ENQUIRY DOCUMENT - MR

(Document No : B933-000-WD-MR-3213-175-RFQ)

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REQUEST FOR QUOTATION (RFQ)

Date: 06-05-2026

To, **Whomsoever it is concerned**	Project: Bina Petchem and Refinery Expansion Project (BPREP) EIL's RFQ No.: **SPN/B933-000-WD-MR-3213/175** Item: **FITTINGS – (CS, LTCS & CS-EPOXY COATED)** Tender ID: **2026_EIL_907468**

INTRODUCTION:

M/s Bharat Petroleum Corporation Ltd. ("BPCL") is a Central Public Sector Undertaking of Government of India with a "Maharatna" status. BPCL is an integrated oil company engaged in refining of crude oil and marketing of petroleum products. BPCL operates 3 refineries in India including Mumbai Refinery (12 MMTPA), Kochi Refinery (15.5 MMPTA), and the Bina Refinery (7.8 MMTPA).

BPCL has embarked on Petrochemical Diversification Plan and is in the process of setting up world scale Ethylene Cracker facilities and associated downstream petrochemical units at Bina along with expansion of Bina Refinery, hereinafter referred as "Bina Petchem and Refinery Expansion Project" (BPREP) or the "Project". BPCL intends to increase the refining capacity of Bina Refinery from 7.8 MMPTA to about 11 MMTPA as a part of the Project.

Gentlemen,

1. E-bids are requested under limited bidding for the captioned item in total compliance to technical specifications, scope and terms & conditions of enquiry documents/attachments. Your offer must be complete in all respect and must contain confirmation/compliance to all points of enclosed commercial Agreed Terms & Conditions without any deviations. Please note that issuance of technical and commercial queries is not envisaged and your offer will be evaluated based on input given therein. Hence pre-bid clarifications, if required may be sought from us immediately on receipt of this RFQ.
2. Bidder can download the RFQ from E-Tendering/ E- procurement website https://eprocure.gov.in/eprocure/app . Bidders have to submit their bids only through e-tendering website. **No hard copy of the RFQ shall be issued. Bidders to note that any corrigendum/addendum shall be published only on site** https://eprocure.gov.in/eprocure/app.
3. Bidders are required to upload the bids (complete in all respects) along with all supporting documents & priced part on the e-tendering website on or before the **BID SUBMISSION DATE & TIME** specified in RFQ. **Physical Bids sent through Fax/Email/Courier/Post will not be accepted.**
4. E-tendering methodology :

   a) E-tendering *Portal mandates that the bidders are to be registered on the portal. Bidders shall submit their bids through* e-tendering *(https://eprocure.gov.in/eprocure/app) only.*

b) *All those vendors who have still not registered on the* e-tendering *Portal are required to register on the same for facilitating uploading of their bids on the* e-tendering *Portal failing which it will not be possible for them to upload their bids. Pursuant to registration, the vendors are required to inform regarding* e-tendering portal *registration details.*

Only e-tendering *portal registered vendors can upload their bids on the portal. Therefore, all those bidders who have not complied with the above registration requirements will not be eligible to bid. Request for extension in due date of submission of bids due to non-registration or delayed registration in* e-tendering *portal shall not be entertained.*

c) *The bid has to be necessarily submitted on the* e-tendering *Portal only. Inability of the bidders to upload their bids on account of not completing the registration with* e-tendering *portal as mentioned above will not be a reason for seeking BDD extension.*

d) *Vendors who have completed the registration on* e-tendering *shall only be allowed to submit the bids through* e-tendering *Portal. Therefore, it is in the interest of the bidders that they register on the* e-tendering *Portal at the earliest.*

e) *The vendor registration on* e-tendering *Portal is a very user-friendly process. However, in case of any doubt, the vendor may contact the 24 X 7 e-tendering Portal helpdesk at Contact No. +91-120-4001 002, +91-120-4001 005 +91-120- 4493 395 and E-mail: eproc@nic.in*

f) *Various links such as "Help for Contractor", "Information about DSC", "FAQ", "Resources Required", "Bidders Manual Kit" etc. are available on home page of https://eprocure.gov.in/eprocure/app facilitating bidders to participate in the bidding process. Bidder are advised to download & utilize the available information/documents under these links for activities like Registration in portal, obtaining User ID & Password, uploading & submission of e-bids etc. Bidders are advised in their own interest to carefully go through Instructions for E-tendering and other related document available against various help links so as to ensure that bids are uploaded in E-tendering website well before the closing date and time of bid submission.*

5. In the event of failure in bidder's connectivity with e-tendering website during the last few hours on account of problem on bidders account, they are likely to miss the deadline for bid submission. Due date extension request due to this reason will not be entertained. In view of the same, bidders are advised to upload their bid in advance.

6. **Bidders to upload the Composite bid in the Single folder mentioned in the e-tender portal.**

7. **This Limited invitation for e-bid is open only to the suppliers to whom this RFQ is issued.**

8. **BRIEF SCOPE OF SUPPLY/ WORK:**
For scope refer RFQ and enclosed Material Requisition

9. **DELIVERY/ COMPLETION PERIOD**:
Refer Bid Data Sheet (BDS)

10. **SALIENT FEATURES OF BIDDING DOCUMENT:**

a)	Type of Enquiry	:	**LIMITED COMPETITIVE BIDDING (DOMESTIC)**
b)	Bidding Document availability on Website (on e-tendering portal)	:	**From 06-05-2026 up to 20-05-2026; 12:00 Hrs. (IST)**
c)	Last date for submission of pre-bid queries	:	Not Applicable.
d)	Date / Venue of Pre-Bid Meeting #	:	Not Applicable.
e)	Last Date and time for submission of e-Bids	:	**20-05-2026; 12:00 Hrs. (IST)** **(or later date as updated by addendum, if any, on E-Tendering/ E- procurement website)**
f)	Cost of Bidding Document / Bidding Document Fee	:	Not Applicable.
g)	Bid Security / Earnest Money Deposit (EMD)	:	Not Applicable
h)	Last date and time of submission of Earnest Money Deposit (EMD) /Bid Security (In original hard copy)	:	Not Applicable
i)	Opening of Techno-commercial (Un priced) Bids #	:	**21-05-2026; 12:00 Hrs. (IST)** **(or later date as updated by addendum, if any, on E-Tendering/ E- procurement website)** (on-line Opening shall be done) If date(s) identified as (#) above happen to be a declared holiday in EIL Gurugram, the next working day shall be considered.
j)	Contact person for any query/ clarifications for this tender	:	**Queries to be addressed to:** Mr. S. Padmanathan, GM (SCM-2), Engineers India Limited, 1st Floor, Tower-1, Sector-16, Gurugram, Haryana-122 001. Telephone: +91-124-289 1233 / 1303 / 1377 / 1375 E-mail : s.padmanathan@eil.co.in, varaprasad.atta@eil.co.in, rohit.singh@eil.co.in, amrit.kumar@eil.co.in

11. Bidder should submit their bid strictly as per the requirements outlined hereunder and as specified in the Bidding Document including Material Requisition.

12. EIL / BPCL reserves the right to use in-house information for assessment of bidder's capability for consideration of bid.

13. As Purchaser/ Consultant intend to contact directly with suppliers of the goods for which bids are invited, the bids should be prepared by the suppliers and submitted directly to Purchaser. Purchaser/Consultant reserves the right to reject offers made by intermediaries.

14. E-bids received online shall be opened on due date and time as specified above. The Bidders who have submitted their Bid will be able to view online the name & status of all

the Bidders at their respective windows, after composite Bid opening by EIL/BPCL.

15. Purchase preference as per government guidelines as applicable from time to time shall be considered.

Submission of MSE related documents:

(a). MSE bidder to submit UDYAM Registration Certificate in support of MSE eligibility along with the technical bid.

(b). The technical evaluation for MSE eligibility in respect of EMD exemption and purchase preference etc. shall be carried out based on submission of valid UDYAM Registration Certificate by the bidder as a part of the un-priced bid.

(c). In addition to valid UDYAM Registration Certificate, MSE Bidder shall also submit certification from a practicing Chartered Accountant (CA) (dated after the date of floating of tender and specific to the tender for which bid is being submitted), as per format (Annexure-A) enclosed with Appendix-VI to ITB. However, this certificate from Chartered Accountant is to be submitted after price bid opening only by such MSE bidder who is either lowest evaluated bidder or eligible for MSE purchase preference as per tender terms.

(d). In case the MSE bidder who is eligible for Purchase Preference fails to submit CA certificate for MSE eligibility, it shall not be considered for Purchase Preference under tender terms.

16. EIL/BPCL reserve the right to make any changes in the terms and conditions of purchase and to reject any or all the bids received, at its discretion without assigning any reason whatsoever.
17. Reverse Auction is **Not Applicable** for this Enquiry.
18. Consortium / Unincorporated Joint Venture Bids are not acceptable.
19. In case any bidder is found to be involved in cartel formation, his bid will not be considered for evaluation/ placement of order. Such bidder will be debarred from bidding in future.
20. Canvassing in any form by the Bidder or by any other Bidder on their behalf may lead to disqualification of their Bid.
21. BPCL/EIL shall not be responsible for any expenses incurred by bidders in connection with the preparation & delivery of their bids, site visit and other expenses incurred during bidding process.
22. For detailed specifications, terms and conditions and other details, refer complete RFQ Document.
23. Job No. B957 mentioned, if any, in the header in SPC / ITB, shall be read as B933.

*Please specify Ref. No. (**SPN/B933-000-WD-MR-3213/175)** in all Correspondence.

THIS IS NOT AN ORDER

Very truly yours,

S. Padmanathan
GM (SCM), Engineers India Limited

Enclosure: As per List Attached

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	B	COMPLIANCE TO BID REQUIREMENT
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	D	BANK MANDATE FORM
	E	FORMAT FOR BIDDER'S QUERIES FOR PRE-BID MEETING
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	~~H~~	~~INTEGRITY PACT~~
	~~I~~	~~GST BREAKUP, WHEREVER APPLICABLE FOR PACKAGE MR~~
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	M	PERFORMA FOR BANK GUARANTEE IN LIEU OF FOR EARNEST MONEY
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7		PRICE SCHEDULE
8		MATERIAL REQUISITION (MR) No.: **B933-000-WD-MR-3213 Rev. D**

BID DATA SHEET
(BDS)

BID DATA SHEET		
S.NO.	**ITB CL. NO.**	**CONTENT**
1.	**ITB 2.1, 2.2 & 2.3** **ELIGIBLE BIDDERS**	Enquiry Basis is Domestic Competitive Bidding. Only **Class-I local suppliers as per PPP-MII Policy are eligible to submit their bid. Bids received from Class-II or non-Local suppliers as per PPP-MII Policy shall not be considered for evaluation and shall rejected.** In case a bidder does not register on the e-Tendering Portal and as a consequence, does not submit their bid on the Portal, it shall be deemed that he is not interested in bidding against this enquiry and no further correspondence will be entertained.
2.	**ITB 6.0** **PREBID MEETING**	Not Applicable
3.	**ITB 19.2,20.2** **BID SECURITY/EMD**	Not Applicable
4.	**ITB 12.4** **INTEGRITY PACT**	Not Applicable
5.	**ITB 31.0 EVALUATION AND COMPARISON OF BIDS** Item Wise / Group Wise / Bottomline Evaluation	Item Wise
6.	**ITB 33.0** **PREFERENCE TO MICRO & SMALL ENTERPRISE**	Applicable **In case Purchase preference is granted to MSE bidders for any MR Items (excluding MR Item No. 22, 131, 132, 137, 139, 169, 219, 226, 229, 308, 387, 390, 394 and 485), MSE bidder availing this benefit shall be required to deliver the items at the (Job site) located at BPCL, Bina.** **In case purchase preference is granted to MSE bidders for MR Item S. No. 22, 131, 132, 137, 139, 169, 219, 226, 229, 308, 387, 390, 394 and 485, the MSE bidder availing this benefit shall be required to deliver the items at the (Job site) located at BPCL, COT Vadinar.**
7.	**ITB 34.0** **POLICY FOR PROVIDING PREFERENCE TO DOMESTICALLY MANUFACTURED IRON AND STEEL PRODUCTS IN GOVERNMENT PROCUREMENT(DMI&SP)**	Applicable. ITB 34.3 stands deleted
8.	**ITB 35.0** **PUBLIC PROCUREMENT (PREFERENCE TO MAKE IN INDIA)**	Policy for Public Procurement (Preference to Make in India) Order 2017 is **Applicable**. Bidders shall submit **FORM-2 (attached as Annexure-2 to ITB)** in their un-priced bid, at the bidding stage. During execution stage, Successful bidder is required to submit documents as per Sl. No. 32 of Special Purchase Conditions (SPC).

BID DATA SHEET		
S.NO.	**ITB CL. NO.**	**CONTENT**
9.	**SPC** **REPEAT ORDER**	Applicable Repeat order is not a part of Evaluation.
10.	**ITB 25.0** **Enquiry issued on ZERO Deviation basis**	Enquiry is issued on Zero Deviation basis. Offers submitted with deviations (except for the deviations, for which loading is defined as per ITB & ITS annexure) or incomplete offers requiring any queries/correspondence may be liable for rejection without any reference to the Bidder.
11.	**ITB 45.0** **Provisions of Category-I MR**	Applicable
12.	**ITB 46.0** **Provisions for Stockist / Traders in case of Pipes, Fittings etc**	Not Applicable
13.	**SBI Base Rate**	SBI base rate as on the date of issue of enquiry shall be applicable.
14.	**Payment Terms**	**For Supply:** i. 15% against identification of raw materials at Supplier's works and against submission of ABG of equivalent amount. ii. 80% against receipt and acceptance of material at site (along with copy of LR/GR and IRN) iii. 05% against receipt and acceptance of all material at site including documentation.
15.	**Part Order**	Applicable
16.	**AMC / PWAMC**	Not Applicable
17.	**Site work**	Not Applicable
18.	**% break-up of grouped items**	Not Applicable.
19.	**Delivery Period / Completion schedule**	**For Supply:** **3 Months** on FOT Project Site basis from the date of Letter of Acceptance (LOA) / Purchase Order (PO) (whichever is earlier). Date of receipt of material at site as certified by site store / owner / EIL shall be considered as date of delivery. **Note:** Bidder to take note of the Clause **15 of ADDITIONAL TECHNICAL REQUIREMENTS of MR** for the items to be delivered at **(Job site) Bharat Petroleum Corporation Ltd (BPCL), COT Vadinar, Gujarat (Postal code 361010) within the delivery period specified above,** out of the total quantity mentioned in the MR. Balance quantity of these MR Sr. Nos. and other MR Sr. Nos. shall be delivered at (job site) BPCL, Bina. **Also, bidder to refer clause 6 of Bid Data Sheet w.r.t delivery location in case of applicability of Purchase preferences.**

BID DATA SHEET		
S.NO.	**ITB CL. NO.**	**CONTENT**
20.	**Sl. No. 5.4 of ITB**	~~ECU / EPCM-1 / U&O~~/ EPCM-2 ~~Bina Petro Chemical Unit~~ / Bina Refinery Expansion
21.	**Sl. No. 16.1 of ITB** **Bid Validity**	4 Months from final bid due date
22.	**Sl. No. 'D' of Annexure-A to SPC** **Applicability of Tax Credit**	This MR pertains to ~~EPCM-1 /~~ EPCM-2 /~~ PMC-1~~ scope
23.	**Sl. No. 3.3 of SPC** **Price Reduction Schedule (PRS)**	Applicable
24.	**Unit rate for addition/ deletion**	Not Applicable.
25.	**Price Schedule Format**	a) Format B1 is applicable for "**Imported Supplies by Indian Suppliers as Built-in Import Content where Suppliers will become consignee of the Goods by filing Bill of Entry for Home Consumption**" and shall be dealt as per B. 2 c) of Annexure-A to SPC (Taxes and Duties).

<table>
<tr><th colspan="3">BID DATA SHEET</th></tr>
<tr><th>S.NO.</th><th>ITB CL. NO.</th><th>CONTENT</th></tr>
<tr><td>26.</td><td>This para to be added under the clause no. 14 (i) of SPC.</td><td>
<table>
<tr><th>BG Value</th><th>Stipulation</th></tr>
<tr><td>Up to INR 1 Crores</td><td>Bank Guarantees from any Scheduled bank (including nationalised banks, other scheduled commercial banks, scheduled cooperative banks and scheduled regional rural banks) as appearing in the second schedule to the RBI Act 1934 Shall be acceptable.</td></tr>
<tr><td>Greater than INR 1 Crores</td><td>Bank Guarantee which are issued by banks having long term issuer rating of “A2” from Moody’s or equivalent from Fitch and S&P in case of the foreign bank and long-term issuer rating of at least “AA” from CRISIL or equivalent from CARE, ICRA and Indian rating in case on Indian Bank, shall be acceptable. In case rating for a bank is available from more than one rating agency, the lowest such rating shall be considered. Illustrative list of banks meeting the stipulated criteria are attached as Annexure B to SPC.

However, during currency of BG(s) [other than EMD BG(s)], in case, the credit rating of the bank falls below the credit rating mentioned above, the contractor shall replace the BG from any of the other eligible bank as per above criteria.</td></tr>
</table>
All foreign BGs issued by any other bank i.e., the banks not covered in the list as provided in Annexure B to SPC (i.e., attached list of banks) or issued by any foreign branch of the banks covered in Annexure B to SPC, shall be mandatorily required to be counter guaranteed by the Indian branch of banks as provided in Annexure B to SPC.
</td></tr>
<tr><td>27.</td><td>Cl. No. 29 of Special Purchase Conditions (SPC):
Arbitration</td><td>Clause No. 29 of Special Purchase Conditions (SPC) stands deleted.</td></tr>
<tr><td>28.</td><td>PR</td><td>No separate PR for this item shall be issued to the vendor. MR (including Amendment if any) to be treated as PR.</td></tr>
</table>

INSTRUCTIONS TO BIDDERS (ITB)

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2	APPENDIX II : PUBLIC PROCUREMENT (PREFERENCE TO MAKE IN INDIA) (PPP-MII)
3	APPENDIX III : EVALUATION CRITERIA AND COMMERCIAL LOADING OF OFFERS IN CASE OF DEVIATIONS.
4	APPENDIX IV : POLICY FOR PROVIDING PREFERENCE TO DOMESTICALLY MANUFACTURED IRON & STEEL PRODUCTS IN GOVERNMENT PROCUREMENT.
5	APPENDIX V : POLICY OF HOLIDAY LISTING OF VENDORS IN BPCL
6	APPENDIX VI : VERIFICATION OF MSE REGISTRATION CERTIFICATE BY CHARTERED ACCOUNTANT.
7	APPENDIX VII : ACKNOWLEDGEMENT CUM CONSENT LETTER.
8	APPENDIX VIII : REVISED POLICY ON MSE PURCHASE PREFERENCE

A. GENERAL

1.0 SCOPE OF BID

1.1 In connection with the Request for Quotation (RFQ), Bharat Petroleum Corporation Limited (BPCL) invites e-Bid(s), under single stage two bid system, for the scope of supply and services covered under the RFQ Document.

1.2 Throughout the Bidding Document:

(a) The **PURCHASER / CLIENT / OWNER** means Bharat Petroleum Corporation Limited (BPCL), having its Registered office at 4&6, Currimbhoy Road, Ballard Estate, Mumbai - 400 001 and shall include its successors and assignees.

(b) "EIL" shall mean Engineers India Ltd., having its registered office at 1, Bhikaiji Cama Place, R.K Puram, New Delhi-110066 (INDIA) and engaged by BPCL as PMC/EPCM for their Project.

(c) except where the context requires otherwise, words indicating the singular also include the plural and words indicating the plural also include the singular; and word written in capital or small letter or where the first letter capital have the same meaning; and

(d) The term 'Bid Due Date' shall mean the 'Final Bid Due Date'.

(e) the term "bid"/ "tender"/"offer"/"proposal" and their derivatives ("RFQ/Bidding/Enquiry" documents, "bidder/tenderer", "Vendor/Supplier/Seller", "Bid/tender", "bidding/tendering", "Contract/Purchase Order" etc.) are synonymous, and day means calendar day..

(f) Material Requisition (MR) means the Technical Part of RFQ Document."GST" shall mean Goods and Services Tax charged on the supply of material(s) and services. The term "GST" shall be construed to include the Integrated Goods and Services Tax (hereinafter referred to as "IGST") or Central Goods and Services Tax (hereinafter referred to as "CGST") or State Goods and Services Tax (hereinafter referred to as "SGST") or Union Territory Goods and Services Tax (hereinafter referred to as "UTGST") depending upon the import / interstate or intrastate supplies, as the case may be. It shall also mean GST compensation Cess, if applicable.

(g) **CONSULTANT :-**

BPCL HAS APPOINTED ENGINEERS INDIA LIMITED (EIL) AS THE CONSULTANT FOR THIS PROJECT. OWNER HAS ALSO AUTHORIZED THE CONSULTANT TO ENTER INTO CORRESPONDENCE WITH BIDDER(S) & OBTAIN CLARIFICATIONS/ CONFIRMATIONS, IF ANY WITH RESPECT TO THIS RFQ/ BIDDING DOCUMENT. BY VIRTUE OF THIS AUTHORIZATION, EIL ON BEHALF OF BPCL MAY ENTER INTO CORRESPONDENCE / DISCUSSIONS & OBTAIN CLARIFICATIONS / CONFIRMATIONS FROM BIDDER(S) IF ANY.

BIDDER SHALL HONOUR EACH & EVERY CLARIFICATION / CONFIRMATION ARISING OUT OF THE CORRESPONDENCE / DISCUSSION BETWEEN THE CONSULTANT & BIDDER.

E-Tendering/ e- procurement website means Central Public Procurement Portal (CPP portal) i.e. https://eprocure.gov.in/eprocure/app

1.3 The successful bidder / "supplier" shall complete the Scope of RFQ within the Time Period/Completion Period stated in RFQ document.

2.0 ELIGIBLE BIDDERS

2.1 An Eligible bidder may be a firm or a company, who, have been issued/intimated for issuance of RFQ Document on Limited Competitive Basis or a bidder meeting the BQC criteria as per Invitation for Bids (IFB)/ Notice Inviting Tender (NIT) on Open Competitive basis.

2.2 In case of limited competitive basis, the bidding is open only to the bidders to whom Bidding Document has been issued or intimation for issuance of Bidding Document has been sent through EIL Tender portal/through e-mail by EIL. (Refer BDS for type of bidding)

2.3 In case of open competitive basis, the bidding is open to the bidder who intends to submit the Bid, in response to IFB/NIT.

2.4 A bidder who is on **Holiday Listing / Negative List** of EIL/BPCL/MoPNG or on due date of submission of bid / during the process of evaluation of the bids, the offers of such bidders shall not be considered for bid opening/evaluation/award. If the RFQ Document **is/was issued inadvertently to such Bidder/downloaded from website by such** Bidder, then Bid submitted by such Bidder shall not be considered for opening/ evaluation/ award.

2.5 Deleted

2.6 Deleted

2.7 Bidder should not be under Insolvency, liquidation, court receivership or similar proceedings.

2.8 The bidder shall not be under a declaration of ineligibility by OWNER for Fraudulent practices as defined at clause no. 41 of ITB.

2.9 A bidder shall not be affiliated with a firm or entity:

i) that has provided consulting services related to the work to the Owner during the preparatory stages of the works or of the project of which the works form a part,

or

ii) That has been hired by the Owner as engineer/consultant for the contract.

2.10 Department of Expenditure (Ministry of Finance) of Government of India through OMs no. 6/18/2019-PPD dated 23.07.2020 & 24.07.2020 has issued the guidelines regarding procurement from bidders from a country or countries sharing Border with India. These guidelines along with their subsequent amendments are available on the website of DoE (https://doe.gov.in/procurement-policy-division) and the same shall be followed as per Government instructions in vogue, as applicable from time to time. In view of the above, Bidder to submit signed and stamped copy of Undertaking with respect to **COMPLIANCE OF RESTRICTIONS FOR COUNTRIES WHICH SHARE LAND BORDER WITH INDIA.** (on Company's Letterhead) attached with Appendix-I of this ITB for compliance.

2.11 Ministry of Petroleum & Natural Gas (MoPNG) vide File no. FP-20013/2/2017-FP-PNG-Part(4)(E-41432) dated 26.04.2022, have issued a directive that Public Procurement (Preference to Make in India) (PPP-MII) Order, 2017 issued by DPIIT and as amended from time to time shall be applicable to all the Public Sector Undertakings and their wholly owned subsidiaries under MoP&NG, Joint Ventures that have 51% of more equity by one or more Public Sector Undertakings under MoP&NG. Copy of the notifications is available on MoPNG website.

Under this policy, buyer reserves the right to allow Suppliers or Service providers in a tender and purchase preference as admissible under the prevailing policy, subject to complying with the requirements/ conditions defined herein and submitting documents required to support the same. Refer Appendix-II to ITB for details.

3.0 Deleted

B. CONTENTS OF BIDDING DOCUMENT

4.0 BIDDING DOCUMENT

4.1 The RFQ document shall consist of Commercial & Technical Section.

4.2 The Bidding Document shall in general consist of the following and should be read in conjunction with any amendment issued in accordance with Clause No. **7.0** of ITB.

i. Notice Inviting Tender (NIT) / Invitation for Bids (IFB) {If applicable}

ii. Request for Quotation (RFQ), Instructions to Bidders and its Appendices

iii. Bid Data Sheet (BDS)

iv. Bidding Forms

v. Special Purchase Conditions (SPC) and its Annexure

vi. General Purchase Conditions (GPC)

vii. Additional Documents Mentioned in RFQ / BDS

viii. Price Schedule

ix. Material Requisition (MR)

4.3 Although all the details presented in this Bidding Document have been compiled with reasonable care, the bidder is expected to examine the Bidding Document, including all instructions, forms, terms, specifications and drawings in the Bidding Document and it includes all the documents as per Table of Contents. In case of any ambiguity or incompleteness, the bidder must bring it to the attention of BPCL/EIL immediately and prior to submission of Bid.

4.4 The bidder is expected to examine the RFQ document downloaded from the e-Procurement Portal, bidding guidelines receipt from BPCL or available on BPCL website, all instructions, formats, terms, specifications and drawings etc., enclosed in the RFQ documents. The invitation for bid (bidding) together with all its attachment thereto, shall be considered to be read, understood and accepted by the bidder in co-ordination to each other. Failure to furnish all information required by the RFQ documents or submission of a bid not substantially responsive to the RFQ documents in every respect will be at bidder's risk and may result in the rejection of the Bid.

4.5 RFQ document once issued in case of limited competitive bidding is non-transferable. However, in case of Open Competitive Bidding, since the RFQ Document is available for free downloading on the portal, any bidder may submit the Bid and the same shall be evaluated in line with the provisions of the Bidding Document.

4.6 Order of precedence

The documents forming the Purchase Order are to be taken as mutually explanatory of one another. If there is an ambiguity or discrepancy in the Term & Conditions defined in the various documents, the order of Precedence shall be as per clause no. 42 of General Purchase Conditions (GPC).

5.0 SITE VISIT

5.1 For Scope involving Site Work, bidder, if required, may visit and examine the Project Site and its surroundings and obtain for itself on its own responsibility all information that may be necessary for preparing the bid.

5.2 Bidder is advised to visit and examine the site or / locations of warehouse (at his own cost), its surroundings and familiarise themselves of the existing facilities & environment, and collect all other information which he may require for preparing and submitting the bid and entering into the Contract. Claims and objections due to ignorance of existing conditions or inadequacy of

information will not be considered after submission of the bid and during implementation. Bidder shall provide at least two days in advance the details of their representatives along with details of laptop, mobile or any other electronic device or any equipment if any, being carried so as to make arrangement for gate passes. Owner's decision on this regard shall be final and binding upon the bidder. The cost of visiting the site shall be at the bidder's own expense.

5.3 The bidder or any of its personnel or agents will be granted permission by the Owner to enter upon its premises and land for the purpose of such visits, but only upon the express condition that the bidder, its personnel, and agents will indemnify the Owner and its personnel and agents from and against all liabilities in respect thereof, and will be responsible for death or personal injury, loss of or damage to property, and any other loss, damage, costs, and expenses incurred as a result of the inspection.

5.4 For site visit, Bidder may contact the following persons in BPCL:

ECU Name: Mr. MP Agrawal Designation: GM (ECU Project-BPREP) Email: agrawalmp@bharatpetroleum.in Mobile: 9892517880 **U&O** Name: Mr. RH Panchal Designation: GM (U&O), BPREP Email: panchalrh@bharatpetroleum.in Mobile: 9819141449	EPCM-2 Name: Mr. R B Hajare Designation: GM BPREP (Site Enabling) Email: hajarerb@bharatpetroleum.in Mobile: 9619566515 Telephone: 07560-226314	PMC (PP/Butene1) Name: Mr. Gunesh V Sawant Designation: CM (Civil-BPREP) Email: sawantgv@bharatpetroleum.in Mobile: 9820441916

6.0 CLARIFICATION OF BIDDING DOCUMENT & PRE-BID MEETING

6.1 Bidder shall submit their queries strictly within cut-off date after which, BPCL/EIL shall reserve the right not to entertain any queries. **Format for Pre-Bid Queries is attached as Form-E of Bidding Forms.**

6.2 Pre-bid meeting shall be attended by competent representative(s) of the bidder.

6.3 Replies to the pre-bid queries will be uploaded in e-procurement portal**.** After pre-bid meeting, no further queries will be entertained from the bidders. The response of pre bid queries shall not form part of the Bidding Document unless issued as an Addendum/ Amendment.

6.4 The bidders may carry their qualification documents in case they desire them to be reviewed by BPCL/EIL officials during the pre-bid meeting.

6.5 **Any modification to the RFQ document, which may become necessary as a result of the pre-bid queries / pre bid discussion, shall be intimated to all bidders through the issue of an Addendum/Amendment.** Record notes of pre-bid meeting/reply to pre-bid queries shall not be considered as part of RFQ.

7.0 AMENDMENT OF BIDDING DOCUMENT

7.1 At any time prior to the deadline for submission of bids, the Owner may, for any reason whether at his own initiative or in response to the clarification requested by the prospective bidder(s), issue amendment in the form of Addendum during the bidding period or subsequent to receiving the bids. Any Addendum thus issued shall become part of Bidding Document and Bidder shall submit

a copy of the Addendum duly signed and stamped in token of his acceptance. The addendum will be hosted on e-procurement website

7.2 All Amendments, Clarifications (if any) etc. will be uploaded in e-procurement portal. Generally intimation of uploading of documents in website is sent to the bidders (all bidders in case of Limited bidding and to bidders who have submitted acknowledgement on tender portal in case of NIT) in their email id. It is the responsibility of the bidder to regularly check the website and provide current and authenticated email id. Bidder shall submit a copy of the Addendum duly signed and stamped in token of his acceptance. Any revision, clarification, addendum, corrigendum, time extension, etc. will be hosted on these websites only. Bidders are requested to visit the websites regularly to keep themselves updated. Bidders have to take into consideration of all the addendum(s) / corrigendum (s) / clarifications issued/ web hosted, before submitting the bid.

7.3 In case Addendum is issued during the bidding period, Bidder shall consider its impact in his bid. In case Addendum is issued subsequent to receipt of bids, Bidder shall follow the instructions issued along with Addendum with regard to submission of impact on quoted price / revised price, if any.

7.4 The Owner/Consultant may, at its discretion, extend the date of submission of Bids in order to allow the bidders a reasonable time to furnish their most competitive bid taking into account the amendments issued.

8.0 CONFIDENTIALITY OF BIDDING DOCUMENT

8.1 The Bidding Document is and shall remain the exclusive property of Owner/Consultant without any right to Bidder to use them for any purpose except for the purpose of Bidding.

8.2 On no account will any agency to whom Bidding Documents is issued, part with possession thereof or copy or take copies or tracings of any drawing, plan etc. It should be understood that the information therein is confidential, and that the Bidding Documents are therefore being issued to bidders in the strictest confidence.

9.0 ACKNOWLEDGEMENT & CONFIRMATION

9.1 Bidder shall acknowledge and confirm his intention to bid for the tendered item as per proforma "Acknowledgement-Cum-Consent Letter" enclosed in Bidding Document as **Appendix-VII to ITB**. Bidder also must intimate their intention of not quoting if they are not submitting Bid.

9.2 In case of e- tendering the bidder shall post their intention to bid for the tendered item in the designated place of EIL's tendering portal.

C. PREPARATION OF BIDS

10.0 COST OF BIDDING

10.1 Bidder shall bear all direct and indirect costs associated with the preparation and submission of its Bid (including clarification meetings, and site visit, if any), and BPCL/EIL shall not be responsible or liable for those costs, regardless of the conduct or outcome of the bidding process.

11.0 LANGUAGE OF BID

11.1 The Bid prepared by the bidder, all correspondence/drawings and documents relating to the bid exchanged by the bidder with the Owner/Consultant shall be in English Language only. In case, any printed literature furnished by bidder written in another language so long as accompanied by an English translation, in which case, for the purpose of evaluation and interpretation of the bid, the English translation shall govern.

11.2 In case any of the supporting documents (either technical or financial) are not in English language, then the English translation copy of the same shall also be furnished duly certified, stamped and

signed by Local Chamber of Commerce of bidder's country or Indian embassy in bidder's country or their embassy in India.

12.0 DOCUMENTS COMPRISING THE BID

No Physical Bids / Offers shall be permitted (other than the documents which are specifically mentioned to be submitted in physical form for which scanned copy already uploaded along with the bid). The offers/bids submitted online through e-procurement portal along with the respective originals as specified in RFQ Document shall only be considered as bid for evaluation and ordering. Bidders are required to upload the Bid/offer along with all supporting documents including Priced bid on the **E-Tendering Portal only.** Electronic Bids (e-bid) shall be submitted on e-procurement Portal as per available functionalities.

Bidders to upload the unpriced bid (comprising of bid security, technical bid, other documents, e.t.c.) and priced bid (offer prices) strictly at designated place on e-procurement Portal. Offer prices shall not be mentioned at any place other than the designated field(s) provided on e-procurement Portal.

12.1 TECHNO-COMMERCIAL/ UNPRICED BID (through e-tender portal)

(a) Offer Covering letter (in bidder's letter head).

(b) Bidder's General Information (**Form-A**).

(c) Bidder Qualification Documents (if applicable) as per requirement specified in IFB.

(d) Techno-Commercial compliance to terms & Conditions of Bidding Document (**Form-B**).

(e) Duly filled and signed copy of Agreed Terms And Conditions (ATC)(**Form-C) & its annexure.**

Wherever foreign bidder is also sourcing supply / services from India, they shall also submit ATC ((For Indian Bidders / Indian Sourced Components By Foreign Bidders), in addition to ATC (For Foreign Bidder)

(f) Bank Certified Mandate Form as per **Form-D** duly signed and stamped with the Banker's certification along with cancelled cheque (Applicable for Indian Bidders).

(g) Self-declaration by bidder regarding Holiday/ Negative listing/Insolvency/ Arbitration/ Litigation etc. **(FORM–G**)

(h) Duly filled and signed copy of **Integrity Pact** (as per **Form-H)** .

(i) GST Breakup, as per **Form-I for Indian Bidders**

(j) Self Certification by Bidder under PPP-MII Order, 2017 towards mandatory minimum Local Content (**FORM-2** attached with Appendix-II of this ITB), if applicable.

(k) Declaration for holiday listing orders in line ITB APPENDIX V[POLICY OF HOLIDAY LISTING OF VENDORS IN BPCL] (**FORM–J).**

(l) Unpriced copy of Price Schedule Indicating 'Quoted' for the "Price" column and 'NQ' for "not quoted".

(m) Copy of valid Certificate for registration as MSE & SC-ST Certificate of registration (if applicable) towards claiming purchase preference as per Public Procurement Policy 2012 along with CA certificate as per Appendix-VI to ITB. .However, this certificate from Chartered Accountant is to be submitted after price bid opening only by such MSE bidder who is either lowest evaluated bidder or eligible for MSE purchase preference as per tender terms.

(n) Duly signed & stamped copy of Addendum / Amendment (if any).

(o) Technical Compliance/ datasheets/ documents, required as per Material Requisition, wherever applicable.

(p) Unpriced copy of Details of Built-in CIF Value of Import Content (For Indian Bidders) with item wise details & rates of Customs Duty considered as per FORMAT-CIF/CD, if applicable indicating "Quoted/Not Quoted(as applicable)".

(q) Power of Attorney in the name of authorized signatory signing the Bid and who possesses the DSC Key on behalf of the bidder's company to sign the e-bid , that such person (s) is/are authorized to sign the bid on behalf of the bidder and any consequence resulting due to such signing shall be binding on the bidder. **(applicable only for Open Enquiries)**

(r) Signed and stamped copy of Undertaking on Company's Letterhead (Form-IA & Form II) attached with Appendix-I of this ITB in line with Government guidelines regarding procurement from bidders from a country or countries sharing Border with India.

(s) Scanned copy of Bid Security ***(on e-tender portal)*** and original bid security (***in hard copy***)

(t) Scanned copy of certified documents towards proof of meeting Technical and Financial Bidder Qualification Criteria. **[only in case of open competitive bidding (NIT / IFB)]**

(u) Tax residency certificate and other information in a form no. 10F **(Form-N),** [Applicable for Foreign Bidders Only]

(v) Any other document required as per Technical Specifications; and

(w) Any other document as required in RFQ/ BDS.

Note: The above shall be uploaded in **"PREQUAL/ TECHNICAL"** folder in e-tendering portal.

12.2 Priced Bid (through e-tender portal)

Bidder shall fill-in the prices at designated field(s) available on e-procurement Portal only.

12.3 Submission of Earnest Money Deposit (EMD) in Original

EMD shall be submitted in ORIGINAL **within 7 calendar Days** from the Bid due date and time of e-bid submission in the E-procurement portal & in a sealed envelope, with proper index and covering letter in bidder's letter head.

Note: In case 7th calendar day happen to be a declared holiday in EIL Gurugram, the next working day shall be considered.

The envelope shall be titled "EMD in original" with the Name of the Item, Bidding Document No., Name of the Project etc. along with the Bidder's name and address with contact no., email Id etc. and shall be submitted to the address as mentioned below:

Ms. Sangitta Ghuliani, Sr. General Manager (SCM)
Engineers India Limited,
Tower-1, 1st Floor, R&D Complex
Sector-16, Gurugram
Haryana-122001
Telephone : +91 (0) -124-289-1284
E-mail : sangitta.ghuliani@eil.co.in ,

BPCL's Bank Details for EMD:

STATE BANK OF INDIA
SARVODAYA CHAURAHA
BINA, DIST. SAGAR (MP) – 470113
ACCOUNT NO.: - 32182313019
IFS CODE: - SBIN0001427

MICR CODE: - 470002101

12.4 INTEGRITY PACT

12.4.1 Bidder shall submit, the scanned copy of the Integrity Pact (IP) duly signed and stamped in token of compliance in Part-I of the Bid (**enclosed with RFQ as Form-H of Bidding Forms**), wherever required as per Bid Data Sheet. **Non-submission of Integrity pact may lead to not considering their bid for further evaluation**.

12.4.2 Deleted

12.4.3 For detail of Independent External Monitors (IEMs), appointed by BPCL, in terms of Integrity Pact (IP) refer Integrity Pact.

12.4.4 No deviations / modifications in IP shall be acceptable. Bidder shall submit the same format of signed integrity pact (as provided in the bidding document duly signed by the buyer), duly filled-in, signed & stamped by the authorised signatory of bidder.

12.4.5 Integrity Pact shall be signed by the authorised signatory of the bid. If the Bidder is a partnership firm, this agreement must be signed by all partners.

13.0 MULTIPLE/ALTERNATIVE BIDS

13.1 A bidder (i.e., the bidding entity) shall, on no account submit more than one bid either directly (as a single bidder or as a member of consortium) or indirectly (as a sub-contractor) failing which following actions shall be initiated:

i) All bids submitted by such bidder (say 'A') as a single bidder or as a consortium, shall stand rejected and EMD, if any, in case of all such bids submitted by bidder 'A' shall be forfeited.

ii) If another bidder (say 'B') has proposed bidder 'A' as a sub-contractor then bidder 'B''s bid shall also be rejected. However, in case the bidder 'B' has also proposed an alternative sub-contractor who is other than the bidder 'A', then bidder 'B''s bid shall be evaluated with the proposed alternative sub-contractor only. Hence, every bidder shall ensure in his own interest that his proposed sub-contractor is not submitting alternative/ multiple bids.

Note: However, in case BPCL/EIL has proposed a list of sub-contractors/ sub-vendors in the enquiry document itself which shall be common for all the Bidders, the provisions at Clause No. **13.1** ii) above shall not be applicable as long as only the sub-contractors / sub-vendors are common in case of various bidders. However, if any of such sub-contractors / sub-vendors happens to be the bidder also, Clause No. **13.1** i) above shall be applicable.

14.0 BID PRICES AND DISCOUNTS

14.1 Prices shall be furnished strictly in the appropriate field(s) available on e-procurement Portal. Bidder shall not quote any discount separately for any item or on overall price. Conditional discounts, if offered by a bidder, shall not be considered for evaluation.

14.2 Rates/ prices quoted by the bidder shall remain **FIRM, FIXED AND VALID** till the completion of the scope of supply/Works (as applicable) and will not be subject to variation on any account except as otherwise specifically provided in the Bidding Documents.

14.3 The bidder shall quote the prices after careful analysis of cost involved for the performance of complete work considering all parts of the RFQ documents. In case, any activity though specifically not covered but is required to complete the work as per scope of work, scope of supply,

specifications, standards, drawings, GPC, SPC or any other part of RFQ Document, the prices quoted shall be deemed to be inclusive of full and final cost incurred for such activity(ies).

14.4 It shall be the responsibility of the Bidder to duly enquire of their own and comply with all applicable laws, rules, regulations, orders and formalities applicable to Goods and Services Tax (GST), Custom Duty etc. on the manufacture, sale and/or supply of any material / services to Owner / EIL.

14.5 Price basis w.r.t inclusion/exclusion of taxes

i. The quoted price for Indian Bidders / Indian sourced components shall be deemed to be exclusive of GST (i.e. IGST or CGST and SGST/UTGST applicable in case of interstate supply or intra state supply respectively and GST compensation cess, if applicable) and inclusive of all other taxes and duties.

ii. In case of foreign bidders, bidders shall submit their prices on FOB International sea port of exit basis (INCOTERM 2020), unless otherwise stated in the bid document. FOB prices quoted shall be inclusive of all applicable taxes upto FOB international port of exit. Further, ocean freight charges shall be quoted upto sea port of Entry in India i.e. Nhava Sheva Port.

For Instrumentation Items: In case of air transport (wherever allowed as per Enquiry Document), foreign bidders shall submit their prices on FCA international port of exit basis (INCOTERM 2020), unless otherwise stated in the bid document. FCA prices quoted shall be inclusive of all applicable taxes upto FCA international port of exit. Further, Air freight charges shall be quoted upto air port of Entry in India i.e. Mumbai Port.

iii. Inland Transportation charges (In India) upto project site, if sought separately, shall be exclusive of GST.

iv. Site work prices, if applicable shall be inclusive of all taxes and duties but exclusive of GST. All necessary registrations, if required, for carrying out the site activities shall be done by the bidder and costs towards the same shall be included in quoted site work prices.

v. Prices of per diem supervision charges, hazop study, 3D modelling, training/AMC, if applicable (executed in India) shall be exclusive of GST. However, GST shall not be applicable on training provided at foreign bidder's work/training facilities in their country.

14.6 All duties, taxes, and other levies payable shall be as per Special Purchase Conditions (SPC).

14.7 It shall be the responsibility of the Bidder to duly enquire on their own and comply with all applicable laws, rules, regulations, orders and formalities applicable to Goods and Services Tax (GST), Customs Duty etc. on the manufacture, sale and/or supply of any material / services to Owner / EIL.

14.8 **The Bidder shall keep the Owner / EIL indemnified from and against any and all claims, demands, prosecutions, penalties, damages, demurrages and/or other levies whatsoever** made or levied by any Court, Tribunal or the Customs or other Authorities with respect to any alleged breach, evasion or infraction of such duties, taxes, charges or levies or any breach or infraction of such laws, rules, regulations, orders or formalities concerning the same and from the consequence thereof.

15.0 CURRENCIES OF BID

15.1 In case of Indigenous Enquiry:

Bidding currency shall be Indian Rupees.

15.2 **In case of Global Enquiry:**

For Indigenous bidders:

Bidding currency shall be Indian Rupees.

For Foreign bidders:`

Foreign Bidders are required to quote in US Dollars/Euro/Indian Rupees. Payment shall be made in respective currency of quote.

15.3 However, evaluation shall be done based on value in INR as per conversion rate published by RBI reference rate as on the date of price bid opening. If RBI reference rate is not available for the date of Price Bid opening, the latest available rates of RBI shall be considered for Price Bid Evaluation.

In the absence of RBI reference rate, SBI TT Sell (Telegraphic Transfer) reference rate on the date of price bid opening or the latest available will be considered. In absence of RBI reference rate, SBI TT reference rate, the conversion Rate shall be taken from the Internet such as:

https://www.xe.com/currencyconverter

https://www.oanda.com/currency/converter

https://economictimes.indiatimes.com/markets/forex/currency-converter

16.0 PERIOD OF VALIDITY OF BIDS

16.1 Bids shall remain valid for the period specified in the BDS from bid due date. A bid with shorter validity period shall be rejected by BPCL/EIL as non-responsive. Bidders shall not be entitled during the above period, without the consent of BPCL/EIL in writing, to revoke or cancel their Bid or to vary the Bid given or any term thereof. In case of bidders revoking or cancelling their Bid or varying any terms in regard thereof without the consent of BPCL/EIL in writing, BPCL/EIL shall forfeit Bid security, submitted along with the bid and shall reject their bids. Such Bidder may also be put on **Holiday Listing / Negative List**.

16.2 Deleted

16.3 In exceptional circumstances, prior to the expiration of the bid validity period, BPCL/EIL may request bidders to extend the period of validity of their bids. The request and the responses shall be made in writing. A bidder may refuse the request after which their offer will not be considered for further evaluation. A bidder granting the request shall not be permitted to modify its bid.

16.4 Single Point Responsibility of the supplier

i. In case of MRs containing supplies as well site work/ services, a single order, covering the supply part as well site work/ services, shall be placed. Refer SPC for details.
In case a foreign supplier sources supplies / services within India, the terms & conditions shall be applicable as specified in relevant annexure of SPC.

16.5 Deleted

17.0 POWER OF ATTORNEY (Applicable for open enquiries only)

The bidders shall be required to submit the **Power of Attorney (POA) on** e-procurement portal along with the e-Bid**, in the name of authorized signatory signing the Bid and who possesses the DSC Key on behalf of the bidder's company to sign the e-bid and subsequent submissions on behalf of the Bidder**. However, in case of General Power of Attorney, photocopy duly attested by **Chief Financial Officer (CFO) / Chief Executive Officer (CEO) / Company Secretary (CS) / any Functional Director in the Board of Directors** is also acceptable.

In case of Foreign Bidder who does not have digital signature issued by an Indian Certifying Authority, he can authorize his Indian representative to use the representative's digital signature to upload the bid on behalf of foreign bidder. In such a case, the authority letter shall be submitted along with the e-bid with the Original signed authority letter along with the Power of Attorney.

In case of e- tendering, hard copy of Power of Attorney is not required & scanned copy will suffice.

Bids shall be signed by the authorized signatory of the bidder. All documents as submitted in the e-Procurement Portal using digital signature at any time during the Bidding process shall be deemed considered signed by the POA holder only, irrespective of POA holder's signature on all pages or not.

18.0 Deleted

D. SUBMISSION AND OPENING OF BIDS

19.0 DEADLINE FOR SUBMISSION OF BIDS

19.1 Bidders shall submit their bids electronically in the e-tendering portal, within the date and time **specified in the RFQ Covering Letter** or any extension thereof.

No Physical bid shall be permitted other than submission of the documents categorically asked for in hard copies as part of e-bids submitted online through the e-tendering Portal. The bids submitted online through e-tendering Portal shall only be considered for evaluation and ordering. The e-bid must be complete in all respects, leaving no scope for ambiguity. Bidder shall be fully responsible for the bid submitted in e-tendering portal and no relief or consideration can be given for errors and omissions.

19.2 Original Bid Security (If applicable) must be received by EIL at the address specified in IFB/ ITB/Bid Data Sheet within the date and time for submission as **specified in the** IFB or any extension thereof**.**

19.3 EIL / BPCL may, at its discretion, extend the deadline for the submission of bids by amending the Bidding Documents in accordance with Clause No. **7.0** of ITB, in which case all rights and obligations of EIL /BPCL and bidders previously subject to the deadline shall thereafter be subject to the deadline as extended.

20.0 LATE BIDS

20.1 E-tendering system shall close immediately after the deadline for submission of bid. Any bids being submitted in physical form (**other than Bid Security or documents specifically sought in physical form**) shall not be considered for opening / evaluation / award and will be returned to such bidders.

20.2 In the event the Bid Security in original is not submitted within the deadline, as per Enquiry Document, the bids shall be declared late and shall be liable for rejection, notwithstanding the fact that the bid has been submitted in electronic form within the deadline. However, in case of exemption from submitting Bid Security under MSE, then bidder shall submit the documentary evidence of the same.

20.3 Unsolicited bids or bids being submitted to place/website other than one specifically stipulated in the RFQ documents shall not be considered for opening/ evaluation / award

21.0 WITHDRAWAL, SUBSTITUTION, AND MODIFICATION OF BIDS

21.1 The bidder may modify, re-submit or withdraw its e-bid after the bid submission, but, before the due date and time for submission of Bid following the electronic bid submission procedures of e-tendering Portal**.**

21.2 No bid shall be withdrawn, substituted, or modified in the interval between the deadline for submission of bids and the expiration of the period of bid validity or any extension thereof. Withdrawal of a bid during this interval shall result in the forfeiture of bidder's EMD/Bid security.

22.0 BID OPENING

22.1 The un-priced Bids shall be opened online through e-tender portal, at the specified date and time given in the RFQ document or on the extended due date, as applicable. Bidders can view the stages of evaluation on e-procurement Portal

22.2 The order of opening of bids shall be as follows;

i. On scheduled date and time of Technical (UNPRICED) bid opening, Opening of **documents, submitted in electronic form shall be processed on the e-Procurement portal.**

ii. Financial (Price) bid of only those bidders whose bids is determined to be technically and commercially acceptable by EIL/BPCL shall be opened. Bidders selected for opening of their priced bids shall be informed about the date and time of price bid opening (through CPP Portal) and shall not be called for physical participation during bid opening.

NOTE:. Online opening as above, will be deemed as opened in public and there will be no separate public opening. Hence, bidders will not be called during opening of the bids.

22.3 If a supplier / an agency is placed on **Holiday Listing / Negative List** of EIL / BPCL/MoPNG after issue of enquiry but before unpriced bid opening, their bid will not be considered for further evaluation. If a supplier / an agency is placed on **Holiday Listing / Negative List** of EIL / BPCL/ MoPNG after opening of unpriced bids but before opening of priced bids, further evaluation shall be stopped and the corresponding priced bid will not be opened. If a supplier/ an agency is placed on **Holiday Listing / Negative List** of EIL / BPCL/ MoPNG after opening of priced bids and such a supplier/ agency happens to be the lowest bidder, then further course of action shall be decided by BPCL/EIL.

E. EVALUATION AND COMPARISON OF BIDS

23.0 CONFIDENTIALITY

23.1 A bidder may seek clarification regarding the Bidding Document provisions, bidding process and / or rejection of his bid. BPCL/EIL shall respond to such requests within a reasonable time. However, such information relating to the evaluation of bids and recommendation of award shall not be disclosed to any other persons not officially concerned with the bidding process.

23.2 Any attempt by a bidder to influence BPCL/EIL in the evaluation of the bids or award decisions shall render their Bid liable for rejection.

23.3 Notwithstanding Clause No. **23.2** of ITB, from the time of bid opening to the time of placement of Order, if a bidder wishes to contact BPCL/EIL on any matter related to the bidding process, it shall done so in writing only.

24.0 DETERMINATION OF RESPONSIVENESS

24.1 The Owner/EIL will examine the bids to determine whether they are complete, whether any computational errors have been made, whether the documents have been properly signed, and whether the bids are generally in order.

24.2 Prior to the detailed evaluation, the Owner/EIL will determine whether each bid is of acceptable quality, is generally complete and is responsive to the RFQ Documents. For the purpose of this determination, a responsive bid is one that conforms to all the terms, conditions and specifications of the RFQ Documents without deviations, objections, conditionality or reservations

24.3 Bidder shall not be allowed to submit any Price Implication or Revised Price after submission of Bid, unless there is change in the stipulations of the RFQ Document and such changes are incorporated through an Amendment. In case Exceptions and Deviations submitted by Bidder

along with Bid are not considered as acceptable and no Amendment is issued, then in such a case the Bidders would be required to withdraw such Exceptions/Deviations in favor of stipulations of the RFQ document and Bidders would not be eligible for submission of Price Implication/Revised Price, failing which such Bid(s) shall be considered as non-responsive and rejected.

24.4 BPCL/EIL determination of a bid's responsiveness is to be based on the contents of the bid itself without recourse to extrinsic evidence. If a bid is not responsive, it will be rejected by the Owner/EIL, and may not subsequently be made responsive by the bidder by correction of the nonconformity.

25.0 BID REJECTION CRITERIA

25.1 All queries related to scope shall be clarified before bid submission. Wherever enquiry is issued on "Zero deviation basis" (Refer BDS for applicability), bidders shall adhere to all provisions of the Bidding Document without taking any deviations, failing which the Bid shall be considered as non-responsive and are liable to be rejected.

25.2 Wherever enquiry is not floated on "Zero deviation basis" (Refer BDS for applicability), following rejection criteria shall be applicable:

i) Bid Security/EMD, wherever applicable.
ii) Arbitration clause
iii) Defects liability period
iv) Bid Validity
v) Schedule of Rates/Prices
vi) Time schedule
vii) Price Reduction Schedule (PRS) /Liquidated Damages for delay (Refer Note below)
viii) Payment Terms (Refer Note below)
ix) Performance Security/Security Deposit/Performance Bank Guarantee
x) Mobilization advance provisions
xi) Termination and Suspension
xii) Force Majeure
xiii) Scope of Work/Scope of Supply
xiv) Integrity Pact
xv) Any other mandatory declarations mentioned elsewhere in the bidding document.

Bidders shall adhere to the above provisions of the Bidding Document without taking any deviations, failing which the Bid shall be considered as non-responsive and are liable to be rejected.

Note:- Except for the deviations w.r.t. PRS and payment terms where loadings are defined in Appendix-III to ITB.

26.0 CLARIFICATION OF BIDS

26.1 Bidders should ensure that the Bid submitted is substantially responsive Bid in the first instance itself. Evaluation may be completed based on the content of the Bid itself without seeking any subsequent additional information, which may result in rejection of Bid. However, EIL / BPCL may, at its discretion, may request bidder to submit the necessary information or documentation, within a reasonable period of time, to withdraw deviation, reservation, or rectify omission in the bid related to documentation requirements. Requesting information or documentation on such account shall not be related to any aspect of the price of the Bid. EIL/BPCL's request for clarification and the response shall be in writing.

26.2 No change, including any voluntary increase or decrease, in the prices or substance of the bid shall be sought, offered, or permitted. Bidder shall not be allowed to submit any price implication or revised price after submission of Bid unless the same is called for by EIL/BPCL in writing.

26.3 If a bidder does not provide clarifications of its bid by the date and time set in EIL /BPCL's request for clarification, its bid shall be evaluated with available information which may result in rejection of their bid.

27.0 EVALUATION OF TECHNO-COMMERCIAL BIDS

27.1 Prior to price opening of bids, EIL/BPCL will determine whether each bid is accompanied with requisite documents;

i) Fulfils the technical, financial and other requirements as specified in the Bidding Document;
ii) Bid's responsiveness and clarifications thereafter, if any;
iii) Any other relevant factor, if any that EIL/BPCL deemed necessary or prudent to be taken into consideration.
iv) EMD / Bid Security as per the requirement specified in IFB(open competitive bidding)

27.2 EIL/BPCL reserves the right to use in-house information for assessment of capability of bidder and their performance on jobs completed/ in progress for evaluation purpose.

27.3 Bidders who are enlisted with EIL are required to quote as per their capabilities registered with EIL (applicable in case of limited enquiries)

27.4 Any unsolicited reduction in price offered by a bidder within the bid validity by way of discount or revised prices, subsequent to the bid due date, shall not be taken into account for comparison. However, such reduction in price shall be taken into account for ordering if such bidder happens to be recommended as per the originally quoted prices.

27.5 In case of unsolicited price increase by any bidder subsequent to the bid due date and before price bid opening, and does not agree to withdraw the price increase, the bid of such bidder shall be rejected. In such case, EMD/Bid Security of such bidder(s) shall be forfeited and further punitive action as per company policy shall be taken against the Bidder(s).

27.6 Technical or commercial queries shall not be raised. However, EIL reserves the right to raise queries in exceptional situations. CQ/ TQs, if any, shall be issued through E-tendering portal and Bidder shall submit their replies through E-tendering portal only. Offers shall be evaluated based on the information available upto cut-off date for CQ/ TQ replies. Bidder shall not submit any Price against TQ/ CQ raised unless specifically sought in writing.

27.7 In case of MRs (group/ basket/ block/ itemwise) / Lumpsum Enquiry, during unpriced evaluation if a bidder has not quoted any part/component etc, the bid of such a bidder for the corresponding group/ basket/ block/ item (or the entire MR/ lumpsum Enquiry, in case there is only one group/ block) shall stand rejected. However, EIL reserve the right to ask the bidder to absorb the same. Non-compliance shall result in rejection of corresponding item/group/block.

It is clarified here that for grouped/ basket/ block, if any item not quoted, the offer shall be rejected for that group/ basket/ block without any CQ/ TQ.

In case, the above is discovered post priced bid opening, such bidder's bid shall not be considered for evaluation for the corresponding group/ block or entire MR/ tender, if there is only one single group/ block. In such an event, the lowest bidder shall be determined out of the remaining bidders.

28.0 OPENING OF FINANCIAL (PRICE) BID

28.1 Priced Bid of only those bidders whose bids is determined to be technically and commercially acceptable by EIL/BPCL shall be opened. Bidders selected for opening of their priced bids shall be informed about the date, time of price bid opening through eTendering portal.

28.2 Bidders who qualify pursuant to unpriced bid evaluation shall be notified through eTendering portal, the time and date for online price bid opening in e-procurement portal

28.3 The Price Bids of those Bidders who were not found to be Techno-commercially acceptable shall not be opened in e-tendering.

29.0 CORRECTION OF ARITHMETICAL ERRORS

The prices quoted by bidders shall be checked for arithmetic correction, if any, based on rate and amount filled by the bidder in the SOR/price schedule formats. If some discrepancies are found between the rate / amount given in figures/words, the total amount shall be corrected as per the following procedure, which shall be binding upon the bidder:

i) When there is a discrepancy between the rate in figures and in words for an item, the rate which corresponds to the amount shall be taken as correct.

ii) When the rate quoted by the bidder in figures and words tallies but the amount is incorrect, the rate quoted by the tenderer shall be taken as correct.

iii) When it is not possible to ascertain the correct rate as detailed above, the rate quoted for the item in words shall be adopted as the quoted rate.

30.0 CONVERSION TO SINGLE CURRENCY

Evaluation shall be done based on value in INR as per conversion rate published by RBI reference rate as on the date of price bid opening. If RBI reference rate is not available for the date of Price Bid opening, the latest available rates of RBI shall be considered for Price Bid Evaluation.

In the absence of RBI reference rate, SBI TT Sell (Telegraphic Transfer) reference rate on the date of price bid opening or the latest available will be considered. In absence of RBI reference rate, SBI TT reference rate, the conversion Rate shall be taken from the Internet such as:

https://www.xe.com/currencyconverter

https://www.oanda.com/currency/converter

https://economictimes.indiatimes.com/markets/forex/currency-converter

31.0 EVALUATION AND COMPARISON OF PRICE BIDS

31.1 EIL shall compare the price bids based on the evaluation methodology and loading criteria (as per Appendix-III to ITB & Clause no. F (evaluation methodology w.r.t taxes) provided in Annexure-A to SPC to determine the lowest evaluated bid.

31.2 Conditional discount, if offered, shall not be considered for evaluation.

31.3 Any unsolicited reduction in price offered by a bidder within the bid validity by way of discount or revised prices, subsequent to the bid due date, shall not be taken into account for comparison. However, such reduction in price shall be taken into account for ordering if such bidder happens to be recommended as per the originally quoted prices.

31.4 In case unsolicited price increase is sought by L1 bidder after price bid opening and the bidder does not agree to withdraw the price increase, the bid of such bidder shall be rejected. In such case, the enquiry shall be refloated and EMD of the Bidder shall be forfeited and further punitive action as per company policy shall be taken against the Bidder

31.5 Deleted

31.6 If a bidder submits prices in un-priced part of bid, such prices shall not be considered. The prices as submitted in the price part only shall be considered for evaluation and ordering, if any. If prices are not found in the price part and even if mentioned elsewhere, the bid shall be rejected. Wherever e-procurement is followed, prices uploaded at the designated priced folder of the e-tendering website shall only be considered.

31.7 Deleted

31.8 Tie Among Lowest Evaluated Prices

In an extreme situation, when there is a 'TIE' based on the evaluated price (after loadings, if any) recourse shall be taken on the basis of bidder's **maximum average annual turnover during the last 3 years**. For this purpose, average annual turnover of the bidders having tie, shall be tabulated for the past 3 years and maximum average annual turnover during the last 3 years shall be determined for each bidder. The bidder whose average annual turnover is highest shall be the recommended bidder.

31.9 Deleted

31.10 Deleted

31.11 Deleted

31.12 REVERSE AUCTION

Reverse auction is not applicable.

32.0 EIL / BPCL'S RIGHT TO ACCEPT ANY BID, AND TO REJECT ANY OR ALL BIDS

32.1 EIL/BPCL reserves the right to accept or reject any bid, and to annul the bidding process and reject all bids at any time prior to award of the order without thereby incurring any liability to the affected bidder or bidders or any obligations to inform the affected bidder or bidders on the ground of such action by EIL / BPCL.

33.0 PREFERENCE TO MICRO OR SMALL ENTERPRISES

33.1 Preference, if applicable to MSEs, shall be as per BDS. Refer **Appendix – VIII** to ITB for detailed provisions.

34.0 POLICY FOR PROVIDING PREFERENCE TO DOMESTICALLY MANUFACTURED IRON & STEEL PRODUCTS IN GOVERNMENT PROCUREMENT (DMI&SP), FOR APPLICABILITY REFER BID DATA SHEET (BDS):

34.1 Refer **Appendix – IV** TO ITB

34.2 A confirmation w.r.t compliance of this DMI&SP Policy shall be submitted by the bidder.

34.3 As per the DMI&SP policy, affidavit is required to be issued by the manufacturer. Accordingly, bidder (except Traders / Stockists) shall furnish self-certification as per the format enclosed with the policy else bid of such bidder shall be rejected.

In case of Traders / Stockists, following need to be submitted :

i.) Authorization letter from the Domestic Indian Manufacturer.

ii.) Affidavit issued by the Domestic Indian Manufacturer as per the format enclosed with the policy and made part of bidding document.

Only those Traders / Stockists who complies above requirement shall be considered.

35.0 PROVISION REGARDING POLICY OF PUBLIC PROCUREMENT (PREFERENCE TO MAKE IN INDIA) (PPP-MII), FOR APPLICABILITY REFER BID DATA SHEET (BDS):

35.1 Refer **Appendix – II** TO ITB for details.

35.2 Deleted

F. AWARD OF CONTRACT

36.0 AWARD CRITERIA

36.1 Pursuant to clause no. 28.0 and Clause no. 32.0 of ITB, BPCL shall place Purchase Order to the bidder(s) who has (have) been determined to be the lowest successful bidder(s) for item(s) / Group(s) of MR as per the item wise / GroupWise ordering philosophy defined in Bidding Document..

36.2 In case of MRs containing supplies as well site work/ services, a single order, covering the supply part as well site work/ services, shall be placed. Refer SPC for details.

In case Indian arm of a foreign bidder does site work, separate order may be issued by referring to the main PO for tax compliance purpose. (if requested by Foreign Principal).

37.0 NOTIFICATION OF AWARD

37.1 Prior to the expiration of the period of bid validity, BPCL shall notify the successful bidder, in writing, that its bid has been accepted. The notification letter called the "**Letter of Acceptance (LOA)/ Purchase Order (PO) {**In case LOA is not issued}" shall specify the sum that the BPCL will pay the Supplier in consideration of the execution and completion of the Supply/Works. The notification letter will constitute the formation of the contract.

37.2 The Delivery Schedule shall commence from the date of issue of LOA /PO (In case LOA is not issued) .

37.3 PO shall contain price, delivery and other salient terms of bid and RFQ Document.

37.4 Bidder will be required to acknowledge receipt of the same by returning "Copy of the LOA / PO" duly signed and stamped by the bidder as a token of acknowledgement to EIL/ BPCL.

~~**38.0 Deleted**~~

~~**39.0** *Deleted*~~

G. MISCELLANEOUS

~~**40.0**~~ **CARTEL FORMATION**

40.1 In case any bidder is found to be involved in cartel formation, his bid will not be considered for evaluation /placement of order. Such bidder will also be debarred from bidding in future.

~~**41.0**~~ **FRAUDULENT PRACTICE**

41.1 The OWNER requires that Bidders/Vendors/Contractors observe the highest standard of ethics during the award/execution of Contract. "Fraudulent Practice" means a misrepresentation of facts in order to influence the award of a Contract to the detriment of the OWNER, and includes collusive practice among bidders (prior to or after bid submission) designed to establish bid prices at artificial non-competitive levels and to deprive the OWNER of the benefits of free and open competition.

41.2 The OWNER will reject a bid for award if it determines that the bidder recommended for award has engaged in fraudulent practices in competing for the Contract in question.

41.3 Bidder is required to furnish the complete and correct information/ documents required for evaluation of their bids, if the information/ documents forming basis of evaluation is found to be false/ forged, the same shall be considered adequate ground for rejection of bids and forfeiture of Earnest Money Deposit.

41.4 In case, the information/ document furnished by the Bidder/vendor/Contractor forming basis of evaluation of his bid is found to be false/ forged after the award of the contract, OWNER shall have full right to terminate the contract and get the remaining job executed at the risk & cost of such

Bidder/Vendor/ Contractor without any prejudice to other rights available to OWNER under the contract such as forfeiture of PBG/Security Deposit, withholding of payment etc.

41.5 In case, this issue of submission of false document comes to the notice after execution of work, OWNER shall have full right to forfeit any amount due to the Bidder/Vendor/Contractor along with forfeiture of PBG/Security Deposit furnished by the Bidder/Vendor/Contractor.

41.6 Further, such Bidder/Vendor/ Contractor shall be put on Holiday/Negative List of OWNER/EIL debarring them from future business with OWNER and EIL for a time period, as per the prevailing policy of OWNER and EIL

~~42.0~~ UNIQUE DOCUMENT IDENTIFICATION NUMBER

The Institute of Chartered Accountant of India at its 379th council meeting dated 17-18th December, 2018 made generation of Unique Document Identification Number (UDIN) mandatory for every signature of full time practicing chartered accountant in phased manner for following services:

a) All certificates with effect from 1st February, 2019.

b) GST and Income Tax Audit with effect from 1st April, 2019.

c) All Audit and Assurance Functions with effect from 1st July, 2019.

In view of the above, bidder shall ensure that any certificate/ reports issued/ attested by an practicing chartered accountant in India and submitted in the bid shall mandatorily include the UDIN number. Certificate / reports issued/ attested without UDIN number of practicing chartered accountant in India shall not be considered for evaluation. The requirement of including UDIN shall not be applicable for certificate/ reports issued/ attested by a chartered accountant practising in Foreign Country.

~~43.0~~ Policy for Holiday listing of vendors in BPCL shall be as per Appendix-V to this ITB.

~~44.0~~ Deleted

~~45.0~~ Category-*I MR (Refer BDS for applicability):*

i) In case of Category-I MR, no technical offers are invited and no correspondence may be entered into or entertained after bid submission.

ii) **No technical details of any nature shall be included in the offer and if the offer contains any technical deviations or clarifications or stipulates any technical specifications, the offer shall be liable for rejection.**

iii) The submission of prices by vendor shall be construed to mean that the vendor has confirmed compliance with all technical specifications of the correspondence item.

46.0 Provisions for Stockist / Traders in case of Pipes, Fittings etc (Not Applicable for open / NIT Enquiries)

46.1 Stockists shall supply the items with 3.2 certification from EIL approved mills/ manufacturers for the approved range (i.e., size/ metallurgy/ thickness) only. List of approved manufacturers alongwith their approved range shall be sought from EIL in case the same is not available with the stockist / trader. The list is as per the present status of manufacturers/ mills approved in EIL. However, In case of placement of order on stockists, they shall verify the status of approved mills/ manufacturers from Inspection Agency before placing their suborders. List of approved manufacturers is proprietary information of EIL. Accordingly, stockists shall not share/ disclose it anywhere. This list has to be used by stockists for bidding purpose in EIL only.

46.2 After order placement by EIL, sub orders copies shall be furnished by stockists to Inspection Agency for verification. Incase, the materials are already available with stockists while quoting/

order placement by EIL, the documents for these items shall be subject to verification by Inspection Agency

46.3 Wherever compliance to DMISP policy is applicable, items shall be sourced only from EIL approved domestic mills/manufacturers.

46.4 Manufacturers/mills which are on holiday list of BPCL/EIL shall not be considered for sourcing the material.

APPENDIX-I TO ITB

COMPLIANCE OF RESTRICTIONS FOR COUNTRIES WHICH SHARE LAND BORDER WITH INDIA.

Annexure-V TO ITB

Tender Clause on Procurement from Bidders from Country(ies) sharing land border with India

1.0 Department of Expenditure (DoE) vide **O.M. No. 7/10/2021-PPD(1) dated 23.02.2023** has issued the revised guidelines for Restrictions on Procurement from Bidders from Country(ies) sharing Border with India. These guidelines are available on the website of DoE (https://doe.gov.in).

2.0 **Requirement of registration from Competent Authority:**

i). Any Bidder from a country which shares a land border with India will be eligible to bid in any procurement whether of goods, services (including consultancy services and non-consultancy services) or works (including turnkey projects) only if the Bidder is registered with the Competent Authority, specified in **Annexure-I of DoE O.M. No. 7/10/2021-PPD(1) dated 23.02.2023.**.

ii). Any Bidder (including an Indian bidder) who has a Specified Transfer of Technology (ToT) arrangement with an entity from a country which shares a land border with India will be eligible to bid in any procurement whether of goods, services (including consultancy services and non-consultancy services) or works (including turnkey projects) only if the Bidder is registered with the Competent Authority, specified in **Annexure-I of DoE O.M. No. 7/10/2021-PPD(1) dated 23.02.2023.**

3.0 **This Order shall not apply to the following special cases:**

i). In projects which receive international funding with the approval of the Department of Economic Affairs (DEA), Ministry of Finance, the procurement guidelines applicable to the project shall normally be followed, notwithstanding anything contained in this order and without reference to the Competent Authority. Exceptions to this shall be decided in consultation with DEA.

ii). This order shall not apply to procurement by Indian missions and by offices of Government agencies/ undertakings located outside India.

iii). This order will not apply to Bidders (or Entities) from those countries (even if sharing a land border with India) to which the Government of India has extended lines of credit or in which the Government of India is engaged in development projects. Updated lists of countries to which lines of credit have been extended or in which development projects are undertaken are given on the website of the Ministry of External Affairs.

iv). Procurement of spare parts and other essential service support like Annual Maintenance Contract (AMC)/ Comprehensive Maintenance Contract (CMC), including consumables for closed systems, from Original Equipment Manufacturers (OEMs) or their authorized agents, shall be exempted from the requirement of registration.

4.0 **Definitions**:

i). **"Bidder"** (including the term 'Tenderer', 'Consultant' 'Vendor' or 'Service Provider' in certain contexts) means any person or firm or company, including any member of a Consortium or Joint Venture (that is an association of several Persons, or Firms or Companies), every artificial juridical person not falling in any of the descriptions of Bidders stated hereinbefore, including any Agency, Branch or Office controlled by such person, participating in a procurement process.

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ii). **"Tender"** will include other forms of procurement, except where the context requires otherwise.

iii). **"Transfer of Technology"** means dissemination and transfer of all forms of commercially usable knowledge such as transfer of know-how, skills, technical expertise, designs, processes and procedures, trade secrets, which enables the acquirer of such technology to perform activities using the transferred technology independently. (Matters of interpretation of this term shall be referred to the Registration Committee constituted by the Department for Promotion of Industry and Internal Trade, and the interpretation of the Committee shall be final.)

iv). **"Specified Transfer of Technology"** means a transfer of technology in the sectors and/ or technologies, specified in **paragraph 5.0**, occurring on or after 23.07.2020.

v). **"Bidder (or entity) from a country which shares a land border with India"** means

(a) An entity incorporated, established or registered in such a country; or

(b) A subsidiary of an entity incorporated, established or registered in such a country; or

(c) An entity substantially controlled through entities incorporated, established or registered in such a country; or

(d) An entity whose beneficial owner is situated in such a country; or

(e) An Indian (or other) agent of such an entity; or

(f) A natural person who is a citizen of such a country; or

(g) A Consortium or Joint Venture where any member of the Consortium or Joint Venture falls under any of the above.

vi). **Beneficial Owner** for the purposes of **paragraph 4.0 v) (d)** will be as under:

a) **In case of a Company or Limited Liability Partnership**, the beneficial Owner is the natural person(s), who, whether acting alone or together, or through one or more juridical person(s), has a controlling ownership interest or who exercises control through other means.

Explanation: -

1. "Controlling ownership interest" means ownership of, or entitlement to, more than twenty-five per cent of shares or capital or profits of the company;
2. "Control" shall include the right to appoint the majority of the Directors or to control the management or policy decisions, including by virtue of their shareholding or management rights or shareholders agreements or voting agreements;

b) **In case of a Partnership Firm**, the beneficial Owner is the natural person(s) who, whether acting alone or together, or through one or more juridical person, has ownership of entitlement to more than fifteen percent of capital or profits of the partnership;

c) **In case of an Unincorporated Association or body of Individuals**, the beneficial Owner is the natural person(s), who, whether acting alone or together, or through one or more juridical person, has ownership of or entitlement to more than fifteen percent of the property or capital or profits of such association or body of individuals;

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d) Where no natural person is identified under a) or b) or c) above, the beneficial Owner is the relevant natural person who holds the position of senior managing official;

e) **In case of a Trust**, the identification of beneficial Owner(s) shall include identification of the author of the trust, the trustee, the beneficiaries with fifteen percent or more interest in the trust and any other natural person exercising ultimate effective control over the trust through a chain of control or ownership.

vii). **"Agent'** is a person employed to do any act for another, or to represent another in dealings with third persons.

[Note:

i). A person who procures and supplies finished goods from an entity from a country which shares a land border with India will, regardless of the nature of his legal or commercial relationship with the producer of the goods, be deemed to be an Agent for the purpose of this Order.

ii). However, a Bidder who only procures raw material, components etc. from an entity from a country which shares a land border with India and then manufactures or converts them into other goods will not be treated as an Agent.]

5.0 **Sensitive Sectors/ Technologies (relevant only for the provisions on ToT arrangements):**

i). Certain sectors and technologies have been identified as sensitive from the national security point of view. **The sectors listed in Schedule I (copy attached) are considered Category-I sensitive sectors. The sectors listed in Schedule II (copy attached) are considered Category-II sensitive sectors**. The technologies listed in Schedule III (copy attached) are considered sensitive technologies.

ii). For **Category-I sensitive sectors**, Bidders with ToT arrangement in any technology with an entity from a country which shares a land border with India shall require registration.

iii). For **Category-II sensitive sectors**, Bidders with ToT arrangement in the sensitive technologies listed in Schedule III, with an entity from a country which shares a land border with India shall require registration.

iv). In **Category-II sensitive sectors**, the Secretary (or an officer not below the rank of Joint Secretary to Government of India, so authorized by the Secretary) of the Ministry/ Department of the Government of India is empowered, after due consideration, to waive the requirement of registration for a particular item/ application or a class of items/ applications from the requirement of registration, even if included in Schedule-III. The Ministry/ Department concerned shall intimate the Department for Promotion of Industry and Internal Trade (DPIIT) and National Security Council Secretariat (NSCS) of their decision to waive the requirement of registration.

Ministries/ Departments of the Government of India are not required to consult the DPIIT/ NSCS before deciding and are only required to intimate the decision to DPIIT/ NSCS. If any point is raised by DPIIT/ NSCS, it should be considered in future procurements; ongoing procurement for which the waiver was granted need not be interrupted or altered.

Based on security considerations, a Ministry/ Department in a **Category-II sensitive sector** or other Ministries/ Departments may recommend to DPIIT inclusion of any other technology in the list of sensitive technologies, either generally or for their Ministry/ Department.

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6.0 **Sub-contracting in works contracts**

In works contracts, including turnkey contracts, Contractors shall not be allowed to sub-contract works to any Contractor from a country which shares a land border with India unless such contractor is registered with the Competent Authority. The definition of **"Contractor from a country which shares a land border with India"** shall be as given in above paragraph 4.0 v).

[Note: Procurement of raw material, components, etc. does not constitute sub-contracting.]

7.0 **Certificate regarding compliance**

Bidder shall submit a certificate of Compliance in the enclosed Form-I A/ Form-I B/ Form - II (as applicable).

This certificate shall be on the Bidder's Letter head and shall be duly signed & stamped by the authorised signatory of the Bidder.

In case at any stage, it is found that the certification given by the Bidder is false, their Bid shall be rejected and shall be liable for other penal actions like placement on Suspension/ Banning or forfeiture of EMD (if applicable). However, if this is found after order placement, this would be ground for immediate termination and further legal actions in accordance with law/provisions of Bidding Document including Suspension/Banning and forfeiture of CPBG/ Security Deposit.

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BIDDER'S UNDERTAKING

(On Company's Letter Head)

To,

M/s Engineers India Limited/ _____ (Name of the client)

Tender Name : _____

Tender No. : _____

"I have read the clause regarding restrictions on procurement from a Bidder of a country which shares a land border with India; I hereby certify that, Bidder M/s_____ (Name of the Bidder) is:

i).	Not from such a country	[ ]
ii).	If from such a country, has been registered with the Competent Authority	[ ]

Notes:

a) Bidder to tick appropriate option (√) in either i) or ii) above)

b) In case of sl. no. ii) above, Bidder to attach evidence of valid registration by the Competent Authority.

I hereby certify that the Bidder fulfills all requirements in this regard and eligible to be considered.

Place :
Date :

Signature (#):
Name :
Designation :
Seal :

(#) Undertaking shall be signed by the authorized signatory of the Bidder.

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FORM-II

BIDDER'S UNDERTAKING IN CASE OF TRANSFER OF TECHNOLOGY (ToT) ARRANGEMENT

(On Company's Letter Head)

To,

M/s Engineers India Limited/ _____ (Name of the client)

Tender Name : _____

Tender No. : _____

"I have read the clause regarding restrictions on procurement from a Bidder having Transfer of Technology (ToT) arrangement. Bidder M/s_____ (Name of the Bidder), hereby certify that,

i).	Bidder does not have any ToT arrangement requiring registration with the competent authority	[ ]
ii).	Bidder has valid registration to participate in this procurement	[ ]

Notes:

a) Bidder to tick appropriate option (√) in either i) or ii) above)

b) In case of sl. no. ii) above, Bidder to attach evidence of valid registration by the Competent Authority.

I hereby certify that the Bidder fulfills all requirements in this regard and eligible to be considered.

Place :
Date :

Signature (#):
Name :
Designation :
Seal :

(#) Undertaking shall be signed by the authorized signatory of the Bidder

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No.F.7/10/2021-PPD (1)
Government of India
Ministry of Finance
Department of Expenditure
Procurement Policy Division
264-C, North Block, New Delhi.
23.02.2023.

Order (Public Procurement No. 4)

Subject: Restrictions under Rule 144(xi) of the General Financial Rules (GFRs), 2017.

Attention is invited to Order (Public Procurement No. 1) issued vide F.6/18/2019-PPD dated 23.07.2020, Order (Public Procurement No. 2) issued vide F.6/18/2019-PPD dated 23.07.2020, Order (Public Procurement No. 3) issued vide F.6/18/2019-PPD dated 24.07.2020, Office Memorandum (OM) No. F.18/37/2020-PPD dated 08.02.2021, OM No. F.12/1/2021-PPD(Pt.) dated 02.03.2021 and OM No. F.7/10/2021-PPD dated 08.06.2021. In this regard, the following is hereby ordered under Rule 144(xi) (as amended vide OM No. F.7/10/2021-PPD dated 23.02.2023) on the grounds stated therein, in supersession to all of the above mentioned Orders/ clarifications:

Requirement of registration:

2. Any bidder from a country which shares a land border with India will be eligible to bid in any procurement whether of goods, services (including consultancy services and non-consultancy services) or works (including turnkey projects) only if the bidder is registered with the Competent Authority, specified in **Annexure I**.

3. Any bidder (including an Indian bidder) who has a Specified Transfer of Technology (ToT) arrangement with an entity from a country which shares a land border with India will be eligible to bid in any procurement whether of goods, services (including consultancy services and non-consultancy services) or works (including turnkey projects) only if the bidder is registered with the Competent Authority, specified in **Annexure I**.

4. The requirement of registration for cases covered by paragraph 2 above has been applicable since 23.07.2020. The requirement of registration for bidders covered by paragraph 3 above will be applicable for all procurements where tenders are issued/ published after 01.04.2023.

5. In tenders issued after 23.07.2020 or 01.04.2023, as the case may be, the provisions of requirement of registration of bidders and of other relevant provisions of this Order shall be incorporated in the tender conditions.

Applicability:

6. Apart from Ministries/ Departments, attached and subordinate bodies, notwithstanding anything contained in Rule 1 of the GFRs 2017, the Order shall also be applicable

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a) to all Autonomous Bodies;

b) to all public sector banks and public sector financial institutions;

c) to all Central Public Sector Enterprises;

d) to all procurement in Public Private Partnership projects receiving financial support from the Government or public sector enterprises/ undertakings; and

e) Union Territories, National Capital Territory of Delhi and all agencies/ undertakings thereof.

7. This order will not be applicable for cases falling under **Annexure II**.

Definitions:

8. "*Bidder*" for the purpose of the Order (including the term 'tenderer', 'consultant' 'vendor' or 'service provider' in certain contexts) means any person or firm or company, including any member of a consortium or joint venture (that is an association of several persons, or firms or companies), every artificial juridical person not falling in any of the descriptions of bidders stated hereinbefore, including any agency, branch or office controlled by such person, participating in a procurement process.

9. "*Tender*" for the purpose of the Order will include other forms of procurement, except where the context requires otherwise.

10. *"Transfer of Technology"* means dissemination and transfer of all forms of commercially usable knowledge such as transfer of know-how, skills, technical expertise, designs, processes and procedures, trade secrets, which enables the acquirer of such technology to perform activities using the transferred technology independently. (Matters of interpretation of this term shall be referred to the Registration Committee constituted by the Department for Promotion of Industry and Internal Trade, and the interpretation of the Committee shall be final.)

11. *"Specified Transfer of Technology"* means a transfer of technology in the sectors and/ or technologies, specified in paragraph 15, occurring on or after 23.07.2020.

12. *"Bidder (or entity) from a country which shares a land border with India"* for the purpose of the Order means

(a) An entity incorporated, established or registered in such a country; or

(b) A subsidiary of an entity incorporated, established or registered in such a country; or

(c) An entity substantially controlled through entities incorporated, established or registered in such a country; or

(d) An entity whose beneficial owner is situated in such a country; or

(e) An Indian (or other) agent of such an entity; or

(f) A natural person who is a citizen of such a country; or

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(g) A consortium or joint venture where any member of the consortium or joint venture falls under any of the above

13. *Beneficial owner* for the purposes of Para 12 (d) will be as under:

(i) In case of a company or Limited Liability Partnership, the beneficial owner is the natural person(s), who, whether acting alone or together, or through one or more juridical person(s), has a controlling ownership interest or who exercises control through other means.

Explanation:-

a. "Controlling ownership interest" means ownership of, or entitlement to, more than twenty-five per cent of shares or capital or profits of the company;

b. "Control" shall include the right to appoint the majority of the directors or to control the management or policy decisions, including by virtue of their shareholding or management rights or shareholders agreements or voting agreements;

(ii) In case of a partnership firm, the beneficial owner is the natural person(s) who, whether acting alone or together, or through one or more juridical person, has ownership of entitlement to more than fifteen percent of capital or profits of the partnership;

(iii) In case of an unincorporated association or body of individuals, the beneficial owner is the natural person(s), who, whether acting alone or together, or through one or more juridical person, has ownership of or entitlement to more than fifteen percent of the property or capital or profits of such association or body of individuals;

(iv) Where no natural person is identified under (i) or (ii) or (iii) above, the beneficial owner is the relevant natural person who holds the position of senior managing official;

(v) In case of a trust, the identification of beneficial owner(s) shall include identification of the author of the trust, the trustee, the beneficiaries with fifteen percent or more interest in the trust and any other natural person exercising ultimate effective control over the trust through a chain of control or ownership.

14. "*Agent*" for the purpose of the Order is a person employed to do any act for another, or to represent another in dealings with third persons.

[Note:

i. A person who procures and supplies finished goods from an entity from a country which shares a land border with India will, regardless of the nature of his legal or commercial relationship with the producer of the goods, be deemed to be an Agent for the purpose of this Order.

ii. However, a bidder who only procures raw material, components etc. from an entity from a country which shares a land border with India and then manufactures or converts them into other goods will not be treated as an Agent.]

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Sensitive Sectors/ Technologies (relevant only for the provisions on ToT arrangements):

15. (i) Certain sectors and technologies have been identified as sensitive from the national security point of view. The sectors listed in Schedule I to this Order are considered Category-I sensitive sectors. The sectors listed in Schedule II to this Order are considered Category-II sensitive sectors. The technologies listed in Schedule III are considered sensitive technologies.

(ii) For Category-I sensitive sectors, bidders with ToT arrangement in any technology with an entity from a country which shares a land border with India shall require registration.

(iii) For Category-II sensitive sectors, bidders with ToT arrangement in the sensitive technologies listed in Schedule III, with an entity from a country which shares a land border with India shall require registration.

(iv) In Category-II sensitive sectors, the Secretary (or an officer not below the rank of Joint Secretary to Government of India, so authorized by the Secretary) of the Ministry/ Department of the Government of India is empowered, after due consideration, to waive the requirement of registration for a particular item/ application or a class of items/ applications from the requirement of registration, even if included in Schedule III. The Ministry/ Department concerned shall intimate the Department for Promotion of Industry and Internal Trade (DPIIT) and National Security Council Secretariat (NSCS) of their decision to waive the requirement of registration. Ministries/ Departments of the Government of India are not required to consult the DPIIT/ NSCS before deciding and are only required to intimate the decision to DPIIT/ NSCS. If any point is raised by DPIIT/ NSCS, it should be considered in future procurements; ongoing procurement for which the waiver was granted need not be interrupted or altered.

16. Based on security considerations, a Ministry/ Department in a Category II sensitive sector or other Ministries/ Departments may recommend to DPIIT inclusion of any other technology in the list of sensitive technologies, either generally or for their Ministry/ Department.

Sub-contracting in works contracts

17. In works contracts, including turnkey contracts, contractors shall not be allowed to sub-contract works to any contractor from a country which shares a land border with India unless such contractor is registered with the Competent Authority. The definition of "contractor from a country which shares a land border with India" shall be as in paragraph 12 above. This shall not apply to sub-contracts already awarded on or before 23.07.2020.

[Note: Procurement of raw material, components, etc. does not constitute sub-contracting.]

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Certificate regarding compliance

18. An undertaking shall be taken from bidders in the tender documents **(Annexure III)** that the extant guidelines for participation in the tenders (which should include conditions for implementation of this Order) have been complied with. If such certificate given by a bidder whose bid is accepted is found to be false, this would be a ground for debarment and further legal action in accordance with law.

Validity of registration

19. In respect of tenders, registration should be valid at the time of submission of bids and at the time of acceptance of bids. In respect of supply otherwise than by tender, registration should be valid at the time of placement of order. If the bidder was validly registered at the time of acceptance / placement of order, registration shall not be a relevant consideration during contract execution.

Government e-Marketplace (GeM)

20. GeM shall remove non-compliant entities from GeM unless/ until they are registered in accordance with this Order.

Model Clauses/ Certificates

21. Model Clauses and Model Certificates which may be inserted in tenders/ obtained from Bidders are given at Annexure-III. While adhering to the substance of the Order, procuring entities are free to appropriately modify the wording of these clauses based on their past experience, local needs etc.

23/02/2023

(Kanwalpreet)
Director(PPD)
Tel.No. 2309 3811; email: kanwal.irss@gov.in

To

1. Secretaries of all Ministries/ Departments of Government of India for information and necessary action. They are also requested to inform these provisions to all procuring entities.
2. Secretary, Department of Public Enterprises with a request to immediately reiterate these orders in respect to public enterprises.
3. Secretary, Department of Financial Services with a request to immediately reiterate these orders in respect to public sector and public sector financial institutions.
4. Secretary DPIIT with a request to take action as provided under Annexure I.
5. Chief Secretaries/ Administrators of Union Territories/ National Capital Territory of Delhi.
6. CEO/ GeM with a request to ensure implementation of this order on GeM.

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Schedule I

List of Category-I Sensitive sectors:

Sr.No.	Sector
(i)	Atomic Energy
(ii)	Broadcasting/ Print and Digital Media
(iii)	Defence
(iv)	Space
(v)	Telecommunications

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Schedule II

List of Category-II Sensitive sectors:

Sr.No.	Sector
(i)	Power and Energy (including exploration/ generation/ transmission/ distribution/ pipeline)
(ii)	Banking and Finance including Insurance
(iii)	Civil Aviation
(iv)	Construction of ports and dams & river valley projects
(v)	Electronics and Microelectronics
(vi)	Meteorology and Ocean Observation
(vii)	Mining and extraction (including deep sea projects)
(viii)	Railways
(ix)	Pharmaceuticals & Medical Devices
(x)	Agriculture
(xi)	Health
(xii)	Urban Transportation

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Schedule-III

List of Sensitive Technologies:

Sr.No.	Sensitive Technologies
(i)	Additive Manufacturing (e.g. 3D Printing)
(ii)	Any equipment having electronic programmable components or autonomous systems (e.g. SCADA systems)
(iii)	Any technology used for uploading and streaming of data including broadcasting, satellite communication etc.
(iv)	Chemical Technologies
(v)	Biotechnologies including Genetic Engineering and Biological Technologies
(vi)	Information and Communication Technologies
(vii)	Software

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ANNEXURE I

Competent Authority and Procedure for Registration

A. The Competent Authority for the purpose of registration under this order shall be/ continue to be the Registration Committee constituted by the Department for Promotion of Industry and Internal Trade (DPIIT)*. [This Committee was already constituted under Order (Public Procurement) No.1].

B. The Registration Committee shall have the following members*:

   i. An officer, not below the rank of Joint Secretary, designated for this purpose by DPIIT, who shall be the Chairman;

   ii. Officers (ordinarily not below the rank of Joint Secretary) representing the Ministry of Home Affairs, Ministry of External Affairs, and of those Departments whose sectors are covered by applications under consideration;

   iii. Any other officer whose presence is deemed necessary by the Chairman of the Committee.

   iv. With effect from 01.04.2023, an officer (ordinarily not below the rank of Joint Secretary) representing the National Security Council Secretariat.

C. DPIIT shall lay down the method of application, format etc. for such bidders as covered by the Order.

D. On receipt of an application seeking registration from a bidder covered by Para 2 and 3 of this order, the Competent Authority shall first seek political and security clearances from the Ministry of External Affairs and Ministry of Home Affairs, as per guidelines issued from time to time. Registration shall not be given unless political and security clearance have both been received.

E. The Ministry of External Affairs and Ministry of Home Affairs may issue guidelines for internal use regarding the procedure for scrutiny of such applications by them.

F. The decision of the Competent Authority, to register such bidder may be for all kinds of tenders or for a specified type(s) of goods or services, and may be for a specified or unspecified duration of time, as deemed fit. The decision of the Competent Authority shall be final.

G. Registration granted by the Competent Authority of the Government of India shall be valid not only for procurement by the Central Government and its bodies specified in para 6 of this order, but also for procurement by State Governments and their agencies/ public enterprises etc. No fresh registration at the State level shall be required.

H. The Competent Authority is empowered to cancel the registration already granted if it determines that there is sufficient cause. Such cancellation by itself, however, will

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not affect the execution of contracts already awarded. Pending cancellation, it may also suspend the registration of a bidder, and the bidder shall not be eligible to bid in any further tenders during the period of suspension.

l. For national security reasons, the Competent Authority shall not be required to give reasons for rejection/cancellation of registration of a bidder.

[*Note:

(i) In respect of application of the Order to procurement by/ under State Governments, all functions assigned to DPIIT shall be carried out by the State Government concerned through a specific department or authority designated by it. The composition of the Registration Committee shall be as decided by the State Government. However, the requirement of political and security clearance as per para D shall remain and no registration shall be granted without such clearance.

(ii) Registration granted by State Governments shall be valid only for procurement by the State Government and its agencies/ public enterprises etc. and shall not be valid for procurement in other states or by the Government of India and their agencies/ public enterprises etc.]

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Special Cases

A. In projects which receive international funding with the approval of the Department of Economic Affairs (DEA), Ministry of Finance, the procurement guidelines applicable to the project shall normally be followed, notwithstanding anything contained in this order and without reference to the Competent Authority. Exceptions to this shall be decided in consultation with DEA.

B. This order shall not apply to procurement by Indian missions and by offices of government agencies/ undertakings located outside India.

C. This order will not apply to bidders (or entities) from those countries (even if sharing a land border with India) to which the Government of India has extended lines of credit or in which the Government of India is engaged in development projects. Updated lists of countries to which lines of credit have been extended or in which development projects are undertaken are given on the website of the Ministry of External Affairs.

D. Procurement of spare parts and other essential service support like Annual Maintenance Contract (AMC)/ Comprehensive Maintenance Contract (CMC), including consumables for closed systems, from Original Equipment Manufacturers (OEMs) or their authorized agents, shall be exempted from the requirement of registration.

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ANNEXURE III

Model Clause/ Certificate/ Undertaking to be inserted in tenders etc.

[While adhering to the substance of the Order, procuring entities and GeM are free to appropriately modify the wording of the clause/ certificate based on their past experience, local needs etc.

The conditions relating to specified ToT (as shown in italics) should be incorporated only in the tenders which attract the restrictions due to specified ToT.]

A. Model Clauses for Tenders (including tenders issued manually or any electronic portal including GeM):

I. Any bidder from a country which shares a land border with India will be eligible to bid in any procurement whether of goods, services (including consultancy services and non-consultancy services) or works (including turnkey projects) only if the bidder is registered with the Competent Authority. *Further, any bidder (including bidder from India) having specified Transfer of Technology (ToT) arrangement with an entity from a country which shares a land border with India, shall also require to be registered with the same competent authority.*

II. "Bidder" (including the term 'tenderer', 'consultant' or 'service provider' in certain contexts) means any person or firm or company, including any member of a consortium or joint venture (that is an association of several persons, or firms or companies), every artificial juridical person not falling in any of the descriptions of bidders stated hereinbefore, including any agency branch or office controlled by such person, participating in a procurement process.

III. "Bidder (or entity) from a country which shares a land border with India" for the purpose of this Order means: -

(a) An entity incorporated, established or registered in such a country; or
(b) A subsidiary of an entity incorporated, established or registered in such a country; or
(c) An entity substantially controlled through entities incorporated, established or registered in such a country; or
(d) An entity whose beneficial owner is situated in such a country; or
(e) An Indian (or other) agent of such an entity; or
(f) A natural person who is a citizen of such a country; or
(g) A consortium or joint venture where any member of the consortium or joint venture falls under any of the above

IV. The beneficial owner for the purpose of (iii) above will be as under:

1. In case of a company or Limited Liability Partnership, the beneficial owner is the natural person(s), who, whether acting alone or together, or through one or more juridical person, has a controlling ownership interest or who exercises control through other means.

Explanation—

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a. "Controlling ownership interest" means ownership of or entitlement to more than twenty-five per cent. of shares or capital or profits of the company;

b. "Control" shall include the right to appoint majority of the directors or to control the management or policy decisions including by virtue of their shareholding or management rights or shareholders agreements or voting agreements;

2. In case of a partnership firm, the beneficial owner is the natural person(s) who, whether acting alone or together, or through one or more juridical person, has ownership of entitlement to more than fifteen percent of capital or profits of the partnership;

3. In case of an unincorporated association or body of individuals, the beneficial owner is the natural person(s), who, whether acting alone or together, or through one or more juridical person, has ownership of or entitlement to more than fifteen percent of the property or capital or profits of such association or body of individuals;

4. Where no natural person is identified under (1) or (2) or (3) above, the beneficial owner is the relevant natural person who holds the position of senior managing official;

5. In case of a trust, the identification of beneficial owner(s) shall include identification of the author of the trust, the trustee, the beneficiaries with fifteen percent or more interest in the trust and any other natural person exercising ultimate effective control over the trust through a chain of control or ownership.

V. An Agent is a person employed to do any act for another, or to represent another in dealings with third person.

VI. [To be inserted in tenders for Works contracts, including Turnkey contracts] The successful bidder shall not be allowed to sub-contract works to any contractor from a country which shares a land border with India unless such contractor is registered with the Competent Authority.

VII. The registration shall be valid at the time of submission of bid and at the time of acceptance of bid.

VIII. If the bidder was validly registered at the time of acceptance / placement of order, registration shall not be a relevant consideration during contract execution

Model Certificate for Tenders:

"I have read the clause regarding restrictions on procurement from a bidder of a country which shares a land border with India; I certify that this bidder is not from such a country or, if from such a country, has been registered with the Competent Authority. I hereby certify that this bidder fulfills all requirements in this regard and is eligible to be considered. [Where applicable, evidence of valid registration by the Competent Authority shall be attached.]"

Model Certificate for Tenders for Works involving possibility of sub-contracting:

"I have read the clause regarding restrictions on procurement from a bidder of a country which shares a land border with India and on sub-contracting to contractors from such countries; I certify that this bidder is not from such a country or, if from such a country, has been registered with the Competent Authority and will not sub-contract any

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work to a contractor from such countries unless such contractor is registered with the Competent Authority. I hereby certify that this bidder fulfills all requirements in this regard and is eligible to be considered. [Where applicable, evidence of valid registration by the Competent Authority shall be attached.]"

Model additional certificate by Bidders in the cases of specified ToT:

"I have read the clause regarding restrictions on procurement from a bidder having Transfer of Technology (ToT) arrangement. I certify that this bidder does not have any ToT arrangement requiring registration with the competent authority."

OR

"I have read the clause regarding restrictions on procurement from a bidder having Transfer of Technology (ToT) arrangement. I certify that this bidder has valid registration to participate in this procurement."

B. Model Certificate for GeM (to be taken by the GeM from seller during registration on GeM. GeM should also obtain this certificate from all existing bidders as soon as possible):

"I have read the clause regarding restrictions on procurement from a bidder of a country which shares a land border with India; I certify that this vendor/ bidder is not from such a country and does not have any specified Transfer of Technology (ToT) from such a country or, if from such a country or if having specified ToT from such a country has been registered with the Competent Authority. I hereby certify that this vendor/ bidder fulfills all requirements in this regard and is eligible to be considered for procurement on GeM. [Where applicable, evidence of valid registration by the Competent Authority shall be attached.]"

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APPENDIX II TO ITB

PUBLIC PROCUREMENT (PREFERENCE TO MAKE IN INDIA) (PPP-MII)

Annexure -1

No. P-45021/2/2017-PP (BE-II)-Part(4)Vol.II
Government of India
Ministry of Commerce and Industry
Department for Promotion of Industry and Internal Trade
(Public Procurement Section)

Vanijya Bhawan, New Delhi
Dated: 19 July,2024

To

All Central Ministries/Departments/CPSUs/All concerned

ORDER

Subject: Public Procurement (Preference to Make in India), Order 2017– Revision; regarding.

Department for Promotion of Industry and Internal Trade, in partial modification [Paras 2, 3, 5, 10 & 13] of Order No.P-45021/2/2017-B.E.-II dated 15.6.2017 as amended by Order No.P-45021/2/2017-B.E.-II dated 28.05.2018, Order No.P-45021/2/2017-B.E.-II dated 29.05.2019, Order No.P-45021/2/2017-B.E.-II dated 04.06.2020 and Order No.P-45021/2/2017-B.E.-II dated 16.09.2020 hereby issues the revised 'Public Procurement (Preference to Make in India), Order 2017" dated 19.07.2024 effective with immediate effect.

Whereas it is the policy of the Government of India to encourage 'Make in India' and promote manufacturing and production of goods and services in India with a view to enhancing income and employment, and

Whereas procurement by the Government is substantial in amount and can contribute towards this policy objective, and

Whereas local content can be increased through partnerships, cooperation with local companies, establishing production units in India or Joint Ventures (JV) with Indian suppliers, increasing the participation of local employees in services and training them,

Now therefore the following Order is issued:

1. This Order is issued pursuant to Rule 153 (iii) of the General Financial Rules 2017.
2. **Definitions**: For the purposes of this Order:
   'Local content' means the amount of value added in India which shall, unless otherwise prescribed by the Nodal Ministry, be the total value of the item procured (excluding net domestic indirect taxes) minus the value of imported content in the item (including all customs duties) as a proportion of the total value, in percent.

   Explanatory notes for calculation of local content given above

   a. Imported items sourced locally from resellers/distributors shall be excluded from calculation of local content.
   b. The license fees/royalties paid/ technical charges paid out of India shall be excluded from local content calculation.

c. Procurement/Supply of repackaged/refurbished/rebranded imported products as understood commonly shall be treated as reselling of imported products and shall be excluded from calculation of local content. The definition of repackaged/refurbished/rebranded imported products is as follows;

'Refurbishing' means repair or reconditioning of an imported product does not amount to manufacture because no new goods come into existence.

'Repackaging' means repacking of imported goods from bulk pack to smaller packs would not ordinarily amount to manufacture of a new item.

'Rebranding' means relabeling or renaming or change in symbol or logo/makes or corporate image of a company/organization/ firm for an imported product would amount to rebranding.

d. To ensure that imported items sourced locally from resellers/distributors are excluded from calculation of local content, procuring entities to obtain from bidders, the cost of such locally-sourced imported items (Inclusive of taxes) along with break-up on license/royalties paid/technical expertise cost etc. sourced from outside India. For items sold by bidder as reseller, OEM certificate for country of origin to be submitted.

e. For contracts involving supply of multiple items, weighted average of all items to be taken while calculating the local content.

'*Class-I local supplier*' means a supplier or service provider, whose goods, services or works offered for procurement, meets the minimum local content as prescribed for 'Class-I local supplier' under this Order.

'*Class-II local supplier*' means a supplier or service provider, whose goods, services or works offered for procurement, meets the minimum local content as prescribed for 'Class-II local supplier' but less than that prescribed for 'Class-I local supplier' under this Order.

'*Non - Local supplier*' means a supplier or service provider, whose goods, services or works offered for procurement, has local content less than that prescribed for 'Class-II local supplier' under this Order.

'*L1*' means the lowest tender or lowest bid or the lowest quotation received in a tender, bidding process or other procurement solicitation as adjudged in the evaluation process as per the tender or other procurement solicitation.

'*Margin of purchase preference*' means the maximum extent to which the price quoted by a "Class-I local supplier" may be above the L1 for the purpose of purchase preference.

'*Nodal Ministry*' means the Ministry or Department identified pursuant to this order in respect of a particular item of goods or services or works.

'*Procuring entity*' means a Ministry or department or attached or subordinate office of, or autonomous body controlled by, the Government of India and includes Government companies as defined in the Companies Act.

'Works' means all works as per Rule 130 of GFR- 2017, and will also include *'turnkey works'*.

2A. *Special treatment for items covered under PLI Scheme*

The manufacturers manufacturing an item under PLI scheme shall be treated as deemed Class II local supplier for that item unless they have minimum local content equal to or higher than that notified for Class-I local supplier for that item, provided the manufacturer has received incentive from the concerned PLI Ministry for the item. The above shall be applicable for the specific time period only, as notified by concerned PLI Ministry.

3. Eligibility of 'Class-I local supplier'/ 'Class-II local supplier'/ 'Non-local suppliers' for different types of procurement

(a) In procurement of all goods, services or works in respect of which the Nodal Ministry / Department has communicated that there is sufficient local capacity and local competition, only 'Class-I local supplier', as defined under the Order, shall be eligible to bid irrespective of purchase value.

(b) Only 'Class-I local supplier' and 'Class-II local supplier', as defined under the Order, shall be eligible to bid in procurement undertaken by procuring entities, except when Global tender enquiry has been issued. In global tender enquiries, 'Non-local suppliers' shall also be eligible to bid along with 'Class-I local suppliers' and 'Class-II local suppliers'. In procurement of all goods, services or works, not covered by sub-para 3(a) above, and with estimated value of purchases less than Rs. 200 Crore, in accordance with Rule 161(iv) of GFR, 2017, Global tender enquiry shall not be issued except with the approval of competent authority as designated by Department of Expenditure.

(c) For the purpose of this Order, works includes Engineering, Procurement and Construction (EPC) contracts and services include System Integrator (SI) contracts.

3.1 Mandatory sourcing of items, with sufficient local capacity and competition, from Class-I local suppliers in SI/EPC/Turnkey Contracts/Service Tenders

a. The items, notified as having sufficient local capacity and competition, shall mandatory be sourced from Class-I local suppliers in SI/EPC/Turnkey Contracts/ Services tenders. This provision will be applicable only for those items which have been notified by the Nodal Ministry as Class I i.e. having sufficient local capacity and competition, with specific HSN codes."

b. Notwithstanding above, if in any project, it is considered that it is not practically feasible to source such items from Class I local suppliers, it may take relaxation from such stipulation with the approval of Secretary of the administrative Ministry/ Department concerned or with the approval of the Competent Authority specified by the Administrative Ministry/Department, on case-specific basis.

3A. Purchase Preference

(a) Subject to the provisions of this Order and to any specific instructions issued by the Nodal Ministry or in pursuance of this Order, purchase preference shall be given to 'Class-I local supplier' in procurement undertaken by procuring entities in the manner specified here under.

(b) In the procurement of goods or works, which are covered by para 3(b)

above and which are divisible in nature, the 'Class-I local supplier' shall get purchase preference over 'Class-II local supplier' as well as 'Non-local supplier', as per following procedure:

i. Among all qualified bids, the lowest bid will be termed as L1. If L1 is 'Class-I local supplier', the contract for full quantity will be awarded to L1.
ii. If L1 bid is not a 'Class-I local supplier', 50% of the order quantity shall be awarded to L1. Thereafter, the lowest bidder among the 'Class-I local supplier' will be invited to match the L1 price for the remaining 50% quantity subject to the Class-I local supplier's quoted price falling within the margin of purchase preference, and contract for that quantity shall be awarded to such 'Class-I local supplier' subject to matching the L1 price. In case such lowest eligible 'Class-I local supplier' fails to match the L1 price or accepts less than the offered quantity, the next higher 'Class-I local supplier' within the margin of purchase preference shall be invited to match the L1 price for remaining quantity and so on, and contract shall be awarded accordingly. In case some quantity is still left uncovered on Class-I local suppliers, then such balance quantity may also be ordered on the L1 bidder.

(c) In the procurement of goods or works, which are covered by para 3(b) above and which are not divisible in nature, and in procurement of services where the bid is evaluated on price alone, the 'Class-I local supplier' shall get purchase preference over 'Class-II local supplier' as well as 'Non-local supplier', as per following procedure:

i. Among all qualified bids, the lowest bid will be termed as L1. If L1 is Class -I local supplier', the contract will be awarded to L1.
ii. If L1 is not 'Class-I local supplier', the lowest bidder among the 'Class-I local supplier', will be invited to match the L1 price subject to Class-I local supplier's quoted price falling within the margin of purchase preference, and the contract shall be awarded to such 'Class-I local supplier' subject to matching the L1 price.
iii. In case such lowest eligible 'Class-I local supplier' fails to match the L1 price, the 'Class-I local supplier' with the next higher bid within the margin of purchase preference shall be invited to match the L1 price and so on and contract shall be awarded accordingly. In case none of the 'Class-I local supplier' within the margin of purchase preference matches the L1 price, the contract may be awarded to the L1 bidder.

(d) "Class-II local supplier" will not get purchase preference in any procurement, undertaken by procuring entities.

3B. Applicability in tenders where contract is to be awarded to multiple bidders- In tenders where contract is awarded to multiple bidders subject to matching of L1 rates or otherwise, the 'Class-I local supplier' shall get purchase preference over 'Class-II local supplier' as well as 'Non-local supplier', as per following procedure:

a. In case there is sufficient local capacity and competition for the item to be procured, as notified by the nodal Ministry, only Class I local suppliers shall be eligible to bid. As such, the multiple suppliers, who would be awarded the contract, should be all and only 'Class I Local suppliers'.
b. In other cases, 'Class II local suppliers' and 'Non local suppliers' may also participate in the bidding process along with 'Class I Local suppliers' as per provisions of this Order.
c. If 'Class I Local suppliers' qualify for award of contract for at least

50% of the tendered quantity in any tender, the contract may be awarded to all the qualified bidders as per award criteria stipulated in the bid documents. However, in case 'Class I Local suppliers' do not qualify for award of contract for at least 50% of the tendered quantity, purchase preference should be given to the 'Class I local supplier' over 'Class II local suppliers'/ 'Non local suppliers' provided that their quoted rate falls within 20% margin of purchase preference of the highest quoted bidder considered for award of contract so as to ensure that the 'Class I Local suppliers' taken in totality are considered for award of contract for at least 50% of the tendered quantity.

d. First purchase preference has to be given to the lowest quoting 'Class-I local supplier', whose quoted rates fall within 20% margin of purchase preference, subject to its meeting the prescribed criteria for award of contract as also the constraint of maximum quantity that can be sourced from any single supplier. If the lowest quoting 'Class-I local supplier', does not qualify for purchase preference because of aforesaid constraints or does not accept the offered quantity, an opportunity may be given to next higher 'Class-I local supplier', falling within 20% margin of purchase preference, and so on.

e. To avoid any ambiguity during bid evaluation process, the procuring entities may stipulate its own tender specific criteria for award of contract amongst different bidders including the procedure for purchase preference to 'Class-I local supplier' within the broad policy guidelines stipulated in sub- paras above.

4. **Exemption of small purchases:** Notwithstanding anything contained in paragraph 3, procurement where the estimated value to be procured is less than Rs. 5 lakhs shall be exempt from this Order. However, it shall be ensured by procuring entities that procurement is not split for the purpose of avoiding the provisions of this Order.

4A. Exemption in sourcing of spares and consumables of closed systems:

Procurement of spare parts, consumables for closed systems and Maintenance/ Service contracts with Original Equipment Manufacturer/Original Equipment Supplier/Original Part Manufacturer shall be exempted from this Order.

5. **Minimum local content:** The 'local content' requirement to categorize a supplier as 'Class-I local supplier' is minimum 50%. For 'Class-II local supplier', the 'local content' requirement is minimum 20%. Nodal Ministry/ Department may prescribe only a higher percentage of minimum local content requirement to categorize a supplier as 'Class-I local supplier'/ 'Class- II local supplier'. For the items, for which Nodal Ministry/ Department has not prescribed higher minimum local content notification under the Order, it shall be 50% and 20% for 'Class-I local supplier'/ 'Class-II local supplier' respectively.

6. **Margin of Purchase Preference:** The margin of purchase preference shall be 20%.

7. **Requirement for specification in advance:** The minimum local content, the margin of purchase preference and the procedure for preference to Make in India shall be specified in the notice inviting tenders or other form of procurement solicitation and shall not be varied during a particular procurement transaction.

8. **Government E-marketplace:** In respect of procurement through the Government E-marketplace (GeM) shall, as far as possible, specifically mark the items which meet the minimum local content while registering the item for

display, and shall, wherever feasible, make provision for automated comparison with purchase preference and without purchase preference and for obtaining consent of the local supplier in those cases where purchase preference is to be exercised.

9. **Verification of local content:**

a. The 'Class-I local supplier'/ 'Class-II local supplier' at the time of tender, bidding or solicitation shall be required to indicate percentage of local content and provide self-certification that the item offered meets the local content requirement for 'Class-I local supplier'/ 'Class-II local supplier', as the case may be. They shall also give details of the location(s) at which the local value addition is made.

b. In cases of procurement for a value in excess of Rs. 10 crores, the 'Class-I local supplier'/ 'Class-II local supplier' shall be required to provide a certificate from the statutory auditor or cost auditor of the company (in the case of companies) or from a practicing cost accountant or practicing chartered accountant (in respect of suppliers other than companies) giving the percentage of local content.

c. The bidder shall give self-certification for local content in the quoted item (goods/works/services) at the time of tendering. However, at the time of execution of the project, for all contracts above INR 10 Crore, the contractor/ supplier shall be required to give local content certification duly certified by cost/ chartered accountant in practice. For cases where it is not possible to provide certification by Cost/Chartered Accountant at the time of execution of project, the supplier shall be permitted to provide the certificate for local content from Cost/ Chartered Accountant after completion of the contract, within time limit acceptable to the procuring entity. In case the contractor/ supplier does not meet the stipulated local content requirement and the category of the supplier changes from Class-I to Class-II/ Non-local or from Class-II to Non-local, a penalty upto 10% of the contract value may be imposed. However, contract once awarded shall not be terminated on this account.

d. Decisions on complaints relating to implementation of this Order shall be taken by the competent authority which is empowered to look into procurement-related complaints relating to the procuring entity.

e. Nodal Ministries may constitute committees with internal and external experts for independent verification of self-declarations and auditor's/ accountant's certificates on random basis and in the case of complaints.

f. Nodal Ministries and procuring entities may prescribe fees for such complaints.

g. False declarations will be in breach of the Code of Integrity under Rule 175(1)(i)(h) of the General Financial Rules for which a bidder or its successors can be debarred for up to two years as per Rule 151 (iii) of the General Financial Rules along with such other actions as may be permissible under law.

h. A supplier who has been debarred by any procuring entity for violation of this Order shall not be eligible for preference under this Order for procurement by any other procuring entity for the duration of the debarment. The debarment for such other procuring entities shall take effect prospectively from the date on which it comes to the notice of other procurement entities, in the manner prescribed under paragraph 9

i below.

i. The Department of Expenditure shall issue suitable instructions for the effective and smooth operation of this process, so that:
   i. The fact and duration of debarment for violation of this Order by any procuring entity are promptly brought to the notice of the Member-Convenor of the Standing Committee and the Department of Expenditure through the concerned Ministry /Department or in some other manner;
   ii. On a periodical basis such cases are consolidated and a centralized list or decentralized lists of such suppliers with the period of debarment is maintained and displayed on website(s);
   iii. In respect of procuring entities other than the one which has carried out the debarment, the debarment takes effect prospectively from the date of uploading on the website(s) in the such a manner that ongoing procurement are not disrupted.

10. **Specifications in Tenders and other procurement solicitations:**
   a. Every procuring entity shall ensure that the eligibility conditions in respect of previous experience fixed in any tender or solicitation do not require proof of supply in other countries or proof of exports.
   b. Procuring entities shall endeavour to see that eligibility conditions, including on matters like turnover, production capability and financial strength do not result in unreasonable exclusion of 'Class-I local supplier'/ 'Class-II local supplier' who would otherwise be eligible, beyond what is essential for ensuring quality or creditworthiness of the supplier.
   c. Procuring entities shall, within 2 months of the issue of this Order review all existing eligibility norms and conditions with reference to sub-paragraphs 'a' and 'b' above.
   d. **Reciprocity Clause**
      i. When a Nodal Ministry/Department identifies that Indian suppliers of an item are not allowed to participate and/ or compete in procurement by any foreign government, due to restrictive tender conditions which have direct or indirect effect of barring Indian companies such as registration in the procuring country, execution of projects of specific value in the procuring country etc., it shall provide such details to all its procuring entities including CMDs/CEOs of PSEs/PSUs, State Governments and other procurement agencies under their administrative control and GeM for appropriate reciprocal action.
      ii. Entities of countries which have been identified by the nodal Ministry/Department as not allowing Indian companies to participate in their Government procurement for any item related to that nodal Ministry shall not be allowed to participate in Government procurement in India for all items related to that nodal Ministry/ Department, except for the list of items published by the Ministry/ Department permitting their participation.
      iii. The stipulation in (ii) above shall be part of all tenders invited by the Central Government procuring entities stated in (i) above. All purchases on GeM shall also necessarily have the above provisions for items identified by nodal Ministry/ Department.
      iv. State Governments should be encouraged to incorporate similar provisions in their respective tenders.
      v. The term 'entity' of a country shall have the same meaning as under the FDI Policy of DPIIT as amended from time to time.
   e. Specifying foreign certifications/ unreasonable technical specifications/

brands/ models in the bid document is restrictive and discriminatory practice against local suppliers. If foreign certification is required to be stipulated because of non-availability of Indian Standards and/or for any other reason, the same shall be done only after written approval of Secretary of the Department concerned or any other Authority having been designated such power by the Secretary of the Department concerned.

f. "All administrative Ministries/Departments *whose procurement exceeds Rs. 1000 Crore per annum* shall notify/update their procurement projections every year, including those of the PSEs/PSUs, for the next 5 years on their respective website."

10A. Action for non-compliance of the Provisions of the Order: In case restrictive or discriminatory conditions against domestic suppliers are included in bid documents, an inquiry shall be conducted by the Administrative Department undertaking the procurement (including procurement by any entity under its administrative control) to fix responsibility for the same. Thereafter, appropriate action, administrative or otherwise, shall be taken against erring officials of procurement entities under relevant provisions. Intimation on all such actions shall be sent to the Standing Committee.

11. **Assessment of supply base by Nodal Ministries:** The Nodal Ministry shall keep in view the domestic manufacturing / supply base and assess the available capacity and the extent of local competition while identifying items and prescribing the higher minimum local content or the manner of its calculation, with a view to avoiding cost increase from the operation of this Order.

12. **Increase in minimum local content:** The Nodal Ministry may annually review the local content requirements with a view to increasing them, subject to availability of sufficient local competition with adequate quality.

13. **Manufacture under license/ technology collaboration agreements with phased indigenization:** While notifying the minimum local content, Nodal Ministries may make special provisions for exempting suppliers from meeting the stipulated local content if the product is being manufactured in India under a license from a foreign manufacturer who holds intellectual property rights and where there is a technology collaboration agreement / transfer of technology agreement for indigenous manufacture of a product developed abroad with clear phasing of increase in local content.

13A. In procurement of all goods, services or works in respect of which there is substantial quantity of public procurement and for which the nodal ministry has not notified that there is sufficient local capacity and local competition, the concerned nodal ministry shall notify an upper threshold value of procurement beyond which foreign companies shall enter into a joint venture with an Indian company to participate in the tender. Procuring entities, while procuring such items beyond the notified threshold value, shall prescribe in their respective tenders that foreign companies may enter into a joint venture with an Indian company to participate in the tender. The procuring Ministries/Departments shall also make special provisions for exempting such joint ventures from meeting the stipulated minimum local content requirement, which shall be increased in a phased manner.

14. **Powers to grant exemption and to reduce minimum local content:** The administrative Department undertaking the procurement (including

procurement by any entity under its administrative control), with the approval of their Minister-in-charge, may by written order, for reasons to be recorded in writing,

a. reduce the minimum local content below the prescribed level; or
b. reduce the margin of purchase preference below 20%; or
c. exempt any particular item or supplying entities from the operation of this Order or any part of the Order.

The Administrative Department, while seeking exemption under this para, shall certify that such an item(s) has not been notified by Nodal Ministry/ Department concerned under para 3 (a) of the Order.

A copy of every such order shall be provided to the Standing Committee and concerned Nodal Ministry / Department. The Nodal Ministry / Department concerned will continue to have the power to vary its notification on Minimum Local Content.

15. **Directions to Government companies:** In respect of Government companies and other procuring entities not governed by the General Financial Rules, the administrative Ministry or Department shall issue policy directions requiring compliance with this Order.
16. **Standing Committee:** A standing committee is hereby constituted with the following membership:
Secretary, Department for Promotion of Industry and Internal Trade - Chairman
Secretary, Commerce—Member
Secretary, Ministry of Electronics and Information Technology—Member Joint Secretary (Public Procurement), Department of Expenditure—Member Joint Secretary (DPIIT)—Member-Convenor

The Secretary of the Department concerned with a particular item shall be a member in respect of issues relating to such item. The Chairman of the Committee may co-opt technical experts as relevant to any issue or class of issues under its consideration.

17. **Functions of the Standing Committee:** The Standing Committee shall meet as often as necessary, but not less than once in six months. The Committee

a. shall oversee the implementation of this order and issues arising therefrom, and make recommendations to Nodal Ministries and procuring entities.
b. shall annually assess and periodically monitor compliance with this Order
c. shall identify Nodal Ministries and the allocation of items among them for issue of notifications on minimum local content
d. may require furnishing of details or returns regarding compliance with this Order and related matters
e. may, during the annual review or otherwise, assess issues, if any, where it is felt that the manner of implementation of the order results in any restrictive practices, cartelization or increase in public expenditure and suggest remedial measures
f. may examine cases covered by paragraph 13 above relating to manufacture under license/ technology transfer agreements with a view to satisfying itself that adequate mechanisms exist for enforcement of such agreements and for attaining the underlying objective of progressive indigenization

g. may consider any other issue relating to this Order which may arise.

18. **Removal of difficulties**: Ministries /Departments and the Boards of Directors of Government companies may issue such clarifications and instructions as may be necessary for the removal of any difficulties arising in the implementation of this Order.

19. **Ministries having existing policies**: Where any Ministry or Department has its own policy for preference to local content approved by the Cabinet after 1st January 2015, such policies will prevail over the provisions of this Order. All other existing orders on preference to local content shall be reviewed by the Nodal Ministries and revised as needed to conform to this Order, within two months of the issue of this Order.

20. **Transitional provision**: This Order shall not apply to any tender or procurement for which notice inviting tender or other form of procurement solicitation has been issued before the issue of this Order.

19/2/24

(Himani Pande)
Additional Secretary to the Government of India
Tel: 011-23038888
E-mail: ashp.dpiit@gov.in

Annexure-2(Rev)

FORM – 2

SELF CERTIFICATION BY BIDDER UNDER PPP-MII ORDER, 2017

To

M/s _____ <Insert name of Client>

NAME OF WORK / ITEM:

TENDER /RFQ NO. :

Dear Sir,

We, M/s _____ *<Name of Bidder>* hereby confirm that we meet the mandatory minimum requirement of Local Content (LC) for **Class-I local supplier / Class-II local supplier** *(strike out which is not applicable)* under Public Procurement (Preference to Make in India), Order 2017 (PPP-MII, 2017) and the work / Item shall have **LC of** _____**%.**

The details of the location(s) at which the local value addition is/shall be made, is/ areas under:

.....
.....
.....

We confirm compliance of Public Procurement (Preference to Make in India) (PPP-MII) Order 2017, vide Order No P-45021/2/2017-PP(BE-II)-Part-4)Vol.II and its subsequent Amendments.

We also confirm that, the imported items sourced locally from resellers/distributors are excluded from calculation of local content. The cost of such locally sourced imported items (inclusive of taxes) along with break up on license/royalties paid/technical expertise etc. sourced from outside India shall be submitted at the time of execution as per Form-2A.

We further confirm that in case we fail to meet the minimum local content/domestic value addition, the same shall be treated as false information and Owner reserves the right to take appropriate action for debarment, Penalty after award etc. as per provision of the PPP-MII Order, 2017 and its subsequent Amendments and as more specifically mentioned in the Bidding/ RFQ document.

We also confirm that we are not debarred by any other procuring entity (GOI/PSU/PSE etc.)
or

Our debarment period is completed as on _____ <insert date>, and as such we are eligible to avail purchase preference under this Order.
(## Strike out which is not applicable)

_____
Signature of Bidder

Place:

Name :

Date:

Designation

Seal :

FORM-2A

DETAILS OF IMPORTED COMPONENTS SOURCED FROM RESELLERS/DISTRIBUTORS EXCLUDED UNDER LOCAL CONTENT

RFQ/TENDER No:

ITEM/WORKS DESCRIPTION:

S. No	Cost component	Cost in INR (Refer Note-2)
a.	Locally-sourced imported items from resellers/distributors (inclusive of taxes)	i. ii. iii. iv.
b.	License/Royalties paid/ Technical Expertise cost etc. for the items sourced from outside India i. License ii. Royalties Paid iii. Technical Expertise Cost iv. other	i. ii. iii. iv.
DETAILS OF ITEMS SOLD BY BIDDER AS RESELLER		
c.	Details of Items	OEM Certificate for country of origin
	i. ii. iii. iv.	i. ii. iii. iv.

Note –

1. For contracts involving supply of multiple items, weighted average of all items to be taken while calculating the local content.
2. As regards cases where currency for above is other than Indian Rupee, exchange rate prevailing on the Bid Due Date shall be considered for the calculation of Local Content.
3. Bidder to enclose OEM Certificate for country of origin as specified in S. No (c) above.

Signature of Bidder

Place:

Name :

Date:

Designation

Seal :

ANNEXURE-3

FORM – 3

(FOR CLASS-I LOCAL SUPPLIER/ CLASS-II LOCAL SUPPLIER HAVING VALUE OF PROCUREMENT MORE THAN INR 10 CRORE)

CERTIFICATE UNDER PPP-MII ORDER, 2017 TOWARDS MANDATORY MINIMUM LOCAL CONTENT

To

M/s _____ <Insert name of Client>

NAME OF WORK / ITEM:

TENDER /RFQ NO.:

Dear Sir,

We, _____, the Statutory Auditor or Cost Auditor of the Company (in case of Companies) or are a practicing Cost Accountant or practicing Chartered Accountant (in respect of supplier other than companies) of M/s. _____ *<Name of Bidder>*, hereby certify that as per definition specified in above policy, M/s. _____ *<Name of Bidder>* is a Class-I Local Supplier / Class-II Local Supplier <as applicable>

We further confirm that M/s _____ *<Name of Bidder>* meet the mandatory minimum Local content requirement specified for Class-I Local supplier/ Class-II Local supplier <as applicable> under Policy for Public Procurement (Preference to Make in India), Order 2017 (PPP-MII) for their offer for the abovementioned Work/ Item and shall have local content of _____% .

The details of the location(s) at which the local value addition is/shall be made, is/ areas under:

……..

……..

We confirm compliance of Public Procurement (Preference to Make in India) (PPP-MII) Order 2017, vide Order No P-45021/2/2017-PP(BE-II)-Part-4)Vol.II and its subsequent Amendments.

We also confirm that, the imported items sourced locally from resellers/distributors are excluded from calculation of local content. The cost of such locally sourced imported items (inclusive of taxes) along with break up on license/royalties paid/technical expertise etc. sourced from outside India is enclosed as Form-3A.

We also confirm that M/s _____ <Name of Bidder> is not debarred by any other procuring entity (GOI/PSU/PSE etc.).

OR

M/s _____<Name of Bidder>'s debarment period is completed as on _____<insert date>, and as such M/s _____ <Name of Bidder> is eligible to availed purchase preference under this Order.

(Strike out which is not applicable)

_____

Signature of certificate issuing authority

Place:

Name :

Date:

Name of Audit Firm:

Designation

Seal :

FORM-3A

DETAILS OF IMPORTED COMPONENTS SOURCED FROM RESELLERS/DISTRIBUTORS EXCLUDED UNDER LOCAL CONTENT

RFQ/TENDER No:

ITEM/WORKS DESCRIPTION:

S. No	Cost component	Cost in INR (Refer Note-2)
a.	Locally-sourced imported items from resellers/distributors (inclusive of taxes)	i. ii. iii.
b.	License/Royalties paid/ Technical Expertise cost etc. for the items sourced from outside India i. License ii. Royalties Paid iii. Technical Expertise Cost iv. other	i. ii. iii. iv.
DETAILS OF ITEMS SOLD BY BIDDER AS RESELLER		
c.	Details of Items	OEM Certificate for country of origin
	i. ii. iii.	i. ii. iii.

Note –

1. For contracts involving supply of multiple items, weighted average of all items to be taken while calculating the local content.
2. As regards cases where currency for above is other than Indian Rupee, exchange rate prevailing on the Bid Due Date shall be considered for the calculation of Local Content.
3. Bidder to enclose OEM.Certificate for country of origin as specified in S. No (c) above.
4. The above formats are indicative, the statutory auditor/Cost auditor/Chartered Accountant/ Cost Accountant can modify the format without changing the intent of certification.

_____

Signature of certificate issuing authority

Place:

Name:

Date:

Name of Audit Firm:

Designation

Seal:

No.F.1/4/2021-PPD
Government of India
Ministry of Finance
Department of Expenditure
Public Procurement Division
*****

264-C, North Block, New Delhi.
18.05.2023.

OFFICE MEMORANDUM

Subject: Concurrent application of Public Procurement Policy for Micro and Small Enterprises Order, 2012 and Public Procurement (Preference to Make in India) Order, 2017.

The undersigned is directed to refer two Preferential Procurement Orders mandated for the Public Procurement in India, namely:

i. Public Procurement Policy for Micro and Small Enterprises (MSEs) Order dated 23.03.2012 (PPP-MSE Order) issued by Ministry of Micro, Small and Medium Enterprises (MoMSME) in exercise of the powers conferred in Section 11 of the MSME Development Act, 2006. (Last revised on 09.11.2018)

ii. Public Procurement (Preference to Make in India) Order, 2017 (PPP-MII order), under Rule 153(iii) of the General Financial Rules (GFRs) 2017, approved by the Cabinet. Implementation of this PPP-MII order is monitored by Department for Promotion of Industry and Internal Trade (DPIIT). (Last revised on 16.09.2020.)

2. It has been brought to the notice of this Department that concurrent application of these two orders are creating confusion to the procuring entities and different procuring entities interpret them differently. In order to bring predictability both to the procuring entities as well as bidders, following guidelines are being issued.

Guidelines

3. The Class-I local suppliers, under PPP-MII Order, participating in any government tender, may or may not be MSEs, as defined under the MSME Act. Similarly, MSEs participating in any government tender, may or may not be Class-I local suppliers. Suppliers may be categorised in following four broad categories for consideration or applicability of purchase preference:

Category	Terminology
Supplier is both MSE & Class-I local supplier.	"MSE Class-I local supplier"
Supplier is MSE but not Class-I local supplier.	"MSE but non-Class-I local supplier"
Supplier is not MSE but is Class-I local supplier.	"Non-MSE but Class-I local supplier"
Supplier is neither MSE nor Class-I local.	"Non-MSE non-Class-I local supplier"

4. The applicability of PPP-MSE Order and PPP-MII Order in various scenarios, involving simultaneous purchase preference to MSEs and Class-I local suppliers under PPP-MSE Order and PPP-MII Order respectively, shall be as under:

a) *Items covered under Para 3(a) of PPP- MII Order, 2017 for which Nodal Ministry has notified sufficient local capacity and competition:* For these items, only Class-I local suppliers are eligible to bid irrespective of purchase value. Hence, Class-II local suppliers or Non-local suppliers, including MSEs which are Class-II local suppliers/ Non-local suppliers, are not eligible to bid. Possible scenarios can be as under:

(i) L-1 is "MSE Class-I local supplier" - 100% of the tendered quantity is to be awarded to L-1.

(ii) L-1 is "Non-MSE but Class-I local supplier" - Purchase preference is given to MSEs as per PPP-MSE Order. Balance quantity is to be awarded to the L-1 bidder.

b) *Items reserved exclusively for procurement from MSEs as per PPP-MSE Order:* These items are reserved exclusively for purchase from MSEs. Hence, non-MSEs are not eligible to bid for these items. Possible scenarios can be as under:

(i) L-1 is "MSE Class-I local supplier" - 100% of the tendered quantity is to be awarded to L-1.

(ii) L-1 is "MSE non-Class–I local supplier" - Purchase preference is to be given to Class-I local supplier as per PPP-MII Order. Balance quantity, is to be awarded to L-1 bidder.

c) *If items are neither notified for sufficient local capacity nor reserved for MSEs, then the process will be as follows:*

c (a) Items covered under Para 3A(b) of PPP-MII Order are divisible items and both MSEs as well as Class-I local suppliers are eligible for purchase preference. Possible scenarios can be as under:

(i) L-1 is "MSE Class-I local supplier" - 100% of the tendered quantity is to be awarded to L-1.

(ii) L-1 is "Non-MSE but Class-I local supplier" - Purchase preference is to be given to MSEs, if eligible, as per PPP-MSE Order. Balance quantity is to be awarded to L-1 bidder.

(iii) L-1 is "MSE but non-Class-I local supplier" - Purchase preference is to be given to Class-I local suppliers, if eligible, as per PPP-MII Order. Balance quantity is to be awarded to L-1 bidder.

(iv) L-1 is "Non-MSE non-Class-I local supplier" - Purchase preference is to be given to MSEs as per PPP-MSE Order. Thereafter, purchase preference is to be given to Class-I local suppliers for "50% of the tendered quantity minus quantity allotted to MSEs

above" as per PPP- MII Order. For the balance quantity, contract is to be awarded to L-1 bidder. *(Kindly refer to the illustrative example in the annexure).*

c (b) Items covered under Para 3A(c) of PPP-MII Order, 2017 are non-divisible items and both MSEs as well as Class-I local suppliers are eligible for purchase preference. Possible scenarios can be as under:

(i) L-1 is "MSE Class-I local supplier" - Contract is awarded to L-1.

(ii) L-1 is not "MSE Class-I local supplier" but the "MSE Class-I local supplier" falls within 15% margin of purchase preference - Purchase preference is to be given to lowest quoting "MSE Class-I local supplier". If lowest quoting "MSE Class-I local supplier" does not accept the L-1 rates, the next higher "MSE Class-I local supplier" falling within 15% margin of purchase preference is to be given purchase preference and so on.

(iii) If conditions mentioned in sub paras (i) and (ii) above are not met i.e. L-1 is neither "MSE Class-I local supplier" nor "MSE Class-I local supplier" is eligible to take benefit of purchase preference, the contract is to be awarded/ purchase preference to be given in different possible scenarios as under:

A. L1 is "MSE but non-Class-I local supplier" or "Non-MSE but Class-I local supplier" – Contract is be awarded to L1.

B. L1 is "Non-MSE non-Class-I local supplier" - First purchase preference to be given to MSE as per PPP-MSE Order. If MSE not eligible/ does not accept - purchase preference to be given to Class- I Local supplier as per PPP-MII Order. If Class-I Local supplier also not eligible/ does not accept – contract to be awarded to L-1.

d) *Items reserved for both MSEs and Class-I local suppliers*: These items are reserved exclusively for purchase from MSEs as well as Class-I local suppliers. Hence, only "MSE Class-I local supplier" are eligible to bid for these items. Non-MSEs/Class-II local suppliers/ Non-local suppliers cannot bid for these items. Hence the question of purchase preference does not arise.

e) Non-local suppliers, including MSEs falling in the category of Non-local suppliers, shall be eligible to bid only against Global Tender Enquiry.

18/5/2023

(Kanwalpreet)
Director
Tel.:-223093811; email: - kanwal.irss@gov.in

To

1. Secretaries of all Central Government Ministries/ Departments.
2. Secretary Department of Public Enterprises with a request for issuing suitable instructions to all Central Public Sector Enterprises in this regard.

Annexure

Example explaining applicability in scenario explained in para 4 c (a)(iv)

(Scenario: Divisible items, both MSEs as well as Class-I local suppliers eligible for purchase preference and L-1 is "Non-MSE non-Class-I local supplier")

Item – Desktop computer

Qty – 50 Nos.

Details of bids received

Sr. No.	Name of bidder	Rates quoted	Price Ranking	Status of bidder
1.	A	100	L1	"Non-MSE non- Class-I local supplier"
2.	B	110	L2	"Non-MSE but Class-I local supplier"
3.	C	112	L3	"MSE but non- Class-I local supplier"
4.	D	115	L4	"Non-MSE but Class-I local supplier"
5.	E	118	L5	"MSE but non- Class-I local supplier"
6.	F	120	L6	"MSE Class-I local supplier"

1. In this case, first purchase preference is to be given to MSEs as per PPP-MSE Order for 25% of tendered quantity of 50 Nos. i.e. 12.5 Nos. (rounded off to the next whole number say 13 Nos). Accordingly, invite L3 (bidder C), whose quoted rates falls within 15% margin of purchase preference to match L1 price i.e. Rs. 100/- for quantity of 13 Nos. Bidder "E" and "F", although MSEs, will not get purchase preference since their quoted rates don't fall within 15% margin of purchase preference. Bidder C will be considered for order of 13 Nos. on confirmation of reduction of price.

2. For 50% of balance quantity of 37 number (tendered quantity of 50 – 13 awarded to bidder C; assuming bidder C has confirmed to accept L1 rates), purchase preference will be given to lowest Class-I local supplier as per PPP-MII Order. Accordingly, bidder B will be invited to match L-1 price for 50% of 37 Nos i.e. 18.5 (say 19 Nos of computers). If bidder "B" does not accept the L1 price i.e. price of Rs. 100/- per unit, next higher Class-I local supplier falling within 20% margin of purchase preference, i.e. bidder "D", may be invited to match L-1 price for 19 Nos. of computers and so on.

3. For remaining quantity i.e. 18 Nos (50-13-19), the contract will be awarded to lowest quoting bidder i.e. Bidder "A", who is L-1 in the example.

***

APPENDIX-III TO ITB

EVALUATION CRITERIA FOR COMPARISON OF BIDS

&

COMMERCIAL LOADING OF OFFERS IN CASE OF DEVIATIONS

Appendix-III

EVALUATION CRITERIA FOR COMPARISON OF BIDS

1.1 **Where only Indian Bids are under comparison**

* Bids shall be evaluated on the basis of net effective price i.e. landed cost at Site i.e. supply, transportation, site work, supervision, Hazop, Training, PWAMC etc, as applicable minus Set off benefit available to BPCL
* If a supplier does not quote freight charges, his supply price shall be considered as inclusive of Freight Charges including GST.

1.2 **Where only Foreign Bids are under comparison**

- Bids shall be evaluated on CFR basis considering firm freight as-quoted by bidders. Additionally, the following shall also be considered i.e. site work, supervision, Hazop, Training, PWAMC etc as applicable.

1.3 **Where Indian as well as Foreign Bids are under comparison**

Domestic Bidders:

- Bids shall be evaluated on the basis of net effective price i.e. landed cost at Site i.e. supply, transportation, site work, supervision, Hazop, Training, PWAMC etc, as applicable minus Set off benefit available to BPCL
- Notional loading towards EIL inspection charges @1% of FOT Dispatch point price), shall be considered.
- If a supplier does not quote freight charges, his supply price shall be considered as inclusive of Freight Charges including GST.

Foreign Bidders:

- Bids shall be evaluated on the basis of landed cost at Site including the charges of inspection by third party inspection agency, all duties, taxes and transportation charges as under less input tax credit available to BPCL on GST (of applicable):

Sl. No.	Head	Basis
1	F.O.B. Price	As quoted by the bidder (including stowage charges in case of pipes*) and including Third Party Inspection charges. * Stowage charges, if not included in the quoted FOB Price, the same shall be loaded @ 10% of freight quoted by the bidder.
2	Add Ocean freight:	Firm freight as quoted by bidders,
3	Add Marine insurance	@1% of FOB price
4	Add Customs Duty	Prevailing rate on CIF value

Sl. No.	Head	Basis
5	Add Port handling charges	@ 2% of CIF value.
6	Add Inland freight charges from Port of Entry in India to project site(s)	@1 % of CIF value
7	Add L/c Charges	@ 1% of FOB Price
8	Commercial Loadings, If any.	On FOB value
9	Less – Input Tax Credit (ITC)	Input tax credit of IGST, as applicable
10	**FOT SITE PRICE**	**Sum (1 to 8) - less (9)**

Wherever offer of Foreign Bidders includes supplies/services sourced within India, such supplies/services shall be evaluated in accordance with provisions mentioned for domestic bidders under Sl. No. 1.3 above

GENERAL :

1.4 Any special dispensation to customs duty like multilateral/bi-lateral trade agreements between countries as furnished by bidder in their bid shall be taken care provided the details w.r.t. applicability alongwith supporting document has been submitted.

1.5 Cost of Mandatory spares if identified in the Material Requisition, commissioning spares and special tools and tackles will be considered for price evaluation of bids.

1.6 Costs of Spares for two years normal operation and maintenance and unit rates for addition / deletion shall not be considered for evaluation.

1.7 If a foreign bidder does not quote ocean freight charges and does not accept the ocean freight in his scope, offer of such bidder shall be rejected.

1.8 Commercial loading shall be done on FOT dispatch Point /FOB price, (wherever applicable as per Enquiry Document))

1.9 Technical Loading if applicable as per MR shall be considered for evaluation.

1.10 No. of mandays towards per diem services shall be as mentioned in BoQ / Price schedule.

1.11 <u>Taxes/Duties (For Indian bidders / Indian sourced components/services by foreign bidder):</u>

i. Taxes and duties will be loaded as applicable. In case bidder does not furnish rate of GST or mention wrong rate of GST, clarifications shall be sought from the bidder.

However even after clarifications, if a bidder does not furnish the correct rate of GST, bid shall be evaluated with highest of the rate quoted by other bidders and same shall be considered for ordering.

Wherever bidder has mentioned the HSN/ SAC code quoted, rate corresponding to HSN/ SAC code shall be considered

However, payment of GST shall be made at actual. In case actual GST rate is more than the rate indicated in PO the excess GST amount shall be deducted from the base price, provided the increase in the rate of GST is not due to statutory variation.

ii. Any wrong interpretation in rate of custom duties shall be on bidder's account. However, if actual rate is less than the quoted rate of custom duties, differential amount shall be passed on to the owner / shall be recovered from the supplier's invoices.

1.12 Any special dispensation to customs duty like multilateral/bi-lateral trade agreements between countries as furnished by bidder in their bid shall be considered for evaluation provided the details w.r.t. applicability alongwith supporting document has been submitted.

1.13 Evaluation shall be done based on value in INR as per conversion rate published by RBI reference rate as on the date of price bid opening. If RBI reference rate is not available for the date of Price Bid opening, the latest available rates of RBI shall be considered for Price Bid Evaluation.

In the absence of RBI reference rate, SBI TT Sell (Telegraphic Transfer) reference rate on the date of price bid opening or the latest available will be considered. In absence of RBI reference rate, SBI TT reference rate, the conversion Rate shall be taken from the Internet such as:

https://www.xe.com/currencyconverter
https://www.oanda.com/currency/converter
https://economictimes.indiatimes.com/markets/forex/currency-converter

Appendix-III

COMMERCIAL LOADING OF OFFERS IN CASE OF DEVIATIONS

-

1.1 **Basis of Loading**

The Foreign Bids shall be loaded on FOB Port of Exit prices and the Indian Bids shall be loaded on FOT Dispatch Point prices.

1.2 **Payment Terms**

1.2.1 Any differential payment terms offered by bidder against the terms specified in the RFQ/ GPC shall be loaded considering SBI base rate prevailing on the date of issue of enquiry plus 1% for the relevant period as under

Drawing approval	80% of the delivery period
Order on sub Vendors	75% of the delivery period
Receipt of raw material at vendor's works	50% of the delivery period
%age payment against dispatch Documents instead receipt & acceptance at Site (Specified in RFQ) (Indian bidder)	Interest for Three month
% age payment against dispatch document instead of Final document as per Purchase Requisition (Specified in RFQ)	Interest for One month
%age payment against receipt of material at site instead acceptance of material at site (Specified in RFQ) (Indian bidder)	Interest for One month

Period of any other stage shall be suitably decided at the time of evaluation.
Payment against dispatch documents through bank is not acceptable. In case bidder insists for the same, bid shall be liable for rejection.

1.2.2 Advance along with LOA/PO will not be allowed. If a supplier insists for advance payment along with LOA/PO, his offer shall be rejected.

1.3 **Price Reduction Schedule (considering GPC clause of 0.5% un-delivered order value (UDOV) ~ 5% total order value (TOV))**

In case a Supplier does not accept the delayed delivery clause and/or takes any deviation (indicates penalty clause/Liquidated Damages in place of Price Reduction Clause) or takes exception to the percentage rate mentioned in GPC, the offer of such supplier(s) shall be loaded as under:

0.5% UDOV to 5%TOV : No Loading
0.5% UDOV to 5% UDOV : 2.5%
0.5% UDOV to less than 5% TOV : Differential between the Offered % and 5%
Any other deviation/Liquidated damages/penalty or non acceptance of price reduction schedule : 5%

1.4 **Price variation :**

Where price variation is stipulated by bidder in their bid, the loading shall be as follows:

a)	Firm Price	No loading
b)	In case of Price Variation formula with ceiling	Loading by ceiling percentage offered.
c)	No formula and/or no ceiling specified by the bidder	Offer shall be rejected

Appendix-IV to ITB

Policy for Providing Preference to Domestically Manufactured Iron & Steel Products in Government Procurement

रजिस्ट्री सं. डी.एल.- 33004/99 REGD. No. D. L.-33004/99

भारत का राजपत्र
The Gazette of India

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असाधारण
EXTRAORDINARY

भाग II—खण्ड 3—उप-खण्ड (i)
PART II—Section 3—Sub-section (i)

प्राधिकार से प्रकाशित
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इस्पात मंत्रालय

अधिसूचना

नई दिल्ली, 17 दिसम्बर, 2025

सा.का.नि. 904(अ).—घरेलू स्तर पर विनिर्मित पूर्ववर्ती लौह एवं इस्पात उत्पाद नीति के अधिक्रमण में, सरकारी अधिप्राप्ति में घरेलू स्तर पर विनिर्मित लौह एवं इस्पात उत्पादों को वरीयता प्रदान करने के लिए संशोधित घरेलू स्तर पर विनिर्मित लौह एवं इस्पात उत्पाद नीति-2025 को आम सूचना के लिए एतदद्वारा प्रकाशित किया जाता है।

सरकारी अधिप्राप्ति में घरेलू स्तर पर विनिर्मित लौह एवं इस्पात उत्पादों को वरीयता देने के लिए नीति - संशोधित, 2025

1. पृष्ठभूमि

1.1 यह नीति सरकारी अधिप्राप्ति में घरेलू स्तर पर विनिर्मित लौह एवं इस्पात उत्पादों (डीएमआईएंडएसपी) को वरीयता देती है।

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1.2 यह नीति परिशिष्ट क में अधिसूचित लौह एवं इस्पात उत्पादों की खरीद, परिशिष्ट ख में सूचीबद्ध पूंजीगत वस्तुओं की खरीद और परिशिष्ट ग में स्वदेशी प्रौद्योगिकी आपूर्तिकर्ताओं से प्रौद्योगिकी पर लागू होती है।

2. परिभाषाएं

2.1 **बोलीदाता** लौह एवं इस्पात का कोई घरेलू/विदेशी विनिर्माता अथवा उनके बिक्री एजेंट/अधिकृत वितरक/अधिकृत डीलर/अधिकृत आपूर्ति गृह अथवा सरकारी एजेंसियों द्वारा वित्त पोषित परियोजनाओं में बोली लगाने में कार्यरत कोई अन्य कंपनी हो सकती है।

2.2 **घरेलू स्तर पर विनिर्मित लौह एवं इस्पात उत्पाद** वे लौह एवं इस्पात उत्पाद हैं जिनका विनिर्माण उन प्रतिष्ठानों द्वारा किया जाता है जो भारत में पंजीकृत और स्थापित हैं, जिसमें विशेष आर्थिक क्षेत्र (एसईजेड) शामिल हैं।

2.3 **घरेलू विनिर्माता** केंद्रीय माल और सेवा कर अधिनियम, 2017 की धारा 2(72) के अनुरूप एक विनिर्माता है।

2.4 **घरेलू मूल्य संवर्धन** का अर्थ है भारत में जोड़े गए मूल्य की राशि जो अधिप्राप्त की जाने वाली वस्तु के कुल मूल्य (शुद्ध घरेलू अप्रत्यक्ष करों को छोड़कर) में से अधिप्राप्त की जाने वाली वस्तु के कुल मूल्य के अनुपात के रूप में वस्तु में आयातित सामग्री के मूल्य (सभी सीमा शुल्कों सहित) को घटाकर प्रतिशत में प्राप्त होगी। 'घरेलू मूल्य संवर्धन' की परिभाषा डीपीआईआईटी दिशा-निर्देशों के अनुरूप होगी और भविष्य में डीपीआईआईटी द्वारा किसी भी बदलाव के मामले में इसे उपयुक्त रूप से संशोधित किया जाएगा। इस नीति दस्तावेज के उद्देश्य के लिए, घरेलू मूल्य संवर्धन और स्थानीय सामग्री का परस्पर उपयोग किया गया है।

% घरेलू मूल्य संवर्धन =

{अधिप्राप्त की जाने वाली वस्तु का कुल मूल्य (शुद्ध घरेलू अप्रत्यक्ष करों को छोड़कर) - वस्तु में आयातित सामग्री का मूल्य (सभी सीमा शुल्कों सहित)}

---------- X 100%

{अधिप्राप्त की जाने वाली वस्तु का कुल मूल्य}

2.5 **तैयार इस्पात** (फिनिश्ड स्टील) का तात्पर्य सपाट और लंबे उत्पादों से होगा, जिन्हें बाद में प्रसाधित कर विनिर्मित वस्तु बनाया जा सकता है।

2.6 इस नीति के प्रयोजन से **सरकार** का तात्पर्य भारत सरकार से है।

2.7 **सरकारी एजेंसियों** में सरकार के सार्वजनिक क्षेत्र के उपक्रम, भारत सरकार द्वारा स्थापित सोसायटी, ट्रस्ट और सांविधिक निकाय शामिल हैं।

2.8 **स्वदेशी प्रौद्योगिकी:** किसी प्रौद्योगिकी को स्वदेशी प्रौद्योगिकी माना जाएगा यदि, इकाई की कम से कम 51% इक्विटी भारतीय निवासियों के पास हो और आईपीआर का स्वामित्व या सह-स्वामित्व किसी भारतीय इकाई के पास हो या विशेष रूप से उन्हें लाइसेंस प्राप्त हो तथा मुख्य इंजीनियरिंग अनुसंधान एवं विकास और परियोजना निष्पादन क्षमताएं भारत में हों।

2.9 **एल1** का तात्पर्य निविदा अथवा अन्य अधिप्राप्ति अनुरोध के अनुसार मूल्यांकन प्रक्रिया में यथाघोषित निविदा, बोली लगाने संबंधी प्रक्रिया अथवा अन्य अधिप्राप्ति अनुरोधों में प्राप्त न्यूनतम निविदा अथवा न्यूनतम बोली अथवा न्यूनतम भाव से होगा।

2.10 **एमओएस** का आशय इस्पात मंत्रालय, भारत सरकार से है।

2.11 **खरीद वरीयता के मार्जिन** का तात्पर्य उस अधिकतम सीमा से है जिस सीमा तक किसी घरेलू आपूर्तिकर्ता द्वारा लगाई गई कीमत खरीद वरीयता के प्रयोजन से एल1 से अधिक हो। डीएमआईएंडएसपी नीति के मामले में, खरीद वरीयता का मार्जिन परिशिष्ट ख में शामिल मदों के लिए 20% होगा।

2.12 **मेल्ट एंड पोर** को एक ऐसे इस्पात के रूप में परिभाषित किया गया है जिसे इस्पात बनाने वाले फर्नेस में उत्पादित किया जाता है और इसे अपने पहले ठोस आकार में डाला जाता है। जिस स्थान पर यह प्रक्रिया होती है उसे मेल्ट एंड पोर (सीओएम) का उद्गम स्थल कहा जाता है। सीओएम वह मूल स्थान है जहाँ क्रूड इस्पात को पहली बार तरल अवस्था में उत्पादित किया जाता है और इसे अपने पहले ठोस आकार में डाला जाता है। मेल्ट एंड पोर (सीओएम) का देश भारत होना चाहिए। पहला ठोस आकार एक अर्ध-तैयार उत्पाद जैसे स्लैब, बिलेट, पिंड या एक तैयार इस्पात मिल उत्पाद हो सकता है।

2.13 **निवल बिक्री मूल्य** इन्वॉइस मूल्य होगा जिसमें निवल घरेलू कर और शुल्क शामिल नहीं होंगे।

2.14 **अर्ध-तैयार इस्पात** (सेमी-फिनिश्ड स्टील) का तात्पर्य इनगोट्स, बिलेट्स, ब्लूम्स और स्लेब्स से है, जिसे बाद में प्रसाधित कर तैयार इस्पात बनाया जा सकता है।

3. अपवर्जन

3.1 इस्पात मंत्रालय द्वारा इस प्रकार की सभी सरकारी अधिप्राप्ति के लिये निम्नलिखित शर्तों के अध्यधीन छूट प्रदान की जा सकती है।

3.1.1 जहां विशिष्ट ग्रेडों के इस्पात का विनिर्माण देश में नहीं किया जाता हो, अथवा

3.1.2 जहां परियोजना की मांग के अनुसार इन मात्राओं को घरेलू स्रोतों के माध्यम से पूरा नहीं किया जा सकता हो।

3.2 छूट संबंधी अनुरोध लौह एवं इस्पात उत्पादों की घरेलू स्तर पर अनुपलब्धता के पर्याप्त प्रमाण के साथ स्थायी समिति के समक्ष प्रस्तुत किए जाएंगे।

4. स्थायी समिति

4.1 सचिव (इस्पात) की अध्यक्षता में एक स्थायी समिति नीति के कार्यान्वयन को देखेगी।

4.2. इस समिति में उद्योग/उद्योग संघ/सरकारी संस्था अथवा निकाय/इस्पात मंत्रालय (एमओएस) से लिए गए विशेषज्ञ शामिल होंगे। इस्पात मंत्रालय में उक्त समिति के पास निम्नलिखित के लिए अधिदेश होगा:

4.2.1 नीति के कार्यान्वयन की निगरानी करना।

4.2.2 परिशिष्ट क, परिशिष्ट ख और परिशिष्ट ग में उल्लिखित लौह एवं इस्पात उत्पादों की सूची, घरेलू सामग्री आवश्यकता मानदंड और नीति निर्देशों की समीक्षा करना और उन्हें अधिसूचित करना।

4.2.3 पैरा 3 के अनुसार प्रापण एजेंसियों को अपवर्जन की स्वीकृति देने सहित इस नीति के कार्यान्वयन के लिए आवश्यक स्पष्टीकरण जारी करना।

4.2.4 इस नीति के कार्यान्वयन से संबंधित शिकायतों की प्रारंभिक जांच के लिए एक शिकायत निवारण समिति का गठन करना।

4.2.5 अधिप्राप्ति एजेंसी द्वारा इस नीति का अनुपालन न किए जाने की स्थिति में संबंधित मंत्रालयों/विभागों को उचित कार्रवाई के लिए निर्देश जारी करना और सलाह देना।

4.3 जहां भी प्रापण इकाई इस निष्कर्ष पर पहुंचती है कि उपलब्ध बोलीदाता/विनिर्माता द्वारा अनुचित रूप से उच्च मूल्य निर्धारित किया गया है, तो मामले को स्थायी समिति को भेजा जा सकता है। ऐसे मामलों में, प्रापण इकाई को अपने मामले को पूर्ण और विस्तृत दस्तावेज़ों के साथ प्रमाणित करना होगा।

4.4 बोली दस्तावेज़ में विदेशी प्रमाणन/अनुचित तकनीकी विनिर्देश निर्दिष्ट करना स्थानीय आपूर्तिकर्ताओं के विरुद्ध प्रतिबंधात्मक और भेदभावपूर्ण व्यवहार है। यदि भारतीय मानकों की अनुपलब्धता और/या किसी अन्य कारण से विदेशी प्रमाणन निर्धारित करना आवश्यक है, तो ऐसा समिति की लिखित स्वीकृति के बाद ही किया जाएगा।

5. प्रयोज्यता

5.1 यह नीति सरकार के प्रत्येक मंत्रालय अथवा विभाग और उनके प्रशासनिक नियंत्रणाधीन सभी एजेंसियों/इकाइयों तथा सरकारी परियोजनाओं के लिए लौह एवं इस्पात उत्पादों की खरीद हेतु इन एजेंसियों द्वारा वित्त पोषित परियोजनाओं पर लागू है। केन्द्रीय क्षेत्र की सभी योजनाएं (सीएस)/ केन्द्रीय प्रायोजित योजनाएं (सीएसएस) जिनके लिए राज्यों और स्थानीय निकायों द्वारा अधिप्राप्ति की जाती है, इस नीति की परिधि में आएंगी, यदि उस परियोजना/योजना को भारत सरकार द्वारा पूर्णत:/आंशिक रूप से वित्तपोषित किया जाता है।

5.2 यह नीति लौह एवं इस्पात उत्पादों के विनिर्माण के लिए पूंजीगत माल (परिशिष्ट-ख) की खरीद के लिए सार्वजनिक क्षेत्र के इस्पात विनिर्माताओं और उनके प्रशासनिक नियंत्रणाधीन एजेंसियों/निकायों पर लागू होती है।

5.3 परिशिष्ट-ख में लौह एवं इस्पात उत्पादों के विनिर्माण में उपयोग किए जाने वाले पूंजीगत माल की छूट संबंधी सूची शामिल है, जिन्हें आयात किया जा सकता है, तथा पैकेजों के लिए लागू न्यूनतम घरेलू सामग्री की आवश्यकता बताई गई है।

5.4 इस्पात विनिर्माण में उपयोग किए जाने वाले पूंजीगत माल के लिए 20% की खरीद वरीयता लागू है। उदाहरण के लिए, यदि आयात योग्य पूंजीगत माल के लिए न्यूनतम बोलीदाता (एल1) कोई विदेशी

कंपनी है, जिसने उत्पाद पैकेज के लिए 100 करोड़ रुपये की कीमत लगाई है, तो नीति के तहत, समान पूंजीगत माल के घरेलू आपूर्तिकर्ता के लिए 20% की खरीद वरीयता लागू होगी।

5.5 परिशिष्ट-ग में इस्पात बनाने वाले सीपीएसई के लिए स्वदेशी प्रौद्योगिकी आपूर्तिकर्ताओं से खरीद करने के निर्देश और कार्यप्रणाली दी गई है।

5.6 यह नीति उन परियोजनाओं और गैर-परियोजनाओं पर लागू होगी, जहाँ किसी संविदा में लौह एवं इस्पात उत्पादों (परिशिष्ट-क) का कुल अधिप्राप्ति मूल्य मदवार आधार पर 5 लाख रुपये से अधिक है।

5.7 लौह एवं इस्पात उत्पादों की अधिप्राप्ति से संबंधित निविदाओं के लिए कोई वैश्विक निविदा इन्क्वायरी (जीटीई) आमंत्रित नहीं की जाएगी (डीएमआईएंडएसपी नीति का परिशिष्ट-क)। लौह एवं इस्पात उत्पादों के विनिर्माण जिनका अनुमानित मूल्य 200 करोड़ रु. तक हो, (डीएमआईएंडएसपी नीति के परिशिष्ट-ख) के लिए पूंजीगत माल की अधिप्राप्ति से संबंधित निविदाओं के लिए कोई वैश्विक निविदा इन्क्वायरी (जीटीई) व्यय विभाग द्वारा यथा नाम-निर्दिष्ट सक्षम प्राधिकारी के अनुमोदन के अलावा आमंत्रित नहीं की जाएगी।

5.8 यह नीति सरकार के मंत्रालय अथवा विभाग या उनके सार्वजनिक क्षेत्र के उपक्रमों की किसी ईपीसी संविदा और/अथवा अन्य आवश्यकता को पूरा करने के लिए निजी एजेंसियों द्वारा लौह एवं इस्पातों की अधिप्राप्ति पर लागू है।

6. अधिप्राप्ति के लिए निविदा प्रक्रिया

6.1 प्रापण एजेंसियां डीएमआईएंडएसपी नीति का पालन करते समय वित्त मंत्रालय और सीवीसी के अनुदेशों के अनुसार मानक अधिप्राप्ति संबंधी प्रक्रियाओं का पालन करेगी।

6.2 माल की अधिप्राप्ति के साथ-साथ ईपीसी संविदाओं के लिए निविदा दस्तावेज में परिशिष्ट क और परिशिष्ट ख में उल्लिखित आवश्यकताओं के अनुपालन के लिए योग्यता मानदंड को स्पष्ट रूप से रेखांकित किया जाना चाहिए।

6.3 विनिर्माताओं, बिक्री एजेंटो, अधिकृत वितरकों, अधिकृत डीलरों और अधिकृत आपूर्ति घरों सहित सभी बोलीदाता अपनी बोली के हिस्से के रूप में फॉर्म-1 जमा करेंगे, भले ही वे विनिर्माता हो या अन्य।

6.4 वे बोलीदाता जो परिशिष्ट-क के अंतर्गत आने वाले लौह एवं इस्पात उत्पादों के घरेलू विनिर्माताओं के विक्रय एजेंट/अधिकृत वितरक/अधिकृत डीलर/अधिकृत आपूर्ति घर हैं, वे नीति के अंतर्गत घरेलू विनिर्माताओं की ओर से स्व-प्रमाणन के साथ बोली लगाने के लिए पात्र हैं, बशर्ते कि बोलीदाता डिलीवरी के समय घरेलू विनिर्माता द्वारा जारी किया गया प्राधिकार प्रमाणपत्र प्रस्तुत करें।

6.5 डीएमआईएंडएसपी नीति के परिशिष्ट ख के अंतर्गत आने वाले उत्पादों के लिए बोलीदाता को कंपनी के सांविधिक लेखापरीक्षक या लागत लेखापरीक्षक (कंपनियों के मामले में) या किसी प्रैक्टिसिंग लागत लेखाकार या प्रैक्टिसिंग चार्टर्ड अकाउंटेंट (कंपनियों के अलावा आपूर्तिकर्ताओं के संबंध में) द्वारा जारी प्रमाणन प्रस्तुत करेगा, जिसमें यह घोषणा की गई होगी कि लौह एवं इस्पात उद्योग में

उपयोग किए जाने वाले पूंजीगत माल निर्धारित घरेलू मूल्य संवर्धन के अनुसार घरेलू स्तर पर विनिर्मित किए गए हैं।

6.6 यदि किसी वस्तु के भारतीय आपूर्तिकर्ताओं को किसी विदेशी सरकार द्वारा अधिप्राप्ति में भाग लेने और/या प्रतिस्पर्धा करने की अनुमति नहीं है, प्रतिबंधात्मक निविदा शर्तों के कारण, जिनका प्रत्यक्ष या अप्रत्यक्ष रूप से भारतीय कंपनियों पर प्रतिबंध है, जैसे अधिप्राप्ति करने वाले देश में पंजीकरण, अधिप्राप्ति करने वाले देश में विशिष्ट मूल्य की परियोजनाओं का निष्पादन आदि, तो वह उचित पारस्परिक कार्रवाई के लिए प्रापण संस्थाओं को ऐसे विवरण उपलब्ध कराएगा।

6.7 इस्पात मंत्रालय द्वारा उन देशों की संस्थाओं की पहचान की गई है, जो भारतीय कंपनियों को इस्पात मंत्रालय से संबंधित किसी भी वस्तु के लिए अपनी सरकारी अधिप्राप्ति में भाग लेने की अनुमति नहीं देते हैं, उन्हें इस्पात मंत्रालय से संबंधित सभी वस्तुओं के लिए भारत में सरकारी अधिप्राप्ति में भाग लेने की अनुमति नहीं दी जाएगी, सिवाय इस्पात मंत्रालय द्वारा प्रकाशित उन वस्तुओं की सूची के जो उन्हें भाग लेने की अनुमति देती हैं।

6.8 उपरोक्त शर्त जैम पोर्टल सहित केन्द्र सरकार की प्रापण संस्थाओं द्वारा आमंत्रित सभी निविदाओं का हिस्सा होगी।

6.9 यदि बोली दस्तावेजों में घरेलू आपूर्तिकर्ताओं के खिलाफ प्रतिबंधात्मक या भेदभावपूर्ण शर्तें शामिल की जाती हैं, तो अधिप्राप्ति करने वाले प्रशासनिक विभाग (इसके प्रशासनिक नियंत्रण के तहत किसी भी इकाई द्वारा अधिप्राप्ति सहित) द्वारा इसकी जिम्मेदारी तय करने के लिए जांच की जाएगी। इसके बाद, संबंधित प्रावधानों के तहत प्रापण संस्थाओं के दोषी अधिकारियों के खिलाफ प्रशासनिक या अन्यथा उचित कार्रवाई की जाएगी। ऐसी सभी कार्रवाई की सूचना डीएमआईएंडएसपी नीति के तहत स्थायी समिति को भेजी जाएगी।

6.10 इस आदेश के उल्लंघन के लिए किसी प्रापण इकाई द्वारा प्रतिबंधित आपूर्तिकर्ता प्रतिबंध की अवधि के दौरान किसी अन्य अधिप्राप्ति करने वाली इकाई द्वारा अधिप्राप्ति के लिए इस आदेश के तहत वरीयता के लिए पात्र नहीं होगा। ऐसी अन्य प्रापण संस्थाओं के लिए प्रतिबंध उस तारीख से प्रभावी होगा जिस दिन यह अन्य अधिप्राप्ति करने वाली संस्थाओं के संज्ञान में आता है।

6.11 यदि, इस मामले को इस्पात मंत्रालय के पास भेजा जाता है, तब इस्पात मंत्रालय के अधीन गठित शिकायत निवारण समिति सरकारी एजेंसी के दृष्टिकोण पर विचार करने के बाद बोलीदाता से सभी दस्तावेजों के प्राप्त होने और उसका संदर्भ भेजे जाने के 4 सप्ताह के भीतर शिकायत का निपटारा करेगी। बोलीदाता से यह अपेक्षित होगा कि वे इस मामले के संदर्भ के 2 सप्ताह के भीतर इस्पात मंत्रालय के अंतर्गत शिकायत निवारण समिति को लौह एवं इस्पात उत्पादों में दावा किए गए घरेलू मूल्यवर्धन के समर्थन में आवश्यक दस्तावेज प्रस्तुत करे।

6.12 निविदा दस्तावेज में निर्धारित घरेलू मूल्यवर्धन का बोलीदाता द्वारा गलत घोषणा किए जाने की स्थिति में प्रापण ऐजेंसी शास्ती को स्पष्ट रूप से परिभाषित करेगी। मौजूदा नियमों के अनुसार शास्ती में ऐसे विनिर्माता/ सेवा प्रदाता आदि की ईएमडी को जब्त करना, अन्य वित्तीय शास्ती लगाना और उसे ब्लैकलिस्ट किया जाना शामिल हो सकता है।

7. इस्पात मंत्रालय द्वारा कार्यान्वयन की निगरानी

7.1 इस नीति के प्रावधान प्रकाशन की तारीख से 5 वर्षों की अवधि के लिए लागू रहेंगे और इस नीति की अवधि को इस्पात मंत्रालय के विवेक पर और आगे बढ़ाया जा सकता है।

7.2 इस्पात मंत्रालय इस नीति के कार्यान्वयन की निगरानी करने के लिए नोडल मंत्रालय होगा।

7.3 डीएमआईएंडएसपी नीति के अंतर्गत सभी एजेंसियां तिमाही आधार पर घोषणा पत्र भेजेगी जिसमें पिछले वित्तीय वर्ष के दौरान इस नीति के अनुपालन की सीमा और उसके अनुपालन न किए जाने के कारणों को दर्शाया जायेगा।

अनुलग्नक-क

लौह एवं इस्पात उत्पादों की सूची जिनकी अधिप्राप्ति केवल घरेलू स्रोतों से की जा सकती है

क्र.सं.	लौह एवं इस्पात उत्पाद	एचएस कोड	स्थिति
1	600 मि.मी. अथवा उससे अधिक की चौड़ाई वाले लौह अथवा गैर-मिश्रधातु इस्पात के फ्लैट रोल्ड उत्पाद, हॉट रोल्ड, क्लेड, प्लेट लगाया हुआ अथवा कोट किया हुआ नहीं	7208	मेल्ट एंड पोर
2	600 मि.मी. अथवा उससे अधिक की चौड़ाई वाले लौह अथवा गैर-मिश्रधातु इस्पात के फ्लैट रोल उत्पाद, कोल्ड रोल्ड (कोल्ड रिड्यूज्ड किया हुआ), क्लेड, प्लेट लगाया हुआ अथवा कोट किया हुआ नहीं	7209	मेल्ट एंड पोर
3	600 मि.मी. अथवा उससे अधिक की चौड़ाई वाले लौह अथवा गैर-मिश्रधातु इस्पात का फ्लैट रोल उत्पाद, क्लेड, प्लेट लगाया हुआ अथवा कोट किया हुआ	7210	मेल्ट एंड पोर
4	600 मि.मी. से कम की चौड़ाई वाले लौह अथवा गैर-मिश्रधातु इस्पात का फ्लैट रोल उत्पाद, क्लेड, प्लेट लगाया हुआ अथवा कोट किया हुआ नहीं	7211	मेल्ट एंड पोर
5	600 मि.मी. से कम की चौड़ाई का लौह अथवा गैर-मिश्रधातु इस्पात का फ्लैट रोल उत्पाद, क्लेड, प्लेट लगाया हुआ अथवा कोट किया हुआ	7212	मेल्ट एंड पोर
6	लौह एवं गैर-मिश्रधातु इस्पात का अनियमित रूप से वूंड क्वाइल में बार्स और रॉड, हॉट रोल्ड	7213	मेल्ट एंड पोर
7	लौह अथवा गैर-मिश्रधातु इस्पात के अन्य बार्स और रॉड्स जिसे फोर्ज किए जाने की तुलना में आगे अधिक वर्क नहीं किया हुआ, हॉट रोल्ड, हॉट ड्रॉन अथवा हॉट एक्सट्रूडेड परंतु रोलिंग के बाद उसे टिविस्ट किये जाने सहित	7214	मेल्ट एंड पोर
8	लौह अथवा गैर-मिश्रधातु इस्पात का अन्य बार्स एंड रॉड्स	7215	मेल्ट एंड पोर
9	लौह अथवा गैर-मिश्रधातु इस्पात का एंगल, शेप और सेक्शन्स	7216	मेल्ट एंड पोर
10	लौह अथवा गैर-मिश्रधातु इस्पात का वायर	7217	मेल्ट एंड पोर
11	600 मि.मी. अथवा उससे अधिक की चौड़ाई का स्टेनलैस इस्पात का फ्लेट रोल्ड इस्पात	7219	मेल्ट एंड पोर
12	600 मि.मी. से कम की चौड़ाई का स्टेनलैस इस्पात का फ्लैट रोल्ड इस्पात	7220	मेल्ट एंड पोर
13	स्टेनलैस स्टील के अन्य बार्स और रॉड्स; स्टेनलैस स्टील का एंगल शेप और सेक्शन्स	7222	मेल्ट एंड पोर
14	अन्य मिश्रधातु इस्पात के वायर	7229	मेल्ट एंड पोर
15	लौह अथवा इस्पात के रेल, रेलवे अथवा ट्रामवे ट्रेक निर्माण सामग्री	7302	50% घरेलू मूल्यवर्धन
16	कास्ट लौह के ट्यूब, पाइप और हॉलो पाइप	7303	50% घरेलू मूल्यवर्धन
17	लौह (कास्ट आयरन को छोड़कर) अथवा इस्पात के ट्यूब पाइप और हॉलो प्रोफाइल, सीमलैस	7304	50% घरेलू मूल्यवर्धन
18	लौह अथवा इस्पात के सर्कुलर क्रॉस सेक्शन वाले अन्य ट्यूब और पाइप (उदाहरण के लिए, वेल्ड किया हुआ, रिवेट किया हुआ अथवा	7305	50% घरेलू मूल्यवर्धन

	समान रूप से बंद किया हुआ), जिसकी बाहरी त्रिज्या 406.4 मि.मी. से अधिक हो		
19	लौह अथवा इस्पात के अन्य ट्यूब, पाइप और हॉलो प्रोफाइल (उदाहरण के लिए ओपन सीन अथवा वेल्ड किया हुआ, रिवेट किया हुआ अथवा समान रूप से बंद किया गया हुआ)	7306	50% घरेलू मूल्यवर्धन
20	लौह अथवा इस्पात के ट्यूब अथवा पाइप फिटिंग (उदाहरण के लिए, कनेक्टर/कप्लिंग, एल्बो स्लीव्स)	7307	50% घरेलू मूल्यवर्धन
21	स्टेनलैस स्टील का अनियमित रूप से वूंड क्वाइल में बार्स और रॉड, हॉट-रोल्ड	7221	मेल्ट एंड पोर
22	स्टेनलैस स्टील का वायर	7223	मेल्ट एंड पोर
23	इलेक्ट्रिकल स्टील सहित 600 मि.मी. अथवा उससे अधिक की चौड़ाई वाले अन्य मिश्रधातु इस्पात का फ्लैट-रोल्ड इस्पात	7225	मेल्ट एंड पोर
24	इलेक्ट्रिकल स्टील सहित 600 मि.मी. से कम की चौड़ाई वाले अन्य मिश्रधातु इस्पात का फ्लैट-रोल्ड इस्पात	7226	मेल्ट एंड पोर
25	अन्य मिश्रधातु इस्पात का अनियमित रूप से वूंड क्वाइल में बार्स और रोड, हॉट-रोल्ड	7227	मेल्ट एंड पोर
26	अन्य मिश्रधातु इस्पात का अन्य बार्स और रॉड्स; अन्य मिश्रधातु इस्पात का एंगल, शेप्स और सेक्शन्स; एलॉय अथवा गैर- मिश्रधातु इस्पात का हॉलो ड्रील बार्स और रॉड्स	7228	मेल्ट एंड पोर
27	लौह अथवा इस्पात की शीट पाइलिंग, चाहे ड्रील किया हुआ हो अथवा नहीं, चाहे पंच किया हुआ हो अथवा नहीं, चाहे असेम्बल किये हुए तत्वों से बना हुआ हो अथवा नहीं; लौह अथवा इस्पात का वेल्ड किया हुआ एंगल, शेप और सेक्शन्स	7301	50% घरेलू मूल्यवर्धन
28	स्ट्रक्चर्स (9406 के शीर्ष का प्रीफेबरिकेटिड भवनों को छोड़कर) और स्ट्रक्चर्स का हिस्सा	7308	50% घरेलू मूल्यवर्धन
29	300 से अधिक क्षमता का लौह अथवा इस्पात का किसी सामग्री (कम्प्रेस किए हुए अथवा तरलीकृत गैस को छोड़कर) के लिए भंडार, टैंक, वैट और समान कन्टेनर चाहे उसे लाइन किया गया हो अथवा नहीं या उसे हीट से इन्सुलेट किया गया हो अथवा नहीं लेकिन यांत्रिक अथवा तापीय उपक्रम से युक्त न हो	7309	50% घरेलू मूल्यवर्धन
30	अधिकतक 300 लीटर की क्षमता का लौह अथवा इस्पात का किसी सामग्री (कम्प्रेस किए हुए अथवा तरलद्रवी गैस को छोड़कर) के लिए टैंक, कास्ट, ड्रम, केन, बॉक्स और समान कन्टेनर चाहे उसे लाइन किया गया हो अथवा नहीं या उसे हीट से इन्सुलेट किया गया हो अथवा नहीं लेकिन यांत्रिक अथवा तापीय उपक्रम से युक्त न हो	7310	50% घरेलू मूल्यवर्धन
31	लौह अथवा इस्पात का कम्प्रेस किया हुआ अथवा तरलीकृत गैस के लिए कन्टेनर	7311	50% घरेलू मूल्यवर्धन
32	लौह अथवा इस्पात का स्टैंडिड वायर, रोप, केबल, प्लेटिड बैंड, स्लिंग और उसके समान वस्तु जिसे विद्युतीय रूप से इन्सुलेट न किया गया	7312	50% घरेलू मूल्यवर्धन
33	लौह अथवा इस्पात का फेनसिंग के लिए उपयोग किये जाने वाला बार्ब्ड वायर; ट्विस्ट किया हुआ हूप अथवा सिंगल फ्लेट वायर, बार्स	7313	50% घरेलू मूल्यवर्धन

	किया हुआ अथवा नहीं और लूज तरीके से ट्विस्ट किया हुआ डबल वायर		
34	लौह अथवा इस्पात वायर का ग्रिल, नेटिंग और फेनसिंग; लौह अथवा इस्पात संबंधित एक्सपैंडेड विस्तृत धातु	7314	50% घरेलू मूल्यवर्धन
35	लौह अथवा इस्पात का चैन और उसका हिस्सा	7315	50% घरेलू मूल्यवर्धन
36	लौह अथवा इस्पात का टैंकर, ग्रेपनेल्स और उसका हिस्सा	7316	50% घरेलू मूल्यवर्धन
37	लौह एवं इस्पात की वस्तुएं	7317	50% घरेलू मूल्यवर्धन
38	लौह एवं इस्पात की वस्तुएं	7318	50% घरेलू मूल्यवर्धन
39	लौह एवं इस्पात की वस्तुएं	7319	50% घरेलू मूल्यवर्धन
40	लौह अथवा इस्पात की स्प्रिंग और स्प्रिंग के लिए लीव्स	7320	50% घरेलू मूल्यवर्धन
41	लौह अथवा इस्पात के स्टोव्स, रेंज, ग्रेड, कूकर (सेंट्रल हिटिंग के लिए सहायक बॉयलरों के साथ उन वस्तुओं सहित), बारबेक्यूज, ब्रेजियर्स, गैस रिंग, प्लेट वॉमर्स और समान गैर-विद्युतीय घरेलू उपकरण और उसका हिस्सा	7321	50% घरेलू मूल्यवर्धन
42	लौह अथवा इस्पात का सेंट्रल हिटिंग के लिए रेडियेटर जिसे विद्युतीय रूप से हीट न किया गया हो और उसका हिस्सा; लौह अथवा इस्पात का हेयर हीटर और हॉट एयर वितरक जिसे विद्युतीय रूप से हीट न किया गया हो, फेन अथवा ब्लोअर जो मोटर से चलती हो और उसके हिस्से को शामिल करते हुए	7322	50% घरेलू मूल्यवर्धन
43	लौह अथवा इस्पात का टेबल और समान घरेलू वस्तुएं और उसका हिस्सा	7323	50% घरेलू मूल्यवर्धन
44	लौह अथवा इस्पात के सेनेटरी वेयर और उसके पार्टस	7324	50% घरेलू मूल्यवर्धन
45	लौह अथवा इस्पात के अन्य कास्ट सामान	7325	50% घरेलू मूल्यवर्धन
46	लौह अथवा इस्पात का विद्युतीय इस्पात और अन्य वस्तुएं	7326	50% घरेलू मूल्यवर्धन
47	रेलवे अथवा ट्रामवे पेसेंजर कोच जो स्व-चालित नहीं है	8605	50% घरेलू मूल्यवर्धन
48	रेलवे अथवा ट्रामवे माल वेन और वेगेन जो स्व-चालित नहीं है	8606	50% घरेलू मूल्यवर्धन
49	रेलवे अथवा ट्रामवे लोकोमोटिव का हिस्सा अथवा रोलिंग स्टॉक जैसे बोगिज, बिसल बोगिज, एक्सेल और फोर्ज्ड किया हुआ पहिया और उसका हिस्सा	8607	50% घरेलू मूल्यवर्धन

परिशिष्ट- ख

लौह एवं इस्पात उत्पादों के विनिर्माण के लिए आयात किए जा सकने वाले पूंजीगत माल (गैर-संपूर्ण) और पैकेज के लिए लागू न्यूनतम घरेलू सामग्री की सूची

क्र.सं.	संयंत्र/यूनिट पैकेज	पूंजीगत माल की न्यूनतम घरेलू सामग्री (%)	आयात योग्य वस्तुएँ
1	**खनन विकास के लिए उपस्कर** • क्रशिंग एवं स्क्रीनिंग संयंत्र • खनिज बेनिफिशियेशन (लौह अयस्क और कोयला) संयंत्र; (बाउंड्री लिमिट: क्रेशर हॉपर में आरओएम की प्राप्ति, विखंडन, पृथक्करण, अयस्क/कोयला प्रसंस्करण से लेकर अंतिम उत्पाद तैयार करना) • स्लाइम बेनिफिशियेशन • स्वचालित लोडिंग सुविधा • कन्वेयर प्रणाली	75%	• वेट हाई इंटेन्सिटी मैग्नेटिक सैपरेटर / हाई ग्रेडीअन्ट मैग्नेटिक सैपेरेटर • हैवी मीडिया साइक्लोन • जाइरेटरी क्रशर • स्पाइलर कंसंट्रेटर • ऑनलाइन ऐश एनालाइजर • बॉल/रॉड/एजी मिल (3.5मी व्यास से अधिक)
2	**खनन परिवहन** • स्लरी पाइपलाइन • लंबी दूरी की कन्वेयिंग प्रणाली	30%	• पीडी पंप • वॉल्व • विशिष्ट/रोप/पाइप कन्वेयर
3	**खदानों के लिए अन्य खनन मशीनरी और हैवी अर्थ मूविंग उपस्कर** (बाउंड्री लिमिट: ड्रिलिंग, रेजिंग, लैडिंग, हॉलेज और खदान तैयार करने के लिए उपस्कर)	लागू नहीं	• डम्पर (220 टन से अधिक पे लोड क्षमता), हाइड्रोलिक एक्सकेवेटर (9 क्यूबिक मीटर बकेट क्षमता से अधिक)
4	**पेलेट संयंत्र उपस्कर** (बाउंड्री लिमिट - फ्लक्स और बाइंडर के लिए ग्राउंड हॉपर प्राप्त करना, बेल्ट कन्वेयर उत्पाद पेलेट बेल्ट कन्वेयर को आईओएफ फीडिंग)	85%	• पैलेट कार, हाई इंटेंसिव मिक्सर, बॉलिंग डिस्क, वर्टिकल रोलर मिल, ड्राइव/डिस्चार्ज एंड स्प्रोकेट असेंबली, कर्व्ड रेल, स्लाइड रेल, सिंगल डेक रोलर स्क्रीन और डबल डेक रोलर स्क्रीन, इंड्यूरेशन मशीन ड्राइव असेंबली, लेवल-2 ऑटोमेशन

	लौह/इस्पात निर्माण		
5	**कच्चे माल की हैंडलिंग प्रणाली** (बाउंड्री लिमिट - वैगन टिपलर से संबंधित उपयोगकर्ता इकाइयों तक)	95%	• बैरल कप्लिंग, हेवी ड्यूटी बियेरिंग, क्रेन रेल लुब्रिकेशन प्रणाली, स्लियू रिंग बियरिंग्स, टोंग्स (विशेष), वाइब्रेशन आइसोलेशन प्रणाली (स्प्रिंग डैम्पर), हाइड्रॉलिक मोटर और हाइड्रॉलिक पंप (वैगन टिपलर, साइड आर्म चार्ज, स्टैकर सह रिक्लेमर, स्लियू स्टैकर में स्थापित) इलैक्ट्रॉनिक कार्ड, अनबैलेंस्ड मोटर, वैगन टिपलर का कैम लिमिट स्वीच।
6	**कोक ओवन बैटरी** (टॉप चार्ज और स्टैम्प चार्ज दोनों) (कोयला बंकर से कोक डिस्चार्ज बकेट तक)	90%	• एंकरेज सिस्टम के स्प्रिंग्स, सीओजी बूस्टर, स्टैम्पिंग ट्रेन, बॉन्डिंग प्रेस
7	**कोक ड्राई क्वेन्चिंग संयंत्र** (हॉट कोक प्राप्त करने वाली बेकट से कूलिंग चैम्बर के डिस्चार्ज श्यूट ढलान तक)	90%	• मिल फैन और मोटर, कूलिंग चैम्बर के ट्विन फ्लू के लिए विशेष रिफैक्ट्री
8	**उपोत्पाद संयंत्र** (प्राथमिक गैस कूलर से स्वच्छ कोक ओवन गैस के नेटवर्क तक)	90%	• एग्जॉस्टर और मोटर, क्लॉज किल्न का बर्नर, कैटलिस्ट, टेल गैस विश्लेषक, पैलेटाइजेशन इकाई
9	**सिंटर संयंत्र उपस्कर** (बाउंड्री लिमिट - उत्पाद सिंटर बिन के नीचे वाइब्रो-फीडर हेतु कच्चे माल के लिए रिसिविंग बिन)	75%	• हाई इन्टेन्सिव मिक्सर और ग्रैनुलेटर इकाई, पैलेट कार, ड्राइव स्प्रोकेट, सिंटर मशीन के गियर बॉक्स के साथ मुख्य ड्राइव, स्लाइड रेल और कर्व्ड रेल, हॉट सिंटर ब्रेकर और ग्रिज़ली, एनुलर डिप रेल कूलर, सिंटर प्लांट एग्जॉस्टर अनुप्रयोग के लिए एलसीआई ड्राइव सिस्टम • इगनिशन फर्नेस स्पेयर पार्ट्स (रिफैक्ट्री/नियंत्रण प्रणाल/बर्नर असेंबली) • इग्ज़ोस्टर (वेस्ट गैस फैन) और सिस्टम स्पेयर पार्ट्स

10	**ब्लास्ट फर्नेस उपस्कर** बाउंड्री लिमिट*:* **इनपुट*:*** • **कच्चा माल -** संबंधित सामग्री के बंकरों का ऊपरी भाग • **कोल्ड ब्लास्ट** - स्नॉर्ट वाल्व का इनलेट • **औद्योगिक जल** - बीएफ पंप हाउस **आउटपुट** • **हॉट मेटल -** टारपीडो लेडल में भरी जाती है • **ग्रेनुलेटिड स्लैग -** ग्रेनुलेटिड स्लैग यार्ड के लिए	70%	• बेल लेस टॉप गियर बॉक्स, ऊपरी सील डिवाइस जो ऊपरी सामग्री गेट और ऊपरी सील वाल्व को कवर करती है, निचली सील डिवाइस जो निचले सामग्री गेट और निचले सील वाल्व को कवर करती है, ब्लीडर वाल्व, टिलटिंग रॉकर, वियर लाइनर्स, गौगल वॉल्व, इक्वलाइजिंग एंड रीलीफ वॉल्व, श्यूट रोटेशन मोटर्स, डिस्ट्रीब्यूशन श्यूट, फीडर स्पाउट, श्यूट्स और फनल्स आदि। • हार्थ रिफ्रैक्टरी (कार्बन ब्लॉक) • टॉप रिकवरी टर्बाइन सिस्टम (टीआरटी) • क्यू-स्टेव्स • एसजीआई स्टेव्स • कास्ट हाउस उपस्कर (मड गन, ड्रिलिंग मशीन और मुख्य ट्रॉफ मैनिपुलेटर) • प्रोब, प्रोफाइलोमीटर और स्टॉक स्तर सूचक (रडार टाईप) • गैस सफाई संयंत्र (एजीएस प्रणाली) • स्टोव सिस्टम - सिरेमिक बर्नर और तकनीकी वाल्व • अपशिष्ट ऊष्मा पुनर्प्राप्ति प्रणाली • टर्बो ब्लोअर • बॉल मिल • पीसीआई इंजेक्शन सिस्टम • लेवल-II ऑटोमेशन • कॉपर प्लेट कूलर्स • ट्यूयेर कूलर्स • स्टोव टेकनोलॉजिकल वाल्व • एसजीपी का डीवाटरिंग व्हील • टोरपेडो लैडल कार चेन असेबली • डोम फिल्ड डंप वाल्वस • ट्यूयेर स्टाक असेंबली
11	**गैस आधारित डायरेक्ट रीडक्शन संयंत्र उपस्कर** (बाउंड्री लिमिट*:* डीआरआई रिएक्टर के शीर्ष पर कच्चे माल की प्राप्ति और ईएएफ में हॉट डीआरआई का डिस्चार्ज)	50%	• रिएक्टर चार्जिंग सिस्टम • रिएक्टर • रिएक्टर डिस्चार्जिंग प्रणाली • ईएएफ में नुमैटिक ट्रांसफर • ब्रिकेटिंग प्रणाली के लिए डिस्चार्च रूट • ब्रिकेटिंग फीडिंग सिस्टम

			• ब्रिकेटिंग प्रणाली • रिडक्शन गैस सर्किट • CO_2 निष्कासन इकाई • प्रक्रिया गैस हीटर • सुधारक प्रणाली • हीट रिकवरी प्रणाली • प्रोसेस गैस कम्प्रेसर • ब्लोअर्स • सील गैस प्रणाली • फ्लू गैस फैन/हॉट फैन • प्रोसेस वाल्व • क्रिटिकल बेलोज • क्रिटिकल रिफ्रैक्ट्री • प्राकृतिक गैस शोधन पूर्व प्रणाली • लेवल-II ऑटोमेशन
12	**ऑक्सीजन संयंत्र 700 टीपीडी और उससे अधिक** (बाउंड्री लिमिट: ऑक्सीजन संयंत्र सीमा पर पानी, विद्युत)	30%	• मुख्य एयर कंप्रेसर • बूस्टर एयर कंप्रेसर • एक्सपेशन टरबाइन • रिबॉयलर • क्रायोजेनिक पंप • एएसयू के हीट विनिमय तत्व • प्रेशर कॉलम • मुख्य कंडेंसर, लो प्रेशर कॉलम • क्रूड आर्गन कॉलम, शुद्ध आर्गन कॉलम और कंडेंसर के साथ कंडेंसर ब्लॉक • मुख्य हीट एक्सचेंजर, शुद्ध आर्गन इवापरेटर सब-कूलर • एलओएक्स-आइसी-प्रोसेस पंप • एलआइएन-आइसी-प्रोसेस पंप • एलएआर-ट्रांसफर -प्रोसेस पंप • डेंस फ्लूइड एक्सपेंडर • बूस्टर हीट एक्सचेंजर • पीपीयू के लिए मॉलिक्यूलर सीव्स स्विचिंग वाल्व • क्रिटिकल सेफ्टी वाल्व • स्पेशलाइज्ड वाल्व • कंट्रोल वाल्व • कोल्ड बॉक्स • कंट्रोल वाल्व जीओएक्स-प्रोडक्ट

			• कोल्ड बॉक्स के फ्लो मापने वाले उपकरण • एक्सपेंडर - ब्रेक जेनरेटर, फ्रीक्वेंसी कन्वर्टर्स
13	**इस्पात प्रसंस्करण**		
13.1	**हॉट मेटल डी-डी-सल्फराइजेशन स्टेशन (एचएमडीएस) यूनिट के साथ को-** **इंजेक्शन प्रक्रिया** (ब्लास्ट फर्नेस (बीएफ) से हॉट मेटल को टारपीडो लेडल या ओपन-टॉप लेडल में प्राप्त होता है "सल्फर(एस)" सामग्री को कम करने के लिए डीसल्फराइजेशन शोधन से गुजारा जाता है और फिर बीओएफ कनवर्टर में स्थानांतरित किया जाता है)	75%	• इंजेक्शन लांस और सहायक उपकरणों के साथ स्वचालित सैंपलिंग इकाई • सहायक उपकरणों के साथ डी-स्लैगिंग मशीनें (स्लैग रेकिंग मशीन) • सहायक उपकरणों के साथ तापमान मापने और नमूना लेने के साधन
13.2	**हॉट मेटल डी-डी-सल्फराइजेशन स्टेशन (एचएमडीएस) यूनिट मैकेनिकल स्टिरर (केआर) प्रक्रिया के साथ** (ब्लास्ट फर्नेस (बीएफ) से हॉट मेटल टारपीडो लेडल या ओपन-टॉप लेडल में प्राप्त होता है, "सल्फर (एस)" सामग्री को कम करने के लिए डीसल्फराइजेशन शोधन से गुजारा जाता है और फिर बीओएफ कनवर्टर में स्थानांतरित किया जाता है)	70%	• सहायक उपकरणों के साथ इम्पेलर, इम्पेलर लिफ्टिंग और स्टीरिंग उपस्कर, गाइड फ्रेम • सहायक सुविधाओं के साथ डी-स्लैगिंग मशीनें (स्लैग रेकिंग मशीन) • सहायक उपकरणों के साथ तापमान मापने और नमूना लेने का साधन
13.3	**बेसिक ऑक्सीजन फर्नेस/एलडी ईकाई** [शोधित हॉट मेटलको बीओएफ कनवर्टर में डाला जाता है, जहां इसे इस्पात में परिवर्तित करने के लिए प्रसंस्कृत किया जाता है, जिसकी फिर लैडल फर्नेस (एलएफ) में आपूर्ति की जाती है]	65%	• क्लैम्पिंग के साथ लांस बॉडी, लांस कैरिज, लांस गाइड, लांस होइस्ट और ट्रॉली, सहायक उपकरणों के साथ लांस कॉपर टिप्स। • आपातकालीन टिल्टिंग ड्राइव के लिए न्यूमेटिक मोटर्स। • ज्वाइंट के साथ बॉटम स्टिरिंग प्रणाली, वाल्व स्टेशन और रोटरी • सहायक उपकरणों के साथ ऑक्सीजन/आर्गन/नाइट्रोजन के लिए वाल्व

			स्टेशन • सहायक उपकरणों के साथ उप-स्लांस प्रणाली • सभी सहायक उपकरणों सहित कंटेनर प्रयोगशाला। • सहायक उपकरणों के साथ स्वचालित गैस कपलिंग (ऑटो कपलर)। • कनवर्टर रेकिंग मशीन। • कनवर्टर टैप होल बदलने की मशीन • रिफ्रैक्टरी निगरानी (लेजर) मशीन। • कन्वर्टर शेल पार्ट्स, सस्पेंशन सिस्टम, रोटरी जॉइंट, स्लैग स्टॉपर और इसके कंट्रोल वाल्व • कन्वर्टर टिल्टिंग ड्राइव सिस्टम और सस्पेंशन सिस्टम, गियरबॉक्स और मोटर्स, न्यूमेटिक मोटर्स और कंट्रोल वाल्व, पोजीशन एनकोडर, क्लच सिस्टम, लुब्रिकेशन सिस्टम कंपोनेंट्स। • लैडल ट्रांसफर कार रेल ट्रैक सिस्टम (ए सीरीज़ टाइप) और गियरबॉक्स, स्टिरिंग कपलिंग। • लोमास गैस एनालाइज़र, मल्टी-लैब तापमान और सैंपल सिस्टम। • लैडल ट्रांसफर कारों के लिए स्टिरिंग कपलिंग। • पीएलसी और आरआइओ। • ऑटोमेशन सिस्टम और सॉफ्टवेयर। • हॉट ज़ोन हाइड्रोलिक पंप और वाल्व। • व्हील ब्लॉक के साथ हॉट ज़ोन गियर वाले मोटर्स। • कन्वर्टर बेयरिंग। • हवा और बिजली से चलने वाला स्लरी कॉम्पेक्शन पंप। • प्राइमरी आईडी फैन, बेयरिंग, मोटर्स, ड्राइव और लुब्रिकेशन सिस्टम। • डब्ल्यूडीएस-कोन
13.4	**इलेक्ट्रिक आर्क फर्नेस यूनिट** (प्राथमिक सामग्री जैसे स्क्रैप, डीआरआई, पिग आयरन और हॉट मेटल को विद्युत ऊर्जा का उपयोग	70%	• सहायक उपकरणों के साथ इलेक्ट्रोड रेगुलेशन प्रणाली • फर्नेस ट्रांसफार्मर सहित हाई करंट प्रणाली • सहायक उपकरणों के साथ ऑक्सीजन और कार्बन इंजेक्शन प्रणाली

	करके तरल इस्पात में परिवर्तित किया जाता है, जिससे कच्चे माल को पिघलाया और परिष्कृत किया जाता है)		• सहायक उपकरणों के साथ मैनुअल तापमान मापन और नमूनाकरण लांस
13.5	**लैडल फर्नेस यूनिट** [तरल इस्पात को वांछित ग्रेड प्राप्त करने के लिए संसाधित/शोधित किया जाता है और निरंतर कास्टिंग मशीन (सीसीएम) को आपूर्ति किए जाने से पहले बफर स्टॉक के रूप में रखा जाता है]	70%	• सहायक उपकरणों के साथ इलेक्ट्रोड विनियमन प्रणाली • सहायक उपकरणों के साथ मैनुअल तापमान मापन और नमूनाकरण लांस
13.6	**आरएच/आरएच-ओबी यूनिट** [आवश्यक विघटित गैस स्तर प्राप्त करने के लिए तरल इस्पात को डीगैस किया जाता है और फिर निरंतर कास्टिंग मशीन (सीसीएम) को आपूर्ति की जाती है]	65%	• सहायक उपकरणों के साथ गैस स्टिरिंग सिस्टम/लिफ्ट गैस स्टिरिंग सिस्टम वॉल्व स्टैंड • सहायक उपकरणों के साथ ऑक्सीजन लांस प्रणाली • सहायक उपकरणों के साथ हाइड्रिस मापन प्रणाली
13.7	**आर्गन/ऑक्सीजन डीकार्बराइजेशन (एओडी) इकाई**	70%	• एओडी कन्वर्टर को टिल्ट करने के लिए ड्राइव यूनिट, एयर मोटर, ब्रेक आदि। • लांस कॉपर टिप्स • पानी और ऑक्सीजन के लिए होज़ • इमरजेंसी टिल्टिंग ड्राइव के लिए न्यूमेटिक मोटर। • एओडी कन्वर्टर के लिए बेयरिंग, एयर मोटर के लिए इमरजेंसी गियर • सहायक उपकरणों के साथ ऑक्सीजन/आर्गन/नाइट्रोजन के लिए वाल्व स्टेशन। • रिफ्रैक्टरी मॉनिटरिंग (लेजर) मशीन • ऑटोमेशन सिस्टम।
13.8	**वीडी/वीओडी**	70%	• गैस एनालिसिस (ऑफ-गैस मास स्पेक्ट्रोमीटर) सिर्फ़ सेंसर। होल्डर भारत में बना है। • ऑटोमेशन और प्रोसेस कंट्रोल सॉफ्टवेयर प्लेटफॉर्म • सहायक उपकरणों के साथ वैक्यूम पंप सिस्टम • ऑक्सीजन टिप्स

			• सहायक उपकरणों के साथ ऑक्सीजन/ आर्गन/नाइट्रोजन के लिए वाल्व स्टेशन।
13.9	**सब्मर्ज्ड आर्क फर्नेस (एसएएफ) इकाई**	65%	• क्ले गन और ड्रिल मशीन • इलेक्ट्रोड उपकरण • स्लिपिंग डिवाइस असेंबली • इलेक्ट्रोड गाइडिंग असेंबली • ऊपरी और निचली मेंटल असेंबली • प्रेशर रिंग असेंबली • कॉन्टैक्ट शू असेंबली • हीट शील्ड असेंबली • इलेक्ट्रोड सील असेंबली • प्रेशर रिंग बेलोज़ • सील रिफ्रैक्टरी • फर्नेस ऑटोमेशन और कंट्रोलर सॉफ्टवेयर
13.10	**सतत कास्टिंग इकाई** (स्लैब कास्टर/बिलेट/ब्लूम राउंड/ कॉम्बी/बीम ब्लैंक) [तरल इस्पात को निरंतर कास्टिंग मशीन (सीसीएम) में स्लैब, बिलेट या ब्लूम में ढाला जाता है]	65%	• सहायक उपकरणों सहित लैडल स्लैग डिटेक्शन प्रणाली • कॉपर ट्यूब और प्लेट, मोल्ड ऑसीलेशन सिलेंडर। • रोटरी यूनियन। • सहायक उपकरणों सहित सतत तापमान माप प्रणाली। • सहायक उपकरणों के साथ टॉर्च कटिंग मशीन/ आपातकालीन टॉर्च कटर • सहायक उपकरणों सहित विद्युत ड्राइव सिस्टम सहित डी-ब्युरिंग मशीन • मार्किंग मशीन। • सहायक उपकरणों सहित रोल गैप चेकर • सहायक उपकरणों सहित इलेक्ट्रोमैग्नेटिक स्टिरर (ईएमएस)/इलेक्ट्रोमैग्नेटिक ब्रेकिंग (ईएमबीआर) प्रणाली
14	**फ्लैट उत्पाद मिल्स**		
14.1	**हॉट स्ट्रिप मिल्स/प्लेट मिल** (बाउंड्री लिमिट: सहायक उपकरणों सहित स्लैब यार्ड से डिस्पैच बे तक)	50%	• डी-स्केलर, मिल स्टैंड, बेड प्लेट, बैकअप रोल, वर्क रोल, मिल स्पिंडल, चॉक्स, एजीसी सिलेंडर, बेंडिंग ब्लॉक और सिलेंडर, शियर, डाउन कॉइलर, एंटी-फ्रिक्शन रोल नेक बेयरिंग, ऑयल फिल्म बेयरिंग, मिल

			रिड्यूसर, लोड सेल, थिकनेस गॉज, प्रोफाइल गॉज, लेवलर, रोल ग्राइंडिंग मशीन, कॉइल मार्किंग मशीन, प्लेट मार्किंग मशीन, मिल स्टैंड मोटर्स और मिल स्टैंड एमवी ड्राइव सिस्टम, ऑटोमेशन सिस्टम आदि।
14.2	**सीआरएम (पीएलटीसीएम)** (बाउंड्री लिमिट: पिकलिंग लाइन एंट्री से मिल एक्जिट तक)	50%	• वेल्डिंग मशीन, टैंशन लेवलर, मिल स्टैंड, बैकअप रोल, एंटीफ्रिक्शन बीयरिंग, ऑयल फिल्म बीयरिंग, रोल चॉक्स, रोल फोर्स सिलेंडर, रोल बेंडिंग और रोल शिफ्टिंग सिलेंडर, मिल स्पिंडल, लोड सेल, पोजिशन ट्रांसड्यूसर, इलेक्ट्रोस्टेटिक ऑइलर, साइड ट्रिमर, स्टीयरिंग सिस्टम, सरफेस इंस्पेक्शन सिस्टम, थिकनेस गेज, लेजर स्पीड गेज, टेंसियोमीटर, फ्लैटनेस गॉज, टैंशन रील, मिल रिड्यूसर, मिल स्टैंड मोटर्स और मिल स्टैंड एमवी ड्राइव सिस्टम, ऑटोमेशन सिस्टम आदि।
14.3	**सीआरएम (एचडीजीएल)** (बाउंड्री लिमिट: टेम्पर मिल और टैंशन लेवलर सहित एचडीजीएल में एंट्री से एक्जिट तक)	60%	• वेल्डिंग मशीन, रेडिएंट ट्यूब फर्नेस, जेट कूलिंग सिस्टम, इंडक्शन हीटिंग के साथ कोटिंग पॉट, पॉट रोल, एयर नाइफ वाइपिंग सिस्टम, टैंशन लेवलर, विड्थ गॉज, थिकनेस गेज, कोटिंग मोटाई गॉज, लोड सेल, रोल फोर्स सिलेंडर, मिल स्टैंड मोटर्स और मिल स्टैंड ड्राइव सिस्टम, ऑटोमेशन सिस्टम, आदि।
14.4	**सीआरएम (एसपीएम)** (बाउंड्री लिमिट: एसपीएम में एंट्री से एक्जिट तक)	50%	• मिल स्टैंड, बैकअप रोल, एंटीफ्रिक्शन बीयरिंग, ऑयल फिल्म बीयरिंग, रोल चॉक्स, रोल फोर्स सिलेंडर, मिल स्पिंडल, इलेक्ट्रोस्टेटिक ऑइलर, कॉइल मार्किंग सिस्टम, लोड सेल, थिकनेस गॉज, मिल स्टैंड मोटर्स और मिल स्टैंड एमवी ड्राइव सिस्टम, ऑटोमेशन सिस्टम, आदि।
14.5	**सीआरएम (बेल एनीलिंग फर्नेस)** (बाउंड्री लिमिट: फर्नेस बेस से पोस्ट कूलिंग उपस्कर तक)	55%	• फर्नेस, स्वचालन प्रणाली, आदि।
14.6	**सीआरएम (कलर कोटिंग लाइन)** (बाउंड्री लिमिट: सीसीएल में एंट्री से	80%	• कोटर, कोटिंग थिकनेस गेज, डिजिटल प्रिंटर, टैंशन लेवलर, स्वचालन आदि।

	एक्जिट तक)		
14.7	**टीएससीडीआर (थिन स्लैब कास्टिंग डायरेक्ट रोलिंग)** (बाउंड्री लिमिट: टूरेट से क्वाइल फिनिशिंग और पैकेजिंग एरिया)	50%	• सहायक उपकरणों सहित संपूर्ण लेडल स्लैग डिटेक्शन सिस्टम • कॉपर ट्यूब और प्लेट, मोल्ड ऑसिलेशन सिलेंडर। • रोटरी यूनियन। • सहायक उपकरणों सहित निरंतर तापमान मापने की प्रणाली। • पेंडुलम शीयर कटिंग मशीन। • सेगमेंट्स असेंबली • सहायक उपकरणों सहित रोल गैप चेकर कंप्लीट • सहायक उपकरणों सहित इलेक्ट्रोमैग्नेटिक स्टिरर (इएनएस)/इलेक्ट्रोमैग्नेटिक ब्रेकिंग (इएमबीआर) सिस्टम • टनल फर्नेस बर्नर • रफिंग और फिनिशिंग मिल स्टैंड, वर्क रोल और बैकअप रोल, एंटीफ्रिक्शन बेयरिंग, ऑयल फिल्म बेयरिंग, रोल चॉक्स, रोल फोर्स सिलेंडर, मिल स्पिंडल, मिल स्टैंड एमवी ड्राइव और मोटर, ऑटोमेशन सिस्टम, लैमिनार/पावर कूलिंग कंपोनेंट्स, हाइड्रोलिक क्वाइलर। प्रोफाइल गेज, थिकनेस गेज, विड्थ गेज। • नोजल • ग्रीस सिस्टम और सहायक उपकरण • हाइड्रोलिक सिस्टम और सहायक उपकरण • गियरबॉक्स • आरओटी रोल असेंबली • रोल असेंबली (स्लीव, शॉफ्ट, रोल) • लेडल टरेट और सहायक उपकरण (स्लीव बेयरिंग, डिस्क कपलिंग, गियरबॉक्स, हाइड्रोलिक क्लच और हाइड्रोलिक सिलेंडर) • मोल्ड ब्रेकआउट प्रिडिक्शन सिस्टम • ऑटो मोल्ड लेवल कंट्रोल न्यूक्लियोनिक गेज • मोल्ड पाउडर फीडिंग सिस्टम • सहायक उपकरणों सहित सीएनसी मोल्ड मशीनिंग सिस्टम • टंडिश और टरेट वजन प्रणाली

			• टनल फर्नेस रिफ्रैक्टरी रोल। • टनल फर्नेस शटल ड्राइव सिस्टम और गैस पहुंचाने की प्रणाली। • बैकअप रोल हाइड्रोस्टेटिक लुब्रिकेशन सिस्टम • रोल बाइट लुब्रिकेशन सिस्टम • सहायक उपकरणों सहित इन-फर्नेस कैमरा • क्रॉप शीयर • डेस्केलर सिस्टम और घटक। • कॉइल मार्किंग मशीन • ऑनलाइन कॉइल वजन प्रणाली • कट टू लेंथ स्टेकर सिस्टम • रोल शॉप (सीएनसी कॉम्बी ग्राइंडर, सीएनसी रोल ग्राइंडर, सीएनसी नाइफ ग्राइंडर, सीएनसी टर्निंग मशीन, लेथ मशीन) • क्वाइल स्ट्रैपिंग मशीन • डाउन कोइलर सिस्टम • मिल मापने की प्रणाली और सेंसर (ऑटोमैटिक गेज कंट्रोल (एजीसी) सेंसर (रोल फोर्स, गैप, दबाव) • अपने सेंसर सहित लूपर कंट्रोल सिस्टम • कंडीशन आधारित निगरानी प्रणाली और उसके सेंसर • क्वाइल शटल कार और पैलेट कन्वेइंग सिस्टम। • क्रेन कॉइल टोंग। • आरओ और यूएफ मेम्ब्रेन • सेल्फ-क्लीनिंग फिल्टर
14.8	**प्लेट मिल के लिए नॉर्मलाइज़िंग फैसिलिटी** (बाउंड्री लिमिट: नॉर्मलाइज़िंग फर्नेस में एंट्री से तैयार प्लेट्स के डिस्पैच तक)	50%	• फर्नेस बर्नर, फर्नेस हर्थ रोलर्स, लेवलर, लोड सेल, ऑटोमेशन
14.9	**एसएसएम (सिलिकॉन स्टील मिल)** (बाउंड्री लिमिट : पिकलिंग लाइन एंट्री से एसएसएम के डिस्पैच तक)	50%	• मिल स्टैंड, वर्क रोल और बैकअप रोल, एंटीफ्रिक्शन बीयरिंग, ऑयल फिल्म बीयरिंग, रोल चॉक्स, रोल फोर्स सिलेंडर, मिल स्पिंडल, मिल स्टैंड एमवी ड्राइव सिस्टम और मोटर्स, ऑटोमेशन सिस्टम, एनीलिंग फर्नेस, डीकार्बराइजिंग लाइन, इलेक्ट्रिकल स्टील परीक्षण इकाईयां (उदाहरण के लिए फिशर

			स्कोप मोटाई मापने वाला उपकरण, फ्रैंकलिन इंसुलेशन रेजिस्टिविटी टेस्टर, चुंबकीय कंसोल, स्टैकिंग फैक्टर टेस्टर)।
14.10	**सीआरएम (क्लस्टर मिल स्टैंड)** सेंडज़िमिर मिल (बाउंड्री लिमिट : सेंडज़िमिर मिल में एंट्री से एग्जिट तक)	50%	• सेंडज़िमिर मिल स्टैंड, वर्क रोल और बैकअप रोल, एंटीफ्रिक्शन बेयरिंग, ऑयल फिल्म बेयरिंग, रोल चॉक्स, रोल फोर्स सिलेंडर, मिल स्पिंडल, मिल स्टैंड एमवी ड्राइव सिस्टम और मोटर्स, ऑटोमेशन सिस्टम
14.11	**एचआरएम (स्टेकेल मिल)** (बाउंड्री लिमिट : कॉइलर फर्नेस एंट्री से स्टेकेल मिल तक और कॉइलर फर्नेस एग्जिट तक)	40%	• स्टेकेल मिल स्टैंड, हीटेड कॉइलर, वर्क रोल और बैकअप रोल, एंटीफ्रिक्शन बेयरिंग, ऑयल फिल्म बेयरिंग, रोल चॉक, रोल फोर्स सिलेंडर, मिल स्पिंडल, मिल स्टैंड एमवी ड्राइव सिस्टम और मोटर्स, ऑटोमेशन सिस्टम
15	**लॉग प्रोडक्ट मिल्स**		
15.1	**बार मिल/डब्ल्यू/एमएम/एलएसएम** (बाउंड्री लिमिट : फर्नेस एंट्री से डिस्पेच तक)	75%	• फास्ट फिनिशिंग ब्लॉक, रोल टर्निंग लेथ, प्रोफाइल गेज, ऑटोमेशन सिस्टम, आदि
15.2	**रेल मिल/हेवी स्ट्रकचरल मिल** (बाउंड्री लिमिट: मटीरियल हैंडलिंग को छोड़कर फर्नेस एंट्री से रेल वेल्डिंग संयंत्र एग्जिट तक)	45%	• मिल स्टैंड, मिल मोटर और ड्राइव सिस्टम, हीट ट्रीटमेंट इकाई, स्ट्रेटनिंग मशीन, • एनडीटी इकाईयां, वेल्डिंग मशीन, प्रोफाइल गेज, हॉट सॉ, कोल्ड सॉ, हॉट मार्किंग मशीन, रोल टर्निंग लेथ, सॉ ग्राइंडिंग मशीन, ऑटोमेशन सिस्टम, आदि।
15.3	ईआरडब्ल्यूपीपी (इलेक्ट्रिकल रेजिस्टेंस वेल्डेड पाइप संयंत्र) (बाउंड्री लिमिट: स्ट्रिप फीडिंग से फिनिशिंग इकाईयां और ईआरडब्ल्यूपीपी के डिस्पैच तक)	50%	• प्री-फॉर्मिंग यूनिट, ब्रेक-डाउन स्टैंड, एज बेंडर, यूनिवर्सल केज, फिनिशिंग पास (मल्टीपल स्टैंड), पाइप गाइड, हाई फ्रीक्वेंसी वेल्डिंग मशीन, हाई पावर इलेक्ट्रिक इंडक्टर, हाइड्रो टेस्टिंग, अल्ट्रासोनिक मशीन
15.4	एसडब्ल्यूपीपी (सर्पिल वेल्डेड पाइप संयंत्र) (बाउंड्री लिमिट: पाइप बनाने से फिनिशिंग इकाईयां और एसडब्ल्यूपीपी के डिस्पैच तक)	50%	• सबमर्ज्ड आर्क वेल्डिंग, आउटसाइड वेल्डिंग (स्केलप जॉइंट), एक्स- रे स्टेशन, हाइड्रो टेस्टिंग, बेवलिंग मशीन, अल्ट्रासोनिक मशीन, एंड रेडियोग्राफ स्टेशन

16	**व्हील संयंत्र**		
16.1	व्हील संयंत्र (राउंड/इनगॉट की रिसिप्ट से लेकर तैयार व्हील तक)	30%	• सर्कुलर सॉ, फोर्जिंग प्रेस, व्हील रोलिंग मिल, व्हील डिशिंग प्रेस, व्हील स्टैम्पिंग मशीन, रिम स्प्रेइंग मशीन, मोबाइल चार्जर, (हैंडलिंग रोबोट), मशीनिंग इकाईयां , टेस्टिंग इकाईयां, ऑटोमेशन सिस्टम आदि
16.2	रेलवे व्हील के लिए हीट ट्रीटमेंट इकाईयां (बाउंड्री लिमिट: हॉट डायमेंशन मेज़रमेंट से ब्लैक व्हील स्टोरेज तक का एग्जिट)	40%	• फर्नेस बर्नर, हर्थ रोलर्स, ऑटोमैटिक व्हील हैंडलिंग और क्वेंचिंग मशीन
16.3	व्हील और रेल के लिए नॉन डेस्ट्रक्टिव टेस्टिंग (एनडीटी) इकाईयां (बाउंड्री लिमिट: एनडीटी इकाईयां के एंट्री और एग्जिट)	30%	• हार्डनेस टेस्टिंग मशीन, अल्ट्रासोनिक टेस्टिंग मशीन, मैग्नेटिक पार्टिकल इंस्पेक्शन मशीन, एडी करंट टेस्टिंग मशीन
16.4	रोलिंग मिल स्टैंड के लिए फोर्ज्ड रोल विनिर्माण की इकाईयां (बाउंड्री लिमिट: फोर्ज्ड ब्लैंक रोल एंट्री से फिनिश्ड रोल के डिस्पैच तक)	30%	• फोर्जिंग प्रेस, मैनिपुलेटर्स, रोल हार्डनिंग मशीन, क्रायोजेनिक ट्रीटमेंट फैसिलिटी, टेम्परिंग फर्नेस, रोल ग्राइंडर, रोल टर्निंग लेथ, हार्डनेस टेस्टिंग मशीन, अल्ट्रासोनिक टेस्टिंग मशीन
16.5	आरजीबीएस/रोल शॉप	50%	• सीएनसी वर्क रोल ग्राइंडर/ सीएनसी कॉम्बी ग्राइंडर, सीएनसी रोल टर्निंग लेथ, • रोल के लिए इलेक्ट्रिक डिस्चार्ज टेक्सचरिंग (ईडीटी) और इलेक्ट्रिक डिस्चार्ज मशीनिंग (ईडीएम) की इकाईयां
17	रिफ्रेक्टरी ब्रिक (कच्चे माल की प्राप्ति से लेकर तैयार ब्रिक तक)	50%	• हाइड्रोलिक प्रेस
18	इल्केट्रिकल (विद्युत गुणवत्ता प्रणाली)	30%	• एमवीस्टेटकॉम • (स्टेटिक सिंक्रोनस कंपेंसेटर) प्रणाली
	अन्य सहायक और उपयोगिता वाले उपस्कर		
19	**कैल्सीनेशन संयंत्र** (कैल्साइन्ड लाइम और डोलो)		• फायरिंग सिस्टम, शाफ्ट लेवल इंडिकेटर, ऑटोमेशन सिस्टम • वीएफडीऔर सॉफ्ट स्टार्टर कार्ड। ड्राइविंग एयर ब्लोअर, डीडस्टिंग ड्राफ्ट फैन,

		कूलिंग एयर फैन, लाइम कूलिंग फैन, वेस्ट गैस फैन, गैस बूस्टर फैन असेंबली • हाइड्रॉलिक सिलेंडर, हाइड्रॉलिक मोटर्स, हाइड्रॉलिक स्टेशन।
20	**इलेक्ट्रिक मोटर चालित कोल्ड ब्लास्ट ब्लोअर** (एक्सियल/ एक्सियल लास्ट स्टेज रेडियल के साथ)	• एक्सियल / एक्सियल लास्ट स्टेज रेडियल ब्लोअर के साथ • ड्राइव सिस्टम के साथ मोटर • ब्लो - ऑफ वाल्व • ब्लोअर नॉन - रिटर्न वाल्व • नियंत्रण और इंस्ट्रूमेंटेशन आइटम
21	स्टीम टर्बाइन चालित कोल्ड ब्लास्ट ब्लोअर (एक्सियल/एक्सियल लास्ट स्टेज रेडियल के साथ)	• एक्सियल / एक्सियल लास्ट स्टेज रेडियल ब्लोअर के साथ • ब्लो - ऑफ वाल्व • ब्लोअर नॉन - रिटर्न वाल्व • कंट्रोल एंड इंस्ट्रूमेंटेशन आइटम
22	**डीजल इंजन चालित कोल्ड ब्लास्ट ब्लोअर** (एक्सियल/एक्सियल लास्ट स्टेज रेडियल रेडियल के साथ)	• एक्सियल/एक्सियल लास्ट स्टेज रेडियल ब्लोअर के साथ / रेडियल ब्लोअर और सिस्टम • डीजल इंजन • ब्लो-ऑफ वाल्व • ब्लोअर नॉन - रिटर्न वाल्व • कंट्रोल एंड इंस्ट्रूमेंटेशन आइटम
23	**गैस फायरड़/हीट रिकवरी बॉयलर**	• विशेष ग्रेड प्लेट्स और ट्यूब्स • फ्लेम स्कैनर • इंस्ट्रूमेंटेशन एंड कंट्रोल
24	**स्टीम टरबाइन** (एक्सट्रेशन/बीपीटीजी)	• स्पेशल ग्रेड ब्लेड सामग्री • गवर्निंग सिस्टम • टर्बो पर्यवेक्षी प्रणाली • इंस्ट्रूमेंटेशन एंड कंट्रोल
25	**गैस होल्डर**	• गैसहोल्डर सील, सीलेंट। • फिटिंग के साथ लेवल वेट रोप • वी.आर.वाल्व गैस्केट • डबल/ट्रिपल मेम्ब्रेन सिस्टम के लिए स्पेशल मेम्ब्रेन • हाईड्रोलिक
26	**हाई प्रेशर गैस बूस्टर** (आउटलेट प्रेशर > 2000 एमएम डब्ल्यूसी)	• गैस बूस्टर जिसमें कंट्रोल और बाईपास वाल्व शामिल हैं • पिस्टन रिंग्स • कंसेंट्रेट रिंग टाईप वाल्व (एसएस)

27	**प्रदूषण नियंत्रण प्रणालियाँ**	• टीआर सेट • कंट्रोलर्स • इंसुलेटरर्स • ईएसपी इलेक्ट्रिकल कंपोनेंट • कंट्रोल एंड इंस्ट्रूमेंटेशन आइटम
28	**जल एवं अपशिष्ट उपचार प्रणाली**	• मेंब्रेन • इवेपोरेटर (कंप्रेसर और टाइटेनियम शीट) • एचपी पंप्स • कंट्रोल एंड इंस्ट्रूमेंटेशन आइटम
29	**कंप्रेस्ड एयर स्टेशन**	• सेंट्रीफ्यूगल कंप्रेसर कोर असेंबली जिसमें इम्पेलर्स, बुल गियर, पिनियन शाफ्ट, बेयरिंग्स, वाइब्रेशन प्रोब्स और लोकल कंट्रोल पैनल शामिल हैं ।
30	**हाइड्रोजन संयंत्र**	• इलेक्ट्रोलाइज़र इकाई • एचपी कंप्रेसर • कंट्रोल एंड इंस्ट्रूमेंटेशन आइटम
31	**पैकेज्ड चिलर्स**	• कंप्रेसर • कंट्रोल एंड इंस्ट्रूमेंटेशन आइटम
32	**अन्य उपयोगिता वाले क्षेत्र जैसे-** एयर कंडीशनिंग और वेंटिलेशन सिस्टम, वीएएम बेस्ड चिलर सिस्टम, फायरफाइटिंग सिस्टम, गैस बूस्टर (डीपी 2000 एमएम डब्ल्यूसी से कम), कूलिंग वॉटर सिस्टम (पंपिंग स्टेशन, फिल्टर, कूलिंग टावर, हीट एक्सचेंजर, आदि), गैस मिक्सिंग स्टेशन, पॉल्यूशन कंट्रोल सिस्टम, इंटर प्लांट पाइपिंग सिस्टम	• आइटम/इक्विपमेंट में सब-कंपोनेंट/पार्ट्स होते हैं जो आयात किए जाते हैं • कंप्रेसर, चिलर, क्रेन एसी यूनिट, एक्पेनशन वाल्व, उपकरण, उच्च तापमान अनुप्रयोग वाले एसी।
33	**इलेक्ट्रिक ओवरहेड ट्रैवलिंग क्रेन और गैन्ट्री क्रेन, इलेक्ट्रिक होइस्ट**	• बैरल कपलिंग, हेवी ड्यूटी बेयरिंग, क्रेन रेल लुब्रिकेशन, स्लू रिंग बेयरिंग, टोंग्स
34	**इंजीनियरिंग शॉप**	• सीएनसी लेथ, सीएनसी मिलिंग मशीन
35	पावर जेनरेशन, ट्रांसमिशन और डिस्ट्रीब्यूशन सिस्टम; शॉप इलेक्ट्रिक्स जिसमें पावर और कंट्रोल सिस्टम और उससे जुड़े इलेक्ट्रिकल काम शामिल हैं	विद्युत मंत्रालय की मिनिमम लोकल कंटेंट (एमएससी)% गाइडलाइन के अनुसार

नोट : सभी उपस्कर की अधिप्राप्तिअनुपालन विद्युत मंत्रालय की दिशानिर्देशों के अंतर्गत/ क्लास-I श्रेणी के अनुसार किया जाएगा। ऐसे मामलों में जहाँ उपकरण क्लास-I श्रेणी में शामिल नहीं हैं, या जहाँ उपस्कर की श्रेणीकरण विशिष्टता विद्युत मंत्रालय की/दिशानिर्देशों में स्पष्ट रूप से परिभाषित नहीं है, वहाँ डीपीआईटीटी द्वारा जारी क्लास-I और क्लास-II श्रेणियों से संबंधित प्रावधानों का पालन किया जाएगा।

36	**इंस्ट्रूमेंटेशन आइटम/उपस्कर** **	डीपीआईटीटी के दिशानिर्देशों के अनुसार*	• अबोव/अंडर बर्डन जांच प्रणाली • प्रोफाइलोमीटर • बर्डन कैमरा • तुयेरे फिनोमिना डिटेक्शन प्रणाली (टीपीडीएस) • टॉप गैस एनालाइज़र (सीओ,सीओ$_2$,एच$_2$,ओ$_2$, पॉल्यूटेंट्स) • फ्लो जाम स्विच • एलिमेंटल एनालाईजर • मॉइस्चर एनालाईजर(न्यूक्लिओनिक) • सीवी एनालाईजर • थिकनेस गेज • हॉट मेटल डिटेक्टर • विड्थ गेज • फर्नेस कैमरा • मल्टीफेज प्रोफ़ाइल गेज • मल्टीफंक्शन/शेप गेज • सतह निरीक्षण प्रणाली • लेजर डॉप्लर वेलोसीटी मीटर • ऑप्टिकल बैरियर • हॉट रोलिंग के लिए थर्मल इमेजिंग सिस्टम • ऑटोमैटिक गेज कंट्रोल (एजीसी) सेंसर (रोल फोर्स, गैप, प्रेशर) • ऑनलाइन मैकेनिकल प्रॉपर्टी प्रेडिक्शन सिस्टम (एआई + सेंसर) • ऑयल फिल्म थिकनेस मॉनिटरिंग सिस्टम (कोल्ड रोलिंग) • एक्स-रे या न्यूक्लिओनिक आधारित कोटिंग थिकनेस गेज • मास फ्लो मीटर • हाइड्रिस (मोल्टन स्टील में हाइड्रोजन का पता लगाना) • मोल्ड लेवल मीजरमेंट • ब्रेक-आउट प्रीडीक्शन प्रणाली (बीओपीएस) • इल्क्ट्रोमैग्नेटिक ब्रेक (ईएमबीआर) नियंत्रण और सेंसर • लेडल ट्रैकिंग और प्रबंधन प्रणाली • स्लैग डिटेक्शन सिस्टम (एसडीएस)/ स्लैग मॉनिटरिंग सिस्टम • बीओएफ एंडपॉइंट डिटेक्शन (लेजर-इंडुय्स्ड

			ब्रेकडाउन स्पेक्ट्रोस्कोपी-एलआईबीएस) • सब-लांस सिस्टम (टेम्परेचर + O_2 + कार्बन + सैंपलिंग) • लैडल रिफ्रैक्टरी वियर मॉनिटरिंग (लेजर/ अल्ट्रासोनिक/इंफ्रारेड) • कंटीन्यूअस एमिशन मॉनिटरिंग सिस्टम (सीईएसएस- एसओx , एनओx, पीएस, सीओ, सीओ$_2$, ओ$_2$, एच2 के लिए इम्पोर्टेड एनालाइज़र) • बीओएफ/ ईएएफ (सीओ, सीओ$_2$, ओ$_2$, एच2 डस्ट) के लिए ऑफ - गैस एनालाइज़र • वॉटर क्वालिटी एनालाइज़र (पीएच, कंडक्टिविटी, ऑयल - इन - वॉटर, टीओसी, सिलिका, बीओडी, सीओडी, टीएसएस, टीडीएस, फिनोल, साइनाइड) • लेजर - आधारित गैस लीक डिटेक्टर (सीएज$_4$, सीओ, एच$_2$, एच2एस) • अक्सोटिक/ अल्ट्रासोनिक रिसाव का पता लगाना • वाइब्रेशन / कंडीशन मॉनिटरिंग सेंसर / एक्सियल शिफ्ट / डिफरेंशियल एक्सपेंशन मॉनिटरिंग सिस्टम • टक्कर रोधी प्रणाली (रडार/लेजर/लिडार) • ओवन पहचान प्रणाली (ओआईएस) • पाइरोमीटर • लोमास विश्लेषक • प्रेशर,टेम्परेचर और इलेक्ट्रोटेक्निकल पैरामीटर्स के लिए मास्टर कैलिब्रेटर • सिंटर संयंत्र में इरिच मिक्सर्स में स्थापित उपकरण और हैंज़ेल निर्मित लुब्रिकेशन प्रणालियाँ • टर्बाइन और टर्बो ब्लोअर के लिए गवर्नर सिस्टम • बाई-प्रोडक्ट संयंत्र के लिए टेल गैस एनालाइज़र • कोक बकेट लिफ्टर और रिवर्सिंग विंच में प्रयोग में आने वाले फोर्स सेंसर • एनकोडर, • हाइड्रोलिक वाल्व नियंत्रक • बीएलटी में स्थापित उपस्कर (टिल्ट स्विच,

			सोनिक सेंसर, एनकोडर,आदि) • फ्लेम सेंसर/स्कैनर
37	**ऑटोमेशन आइटम/उपस्कर ****	डीपीआईटीटी के दिशानिर्देशों के अनुसार *	
38	**वॉयस कम्युनिकेशन सिस्टम ****	डीपीआईटीटी के दिशानिर्देशों के अनुसार *	
39	**फायर डिटेक्शन और अलार्म (एफडीए) प्रणाली ****	डीपीआईटीटी के दिशानिर्देशों के अनुसार *	
40	**सीसीटीवी प्रणाली ****	डीपीआईटीटी के दिशानिर्देशों के अनुसार *	

नोट:

* इंस्ट्रूमेंटेशन, ऑटोमेशन संचार उपस्कर, फायर डिटेक्शन एंड अलार्म (एफडीए) प्रणाली और सीसीटीवी प्रणाली डीपीआईआईटी के साथ-साथ एमईआईटीवाई दिशानिर्देशों के अनुसार क्लास- I और क्लास- II आपूर्तिकर्ता मानदंडो के अनुरूप पूंजीगत वस्तुओं के लिए घरेलू सामग्री आवश्यकताओं का अनुपालन करेगी।

** अत्यधिक विशिष्ट उपस्कर, कंपोनेंट्स, और ज़रूरी पार्ट्स जैसे इंस्ट्रूमेंटेशन, ऑटोमेशन, कम्युनिकेशन सिस्टम, फायर डिटेक्शन और अलार्म (एफडीए) सिस्टम, और सीसीटीवी सिस्टम के लिए सेमीकंडक्टर चिप्स अभी वैश्विक प्रौद्योगिकी वाली अग्रणी कंपनियों से लिए जा रहे हैं। हालांकि, पूरे सिस्टम असेंबली, इंटीग्रेशन, और मैन्युफैक्चरिंग का कार्य भारत में ही किया जा रहा है, और शेष कंपोनेंट्स स्वदेसी स्रोतो से अधिप्राप्त किये जा रहे हैं।

परिशिष्ट-ग

लौह एवं इस्पात क्षेत्र में स्वदेशी प्रौद्योगिकियों को बढ़ावा देना

1) **उद्देश्य:**

इस्पात विनिर्माण के सभी चरणों में स्वदेशी प्रौद्योगिकियों का अंगीकरण, विकास और विस्तार को प्रोत्साहित करके भारतीय लौह एवं इस्पात क्षेत्र में आत्मनिर्भरता को बढ़ावा देना।

2) **विषय क्षेत्र:**

यह नीति इस्पात बनाने या इस्पात विनिर्माण संयंत्र स्थापित करने वाले केन्द्रीय सार्वजनिक क्षेत्र के उद्यमों पर लागू होती है।

3) **नीति निदेश:**

3.1 ऐसे मामले जहां प्रौद्योगिकी और पूर्व इंजीनियरिंग एवं आपूर्ति के लिए प्रमाण उपलब्ध हैं, लेकिन वर्तमान क्षमता आवश्यकता से मेल नहीं खाते हैं, ऐसे मामलों में स्वदेशी प्रौद्योगिकी प्रदाताओं के लिए निम्नलिखित शर्तें लागू होंगी:

3.1.1 उत्पादन क्षमता प्रस्तावित संयंत्र की क्षमता का 30% होगी

3.1.2 वेंड़र्स के साथ स्पष्ट साझेदारी की प्रामाणिक उपलब्धता

3.1.3 प्रस्तावित संयंत्र की क्षमता के कम से कम 75% के लिए परियोजनाओं की डिटेल इंजीनियरिंग कार्यों का अनुभव

3.2 ऐसे मामले जहां प्रौद्योगिकी उपलब्ध है, लेकिन अर्लियर सप्लाई के लिए कोई संदर्भ उपलब्ध नहीं है, ऐसे मामलों में स्वदेशी प्रौद्योगिकी प्रदाताओं के लिए निम्नलिखित शर्तें लागू होंगी:

3.2.1 स्वदेशी प्रौद्योगिकी आपूर्तिकर्ता ने प्रस्तावित परियोजना की कम से कम 75% विशेषताओं से मेल खाते हुए परियोजनाओं की डिटेल इंजीनियरिंग कार्य किया हो

3.2.2 स्वदेशी प्रौद्योगिकी आपूर्तिकर्ता ने प्रस्तावित परियोजना की महत्वपूर्ण विशेषताओं से 100% मेल खाते हुए डिटेल इंजीनियरिंग कार्य किया हो

3.2.3 वेंड़र्स के साथ स्पष्ट गठजोड़ की उपलब्धता

3.2.4 प्रौद्योगिकी उपलब्धता के प्रमाणिक साक्ष्य (आईपीआर या अन्य पर्याप्त साक्ष्य)

3.3 ऐसे मामलों में जहाँ कोई भारतीय प्रौद्योगिकी उपलब्ध नहीं है, वहाँ यदि कोई विदेशी प्रौद्योगिकी प्रदाता तीन वर्षों के भीतर भारतीय सीपीएसई (जिसमें अधिप्राप्ति करने वाली इकाई भी शामिल है) को प्रशिक्षण और सहयोग सहित प्रौद्योगिकी हस्तांतरण करने का वचन देता है, तो उसे घरेलू मूल्य संवर्धन के प्रतिशत पर ध्यान दिए बिना माना हुआ श्रेणी-1 आपूर्तिकर्ता (डीम्ड क्लास-1 सप्लायर) माना जाएगा। इस स्थिति में, क्रय वरीयता उस विदेशी प्रौद्योगिकी प्रदाता को दी जाएगी, जैसा कि डीपीआईआईटी के सार्वजनिक अधिप्राप्ति (मेक इन इंडिया को प्राथमिकता) आदेश में समय-समय पर संशोधित किया गया है।

4) **कार्यान्वयन निरीक्षण:**

इस्पात मंत्रालय द्वारा गठित स्थायी समिति कार्यान्वयन की निगरानी करेगी, विवादों का समाधान करेगी तथा पात्रता एवं प्रोत्साहन मानदंडों को समय-समय पर अद्यतन करेगी।

प्रपत्र-1

मेल्ट एंड पोर आवश्यकताओं (परिशिष्ट- क*) और/या घरेलू मूल्य वर्धन आवश्यकताओं (परिशिष्ट-क और परिशिष्ट-ख*) के अनुपालन के लिए स्व-प्रमाणन का हलफनामा

*परिशिष्ट-ख पूंजीगत वस्तुओं के लिए, नीति के तहत अनिवार्य रूप से वैधानिक लेखापरीक्षक/लागत लेखापरीक्षक/सीए प्रमाणपत्र के साथ यह शपथपत्र अवश्य संलग्न होना चाहिए।

मैं,_____,निवास_____,मेसर्स_____

_के अधिकृत हस्ताक्षरकर्ता होने के नाते _____ एतद्द्वारा पूर्णतया प्रतिज्ञा और घोषणा करता/करती हूँ;

1. मैंने दिनांक_____ को जारी अधिसूचना संख्या_____ घरेलू स्तर पर विनिर्मित लौह एवं इस्पात उत्पाद (डीएमआई एवं एसपी) नीति, 2025, को पढ़ और समझ लिया है। मैं उक्त नीति और उस निविदा की सभी शर्तों और नियमों का पालन करने के लिए सहमत हूं जिसके संबंध में यह शपथपत्र प्रस्तुत किया गया है।

2. यह शपथपत्र निम्नलिखित लौह एवं इस्पात उत्पाद/पूंजीगत वस्तुओं से संबंधित है:

उत्पाद का नाम: _____

एचएस कोड: _____

परिशिष्ट वर्गीकरण: परिशिष्ट-क/परिशिष्ट-ख (जैसा लागू हो, चुनें)

प्रापण एजेंसी: _____

3. मेल्ट एंड पोर - यह केवल परिशिष्ट-क में उल्लिखित उन वस्तुओं पर लागू होता है जिनमें मेल्ट एंड पोर संबंधी शर्त होती है।

मैं एतद्द्वारा घोषणा करता/करती हूँ कि उपरोक्त उत्पाद भारत में मेल्ट एंड पोर की आवश्यकताओं जैसा कि विशेष रूप से परिशिष्ट- क में अधिसूचित किया है, को पूरा करते हैं। विशेष रूप से:

भारत में ही इस्पात को मेल्ट और पोर किया गया था।

पहला सॉलिड शेप (स्लैब/बिलेट/इनगॉट/अन्य) निम्नलिखित स्थान(स्थानों) पर उत्पादित किया गया था:

इस्पात निर्माण इकाई: _____स्थान: _____ हीट रिकॉर्ड; _____ बैच विवरण: _____

मैं प्रापण एजेंसी द्वारा आवश्यकता पड़ने पर इस घोषणा को प्रमाणित करने के लिए मिल परीक्षण प्रमाण पत्र, हीट रिकॉर्ड और कोई अन्य दस्तावेजी प्रमाण प्रस्तुत करने का वचन देता हूं।

(यदि लागू न हो, तो "लागू नहीं" लिखें।)

4. घरेलू मूल्य संवर्धन - परिशिष्ट-क डीवीए मदों और परिशिष्ट-ख पूंजीगत वस्तुओं पर लागू:

मैं एतद्द्वारा घोषणा करता/करती हूँ कि उत्पाद(उत्पादों) का घरेलू मूल्यवर्धन (डीवीए)% _____ है। डीवीए की गणना डीपीआईआईटी दिशानिर्देशों और डीएमआईएंडएसपी नीति, 2025 में निर्दिष्ट फार्मुला के अनुसार की गई है।

4क. परिशिष्ट- ख पूंजीगत वस्तुओं (अनिवार्य) के लिए: वैधानिक लेखापरीक्षक/लागत लेखा परीक्षक/चार्टर्ड लेखाकार द्वारा जारी प्रमाण पत्र संलग्न है, जो नीति के अनुसार पूंजीगत वस्तु पैकेज के डीवीए की पुष्टि करता है।

(यदि यह केवल परिशिष्ट-क का आइटम है, तो इस खंड को रद्द कर दें।)

5. मैं पुष्टि करता/करती हूँ कि: दी गई सभी जानकारी सत्य और सही है। सभी इनपुट स्टील की लागत, आयातित सामग्री और घरेलू सामग्री की गणना सत्यापित की जा चुकी है। सभी उत्पादन, खरीद और मूल्य निर्धारण संबंधी रिकॉर्ड जांच के लिए उपलब्ध हैं।

यदि कोई भी जानकारी गलत या भ्रामक पाई जाती है: प्रापण एजेंसी अपने मानदंडों के अनुसार मुझे/मेरी फर्म को सरकारी निविदाओं से अयोग्य घोषित कर सकती है। मैं नीति और निविदा शर्तों के अनुसार, ईएमडी की जब्ती सहित सभी मूल्यांकन लागतों और जुर्माने का भुगतान करने के लिए सहमत हूं।

6. मैं संबंधित रिकॉर्ड को बनाए रखने और उन्हें किसी भी वैधानिक प्राधिकारी को उपलब्ध कराने का वचन देता हूं।

7. घोषणा: मैं एतद्द्वारा घोषणा करता/करती हूँ कि ऊपर दिए गए कथन मेरी जानकारी और विश्वास के अनुसार सत्य है। मैं समझता/समझती हूँ कि किसी भी प्रकार की गलत जानकारी देने पर डीएमआईएंडएसपी नीति, लागू कानूनों और निविदा शर्तों के तहत दंड का प्रावधान होगा।

(स्थान एवं दिनांक)

मैसर्स_____

के लिए और उनकी ओर से

(अधिकृत हस्ताक्षरकर्ता)

[फा. सं. 8(2)/2023-आईडी-I]

अभिजीत नरेंद्र, संयुक्त सचिव

MINISTRY OF STEEL

NOTIFICATION

New Delhi, the 17th December, 2025

G.S.R. 904(E).— In supersession of earlier Domestically Manufactured Iron & Steel Products Policy, the revised Domestically Manufactured Iron & Steel Products Policy-2025 for providing preference to Domestically Manufactured Iron & Steel Products in Government procurement is hereby published for general information.

POLICY FOR PROVIDING PREFERENCE TO DOMESTICALLY MANUFACTURED IRON & STEEL PRODUCTS IN GOVERNMENT PROCUREMENT- REVISED, 2025

1. **Background**

1.1. This policy provides preference for Domestically Manufactured Iron and Steel Products (DMI&SP) in Government procurement.

1.2. The policy applies to procurement of iron & steel products notified in Appendix A, procurement of capital goods listed in Appendix B and technology from indigenous technology suppliers in Appendix C.

2. **Definitions**

2.1. **Bidder** may be a domestic/foreign manufacturer of iron & steel or their selling agents/ authorized distributors/authorized dealers/ authorized supply house or any other company engaged in the bidding of projects funded by Government agencies.

2.2. **Domestically Manufactured Iron & Steel Products** are those iron and steel products that are manufactured by entities that are registered and established in India, including in Special Economic Zones (SEZs).

2.3. **Domestic Manufacturer** is a manufacturer conforming to Section 2(72) of the Central Goods and Services Tax (CGST) Act, 2017.

2.4. **Domestic value addition** means the amount of value added in India which shall be the total value of the item to be procured (excluding net domestic indirect taxes) minus the value of imported content in the item (including all custom duties) as a proportion of the total value of the item to be procured, in percent. The 'domestic value addition' definition shall be in line with the DPIIT guidelines and shall be suitably amended in case of any changes by DPIIT in the future. For the purpose of this policy document, domestic value addition and local content have been used interchangeably.

% Domestic value addition =

{Total value of the item to be procured (excluding net domestic indirect taxes) – The value of

imported content in the item (including all customs duties)}

---------- X 100%

{Total value of the item to be procured}

2.5. **Finished Steel** means flat and long products, which can be subsequently processed into manufactured items.

2.6. **Government** for the purpose of the Policy means Government of India.

2.7. **Government agencies** include Government PSUs, Societies, Trusts, and Statutory bodies set up by the Government of India.

2.8. **Indigenous Technology:** A technology shall be deemed to be Indigenous technology if, at least 51 % of the entity's equity is held by Indian residents and the IPR is owned or co-owned by an Indian entity or licensed exclusively to them and the core engineering R&D, and project execution capabilities reside in India.

2.9. **L1** means the lowest tender, or the lowest bid or the lowest quotation received in a tender, bidding process, or other procurement solicitation as adjudged in the evaluation process as per the tender or other procurement solicitation.

2.10. **MoS** means Ministry of Steel, Government of India.

2.11. **Margin of purchase preference** means the maximum extent to which the price quoted by a domestic supplier may be above L1 for the purpose of purchase preference. In the case of DMI&SP policy, the margin of purchase preference shall be 20% for items in Appendix B.

2.12. **Melt & Pour** is defined as the steel that has been produced in a steel-making furnace and poured into its first solid shape. The location where this process takes place is called the country of melt and pour (COM). The COM is the original location where crude steel is first produced in a liquid state and poured into its first solid shape. The country of melt and pour (COM) should be India. The first solid shape can be a semi-finished product, like a slab, billet, ingot, or a finished steel mill product.

2.13. **Net Selling Price** means the invoiced price excluding net domestic taxes and duties.

2.14. **Semi-Finished Steel** means Ingots, billets, blooms, and slabs, which can be subsequently processed into finished steel.

3. **Exclusions**

3.1. Waivers may be granted by the Ministry of Steel to all such Government procurements subject to the below conditions:

3.1.1. Where specific grades of steel are not manufactured in the country, or

3.1.2. Where the quantities as per the demand of the project cannot be met through domestic sources.

3.2. Exemption requests shall be submitted to the Standing Committee along with sufficient proof of unavailability of iron & steel products domestically.

4. **Standing Committee**

4.1. A Standing Committee chaired by the Secretary (Steel), shall oversee the implementation of the policy.

4.2. The Committee shall comprise of experts drawn from Industry/Industry Association/Government Institution or Body/Ministry of Steel. The said Committee in MoS shall have the mandate for the following:

4.2.1. Monitor the implementation of the policy.

4.2.2. Review and notify the list of Iron & Steel products, the domestic content requirement criteria and policy directives as mentioned in Appendix A, Appendix B and Appendix C.

4.2.3. Issue necessary clarifications for implementation of the policy including grant of exclusions to procuring agencies.

4.2.4. Constitute a grievance redressal committee for preliminary examination of complaints related to implementation of this policy.

4.2.5. Issue directions for suitable action to Ministries/Departments concerned in case of non-compliance with this policy by the procuring agency and advise.

4.3. Wherever a procuring entity concludes that an unreasonably high price has been quoted by the sole bidder/manufacturer, the matter may be referred to the Committee. In such cases, the procuring entity would be required to substantiate its case with complete and thorough documentation.

4.4. Specifying foreign certifications/unreasonable technical specifications in bid document is a restrictive and discriminatory practice against local suppliers. If foreign certification is required to be stipulated because of non-availability of Indian Standards and/or for any other reason, the same shall be done only after written approval of the Committee.

5. **Applicability**

5.1. The policy applies to every Ministry or Department of Government and all agencies/entities under their administrative control and to projects funded by these agencies for the purchase of iron & steel products for government projects. All Central Sector Schemes (CS)/Centrally Sponsored Schemes (CSS) for which procurement is made by States and Local Bodies, come within the purview of this Policy if that project/scheme is fully/partly funded by the Government of India.

5.2. The policy applies to public sector steel manufacturers and agencies/entities under their administrative control for purchase of capital goods (Appendix-B) for manufacturing iron & steel products.

5.3. Appendix-B contains the list of capital goods used in manufacturing iron & steel products which can be imported, and the applicable minimum domestic content requirement for packages.

5.4. A purchase preference of 20% is applicable for capital goods used in steel manufacturing. For example, if the lowest bidder (L1) for an importable capital good is a foreign company with a quoted price of Rs.100 crore for the product package, under the policy, procurement preference of 20% will be applicable to a domestic supplier of the same capital good.

5.5. Appendix-C contains directives and methodology for steelmaking CPSEs to procure from indigenous technology suppliers.

5.6. The policy shall apply to projects and non-projects where the total procurement value of iron and steel products (Appendix-A) in a contract is greater than Rs. 5 lakhs, on itemized basis.

5.7. No Global Tender Enquiry (GTE) shall be invited for tenders related to the procurement of iron and steel products (Appendix-A of the DMI&SP Policy). No Global Tender Enquiry (GTE) shall be invited for tenders related to the procurement of Capital Goods for manufacturing iron & steel products (Appendix-B of the DMI&SP Policy) having estimated value up to Rs. 200 crore except with the approval of competent authority as designated by Department of Expenditure.

5.8. The policy applies to the purchase of iron & steel products by private agencies for fulfilling an EPC contract and/or any other requirement of a Ministry or Department of Government or their PSUs.

6. **Tender procedure for procurement**

6.1. Procuring agencies shall follow standard government procurement procedures while adhering to the DMI&SP policy.

6.2. The tender document, for procurement of both Goods as well as for EPC contracts, should explicitly outline the qualification criteria for adherence to the requirement as mentioned in Appendix A and Appendix B.

6.3. All bidders – including manufacturers, selling agents, authorized distributors, authorized dealers, and authorized supply houses – shall submit Form-1 as part of their bid, irrespective of whether they are the manufacturer or otherwise.

6.4. Bidders who are selling agents/authorized distributors/authorized dealers/authorized supply houses of the domestic manufacturers of iron & steel products, covered by Appendix-A, are eligible to bid with self-certification on behalf of the domestic manufacturers under the policy, subject to the bidder furnishing an authorization certificate issued by the domestic manufacturer at the time of delivery.

6.5. For products covered under Appendix B of the DMI&SP policy, the bidder shall furnish certification issued by the statutory auditor or cost auditor of the company (in the case of companies) or from a practicing cost accountant or practicing chartered accountant (in respect of suppliers other than companies) declaring that the capital goods to be used in iron & steel industry are domestically manufactured in terms of the domestic value addition prescribed.

6.6. If Indian suppliers of an item are not allowed to participate and/ or compete in procurement by any foreign government, due to restrictive tender conditions which have direct or indirect effect of barring Indian companies such as registration in the procuring country, execution of projects of specific value in the procuring country etc., it shall provide such details to the procuring entities for appropriate reciprocal action.

6.7. Entities of countries that have been identified by the Ministry of Steel as not allowing Indian companies to participate in their Government procurement for any item related to the Ministry of Steel shall not be allowed to participate in Government procurement in India for all items related to Ministry of Steel, except for the list of items published by Ministry of Steel permitting their participation.

6.8. The stipulation above shall be part of all tenders including those on GeM portal invited by the Central Government procuring entities.

6.9. In case restrictive or discriminatory conditions against domestic suppliers are included in bid documents, an inquiry shall be conducted by the Administrative Department undertaking the procurement (including procurement by any entity under its administrative control) to fix responsibility for the same. Thereafter, appropriate action, administrative or otherwise, shall be taken against erring officials of procurement entities under relevant provisions. Intimation on all such action shall be sent to the Standing Committee under the DMI&SP policy.

6.10. A supplier debarred by any procuring entity for violation of this Order shall not be eligible for preference under this Order for procurement by any other procuring entity for the duration of the debarment. The debarment for such other procuring entities shall take effect prospectively from the date on which it comes to the notice of other procurement entities.

6.11. In case, the matter is referred to the Ministry of Steel, the grievance redressal committee set up under the MoS shall dispose of the complaint within 4 weeks of its reference and receipt of all documents from the bidder after taking into consideration, the view of the Government Agency. The bidder shall be required to furnish the necessary documentation in support of domestic value addition claimed in iron & steel products to the grievance redressal committee under MoS within 2 weeks of the reference of the matter.

6.12. Procuring agency shall define the penalties, in case of a wrong declaration by the bidder of the prescribed domestic value addition, in the tender document. The penalties may include forfeiting of the EMD, other financial penalties, and blacklisting of such manufacturer/service provider etc., in terms of extant rules.

7. Implementation monitoring by the Ministry of Steel

7.1. The policy provisions shall be applicable for 5 years from the date of publication and may further be extended at the discretion of the Ministry of Steel.

7.2. MoS shall be the nodal ministry to monitor the implementation of the policy.

7.3. Agencies covered under DMI&SP policy shall send declaration on a quarterly basis indicating the extent of compliance to the policy and reasons for non-compliance thereof, during the preceding financial year.

Appendix-A

List of iron and steel products which can only be procured from domestic sources

Sl. No	Iron & Steel Products	HS Code	Condition
1	Flat-rolled products of iron or non-alloy steel, of a width of 600 mm or more, hot rolled, not clad, plated or coated	7208	Melt & Pour
2	Flat-rolled products of iron or non-alloy steel, of a width of 600 mm or more, cold rolled (cold-reduced), not clad, plated or coated	7209	Melt & Pour
3	Flat-rolled products of iron or non-alloy steel, of a width of 600 mm or more, clad, plated or coated	7210	Melt & Pour
4	Flat-rolled products of iron or non-alloy steel, of a width of less than 600 mm, not clad, plated or coated	7211	Melt & Pour
5	Flat-rolled products of iron or non-alloy steel, of a width of less than 600 mm, clad, plated or coated	7212	Melt & Pour
6	Bars and rods, hot-rolled, in irregularly wound coils, of iron or non-alloy steel	7213	Melt & Pour
7	Other bars and rods of iron or non-alloy steel, not further worked than forged, hot rolled, hot-drawn or hot-extruded, but including those twisted after rolling	7214	Melt & Pour
8	Other bars and rods of iron or non-alloy steel	7215	Melt & Pour
9	Angles, shapes and sections of iron or non-alloy steel	7216	Melt & Pour
10	Wire of iron or non-alloy steel	7217	Melt & Pour
11	Flat-rolled products of stainless steel, of a width of 600 mm or more	7219	Melt & Pour
12	Flat-rolled products of stainless steel, of a width of less than 600 mm	7220	Melt & Pour
13	Other bars and rods of stainless steel; angles, shapes and sections of stainless steel	7222	Melt & Pour
14	Wire of other alloy steel	7229	Melt & Pour

15	Rails, railway or tramway track construction material of iron or steel	7302	50% Domestic Value Addition
16	Tubes, pipes and hollow profiles, of cast iron	7303	50% Domestic Value Addition
17	Tubes, pipes and hollow profiles, seamless, of iron (other than cast iron) or steel	7304	50% Domestic Value Addition
18	Other tubes and pipes (for example, welded, riveted or similarly closed), having circular cross-sections, the external diameter of which exceeds 406.4 mm, of iron or steel	7305	50% Domestic Value Addition
19	Other tubes, pipes and hollow profiles (for example, open seam or welded, riveted or similarly closed), of iron or steel	7306	50% Domestic Value Addition
20	Tube or pipe fittings (for example, connectors/couplings, elbow sleeves), of iron or steel	7307	50% Domestic Value Addition
21	Bars and rods, hot-rolled, in irregularly wound coils, of stainless steel	7221	Melt & Pour
22	Wire of stainless steel	7223	Melt & Pour
23	Flat-rolled products of other alloy steel, of a width of 600 mm or more, including electrical steel	7225	Melt & Pour
24	Flat-rolled products of other alloy steel, of a width of less than 600 mm, including electrical steel	7226	Melt & Pour
25	Bars and rods, hot-rolled, in irregularly wound coils, of other alloy steel	7227	Melt & Pour
26	Other bars and rods of other alloy steel; angles, shapes and sections, of other alloy steel; hollow drill bars and rods, of alloy or non-alloy steel	7228	Melt & Pour
27	Sheet piling of iron or steel, whether or not drilled, punched or made from assembled elements; welded angles, shapes and sections, of iron or steel	7301	50% Domestic Value Addition
28	Structures (excluding prefabricated buildings of heading 9406) and parts of structures	7308	50% Domestic Value Addition
29	Reservoirs, tanks, vats and similar containers for any material (other than compressed or liquefied gas), of iron or steel, of a capacity exceeding 300 whether or not lined or heat insulated, but not fitted with mechanical or Thermal equipment	7309	50% Domestic Value Addition
30	Tanks, casks, drums, cans, boxes and similar containers, for any material(other than compressed or liquefied gas), of iron or steel, of a capacity not exceeding 300L,whether or not lined or heat-insulated, but not fitted with mechanical or thermal equipment	7310	50% Domestic Value Addition
31	Containers for compressed or liquefied gas, of iron or steel	7311	50% Domestic Value Addition
32	Stranded wire, ropes, cables, plaited bands, slings and the like, of iron or steel, not electrically insulated	7312	50% Domestic Value Addition
33	Barbed wire of iron or steel; twisted hoop or single flat wire, barbed or not, and loosely twisted double wire, of a kind used for fencing, of iron or steel	7313	50% Domestic Value Addition
34	Grill, netting and fencing, of iron or steel wire; expanded metal of iron or steel	7314	50% Domestic Value Addition
35	Chain and parts thereof, of iron or steel	7315	50% Domestic Value Addition

36	Anchors, grapnels and parts thereof, of iron or steel	7316	50% Domestic Value Addition
37	Articles of iron and steel	7317	50% Domestic Value Addition
38	Articles of iron and steel	7318	50% Domestic Value Addition
39	Articles of iron and steel	7319	50% Domestic Value Addition
40	Springs and leaves for springs, of iron or steel	7320	50% Domestic Value Addition
41	Stoves,ranges,grates,cookers(including those with subsidiary boilers for central heating), barbecues, braziers, gas-rings, plate warmers and similar non-electric domestic appliances, and parts thereof, of iron or steel	7321	50% Domestic Value Addition
42	Radiators for central heating, not electrically heated, and parts thereof, of iron or steel; air heaters and hot air distributors, not electrically heated, incorporating a motor-driven fan or blower, and parts thereof, of iron or steel	7322	50% Domestic Value Addition
43	Tables and similar house hold articles and parts thereof, of iron or steel	7323	50% Domestic Value Addition
44	Sanitary ware and parts thereof, of iron or steel	7324	50% Domestic Value Addition
45	Other cast articles of iron or steel	7325	50% Domestic Value Addition
46	Electrical steel and other articles of iron or steel	7326	50% Domestic Value Addition
47	Railway or tramway passenger coaches, not self-propelled	8605	50% Domestic Value Addition
48	Railway or tramway goods vans and wagons, not self-propelled	8606	50% Domestic Value Addition
49	Parts of railway or tramway locomotives or rolling-stock; such as bogies, bissel-bogies, axles and forged wheels, and parts thereof	8607	50% Domestic Value Addition

Appendix- B

List of Capital Goods (non-exhaustive) which can be imported for Manufacturing Iron & Steel products, and minimum domestic content applicable for the package

S. No.	Plant /Unit package	Minimum domestic content of Capital Goods (%)	Importable Items
	Mining		
1	**Equipment for Mining development** • Crushing & Screening Plant • Mineral beneficiation (iron ore and coal) plant; (Boundary Limit: from Receiving of ROM at the crusher hopper, comminution, segregation, ore/coal processing up to final product preparation) • Slime Beneficiation • Automatic Loading facilities • Conveyer system	75%	• Wet High Intensity Magnetic Separator / High Gradient Magnetic Separator • Heavy Media Cyclone • Gyratory Crusher • Spiral Concentrator • Online Ash Analyzer • Ball/Rod/AG Mill (Greater than 3.5 m dia)
2	**Mining transportation** • Slurry Pipelines • Long distance conveying system	30%	• PD Pump • Valves • Specialized/rope/pipe conveyor
3	**Other Mining Machinery & Heavy Earth Moving equipment for mines** (Boundary Limit: Equipment for drilling, raising, lading, haulage, and mine preparation)	Not Applicable	• Dumper (above 220 tons pay load capacity), Hydraulic Excavators (above 9 Cubic meter bucket capacity) • Blast Hole Drills 10"(Electric/Diesel) • Diesel driven Track Dozer >850 HP Capacity • Diesel Driven Wheel Dozer >500 HP capacity • Diesel driven Front End Wheel Loader >8 Cubic Meter bucket Capacity
4	**Pellet Plant Equipment** (Boundary Limit – Receiving Ground Hopper for flux & Binder, Belt Conveyor feeding IOF to product pellet belt conveyor)	85%	• Pellet car, High Intensive Mixer, Balling Discs, Vertical roller mill, Drive/discharge end Sprocket assembly, curved rail, Slide rails, Single deck roller screen and Double deck roller screen, Induration Machine Drive assembly, Level-2 automation
	Iron/steel making		
5	**Raw Material Handling System** (Boundary Limit – from Wagon Tippler to respective user units)	95%	• Barrel Couplings, Heavy Duty Bearings, Crane Rail Lubrication System, Slew Ring Bearings, Tongs (Special), Vibration Isolation System (Spring Damper), Hydraulic motor & hydraulic pump (installed in wagon tippler, side arm charger, stacker cum reclaimer, slew stacker), electronic cards, unbalanced motor, cam limit switch of wagon tippler.
6	**Coke Oven Battery** (Both top charged & stamp charged) (From Coal bunker to coke discharge bucket)	90%	• Springs of the anchorage systems, COG booster, stamping train, bonding press

S. No.	Plant /Unit package	Minimum domestic content of Capital Goods (%)	Importable Items
7	**Coke Dry Quenching Plant** (From Hot coke receiving bucket to discharge chute of cooling chamber)	90%	• Mill fan & Motor, Special Refractory for Twin Flue of Cooling Chamber.
8	**By-Product Plant** (From Primary Gas cooler to clean coke oven gas up to the network)	90%	• Exhauster & Motor, burner of the clause kiln, Catalyst, Tail gas analyzer, Palletization unit.
9	**Sinter Plant Equipment** (Boundary Limit – Receiving Bin for Raw Material to Vibro-Feeder below Product Sinter Bin)	75%	• Highly Intensive Mixer & Granulator Unit, Pallet cars, Drive Sprocket, Main Drive with Gear Box of sinter machine, slide rail & curved rail, Hot Sinter breaker and Grizzly, Annular Dip Rail Cooler, LCI Drive system for Sinter Plant Exhauster application. • Ignition Furnace Spare parts (Refractory/Control System/Burner Assembly) • Exhauster (Waste Gas Fan) and System Spare Parts
10	**Blast Furnace Equipment** Boundary Limit: **Input** • **Raw material-** Top of bunkers of respective material • **Cold Blast**- Inlet of the snort valve • **Industrial water**- BF pump house **Output** • **Hot Metal**- Filled in the torpedo ladle • **Granulated Slag** - to the granulated slag yard	70%	• Bell less top gear box, upper seal device covering upper material gate and upper seal valve, lower seal device covering lower material gate and lower seal valve, Bleeder valve, Tilting Rocker, Wear liners, Goggle Valve, Equalizing & Relief Valve, Chute Rotation Motors, Distribution chute, Feeder spout, Chutes & Funnels etc. • Hearth Refractory (carbon blocks) • Top Recovery Turbine system (TRT) • Cu-staves • SGI Staves • Cast house equipment (Mud gun, Drilling machine and main trough Manipulator) • Probes, Profilometer & Stock level indicator (radar type) • Gas cleaning plant (AGS system) • Stove system – ceramic burner & technological valve • Waste Heat Recovery system • Turbo blowers • Ball Mill • PCI Injection System • Level-II automation • Copper plate coolers • Tuyere cooler • Stove technological valves • Dewatering Wheel of SGP • Torpedo Ladle Car chain assembly • Dome filled dump Valves • Tuyere stock assembly
11	**Gas based Direct Reduction Plant Equipment** (Boundary Limit: Receipt of raw	50%	• Reactor charging system • Reactor • Reactor discharging system

S. No.	Plant /Unit package	Minimum domestic content of Capital Goods (%)	Importable Items
	material at the top of the DRI reactor & discharge of hot DRI to EAF)		• Pneumatic transfer to EAF • Discharge route to briquetting system • Briquetting feeding system • Briquetting system • Reduction gas circuit • CO2 removal unit • Process gas heater • Reformer system • Heat Recovery System • Process Gas Compressors • Blowers • Seal Gas System • Flue Gas Fan/ Hot Fan • Process valves • Critical bellows • Critical refractories • Natural Gas pre-treatment system • Level-II automation
12	**Oxygen Plant 700 tpd & Above** (Boundary limit: Water, Power at oxygen plant boundary)	30%	• Main Air Compressor • Booster Air Compressor • Expansion Turbine • Reboiler • Cryogenic Pumps • Heat exchange elements of • ASU • Pressure Column • Main Condenser, Low Pressure Column • Crude Argon Column, Pure Argon Column and Condenser with Condenser Block • Main Heat Exchangers, Pure Argon Evaporator Sub-cooler • LOX-IC-Process Pump • LIN-IC-Process Pumps • LAR-Transfer -Process Pumps • Dense Fluid Expander • Booster Heat Exchangers • Molecular Sieves Switching Valves for PPU • Critical Safety valves • Specialized valves • Control Valves • Cold box • Control Valves GOX-Product • Flow Measuring devices of Cold box • Expander - Brake Generator, Frequency Converters
13	**Steel Processing**		
13.1	**Hot Metal De- De-Sulphurization Station (HMDS) Unit with Co-Injection Process** (Hot metal from the blast furnace (BF) is	75%	• Injection Lance and automatic sampling Unit with auxiliaries • De-slagging Machines (slag raking machine) with auxiliaries

S. No.	Plant /Unit package	Minimum domestic content of Capital Goods (%)	Importable Items
	received in a torpedo ladle or open-top ladle, undergoes desulfurization treatment to reduce "Sulphur (S)" content, and is then transferred to the BOF converter)		• Temp. measuring and sampling device with auxiliaries
13.2	**Hot Metal De- De-Sulphurization Station (HMDS) Unit with Mechanical Stirrer (KR) Process** (Hot metal from the blast furnace (BF) is received in a torpedo ladle or open-top ladle, undergoes desulfurization treatment to reduce "Sulphur (S)" content, and is then transferred to the BOF converter)	70%	• Impeller, Impeller lifting & stirring equipment, Guide Frame with auxiliaries • De-slagging Machines (slag raking machine) with auxiliary facilities • Temp. measuring and sampling device with auxiliaries
13.3	**Basic Oxygen Furnace / LD Unit** [Treated hot metal is poured into the BOF converter, where it undergoes processing to convert it into steel, which is then supplied to the ladle furnace (LF)]	65%	• Lance body with clamping, Lance carriage, Lance guide, Lance hoist & trolley, Lance copper tips with auxiliaries. • Pneumatic motors for emergency tilting drive. • Bottom stirring system, valve station & rotary joint along with auxiliaries • Valve stations for oxygen/ argon/ nitrogen with auxiliaries • Sub-lance system with auxiliaries • Container lab with all auxiliaries. • Automatic gas coupling (auto coupler) with auxiliaries. • Converter wrecking machine. • Converter tap hole changing machine • Refractory monitoring (laser) machine. • Converter Shell parts, Suspension System, Rotary joint, Slag Stopper & its control valves • Converter Tilting Drive system & Suspension system, gearboxes & Motors, Pneumatic Motors & control valves, Position Encoders, Clutch system, Lubrication system components. • Ladle Transfer Car Rail Track System (A series type) & gearboxes, stirring couplings. • LOMAS Gas Analyzer, Multi-lab temperature & sample system. • Stirring couplings for ladle transfer Cars. • PLCs and RIOs. • Automation system and software. • Hot Zone Hydraulic Pumps and Valves. • Hot Zone Geared Motors with wheel block. • Converter Bearings. • Air & Electric operated Slurry Compaction Pump. • Primary ID fan, bearings, motors, drives & Lubrication system.

S. No.	Plant /Unit package	Minimum domestic content of Capital Goods (%)	Importable Items
			• WDS-Cone
13.4	**Electric Arc Furnace Unit** (Primary materials such as scrap, DRI, pig iron, and hot metal in combination is converted into liquid steel using electrical energy to melt and refine the raw materials)	70%	• Electrode regulation system with auxiliaries • High current system including furnace transformer • Oxygen & Carbon Injection System with auxiliaries • Manual Temp Measuring & sampling Lance with auxiliaries
13.5	**Ladle Furnace Unit** [Liquid steel is processed/ treated to achieve the desired grade and held as buffer stock before being supplied to the continuous casting machine (CCM)]	70%	• Electrode regulation system with auxiliaries • Manual Temp Measuring & sampling Lance with auxiliaries.
13.6	**RH/ RH-OB Unit** [The liquid steel is degassed to achieve the required dissolved gas levels and then supplied to the continuous casting machine (CCM)]	65%	• Gas Stirring System/ Lift Gas Stirring System Valve Stand with auxiliaries • Oxygen Lance System with auxiliaries • Hydris Measurement System with auxiliaries
13.7	**Argon-Oxygen Decarburization (AOD) Unit**	70%	• Drive Unit for tilting of AOD converter, Air Motor, Brakes etc. • Lance copper tips • Hoses for water and oxygen • Pneumatic motors for emergency tilting drive. • Bearing for AOD Converter, Emergency Gears for air motor • Valve stations for oxygen/ argon/nitrogen with auxiliaries. • Refractory monitoring (laser) machine • Automation system.
13.8	**VD/VOD**	70%	• Gas analysis (Off-Gas Mass Spectrometers) only sensor. Holder is make in India • Automation and Process control software platform • Vacuum Pump System with Auxiliary • Oxygen tips • Valve stations for oxygen/ argon/nitrogen with auxiliaries.
13.9	**Submerged Arc Furnace (SAF) Unit**	65%	• Clay gun and drill M/c • Electrode equipment • Slipping device assembly • Electrode guiding assembly • Upper & Lower mantle assembly • Pressure ring assembly • Contact shoe assembly • Heat shield assembly • Electrode seal assembly • Pressure ring bellows • Seal refractory • Furnace automation and Controller Software

S. No.	Plant /Unit package	Minimum domestic content of Capital Goods (%)	Importable Items
13.10	**Continuous Casting Unit** (Slab Caster/ Billet/ Bloom Round/ Combi/ Beam Blank) [The liquid steel is cast into slabs, billets, or blooms in the continuous casting machine (CCM)]	65%	• Ladle slag detection system completes with auxiliaries • Copper tube and Plate, Mould oscillation Cylinder. • Rotary Union. • Continuous temperature measuring system with auxiliaries. • Torch cutting machine/ Emergency torch cutter along with auxiliaries • De-burring machine along with electrical drive system with auxiliaries • Marking machine. • Roll gap checker completes with auxiliaries • Electromagnetic Stirrer (EMS)/ Electromagnetic Braking (EMBr) system along with auxiliaries
14	**Flat Product Mills**		
14.1	**Hot Strip Mills/ Plate Mill** (Boundary Limit: Slab yard to Dispatch Bay, including auxiliaries)	50%	• De-scalars, mill stand, bed plates, backup rolls, Work Rolls, mill spindles, chocks, AGC cylinders, bending blocks & cylinders, shears, down coilers, anti-friction roll neck bearings, oil film bearings, mill reducers, load cells, thickness gauge, profile gauge, width gauge, levelers, roll grinding machines, Coil Marking Machine, Plate Marking Machine, mill stand motors & mill stand MV drive system, automation system, etc.
14.2	**CRM (PLTCM)** (Boundary Limit: Pickling line entry to mill exit)	50%	• Welding machine, tension leveler, mill stands, backup rolls, antifriction bearings, oil film bearings, roll chocks, roll force cylinders, roll bending and roll shifting cylinders, mill spindles, load cells, position transducers, Electrostatic Oiler, Side Trimmer, Steering System, Surface Inspection System, thickness gauges, laser speed gauge, tensiometer, Flatness Gauge, tension reel, mill reducers, mill stand motors & mill stand MV drive system, automation system etc.
14.3	**CRM (HDGL)** (Boundary Limit: entry to exit of HDGL including temper mill & tension leveler)	60%	• Welding machine, radiant tube furnaces, jet cooling system, coating pot with induction heating, pot rolls, air knife wiping system, tension leveler, width gauge, thickness gauge, coating thickness gauge, load cells, roll force cylinders, mill stand motors & mill stand drive system, automation system, etc.
14.4	**CRM (SPM)** (Boundary Limit: entry to exit of SPM)	50%	• Mill stands, backup rolls, antifriction bearings, oil film bearings, roll chocks, roll force cylinders, mill spindles, Electrostatic Oiler, Coil Marking System, load cells, thickness gauge, mill stand motors & mill

S. No.	Plant /Unit package	Minimum domestic content of Capital Goods (%)	Importable Items
			stand MV drive system, automation system, etc.
14.5	**CRM (Bell Annealing Furnace)** (Boundary Limit: From furnace bases to post cooling equipment)	55%	• Furnace, automation system, etc.
14.6	**CRM (Color Coating Line)** (Boundary Limit: Entry to exit of CCL)	80%	• Coater, Coating thickness gauge, digital printer, tension leveler, automation, etc.
14.7	**TSCDR (Thin Slab casting Direct Rolling)** (Boundary Limit: From turret to coil finishing & packaging area)	50%	• Ladle slag detection system complete with auxiliaries • Copper tube and Plate, Mould oscillation Cylinder. • Rotary Union. • Continuous temperature measuring system with auxiliaries. • Pendulum shear cutting machine. • Segments assembly • Roll gap checker complete with auxiliaries • Electromagnetic Stirrer (EMS)/Electromagnetic Braking (EMBr) system along with auxiliaries, • Tunnel furnace burners • Roughing & Finishing Mill stands, work roll & backup rolls, antifriction bearings, oil film bearings, roll chocks, roll force cylinders, mill spindles, mill stand MV drive and motors, automation system, laminar/power cooling components, hydraulic coilers. Profile gauge, thickness gauge, width gauge. • Nozzles • Grease system and auxiliaries • Hydraulic system and auxiliaries • Gearbox • ROT roll assembly • Roll assembly (Sleeve, Shaft, Roll) • Ladle turret and auxiliaries (Slew bearing, Disc coupling, Gearbox, Hydraulic clutch and Hydraulic Cylinder) • Mould breakout prediction system • Auto mould level control nucleonic gauge • Mould powder feeding system • CNC mould machining system with auxiliaries • Tundish and Turret weighing system • Tunnel furnace refractory rolls. • Tunnel furnace shuttle drive system and gas conveying system. • Backup roll hydrostatic lubrication system • Roll bite lubrication system • In-furnace camera with auxiliaries • Crop shear • Descaler system and component. • Coil marking machine

S. No.	Plant /Unit package	Minimum domestic content of Capital Goods (%)	Importable Items
			• Online Coil weighing system • Cut to Length Stacker System • Roll Shop (CNC Combi grinders, CNC Roll Grinders, CNC Knife Grinders, CNC Turing Machine, Lathe Machines) • Coil Strapping machines • Down coiler system • Mill Measuring system and Sensors (Automatic gauge control (AGC) sensors (roll force, gap, pressure) • Looper Control System along its sensors • Condition based monitoring System and its sensors • Coil shuttle car and pallet conveying system. • Crane coil tong. • RO and UF membranes • Self-cleaning filters
14.8	**Normalizing Facilities for Plate Mill** (Boundary Limit: entry to Normalizing furnace to dispatch of finished plates)	50%	• Furnace burners, Furnace hearth rollers, leveler, load cell, automation
14.9	**SSM (Silicon Steel Mill)** (Boundary Limit: Pickling line entry to dispatch of SSM)	50%	• Mill stand, work roll & backup roll, antifriction bearings, oil film bearings, roll chocks, roll force cylinders, mill spindles, mill stand MV drive system & motors, automation system, annealing furnace, decarburizing line, electrical steel testing facilities (e.g. Fischer scope thickness measuring device, Frankline Insulation Resistivity Tester, Magnetic Console, Stacking Factor tester).
14.10	**CRM (Cluster Mill stand)** Sendzimir Mill (Boundary Limit: entry to exit of Sendzimir Mill)	50%	• Sendzimir Mill stand, work roll & backup rolls, antifriction bearings, oil film bearings, roll chocks, roll force cylinders, mill spindles, mill stand MV drive system & motors, automation system
14.11	**HRM (Steckel Mill)** (Boundary Limit: From coiler furnace entry to Steckel Mill and exit to coiler furnace)	40%	• Steckel Mill stand, heated coilers, work roll & backup rolls, antifriction bearings, oil film bearings, roll chocks, roll force cylinders, mill spindles, mill stand MV drive system & motors, automation system
15	**Long Product Mills**		
15.1	**Bar Mill/ WRM/MM/ LSM** (Boundary Limit: From furnace entry to dispatch)	75%	• Fast finishing blocks, Roll turning lathes, Profile Gauge, automation systems, etc.
15.2	**Rail Mill/ Heavy Structural Mill** (Boundary Limit: From furnace entry to exit of the rail welding plant excluding material handling)	45%	• Mill stands, mill motor & drive system, heat treatment facility, straightening machine, NDT facilities, welding machine, Profile Gauge, Hot Saw, Cold Saw, Hot Marking Machine, Roll Turning Lathe, Saw Grinding Machine, automation system, etc.
15.3	**ERWPP (Electrical Resistance Welded Pipe Plant)**	50%	• Pre-forming Unit, Break-Down Stand, Edge Bender, Universal Cage, Finishing Pass

S. No.	Plant /Unit package	Minimum domestic content of Capital Goods (%)	Importable Items
	(Boundary Limit: From strip feeding to finishing facilities and dispatch of ERWPP)		(multiple stands), Pipe Guide, high frequency welding machine, high power electric inductors, hydro testing, ultrasonic machine
15.4	**SWPP (Spiral Welded Pipe Plant)** (Boundary Limit: From pipe forming to finishing facilities and dispatch of SWPP)	50%	• Submerged arc welding, outside welding (skelp joint), X-ray station, hydro testing, beveling machine, ultrasonic machine, end radiograph station
16	**Wheel Plant**		
16.1	**Wheel Plant** (receipt of round/ingot to finished wheel)	30%	• Circular saw, forging press, wheel rolling mill, wheel dishing press, wheel stamping machine, rim spaying machine, mobile chargers, (Handling Robots), machining facilities, testing facilities, automation system etc.
16.2	**Heat Treatment Facilities for Railway Wheels** (Boundary Limit: exit of Hot Dimension Measurement to Black Wheel Storage)	40%	• Furnace burners, hearth rollers, automatic wheel handling and quenching machine
16.3	**Non-Destructive Testing (NDT) Facilities for Wheels and Rails** (Boundary Limit: entry & exit of NDT facilities)	30%	• Hardness testing machine, Ultrasonic testing machine, Magnetic particle inspection machine, Eddy current testing machine
16.4	**Facilities for Manufacturing of Forged Rolls for Rolling Mill Stands** (Boundary Limit: entry of forged blank roll to dispatch of finished rolls)	30%	• Forging Press, Manipulators, roll hardening machine, Cryogenic treatment facilities, tempering furnaces, roll grinders, roll turning lathes, hardness testing machine, ultrasonic testing machine
16.5	**RGBS/ Roll Shop**	50%	• CNC work roll grinder/CNC combi grinder, CNC Roll turning lathe, • Facilities for Electric Discharge Texturing (EDT) and Electro Discharge Machining (EDM) for rolls
17	**Refractory Brick** (Receipt of raw material to finished brick)	50%	• Hydraulic Press
18	**Electrical** (Power Quality System)	30%	• MVSTATCOM • (Static Synchronous Compensator) System
	Other auxiliary and utility equipment		
19	**Calcination Plant** (Calcined Lime & Dolo)		• Firing system, Shaft level indicator, Automation system • VFD & Soft Starter Cards. Driving Air Blower, Dedusting Draft Fans, Cooling Air Fans, Lime Cooling Fan, Waste Gas Fans, Gas Booster Fan assembly • Hyd. Cylinders, Hyd. Motors, Hyd. Station.
20	**Electric Motor Driven Cold Blast Blower** (Axial/Axial with last stage radial)		• Axial/ Axial with last stage radial Blower • Motor with Drive System • Blow-off Valve • Blower non-return valve • Control & Instrumentation items

S. No.	Plant /Unit package	Minimum domestic content of Capital Goods (%)	Importable Items
21	**Steam Turbine Driven Cold Blast Blower** (Axial/Axial with last stage radial)		• Axial/ Axial with last stage radial Blower • Blow-off Valve • Blower non-return valve • Control & Instrumentation items
22	**Diesel Engine Driven Cold Blast Blower** (Axial/Axial with last stage radial/radial)		• Axial/ Axial with last stage radial Blower/radial Blower and Systems • Diesel Engines • Blow-off Valves • Blower non-return valves • Control & Instrumentation items
23	**Gas Fired/ Heat Recovery Boilers**		• Special Grade Plates & Tubes • Flame Scanner • Instrumentation & controls
24	**Steam Turbine** (Extraction/ BPTG)		• Special Grade Blade Material • Governing System • Turbo Supervisory system • Instrumentation & controls
25	**Gas Holder**		• Gasholder seal, sealant. • Level weight ropes with fittings. • V. R. Valve gaskets • Specialized membranes for double/triple membrane system. • Hydraulics
26	**High pressure gas boosters** (Outlet pressure > 2000 mm WC)		• Gas booster proper including control and bypass valves • Piston Rings • Concentric Ring Type Valves (SS)
27	**Pollution Control Systems**		• TR sets • Controllers • Insulators • ESP electrical components • Control & Instrumentation items
28	**Water & Effluent Treatment System**		• Membranes • Evaporators (Compressor & Titanium Sheet) • HP Pumps • Control & Instrumentation items
29	**Compressed Air Station**		• Centrifugal Compressor core assembly including Impellors, Bull Gear, Pinion Shafts, Bearings, Vibration Probes and Local Control Panel.
30	**Hydrogen Plant**		• Electrolyser unit • HP Compressors • Control & Instrumentation items
31	**Packaged Chillers**		• Compressors • Control & Instrumentation items
32	**Other Utility areas like**– Air conditioning & ventilation system, VAM based chiller system, firefighting system, gas boosters (DP less than 2000 mm WC), cooling water system (pumping station, filters, cooling		• Items / Equipment have sub-components / parts which are imported • Compressors, Chillers, Crane AC units, Expansion Valve, Instruments, High Temperature Application AC.

S. No.	Plant /Unit package	Minimum domestic content of Capital Goods (%)	Importable Items
	towers, heat exchangers, etc.), gas mixing stations, pollution control systems, inter plant piping system		
33	**Electric overhead travelling crane and gantry crane, electric hoist**		• Barrel coupling, heavy duty bearing, crane rail lubrication, slew ring bearings, tongs
34	**Engineering shop**		• CNC lathe, CNC milling machine
35	Power Generation, transmission & Distribution system; Shop Electrics including Power & control system and associated electrical works	As per Minimum local content (MLC) % guideline of Ministry of Power	
Note: All equipment shall be procured/ complied as per the Class-I category of the Ministry of Power guidelines. In case(s) where the equipment is not mentioned in Class-I category, or where classification/specification of the equipment is not explicitly or clearly defined under the Ministry of Power guidelines, the provisions issued by DPIIT for Class-I and Class-II categories shall accordingly be followed.			
36	**Instrumentation items/ equipment ****	As per DPIIT guideline *	• Above / under burden probe system • Profilometer • Burden camera • Tuyere phenomena detection system (TPDS) • Top gas analyzers (CO, CO_2, H_2, O_2, pollutants) • Flow jam switch • Elemental analyzers • Moisture analyzer (Nucleonic) • CV analyzer • Thickness gauge • Hot metal detector • Width gauge • Furnace camera • Multifunction profile gauge • Flatness/shape gauge • Surface inspection system • Laser doppler velocity meter • Optical barrier • Thermal imaging systems for hot rolling • Automatic gauge control (AGC) sensors (roll force, gap, pressure) • Online mechanical property prediction systems (AI + sensors) • Oil film thickness monitoring systems (cold rolling) • X-Ray or Nucleonic Based Coating Thickness Gauges • Mass flow meter • Hydris (hydrogen detection in molten steel) • Mold level measurement • Break-Out Prediction System (BOPS) • Electromagnetic Brake (EMBr) Control & Sensors • Ladle tracking and management system • Slag Detection System (SDS)/ Slag Monitoring Systems

S. No.	Plant /Unit package	Minimum domestic content of Capital Goods (%)	Importable Items
			• BOF Endpoint Detection (Laser-Induced Breakdown Spectroscopy – LIBS) • Sub-Lance Systems (Temp + O_2 + Carbon + Sampling) • Ladle Refractory Wear Monitoring (Laser/Ultrasonic/Infrared) • Continuous Emissions Monitoring Systems (CEMS – imported analyzers for SOx, NOx, PM, CO, CO_2, O_2, H2) • Off-gas analyzer for BOF/ EAF (CO, CO_2, H_2, dust) • Water quality analyzers (pH, Conductivity, Oil-in-water, TOC, Silica, BOD, COD, TSS, TDS, Phenol, Cyanide) • Laser-based gas leak detectors (CH_4, CO, H_2, H2S) • Acoustic / ultrasonic leak detection • Vibration / condition monitoring sensors / Axial shift / Differential expansion monitoring systems • Anti-collision system (Radar/ Laser/ Lidar) • Oven Identification System (OIS) • Pyrometers • LOMAS Analyzers • Master calibrators for pressure, temperature and electrotechnical parameters • Instruments installed in Eirich Mixers in Sinter plant, and Hanzel make lubrication systems. • Governor systems for Turbines and Turbo-blowers • Tail gas analyzers for By-product plant • Force sensors used in Coke bucket Lifter & reversing winch • Encoders, • Hydraulic valve controllers • Instruments installed in BLTs (Tilt switch, sonic sensor, encoders, etc.) • Flame sensors/scanners
37	**Automation items/ equipment ****	As per DPIIT guideline *	
38	**Voice Communication system ****	As per DPIIT guideline *	
39	**Fire Detection and Alarm (FDA) system ****	As per DPIIT guideline *	
40	**CCTV system ****	As per DPIIT guideline *	

S. No.	Plant /Unit package	Minimum domestic content of Capital Goods (%)	Importable Items
Note: * Instrumentation, automation, communication equipment, Fire Detection & Alarm (FDA) system, and CCTV system shall comply with the domestic content requirements for capital goods in line with Class-I and Class-II supplier norms as per DPIIT as well as MEITY guidelines. ** Highly specialized equipment, components, and critical parts such as semiconductor chips for instrumentation, automation, communication systems, fire detection & alarm (FDA) systems, and CCTV systems are currently being sourced from global technology leaders. However, the overall system assembly, integration, and manufacturing activities are being carried out in India, with the remaining components procured through domestic sources.			

Appendix-C

Promotion of Indigenous Technologies in Iron & Steel Sector

1) **Objective:**
To promote self-reliance in the Indian iron and steel sector by incentivizing the adoption, development, and scale-up of indigenous technologies across all stages of steel manufacturing.

2) **Scope:**
This policy applies to Central Public Sector Enterprises involved in steelmaking or putting up a steel manufacturing plant.

3) **Policy Directives:**

3.1 In cases where technology and proof for earlier engineering & supply is available but does not match the present capacity requirement, following conditions will be applicable for indigenous technology providers:

3.1.1 Production capacity reference to be 30% of the capacity of the proposed plant.

3.1.2 Availability of demonstrable tie ups with the vendors.

3.1.3 Experience of detailed engineering of projects for at least 75% of the capacity of the proposed plant.

3.2 In cases where technology is available but no reference for earlier supply is available, following conditions will be applicable for indigenous technology providers:

3.2.1 The indigenous technology supplier has done detailed engineering of projects matching at least 75% of the features of the proposed project.

3.2.2 The indigenous technology supplier has done detailed engineering matching 100% of the critical features of the proposed project.

3.2.3 Availability of demonstrable tie ups with the vendors.

3.2.4 Demonstrable evidence of technology availability (IPR or other sufficient evidence).

3.3 In cases where no Indian technology is available, a foreign technology supplier committing to transfer technology, including training and handholding to an Indian CPSE (including the procuring entity), within three years, shall be considered as deemed Class-I supplier irrespective of percentage of Domestic Value Addition. In this case, purchase preference shall be given to the foreign technology supplier as defined in DPIIT's Public Procurement (Preference to Make in India) Order amended from time to time.

4) **Implementation Oversight:**
The Standing Committee constituted by Ministry of Steel shall monitor implementation, resolve disputes, and update the eligibility and incentive criteria periodically.

Form-1

Affidavit of Self-Certification for Compliance with Melt & Pour Requirements (Appendix-A) and/or Domestic Value Addition Requirements (Appendix-A & Appendix-B*)

*For Appendix-B capital goods, this affidavit must accompany the statutory auditor's / cost auditor's / CA certificate, as mandated under the policy.

I, _____, Resident of _____, being the authorised signatory of M/s _____,

do hereby solemnly affirm and declare as under:

1. I have read and understood the Domestically Manufactured Iron & Steel Products (DMI&SP) Policy, 2025, issued vide Notification No. _____ dated _____. I agree to abide by all terms and conditions of the said policy and the tender in which this affidavit is submitted.

2. This affidavit pertains to the following iron & steel product(s)/capital good(s):

Name of product(s): _____

HS Code(s): _____

Appendix classification: Appendix-A / Appendix-B (select as applicable)

Procuring agency: _____

3. Melt & Pour - Applicable only for Appendix-A items with Melt & Pour condition

I hereby declare that the above product(s) satisfy the Melt & Pour in India requirement as notified in Appendix-A. Specifically:

The steel was melted and poured in India.

The first solid shape (slab/billet/ingot/other) was produced at the following location(s):

Steelmaking facility: _____Location: _____ Heat numbers; Batch details: _____

I undertake to produce mill test certificates, heat records, and any other documentary proof to substantiate this declaration whenever required by the procuring agency.

(If not applicable, write "Not Applicable".)

4. Domestic Value Addition - Applicable for Appendix-A DVA items and Appendix-B capital goods:

I hereby declare that the Domestic Value Addition (DVA) for the product(s) is: _____ %. The DVA has been computed as per DPIIT guidelines and the formula specified in the DMI&SP Policy, 2025.

4A. For Appendix-B Capital Goods (Mandatory): A certificate issued by the statutory auditor / cost auditor / chartered accountant is enclosed herewith, confirming the DVA of the capital good package in accordance with the policy.

(If Appendix-A item only, strike this clause out.)

5. I confirm that: All information furnished is true and correct. All input steel costs, imported content, and domestic content calculations have been verified. All manufacturing, purchase, and pricing records are available for examination.

If any information is found incorrect or misleading: The procuring agency may disqualify me / my firm from Government tenders as per the procuring agency norms. I agree to pay all assessment costs and penalties, including forfeiture of EMD, as per policy and tender conditions.

6. I undertake to maintain the relevant records, and make them available to any statutory authority.

7. Declaration: I do hereby declare that the statements made above are true to the best of my knowledge and belief. I understand that any misrepresentation shall attract penalties under the DMI&SP Policy, applicable laws, and tender conditions.

For and on behalf of

(Place & Date)

M/s _____

(Authorised Signatory)

[F. No. 8(2)/2023-ID-I]

ABHIJIT NARENDRA, Jt. Secy.

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SARVESH KUMAR SRIVASTAVA Digitally signed by SARVESH KUMAR SRIVASTAVA Date: 2025.12.18 23:38:47 +05'30'

Appendix-V to ITB

Policy for Holiday listing of vendors in BPCL

Policy for holiday listing of vendors in BPCL

1. Introduction :

Works and procurement contracts have become a major activity for corporate in current times. In course of such contracting Oil sector PSEs deal with various "Agencies" (which shall include vendors/parties/contractors/suppliers/ consultants/Licensors/bidders). These entities are expected to adopt ethics of highest standards and a very high degree of integrity, safety and quality consciousness, commitments and sincerity towards the work undertaken and dealing with BPCL in such matters. However, in few occasions, the terms are found to be infringed and deviations from expected behavior are observed. It is not in the interest of BPCL to deal with Agencies who commit deception, fraud or other misconduct including compromising quality and safety in the tendering and execution process.

Also, while participating in the tender and performing the contract, vendors are required to meet certain basic performance criteria and adherence to the terms and conditions of the tender/contract. In case the vendor fails to meet the above parameters, it is prudent to put the vendor on holiday list for specific periods in order to deter the vendors form committing such defaults. Such decisions shall be taken based on the gravity of the default and after following a laid down process, on case to case basis.

Holiday Listing from business dealings involves civil consequences for the "Agency" concerned. Hence, the same requires adherence to the Principles of Natural Justice. Therefore, it is incumbent that adequate opportunity of hearing is provided and the explanation, if tendered, is considered before passing any order in this regard keeping in view the facts and circumstances of the case. The meaning of "Black listing", "Holiday Listing" and "Banning" is considered one and the same and shall hereafter be referred to only as "Holiday Listing" and the term Holiday Listed Companies is used accordingly in this document.

2. Scope :

2.1 The information for Bidders/Instruction to Bidders and even the General Conditions of Contract (GCC) or General Purchase Conditions (GPC) generally provide that BPCL shall have the rights to remove from list of approved suppliers / contractors or to ban business dealings if any Agency has been found to have committed misconduct or fraud or poor performance or anything unethical not expected from a reputed agency.

2.2 The procedure of Holiday Listing of Agencies from Business Dealings with BPCL has been laid down in these guidelines.

2.3 These guidelines are applicable across BPCL and shall form part of all the tenders. These guidelines shall be published as a separate document in BPCL website and the General Conditions of Contract (GCC) or General Purchase Conditions (GPC) shall have a clause expressly stating that the Guidelines and Procedures for Holiday Listing as adopted by BPCL and available separately in BPCL website shall be applicable in the context of all tenders floated and consequently all orders/ contracts / purchase orders placed by BPCL.

2.4 The Holiday Listing shall be with prospective effect, i.e. for future business dealings.

3. Definitions :

In these Guidelines, unless the context otherwise requires

(i) Agency; "Party/Contractor/Supplier/Vendor/Consultant/Bidder/Licensor" in the context of these guidelines is indicated as 'Agency' ;

"Party/Contractor/Supplier/Vendor/Consultant/bidders/Licensor" shall mean and include a public limited company or a private limited company, a joint venture. Consortium, HUF, a firm whether registered or not, an individual, co-operative society or an association or a group of persons engaged in any commerce, trade, industry etc.

(ia) Allied Agency means: All concerns which come within the sphere of effective influence of the debarred firms shall be treated as allied firms. In determining this, the following factors may be taken into consideration:

a. Whether the management is common
b. Majority interest in the management is held by the partners or directors of banned / suspended firm
c. Substantial or majority shares are owned by the banned / suspended firm and by virtue of this it has a controlling voice
d. Directly or indirectly controls, or is controlled by or is under common control with another bidder
e. All successor firms will also be considered as allied firms.

(ii) Appellate Authority: "Appellate Authority" shall mean the concerned functional Director of BPCL or any other authority nominated by the C & MD. The Appellate authority shall be higher than the "Competent Authority".

(iii) Competent Authority: "Competent Authority" shall mean the authority, who is competent to take final decision for Banning of business dealings with Agencies, in accordance with these guidelines:

The Competent Authority for a Procurement Department which is initiating the Holiday Listing process should be the Regional head (or) SBU / Entity head as the case may be relevant to the said Procurement Department, but not below the level of General Manager

(iv) Corporation: "Corporation" means Bharat Petroleum Corporation Ltd. with its Registered Office at Bharat Bhavan-I, 4&6 Currimbhoy Road, Ballard Estate, Mumbai-400001.

(v) Corrupt Practice: "Corrupt Practice" means the offering, giving, receiving or soliciting, directly or indirectly, anything of value to improperly influence the actions in selection process or in contract execution. Corrupt Practice" also includes any omission for misrepresentation that may mislead or attempt to mislead so that financial or other benefit may be obtained or an obligation avoided.

(vi) Fraudulent Practice: "Fraudulent Practice" means and include any act or omission committed by a agency or with his connivance or by his agent by misrepresenting/ submitting false documents and/ or false information or concealment of facts or to deceive in order to influence a selection process or during execution of contract/ order;

(vii) Collusive Practice : "Collusive Practice" amongst bidders (prior to or after bid submission)" means a scheme or arrangement designed to establish bid prices at artificial non-

competitive levels and to deprive the Employer of the benefits of free and open competition.

(viii) Coercive Practice: "Coercive practice" means impairing or harming or threatening to impair or harm directly or indirectly, any agency or its property to influence the improperly actions of an agency, obstruction of any investigation or auditing of a procurement process.

(ix) Officer-in-Charge: "Officer –in-Charge (OIC)" or "Engineer-in-Charge (EIC)" shall mean the person (s) designated to act for and on behalf of BPCL for the execution of the work as per requirement of the concerned department.

(x) Malpractice : Malpractice means any Corrupt Practice, Fraudulent Practice, Collusive Practice or Coercive practice as defined herein;

(xi) Mis-Conduct : "Mis-conduct" means any act or omission by the Agency, making it liable for action for Holiday Listing as per these guidelines

(xii) Nodal Department: "Nodal Department" means the Department primarily assigned with the role of overseeing the Holiday Listing Process to ensure adherence to guidelines, maintaining, updating and publishing the list of Agencies with whom BPCL has decided to ban business dealings and shall be the Corporate Finance Department.

(xiii) Vendor De-listment Committee: "Vendor De-listment Committee" relevant to the procurement department which initiates the holiday listing process would the same as the vendor enlistment Committee as per DR&A of the concerned SBU/Entity.

4. Holiday Listing:

4.1 Reasons for Holiday Listing : An Agency may be placed in Holiday List for any one or more of the following circumstances:

4.1.1. If the Agency , in the context of its dealings with the Corporation:

a. has indulged in malpractices ;
b. has submitted fake, false or forged documents / certificates
c. Has substituted materials in lieu of materials supplied by BPCL or has not returned or has unauthorized disposed off materials / documents / drawings / tools or plants or equipments supplied by BPCL.
d. Has deliberately violated and circumvented the provisions of labor laws/ regulations / rules, safety norms, environmental norms or other statutory requirements.
e. has deliberately indulged in construction and erection of defective works or supply of defective materials
f. Has not cleared previous dues to BPCL if applicable.
g. Has committed breach of contract or has abandoned the contract.
h. Poor performance of the Agency in one or several contracts;
i. Has not honored the fax of award / letter of award / Contract / Purchase order after the same is issued by BPCL.
j. Withdraws/ revises the bid upwards after becoming the L1 bidder.
k. Has parted with, leaked or provided confidential / proprietary information of BPCL to any third party without the prior consent of BPCL.

4.1.2.The following additional grounds can also be reasons for Holiday listing of an agency:

a. If a communication is received from the Administrative Ministry of the Corporation (i.e. MOP&NG) to ban Agency from dealing with the Corporation ;

b. If the Agency Is or has become bankrupt , OR is being dissolved OR has resolved to be wound up OR if proceedings for winding up or dissolution has been instituted against the Agency;

c. Any other ground, including transgression of Integrity Pact, which, in the opinion of the Corporation, makes it undesirable to deal with the Agency; In the case of transgression of Integrity Pact, the same should be substantiated by the verdict of the Independent External Monitor.

4.2 Procedure :

4.2.1. Proceedings for Holiday Listing shall be initiated against an Agency when a prima facie case for Holiday Listing comes up, under any of the above mentioned circumstances; before taking a decision, a fair opportunity of hearing the party should be given by means of a Show Cause notice. The show cause notice should indicate clearly and precisely the charges/misconduct which should be based on facts as can be proved as distinct from mere allegations. Statement containing the imputation of misconduct or misbehavior may be appended to the show-cause notice and the "Agency" should be asked to submit within 15 days a written statement in its defense. A proforma of Show Cause notice is attached at Annexure-I. ;

4.2.2. The proceedings shall start with a proposal for initiating action against the Agency, to be raised by the Procurement Department which, in the first instance, is to be cleared by the relevant Vendor De-listment Committee.

4.2.3. The proposal shall state a brief background of the case, the action proposed and all supporting documents, including a note from the Engineer / Officer – In –Charge or the designated incharge or the department responsible for execution of a work, in the case the proposal is related to the performance of a contract. A draft show cause notice is also to be attached to the proposal.

4.2.4. On preliminary examination of the proposal with attached documents, if the vendor delistment committee is of the opinion that action is to be initiated against the Agency, the committee will approve the proposal along with the proposed Show Cause Notice.

4.2.5. Thereupon the Show Cause Notice, as approved, will be issued by the concerned Procurement Department. Before issuing the Show Cause Notice, concerned procurement department should give intimation to the Nodal Department regarding the proposed action against the Agency, along with a copy of the Show Cause notice for record. The Nodal Department, shall in turn publish this information in BPCL website for information and reference of all procuring departments across the corporation

4.2.6. On receipt of the explanation from the Agency, the procurement Department will put up the proposal for holiday listing, to the competent authority, through the vendor de-listment committee & the Nodal Department; This proposal would consist of a background of the case, copy of initiation proposal approved by vendor de-listment committee, copy of the Show Cause Notice issued and Agency's reply received and the procurement departments' comments on the same. The period for which holiday listing is recommended should also be clearly mentioned in the proposal. All relevant supporting documents should also be attached; In case no explanation is received from the Agency within the stipulated time, the case shall be preceded with ex-parte.

4.2.7. The proposal along with the reply from the Agency would be examined by the Vendor de-listment Committee; thereafter, with the recommendation from the vendor de-listment Committee, the proposal would be put up through the Nodal Department to the Competent Authority for final decision on banning or otherwise.

4.2.8. The competent authority, after examining all the materials on record, including the explanation from the Agency, will give their decision on the proposal. Competent Authority in its decision may :

- Approve the proposal for Holiday Listing as such, OR
- Approval the proposal for holiday listing for a period higher than that was recommended, in case the competent authority is of the opinion that banning for a longer period is required in view of the gravity of the case, OR
- Approve the proposal for holiday listing for a period lesser than that was recommended, in case the competent authority is of the opinion that lesser period would meet the requirement, considering the gravity of the case, OR
- Reject the proposal, in case, based on explanation furnished by the Agency, the Competent Authority is of opinion that the alleged misconduct / malpractice was either not substantiated or has happened on account of circumstances on which Agency had no control.

4.2.9. The decision of the Competent Authority regarding Holiday Listing of business dealings should be communicated to the 'Agency' concerned, by the concerned procurement department. A draft proforma for intimation of Holiday Listing to Agency is at Annexure II.

4.2.10. The Holiday Listing process should be completed at the earliest, and in any case within 45 days from initiation of case by concerned Engineer / Officer – In-Charge /Department responsible for invitation of bids.

However, if any agency , which is under holiday listing process with BPCL, has participated in a tender by submitting bid, the department responsible for initiating the holiday listing process shall expedite completion of the same within 21 days of technical bid opening , based on which the tender can be proceeded with.

4.2.11. Competent Authority shall decide on the period of holiday listing, on case to case basis, depending on the gravity of the case and considering the implications for BPCL on account of the Act/Omission on the part of the Agency, intentions of the Agency as established from the circumstances of the case, frequency of tendering for work of similar nature etc.

4.2.12. Ordinarily the period for which as Agency is Holiday listed should not be less than 1 year (6 months in less serious cases with proper justification) and should not exceed 3 years. However, in extraordinary circumstances as mentioned below, banning of 15 years can be done. The broad guidelines for the period of holiday listing based on the circumstances under which they were put on holiday listing is as under :

S.No	Reasons for holiday listing	Period of holiday listing
1	Indulged in malpractices resulting in financial loss to the Corporation	15 years
2	Submitted fake, false or forged documents / certificates	3 years
3	has substituted materials in lieu of materials supplied by BPCL or has not returned or has unauthorisedly disposed off materials / documents / drawings / tools or plants or equipment's supplied by BPCL	15 years
4	Has deliberately violated and circumvented the provisions of labour laws/ regulations / rules, safety norms, environmental norms or other statutory requirements	3 years
5	has deliberately indulged in construction and erection of defective works or supply of defective materials	3 years
6	has not cleared BPCLs previous dues if applicable	1 year
7	has committed breach of contract or has abandoned the contract	3 years
8	Poor performance of the Agency in one or several contracts	1 year
9	has not honoured the fax of award / letter of award / Contract / Purchase order after the same is issued by BPCL	1 year
10	Withdraws/ revises the bid upwards after becoming the L1 bidder	1 year
11	has parted with , leaked or provided confidential / proprietary information of BPCL to any third party without the prior consent of BPCL	15 years
12	If the Agency Is or has become bankrupt , OR is being dissolved OR has resolved to be wound up OR if proceedings for winding up or dissolution has been instituted against the Agency	3 years
13	Transgression of Integrity Pact , which, in the opinion of the Corporation, makes it undesirable to deal with the Agency;	3 years

4.2.13. In cases where Holiday Listing is proposed based on advice from the Administrative Ministry, .no show cause or formal decision by competent authority will be required. The Nodal Department will directly intimate the Agency that they have been placed in Holiday Listing by BPCL based on the Ministry's advice

4.2.14. Provision for Appeal;

(i) An agency aggrieved with the decision of the Competent Authority shall have the option of filing an appeal against the decision of the Competent Authority within a maximum of 15 days from the date of receipt of intimation of holiday listing.

(ii) Any appeal filed after expiry of the above period shall not be considered by the Appellate Authority;

(iii) On receipt of the Appeal from the Agency, the Appellate Authority, if it so desires , may call for comments from the Competent Authority;

(iv) After receipt of the comments from the Competent Authority, the Appellate Authority , if it so desires , may also give an opportunity for personal hearing, to the Appellant Agency;

(v) After examining the facts of the case and documents available on record and considering the submissions of the Appellant Agency, the Appellate Authority may pass appropriate order by which the Appellate Authority may either :

a) Uphold the decision of Competent authority with or without any variation /lesser period of Holiday Listing; OR

b) Annul the order of the Competent Authority.

(vi) Appellate Authority shall pass its order within a maximum period of 45 days from the date of receipt of Appeal.

(vii) Order of the Appellate Authority shall be communicated to the Agency by the Procurement Department copy of which shall be given to the Competent Authority and also to the Nodal Department as well. A draft proforma for communicating the decision of the Appellate Authority is at Annexure III

(viii)No Appeal is permitted in case an Agency is placed in Holiday List by BPCL, based on Ministry's advice.

4.2.15. Effect of Holiday Listing

(i) No enquiry / bid / tender shall be entertained with an Agency (including Allied Agency) as long as the 'Agency' name appears in the Holiday list.

(ii) If an 'Agency' is put on the Holiday list during tendering :

a) If an 'Agency' is put on Holiday List after issue of the enquiry / bid / tender but before

opening of the un-priced bid, the un-priced bid of the 'Agency' shall not be opened and BG/EMD , if submitted by the 'Agency' shall be returned . If an 'Agency' is put on Holiday List after un-priced bid opening but before price bid opening, the price bid of the 'Agency' shall not be opened and BG/EMD submitted by the 'Agency' shall be returned .

b) If an'Agency'is put on Holiday List after opening of price bid but before finalization of the tender, the offer of the 'Agency' shall be ignored and will not be further evaluated and the BG/EMD if any submitted by the 'Agency' shall be returned, The 'Agency' will not be considered for issue of order even if the 'Agency' is the lowest (L1). In such situation next lowest shall be considered as L1;

bb) In case, any debarred firms has submitted the bid, the same will be ignored. In case such firm is lowest (L-1), next lowest firm shall be considered as L-1. Bid security submitted by such debarred firms shall be returned to them.

c) If contract with the 'Agency' concerned is in operation, (including cases were contract has already been awarded before decision of holiday listing) normally order for Holiday Listing from business dealings cannot affect the contract, because contract is a legal document and unless the same is terminated in terms of the contract, unilateral termination will amount to breach and will have civil consequences.

(iii) In cases where holiday listing proposal has been initiated by some procurement department in the Corporation, but the process is yet to be completed and order of Competent Authority is awaited, the tendering process may be taken forward till price bid opening and after price bid opening, decision on the tender may be kept on hold till such time order of Competent Authority is issued.

5. **Declaration by Bidders regarding Holiday Listing status:**

Tenders invited for purchase of Goods and Services for both Open Tenders as well as Limited Tenders, should have the provision that the bidder should submit a declaration to the effect that they are not currently serving any Holiday Listing orders issued by BPCL or MOPNG debarring them from carrying on business dealings with the BPCL/MOPNG. Offers not accompanied with a declaration should be incorporated in rejection criteria. Any wrong declaration in this context shall make the Agency liable for action under this Holiday Listing procedure.

Bidder should submit a declaration to the effect that he has not been convicted of an offence–

(a) under the Prevention of Corruption Act, 1988; or

(b) the Indian Penal Code or any other law for the time being in force, for causing any loss of life or property or causing a threat to public health as part of execution of a public procurement contract.

6. **Revocation of Holiday Listing:**

6.1 An order for Holiday Listing once passed for a certain specified period shall be revoked as under:

6.1.1. An order for Holiday Listing passed for a certain specified period shall be revoked on the expiry of that specified period, subject to the Agency giving a request in writing clearly mentioning the corrective action which has already been taken / proposed to be taken, to avoid recurrence Specific order of revocation shall be issued by the concerned Procurement Department Vendor Enlistment Committee, which had recommended the Holiday Listing , after considering the Vendor's request, with copy to the Nodal Department.

6.1.2. A Holiday Listing order may, on a review during its currency of operation, be revoked by the competent authority if it is of the opinion that the disability already suffered is adequate in the circumstances of the case, and the Agency has taken appropriate action to avoid recurrence.

7. **Publishing of holiday listing information in BPCL Web-site:**

7.1 Once an order of Holiday Listing of an Agency is passed by a Competent Authority, the said information shall be published in the BPCL web-site, by the Nodal Department;

7.2 All Procurement Agencies, should before issue of tender in limited tender cases and before opening of price bids in all cases, verify with this published information that the bidder concerned is not currently serving any Holiday Listing orders issued by BPCL; suitable declarations to this effect shall be incorporated in the concerned approval notes/TEC Note.

7.3 All orders of revocation of holiday listing shall, immediately on revocation, be made available to the Nodal Department, who in turn shall update the information in the web-site accordingly.

7.4 To take cognizance of the holiday listing process in the initiation stage itself, the Nodal Department should update the information in the BPCL web site, as soon as they get intimation from the Procurement Group, along with copy of proposed show cause notice.

7.5 If any Communication is received from the Administrative Ministry (i.e. MOP&NG) advising banning of business dealings with any Agency, the Nodal Department should take immediate action to circulate the same to all Procurement Departments within the Corporation, update the website and also send intimation to the concerned Agency in format Ann. IV

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Annexure –I

(Proforma of Show Cause Notice)

BY REGD. POST/SPEED POST/COURIER

No. .....

Date.....

To M/s ....

Attn.: Shri .....

Sub: Show Cause Notice

Ref :

Dear Sir,

You are hereby required to show cause in writing within 15 days from the date hereof why you should not be placed on Holiday List and be debarred from entering into any contracts with BPCL for the following reasons:

(Give Reasons)

Your reply (if any) should be supported by documents and documentary evidence which you wish to rely in support of your reply should you fail to reply to this Show Cause Notice within the time and manner aforesaid, it will be presumed that you have nothing to say and we shall proceed accordingly.

Your reply, if any, and the documents / documentary evidence given in support shall; be taken into consideration prior to arriving at a decision.

Yours faithfully,

For & On behalf of BPCL.

Annexure –II

(Proforma for Intimation of Holiday Listing)

BY REGD. POST/SPEED POST/COURIER

No.....

Date.....

To M/s .....

Attn.: Shri .....

Sub: Intimation of Banning of Business Dealings / Holiday Listing

Dear Sir,

WHERAS our Show Cause Notice served to you dated .....WHERAS, in spite of the opportunity given to you, you have failed to show cause as required / your reply to the show cause notice *(and documents and documentary evidence submitted in support of your reply) has / have been duly considered;

(Speaking Order either to agree or rebut the reply furnished by Agency – allegation wise)

After considering the allegations made in the show cause notice/your reply to the show cause notice*(and documents and documentary evidence furnished in support thereof) as cited above. it has been decided that business dealings with you will be banned and you are hereby debarred from entering into contracts with BPCL for ..... Years/months, effective from the date hereof.

This order shall have the following effects:

1. No enquiry / bid / tender shall be issued to you nor will the bids submitted by you be entertained;
2. In cases where tenders have already been issued to you and price bids are yet to be opened, the price bid submitted by you shall not be opened and BG/EMD, if any, submitted by you shall be returned.
3. In cases where tenders have already been issued to you and price bids have already been opened , but final decision is pending, your quote will not be considered for further evaluation and finalization of the tender, and BG/EMD, if any, submitted by you shall be returned.
4. In case of ongoing contracts between you & BPCL, (including cases were contract has already been awarded before .....) you will be required to continue with the execution and perform as per terms of the contract.

In case you are aggrieved by this order, you may file an Appeal before ..... (Indicate here the relevant Appellate Authority), within a maximum of 15 days from the date of receipt of this order.

You may represent your case before the Appellate Authority, along with necessary justification.

On expiry of the above period of holiday listing, you may approach.....(indicate the concerned procurement department) , with request for revocation of the order mentioning inter-alia the steps taken by you to avoid recurrence of misconduct which has led to the Holiday Listing. (Give Reasons)

Yours faithfully,

For & On behalf of BPCL.

Annexure –III

(Proforma for communication of Appellate Decision on Holiday Listing Order)

BY REGD. POST/SPEED POST/COURIER

No. .....

Date .....

To M/s .....

.....

Attn.: Shri .....

Sub: Banning of Business Dealings / Holiday Listing- Intimation of decision of Appellate Authority

Ref: 1. Order dated ..... placing M/s ..... on Holiday List by BPCL;

2. Your Appeal reference ..... Dt.....

Dear Sir,

This has reference to the order dt..... placing you on Holiday List and your appeal petition reference ..... dt.... on the same.

After considering the findings of the Original Authority in order dt....., submissions made by you in your appeal, and the documents/documentary evidences available on record, it has been decided finally that:

- There is no infirmity in the order of the Original Authority, and the allegations stand substantiated and the Holiday Listing for the period of ..... years/month from the date of order, as ordered by the original Authority is upheld,
- Considering your submissions, the order of Holiday Listing passed by the original authority is upheld, but with a reduction in period of holiday listing for ..... years/months from the date of order of original authority.
- Considering your submissions and the evidence available on record, there is enough justification to annul the order of the original authority.

(*** Incorporate any one of the above as applicable)

Yours faithfully,

For & On behalf of BPCL.

Annexure –IV

(Proforma for Intimation of Holiday Listing- based on Ministry's Advice)

BY REGD. POST/SPEED POST/COURIER

No. .....

Date ..... To M/s

.....

.....

Attn.: Shri .....

Sub : Intimation of Banning of Business Dealings / Holiday Listing

Ref: MOP&NG's letter ref ..... dt....., advising banning of business dealings with M/s.....

Dear Sir,

WHERAS we have been advised by MOP&NG that all business dealings with you is to be banned and you should be placed on Holiday List for a period of .....yrs/months from.....; You are hereby informed that the business dealings with you would be banned and you are hereby debarred from entering into contracts with BPCL for ..... Years/months, effective from the date hereof.

On expiry of the above period of holiday listing, you may approach.....(indicate the concerned procurement department) , with request for revocation of the order mentioning inter-alia the steps taken by you to avoid recurrence of misconduct which has led to the Holiday Listing

Yours faithfully,

For & On behalf of BPCL.

FORMAT for Declaration of Holiday Listing orders issued by BPCL or MOPNG debarring us from carrying on business dealings with BPCL/ MOPNG.

(On Company Letter Head, to be signed by the duly authorized person)

Date: _____

TENDER NO. : .....

TITLE OF TENDER: .....

To,
Bharat Petroleum Corporation Ltd

Dear Sir/Madam,

I /We declare and confirm that we are currently not serving any Holiday Listing orders issued by BPCL or MOPNG debarring us from carrying on business dealings with BPCL/ MOPNG or convicted of an offence –

(a) under the Prevention of Corruption Act, 1988: or

(b) the Indian Penal Code or any other law for the time being in force, for causing any loss of life or property or causing a threat to public health as part of execution of a public procurement contract.

(Signature and Stamp of the Bidder)

Bidder Name:

Date :

Address:

APPENDIX VI : VERIFICATION OF MSE REGISTRATION CERTIFICATE BY CHARTERED ACCOUNTANT

Ref : MA.TEC.POL.CON.3A

29th January 2020

Note To : All SBU / Entity Heads,
All SBU /Entity Finance Heads

Subject : Verification of MSE Registration certificate by Chartered Accountant

Bidders who are Micro & Small Enterprises (MSEs), MSEs owned by SC/ST and MSEs owned by Women Entrepreneurs are allowed Purchase Preference as per the government guidelines / instructions in force from time to time.

Currently as per the public procurement policy for MSEs (MSME Order 2012), participating MSE vendors quoting price within the band of L1+15% in tenders are allowed to supply a portion of requirement by bringing down their price to L1 price in a situation where L1 price is from someone other than MSE. Orders are placed on such MSEs, to supply atleast 25% of total tendered value. Further out of the 25% order earmarked for MSE vendors who match L1 price, a minimum of 3% to be reserved for "Women owned MSEs" and 4% to be reserved for "MSEs owned by SC/ST Entrepreneurs".

MSE bidders are also exempted from submission of EMD and tender related fees.

To be eligible for the privileges as mentioned above, MSE vendors are required to submit MSE Registration Certificate issued by the NSIC or any of the authorities specified under the Public Procurement Policy for MSEs.

Office of the Development Commissioner (Ministry of MSME) has recently issued a clarification stating that MSE Registration on the UAM portal is done by the firms on the basis of self-declaration. Ministry of MSME does not carry out verification of the information uploaded by the MSE. Therefore, it is the responsibility of concerned CPSE to verify/ascertain the veracity of the claim of any MSE regarding any particular enterprise satisfying the criterion of the Investment limits as mentioned in the MSMED Act, 2006 before giving any benefit under Public Procurement Policy. Further they have clarified that
CA certificate issued by Chartered Accountants may be accepted as supporting document for verification of the MSE Registration Certificate during the tender evaluation process.

Thus in the process of verification of original documents required for Bid Qualification Criteria, MSE certificate forms an extremely important document that needs to be verified since it leads to passing of benefits like EMD exemption and extending Purchase Preference to the party.

In view of the above, all bidders quoting as MSE would be required to submit CA certificate along with MSE Registration Certificate/document **(not applicable in case of NSIC)** to avail the benefits under Public Procurement Policy as per MSMED Act 2006 / Public Procurement Policy Order 2012. The CA certificate should be dated after the date of floating of tender and

shall be specific to the tender for which bid is being submitted. Format of the CA certificate is attached for reference (Annexure – A).

Further above mentioned CA certification process need not be done in case vendor submits valid NSIC (National Small Industries Corporation) Certificate, since same is issued after due inspection.

Bidder shall have to submit copy of MSE Registration certificate along with CA certificate. In case CA certificate is not submitted, bid of the vendor shall be rejected at EMD stage (for open tenders).

All tendering / procurement groups may be suitably advised to ensure the verification process as mentioned above before passing on important benefits like EMD exemption and extending purchase preference to the MSEs.

Annexure : A

Date:_____

CERTIFCATE CONFIRMING ELIGIBILTY FOR BENEFITS OF PUBLIC PROCUREMENT POLICY

Ref: Tender No…….. for…….

This is to confirm that we have verified the investment limits and other details of Unit _____ _____pertaining to M/s _____ and certify that they satisfy the eligibility criteria as per MSMED Act, 2006 and other notifications/circulars issued from time to time in this regard. Accordingly, M/s _____ is a Micro/Small enterprise under the said Act and are eligible to claim the benefits of public procurement policy for the tender mentioned above.

In case applicable:
Based on our verification of share holding pattern and other details, it is certified that M/s _____ meets the eligibility criteria under SC/ST provision of Public Procurement Policy Order 2012 and other notifications/circulars issued from time to time in this regard and are hence eligible to claim benefits pertaining to SC/ST under the act.

In case applicable:
Based on our verification of share holding pattern and other details, it is certified that M/s _____ meets the eligibility criteria under Women Entrepreneur provision of Public Procurement Policy Order 2012 and other notifications/circulars issued from time to time in this regard and are hence eligible to claim benefits pertaining to Women Entrepreneur under the Act.

(Membership No. of CA along with certification / stamp)

APPENDIX VII : ACKNOWLEDGEMENT CUM CONSENT LETTER

REPLY / ACKNOWLEDGEMENT LETTER

(PLEASE E-MAIL TO EIL WITHIN THREE DAYS ON RECEIPT OF RFQ)

Sr. General Manager (SCM)
Engineers India Limited
Tower-1, 1st Floor, R&D Complex, Sector-16
Gurugram, Haryana–122001
INDIA

Attention : Ms. Sangitta Ghuliani, Sr.GM (SCM)

Client : M/s Bharat Petroleum Corporation Limited, BIna Refinery
Project *: BINA PETCHEM AND REFINERY EXPANSION PROJECTS (BPREP)*
RFQ No. : ……
Item : ……..

Dear Sirs / Madam,

We acknowledge with thanks receipt of your above cited RFQ along with enclosures. We undertake that the contents of the above RFQ shall be kept confidential including all the drawings, specifications and documents and the said documents shall be used only for the purpose, for which they are intended.

Further, our response is as under:- (Bidders to put a tick √, as applicable).

1. **We will submit the bid within due date.** ☐

2. **We regret to submit our offer/quote because of the following reasons:** ☐
   a. _____
   b. _____

Thanking you,

Very truly yours,

Name of Bidder :
Contact Person :
Contact Person Mobile No :
Bidder's Address :
Bidder's Phone No. :
Bidder's Fax No. :
Bidder's E-mail :

APPENDIX VIII: POLICY ON MSE PURCHASE PREFERENCE

रजिस्ट्री सं. डी.एल.-33004/99

REGD. No. D. L-33004/99

भारत का राजपत्र
The Gazette of India

सी.जी.-डी.एल.-अ.-18102022-239737
CG-DL-E-18102022-239737

असाधारण
EXTRAORDINARY

भाग II—खण्ड 3—उप-खण्ड (ii)
PART II—Section 3—Sub-section (ii)

प्राधिकार से प्रकाशित
PUBLISHED BY AUTHORITY

सं. 4714] नई दिल्ली, मंगलवार, अक्तूबर 18, 2022/आश्विन 26, 1944
No. 4714] NEW DELHI, TUESDAY, OCTOBER 18, 2022/ASVINA 26, 1944

सूक्ष्म, लघु और मध्यम उद्यम मंत्रालय

अधिसूचना

नई दिल्ली, 18 अक्तूबर, 2022

का.आ. 4926(अ).—केन्द्रीय सरकार, सूक्ष्म, लघु और मध्यम उद्यम विकास अधिनियम, 2006 (2006 का 27) की धारा 7 की उप-धारा (9) के साथ पठित उप-धारा (1) और धारा 8 की उप-धारा (3) के साथ पठित उप-धारा (2) के द्वारा प्रदत्त शक्तियों का प्रयोग करते हुए, भारत सरकार के सूक्ष्म, लघु और मध्यम उद्यम मंत्रालय की अधिसूचना संख्यांक का.आ. 2119(अ), तारीख 26 जून, 2020 जो भारत के राजपत्र, असाधारण, भाग II, खंड 3, उपखंड (ii) में प्रकाशित की गई थी, का और संशोधन करती है, अर्थात् :-

उक्त अधिसूचना में, पैरा 8 के उप पैरा (5) के स्थान पर निम्नलिखित उप पैरा रखा जाएगा, अर्थात् :-

"(5) संयंत्र और मशीनरी या उपस्कर में किसी में उच्चतर पठनक्षमता अथवा/और टनभारिता में उच्चतर पठनक्षमता तथा पठनक्षमता रूपांतरण की अवस्था में, कोई उद्यम उस प्रवर्ग (सूक्ष्म या लघु या मध्यम) से तीन उच्चतर पठनक्षमता की तारीख से तीन वर्ष की अवधि के लिए उन सभी माल-कर लाभों का उपयोग करता रहेगा, जो ऐसे पुनर्वर्गीकरण से पहले कर रहा था ।"

[फा. सं. पी-05/1/2022-एमईएन]

विनोद कुमार सैनी, अपर सचिव एवं विकास आयुक्त (एमएसएमई)

टिप्पण : मूल अधिसूचना संख्यांक का.आ. 2119(अ), तारीख 26 जून, 2020 द्वारा भारत के राजपत्र, भाग II, खंड 3, उपखंड (ii) में प्रकाशित की गई थी और तत्पश्चात् संख्यांक का.आ. 1055(अ), तारीख 5 मार्च, 2021, का.आ. 2347(अ), तारीख 16 जून, 2021, का.आ. 278(अ), तारीख 19 जनवरी, 2022 और का.आ. 2134(अ), तारीख 6 मई, 2022 द्वारा संशोधित की गई थी ।

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MINISTRY OF MICRO, SMALL AND MEDIUM ENTERPRISES

NOTIFICATION

New Delhi, the 18th October, 2022

S.O. 4926(E).—In exercise of the powers conferred by sub-section (1) read with sub-section (9) of section 7 and sub-section (2) read with sub-section (3) of section 8 of the Micro, Small and Medium Enterprises Development Act, 2006 (27 of 2006), the Central Government hereby makes the following further amendments in the notification of the Government of India, Ministry of Micro, Small and Medium Enterprises number S.O. 2119(E), dated the 26th June, 2020, published in the Gazette of India, Extraordinary, Part-II,Section 3, Sub-section (ii), namely:-

In the said notification, for sub-paragraph (5) of paragraph 8, the following sub-paragraph shall be substituted, namely:-

"(5) In case of an upward change in terms of investment in plant and machinery or equipment or turnover or both, and consequent re-classification, an enterprise shall continue to avail of all non-tax benefits of the category (micro or small or medium) it was in before the re-classification, for a period of three years from the date of such upward change.".

[F. No. P-05/1/2022-GEN]

SHAILESH KUMAR SINGH, Addl. Secy.
and Development Commissioner (MSME).

Note : The principal notification was published in the Gazette of India, Extraordinary, Part-II, Section 3, Sub-section (ii) *vide* number S.O. 2119 (E), dated the 26th June, 2020 and subsequently amended *vide* numbers S.O. 1055(E), dated the 5th March, 2021, S.O. 2347(E), dated the 16th June, 2021, S.O. 278(E), dated the 19thJanuary, 2022 and S.O. 2134(E), dated the 6th May, 2022.

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MANOJ KUMAR VERMA Digitally signed by MANOJ KUMAR VERMA Date: 2022.10.18 22:11:26 +05'30'

MINISTRY OF MICRO, SMALL AND MEDIUM ENTERPRISES

NOTIFICATION

New Delhi, the 26th June, 2020

S.O. 2119(E).—In exercise of the powers conferred by sub-section (1) read with sub-section (9) of section 7 and sub-section (2) read with sub-section (3) of section 8, of the Micro, Small and Medium Enterprises Development Act, 2006, (27 of 2006), hereinafter referred to as the said Act, and in supersession of the notifications of the Government of India in the Ministry of Micro, Small and Medium Enterprises number S.O.1702 (E), dated the 1st June, 2020, S.O. 2052 (E), dated the 30th June, 2017, S.O.3322 (E), dated the 1st November, 2013 and S.O.1722 (E), dated the 5th October, 2006, published in the Gazette of India, Extraordinary, Part II, Section 3, Sub-Section (ii), except as respects things done or omitted to be done before such supersession, the Central Government, after obtaining the recommendations of the Advisory Committee in this behalf, hereby notifies certain criteria for classifying the enterprises as micro, small and medium enterprises and specifies the form and procedure for filing the memorandum (hereafter in this notification to be known as ―Udyam Registration‖), with effect from the 1st day of July, 2020, namely:--

1. Classification of enterprises.-An enterprise shall be classified as a micro, small or medium enterprise on the basis of the following criteria, namely:--

(i) a micro enterprise, where the investment in plant and machinery or equipment does not exceed one crore rupees and turnover does not exceed five crore rupees;

(ii) a small enterprise, where the investment in plant and machinery or equipment does not exceed ten crore rupees and turnover does not exceed fifty crore rupees; and

(iii) a medium enterprise, where the investment in plant and machinery or equipment does not exceed fifty crore rupees and turnover does not exceed two hundred and fifty crore rupees.

2. Becoming a micro, small or medium enterprise.--

(1) Any person who intends to establish a micro, small or medium enterprise may file Udyam Registration online in the Udyam Registration portal, based on self-declaration with no requirement to upload documents, papers, certificates or proof.

(2) On registration, an enterprise (referred to as ―Udyam‖ in the Udyam Registration portal) will be assigned a permanent identity number to be known as ―Udyam Registration Number‖.

(3) An e-certificate, namely, ―Udyam Registration Certificate‖ shall be issued on completion of the registration process.

3. Composite criteria of investment and turnover for classification.--

(1) A composite criterion of investment and turnover shall apply for classification of an enterprise as micro, small or medium.

(2) If an enterprise crosses the ceiling limits specified for its present category in either of the two criteria of investment or turnover, it will cease to exist in that category and be placed in the next higher category but no enterprise shall be placed in the lower category unless it goes below the ceiling limits specified for its present category in both the criteria of investment as well as turnover.

(3) All units with Goods and Services Tax Identification Number (GSTIN) listed against the same Permanent Account Number (PAN) shall be collectively treated as one enterprise and the turnover and investment figures for all of such entities shall be seen together and only the aggregate values will be considered for deciding the category as micro, small or medium enterprise.

4. Calculation of investment in plant and machinery or equipment.--

(1) The calculation of investment in plant and machinery or equipment will be linked to the Income Tax Return (ITR) of the previous years filed under the Income Tax Act, 1961.

(2) In case of a new enterprise, where no prior ITR is available, the investment will be based on self-declaration of the promoter of the enterprise and such relaxation shall end after the 31st March of the financial year in which it files its first ITR.

(3) The expression ―plant and machinery or equipment‖ of the enterprise, shall have the same meaning as assigned to the plant and machinery in the Income Tax Rules, 1962 framed under the Income Tax Act, 1961 and shall include all tangible assets (other than land and building, furniture and fittings).

(4) The purchase (invoice) value of a plant and machinery or equipment, whether purchased first hand or second hand, shall be taken into account excluding Goods and Services Tax (GST), on self-disclosure basis, if the enterprise is a new one without any ITR.

(5) The cost of certain items specified in the *Explanation I* to sub-section (1) of section 7 of the Act shall be excluded from the calculation of the amount of investment in plant and machinery.

5. Calculation of turnover.--

(1) Exports of goods or services or both, shall be excluded while calculating the turnover of any enterprise whether micro, small or medium, for the purposes of classification.

(2) Information as regards turnover and exports turnover for an enterprise shall be linked to the Income Tax Act or the Central Goods and Services Act (CGST Act) and the GSTIN.

(3) The turnover related figures of such enterprise which do not have PAN will be considered on self-declaration basis for a period up to 31st March, 2021 and thereafter, PAN and GSTIN shall be mandatory.

6. Registration process.―

(1) The form for registration shall be as provided in the Udyam Registration portal.

(2) There will be no fee for filing Udyam Registration.

(3) Aadhaar number shall be required for Udyam Registration.

(4) The Aadhaar number shall be of the proprietor in the case of a proprietorship firm, of the managing partner in the case of a partnership firm and of a karta in the case of a Hindu Undivided Family (HUF).

(5) In case of a Company or a Limited Liability Partnership or a Cooperative Society or a Society or a Trust, the organisation or its authorised signatory shall provide its GSTIN and PAN along with its Aadhaar number.

(6) In case an enterprise is duly registered as an Udyam with PAN, any deficiency of information for previous years when it did not have PAN shall be filled up on self-declaration basis.

(7) No enterprise shall file more than one Udyam Registration:

Provided that any number of activities including manufacturing or service or both may be specified or added in one Udyam Registration.

(8) Whoever intentionally misrepresents or attempts to suppress the self-declared facts and figures appearing in the Udyam Registration or updation process shall be liable to such penalty as specified under section 27 of the Act.

7. Registration of existing enterprises.---

(1) All existing enterprises registered under EM–Part-II or UAM shall register again on the Udyam Registration portal on or after the 1st day of July, 2020.

(2) All enterprises registered till 30th June, 2020, shall be re-classified in accordance with this notification.

(3) The existing enterprises registered prior to 30th June, 2020, shall continue to be valid only for a period up to the 31stday of March, 2021.

(4) An enterprise registered with any other organisation under the Ministry of Micro, Small and Medium Enterprises shall register itself under Udyam Registration.

8. Updation of information and transition period in classification.--

(1) An enterprise having Udyam Registration Number shall update its information online in the Udyam Registration portal, including the details of the ITR and the GST Return for the previous financial year and such other additional information as may be required, on self-declaration basis.

(2) Failure to update the relevant information within the period specified in the online Udyam Registration portal will render the enterprise liable for suspension of its status.

(3) Based on the information furnished or gathered from Government's sources including ITR or GST return, the classification of the enterprise will be updated.

(4) In case of graduation (from a lower to a higher category) or reverse-graduation (sliding down to lower category) of an enterprise, a communication will be sent to the enterprise about the change in the status.

(5) In case of an upward change in terms of investment in plant and machinery or equipment or turnover or both, and consequent re-classification, an enterprise will maintain its prevailing status till expiry of one year from the close of the year of registration.

(6) In case of reverse-graduation of an enterprise, whether as a result of re-classification or due to actual changes in investment in plant and machinery or equipment or turnover or both, and whether the enterprise is registered under the Act or not, the enterprise will continue in its present category till the closure of the financial year and it will be given the benefit of the changed status only with effect from 1st April of the financial year following the year in which such change took place.

9. Facilitation and grievance redressal of enterprises.--

(1) The Champions Control Rooms functioning in various institutions and offices of the Ministry of Micro, Small and Medium Enterprises including the Development Institutes (MSME-DI) shall act as Single Window Systems for facilitating the registration process and further handholding the micro, small and medium enterprises in all possible manner.

(2) The District Industries Centres (DICs) will also act as Single Window facilitation Systems in their Districts.

(3) Any person who is not able to file the Udyam Registration for any reason including for lack of Aadhaar number, may approach any of the above Single Window Systems for Udyam Registration purposes with his Aadhaar enrolment identity slip or copy of Aadhaar enrolment request or bank photo pass book or voter identity card or passport or driving licence and the Single Window Systems will facilitate the process including getting an Aadhaar number and thereafter in the further process of Udyam Registration.

(4) In case of any discrepancy or complaint, the General Manager of the District Industries Centre of the concerned District shall undertake an enquiry for verification of the details of Udyam Registration submitted by the enterprise and thereafter forward the matter with necessary remarks to the Director or Commissioner or Industry Secretary concerned of the State Government who after issuing a notice to the enterprise and after giving an opportunity to present its case and based on the findings, may amend the details or recommend to the Ministry of Micro, Small or Medium Enterprises, Government of India, for cancellation of the Udyam Registration Certificate.

[F. No. 21(5)/2019-P&G/Policy (Pt-IV)]

A. K. SHARMA, Secy.

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MINISTRY OF MICRO, SMALL AND MEDIUM ENTERPRISES

NOTIFICATION

New Delhi, the 16th June, 2021

S.O. 2347(E).—In exercise of the powers conferred by sub-sections (1) and (9) of section 7 read with sub-sections (2) and (3) of section 8 of the Micro, Small and Medium Enterprises Development Act, 2006 (27 of 2006), the Central Government hereby makes the following amendments in the notification of Government of India, Ministry of Micro, Small and Medium Enterprises number S.O. 2119 (E), dated the 26th June, 2020, published in the Gazette of India, Extraordinary, Part II, Section 3, sub-section (ii), namely:-

In the said notification, in paragraph (7), in sub-paragraph (3), for the figures and words, "31st day of March, 2021" the figures and words "31st day of December, 2021" shall be substituted.

[F. No. PY-10024/6/2021-P and G-DCMSME]

D. K. SINGH, Addl. Secy.

Note : The principal notification was published in the Gazette of India, Extraordinary, Part-II, Section 3, Sub-section (ii) *vide* number S.O. 2119 (E), dated the 26th June, 2020 and subsequently amended *vide* number 1055(E) dated 5th March, 2021.

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ठटप्पण : मूलअअूचना भाक्के राक्सासाधाणाभाग II, खंड 3, उखंड (ii) में काआ 2119(अ), तारीख 6 जून, 2020 द्वाराप्रक्तिकीग्ईथी।

MINISTRY OF MICRO, SMALL AND MEDIUM ENTERPRISES

NOTIFICATION

New Delhi, the 5th March, 2021

S.O. 1055(E).—In exercise of the powers conferred by sub-sections (1) and (9) of section 7 read with sub-sections (2) and (3) of section 8 of the Micro, Small and Medium Enterprises Development Act, 2006 (27 of 2006), the Central Government hereby makes the following amendments in the notification of Government of India, Ministry of Micro, Small and Medium Enterprises number S.O. 2119 (E), dated the 26th June, 2020, published in the Gazette of India, Extraordinary, Part II, Section 3, sub-section (ii), namely:-

In the said notification,–

(i) in paragraph (5), after sub-paragraph (3), the following sub-paragraph shall be inserted, namely:-

"(4) The exemption from the requirement of having GSTIN shall be as per the provisions of the Central Goods and Services Tax Act, 2017 (12 of 2017).";

(ii) in paragraph (6), after sub-paragraph (8), the following sub-paragraph shall be inserted, namely:-

"(9) In case of any proprietorship enterprise not registered under any Act or rules of the Central Government or the State Government, the proprietor may use his or her PAN for registration of the enterprise in the Udyam Registration portal and for all other types of enterprises PAN shall be mandatory.".

[F.No.16/4/2019/P-P & G/Policy (Pt 1)]

D. K. SINGH, Addl. Secy.

Note : The principal notification was published in the Gazette of India, Extraordinary, Part-II, Section 3, Sub-section (ii) *vide* number S.O. 2119 (E), dated the 26th June, 2020.

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MINISTRY OF MICRO, SMALL AND MEDIUM ENTERPRISES

New Delhi, the 23rd March, 2012

ORDER

S.O. 581(E).—Whereas, the Central Government Ministries, Departments and Public Sector Undertakings shall procure minimum of 20 per cent of their annual value of goods or services from Micro and Small Enterprises;

And whereas, the Public Procurement Policy shall apply to Micro and Small Enterprises registered with District Industries Centers or Khadi and Village Industries Commission or Khadi and Village Industries Board or Coir Board or National Small Industries Corporation or Directorate of Handicrafts and Handloom or any other body specified by Ministry of Micro, Small and Medium Enterprises;

And whereas, the Public Procurement Policy rests upon core principles of competitiveness, adhering to sound procurement practices and execution of orders for supply of goods or services in accordance with a system which is fair, equitable, transparent, competitive and cost effective; and

And whereas, for facilitating promotion and development of micro and small enterprises, the Central Government or the State Government, as the case may be, by Order notify from time to time, preference policies in respect of procurement of goods and services, produced and provided by micro and small enterprises, by its Ministries or Departments, as the case may be, or its aided institutions and public sector enterprises.

Now, therefore, in exercise of the powers conferred in section 11 of the Micro, Small and Medium Enterprises Development (MSMED) Act 2006, the Central Government, by Order, notifies the Public Procurement Policy (hereinafter referred to as the Policy) in respect of procurement of goods and services, produced and provided by micro and small enterprises, by its Ministries, Departments and Public Sector Undertakings.

2. Short title and commencement. -

(1) This Order is titled as 'Public Procurement Policy for Micro and Small Enterprises (MSEs) Order, 2012'.

(2) It shall come into force with effect from 1st April 2012.

3. Mandatory procurement from Micro Small and Enterprises. – (1) Every Central Ministry or Department or Public Sector Undertaking shall set an annual goal of procurement from Micro and Small Enterprises from the financial year 2012-13 and onwards, with the objective of achieving an overall procurement of minimum of 20 per cent, of total annual purchases of products produced and services rendered by Micro and Small Enterprises in a period of three years.

(2) Annual goal of procurement also include sub-contracts to Micro and Small Enterprises by large enterprises and consortia of Micro and Small Enterprises formed by National Small Industries Corporation.

(3) After a period of three years i.e. from 1st April 2015, overall procurement goal of minimum of 20 per cent shall be made mandatory.

(4) The Central Ministries, Departments and Public Sector Undertakings which fail to meet the annual goal shall substantiate with reasons to the Review Committee headed by Secretary (Micro, Small and Medium Enterprises), constituted in Ministry of Micro, Small and Medium Enterprises, under this Policy.

4. Special provisions for Micro and Small Enterprises owned by Scheduled Castes or Scheduled Tribes. % Out of 20 per cent target of annual procurement from Micro and Small Enterprises, a sub-target of 20 per cent (i.e., 4 per cent out of 20 per cent) shall be earmarked for procurement from Micro and Small Enterprises owned by the Scheduled Caste or the Scheduled Tribe entrepreneurs. Provided that, in event of failure of such Micro and Small Enterprises to participate in tender process or meet tender requirements and L1 price, 4 per cent sub-target for procurement earmarked for Micro and Small Enterprises owned by Scheduled Caste or Scheduled Tribe entrepreneurs shall be met from other Micro and Small Enterprises.

5. Reporting of targets in Annual Report. %(1) The data on Government procurements from Micro and Small Enterprises is vital for strengthening the Policy and for this purpose, every Central Ministry or Department or Public Sector Undertaking shall report goals set with respect to procurement to be met from Micro and Small Enterprises and achievement made thereto in their respective Annual Reports.

(2) The annual reporting shall facilitate in better understanding of support being provided by different Ministries or Departments or Public Sector Undertakings to Micro and Small Enterprises.

6. Price quotation in tenders. % (1) In tender, participating Micro and Small Enterprises quoting price within price band of L1+15 per cent shall also be allowed to supply a portion of requirement by bringing down their price to L1 price in a situation where L1 price is from someone other than a Micro and Small Enterprise and such Micro and Small Enterprise shall be allowed to supply up to 20 per cent of total tendered value.

(2) In case of more than one such Micro and Small Enterprise, the supply shall be shared proportionately (to tendered quantity).

7. Developing Micro and Small Enterprise vendors. – The Central Ministries or Departments or Public Sector Undertakings shall take necessary steps to develop appropriate vendors by organizing Vendor Development Programmes or Buyer-Seller Meets and entering into Rate

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Contract with Micro and Small Enterprises for a specified period in respect of periodic requirements.

8. Annual Plan for Procurement from Micro and Small Enterprises on websites. – The Ministries or Departments or Public Sector Undertakings shall also prepare Annual Procurement Plan for purchases and upload the same on their official website so that Micro and Small Enterprises may get advance information about requirement of procurement agencies.

9. Enhancing participations of Micro and Small Enterprises including those owned by Scheduled Castes or Scheduled Tribes in Government procurements. % For enhancing participation of Scheduled Castes or Scheduled Tribes in Government procurement, the Central Government Ministries, Departments and Public Sector Undertakings shall take following steps, namely:-

(a) Special Vendor Development Programmes or Buyer-Seller Meets shall be conducted by Departments/Public Sector Undertakings for Scheduled Castes or Scheduled Tribes;

(b) Outreach programmes shall be conducted by National Small Industries Corporation to cover more and more Micro and Small Enterprises from Scheduled Castes or Scheduled Tribes under its schemes of consortia formation; and

(c) National Small Industries Corporation shall open a special window for Scheduled Castes or Scheduled Tribes under its Single Point Registration Scheme (SPRS).

10. Reduction in transaction cost. % To reduce transaction cost of doing business, Micro and Small Enterprises shall be facilitated by providing them tender sets free of cost, exempting Micro and Small Enterprises from payment of earnest money, adopting e-procurement to bring in transparency in tendering process and setting up a Grievance Cell in the Ministry of Micro, Small and Medium Enterprises.

11. Reservation of specific items for procurement. % To enable wider dispersal of enterprises in the country, particularly in rural areas, the Central Government Ministries or Departments or Public Sector Undertakings shall continue to procure 358 items (Appendix) from Micro and Small Enterprises, which have been reserved for exclusive purchase from them. This will help in promotion and growth of Micro and Small Enterprises, including Khadi and village industries, which play a critical role in fostering inclusive growth in the country.

12. Review Committee. (1) A Review Committee has been constituted under the Chairmanship of Secretary, Ministry of Micro, Small and Medium Enterprises, for monitoring and review of Public Procurement Policy for Micro and Small Enterprises vide Order No. 21(1)/2007-MA dated the 21st June 2010 (Annexure).

(2) This Committee shall, inter alia, review list of 358 items reserved for exclusive purchase from Micro and Small Enterprises on a continuous basis, consider requests of the Central Ministries or Departments or Public Sector Undertakings for exemption from 20 per cent target on a case to case basis and monitor achievements under the Policy.

13. Setting up of Grievance Cell. % In addition, a 'Grievance Cell' will be set up in Ministry of Micro, Small and Medium Enterprises for redressing grievances of Micro and Small Enterprises in Government procurement. This cell shall take up issues related to Government procurement raised by Micro and Small Enterprises with Departments or agencies concerned, including imposition of unreasonable conditions in tenders floated by Government Departments or agencies that put Micro and Small Enterprises at a disadvantage.

14. Special Provisions for Defence Procurements. % Given their unique nature, defence armament imports shall not be included in computing 20 per cent goal for Ministry of Defence. In addition, defence equipments like weapon systems, missiles, etc. shall remain out of purview of such Policy of reservation.

15. Monitoring of Goals. % The monitoring of goals set under the Policy shall be done, in so far as they relate to the Defence sector, by Ministry of Defence itself in accordance with suitable procedures to be established by them.

16. Removal of difficulty. % Any difficulties experienced during the course of implementation of the above Policy shall be clarified by Ministry of Micro, Small and Medium Enterprises through suitable Press releases which would be kept on the public domain.

[F.No. 21(1)/2011-MA]

AMARENDRA SINHA, Additional Secretary and Development Commissioner (MSME)

ANNEXURE

No. 21(1)/2007-MA

Government of India

Ministry of Micro, Small and Medium Enterprises

Office of the Development Commissioner (MSME)

'A' Wing, 7th Floor, Nirman Bhavan,

New Delhi-110108

Dated: 21st June, 2010

ORDER

Subject: Constitution of a Committee for monitoring and

review of the Public Procurement Policy for Micro and Small Enterprises

Pending approval of the new Public Procurement Policy for Micro and Small Enterprises (MSEs), a Committee is hereby constituted for looking into the applicability of some of the provisions of the proposed Policy in respect of select Central Ministries/Departments.. The Committee will be chaired by the Secretary, Ministry of Micro, Small and Medium Enterprises.

2. The composition of the Committee will be as follows:

(i) Secretary, Ministry of MSME : Chairman

(ii) Secretary, Planning Commission : Member

(iv) Secretary, Department of Public Enterprises : Member

(v) Director General (Supplies and Disposals), Department of Commerce, : Member

(vii) Ministry of Commerce and Industry

(viii) Additional Secretary and Development Commissioner (MSME) : Member Secretary

3. The Committee will undertake the following functions:

(i) Consider the requests of the Central Ministries/ Departments/PSUs for exemption, on a case to case basis, from the 20% target;

(ii) Review the list of 358 items (as per Appendix) reserved for exclusive purchase from the MSEs based on the feedback received from the Central Ministries/Departments/PSUs ;

(iii) Review the grievances received from MSEs regarding Government procurement, including imposition of unreasonable conditions in the tenders floated by the Government Departments/PSUs; and

(iv) Suggest special measures to be taken by the Central Ministries/Departments for enhancing their procurements from MSEs.

4. The Committee may co-opt any other Ministries/ Departments of the Central Government as well as State Governments or invite any other expert/person associated/ concerned with the MSMEs in its meetings, as and when required.

5. The Office of the Development Commissioner (MSME) will provide secretariat support to this Committee.

6. This issues with the approval of the Competent Authority.

Sd-

(Praveen Mahto)

Additional Economic Adviser

Ph: 23062230, Fax: 23061611

APPENDIX

LIST OF ITEMS RESERVED FOR PURCHASE FROM SMALL SCALE INDUSTRIAL UNITS INCLUDING HANDICRAFT SECTOR.

Sl No.	Item Description
1.	AAC/and ACSR Conductor upto 19 strands
2.	Agricultural Implements
	(a) Hand Operated tools and implements
	(b) Animal driven implements
3.	Air/Room Coolers
4.	Aluminum builder's hardware
5.	Ambulance stretcher
6.	Ammeters/ohm meter/Volt meter (Electro magnetic upto Class I accuracy)
7.	Anklets Web Khaki
8.	Augur (Carpenters)
9.	Automobile Head lights Assembly
10.	Badges cloth embroidered and metals
11.	Bags of all types i.e. made of leather, cotton, canvas and jute etc. including kit bags, mail bags, sleeping bags and water-proof bag.
12.	Bandage cloth
13.	Barbed Wire
14.	Basket cane (Procurement can also be made from State Forest Corpn. and State Handicrafts Corporation)
15.	Bath tubs
16.	Battery Charger
17.	Battery Eliminator
18.	Beam Scales (upto 1.5 tons)
19.	Belt leather and straps
20.	Bench Vices
21.	Bituminous Paints
22.	Blotting Paper

23. Bolts and Nuts
24. Bolts Sliding
25. Bone Meal
26. Boot Polish
27. Boots and Shoes of all types including canvas shoes
28. Bowls
29. Boxes Leather
30. Boxes made of metal
31. Braces
32. Brackets other than those used in Railways
33. Brass Wire
34. Brief Cases (other than moulded luggage)
35. Brooms
36. Brushes of all types
37. Buckets of all types
38. Button of all types
39. Candle Wax Carriage
40. Cane Valves/stock valves (for water fittings only)
41. Cans metallic (for milk and measuring)
42. Canvas Products :
    (a) Water Proof Deliver, Bags to spec. No. IS - 1422/70
    (b) Bonnet Covers and Radiators Muff. to spec Drg. Lv 7/NSN/IA/130295
43. Capes Cotton and Woollen
44. Capes Waterproof
45. Castor Oil
46. Ceiling roses upto 15 amps
47. Centrifugal steel plate blowers
48. Centrifugal Pumps suction and delivery 150 mm. x 150 mm
49. Chaff Cutter Blade
50. Chains lashing
51. Chappals and sandals
52. Chamois Leather
53. Chokes for light fitting
54. Chrome Tanned leather (Semi-finished Buffalo and Cow)
55. Circlips
56. Claw Bars and Wires
57. Cleaning Powder
58. Clinical Thermometers
59. Cloth Covers
60. Cloth Jaconet
61. Cloth Sponge
62. Coir fibre and Coir yarn
63. Coir mattress cushions and matting
64. Coir Rope hawserlaid
65. Community Radio Receivers
66. Conduit pipes
67. Copper nail
68. Copper Napthenate
69. Copper sulphate
70. Cord Twine Maker
71. Cordage Others
72. Corrugated Paper Board and Boxes
73. Cotton Absorbent
74. Cotton Belts
75. Cotton Carriers
76. Cotton Cases
77. Cotton Cord Twine
78. Cotton Hosiery
79. Cotton Packs
80. Cotton Pouches
81. Cotton Ropes
82. Cotton Singlets
83. Cotton Sling
84. Cotton Straps
85. Cotton tapes and laces
86. Cotton Wool (Non absorbent)
87. Crates Wooden and plastic
88. (a) Crucibles upto No. 200
    (b) Crucibles Graphite upto No. 500
    (c) Other Crucibles upto 30 kgs.
89. Cumblies and blankets
90. Curtains mosquito
91. Cutters
92. Dibutyl phthalate
93. Diesel engines upto 15 H.P
94. Dimethyl Phthalate
95. Disinfectant Fluids
96. Distribution Board upto 15 amps
97. Domestic Electric appliances as per BIS Specifications :-

- Toaster Electric, Elect. Iron, Hot Plates, Elect. Mixer, Grinders, Room heaters and convectors and ovens

98. Domestic (House Wiring) P.V.C. Cables and Wires (Aluminum) Conforming to the prescribed BIS Specifications and upto 10.00 mm sq. nominal cross section
99. Drawing and Mathematical Instruments

100. Drums and Barrels
101. Dust Bins
102. Dust Shield leather
103. Dusters Cotton all types except the items required in Khadi
104. Dyes :
(a) Azo Dyes (Direct and Acid)
(b) Basic Dyes
105. Electric Call bells/buzzers/door bells
106. Electric Soldering Iron
107. Electric Transmission Line Hardware items like steel cross bars, cross arms clamps arching horn, brackets, etc
108. Electronic door bell
109. Emergency Light (Rechargeable type)
110. Enamel Wares and Enamel Utensils
111. Equipment camouflage Bamboo support
112. Exhaust Muffler
113. Expanded Metal
114. Eyelets
115. Film Polythene - including wide width film
116. Film spools and cans
117. Fire Extinguishers (wall type)
118. Foot Powder
119. French polish
120. Funnels
121. Fuse Cut outs
122. Fuse Unit
123. Garments (excluding supply from Indian Ordnance Factories)
124. Gas mantels
125. Gauze cloth
126. Gauze surgical all types
127. Ghamellas (Tasllas)
128. Glass Ampules
129. Glass and Pressed Wares
130. Glue
131. Grease Nipples and Grease guns
132. Gun cases
133. Gun Metal Bushes
134. Gumtape
135. Hand drawn carts of all types
136. Hand gloves of all types
137. Hand Lamps Railways
138. Hand numbering machine
139. Hand pounded Rice (polished and unpolished)
140. Hand presses
141. Hand Pump
142. Hand Tools of all types
143. Handles wooden and bamboo (Procurement can also be made from State Forest Corpn. and State Handicrafts Corporation)
144. Harness Leather
145. Hasps and Staples
146. Haver Sacks
147. Helmet Non-Metallic
148. Hide and country leather of all types
149. Hinges
150. Hob nails
151. Holdall
152. Honey
153. Horse and Mule Shoes
154. Hydraulic Jacks below 30 ton capacity
155. Insecticides Dust and Sprayers (Manual only)
156. Invalid wheeled chairs.
157. Invertor domestic type upto 5 KVA
158. Iron (dhobi)
159. Key board wooden
160. Kit Boxes
161. Kodali
162. Lace leather
163. Lamp holders
164. Lamp signal
165. Lanterns Posts and bodies
166. Lanyard
167. Latex foam sponge
168. Lathies
169. Letter Boxes
170. Lighting Arresters - upto 22 kv
171. Link Clip
172. Linseed Oil
173. Lint Plain
174. Lockers
175. Lubricators
176. L.T. Porcelain KITKAT and Fuse Grips
177. Machine Screws
178. Magnesium Sulphate
179. Mallet Wooden
180. Manhole covers
181. Measuring Tapes and Sticks

182. Metal clad switches (upto 30 Amps)
183. Metal Polish
184. Metallic containers and drums other than N.E.C. (Not elsewhere classified)
185. Metric weights
186. Microscope for normal medical use
187. Miniature bulbs (for torches only)
188. M.S. Tie Bars
189. Nail Cutters
190. Naphthalene Balls
191. Newar
192. Nickel Sulphate
193. Nylon Stocking
194. Nylon Tapes and Laces
195. Oil Bound Distemper
196. Oil Stoves (Wick stoves only)
197. Pad locks of all types
198. Paint remover
199. Palma Rosa Oil
200. Palmgur
201. Pans Lavatory Flush
202. Paper conversion products- paper bags, envelops, Ice-cream cup, paper cup and saucers and paper Plates
203. Paper Tapes (Gummed)
204. Pappads
205. Pickles and Chutney
206. Piles fabric
207. Pillows
208. Plaster of Paris
209. Plastic Blow Moulded Containers upto 20 litre excluding Poly Ethylene Terphthalate (PET) Containers
210. Plastic cane
211. Playing Cards
212. Plugs and Sockets electric upto 15 Amp
213. Polythene bags
214. Polythene Pipes
215. Post Picket (Wooden)
216. Postal Lead seals
217. Potassium Nitrate
218. Pouches
219. Pressure Die Casting upto 0.75 kg
220. Privy Pans
221. Pulley Wire
222. PVC footwears
223. PVC pipes upto 110 mm
224. PVC Insulated Aluminium Cables (upto 120 sq. mm) (ISS:694)
225. Quilts, Razais
226. Rags
227. Railway Carriage light fittings
228. Rakes Ballast
229. Razors
230. RCC Pipes upto 1200 mm. dia
231. RCC Poles Prestressed
232. Rivets of all types
233. Rolling Shutters
234. Roof light Fittings
235. Rubber Balloons
236. Rubber Cord
237. Rubber Hoses (Unbranded)
238. Rubber Tubing (Excluding braided tubing)
239. Rubberised Garments Cap and Caps etc
240. Rust/Scale Removing composition
241. Safe meat and milk
242. Safety matches
243. Safety Pins (and other similar products like paper pins, staples pins etc.)
244. Sanitary Plumbing fittings
245. Sanitary Towels
246. Scientific Laboratory glass wares (Barring sophisticated items)
247. Scissors cutting (ordinary)
248. Screws of all types including High Tensile
249. Sheep skin all types
250. Shellac
251. Shoe laces
252. Shovels
253. Sign Boards painted
254. Silk ribbon
255. Silk Webbing
256. Skiboots and shoes
257. Sluice Valves
258. Snapfastner (Excluding 4 pcs. ones)
259. Soap Carbolic
260. Soap Curd
261. Soap Liquid
262. Soap Soft
263. Soap washing or laundary soap
264. Soap Yellow
265. Socket/pipes

266. Sodium Nitrate
267. Sodium Silicate
268. Sole leather
269. Spectacle frames
270. Spiked boot
271. Sports shoes made out of leather (for all Sports games)
272. Squirrel Cage Induction Motors upto and including 100 KW440 volts 3 phase
273. Stapling machine
274. Steel Almirah
275. Steel beds stead
276. Steel Chair
277. Steel desks
278. Steel racks/shelf
279. Steel stools
280. Steel trunks
281. Steel wool
282. Steel and aluminium windows and ventilators
283. Stockinet
284. Stone and stone quarry rollers
285. Stoneware jars
286. Stranded Wire
287. Street light fittings
288. Student Microscope
289. Studs (excluding high tensile)
290. Surgical Gloves (Except Plastic)
291. Table knives (Excluding Cutlery)
292. Tack Metallic
293. Taps
294. Tarpaulins
295. Teak fabricated round blocks
296. Tent Poles
297. Tentage Civil/Military and Salitah Jute for Tentage
298. Textiles manufactures other than N.E.C. (not elsewhere classified)
299. Tiles
300. Tin Boxes for postage stamp
301. Tin can unprinted upto 4 gallons capacity (other than can O.T.S.)
302. Tin Mess
303. Tip Boots
304. Toggle Switches
305. Toilet Rolls
306. Transformer type welding sets conforming to IS:1291/75 (upto 600 amps)
307. Transistor Radio upto 3 band
308. Transistorised Insulation - Testers
309. Trays
310. Trays for postal use
311. Trolley
312. Trollies - drinking water
313. Tubular Poles
314. Tyres and Tubes (Cycles)
315. Umbrellas
316. Utensils all types
317. Valves Metallic
318. Varnish Black Japan
319. Voltage Stablisers including C.V.T's
320. Washers all types
321. Water Proof Covers
322. Water Proof paper
323. Water tanks upto 15,000 litres capacity
324. Wax sealing
325. Waxed paper
326. Weighing Scale
327. Welded Wiremash
328. Wheel barrows
329. Whistle
330. Wicks cotton
331. Wing Shield Wipers (Arms and Blades only)
332. Wire brushes and Fibre Brushes
333. Wire Fencing and Fittings
334. Wire nails and Horse shoe nails
335. Wire nettings of gauze thicker than 100 mesh size
336. Wood Wool
337. Wooden ammunition boxes
338. Wooden Boards
339. Wooden Box for Stamps
340. Wooden Boxes and Cases N.E.C. (Not elsewhere classified)
341. Wooden Chairs
342. Wooden Flush Door Shutters
343. Wooden packing cases all sizes
344. Wooden pins
345. Wooden plugs
346. Wooden shelves
347. Wooden veneers
348. Woollen hosiery
349. Zinc Sulphate
350. Zip Fasteners

HANDICRAFT ITEMS

Sl.No.	Item Description	Source of Supply
351	Cane furniture Handlooms	North Eastern Handicrafts and Development Corporation Assam Govt. Marketing Corpn. Craft Society of Manipur Nagaland Handicrafts and Handlooms Development Corpn.
352.	Bamboo file tray, Baskets, Pencil stand, side racks etc.	-do-
353.	Artistic Wooden Furniture	Rajasthan Small Industries Corpn., U.P. Export Corporation.
354.	Wooden paper weight, racks etc.	-do-
355.	Glass covers made and grass jute of wood	-do-
356.	Jute furniture	West Bengal Handicrafts Dev.Corpn. Jute Mfg. Development Corporation Orissa State Handicrafts Dev.Corpn.
357.	Jute bags, file cover	-do-
358.	Woolen and silk carpets	U.P. Export Corporation JandK Sale and Export Corporation

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Ministry of Micro, Small and Medium Enterprises
Office of Development Commissioner (MSME)

New Delhi,
The 23rd March, 2012

ORDER

Public Procurement Policy for Micro and Small Enterprises (MSEs) Order, 2012

Whereas, the Central Government Ministries, Departments and Public Sector Undertakings shall procure minimum of 20 per cent of their annual value of goods or services from Micro and Small Enterprises;

And whereas, the Public Procurement Policy shall apply to Micro and Small Enterprises registered with District Industries Centers or Khadi and Village Industries Commission or Khadi and Village Industries Board or Coir Board or National Small Industries Corporation or Directorate of Handicrafts and Handloom or any other body specified by Ministry of Micro, Small and Medium Enterprises;

And whereas, the Public Procurement Policy rests upon core principles of competitiveness, adhering to sound procurement practices and execution of orders for supply of goods or services in accordance with a system which is fair, equitable, transparent, competitive and cost effective; and

And whereas, for facilitating promotion and development of micro and small enterprises, the Central Government or the State Government, as the case may be, by Order notify from time to time, preference policies in respect of procurement of goods and services, produced and provided by micro and small enterprises, by its Ministries or Departments, as the case may be, or its aided institutions and public sector enterprises.

Now, therefore, in exercise of the powers conferred in section 11 of the Micro, Small and Medium Enterprises Development (MSMED) Act 2006, the Central Government, by Order, notifies the Public Procurement Policy (hereinafter referred to as the Policy) in respect of procurement of goods and services, produced and provided by micro and small enterprises, by its Ministries, Departments and Public Sector Undertakings.

2. Short title and commencement. -

(1) This Order is titled as 'Public Procurement Policy for Micro and Small Enterprises (MSEs) Order, 2012'.

(2) It shall come into force with effect from 1st April 2012.

3. Mandatory procurement from Micro Small and Enterprises. – (1) Every Central Ministry or Department or Public Sector Undertaking shall set an annual goal of procurement from Micro and Small Enterprises from the financial year 2012-13 and onwards, with the objective of achieving an overall procurement of minimum of 20 per cent, of total annual purchases of products produced and services rendered by Micro and Small Enterprises in a period of three years.

(2)Annual goal of procurement also include sub-contracts to Micro and Small Enterprises by large enterprises and consortia of Micro and Small Enterprises formed by National Small Industries Corporation.

(3)After a period of three years i.e. from 1st April 2015, overall procurement goal of minimum of 20 per cent shall be made mandatory.

(4)The Central Ministries, Departments and Public Sector Undertakings which fail to meet the annual goal shall substantiate with reasons to the Review Committee headed by Secretary (Micro, Small and Medium Enterprises), constituted in Ministry of Micro, Small and Medium Enterprises, under this Policy.

4.Special provisions for Micro and Small Enterprises owned by Scheduled Castes or Scheduled Tribes. — Out of 20 per cent target of annual procurement from Micro and Small Enterprises, a sub-target of 20 per cent (i.e., 4 per cent out of 20 per cent) shall be earmarked for procurement from Micro and Small Enterprises owned by the Scheduled Caste or the Scheduled Tribe entrepreneurs. Provided that, in event of failure of such Micro and Small Enterprises to participate in tender process or meet tender requirements and L1 price, 4 per cent sub-target for procurement earmarked for Micro and Small Enterprises owned by Scheduled Caste or Scheduled Tribe entrepreneurs shall be met from other Micro and Small Enterprises.

5.Reporting of targets in Annual Report. — (1) The data on Government procurements from Micro and Small Enterprises is vital for strengthening the Policy and for this purpose, every Central Ministry or Department or Public Sector Undertaking shall report goals set with respect to procurement to be met from Micro and Small Enterprises and achievement made thereto in their respective Annual Reports.

(2) The annual reporting shall facilitate in better understanding of support being provided by different Ministries or Departments or Public Sector Undertakings to Micro and Small Enterprises.

6. Price quotation in tenders. — (1) In tender, participating Micro and Small Enterprises quoting price within price band of L1+15 per cent shall also be allowed to supply a portion of requirement by bringing down their price to L1 price in a situation where L1 price is from someone other than a Micro and Small Enterprise and such Micro and Small Enterprise shall be allowed to supply up to 20 per cent of total tendered value.

(2) In case of more than one such Micro and Small Enterprise, the supply shall be shared proportionately (to tendered quantity).

7.Developing Micro and Small Enterprise vendors. – The Central Ministries or Departments or Public Sector Undertakings shall take necessary steps to develop appropriate vendors by organizing Vendor Development Programmes or Buyer-Seller Meets and entering into Rate Contract with Micro and Small Enterprises for a specified period in respect of periodic requirements.

8.Annual Plan for Procurement from Micro and Small Enterprises on websites. – The Ministries or Departments or Public Sector Undertakings shall also prepare Annual Procurement Plan for purchases and upload the same on their official website so that Micro and Small Enterprises may get advance information about requirement of procurement agencies.

9.Enhancing participations of Micro and Small Enterprises including those owned by Scheduled Castes or Scheduled Tribes in Government procurements. — For enhancing participation of Scheduled Castes or Scheduled Tribes in Government procurement, the Central Government Ministries, Departments and Public Sector Undertakings shall take following steps, namely:-

(a) Special Vendor Development Programmes or Buyer-Seller Meets shall be conducted by Departments/Public Sector Undertakings for Scheduled Castes or Scheduled Tribes;

(b) Outreach programmes shall be conducted by National Small Industries Corporation to cover more and more Micro and Small Enterprises from Scheduled Castes or Scheduled Tribes under its schemes of consortia formation; and

(c) National Small Industries Corporation shall open a special window for Scheduled Castes or Scheduled Tribes under its Single Point Registration Scheme (SPRS).

10.Reduction in transaction cost. — To reduce transaction cost of doing business, Micro and Small Enterprises shall be facilitated by providing them tender sets free of cost, exempting Micro and Small Enterprises from payment of earnest money, adopting e-procurement to bring in transparency in tendering

process and setting up a Grievance Cell in the Ministry of Micro, Small and Medium Enterprises.

11.Reservation of specific items for procurement. — To enable wider dispersal of enterprises in the country, particularly in rural areas, the Central Government Ministries or Departments or Public Sector Undertakings shall continue to procure 358 items (Appendix) from Micro and Small Enterprises, which have been reserved for exclusive purchase from them. This will help in promotion and growth of Micro and Small Enterprises, including Khadi and village industries, which play a critical role in fostering inclusive growth in the country.

12.Review Committee. – (1) A Review Committee has been constituted under the Chairmanship of Secretary, Ministry of Micro, Small and Medium Enterprises, for monitoring and review of Public Procurement Policy for Micro and Small Enterprises vide Order No. 21(1)/2007-MA dated the 21st June 2010 (Annexure).

(2) This Committee shall, inter alia, review list of 358 items reserved for exclusive purchase from Micro and Small Enterprises on a continuous basis, consider requests of the Central Ministries or Departments or Public Sector Undertakings for exemption from 20 per cent target on a case to case basis and monitor achievements under the Policy.

13.Setting up of Grievance Cell. — In addition, a 'Grievance Cell' will be set up in Ministry of Micro, Small and Medium Enterprises for redressing grievances of Micro and Small Enterprises in Government procurement. This cell shall take up issues related to Government procurement raised by Micro and Small Enterprises with Departments or agencies concerned, including imposition of unreasonable conditions in tenders floated by Government Departments or agencies that put Micro and Small Enterprises at a disadvantage.

14.Special Provisions for Defence Procurements. — Given their unique nature, defence armament imports shall not be included in computing 20 per cent

goal for Ministry of Defence. In addition, defence equipments like weapon systems, missiles, etc. shall remain out of purview of such Policy of reservation.

15.Monitoring of Goals. — The monitoring of goals set under the Policy shall be done, in so far as they relate to the Defence sector, by Ministry of Defence itself in accordance with suitable procedures to be established by them.

16.Removal of difficulty. — Any difficulties experienced during the course of implementation of the above Policy shall be clarified by Ministry of Micro, Small and Medium Enterprises through suitable Press releases which would be kept on the public domain.

(AMARENDRA SINHA)
Additional Secretary and Development Commissioner (MSME)

Annexure

No. 21(1)/2007-MA
Government of India
Ministry of Micro, Small and Medium Enterprises
Office of the Development Commissioner (MSME)
******

'A' Wing, 7th Floor, Nirman Bhavan,
New Delhi-110108
Dated: 21st June, 2010

ORDER

Subject: **Constitution of a Committee for monitoring and review of the Public Procurement Policy for Micro and Small Enterprises**

Pending approval of the new Public Procurement Policy for Micro and Small Enterprises (MSEs), a Committee is hereby constituted for looking into the applicability of some of the provisions of the proposed Policy in respect of select Central Ministries/Departments.. The Committee will be chaired by the Secretary, Ministry of Micro, Small and Medium Enterprises.

2. The composition of the Committee will be as follows:

(i)	Secretary, Ministry of MSME	:	Chairman
(ii)	Secretary, Planning Commission	:	Member
(iv)	Secretary, Department of Public Enterprises	:	Member
(v)	Director General (Supplies and Disposals), Department of Commerce,	:	Member
(vii)	Ministry of Commerce and Industry		
(viii)	Additional Secretary and Development Commissioner (MSME)	:	Member Secretary

3. The Committee will undertake the following functions:

(i) Consider the requests of the Central Ministries/Departments/PSUs for exemption, on a case to case basis, from the 20% target;
(ii) Review the list of 358 items (as per Appendix) reserved for exclusive purchase from the MSEs based on the feedback received from the Central Ministries/Departments/PSUs ;

(iii) Review the grievances received from MSEs regarding Government procurement, including imposition of unreasonable conditions in the tenders floated by the Government Departments/PSUs; and

(iv) Suggest special measures to be taken by the Central Ministries/Departments for enhancing their procurements from MSEs.

4. The Committee may co-opt any other Ministries/Departments of the Central Government as well as State Governments or invite any other expert/person associated/concerned with the MSMEs in its meetings, as and when required.

5. The Office of the Development Commissioner (MSME) will provide secretariat support to this Committee.

6. This issues with the approval of the Competent Authority.

Sd/-
(Praveen Mahto)
Additional Economic Adviser
Ph: 23062230, Fax: 23061611

To,

All Members of the Committee

Copy to:

1. Cabinet Secretariat (Shri V.P.Arora, Under Secretary), w.r.t. their O.M.No. 601/2/1/2009-Cab.III dated 24.02.2010
2. PS to Minister (MSME)
3. Sr. PPS to Secretary (MSME)

Appendix

LIST OF ITEMS RESERVED FOR PURCHASE FROM SMALL SCALE INDUSTRIAL UNITS INCLUDING HANDICRAFT SECTOR.

Sl No.	Item Description
1.	AAC/and ACSR Conductor upto 19 strands
2.	Agricultural Implements (a) Hand Operated tools and implements (b)Animal driven implements
3.	Air/Room Coolers
4.	Aluminum builder's hardware
5.	Ambulance stretcher
6.	Ammeters/ohm meter/Volt meter (Electro magnetic upto Class I accuracy)
7.	Anklets Web Khaki
8.	Augur (Carpenters)
9.	Automobile Head lights Assembly
10.	Badges cloth embroidered and metals
11.	Bags of all types i.e. made of leather, cotton, canvas and jute etc. including kit bags, mail bags, sleeping bags and water-proof bag.
12.	Bandage cloth
13.	Barbed Wire
14.	Basket cane (Procurement can also be made from State Forest Corpn. and State Handicrafts Corporation)
15.	Bath tubs
16.	Battery Charger
17.	Battery Eliminator
18.	Beam Scales (upto 1.5 tons)
19.	Belt leather and straps
20.	Bench Vices
21.	Bituminous Paints
22.	Blotting Paper
23.	Bolts and Nuts
24.	Bolts Sliding
25.	Bone Meal
26.	Boot Polish
27.	Boots and Shoes of all types including canvas shoes
28.	Bowls
29.	Boxes Leather
30.	Boxes made of metal
31.	Braces
32.	Brackets other than those used in Railways
33.	Brass Wire
34.	Brief Cases (other than moulded luggage)

35. Brooms
36. Brushes of all types
37. Buckets of all types
38. Button of all types
39. Candle Wax Carriage
40. Cane Valves/stock valves (for water fittings only)
41. Cans metallic (for milk and measuring)
42. Canvas Products :
    (a) Water Proof Deliver, Bags to spec. No. IS - 1422/70
    (b) Bonnet Covers and Radiators Muff. to spec. Drg. Lv 7/NSN/IA/130295
43. Capes Cotton and Woollen
44. Capes Waterproof
45. Castor Oil
46. Ceiling roses upto 15 amps
47. Centrifugal steel plate blowers
48. Centrifugal Pumps suction and delivery 150 mm. x 150 mm
49. Chaff Cutter Blade
50. Chains lashing
51. Chappals and sandals
52. Chamois Leather
53. Chokes for light fitting
54. Chrome Tanned leather (Semi-finished Buffalo and Cow)
55. Circlips
56. Claw Bars and Wires
57. Cleaning Powder
58. Clinical Thermometers
59. Cloth Covers
60. Cloth Jaconet
61. Cloth Sponge
62. Coir fibre and Coir yarn
63. Coir mattress cushions and matting
64. Coir Rope hawserlaid
65. Community Radio Receivers
66. Conduit pipes
67. Copper nail
68. Copper Napthenate
69. Copper sulphate
70. Cord Twine Maker
71. Cordage Others
72. Corrugated Paper Board and Boxes
73. Cotton Absorbent
74. Cotton Belts
75. Cotton Carriers
76. Cotton Cases
77. Cotton Cord Twine

78. Cotton Hosiery
79. Cotton Packs
80. Cotton Pouches
81. Cotton Ropes
82. Cotton Singlets
83. Cotton Sling
84. Cotton Straps
85. Cotton tapes and laces
86. Cotton Wool (Non absorbent)
87. Crates Wooden and plastic
88. (a) Crucibles upto No. 200
    (b) Crucibles Graphite upto No. 500
    (c) Other Crucibles upto 30 kgs.
89. Cumblies and blankets
90. Curtains mosquito
91. Cutters
92. Dibutyl phthalate
93. Diesel engines upto 15 H.P
94. Dimethyl Phthalate
95. Disinfectant Fluids
96. Distribution Board upto 15 amps
97. Domestic Electric appliances as per BIS Specifications:-
    - Toaster Electric, Elect. Iron, Hot Plates, Elect. Mixer, Grinders, Room heaters and convectors and ovens
98. Domestic (House Wiring) P.V.C. Cables and Wires (Aluminum) Conforming to the prescribed BIS Specifications and upto 10.00 mm sq. nominal cross section
99. Drawing and Mathematical Instruments
100. Drums and Barrels
101. Dust Bins
102. Dust Shield leather
103. Dusters Cotton all types except the items required in Khadi
104. Dyes :
    (a) Azo Dyes (Direct and Acid)
    (b) Basic Dyes
105. Electric Call bells/buzzers/door bells
106. Electric Soldering Iron
107. Electric Transmission Line Hardware items like steel cross bars, cross arms clamps arching horn, brackets, etc
108. Electronic door bell
109. Emergency Light (Rechargeable type)
110. Enamel Wares and Enamel Utensils
111. Equipment camouflage Bamboo support
112. Exhaust Muffler
113. Expanded Metal
114. Eyelets

115. Film Polythene - including wide width film
116. Film spools and cans
117. Fire Extinguishers (wall type)
118. Foot Powder
119. French polish
120. Funnels
121. Fuse Cut outs
122. Fuse Unit
123. Garments (excluding supply from Indian Ordnance Factories)
124. Gas mantels
125. Gauze cloth
126. Gauze surgical all types
127. Ghamellas (Tasllas)
128. Glass Ampules
129. Glass and Pressed Wares
130. Glue
131. Grease Nipples and Grease guns
132. Gun cases
133. Gun Metal Bushes
134. Gumtape
135. Hand drawn carts of all types
136. Hand gloves of all types
137. Hand Lamps Railways
138. Hand numbering machine
139. Hand pounded Rice (polished and unpolished)
140. Hand presses
141. Hand Pump
142. Hand Tools of all types
143. Handles wooden and bamboo (Procurement can also be made from State Forest Corpn. and State Handicrafts Corporation)
144. Harness Leather
145. Hasps and Staples
146. Haver Sacks
147. Helmet Non-Metallic
148. Hide and country leather of all types
149. Hinges
150. Hob nails
151. Holdall
152. Honey
153. Horse and Mule Shoes
154. Hydraulic Jacks below 30 ton capacity
155. Insecticides Dust and Sprayers (Manual only)
156. Invalid wheeled chairs.
157. Invertor domestic type upto 5 KVA
158. Iron (dhobi)
159. Key board wooden

160. Kit Boxes
161. Kodali
162. Lace leather
163. Lamp holders
164. Lamp signal
165. Lanterns Posts and bodies
166. Lanyard
167. Latex foam sponge
168. Lathies
169. Letter Boxes
170. Lighting Arresters - upto 22 kv
171. Link Clip
172. Linseed Oil
173. Lint Plain
174. Lockers
175. Lubricators
176. L.T. Porcelain KITKAT and Fuse Grips
177. Machine Screws
178. Magnesium Sulphate
179. Mallet Wooden
180. Manhole covers
181. Measuring Tapes and Sticks
182. Metal clad switches (upto 30 Amps)
183. Metal Polish
184. Metallic containers and drums other than N.E.C. (Not elsewhere classified)
185. Metric weights
186. Microscope for normal medical use
187. Miniature bulbs (for torches only)
188. M.S. Tie Bars
189. Nail Cutters
190. Naphthalene Balls
191. Newar
192. Nickel Sulphate
193. Nylon Stocking
194. Nylon Tapes and Laces
195. Oil Bound Distemper
196. Oil Stoves (Wick stoves only)
197. Pad locks of all types
198. Paint remover
199. Palma Rosa Oil
200. Palmgur
201. Pans Lavatory Flush
202. Paper conversion products- paper bags, envelops, Ice-cream cup, paper cup and saucers and paper Plates
203. Paper Tapes (Gummed)

204. Pappads
205. Pickles and Chutney
206. Piles fabric
207. Pillows
208. Plaster of Paris
209. Plastic Blow Moulded Containers upto 20 litre excluding Poly Ethylene Terphthalate (PET) Containers
210. Plastic cane
211. Playing Cards
212. Plugs and Sockets electric upto 15 Amp
213. Polythene bags
214. Polythene Pipes
215. Post Picket (Wooden)
216. Postal Lead seals
217. Potassium Nitrate
218. Pouches
219. Pressure Die Casting upto 0.75 kg
220. Privy Pans
221. Pulley Wire
222. PVC footwears
223. PVC pipes upto 110 mm
224. PVC Insulated Aluminium Cables (upto 120 sq. mm) (ISS:694)
225. Quilts, Razais
226. Rags
227. Railway Carriage light fittings
228. Rakes Ballast
229. Razors
230. RCC Pipes upto 1200 mm. dia
231. RCC Poles Prestressed
232. Rivets of all types
233. Rolling Shutters
234. Roof light Fittings
235. Rubber Balloons
236. Rubber Cord
237. Rubber Hoses (Unbranded)
238. Rubber Tubing (Excluding braided tubing)
239. Rubberised Garments Cap and Caps etc
240. Rust/Scale Removing composition
241. Safe meat and milk
242. Safety matches
243. Safety Pins (and other similar products like paper pins, staples pins etc.)
244. Sanitary Plumbing fittings
245. Sanitary Towels
246. Scientific Laboratory glass wares (Barring sophisticated items)
247. Scissors cutting (ordinary)

248. Screws of all types including High Tensile
249. Sheep skin all types
250. Shellac
251. Shoe laces
252. Shovels
253. Sign Boards painted
254. Silk ribbon
255. Silk Webbing
256. Skiboots and shoes
257. Sluice Valves
258. Snapfastner (Excluding 4 pcs. ones)
259. Soap Carbolic
260. Soap Curd
261. Soap Liquid
262. Soap Soft
263. Soap washing or laundary soap
264. Soap Yellow
265. Socket/pipes
266. Sodium Nitrate
267. Sodium Silicate
268. Sole leather
269. Spectacle frames
270. Spiked boot
271. Sports shoes made out of leather (for all Sports games)
272. Squirrel Cage Induction Motors upto and including 100 KW440 volts 3 phase
273. Stapling machine
274. Steel Almirah
275. Steel beds stead
276. Steel Chair
277. Steel desks
278. Steel racks/shelf
279. Steel stools
280. Steel trunks
281. Steel wool
282. Steel and aluminium windows and ventilators
283. Stockinet
284. Stone and stone quarry rollers
285. Stoneware jars
286. Stranded Wire
287. Street light fittings
288. Student Microscope
289. Studs (excluding high tensile)
290. Surgical Gloves (Except Plastic)
291. Table knives (Excluding Cutlery)
292. Tack Metallic

293. Taps
294. Tarpaulins
295. Teak fabricated round blocks
296. Tent Poles
297. Tentage Civil/Military and Salitah Jute for Tentage
298. Textiles manufactures other than N.E.C. (not elsewhere classified)
299. Tiles
300. Tin Boxes for postage stamp
301. Tin can unprinted upto 4 gallons capacity (other than can O.T.S.)
302. Tin Mess
303. Tip Boots
304. Toggle Switches
305. Toilet Rolls
306. Transformer type welding sets conforming to IS:1291/75 (upto 600 amps)
307. Transistor Radio upto 3 band
308. Transistorised Insulation - Testers
309. Trays
310. Trays for postal use
311. Trolley
312. Trollies - drinking water
313. Tubular Poles
314. Tyres and Tubes (Cycles)
315. Umbrellas
316. Utensils all types
317. Valves Metallic
318. Varnish Black Japan
319. Voltage Stablisers including C.V.T's
320. Washers all types
321. Water Proof Covers
322. Water Proof paper
323. Water tanks upto 15,000 litres capacity
324. Wax sealing
325. Waxed paper
326. Weighing Scale
327. Welded Wire mash
328. Wheel barrows
329. Whistle
330. Wicks cotton
331. Wing Shield Wipers (Arms and Blades only)
332. Wire brushes and Fibre Brushes
333. Wire Fencing and Fittings
334. Wire nails and Horse shoe nails
335. Wire nettings of gauze thicker than 100 mesh size
336. Wood Wool
337. Wooden ammunition boxes

338. Wooden Boards
339. Wooden Box for Stamps
340. Wooden Boxes and Cases N.E.C. (Not elsewhere classified)
341. Wooden Chairs
342. Wooden Flush Door Shutters
343. Wooden packing cases all sizes
344. Wooden pins
345. Wooden plugs
346. Wooden shelves
347. Wooden veneers
348. Woolen hosiery
349. Zinc Sulphate
350. Zip Fasteners

HANDICRAFT ITEMS

Sl.No.	Item Description	Source of Supply
351	Cane furniture Handlooms	North Eastern Handicrafts and Development Corporation Assam Govt. Marketing Corpn. Craft Society of Manipur Nagaland Handicrafts and Handlooms Development Corpn.
352.	Bamboo file tray, Baskets, Pencil stand, side racks etc.	-do-
353.	Artistic Wooden Furniture	Rajasthan Small Industries Corpn., U.P. Export Corporation.
354.	Wooden paper weight, racks etc.	-do-
355.	Glass covers made of wood and grass jute	-do-
356.	Jute furniture	West Bengal Handicrafts Dev. Corpn. Jute Mfg. Development Corporation Orissa State Handicrafts Dev. Corpn.
357.	Jute bags, file cover	-do-
358.	Woolen and silk carpets	U.P. Export Corporation J and K Sale and Export Corporation

***

MA.TEC.POL.CON.3A 26th October 2020

Note to: SBU / Entity Heads

Relaxation in Past Track Record for Micro & Small Enterprises

The Government has been granting various relaxations to Micro & Small Enterprises (MSEs) and Startup vendors in public procurement from time to time. Accordingly, the relaxation norms for startups were communicated vide note MA.TEC.POL.CON.3A dated 30th July 2018. In line with the directions from MoP&NG as per the study carried out on "Enhancing efficiency and transparency in procurement of Oil PSUs", it has been decided to provide relaxations in past track record even to MSEs who are not startups in order to enhance the participation of MSEs.

In view of this, it is proposed to relax the past experience criteria to the extent of 15% for MSEs. For example, if the similar works specified in Bidder Qualification Criteria are 80%/50%/40% of estimated cost for 1/2/3 similar works respectively, then for MSE bidders the same would be 68%/42.5%/34% for 1/2/3 similar works respectively.

Similarly, there shall be a relaxation to the extent of 15% in the average annual financial turnover during the previous three financial years for MSEs subject to maintaining a minimum threshold of 30%. For example, if the average annual financial turnover is specified as 60%, then the same would be 51% for MSEs. However, if the average annual financial turnover is specified as 30%, there shall not be any relaxation in this limit for MSEs.

It is reiterated that the above relaxations would be subject to the MSEs meeting the quality, safety, performance and technical specifications. The relaxation criteria shall only be applicable for procurement of goods produced and services rendered by MSEs, and shall not be applicable for works contracts. It should also be ensured that the vendor has a valid MSE certificate as per the laid down policy. These relaxations, if applicable, shall be suitably incorporated in the tender documents.

All other provisions as per MSE policy shall continue to be complied with.

V S Chadha

V.S. Chadha
CGM (Corporate Finance)

cc: SBU / Entity Finance Heads

Ref: TEC:POL:CON 1st August 2017

Note To: All SBU/ Entity Heads, SBU/Entity Finance Heads

Subject: Clarification regarding award of job to MSE Vendor in case tendered item is non-divisible: Works Contracts

This refers to our note of even reference dated 9th June 2016 (copy enclosed as Annexure - I) on the above subject.

We had sought clarifications from MSME Ministry on the applicability of Public Procurement Policy for Micro and Small Enterprises (MSEs) to Works Contracts. They have clarified vide their letter reference F.No.21(6)/2015-MA dated 10th April 17 quoting their earlier letter reference F.No.21(8)/2011-MA dated 9th November16 whereby the definition of Goods and Services applicable under PP Policy has been summarized as follows :

Quote:

"Goods" include all articles, material, commodity, livestock, furniture, fixtures, raw material, spare parts, instruments, machinery, equipment, industrial plant, vehicles, aircrafts, ships, railways rolling stock assemblies, sub-assemblies, accessories, a group of machines comprising an integrated production process or such other categories of goods or intangible products like technology transfer, licenses, patents or other intellectual properties(but excludes books, publications, periodicals etc for a library), procured or otherwise acquired by a procuring entity. Procurement of goods may include certain small work or some services, which are incidental or consequential to the supply of such goods, such as transportation, insurance, installation, commissioning, training and maintenance;
"Service" means any subject matter of procurement other than goods or works, except those incidental or consequential to the service, and includes physical, maintenance, professional, intellectual, training, consultancy and advisory services or any other service classified or declared as such by procuring entity but does not include appointment of an individual made under any law, rules, regulations or order issued in this behalf. "Subject matter of procurement" means any item of procurement whether in the form of goods, services or works or a combination thereof;

Unquote:

In view of the above, our circular reference TEC:POL:CON dated 9th June 2016 is applicable for tenders pertaining to "non-divisible Goods" and "non-divisible Services" only. This will not be applicable for tenders pertaining to "Works Contracts". Therefore, the Purchase Preference clause for MSEs as mentioned in the tender conditions should be accordingly removed for tenders pertaining to "Works Contracts". However, in order to promote the spirit of the Policy, EMD exemption will be applicable to MSE vendors participating in the tenders involving works contracts as per the Industry practice.

Needless to mention that as per FAQ no: 18 of Public Procurement Policy for MSEs Order 2012 dated 24.10.2016, Public Procurement Policy is applicable to procurement of Goods produced and Services rendered by MSEs. Works/trading activities are excluded from the purview of the Public Procurement Policy.

Please be guided accordingly.

Bakshi 1/8/17.

(Rajiv Bakshi)
ED (Corporate Finance)

CC : CPO(M) : This also refers to the clarification given during your meeting with Jt. Secretary MSME, Director MSME & Dy. Director-MSME on 21.03.2017 on the applicability of PP Policy for MSEs to Works Contracts.

→ CFO(M) Dir(M) R-2/1/2020

विकास आयुक्त का कार्यालय
(सूक्ष्म, लघु एवं मध्यम उद्यम)
सूक्ष्म, लघु एवं मध्यम उद्यम मंत्रालय
(भारत सरकार)
निर्माण भवन, मौलाना आजाद रोड,
नई दिल्ली-110 108

सत्यमेव जयते

OFFICE OF THE DEVELOPMENT COMMISSONER
(MICRO, SMALL & MEDIUM ENTERPRISES)
MINISTRY OF MICRO, SMALL & MEDIUM ENTERPRISES
GOVERNMENT OF INDIA
Nirman Bhawan, 7th Floor, Maulana Azad Road,
New Delhi-110 108

Ph. EPAX-23063800, 23063802, 23063803, 23063804, 23063805 & 23063806

No. 5/1(1)/2019-P&G/ Policy
(P-14360)

Dated: 13 .12.2019

P.A. → No 6 sent to Agra Post

To

Bharat Petroleum Corporation Limited (BPCL)
Bharat Bhavan,
4 and 6 Currimbhoy Road,
Ballard Estate,
Mumbai

R-2/1

Subject: Verification of MSE certificate-reg.

Sir,

Kindly refer to this office letter no. 5/1(1)/2019-P&G/ Policy dated 06.12.2019 on the above cited subject. It is further clarified that for verification of the MSME certificate obtained by the MSMEs on the UAM portal, the CA certificate issued by Chartered Accountants based on the provisions of the MSMED Act, 2006 and notifications/ circulars issued from time to time may also be accepted as a supporting document.

2. This issue with the approval of Competent Authority.

Yours faithfully,

AP 13.12.19

(A.K. Tamaria)
Dy. Director (Policy)
Ph.:01123061163

Copy to:

Shri C.R.Ruparel,
M/s Bharat Transport Company,
Pune

विकास आयुक्त का कार्यालय
(सूक्ष्म, लघु एवं मध्यम उद्यम)
सूक्ष्म, लघु एवं मध्यम उद्यम मंत्रालय
(भारत सरकार)
निर्माण भवन, मौलाना आज़ाद रोड,
नई दिल्ली-110 108

सत्यमेव जयते

Speed Post
OFFICE OF THE DEVELOPMENT COMMISSONER
(MICRO, SMALL & MEDIUM ENTERPRISES)
MINISTRY OF MICRO, SMALL & MEDIUM ENTERPRISES
GOVERNMENT OF INDIA
Nirman Bhawan, 7th Floor, Maulana Azad Road,
New Delhi-110 108

Ph. EPAX-23063800, 23063802, 23063803, 23063804, 23063805 & 23063806

No. 5/1(1)/2019-P&G/ Policy
(P-14360)

Dated: 6 .12.2019

To

Bharat Petroleum Corporation Limited (BPCL)
Bharat Bhavan,
4 and 6 Currimbhoy Road,
Ballard Estate,
Mumbai

Subject: Verification of MSE certificate-reg.

11. The UAM of M/s Bharat Transport Co. bearing no. MH26E0047885, as mentioned are available on our portal https://udyogaadhaar.gov.in/UA/UA_VerifyUAM_Details.aspx

12. This registration on the UAM portal is done by firms on the basis of self-declaration. M/o MSME does not carry out verification of the information uploaded by the MSMEs.

13. The copy of the returns filed along with a certificate issued by Chartered Accountant have been submitted by M/s Bharat Transport Co. to this office, asking for a certificate from the Ministry submitting that your concern has asked for such a certificate.

14. This Ministry does not undertake any such verification exercise and, as already mentioned above, the registration is obtained on the basis of self-declaration. It is incumbent on the CPSEs concerned to verify/ ascertain the veracity of the claim of any MSME as regards any particular enterprise satisfying the criterion of the investment limits as mentioned in the MSMED Act, 2006 before giving benefits under Public Procurement Policy, etc.

15. This issues with the approval of Competent Authority.

Yours faithfully,

6.12.19

(A.K. Tamaria)
Dy. Director (Policy)
Ph.:01123061163

Copy to:

Shri C.R.Ruparel,
M/s Bharat Transport Company,
Pune

O/C 6/12

Ref : MA.TEC.POL.CON3A **27th November 2017**

Note To: All SBU /Entity Heads

Subject: Verification of original documents required for Bid Qualification Criteria in Open Tenders

In the annual sectorial review meeting with CMDs and CVOs of Petroleum sector at CVC New Delhi, CVC pointed out that submission of fake certificates were unearthed in one of the PSUs after the award of job and reiterated the need for validating the genuineness of certificates at the time of awarding the tenders to mitigate the problems being faced later on. CVC has advised that "Certificates of at least those vendors who have qualified should be verified before awarding of contract. Linking of payment to genuineness of certificates to be looked into". Vigilance department has also reiterated the need for issuance of suitable instructions in this regard.

In order to meet the requirement of validating the genuineness of various certificates/documents at the time of awarding the Open tenders to mitigate the problems being faced later on, the original BQC related documents of the vendors shortlisted for award shall be mandatorily verified by BPCL procurement office or by the consultant (in case of PMC) or by empanelled TPIA.

The verification may also cover confirmation regarding other items like issue of PO / Contracts, completion certificates which can be obtained directly from the issuing Company/Agency on their letter head, authenticity of email confirmation etc. However, this is only an indicative list.

Kindly issue suitable instructions to all concerned procurement / tendering groups for compliance.

Rajiv Bakshi
ED (Corporate Finance)

CC : All SBU / Entity Finance Heads

Date:_____

CERTIFCATE CONFIRMING ELIGIBILTY FOR BENEFITS OF PUBLIC PROCUREMENT POLICY AS MSMED ACT 2006

Ref: Tender No……. for……

This is to confirm that we have verified the investment limits and other details of Unit _____ pertaining to *M/s*_____and certify that they satisfy the eligibility criteria as per MSMED Act, 2006 and other notifications/circulars issued time to time in this regard. Accordingly, M/s_____is a Micro/Small enterprise under the said Act and are eligible to claim the benefits of public procurement policy as per MSMED Act 2006 for the tender mentioned above.

In case applicable:

Based on our verification of share holding pattern and other details, it is certified that M/s _____ meets the eligibility criteria under SC/ST provision of Public Procurement Policy Order 2012 and other notifications/circulars issued time to time in this regard and are hence eligible to claim benefits pertaining to SC/ST under the act.

In case applicable:

Based on our verification of share holding pattern and other details, it is certified that *M/s* _____ meets the eligibility criteria under Women Entrepreneur provision of Public Procurement Policy Order 2012 and other notifications/circulars issued time to time in this regard and are hence eligible to claim benefits pertaining to Women Entrepreneur under the act.

BIDDING FORMS

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FORM NO.	DESCRIPTION
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C-2	AGREED TERMS & CONDITIONS (ATC) - FOREIGN BIDDERS
D	BANK MANDATE FORM
E	FORMAT FOR BIDDERS" QUERIES
J	Declaration for holiday listing orders in line ITB APPENDIX V [POLICY OF HOLIDAY LISTING OF VENDORS IN BPCL]
G	SELF DECLARATION
H	INTEGRITY PACT
M	PROFORMA OF BANK GUARANTEE FOR EARNEST MONEY DEPOSIT
N	TAX RESIDENCY CERTIFICATE & FORM 10F

(FORM – A)

BIDDER'S GENERAL INFORMATION

(OTHER DETAILS)

To,

BPCL

S.No.	DESCRIPTION	BIDDER'S REPLY
1.1	Legal Name of the Bidder(Company)	
1.2	Date of Business (Company) Establishment	Day Month Year
1.3	Country of registration and Registration Number:	
1.4	Address of Registered Office	_____ _____ City :_____ District :_____ State :_____ PIN/ZIP:_____
1.5	Operation/Working Address if different from above:	_____ _____ City :_____ District :_____ State :_____ PIN/ZIP:_____ GSTIN no. of Dispatch Point _____
1.6	Bidder's address where order/contract is to be placed *	_____ _____ City :_____ District :_____ State :_____ PIN/ZIP:_____

1.7	Invoicing place and State	_____ _____ City :_____ District :_____ State :_____ PIN/ZIP:_____ GSTIN no. of invoicing place _____
1.8	Name & Mobile no. of Concerned person(s)	
1.9	E-mail address of Concerned person(s):	
1.10	Internet Website (If applicable)	
2.0	**GENERAL**	
2.1	Income Tax PAN No. (In India) of the firm.	
2.2	**Whether Registered as MSE bidder or not.**	**Yes / No (Tick whichever is applicable)**
2.3	a) Detail of MSE Registration & MSE Registration No.	
	b) In case owner of Bidder's organisation belongs to SC/ST, then Bidder to submit requisite documents as specified in the Enquiry. c) In case owner of Bidder's organisation belongs to Women category then Bidder to submit requisite documents. d) MSME bidders registered under Trade Receivable e- Discounting System (TReDS) shall furnish details of registration with registration No. & date.	(Tick whichever is applicable) Submitted / Not Applicable Submitted / Not Applicable Registration No. ……. Dated …… / Not Applicable
2.4	GST Registration No. of the firm.	
3.0	**Change of Ownership:** has there been any major change of Ownership of the establishment over the past five (5) years. If so, kindly provide details and if not, please affirm by "NONE".	
4.0	GeM Registration details (Applicable for enquiries not issued through GeM portal)	

FORM-B

ATC

SUPPLIER'S SIGNATURE WITH STAMP/SEAL

COMPLIANCE TO BID REQUIREMENT

(TO BE SUBMITTED ON THE LETTER HEAD OF BIDDER)

TITLE OF ITEM:
BIDDING DOCUMENT NO.

We …… *(*)* hereby agree to fully comply with, abide by and accept without variation, deviation or reservation all technical, commercial and other conditions of the Bidding Document and its Technical & Commercial Amendments.

We further hereby waive, withdraw and abandon any and all assumptions, deviations, variations, objections or reservations whatsoever hereto set out, given or indicated in our offer, clarifications, correspondence, communications, or otherwise with a view that the price bid and price implication (if any) submitted may be treated to conform to, in all respects, with the terms and conditions of the said Bidding Document including all Technical and Commercial Amendments.

** For and on behalf of

Authorized signatory Date:

*Here fill in the name of bidder.

or

EXCEPTIONS AND DEVIATIONS STATEMENT FORMAT

Sl. NO.	BIDDING DOCUMENT REFERENCE		SUBJECT	DEVIATIONS
	PAGE NO.	CLAUSE NO.		

NOTE :

1. Bidder is required to comply with the requirements of the Bidding Document, and not to stipulate any exceptions or deviations. In case it is unavoidable, Bidder may stipulate exceptions to requirements of Bidding Document in the above format only.

2. All exceptions and deviations taken by Bidder to the stipulations of the Bidding Document shall be indicated at one location in a separate section titled “Exceptions and Deviations” in the techno-commercial unpriced part of the Bid as per the above format only and not in the Bidding Document or in the Price Bid .
3. Any exceptions or deviations indicated elsewhere in the Bid and / or in other format shall not be taken cognizance of and Bid of the Bidder shall be deemed considered without having any such deviations taken by the Bidder.

SIGNATURE & STAMP OF BIDDER:

NAME OF BIDDER

FORM C-1

AGREED TERMS & CONDITIONS (ATC)

(FOR INDIAN BIDDERS)

BINA PETCHEM AND REFINERY EXPANSION PROJECTS (BPREP)
OF
BHARAT PETROLEUM CORPORATION LIMITED (BPCL), BINA REFINERY

AGREED TERMS & CONDITIONS (ATC) (FOR INDIAN BIDDERS / INDIAN SOURCED COMPONENTS BY FOREIGN BIDDERS)

Name of Bidding Entity : M/s _____

RFQ No.: _____

Bidder's Offer Ref No.: _____dated_____

Tel. No. _____Mob. No. _____Fax No. _____

Contact Person: _____E-mail _____

(*use capital letters only*)

1. All correspondence must be in **English** language only.
2. This is a pre-filled "questionnaire" and Bidder to accept and submit it online, duly signed and stamped on each page, as a token of their acceptance of all commercial terms and conditions.
3. All commercial terms / compliance / salient details are given /confirmed in this questionnaire and Bidding Forms itself and not elsewhere in the Offer. In case of contradiction, the confirmation given herein and in Bidding Forms by the Bidder shall prevail over the declaration/ statement/ confirmation given in other places by the Bidder. Bidder to note that the terms and conditions mentioned elsewhere in their offer or Bidder's own terms and conditions shall not be given cognizance of.
4. **Failure on the part of the Bidder in submitting this duly pre-filled "questionnaire" online with the Un-priced bid and/or submitting incomplete replies may lead to rejection of Bidder's Offer.**
5. Bidder's offer shall be in total compliance with RFQ documents containing commercial and technical specifications including general/ technical notes and scope of supply/work including documentation as per material requisition (MR) and subsequent technical/ commercial amendment, if any, and technical/commercial corrigendum, if any, without any deviation, otherwise such offer shall be liable for rejection.

SL. NO.	DESCRIPTION	SUPPLIER'S CONFIRMATION
1.	**Price :** Bidder confirms that quoted prices are strictly as per Price Schedule format of the Enquiry Document.	*Confirmed*
2	**Insurance:** a) **Supply** Transit/ Marine insurance shall be excluded from the supplier's scope and the same shall be arranged by the owner. b) **Site Work** For purchases involving site work, the comprehensive insurance (Transit / Marine cum – erection till handing over of equipment) has been taken care by the owner. However, site related insurance related to seller, including tools / tackles, equipment, workmen compensation, ES / PF etc. to be included in the seller quoted prices. (For details refer SPC)	Confirmed *Confirmed*

SL. NO.	DESCRIPTION	SUPPLIER'S CONFIRMATION
3.	Confirm documentation charges as per MR are included in quoted prices.	*Confirmed*
4.	Confirm that priced copy of : i. Supply of Mandatory spares as per Mandatory spare parts list in MR, if sought separately in MR / Price Schedule. ii. Two years O & M, if applicable iii. Details w.r.t. Import Content, if applicable iv. Overtime rate of supervision, if applicable v. Unit rate for addition / deletion , if applicable as per Price schedule format has been uploaded in Financial bid/folder on etender Portal	*i. Confirmed* *ii. Confirmed* *iii. Confirmed* *iv. Confirmed* *v. Confirmed*
5.	**Price Reduction for delay in delivery/ completion:** a) Confirm acceptance of price reduction schedule for delay in deliveries / completion as specified in GPC enclosed in RFQ Document. b) In case of delay, vendor will reduce the invoice amount by applicable reduction. c) The supplier shall submit credit note/adjustment in GST invoice for PRS, if applicable on account of delay in delivery. This is with respect to cases wherein supplier has not considered the applicable PRS in GST invoice.	*Confirmed* *Confirmed* *Confirmed*
6.	**Delivery / Completion Period:** a) Confirm acceptance to delivery/completion period as stipulated in the RFQ/ IFB /Amendment (as applicable).	*Confirmed*
7.	**Payment Terms:** Confirm acceptance of payment terms as specified in Bid Data Sheet (BDS) / Special Purchase Conditions (SPC).	*Confirmed*
8.	**Part order:** a) Confirm acceptance of Part Order clause as per RFQ Document. (if applicable as per RFQ). b) Items may be split (wherever applicable) to meet the Public Procurement Policy, 2012 for MSEs or Public Procurement (Preference to Make in India) (PPP-MII). Confirm acceptance. c) Any charges quoted extra as lumpsum shall be applicable prorata on value basis in the event of part order.	*Confirmed*
9.	**Repeat Order:** Confirm Acceptance of Repeat Order clause as per RFQ Document. (Refer BDS for applicability)	*Confirmed*

SL. NO.	DESCRIPTION	SUPPLIER'S CONFIRMATION
10.	**Performance Bank Guarantee:** a) Confirm submission of the Performance Bank Guarantee, in line with provisions of Enquiry Document. b) The Performance Bank Guarantee shall be strictly as per proforma enclosed in Enquiry document and shall be from Banks allowed as per Enquiry Document and shall be submitted within 15 days from date of LOA / PO.	*Confirmed* *Confirmed*
11.	**Guarantee / Warranty:** Confirm acceptance to Guarantee / Warranty clause as mentioned in the GPC/BDS.	*Confirmed*
12.	**Firmness of prices:** Confirm quoted prices shall remain firm and fixed till complete execution of order. Price Variation shall not be considered on any account (except in case specifically permissible as per bidding document).	*Confirmed*
13.	**Testing and Inspection charges:** a) Inspection of Indigenous items shall be done by Engineers India Limited (EIL) and charges towards the same have NOT been included in the quoted price. b) In the case bidder sourcing materials from abroad, the bidder shall arrange inspection through Third Party Inspection agency (as per Sl. No. 7.2 of GPC) in the country of origin & charges of the same shall be included in quoted prices and no additional charges shall be paid by Owner. c) Quoted prices are inclusive of all testing charges (if applicable) as per MR. d) Quoted prices are inclusive of all statutory certification charges PESO etc. (if applicable) as required in the Material Requisition	*Confirmed* *Confirmed* *Confirmed* *Confirmed*
14.	Import content in the offer **(Tick one whichever is applicable).** **(In case no option is selected, Import content shall be considered to be not applicable)** a) Quoted prices are after considering the benefit of Input Credit on IGST Portion	☐ APPLICABLE ☐ NOT APPLICABLE a) Confirmed
15.	**Validity of Bid:** Confirm Bid validity as stipulated in RFQ/ BDS covering letter from the date of opening of unpriced bid.	*Confirmed*
16.	a) **Compliance to RFQ documents (For Category-I items, refer BDS for applicability):** Confirm your offer is in total compliance with RFQ Document containing technical specifications including General / Technical notes, scope of supply/ services/ site work (as applicable) including documentation as per Material Requisition (MR) and subsequent amendment and corrigendum, if any, without any deviation.	*Confirmed*

SL. NO.	DESCRIPTION	SUPPLIER'S CONFIRMATION
	b) Confirm your offer is in total compliance with RFQ documentation containing commercial terms and conditions as per the following documents, without any deviation: i) Request for Quotation (RFQ) / Invitation for Bids (IFB) ii) Instructions to Bidders (ITB) iii) Bid Data Sheet (BDS) & Bidding Forms iv) Special Purchase Conditions (SPC) v) General Purchase Conditions (GPC) vi) Terms & Conditions of Site work / GCC / HSE vii) Integrity Pact. viii) Terms & Conditions for Supervision services/ Training/ Hazop/ AMC/ PWCAMC/ PGTR/ 3-D Modeling etc (as applicable to MR) ix) Packing, Marking & Shipping requirement. x) Commercial / Technical Amendments, if any xi) Any other document enclosed with Enquiry Document.	i) Confirmed ii) Confirmed iii) Confirmed iv) Confirmed v) Confirmed vi) Confirmed (if applicable) vii) Confirmed (if applicable) viii) Confirmed (if applicable) ix) Confirmed x) Confirmed (if applicable) xi) Confirmed
17.	**<u>For Stockist / Traders :</u>** Quoted items shall be supplied from EIL enlisted manufacturer/ mill as per their enlistment with EIL. (*Above clause is not applicable for Enquiries issued on open NIT basis)*	*Confirmed*
18.	Bidder to quote as per the requirements and terms and conditions of the RFQ Document including all the enclosures and not to stipulate deviations/ exceptions. Once quoted, the Bidder shall not make any subsequent price changes, whether resulting or arising out of any technical/ commercial clarifications and details sought on any deviations, exceptions or stipulations mentioned in the Bidder's offer unless any amendment to RFQ Document is issued by OWNER/ EIL seeking price implication. Similarly, no revision in quoted price shall be allowed should the deviations stipulated by Bidder are not accepted by OWNER/EIL and are required to be withdrawn by Bidder in favor of meeting the requirements and complying to the terms and conditions of the RFQ Document. Any unsolicited proposed price change by the Bidder is likely to render the Bidder's offer liable for rejection. Confirm compliance.	*Confirmed*
19.	Printed terms and conditions, if any, appearing in quotation, shall not be applicable in the event of order. In case of contradiction between the confirmations given above and terms & conditions mentioned elsewhere in the offer, the confirmation given/confirmed herein above shall prevail.	*Confirmed*

BIDDER'S NAME:

SIGNATURE & SEAL:

ANNEXURE-I to ATC (Indigenous)

BINA PETCHEM AND REFINERY EXPANSION PROJECTS (BPREP)
OF
BHARAT PETROLEUM CORPORATION LIMITED (BPCL), BINA REFINERY

INPUTS BY INDIAN BIDDERS

NAME OF BIDDER: _____

SUPPLIER OFFER REF. _____Dated _____

RFQ NO.: _____

The salient features of the offer are as below:

1. Specify Despatch point 2. GSTIN no. of Despatch point	_____ _____
3. Specify Invoicing place and State 4. GSTIN no. of invoicing place	_____ _____
5. HSN Code	_____
6. If the Supplier is currently unregistered due to turnover below threshold, undertaking/ letter stating reason for non-obtaining registration *	YES ( ) / NO ( )
7. In case the Supplier is located in SEZ, declaration/ undertaking/ certificate shall be provided *	YES ( ) / NO ( )
*-(√) whichever is applicable	

BIDDER'S NAME:

SIGNATURE & SEAL:

FORM C-2

AGREED TERMS & CONDITIONS (ATC)

(FOR FOREIGN BIDDERS)

BINA PETCHEM AND REFINERY EXPANSION PROJECTS (BPREP)
OF
BHARAT PETROLEUM CORPORATION LIMITED (BPCL), BINA REFINERY

AGREED TERMS & CONDITIONS (ATC)
(FOR FOREIGN BIDDERS)

Name of Bidding Entity: M/s _____

RFQ No.: _____

Bidder's Offer Ref No. _____ dated _____

Tel. No. _____Mob. No. _____ Fax No. _____

Contact Person: _____ E-mail _____

(*use capital letters only*)

1. All correspondence must be in **English** language only.
2. This is a pre-filled "questionnaire" and Bidder to accept and submit it online, duly signed and stamped on each page, as a token of their acceptance of all commercial terms and conditions.
3. All commercial terms / compliance / salient details are given /confirmed in this questionnaire and Bidding Forms itself and not elsewhere in the Offer. In case of contradiction, the confirmation given herein and in Bidding Forms by the Bidder shall prevail over the declaration/ statement/ confirmation given in other places by the Bidder. Bidder to note that the terms and conditions mentioned elsewhere in their offer or Bidder's own terms and conditions shall not be given cognizance of.
4. **Failure on the part of the Bidder in submitting this duly pre-filled "questionnaire" online with the Un-priced bid and/or submitting incomplete replies may lead to rejection of Bidder's Offer.**
5. Bidder's offer shall be in total compliance with RFQ documents containing commercial and technical specifications including general/ technical notes and scope of supply/work including documentation as per material requisition (MR) and subsequent technical/ commercial amendment, if any, and technical/commercial corrigendum, if any, without any deviation, otherwise such offer shall be liable for rejection.

Sl. No.	DESCRIPTION	SUPPLIER'S CONFIRMATION
1.	a) Bidder confirms that quoted prices are strictly as per Price Schedule format of the Enquiry Document. b) Confirm quoted prices are inclusive of stowage charges (Applicable in case of pipes RFQ). c) Confirm that ocean freight charges upto port of entry- Nhava sheva, (India) has been quoted separately by you in the price schedule.	*Confirmed* *Confirmed* *Confirmed, Quoted in Price Schedule*
2.	**Insurance:** **a) Supply** Price quoted must exclude Marine insurance charges from FOB International Port of Exit Price, as same shall be arranged by the Owner. However all marine insurance charges for inland transit upto FOB International Port of Exit must be included by you in your prices. **b) Site Work**	*Confirmed*

Sl. No.	DESCRIPTION	SUPPLIER'S CONFIRMATION
	Comprehensive insurance (Transit / Marine cum – erection till handing over of equipment) has been taken care by the owner. However site related insurance related to seller, including tools / tackles, equipment, workmen compensation, ES / PF etc. to be included in the seller quoted prices. (For details refer SPC)	*Confirmed*
3.	**Currency of Quote** Confirm that you have specified the currency of quote in Price Schedule Format / BoQ , in line with SPC.	*Confirmed*
4.	**Delivery / Completion Period:** a) Delivery / Completion period shall be strictly as mentioned in the RFQ covering letter.	*Confirmed*
5. a. b.	**Taxes & Duties:** All taxes, duties and levies of any kind payable upto FOB International Port of Exit shall be borne by Bidder. Export permit/ licence if required shall be vendor's responsibility & any expenditure towards same will be borne by Bidder.	*Confirmed* *Confirmed*
6.	**Validity:** Confirm Bid validity as stipulated in Bid Data Sheet (BDS) / RFQ Document .	*Confirmed*
7	**For Stockist / Traders :** Quoted items shall be supplied from EIL enlisted manufacturer/ mill as per their enlistment with EIL. (*Above clause is not applicable for Enquiries issued on open NIT basis)*	*Confirmed*
8. a.   b.   c

Sl. No.	DESCRIPTION	SUPPLIER'S CONFIRMATION
	iii) Inclusive of all statutory certification charges PESO/CCOE etc. (if applicable) as required in the Material Requisition.	
9.	*Confirm documentation charges as per MR are inclusive in your quoted prices.*	*Confirmed*
10.	**Performance Bank Guarantee:**	
a.	Confirm submission of the Performance Bank Guarantee, in line with provisions of Enquiry Document..	*Confirmed*
b.	The Performance Bank Guarantee shall be strictly as per proforma enclosed in Enquiry document and shall be from Banks allowed as per Enquiry Document and shall be submitted within 15 days from date of LOA / PO, whichever is earlier.	*Confirmed*
11.	**Guarantee / Warranty** Confirm acceptance to Guarantee / Warranty clause as mentioned in the GPC/BDS.	*Confirmed*
12.	**Firmness of prices:** Confirm quoted prices shall remain firm and fixed till complete execution of order. Price Variation shall not be considered on any account (except in case specifically permissible as per bidding document).	*Confirmed*
13.	**Part Order:** a) Confirm acceptance of Part Order clause as per RFQ Document. (if applicable as per RFQ). b) Items may be split (wherever applicable) to meet the Public Procurement Policy, 2012 for MSEs or Public Procurement (Preference to Make in India) (PPP-MII). Confirm acceptance. c) In case of part order confirm all lumpsum charges quoted extra if any viz. Documentation, testing, packing, crating, handling, FOB, TPI, IBR etc., shall be applicable prorata on value basis in the event of part order / part quantities/ split order.	*Confirmed* *Confirmed* *Confirmed*
14.	**Repeat Order:** Confirm Acceptance of Repeat Order clause as per RFQ Document. *(Refer BDS for applicability)*	*Confirmed*
15.	**Price Reduction on delay in delivery/completion:** a) Confirm acceptance of price reduction schedule for delay in deliveries/completion of work/services specified in General Purchase Conditions (GPC) enclosed with the RFQ Document. b) In case of delay, vendor will reduce the invoice amount by applicable reduction.	*Confirmed* *Confirmed*

Sl. No.	DESCRIPTION	SUPPLIER'S CONFIRMATION
16.	**<u>Payment Terms:</u>** Confirm acceptance of payment terms as specified in Bid Data Sheet (BDS) / Special Purchase Conditions (SPC).	*Confirmed*
17.	a) Letter of Credit shall be opened after receipt of unconditional order acceptance along with Performance bank guarantee, as per provisions of Enquiry Document. b) Letter of Credit shall be opened through a Bank as specified in SPC **OR** c) However, if you still insist for confirmed L/C, confirmation charges shall be borne by you. Please confirm.	*Confirmed* *Confirmed L/C not required* *Noted*
18.	All Bank charges and stamp duties payable outside India in connection with payments to be made under Purchase Order for the item, if placed, shall be borne by you. All bank charges and stamp duties payable in India shall be borne by the Purchaser.	*Confirmed*
19.	a) **Compliance to RFQ documents (For Category-I items, refer BDS for applicability):** Confirm that your offer is in total compliance with RFQ Document containing technical specifications including General / Technical notes, scope of supply/services/site work (as applicable) including documentation as per Material Requisition (MR) and subsequent amendment and corrigendum, if any, without any deviation.	*Confirmed*
b)	Confirm that your offer is in total compliance with RFQ documents containing commercial terms and conditions as per the following documents, without any deviation: i) Request for Quotation (RFQ) / Invitation for Bids (IFB) ii) Instructions to Bidders (ITB) iii) Bid Data Sheet (BDS) & Bidding Forms iv) Special Purchase Conditions (SPC) v) General Purchase Conditions (GPC) vi) Terms & Conditions of Site work / GCC / HSE vii) Integrity Pact. viii) Terms & Conditions for Supervision services/ Training/ Hazop/ AMC/ PWCAMC/ PGTR/ 3-D Modeling etc (as applicable to MR) ix) Commercial / Technical Amendments, if any x) Terms & Conditions for Indian Sourced Supply / service (if applicable) xi) Packing, Marking & shipping requirements. xii) Any other document enclosed with Enquiry Document.	i) Confirmed ii) Confirmed iii) Confirmed iv) Confirmed v) Confirmed vi) Confirmed (if applicable) vii) Confirmed (if applicable) viii) Confirmed (if applicable) ix) Confirmed (if applicable) x) *Confirmed* (if applicable) xi) *Confirmed* xii) *Confirmed*

Sl. No.	DESCRIPTION	SUPPLIER'S CONFIRMATION
20.	Direct offer without the intermediary of an Indian Agent will only be considered.	*Noted & Confirmed.*
21.	Bidder to quote as per the requirements and terms and conditions of the RFQ Document including all the enclosures and not to stipulate deviations/ exceptions. Once quoted, the Bidder shall not make any subsequent price changes, whether resulting or arising out of any technical/ commercial clarifications and details sought on any deviations, exceptions or stipulations mentioned in the Bidder's offer unless any amendment to RFQ Document is issued by OWNER/ EIL seeking price implication. Similarly, no revision in quoted price shall be allowed should the deviations stipulated by Bidder are not accepted by OWNER/EIL and are required to be withdrawn by Bidder in favor of meeting the requirements and complying to the terms and conditions of the RFQ Document. Any unsolicited proposed price change by the Bidder is likely to render the Bidder's offer liable for rejection. Confirm compliance.	*Confirmed*
22.	Printed terms and conditions, if any, appearing in quotation, shall not be applicable in the event of order. In case of contradiction between the confirmations given above and terms & conditions mentioned elsewhere in the offer, the confirmation given/confirmed herein above shall prevail.	*Confirmed*

BIDDER'S NAME:

SIGNATURE & SEAL:

ANNEXURE-I to ATC (Foreign)

BINA PETCHEM AND REFINERY EXPANSION PROJECTS (BPREP)
OF
BHARAT PETROLEUM CORPORATION LIMITED (BPCL), BINA REFINERY

INPUTS BY FOREIGN BIDDERS

Sl. No.	Description	Bidder's Response
1.	Country of origin from where the goods have been offered.	……
2.	Indicate International Seaport of Exit	……
3.	Indicate the HSN Code of the Items	……
4.	Details of any Free Trade Agreement (FTA) / Comprehensive Economic Partnership Agreement (CEPA) / Treaty between Bidders country Govt. & Indian Government for availing custom duty exemption / concession. **If bidder will not specifically mention the same, it will be construed that there is no specific Agreement / Treaty between Govt. of Bidders & Purchasers County.**	**Applicable / Not Applicable** If Applicable, bidder to provide details …….. ……..
5.	Please indicate name and address of your Bankers for L/C opening, telephone/E-mail address.	……

BIDDER'S NAME:

SIGNATURE & SEAL:

FORM-D

BANK MANDATE FORM
(For Indian supplier) (As per ITB)

1. Bidder Name :
2. Bidder Code :
3. Address of the Bidder :
4. Particulars of Bank Account of Bidder :
   a. Name of the Bank :
   b. Name of the Branch and Address of the Branch :
   c. Branch Code : :
   d. 9-Digit MICR code Number of the Bank & Branch :
   (As appearing in the MICR Cheque issued by the bank) :
   (Please do not give multicity cheque book code :
   Number)
   e. Type of account (Saving Bank, Current or Cash Credit) :
   f. Account Number :
   g. RGTS/IFSC Code (11 digit) :
   h. NEFT Code No. :
5. E-mail address of the Bidder :
6. Contact Person(s) of the Bidder :

I/we declare that the particulars given above are correct and complete and I/we accord our consent for receiving all our payments through Electronic Mechanism.

_____
(Signature and designation of the Authorised person(s) of Bidder)

Place :
Date :
Official seal of the Bidder

BANK CERTIFICATION
Certified that the particulars furnished above are correct as per our records. Place :
Date :

_____
Signature of the Authorised
Official of the Bank

Bank"s Stamp

BIDDER TO ENSURE SUBMISSION OF CANCELLED CHEQUE WITH THIS MANDATE FORM. IN CASE THIS MANDATE FORM IS NOT CERIFIED BY BANK

FORM-E

PRE BID QUERIES FORMAT

FOR BIDDER'S QUERIES FOR PRE BID CONFERENCE/ MEETING

SL. NO.	REFERENCE OF BIDDING DOCUMENT				BIDDER'S QUERY	EIL/OWNER'S REPLY
	Section	Page No.	Clause No.	Subject		

NOTE: 1. The Pre-Bid Queries may be sent to e-mail addresses as mentioned in RFQ / IFB / NIT.

SIGNATURE OF BIDDER : _____

NAME OF BIDDER : _____

FORMAT for Declaration of Holiday Listing orders issued by BPCL or MOPNG debarring us from carrying on business dealings with BPCL/ MOPNG.

(On Company Letter Head, to be signed by the duly authorized person)

Date: _____

TENDER NO. : .....

TITLE OF TENDER: .....

To,
Bharat Petroleum Corporation Ltd

Dear Sir/Madam,

I /We declare and confirm that we are currently not serving any Holiday Listing orders issued by BPCL or MOPNG debarring us from carrying on business dealings with BPCL/ MOPNG or convicted of an offence –

(a) under the Prevention of Corruption Act, 1988: or

(b) the Indian Penal Code or any other law for the time being in force, for causing any loss of life or property or causing a threat to public health as part of execution of a public procurement contract.

(Signature and Stamp of the Bidder)

Bidder Name:

Date :

Address:

FORM-G

SELF DECLARATION

(AS PER ITB ON LETTERHEAD OF BIDDER)

Bidder's declaration as furnished herein shall supersede the stipulations mentioned elsewhere in their bid.

SL. NO.	DESCRIPTION	BIDDER'S DECLARATION
1.	We confirm that we are not on Holiday/ Negative list of EIL/BPCL/MoPNG as on date of submission of our bid.	☐ **We confirm** ☐ **We do not confirm**
2.	We confirm that we are not under insolvency, liquidation, court receivership or similar proceedings.	☐ **We confirm** ☐ **We do not confirm**
3.	We confirm that we are not involved in any Litigation / Arbitration. (or) We confirm that the current Litigation / Arbitration, in which bidder is involved will not have any impact in work being tendered or in entering into contract during the validity of offer and performing the contract till all the contractual obligations under contract are performed.	☐ **We confirm** ☐ **We do not confirm** **Or** ☐ **We confirm** ☐ **We do not confirm**
4.	Whether any of the directors of bidder is a relative of any director of BPCL/EIL or the bidder is a firm in which any director of BPCL/EIL or his relative is a partner of the bidder or a private company in which any director of BPCL/EIL is a director.	☐ **No Relation** ☐ **Yes, provide details**

SIGNATURE OF BIDDER : _____

NAME OF BIDDER : _____

COMPANY SEAL : _____

FORM-H

INTEGRITY PACT

[To be executed on plain paper and applicable for all tenders of value above Rs. 10 Crore]

INTEGRITY PACT

Between

Bharat Petroleum Corporation Limited (BPCL) hereinafter referred to as "The Principal",

And

.....hereinafter referred to as "The Bidder/ Contractor/ Supplier".

Preamble

The Principal intends to award, under laid down organization procedures, contract/s for ..... . The Principal values full compliance with all relevant laws and regulations, and the principles of economic use of resources, and of fairness and transparency in its relations with its Bidder/s, Contractor/s and Supplier/s.

In order to achieve these goals, the Principal cooperates with the renowned international Non-Governmental Organization "Transparency International" (TI). Following TI's national and international experience, the Principal will appoint Independent External Monitor who will monitor the tender process and the execution of the contract for compliance with the principles mentioned above.

Section 1 - Commitments of the Principal

(1) The Principal commits itself to take all measures necessary to prevent corruption and to observe the following principles:

a) No employee of the Principal, personally or through family members, will in connection with the tender, or the execution of the contract, demand, take a promise for or accept, for himself/ herself or third person, any material or immaterial benefit which he/she is not legally entitled to.

b) The Principal will, during the tender process, treat all Bidders with equity and reason. The Principal will, in particular, before and during the tender process, provide to all Bidders the same information and will not provide to any Bidder confidential/ additional information through which the Bidder could obtain an advantage in relation to the tender process or the contract execution.

c) The Principal will exclude from the process all known persons having conflict of interest.

(2) If the Principal obtains information on the conduct of any of its employees which is a criminal offence under the Indian Penal Code (IPC) 1860 (replaced by Bhartiya Nyaya Sanhita (BNS), 2023) and Prevention of Corruption Act 1988, or if there be a substantive suspicion in this regard, the Principal will inform its Vigilance Office and in addition can initiate disciplinary actions.

Section 2 - Commitments of the Bidder/ Contractor/ Supplier

(1) The Bidder/ Contractor/ Supplier commits itself to take all measures necessary to prevent corruption. He commits himself to observe the following principles during his participation in the tender process and during the contract execution.

a) The Bidder/ Contractor/ Supplier will not, directly or through any other person or firm, offer, promise or give to any of the Principal's employees involved in the tender process or the execution of the contract or to any third person, any material or immaterial benefit which he/she is not legally entitled to, in order to obtain in exchange, any advantage of any kind whatsoever during the tender process or during the execution of the contract.

b) The Bidder/ Contractor/ Supplier will not enter with other Bidders into any undisclosed agreement or understanding, whether formal or informal, in violation of Competition Act 2022 (as amended from time to time). This applies in particular to prices, specifications, certifications, subsidiary contracts, submission or non-submission of bids or any other actions to restrict competitiveness or to introduce cartelization in the bidding process.

c) The Bidder/ Contractor/ Supplier will not commit any offence under the Indian Penal Code (IPC) 1860 (replaced by Bhartiya Nyaya Sanhita (BNS), 2023) and Prevention of Corruption Act 1988; further the Bidder/ Contractor/ Supplier will not use improperly, for purposes of competition or personal gain, or pass on to others, any information or document provided by the Principal as part of the business relationship, regarding plans, technical proposals and business details, including information contained or transmitted electronically.

d) The Bidder/ Contractor/ Supplier will, when presenting his bid, disclose any and all payments he has made, is committed to, or intends to make to agents, brokers or any other intermediaries in connection with the award of the contract.

e) The Bidder/ Contractor/ Supplier shall make sure that the terms of this Integrity Pact are also adopted by its sub-contractors, sub-sub-contractors etc, if any and submit such adoption confirmation proof to the Principal. The Bidder/ Contractor/ Supplier shall be solely responsible for the adherence to the provisions of IP by its sub-contractors, sub-sub-contractors etc.

f) The bidder / contractor of foreign origin shall disclose the name and address of agents and representatives in India related to this tender. Similarly, the bidder / contractor of Indian nationality shall furnish the name and address of their foreign principals or associates, if any, related to this tender. Further details, as mentioned in the "Guidelines on Indian Agents of Foreign Suppliers," shall be disclosed by the Bidder(s)/Contractor(s) as per Annex.

(2) The Bidder/ Contractor/ Supplier will not instigate third persons to commit offences outlined above or be an accessory to such offences.

Section 3 - Disqualification from Tender Process and Exclusion from Future Contracts

If the Bidder, before contract award, has committed a transgression through a violation of Section 2 or in any other form such as to put his reliability or credibility as Bidder into question, the Principal is entitled to disqualify the Bidder from the tender process or to terminate the contract, if already signed, for such reason or take action as per laid down procedure to debar the Bidder(s)/Contractor(s) from participating in the future procurement processes.

(1) If the Bidder/ Contractor/ Supplier has committed a transgression through a violation of Section 2 such as to put his reliability or credibility into question, the Principal is also entitled to exclude the Bidder/ Contractor/ Supplier from future contract award processes. The imposition and duration of the exclusion will be determined by the severity of the transgression. The severity will be determined by the circumstances of the case, in particular the number of transgressions, the position of the transgressors within the company hierarchy of the Bidder and the amount of the damage. The exclusion will be imposed for a minimum of 6 months and maximum of 3 years.

(2) A transgression is considered to have occurred if the Principal after due consideration of the available evidences, concludes that no reasonable doubt is possible.

(3) The Bidder accepts and undertakes to respect and uphold the Principal's absolute right to resort to and impose such exclusion and further accepts and undertakes not to challenge or question such exclusion on any ground, including the lack of any hearing before the decision to resort to such exclusion is taken.

This undertaking is given freely and after obtaining independent legal advice.

(4) If the Bidder/ Contractor/ Supplier can prove that he has restored/ recouped the damage caused by him and has installed a suitable corruption prevention system, the Principal may revoke the exclusion prematurely.

Section 4 – Compensation for Damages

(1) If the Principal has disqualified the Bidder from the tender process prior to the award according to Section 3, the Principal is entitled to demand and recover from the Bidder liquidated damages equivalent to Earnest Money Deposit/Bid Security.

(2) If the Principal has terminated the contract according to Section 3, or if the Principal is entitled to terminate the contract according to Section 3, the Principal shall be entitled to demand and recover from the Contractor/ Supplier liquidated damages equivalent to Security Deposit/ Performance Bank Guarantee.

(3) The Bidder agrees and undertakes to pay the said amounts without protest or demur subject only to condition that if the Bidder/ Contractor/ Supplier can prove and establish that the exclusion of the Bidder from the tender process or the termination of the contract after the contract award has caused no damage or less damage than the amount of the liquidated damages, the Bidder/ Contractor/ Supplier shall compensate the Principal only to the extent of the damage in the amount proved.

Section 5 - Previous Transgression

(1) The Bidder declares that no previous transgression occurred in the last 3 years from the date of bid submission with any other Company in any country conforming to the TI / Anti-corruption approach or with any other Public Sector Enterprise in India that could justify his exclusion from the tender process.

(2) If the Bidder makes incorrect statement on this subject, he can be disqualified from the tender process or the contract, if already awarded, can be terminated for such reason.

Section 6 - Equal treatment of all Bidders/ Contractors/Suppliers/ Subcontractors

(1) The Bidder/ Contractor/ Supplier undertakes to demand from all subcontractors a commitment in conformity with this Integrity Pact, and to submit it to the principal before contract signing. In case of a joint venture, all the partners of the joint venture should sign

the Integrity Pact. In case of sub-contracting, the principal contractor shall be solely responsible for the adherence to the provisions of IP by subcontractor.

(2) The Principal will enter into agreements with identical conditions as this one with all Bidders and Contractors/ Suppliers.

(3) The Principal will disqualify from the tender process all Bidders who do not sign this Pact or violate its provisions.

Section 7 - Punitive Action against Violating Bidders/ Contractors/ Suppliers/ Subcontractors

If the Principal obtains knowledge of conduct of a Bidder, Contractor, Supplier or Subcontractor, or of an employee or a representative or an associate of a Bidder, Contractor, Supplier or Subcontractor which constitutes corruption, or if the Principal has substantive suspicion in this regard, the Principal will inform the Vigilance Office.

Section 8 - Independent External Monitors

(1) The Principal has appointed competent and credible Independent External Monitors for this Pact after approval by the Central Vigilance Commission. The task of the Monitor is to review independently and objectively, whether and to what extent the parties comply with the obligations under this agreement.

(2) The Monitor is not subject to instructions by the representatives of the parties and performs his functions neutrally and independently. He reports to the Chairperson of the Board of the Principal.

(3) The Bidder/ Contractor/ Supplier accepts that the Monitor has the right to access without restriction to all Project documentation of the Principal including that provided by the Bidder/ Contractor/ Supplier. The Bidder/ Contractor/ Supplier will also grant the Monitor, upon his request and demonstration of a valid interest, unrestricted and unconditional access to this project documentation. The same is applicable to Subcontractors. The Monitor is under contractual obligation to treat the information and documents of the Bidder/ Contractor/ Supplier/ Subcontractor with confidentially. The Monitor has also signed declarations on 'Non disclosure of Confidential Information' and 'Absence of Conflict of Interest'. In case of any conflict of interest arising later, the IEM shall inform the Management of the Principal and recuse themselves from that case.

(4) The Principal will provide to the Monitor sufficient information about all meetings among the parties related to the Project provided such meetings could have an impact on the

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contractual relations between the Principal and the Bidder/ Contractor/ Supplier. The parties offer to the Monitor the option to participate in such meetings.

(5) As soon as the Monitor notices, or believes to notice, a violation of this agreement, he will so inform the Management of the Principal and request the Management to discontinue or heal the violation, or to take other relevant action. The Monitor can in this regard submit non-binding recommendation. Beyond this, the Monitor has no right to demand from the parties that they act in a specific manner, refrain from action or tolerate action. However, the Independent External Monitor shall give an opportunity to the Bidder/ Contractor/ Supplier to present its case before making its recommendations to the Principal.

(6) The Monitor will submit a written report to the Chairperson of the Board of the Principal within 8 to 10 weeks from the date of reference or intimation to him by the 'Principal' and, should the occasion arise, submit proposals for correcting problematic situations.

(7) If the Monitor has reported to the Chairperson of the Board a substantiated suspicion of an offence under relevant Indian Penal Code (IPC) 1860 (replaced by Bhartiya Nyaya Sanhita (BNS), 2023) and Prevention of Corruption Act 1988, and the Chairperson has not, within reasonable time, taken visible action to proceed against such offence or reported it to the Vigilance Office, the Monitor may also transmit this information directly to the Central Vigilance Commissioner, Government of India.

(8) The word 'Monitor' would include both singular and plural.

Section 9 - Pact Duration

This Pact begins when both parties have legally signed it. It expires for the Contractor/ Supplier 12 months after the last payment under the respective contract, and for all other Bidders 6 months after the contract has been awarded. Any violation of the same would entail disqualifying the bidders and exclusion from future business dealings.

If any claim is made/ lodged during this time, the same shall be binding and continue to be valid despite the lapse of this pact as specified above, unless it is discharged/ determined by Chairperson of the Principal.

Section 10 - Other Provisions

(1) This agreement is subject to Indian Law. Place of performance and jurisdiction is the Registered Office of the Principal, i.e. Mumbai. The Arbitration clause provided in the main

tender document/ contract shall not be applicable for any issue/ dispute arising under Integrity Pact.

(2) Changes and supplements as well as termination notices need to be made in writing. Side agreements have not been made.

(3) If the Bidder/ Contractor/ Supplier is a partnership or a consortium, this agreement must be signed by all partners or consortium members.

(4) Should one or several provisions of this agreement turn out to be invalid, the remainder of this agreement remains valid. In this case, the parties will strive to come to an agreement to their original intentions.

(5) If any Bidder/ Contractor/ Supplier entering into Integrity Pact, aggrieved by any decision / action of the Principal, shall approach the IEMs and await their decision before pursuing any other remedy available to him in law.

(6) Issues like Warranty / Guarantee, etc., shall be outside the purview of IEMs.

M PRABHU
Deputy General Manager (CRO-BPREP)
Bina Petchem & Refinery Expansion Project (BPREP)
Bharat Petroleum Corporation Ltd.
Mumbai Refinery, Admin Building,
Mahul, Mumbai - 400074.

For & On Behalf of the Principal
(Office Seal)

For & On Behalf of Bidder / Contractor / Supplier
(Office Seal)

Place.....
Date .....

Witness 1
(Name & Address)

Witness 1
(Name & Address)

Annex– Guidelines on Indian Agents of Foreign Suppliers

1.1 There shall be compulsory registration of agents for all Global Tender Enquiries (GTE) and Limited Tender Enquiries (LTE). An agent not registered with the Procuring Entity shall apply for registration with them.

1.2 Registered agents shall file an authenticated Photostat copy duly attested by a Notary Public / Original certificate of the Principal confirming the agency agreement and giving the status being enjoyed by the agent and the commission/remuneration/salary/ retainer ship being paid by the Principal to the agent before the placement of an order by the Procuring Entity.

1.3 Wherever the Indian representatives have communicated on behalf of their principals and the foreign parties, have stated that they are not paying any commission to the Indian agents, and the Indian representative is working based on salary or as a retainer, a written declaration to this effect should be submitted by the party (i.e., Principal) before finalising the Contract.

2.0 Disclosure of Particulars of Agents/ Representatives in India, if any.

2.1 Bidders of Foreign nationality shall furnish the following details in their offer:

2.1.1 The name and address of the agents/representatives in India, if any and the extent of authorisation and authority given to commit the Principals. If the agent/representative is a foreign Company, it shall be confirmed whether it is a real functioning Company, and details of the same shall be furnished.

2.1.2 The amount of commission/remuneration included in the quoted price(s) for such agents/representatives in India.

2.1.3 Confirmation of the Bidder that the commission/ remuneration, if any, payable to his agents/representatives in India, may be paid by the Procuring Entity in Indian Rupees only.

2.2 Bidders of Indian Nationality shall furnish the following details in their offers:

2.2.1 The name and address of the foreign principals indicating their nationality as well as their status, i.e., whether manufacturer or agents of manufacturer holding the Letter of Authority of the Principal specifically authorising the agent to make an offer in India in response to tender either directly or through the agents/representatives.

2.2.2 The amount of commission/remuneration included in the price (s) quoted by the Bidder for himself.

2.2.3 Confirmation of the foreign principals of the Bidder that the commission/remuneration, if any, reserved for the Bidder in the quoted price (s) may be paid by the Procuring Entity in India in equivalent Indian Rupees on satisfactory completion of the Project or supplies of Stores and Spares in case of operation items.

2.3 In either case, in the event of the contract materialising, the payment terms shall provide for payment of the commission /remuneration, if any, payable to the agents/representatives in India in Indian Rupees on expiry of 90 days after the discharge of the obligations under the contract.

2.4 Failure to furnish correct and detailed information as called for in paragraph - 2.0 above shall render the concerned bid liable to rejection or, in the event of a contract materialising, the same liable to termination by the Procuring Entity. Besides this, there would be a penalty of banning business dealings with the Procuring Entity or damage or payment of a named sum.

The Independent External Monitors (IEM) may be contacted in case of any complaint with respect to the Tender :

Sr. No	Name	Address	Contact No	Email ID
1.	Shri Dr. Atanu Purkayastha	D-5, Sector 27 Noida, Uttar Pradesh-201301	9899772227	*dratanu2011@gmail.com*
2	Shri Pradeep Kumar			*pradeepawasthi1981@gmail.com*
3	Shri Javeed Ahmad			*Javeed60@yahoo*.com

FORM-I

DELETED

FORM –M

PROFORMA OF BANK GUARANTEE FOR EARNEST MONEY DEPOSIT

PROFORMA OF BANK GUARANTEE

(On non-judicial paper of appropriate value)

FOR EARNEST MONEY / SECURITY DEPOSIT TOWARDS PERFORMANCE

To

Bharat Petroleum Corporation Ltd.

Dear Sirs,

M/s._____have taken tender for the work_____CRFQ No/PO No

_____for Bharat Petroleum Corporation Ltd.

The tender Conditions of Contract provide that the Contractor shall pay a sum of Rs._____ (Rupees_____) as earnest money/security deposit in the form therein mentioned. The form of payment of earnest money/security deposit includes guarantee executed by Scheduled Bank, undertaking full responsibility to indemnify Bharat Petroleum Corporation Ltd. in case of default.

The said_____have approached us and at their request and in consideration of the premises we_____having our office at_____have agreed to give such guarantee as hereinafter mentioned.

1. We_____hereby undertake and agree with you that if default shall be made by M/s._____in performing any of the terms and conditions of the tender or in payment of any money payable to Bharat Petroleum Corporation Ltd. We shall on demand pay to you in such matter as to you may direct the said amount of Rupees_____only or such portion thereof not exceeding the said sum as you may from time to time require.

2. You will have the full liberty without reference to us and without effecting this guarantee postpones for any time or from time to time the exercise of any of the powers and rights conferred on you under the contract with the said_____and to enforce or to for bear from endorsing any power of rights or by reason of time being given to the said which under law relating to the sureties would but for provision have the effect of releasing us.

3. Your right to recover the said sum of Rs._____(Rupees_____) from us in manner aforesaid will not be affected or suspended by reason of the fact that any dispute or disputes have been raised by the said M/s._____and/or that any dispute or disputes are pending before any officer, tribunal or court.

4. The guarantee herein contained shall not be determined or affected by the liquidation or winding up, dissolution or change of constitution or insolvency of the said_____but shall in all respects and for all purposes be binding operative units payment of all money due to you in respect of such liabilities is paid.

5. Our liability under this guarantee is restricted to Rupees_____Our guarantees shall remain in force until_____unless a suit or action to enforce a claim under_____Guarantee is filed against us within six months from _____(which is date of expiry of guarantee) all our rights under the said guarantee shall be forfeited and shall be relieved and discharged from all liabilities thereunder.

6. We have power to issue this guarantee in your favour under Memorandum and Articles of Association and the undersigned has full power to do under the Power of Attorney dated_____granted to him by the Bank.

Yours faithfully

_____ Bank by its Constituted Attorney Signature of a person duly authorized to sign on behalf of the bank.

FORM – N

TAX RESIDENCY CERTIFICATE

&

FORM 10F

TAX RESIDENCY CERTIFICATE

TRC obtained by the Non-resident from Government of foreign country shall contain the following particulars:

Name of the assessee;

Status (individual, company, firm etc.) of the

assessee; Nationality (in case of individual);

Country or specified territory of incorporation or registration (in case of others);

Assessee's tax identification number in the country or specified territory of residence or in case no such number, then, a unique number on the basis of which the person is identified by the Government of the country or the specified territory;

Residential status for the purposes of tax;

Period for which the certificate is applicable; and

Address of the applicant for the period for which the certificate is applicable;

FORM NO 10F

[See sub-rule (1) of rule 21AB]

Information to be provided under sub-section (5) of section 90 or sub-section (5) of section 90A of the Income-tax Act, 1961

I……*son/daughter of……in the capacity of ..... (designation) do provide the following information, relevant to the previous year…… *in my case/in the case of ……for the purposes of sub-section (5) of * section 90/section 90A:-

Sl. No.	Nature of information	:	Details#
(i)	Status (individual; company, firm etc.) of the assessee	:	
(ii)	Permanent Account Number (PAN) of the assessee if allotted	:	
(iii)	Nationality (in the case of an individual) or Country or specified territory of incorporation or registration (in the case of others)	:	
(iv)	Assessee's tax identification number in the country or specified territory of residence and if there is no such number, then, a unique number on the basis of which the person is identified by the Government of the country or the specified territory of which the assessee claims to be a resident	:	
(v)	Period for which the residential status as mentioned in the certificate referred to in sub-section (4) of section 90 or sub-section (4) of section 90A is applicable	:	
(vi)	Address of the assessee in the country or territory outside India during the period for which the certificate, mentioned in (v) above, is applicable	:	

2. I have obtained a certificate to in sub-section (4) of section 90 of sub-sub-section (4)of section 90A from the Government of (name of country or specified territory outside India)

Signature:……..
Name:……..
Address:…….
Permanent Account Number:……..

Verification

I …….. do hereby declare that to the best of my knowledge and belief what is stated above is correct complete and is truly stated.
Verified today the ……..day of…….

……
Signature of the person providing the information

Place:…….
Note:

1. *Delete whichever is not applicable.
2. #Write N.A. if the relevant information forms part of the certificate referred to in sub- section (4) of section 90 or sub-section (4) of section 90A.

3. #Write N.A. if the relevant information forms part of the certificate referred to in sub- section (4) of section 90 or sub-section (4) of section 90A.

BINA PETCHEM AND REFINERY EXPANSION PROJECT (BPREP)
OF
M/s BHARAT PETROLEUM CORPORATION LTD, BINA (MADHYA PRADESH)

SPECIAL PURCHASE CONDITIONS (SPC)

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ANNEXURES TO SPC

Sl. No.	Description
1	Annexure- A: Taxes & Duties.
2	Annexure- B : List of banks
3	Annexure- C : Provisions w.r.t. Payment Terms
4	Annexure- D : Terms and Conditions for Supervision of Erection, Testing & Commissioning / Training at Site/Hazop
5	Annexure- E : Terms and Conditions for Post Warranty Annual Maintenance Contract
6	Annexure- F : Terms and Conditions for Site Work
7	Annexure- G :Terms & Conditions for Indian Sourced Components / Services
8	Annexure- H : Procedure for Vendor Invoice Processing- data collection template Vendor master Social Media Policy for Business Partners Vendor Advisory on Environmental Criteria
9	Annexure- I Packing, Marking, Shipping and Documentation Specification (For Indian Bidders) Packing, Marking, Shipping and Documentation Specification (For Foreign Bidders)

1. DEFINITIONS AND INTERPRETATIONS

In addition to meaning ascribed to certain capitalized terms in "General Purchase Conditions (GPC)", following initial capitalized terms shall have the meaning as ascribed to such term hereunder. In case any term defined hereunder is also defined in "GPC", the meaning ascribed to such term hereunder shall prevail:

1.1 Definitions

RFQ Documents, shall mean documents issued to the bidder along with RFQ

Effective Date shall mean the date on which Supplier's obligations will commence and that will be date of GeM Contract / Letter of Acceptance (LOA) / Purchase Order (PO), in case LOA is not issued.

The "Consultant" means the consulting engineers Nominated/appointed by the Owner for this Project/Job. ENGINEERS INDIA LIMITED (EIL) is consultant for this Project.

1.2 Interpretations

1.2.1 Where any portion of the GPC is repugnant to or at variance with any provisions of the SPC then, unless a different intention appears, the provisions of the SPC shall be deemed to govern the provisions of the GPC and SPC provisions shall prevail to the extent of such repugnancy, or variations exist.

1.2.2 In RFQ Documents unless otherwise stated specifically, the singular shall include the plural and vice versa wherever the context so requires.

1.2.3 Notwithstanding the sub-division of the RFQ Documents into separate sections and volumes every part of each shall be deemed to be supplementary to and complementary of every other part and shall be read with and into the Agreement so far as it may be practicable to do so.

1.2.4 All headings, subtitles and marginal notes to the clauses of the GPC, SPC or to the Specifications or to any other part of RFQ Document are solely for the purpose of giving a concise indication and not a summary of the contents thereof, and they shall never be deemed to be part thereof or be used in the interpretation or construction thereof.

1.2.5 The terms fully capitalized and/or initial capitalized shall be interchangeable and shall have the meaning as assigned to fully capitalized term or initial capitalized term.

1.2.6 Except the obligation of issuance of Purchase Order, Amendment of Purchase Order and payment to Seller, Consultant may discharge all other Purchaser's obligations. In BIDDING documents at all such places where obligations are confined to Purchaser alone such provision to read as 'Purchaser/Consultant's' obligation to the extent the context so means/ requires.

2. SUPPLIER'S SCOPE

2.1 Supplier's scope shall include but not limited to (a) manufacturing of Items as per Material Requisition technical specifications; (b) preparation of Quality Assurance / Quality control program; (c) obtaining Consultant's approval; (d) Inspection by Purchaser's/ Consultant/ Agency Designated by Purchaser and obtaining Inspection Release Note; (e) obtaining dispatch clearance; (f) Packing; and (g) Loading on truck/trailer for Indian Bidder / loading on ship at FOB port of exit, Ocean freight upto Nhava Sheva Port including stowage as applicable for foreign bidder and transportation upto site as applicable for Indian Bidder.

3. DELIVERY SCHEDULE / COMPLETION PERIOD

3.1 All goods under the scope of the Supplier shall be delivered as per delivery schedule / completion period specified in Request for Quotation (RFQ)/IFB and no variation shall be permitted.

3.2 Failing to meet the delivery schedule / completion period will be subject to Price Reduction and/or other remedies available to the Purchaser in RFQ Documents.

3.3 Price Reduction Schedule (PRS) shall be applicable as per Clause. No. 20 of GPC.

3.4 Where erection/testing/commissioning supervision, commissioning assistance is required as per RFQ Documents / Material requisition, penalty for non- mobilization/delay in mobilization as per order shall

be applicable.

3.5 The delivery schedule / completion period shall be reckoned from the date of GeM Contract / Letter of Acceptance / Purchase Order (PO), whichever is earlier..

4. DESPATCH INSTRUCTIONS

4.1 Supplier shall obtain dispatch clearance from the purchaser prior to dispatch.

4.2 Following dispatch documents are required to be submitted by the Supplier immediately after shipment is made.

Tax Invoice

Inspection Release Note by Third Party Inspection Agency/Purchaser/Consultant. LR/ GR / Clean Bill of Lading.

Packing List

Test Certificates (NDT reports, MTC, etc. as per MR) Certificate of Measurement and Weight

List of documents as specified in Vendor Data Requirement in Material Requisition & counter signed & stamped by TPIA (as applicable).

In addition to above documents in case of Foreign Bidder following documents are also required to be submitted

ETA Nhava Sheva Seaport

Documents pertaining to ocean freight

Country of origin certificate

5. PACKING, MARKING AND SHIPMENT

5.1 The following clause is added to Clause no.8 and 15 of GPC :

"The Supplier wherever applicable shall after proper painting, pack and crate all goods for sea/road/rail transportation in such a manner so as to protect it from damage and deterioration. The Supplier shall be held responsible for all damages due to improper packing. The Supplier shall ensure sizing or packing of all oversized consignments in such a way that availability of carrier and/or road/rail route is properly taken into consideration"

6. INSURANCE

6.1 Where only supply is involved, transit insurance shall be excluded from the suppliers scope and the same shall be arranged by the owner.

For purchases involving site work, Owner shall take Comprehensive Project Insurance covering all aspects of the Project construction including transit/logistics Procurement, Farbication, Construction, Offsite storage, Testing & commissioning and contractor and sub contractor of any tier shall be covered for on site activities only with respect to Project Value. Contractor is not supposed to take any Project Insurance nor Marine policy. This policy will also cover Third Party Liability arising out of bodily injury and/or property damage to Third Party only.
Owner's policies will absolutely exclude the following for which supplier shall take adequate insurance:

- Cover for supplier's Plant & Machinery used for construction
- Liability arising out of above equipment
- Cover for Employees/ workers of the Contractor
- Any statutory insurance like motor insurance for the vehicles used by suppliers.
- Cover for any vessels used for construction activities by the supplier including any associated liabilities
- Cover for any aircraft or helicopter and/or aviation assets used for construction activities by the contractor including any associated liabilities

- Cover for Professional Liability Insurance for design, project management, detailed engineering, design & build activities by the contractor and/or any consultant

7. INSPECTION

7.1 Inspection of Indigenous items shall be done by Engineers India Limited (EIL). In the case Indian party sourcing materials from abroad, the bidder shall arrange inspection through Third Party Inspection agency (as per Sl. No. 7.2 of General Purchase Conditions) in the country of origin & charges of the same shall be included in quoted prices.

7.2 Foreign vendors shall include third party inspection charges of Third Party Inspection agency (TPIA registered as per Sl. No. 7.2 of General Purchase Conditions) in the country of origin. In the case of foreign party sourcing items from India the inspection shall be done by EIL, no additional charges shall be payable to Seller on account of the same.

8. Deleted

9. TAXES & DUTIES

Refer chapter on Taxes and duties attached as Annexure- A to Special Purchase Conditions (SPC)

10. RECOVERY OF CUSTOMS DUTY, GST

In case of Indian Bidders, if the Statutory Variation entitles the Owner to recover the amount (irrespective of contractual delivery) such amount will be recovered from any bill of the Supplier immediately on enforcement of such variation under intimation to the Supplier.

11. REJECTION OF MATERIAL

Any materials/goods covered under scope of supply, which during the process of inspection by appointed third party, at any stage of manufacture/fabrication and subsequent stages as defined in Material Requisition , prior to dispatch is found not conforming to the requirements/specifications of the Purchase Requisition/Order, shall be liable for immediate rejection.

Supplier shall be responsible and liable for immediate replacement of such material on FOT Site basis, with acceptable material or rectify the defective material upto the satisfaction of inspection agency at no extra cost or impact on the delivery schedule to PURCHASER.

12. Deleted

13. PURCHASER'S RIGHTS AND REMEDIES

Without prejudice to PURCHASER's right and remedies under Agreement, if SUPPLIER fails to commence delivery as per agreed schedule and/or in reasonable opinion of the PURCHASER, SUPPLIER is not in a position to make up the delay to meet the intended purpose, the PURCHASER may terminate the AGREEMENT in full or part at SUPPLIER's default and may get supplies from other sources at SUPPLIER's risk and cost.

14. PERFORMANCE BANK GUARANTEE (PBG):

i) Single Performance Bank Guarantee for **5%** of total basic order value shall be furnished by successful vendors in BPCL format, within 15 days from the date of GeM Contract / Purchase order/ Letter of Acceptance, whichever issued earlier, in the proforma, in line with bidding document and from the banks as listed in **Annexure-B to SPC.**

ii) In case PBG is not received by BPCL within 45 days, non-refundable interest shall be charged at the rate (SBI base rate prevailing on the date of issue of enquiry plus 1%) (refer Bid data Sheet for SBI Base Rate), from the date the BG towards security deposit becomes due (i.e. 15 days from the date of Award).

iii) Failure of the successful bidder to submit the above-mentioned Performance Bank Guarantee shall constitute sufficient grounds for the annulment of the award.

iv) **BPCL's Bank Details for SFMS / e-PBG:**

Name of Bank : ICICI Bank
Branch: : Backbay Branch,

Mumbai BPCL : BPCL583493800
IFSC Code : ICIC0000393
BPCL Customer ID: BPCL583493800

v) Performance Bank Guarantee is applicable for all contract with value exceeding Rs 10 lakh.

15. PAYMENT TERMS FOR INDIAN BIDDERS AND FOREIGN BIDDERS:

Payment Terms shall be as specified in Bid Data Sheet (BDS). Also refer **Annexure-C** to this Special Purchase Conditions for relevant notes.

16. TRANSPORTATION

Delivery shall be on FOT site basis for indigenous supplies. For foreign supplies delivery shall be CFR port of entry in India (Nhava Sheva Port) basis except for ODC items. However, in case of packages involving site work, the delivery shall be on FOT site basis, duly erected and commissioned. or as Indicated in the RFQ document. Transportation / Ocean Freight shall be in scope of bidder. However, for Price Reduction Schedule (PRS) purpose, FOT dispatch point price for Indigenous supplies and FOB Port of shipment price for foreign supplies shall be considered. For ODC items, Delivery shall be FOT site basis only.

17. Deleted

18. PAYING AUTHORITY:

Bharat Petroleum Corporation Limited

Purchaser's Bankers:

Shall be provided along with detailed Purchase Order.

GST Registration details of BPCL

Bina Petro Chemical Unit (Madhya Pradesh): 23AAACB2902M2Z0

Bina Refinery Expansion (Madhya Pradesh): 23AAACB2902M1Z1

19. ORIGIN OF GOODS:

A certificate issued by relevant Chambers of Commerce to this effect shall form part of shipping documents (Applicable for imported finished Goods only).

20. QUALITY ASSURANCE / QUALITY CONTROL

11.1 The Supplier shall prepare a detailed quality assurance plan for the execution of contract for various facilities, which will be mutually discussed and agreed to.

11.2 The Supplier shall establish document and maintain an effective quality assurance system outlined in recognized codes

11.3 The purchaser/consultant, while agreeing to a quality assurance plan shall mark the stages where they would like to witness the tests; review any or all stages of work at shop as deemed necessary for quality assurance.

21. Deleted

22. Deleted

23. LIEN

Supplier shall ensure that the Scope of Supply supplied under the Agreement shall be free from any claims of title/liens from any third party. In the event of such claims by any party, Supplier shall at his own cost defend, indemnify and hold harmless Purchaser or its authorized representative from such disputes of title/liens, costs, consequences etc.

24. SETTLEMENT OF DISPUTE BETWEEN GOVT. DEPT./ PUBLIC SECTOR UNDERTAKINGS

In the event of any disputes or differences between the CONTRACTOR and the OWNER, if the CONTRACTOR is a Government department, a Government company or an undertaking in the public sector, then in addition to the provisions of clause 23 of the General Purchase Conditions, following shall be applicable:

Office Memorandum No. 0S/0003/2019-FTS-10937 dated 14.12.2022 issued by Government of India Ministry of Finance, Department of Public Enterprises for "Settlement of commercial disputes between Central Public Sector Enterprises (CPSEs) inter se and CPSE(s) and Government Department(s)/Organization(s) - Administrative Mechanism for Resolution of CPSEs Disputes (AMRCD)."

25. POST ORDER CORRESPONDENCE

Shall be specified in Letter of Acceptance / Purchase Order.

26. INDEPENDENT EXTERNAL MONITORS:

Bidders may raise disputes/complaints, if any, with the nominated Independent External Monitor, Bidder to refer Integrity Pact for details of Independent External Monitor.

27. REPEAT ORDER (Refer BDS for applicability)

Repeat order shall be applicable for additional **100%** value of the original order with quantities of each ordered item not exceeding 100% of the ordered quantities within 1 year from the date of placement of order

28. GOVERNING LAW:

Laws of India will govern the Contract / Purchase Order and jurisdictions of the courts in the city of Mumbai will have exclusive jurisdiction on all matters related to Contract / Purchase Order.

Seat of Arbitration shall be Mumbai for clause no. 23 of GPC.

29. ARBITRATION

In partial modification to Cl. No. 23 of GPC, following clause shall be applicable:

Mediation and Arbitration:

In the event of a dispute arising out of or in connection with this contract, including any question regarding its existence, validity or termination, the parties shall first seek settlement of that dispute by mediation in accordance with the Mediation Act, 2023.

A. If the dispute is not settled by mediation within [90] days of the appointment of the Mediator, or such further period as the parties shall mutually agree in writing, the dispute shall be referred to and finally resolved by arbitration as per India International Arbitration Centre (Conduct of Arbitration Proceedings) Regulations for the time being in force, which Regulations are deemed to be incorporated by reference into this Clause

B. The language to be used in the mediation and in the arbitration shall be English.

C. The governing law of the contract shall be the substantive law of India.

D. In any arbitration commenced pursuant to this clause:

i) The number of arbitrator/s shall be:

a) One - if the total claim including counterclaim, if any, under arbitration is Rupees 50 Crores or less; or

b) Three – if total claim including counterclaim, if any, is of more than Rs. 50 Crores.

ii) The seat of arbitration shall be Mumbai, India

iii) The cost of the proceedings shall be equally borne by the parties, unless otherwise directed by the arbitrator/s.

iv) Neither party shall be entitled to and claim for any pre-reference or pendente-lite interest, i.e. form the date of cause of action till date of Award by Arbitral Tribunal and claim for any such interest shall not be entertained by Arbitral Tribunal and be void. Further, Arbitral Tribunal shall have no power or authority to award pre-reference or pendent-lite interest in the matter.

E. In the event of any dispute or difference relating to the interpretation and application of the provisions of commercial contract(s) between Central Public Sector Enterprises (CPSEs) / Port Trusts inter se and also between CPSEs and Government Departments / Organizations (excluding disputes relating to Railways, Income Tax, Customs & Excise Departments), such dispute or difference shall be taken up by either party for resolution through AMRCD as mentioned in DPE OM No. 05/0003/2019-FTS-10937 dated 14th December 2022 and the decision of AMRCD on the said dispute will be binding on both the parties

30. PRICE VARIATION

Price Variation as per IEEMA shall be applicable for cables MR.

31. WAIVER OR TRANSFER OF THE AGREEMENT

The successful bidder shall not waive the Agreement or transfer it to third parties, whether in part or in whole, nor waive any interest that is included in the Agreement without the prior written permission of the Purchaser.

32. COMPLIANCE TO PUBLIC PROCUREMENT (PREFERENCE TO MAKE IN INDIA), ORDER-2017 DURING EXECUTION:

(a) For all contracts up to INR 10 Crore Contractor/ Supplier shall submit Form-2A. However, for contracts above INR 10 Crore, the Bidder shall be required to submit local content certification (as per FORM-3 & 3A) duly certified by Statutory Auditor or Cost Auditor (in the case of companies) or from a Practicing Cost Accountant or Practicing Chartered accountant (in respect of contractors / suppliers other than companies). For cases where it is not possible to provide such certification, the Contractor / supplier is permitted to provide the certificate after completion of contract but not later than submission of Final Bill. In that case, an amount equivalent to 10% of invoice value shall be retained from each invoice till submission of Form-3 & 3A.

(b) In case the Contractor/Supplier submit False declarations and / or does not meet the stipulated local content requirement and the category of the Contractor/ Supplier changes from Class-I to Class-II / Non-local or from Class-II to Non-local, default and penalty actions shall be taken as per the provisions of Public Procurement (Preference to Make in India) (PPP-MII) Order 2017 and its subsequent amendments.

ANNEXURE-A TO SPC

TAXES & DUTIES

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A. Price basis w.r.t inclusion/exclusion of taxes and duties

1. The quoted price(s) shall be inclusive of all the taxes and duties except GST (i.e. IGST or CGST and SGST/UTGST applicable in case of interstate supply or intra state supply respectively) and GST compensation cess, (if applicable) leviable on sale of finished goods/services.
2. In case of foreign bidders, bidders shall submit their prices on FOB international sea port of exit basis which shall be inclusive of all applicable taxes up to FOB international sea port of exit
3. Transportation charges in India (if applicable) up to respective project site shall be exclusive of GST.
4. Site work prices, if applicable shall be inclusive of all taxes and duties except GST. All necessary registrations, if required, for carrying out the site activities shall be done by the bidder and costs towards the same shall be included in quoted site work prices.
5. Prices of per diem supervision charges, training/AMC, HAZOP Study etc. (as applicable) shall be exclusive of GST. However, GST shall not be applicable on training provided at foreign bidder's work/training facilities in any territory other than India.

For enquiries floated on GeM portal, the above provisions shall be superseded by the provisions mentioned in ITB in this regard.

B. TAX CLAUSES

1. Goods and Services Tax

a. The supplier/contractor will be liable to register with the respective tax authorities and to submit self-attested copy of such registration certificates and the supplier/contractor will be responsible for procurement of goods/services in its own registration (GSTN).

b. Supplier/Contractor shall be required to issue tax invoice in the form and manner prescribed under GST Act read with Rules thereunder including E-Invoicing provisions so that input tax credit under GST can be availed by Owner. In the event that the supplier/contractor fails to provide the Tax Invoice/E-Invoice in the form and manner prescribed under the GST act read with GST invoicing rules thereunder, Owner shall not be liable to make any payment on account of GST against such invoice.

c. In case supplier/contractor is not subject to E-Invoicing provisions under the GST Laws as amended from time to time, then a declaration to this effect shall be furnished by the supplier/contractor along with the Invoice.

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d. GST shall be paid to supplier/contractor against receipt of Tax Invoice/E-Invoice. In case of non-receipt of Tax Invoice/E-Invoice, Owner shall with hold the payment of GST.

e. The supplier/contractor shall always comply with the requirements of applicable laws and provide necessary documents as prescribed under the rules and regulations, as applicable from time to time. In particular, if any tax credit, refund or any other benefit Is denied/delayed to Owner or any interest/penalty is charged to Owner due to any non-compliance/ delayed compliance by the supplier/contractor under the GST Law (including but not limited to failure to upload the details of the sale on GSTN portal, failure to pay GST to the government or due to non-furnishing or furnishing of incorrect or incomplete documents, non-filing of GST return by the supplier/contractor), the supplier/contractor shall be liable to reimburse Owner for all such losses and other consequences including but not limited to the tax loss, interest and penalty. Owner shall be entitled to recover such amount from the supplier/contractor by way of adjustment from the next invoice, encashment of BG or by way of any other means either of same project or any other project of the Owner.

f. In case of any Advance including Mobilization/Secured/Other Advance is granted to supplier/contractor as per the provisions of Contract, then the supplier/contractor shall issue a Receipt Voucher / GST Invoice in the form and manner prescribed under GST Act read with Rules thereunder including e-invoicing provisions.

g. In case of any Price Variation as per the provisions of Contract, the supplier/contractor shall issue an Invoice in the form and manner prescribed under the GST Act read with Rules thereunder including e-invoicing provisions.

h. GST payable under reverse charge for specified services/goods under GST Act read with Rules thereunder, if any, shall not be paid to the supplier/contractor but will be directly deposited by Owner to the appropriate Government Tax Authority. If the same has already been reimbursed / paid to the supplier/contractor for any reason whatsoever, then Owner shall be entitled to deduct/set off /recover such amount against any amounts paid/payable by Owner to supplier/contractor.

i. Where Owner has the obligation to discharge GST liability under reverse charge mechanism and Owner has paid or is liable to pay GST to the government on which interest/penalty becomes payable as per GST law for any reason which is not attributable to Owner or Input Tax Credit w.r.t. such payment is not available to Owner for any reason which is not attributable to

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Owner, then Owner shall be entitled to deduct/set off /recover such amount against any amounts paid/payable by Owner to contractor/supplier.

j. TDS under GST, if applicable shall be deducted from supplier/contractor bills at applicable rates and a certificate as per rules for tax so deducted shall be provided to supplier/contractor.

k. The supplier/contractor will be under obligation for charging correct rate of tax as prescribed under the respective tax laws. Further the supplier/contractor shall avail and pass on benefits of all exemptions/concessions available under applicable tax laws.

l. In case bidder is covered under composition scheme under GST law, then bidder shall quote the price inclusive of GST. Further, such bidder should mention "Covered under GST Composition Scheme" in column for GST of relevant price schedule(s). In case subsequently such bidder gets covered under regular GST regime, the prices including GST under regular GST regime shall not exceed the prices quoted by the bidder under composition scheme.

m. Owner prefers to deal with registered supplier/contractor of goods/services under GST. Therefore, bidders are requested to get themselves registered under GST, If not registered yet. However, in case any unregistered bidder is submitting bid, their prices will be loaded with applicable GST while evaluation of bid as per evaluation methodology of tender document. However, where Owner is entitled for input credit of GST, the same will be considered for evaluation of bid as per evaluation methodology of tender document.

n. In case of foreign bidders, for supervision/site-work/training, services provided by foreign bidder at project site, GST shall be paid by Owner directly to appropriate Government Tax Authorities, under Reverse Charge Mechanism, if applicable and prices of such services will be loaded with applicable GST while evaluation of bid as per clause E (Evaluation methodology).

o. Bidder will be required to quote applicable tax rate (along with applicable HSN/SAC Code) as per provisions of GST Laws for all the line items forming part of the enquiry. Any higher rate of tax actually invoiced in excess of quoted rate of tax (except in compliance with provisions of Statutory Variation clauses) shall be adjusted in basic price.

p. In case of delay in supply/execution of contract, supplier/contractor shall be liable to raise invoices for reduced value as per Price Reduction Schedule (PRS) provision of the bidding document. In case the supplier/contractor

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raises invoices for full value, then supplier/contractor shall issue Credit Note, in the form and manner prescribed under relevant GST Act read with Rules thereunder, towards applicable PRS amount with applicable GST thereon.

In case supplier/contractor fails to submit invoices with reduced value or does not issue Credit Note as mentioned above, Owner shall release payment to the supplier/contractor after giving effect to the PRS clause with corresponding reduction in taxes from invoice(s) of supplier/contractor.

In case any financial implication arises on Owner due to issuance of invoice without reduction in prices or non-issuance of Credit Note by supplier/contractor, the same shall be to the account of supplier/contractor. Owner shall be entitled to recover the amount of such financial implication paid or becoming payable by Owner together with penalty and interest thereon, if any.

q. E-way bills shall be issued directly by supplier/contractor in all cases except in cases of direct imports by Owner where E-way bill shall be issued by Owner.

r. In case of applicability of any recovery as per provisions of the contract, Owner shall raise Invoice on supplier/contractor after charging GST at applicable rates as per prevailing provisions of GST Laws.

2. IMPORT DUTIES

a. Direct supplies by foreign suppliers where, client becomes consignee:
   i. Consignee shall be Owner, bill of entry shall be filed by Owner, all import duties, Social Welfare Surcharge, IGST and GST Compensation Cess etc. as applicable in India shall be paid by Owner.

b. Imported supplies by Indian/ Foreign suppliers/Contractors as built in import content where goods are cleared by filing into Bill of Entry in the name of Owner
   i. High seas sale shall be effected between, supplier/contractor and Owner.
   ii. Bill of entry shall be filed in the name of Owner by supplier/contractor, all import duties, Social Welfare Surcharge, IGST and GST Compensation Cess etc. as applicable in India shall be discharged by Owner.
   iii. Custom duties, Social Welfare Surcharge, IGST, GST Compensation Cess, etc. as applicable in India on the imported materials shall not be included in the quoted prices by the bidder. All harbour dues/ pilotage fees, port fees, wharfage, unloading costs, demurrage

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charges etc. incurred in India in respect of any imported goods shall be to supplier's/contractor's account.

iv. Bidder to indicate CIF value of built-in import content and applicable merit rate,Social Welfare Surcharge on custom in the relevant price schedule.

v. The supplier/contractor shall be responsible for and shall exercise due diligence in properly classifying the goods and materials, undertaking the payment of custom duties, and/or otherwise complying with all applicable laws w.r.t. import of the goods and materials

vi. If the total custom duties (BCD, SWS & IGST) paid or payable on the import of goods into India exceeds the total value thereof calculated as per the CIF value and rates indicated by supplier/contractor as above as increased or decreased for any increase or reduction in applicable rates or CIF valuation, the Supplier/contractor shall pay and bear and/or reimburse to the Owner such excess custom duties.

c. Imported supplies by Indian suppliers as built in import content where Suppliers/Contractors will become consignee of the goods by filling Bill of Entry for Home consumption

i. Custom duties, Social Welfare Surcharge, IGST, GST Compensation Cess, etc. as applicable in India on the imported materials shall be included in the quoted prices by the bidder (considering the input tax credit of IGST, GST Compensation Cess on imported material) and supplier/contractor shall be responsible for the timely payment of the custom duties to the relevant government authority. All harbor dues/ pilotage fees, port fees, wharfage, unloading costs, demurrage charges etc. incurred in India in respect of any imported goods shall be to supplier's/contractor's account.

ii. Bidder to indicate, in relevant price schedule, CIF value of built-in import content and applicable merit rate of basic custom duty, Social Welfare Surcharge on custom duty (considering the input tax credit of IGST, GST Compensation Cess on imported material) included in quoted price, in the price schedule.

iii. In case merit rate of custom duty is applicable and bids are invited on the basis of same, however at a later stage concessional rate of custom duty becomes applicable, concessional certificate shall be issued towards import of material against the advance request letter submitted by the domestic bidder and the differential custom duties between concessional rate and quoted merit rate of custom duty by supplier/contractor shall be passed on to the Owner or it shall be recovered by the Owner from the supplier/contractor's invoice.

iv. The supplier/contractor shall be responsible for and shall exercise due diligence in properly classifying the goods and materials, undertaking

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the payment of custom duties, and/or otherwise complying with all applicable laws w.r.t. import of the goods and materials.

v. If bidder does not furnish built in CIF value and rates of custom duty, in that case bidder shall not be entitled to claim any variation in the custom duties even if bidder has quoted their prices considering custom duties.

vi. If custom duty rate actually paid on import of materials and components is found to be lower than the quoted rate of custom duty, then benefit of the same shall be passed on to the Owner.

vii. If bidder has considered Import Duty other than Merit Rate of Import Duty then statutory variation on the Import Duty shall be payable extra on the Merit Rate of Import Duty or the rate of Import Duty considered by the bidder, whichever is lower.

viii. In case, no import is made for execution of the order, clauses related to Imports will not be applicable.

d. General points:

i. In case Owner is exposed to any penal action, interest /penalties by the custom authorities for incorrect declaration and / or valuation of the goods or material by the supplier/contractor, or otherwise on account of any breach of applicable laws in the course of the import of the goods and material by supplier/contractor, the supplier/contractor shall indemnify and hold harmless the Owner for any and all costs, expenses or losses suffered or incurred by Owner in this regard

ii. If bidder intends to source import of goods from a country with which India has Free Trade Agreement (FTA) or Comprehensive Economic Partnership Agreement (CEPA) or any such multi-lateral / bi-lateral Agreement or Treaty with India or under Generalized System of Preference (GSP); or under any other notification (allowing lower rate of custom duty), then the bidder is advised to ascertain and confirm its applicability along with supporting documents in the bid and ensure that conditions of such agreement/treaty etc. are strictly complied with.

iii. The bidder shall be liable to provide all documentation to ensure availment of the exemption/waiver. In case the bidder defaults on this due to any reason, whatsoever, he shall be liable to bear the incremental custom duty applicable if any

iv. Any additional custom duty applicability on account of any change in the notification (allowing lower rate of custom duty)/ CEPA/FTA/multi-lateral/bi-lateral trade agreement shall be to bidder's account.

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v. Documentation to be furnished for availing the exemption/waiver of custom duty shall be specifically listed in the letter of credit also as a prerequisite for release of payment against shipping documents and this documentation shall necessarily form a part of shipping documents.

vi. Owner will not bear any liability towards payment of Safeguard Duty, Anti-Dumping Duty, Protective Duty and applicable IGST including GST Cess on same or Countervailing Duty on subsidized articles or any other such duties of Customs imposed by Government under Customs Tariff Act, 1975.

vii. In case custom duty rate as quoted by Foreign bidder is less than Actual rate applicable on due date of submission of last price bid and payment of custom duty is on Owner's Account, differential amount on account of above-mentioned rate variation will be recovered from Foreign bidder.

3. INCOME TAX

a. Foreign supervisors/suppliers/contractors

Prices of site work, contracts and other services of foreign supplier/contractor shall be gross of income tax i.e., inclusive of Indian income tax at the applicable prevailing rate as per Indian Income Tax Act and Rules there under.

Owner shall deduct withholding tax at source (TDS) as applicable while making payments against each invoice. Certificate for TDS shall be provided to the supplier/contractor.

In case foreign bidder quotes Prices of site work, contracts and other services "net of Income Tax" i.e., exclusive of Indian income tax, Owner shall deduct and deposit TDS as applicable after grossing up the sums due while making payments against each invoice at the applicable prevailing rate as per Indian Income Tax Act and Rules thereunder.

Foreign bidder shall furnish the information required in line with the prevalent provisions of Income tax act read with rules thereunder including but not limited to Tax residency certificate, Form 10F, No permanent establishment declaration, No business connection certificate, PAN in India if available.

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Failing to provide above documents/information, tax will be withheld at rates applicable as per the provisions of Income Tax Act, 1961 read with rules thereunder and the benefit of reduced rates will not be given.

If the non-resident is unable to obtain & submit Tax Residency Certificate to the Owner within a reasonable time, the bidder should furnish Form 10F along with an undertaking to the effect that the bidder is a tax resident of (the specified country) and that they shall obtain and provide the tax residency certificate (TRC) to the Owner before 30 days of submission of first Invoice by them or within 3 months from the date of entering into contract whichever is earlier.

In case of contracts with term exceeding one financial year, the relevant documents like TRC, Form 10 F, No PE / Business Connection Certificate etc. as applicable, as per Income Tax Act, 1961 must be submitted at the beginning of each financial year and the Owner will not bear additional tax liability (if any) arising from non-submission of documents.

The bidder shall be liable to intimate the subsequent changes (if any) to the information submitted against any of the above particulars, along with full details.

In addition to the above particulars, the bidder should also provide any other information as may be required at a later stage for determining the taxability of the amount to be remitted to the non-residents.

In case, any additional tax liability arises on the Owner due to any action of bidder like delay in submission / non-submission of information / documents required as above or change in residential status post submission of documents or change in any document (like TRC, Form 10F etc.) after its submission shall be recovered from the supplier/contractor.

b. Indian resident supervisors/ suppliers/contractors

Prices for supply and services of Indian suppliers/ contractors shall be inclusive of income tax.

Tax shall be deducted at source (TDS) by Owner on all sums due to supplier/contractor in accordance with the provisions of Indian Income Tax act read with rules thereunder as in force at the relevant point of time.

Owner shall issue a Tax Deduction Certificate to the supplier/contractor evidencing the tax deducted or withheld and deposited by Owner on

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payments made to the supplier/contractor to enable the supplier/contractor to claim the credit of Tax deducted by Owner.

c. INCOME TAX (General Points):-

i. The supplier/contractor shall also be responsible for ensuring compliance with all applicable provisions of the Direct Tax Laws of India including, but not limited to, the filing of relevant Tax Returns and shall promptly provide all information required by the Owner for discharging any of its responsibilities/liabilities under such laws in relation to or arising out of the Contract. For the lapses/failure, if any, on the part of the supplier/contractor and consequential penal action taken by the Income Tax department, Owner shall not take any responsibility whether financial or otherwise and shall be indemnified by the supplier/contractor.

ii. The Indian Income Tax Act and Rules made thereunder contains provisions permitting deduction of tax at source (TDS) at lesser rate if the supplier/contractor is able to justify to the Income Tax Authorities such lesser rate of deduction. However, a deduction once made has to be deposited by the Owner with the Income Tax Authorities in India and will not be adjustable by the Owner. It is therefore in the interest of the supplier/contractor that prior to release of any payment due to the supplier/contractor under the Contract that the supplier/contractor obtains from the relevant Income Tax Authorities in India, a certificate specifying the rate of deduction/withholding of Income tax at source, failing which, payment to the supplier/contractor shall be made by the Owner after withholding/deduction at the rate as may be applicable to the supplier/contractor as per provisions of Income Tax Act, 1961.

iii. TDS on interest recovered on Mobilization/Other Advance will be deposited by the supplier/contractor and same would be reimbursed by the Owner against submission of Form-16A (TDS certificate).

C. INVOICING METHODOLOGY W.R.T. TAXATION

Following invoicing methodology shall be followed :

1. In case of domestic / foreign PO's (Other than 2 below) , Invoice/E-Invoice shall be raised by the supplier/contractor in the name of Owner and consignee shall be Owner.
2. In case of package MR's (where title transfer or take over is envisaged to take place at site after completion of site work) and tenders, supplier/contractor shall bring material at project site in their own name and they themselves shall be consignee. As per provisions of contract between Owner and

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supplier/contractor, Invoice/E-Invoice shall be raised by supplier/contractor to Owner after charging GST.

D. APPLICABILITY OF TAX CREDIT

MR/tender pertaining to PMC-1 scope: 100% GST input credit is available to owner, except for Sec 17(5) disallowances.

MR/tender pertaining to EPCM-1 scope: 100% GST input credit is available to owner, except for Sec 17(5) disallowances.

MR/tender pertaining to EPCM-2 scope: GST input credit is to be considered as NIL

E. EVALUATION METHODOLOGY W.R.T. TAXES

Following shall be loaded for evaluation:

1. Applicable Custom Duty, Social Welfare Surcharge etc (Non-MOOWR cases)/Present value of deferred import duties (MOOWR cases), (excluding IGST & GST Compensation Cess (if applicable) on imported material which shall be dealt as per bid evaluation methodology given in E2 below) shall be loaded for price bid evaluation in respect of supplies for which bill of entry has to be filed by Owner/in the name of Owner (MOOWR cases).

2. a) GST including GST Compensation Cess (if applicable) on which input credit is not available to Owner [Excluding (b) below]
   (b) Present Value of GST deferred under MOOWR scheme

3. Applicable Income tax, in case foreign bidder quotes prices net of taxes.

Note:

i.) Interest rate for discounting to arrive at the present value of deferred import duties = 12 %

ii.) Project useful life = 25 years

F. TAXATION TERMS FOR INDIAN SOURCED SUPPLIES (Applicable in case of foreign supplier)

Shall be the same as applicable for Indian bidders.

G. TAX IMPLICATION WHERE FABRICATION YARD IS OUTSIDE THE FACTORY PREMISES, WHEREVER APPLICABLE

In case of package MRs and tenders, since contractors/suppliers shall bring material at project site in their own name and raise invoice to Owner (as per payment

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milestone achieved) after charging GST, location of fabrication yard whether inside or outside factory premises will not attract any additional liability.

H. TAX IMPLICATION WHERE OWNER WILL ISSUE FREE ISSUE MATERIAL (FIM) TO CONTRACTORS/SUPPLIERS

Where Owner issues FIM's to suppliers/contractors, material will be released against delivery challan and such FIM shall be received back in factory premises as per provision of GST.

I. STATUTORY VARIATION (IN CASE OF MRS & TENDERS)

No variation on account of taxes and duties, statutory or otherwise, shall be payable to Supplier/Contractor except for the following:

1. GST: If after the due date of submission of last price bid and up to the contractual delivery/completion period , any increase/decrease occurs in the applicable rate of GST, the variation in such GST shall be to Owner's account and shall be adjusted (increase / decrease) to / from the Supplier's/Contractor's invoices based on the documentary evidence.

   Any increase in GST after the contractual delivery/completion period shall be to Supplier's/Contractor's account. However, any decrease in the rate of GST shall be passed on to Owner.

   For calculating Statutory Variations ceiling amount as declared by the Bidder in price schedule shall only be considered.

2. Basic Custom Duty (BCD) & Social Welfare Surcharge (SWS): If after the due date of submission of last price bid and up to the 2/3rd of contractual delivery/completion period, any increase/decrease occurs in the applicable rate of BCD & SWS on materials imported, the variation in such BCD & SWS shall be to Owner's account and shall be adjusted (increase/decrease) to/from the Supplier's/Contractor's invoices based on the documentary evidence.

   Any increase in rate of BCD & SWS on materials imported after the 2/3rd of the contractual delivery/completion period shall be to Supplier's/Contractor's account. However, any decrease in the rate of BCS & SWS on materials imported shall be passed on to Owner.

   For calculating Statutory Variations in BCD/SWS, ceiling amount of CIF Value and rate of custom duty as declared by the Bidder in relevant price schedule shall only be considered.

Note: Indian supplier/contractor to consider input tax credit of IGST and GST Compensation Cess if any (in case of import of raw Materials / components) in their quoted prices. Hence, Statutory variations on same in case of

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imported materials from outside India in Supplier's/Contractor's name (i.e., for Indian Bidders) shall be to Supplier/Contractor account.

3. Any new output taxes, duties, cess, levies notified or imposed after the due date of submission of last price bid but upto the contractual date of delivery/completion shall be to Owner's account. These shall be reimbursed against documentary evidence. However, in case of delay attributable to supplier/contractor, any new output taxes, duties, cess, levies notified or imposed after Time for Completion, defined as above, shall be to supplier's/Contractor's account.

J. TAX INDEMNITY

Any omission/ errors of interpretation of applicability of taxes, duties, cesses and levies, whatsoever named, howsoever named, as are payable to any government, local or statutory authority in India or in any country other than India by the supplier/contractor shall be to supplier's/contractor's account.

If any fine/penalty/any other levy is required to be met by the Owner arising out of any non-compliance/fault/fraud/willful suppression/misstatement of facts/information/documents, whatsoever, of any applicable laws of India or any country other than India by the supplier/contractor/their personnel/sub-contractors/agencies, the same shall be recovered from any amount payable to the supplier/contractor under this contract or under any other contract of the Owner.

If any tax is paid / required to be paid by supplier/contractor in pursuance of any demand of any law enforcement agency/Tax Authority on account of non-compliance/fault/fraud/willful suppression/misstatement of facts/information/documents, whatsoever, of any applicable laws of India or any country other than India by the supplier/contractor/their personnel/sub-contractors/agencies, the same shall be to supplier's/contractor's account only.

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ANNEXURE-B TO SPC

LIST OF BANKS FOR BANK GUARANTEES

Annexure I

List of banks meeting the stipulated criteria as on 02.06.2025

Sr No.	Name of Bank	Category of Banks
1	AU Small Finance Bank Ltd	Indian Bank
2	Axis Bank Ltd	Indian Bank
3	Bank of Baroda	Indian Bank
4	Bank of India	Indian Bank
5	Bank of Maharashtra	Indian Bank
6	Canara Bank	Indian Bank
7	Federal Bank Ltd	Indian Bank
8	HDFC Bank Ltd	Indian Bank
9	ICICI Bank Ltd	Indian Bank
10	IDBI Bank Ltd	Indian Bank
11	IDFC First Bank Ltd	Indian Bank
12	Indian Bank	Indian Bank
13	Indian Overseas Bank	Indian Bank
14	IndusInd Bank Ltd	Indian Bank
15	Karur Vysya Bank Ltd	Indian Bank
16	Kotak Mahindra Bank Ltd	Indian Bank
17	Punjab National Bank	Indian Bank
18	State Bank of India	Indian Bank
19	UCO Bank	Indian Bank
20	Union Bank of India Ltd	Indian Bank
21	Abu Dhabi Commercial Bank PJSC	Foreign Bank
22	Bank of America NA	Foreign Bank
23	Bank of Nova Scotia	Foreign Bank
24	MUFG Bank Ltd	Foreign Bank
25	BNP Paribas SA	Foreign Bank
26	Shinhan Financial Group Co Ltd	Foreign Bank
27	Citibank NA	Foreign Bank
28	DBS Group Holdings Ltd	Foreign Bank
29	Hongkong & Shanghai Banking Co	Foreign Bank
30	JPMorgan Chase & Co	Foreign Bank
31	Mizuho Bank Ltd	Foreign Bank
32	Westpac Banking Corp	Foreign Bank
33	Industrial & Commercial Bank of China	Foreign Bank
34	Credit Agricole SA	Foreign Bank
35	Cooperative Rabobank UA	Foreign Bank
36	Doha Bank QPSC	Foreign Bank
37	Qatar National Bank QPSC	Foreign Bank
38	United Overseas Bank Ltd	Foreign Bank
39	KEB Hana Bank	Foreign Bank
40	Industrial Bank of Korea	Foreign Bank
41	First Abu Dhabi Bank PJSC	Foreign Bank
42	Emirates NBD Bank PJSC	Foreign Bank
43	NatWest Markets PLC	Foreign Bank
44	Bank of China Ltd	Foreign Bank
45	CTBC Bank Co Ltd	Foreign Bank

Note:

1. The above list of banks is based on the credit rating as on date (Source: Bloomberg)
2. In case of any discrepancy/subsequent upgrade in credit rating, user department can contact Treasury for clarification.

ANNEXURE-C TO SPC

PAYMENT TERMS

Annexure-C

PAYMENT TERMS FOR MATERIAL REQUISITIONS

In partial modification of the payment terms as mentioned in the General Purchase Conditions, the payment terms mentioned in Bid Data Sheet shall be applicable.

Further, following to be noted

A. 1ST Milestone payment shall be released only after receipt of CPBG (wherever applicable) Wherever ABG is required to be submitted by the supplier against milestone progress payment, validity of ABG shall be valid till CDD which shall be further extended, as required till last date of receipt of all material at site. However ABG will be released on dispatch/ receipt of material at site (as applicable).

B. Prorata payments shall be applicable on dispatch of equipment. In case of equipment, prorate shall not be done on part of equipment.

C. In case of indigenous SUPPLIERs, wherever taxes/duties are separately indicated, the order value shall be exclusive of taxes/duties. 100% payment of GST shall be paid on receipt of GST invoices.

D. Payment to indigenous SUPPLIERs shall be released through Electronic Clearing System (ECS) and to foreign SUPPLIERs, payments other than against shipping documents, i.e., for Site Work and Supervision/Training etc. shall be through wire transfer.

E. Uploading of and Tracking of invoice in BPCL invoice portal:For details, **refer Annexure-H** to SPC

F. For payment to Foreign suppliers: L/C shall be established in favor of the supplier in a bank in his country, for an appropriate amount (in line with Payment Terms). L/C shall be opened within 45 days of receipt of acknowledgement of LOA/PO and receipt of CPBG (wherever applicable). In case confirmed L/C is insisted by supplier, L/C confirmation charges shall be to supplier's account.

G. All payments (other than through L/C) shall be released within 30 days of receipt of invoice and all requisite documents, complete in all respects.

H. All bank charges of respective bankers shall be to respective account.

I. Supplier shall submit Billing Schedule within three weeks after placement of LOA/PO (whichever is issued earlier) for EIL/OWNER's approval (wherever applicable). Suppliers requiring multiple dispatches will restrict the number of dispatches to maximum Three, unless agreed otherwise by Project Manager.

K. In case site front is not available up to 6 (Six) months (wherever site work is applicable), after receipt of all supplies at site, the payment against the site work shall be released on submission of additional Bank Guarantee of equivalent amount valid for 1 (One) year or such extended period as may be required

L. Certification for placement of sub-order and/or identification of major raw material, in the above payment terms, shall be carried out by the nominated Inspection agency.

M. Wherever the payment provision is there against ABG, and Vendor is not seeking payment against these milestones, those milestone payment shall be released along with milestone of despatch/ receipt of material at site without seeking any ABG for earlier milestone payment.

N. In case of high value Contracts for sophisticated Equipment/ Machinery, if domestic supplier insist payment through LC, this may be considered provided Loading provision is included in Bidding Document.

ANNEXURE-D TO SPC

TERMS & CONDITIONS FOR SUPERVISION OF ERECTION, TESTING & COMMISSIONING / TRAINING AT SITE/HAZOP

Terms & Conditions for Supervision of Erection, Testing & Commissioning / Hazop / Training at Site

1. The quoted per diem rate shall be deemed to include all related expenses, including but not limited to domestic travel, local conveyance, accommodation, meals, medical, all insurances including Bidder's personnel and third-party insurance and all other incidental charges, and compliance with applicable statutory requirements pertaining to the deployed personnel. No additional reimbursement shall be payable under any head unless expressly provided for elsewhere in the Contract.
2. Per diem charges shall be payable from the day bidder's person reaches site upto the day he leaves the site. No payment will be made for travel days/period.
3. In case bidder's representative takes leave, per diem charges for that day shall not be payable.
4. The Bidder shall quote an all-inclusive per diem rate for the aforesaid services, based on a standard working day of ten (10) hours. The per diem rate shall be uniformly applicable to working days, weekly offs, and public holidays on a pro-rata basis. Any work performed beyond ten (10) hours in a day shall be compensated on a pro-rata basis calculated from the quoted per diem rate. Payment shall be made strictly for the actual number of days personnel are present and working at the site; no payment shall be made for travel time.
5. Selection of Foreign/ Indian supervisory personnel shall be left to Owner's/Purchaser's choice.
6. Vendor's supervisory personnel shall observe/abide by site working conditions prevailing at the existing site, safety codes, Indian laws and local laws.
7. A notice period of 15 days will be given for mobilization of supervisory personnel for supervision of erection.
8. Validity period of per diem rate shall be upto the end of guarantee period. Further, in case services for supervision are required after the guarantee period, 5% annual escalation shall be applicable.
9. Payment Terms: Refer Bid Data Sheet / Annexure-C to SPC.
10. **Requirement of Employment Visa for Foreign Nationals**

    All foreign nationals coming to India for execution of Projects / Orders will have to apply for Employment Visa only and that grant of Employment Visa would be subject to strict adherence of following norms:

    i) Employment Visa is granted only for the skilled and qualified professional or to a person who is being engaged or appointed by a company, organization, Industry or undertaking etc. in India on contract or employment basis at a senior level, skilled position such as technical expert, senior executive or in managerial position etc.
    ii) Request for employment Visa for jobs for which large number of qualified Indian are available, is not considered.
    iii) Under no circumstances an Employment Visa is granted for routine, ordinary secretarial / clerical jobs. Bidders are advised in their own interest to check latest Visa rules from Indian Embassy/ High Commission in their country in case foreign nationals are required to be deputed to Indian during execution of the Order.

Signature with Name & Date and

Seal/Stamp of the Bidder

ANNEXURE-E TO SPC

Terms and Conditions for Post Warranty Annual Maintenance Contract

Terms and Conditions for Post Warranty Annual Maintenance Contract

1. Bidder to quote for the Post Warranty Annual Maintenance Contract as per scope defined in Material Requisition (MR) / Technical portion for no. of years as specified in MR / Price Schedule. Bidder to furnish the Lumpsum Price as per the Price Schedule.

2. The AMC Charges quoted in Price Schedule Format shall be inclusive of all the charges for Transportation, Lodging, Boarding, all insurances including third party insurance,and all other incidental charges etc. Owner will not have any liability, whatsoever, over and above the quoted prices.

3. Payment terms shall be as specified in Bid Data Sheet (BDS) / Annexure-C to SPC.

4. The order for AMC will be placed before the expiry of contractual Warranty Period. The price of AMC services will remain firm & fixed for the complete execution of AMC contract. In case there is delay in start of AMC from the date of expiry of warranty period, the charges shall be paid on prorata basis for the duration curtailed from original specified AMC period.

5. Within 2 weeks of placement of Order for AMC, Seller shall submit CPBG for 5% of the Maximum annually AMC amount which shall be valid for the entire AMC period plus 6 months claim period.

6. Periodic and Preventive maintenance: Vendor shall depute their engineers to installation site as & when required for regular checkups, as part of periodic maintenance. Vendor shall also depute their service engineers periodically for preventive maintenance, major repairs / replacement and reporting. Price shall also include emergency visits as necessary.

7. Scope of AMC shall be as per MR/ Technical portion. The quoted lump sum rate shall include providing all manpower, machineries and materials required to carry out the work as per scope of work of AMC defined in the MR.

ANNEXURE-F TO SPC
TERMS & CONDITIONS FOR SITE WORK

TERMS & CONDITIONS FOR SITE WORK

1. The Vender shall perform their jobs in eco-friendly manner and in consonance with the objectives of BPCL Refinery environment management system.
2. Since, it is an existing Complex with various units in operation; the proposed site has constraints of space availability, restriction in movement of over dimensioned / overweight consignments both within & outside the project site. Further, construction / erection work for several other project facilities at various locations within refinery site will be progressing concurrently. It will be the responsibility of vendor to seek approvals from the Owner for working within & outside the refinery limits and also of taking all suitable safety measures as per regulations in force for the safety of existing-refinery.
3. The material shall be collected by the vendor from owner's stores/Project Site/vendor's own stores (as the case may be) and transported to the erection site at vendor's cost and risk.
4. All labour (both skilled and unskilled), tools, tackles and consumables, shall be arranged by Vendor at his own cost.
5. Vendor shall arrange for the necessary transport, accommodation, medical, canteen and other facilities for their employees/staff at their own cost and abide by all labour laws, safety codes and statutory regulations and keep Owner indemnified in respect hereof.
6. The Vendor is responsible for keeping his work place neat and clean and shall always avoid scattering of any materials around the work place. The Vendor shall clear the work site of all debris, materials, tools, tackles etc. immediately upon completion of the job. Any temp. Line/cables etc. laid for the purpose of execution of a particular job shall be immediately removed to an agreed location and the site cleared off all such materials.
7. The Vendor shall not throw out gaskets, used electrode pieces, hand gloves, cotton wastes, gunny bags, polythene bags etc. into open channel, any drains or pipe line system. These are to be collected together and deposited in bins/waste collectors earmarked for the purpose of disposal after consultation with Engineer-in-Charge.
8. Construction Power shall be provided by BPCL free of cost only within BPCL BPREP Premises and area/ land allotted by BPCL to vendor. The free power shall be provided at designated locations only. Vendor to make all necessary arrangements for taking the power to their required locations.
9. Construction Water shall be provided by BPCL free of cost only within BPCL BPREP Premises. In Hadkal area, there are few Borewells available. The free water shall be provided at designated locations/ borewells only. Vendor to make all necessary arrangements for taking the water to their required locations.
10. Crane, if required shall be in the scope of vendor, unless otherwise specified in Material Requisition.
11. As per the applicable Factory Act the Labour License if required, shall be taken by Vendor before starting the works.

RFQ NO:
ITEM:
OFFER NO:

VENDOR'S SIGNATURE & DATE:
NAME
DESIGNATION

PERSONAL PROTECTIVE EQUIPMENT (PPE) POLICY

We at **Bina Refinery(BR), Bharat Petroleum Corporation Ltd (BPCL)** are committed to achieve safe work environment by providing quality **Personal Protective Equipment (PPE)** as per the identified Hazards. Refinery operation is inherently hazardous in nature due to the processes involved and the large inventories of hydrocarbon stored in the premises. Petroleum Refinery poses great risk of fire, explosion and release of toxic materials due to the characteristics of its raw materials, intermediates and final products and the high operating temperature / pressure involved in the plant operations.

The purpose of the **Personal Protective Equipment Policy** is to protect the employees and service providers of BPCL BR from exposure to workplace hazards and the risk of injury.

To achieve the above objective, everyone shall adhere to the followings:

- ✓ **5–Mandatory PPEs** (Boiler suit / Duster Coat, Safety Shoes, Safety Helmet, Safety Goggle and Safety hand gloves) shall be used by all employees as well as Service Providers / Visitors while entering the operation area which is beyond the car parking area.
- ✓ **Mandatory PPEs** shall be used in **Workshop and Warehouse** storage areas also.
- ✓ **Flame Resistance Clothing** with inherently flame resistance fabrics shall be used for the Boiler suit / Duster Coat for the employees.
- ✓ For Service Providers working inside refinery operation areas like, Maintenance / Electrical / Instrumentation / other O&M service providers should preferably use minimum **Chemically treated flame resistance** boiler suits.
- ✓ Encourage use of **Cotton / Flame resistance Winter wear** by all employees and service providers. Winter wears using woollen / synthetic fabrics to be avoided.
- ✓ Employees in the rank of Chief Manager and above shall wear Duster Coats, while Sr. Manager and below shall wear Boiler suits. Duster Coats shall not be allowed to Service providers.
- ✓ In addition to above, **Job Specific PPEs** shall be used as per Hazard Identification and Risk Assessment. **Job specific PPE matrix** shall be followed as indicated in Common Procedure Manual for PPE.

Date: 08th Sept' 2023
Place: Bina

Chacko M Jose
Executive Director-BR

Chapter 3: Contractor's HSE Guidelines:

1	**PURPOSE:**	The purpose is to outline BPCL's Safety Guidelines for Contractors. These guidelines are not to be considered as a substitute for the applicable government regulations.
2	**SCOPE OF APPLICATON:**	This procedure shall be applicable to all BPCL Facilities. These includes, but not limited to: a) Refinery Complex b) Bina Dispatch Terminal (BDT) c) Crude Oil Terminal (COT Vadinar)
3	**CROSS REFERENCES:**	ISO 45001:2018, Factories Act 1948 & Madhya Pradesh State Factory Rules, 1962
4	**PROCEDURE:**	

PART "A": BPCL OBLIGATIONS

1.0 HSE Consideration in Selection of Contractors:

1.1 The user plant sends request to Commercial about the requirement of the contractor for any work/job. Commercial/User will locate the vendors/ contractors and suitable contractors are short-listed after technical scrutiny/ recommendation as per the prevailing procedures. Commercial will award the work order for the job as per existing SOP.

1.2 Contractor's past HSE record (minimum 2 years) shall be given due consideration, together with the technical competence. Following stages are considered while selecting & registration of new contracting agencies and awarding contract to any job.

1.2.1 Pre-selection stage:

i. During pre-selection stage, contractor's suitability for a specific type of work is assessed in a preliminary way. HSE should be one of the prime considerations in such assessment.

ii. Pre-selection involves establishing a list of approved contractors (the approved list). The contractors who are included in this list can be invited to submit an offer for a contract. HOD User Department / Engineer In Charge or his/her representative shall ensure that the contractor fulfills requirements pertaining to HSE before including his name in approved list.

1.2.2 Tendering and contract award stage:

i. In the tendering process, the contractor will have to include in its cost estimation, all items necessary for complying with health, safety and

environmental aspects. It is therefore essential that while inviting a contractor to submit an offer, he ensures understanding of the scope of work completely including general and specific HSE requirements, so as to enforce the required level of HSE performance during execution stage.

ii. Since all contractors, who have submitted offers, are screened in the pre-qualification stage, they are assumed to be capable of meeting the HSE requirements of the company. However, the aim should always be to achieve a high level of HSE performance in the execution of the contract, and hence the HSE aspects of each of the contractors should weigh equally amongst the other key items like cost, quality and time for making the ultimate choice.

2.0 BPCL Responsibilities

2.1 Responsibilities of BPCL Management:

2.1.1 To provide specific information to contractors and make workers aware of the hazards associated with job assigned.

2.1.2 To provide information about risk mitigation measures available at the workplace.

2.1.3 To provide the contractor with information on BPCL safety procedures, confined space entry, work permit system, Emergency Response & Disaster Management Plan etc.

2.1.4 To ensure training of the contractor workforce, medical examination, and proper usage of safety equipment.

2.1.5 To arrange for a multi-disciplinary safety audit team to conduct regular safety audits and monitor the implementation of the recommendations.

2.2 Responsibilities of Procurement Department:

2.2.1 Procurement will receive the request mentioning all the job details including special HSE requirement, if any from the concerned plant/ Dept. HOD and locate the suitable contractor.

2.2.2 Shall consider the performance of the contractor on compliance of HSE procedures as per the feedback given by the concerned Plant/Department/F&S for floating tender enquiry.

2.2.3 Shall advice / warn and if required terminate and de-list the contractor for violation of HSE procedures on recommendation of the EIC / User.

2.3 Responsibilities of Plant/Dept. HOD:

Although the contractual obligation for HSE of contractor's activity rests with the contractor, the HOD of concerned Plant/ Dept. shall also oversee that the contractor's supervision is in line with the HSE requirements applicable to the work and the hazards associated with that work.

2.4 Responsibilities of F & S Dept.:

2.4.1 Conduct safety induction, mandatory/ special fire & safety training for the contractor's supervisors and workers.

2.4.2 Ensure Investigation of all the incidents.

2.4.3 Conduct audits/inspections and suggest Contractor for improving the HSE standards of Contract employees.

2.4.4 Advises procurement department to warn / terminate the contractor if HSE procedures are violated.

2.5 Responsibilities of Engineer Incharge:

2.5.1 It is the responsibility of engineer incharge to ensure that BPCL HSE requirements are fulfilled by contractors/ sub-contractors.

2.5.2 The engineer in charge must see the past HSE record of all contractors/ subcontractors before awarding the work order.

2.5.3 The engineer in charge must ensure that the contractor employees have undergone safety induction, mandatory/ special F&S trainings.

2.5.4 The engineer in charge shall ensure that contractor's employees must wear mandatory/ job specific personal protective equipment.

2.5.5 The engineer in charge should ensure that incidents are reported/ entered in IRIS portal.

PART "B": CONTRACTOR'S HSE GUIDELINES

1.0 Introduction:

BPCL believes that all the manufacturing and related activities should be conducted in a safe way to ensure the safety of people working in its premises.

It is to be ensured that contractors, who work for BPCL, comply with HSE standards as per the company's policy and observe safe practices & procedures at work to protect health and safety of their employees and others.

Safety of the contract personnel needs enhanced focus due to constant change of persons leading to lack of awareness. Statistics and experience show that an additional benefit from improved HSE performance leads to overall effectiveness in the execution of contract work.

In particular, the contractor has an independent responsibility for his own HSE performance. BPCL is responsible for clearly communicating its HSE requirement to the contractor and for monitoring the contractor's performance with respect to HSE. HSE standards of the contract employees should be in line with the BPCL employees and any violation observed will be dealt with strictly (including termination of the contract).

These guidelines are applicable to all contracting agencies, O&M operators, other service providers, etc. who work for Bharat Petroleum Refineries Limited.

1.1 Definitions:

Owner / Company shall mean Bharat Petroleum Refineries Limited.

Agreement shall mean the contract agreement between owner and contractor for activities assigned to the contractors.

Contractor shall mean the person/persons, firm or company whose tender has been accepted by the Competent Officer of BPCL or contractor's legal Representative/ his successors and permitted assignee/sometimes engaged in job on verbal instructions, due to exigency/emergency etc.

Engineer – in – charge shall mean the person authorized by the Competent Officer of BPCL to whom contractor or his/her employees report to for work instruction.

Contract shall mean the totality of the agreement between the parties as derived from the contract documents.

2.0 HSE Aspects of the Contract:

In addition to the usual features of a contact there shall be a separate clause dealing with the contractor's compliance with Health, Safety and Environmental requirements. The sub-contractors if engaged shall follow all the HSE requirements of BPCL applicable to main contractor.

2.1 HEALTH: OCCUPATIONAL HEALTH REQUIREMENTS

2.1.1 MEDICAL FITNESS

i. Before planning the posting of the worker to BPCL, the concerned supervisor shall have a general overview that the person is not physically or mentally incapacitated for the planned job.

ii. The contractor shall arrange the medical examination of the workers as per the BPCL policy.

iii. The contractor shall produce the certificate of medical fitness of the worker at the time of gate pass application on the format as required by BPCL.

iv. The contractor shall ensure the compliance to the completion of the various specific medical examinations (SME) as per the BPCL policy. At present the SME is required for the following jobs

- Confined space entry (Specify if inert space entry)
- Work at Height
- Work in SRU
- Work in CPP
- Work in High Noise Area
- Canteen work
- Operation of a crane, locomotive or fork-lift truck, or to give signals to them
- Driving (other than specified in clause1.4.7)
- Work at White oil gantry or Railway Gantry of BDT

v. The contractor shall ensure compliance to the Form-32 medical examination for

- Confined space entry ,

- Work at Height (>30 Meters)
- Any specific job as suggested by Fire &Safety dept.

vi. The contractor shall ensure that the posting of the workers in the jobs requiring SME or Form-32 shall be in accordance with the fitness status in the medical examination.

vii. The contractor shall follow-up with the workers for the medical recommendation as suggested on the medical fitness certificate / Form 32.

viii. The contractor shall ensure timely renewal of the medical certificate, that is within one year for:

- Periodic Medical Examination for all the workers (if not specified)
- Confined space entry (Specify if inert space entry)
- Work at Height
- Canteen work
- Operation of a crane, locomotive or fork-lift truck, or to give signals to them (age < 45 years)
- Driving (other than specified in clause 1.4.7)
- Work at White Oil Gantry or Railway Gantry of BDT
- Six months for:
- Work in SRU
- Work in CPP
- Work in High Noise Area
- Operation of a crane, locomotive or fork-lift truck, or to give signals to them (age > 45 years)

ix. The cost of all these medical examinations (if any) should not be directly or indirectly recovered from the workers & shall be borne by the contractor company.

x. In case of any medical related dispute BPCL will be the final authority to arrive at a decision.

2.1.2 WORKPLACE INJURIES / EXPOSURES

i. The contractor shall periodically educate, train, motivate & supervise the workers at the opportunities of tool box talk or during the job on the possible health hazards, risks involved in the job & the good safety practices for prevention of such workplace injuries / exposures.

ii. The contractor shall ensure that in case of any such incident, the person is sent to Occupational Health Centre (OHC) along with his/her supervisor for the treatment & the documentation.

iii. The contractor shall cooperate, arrange & ensure that:

iv. The injured gets the complete treatment as advised,

v. The injured gets the medical attention on the recommended frequency at the govt. approved hospitals / clinics.

vi. The person is brought to the OHC for fitness certificate in all (except the First Aid cases), for the medical examination & fitness, before resuming the duties.

vii. The injured gets all required rehabilitative care.

2.1.3 HEALTH PROMOTION ACTIVITIES

The contractor shall ensure that the workers actively participate in all the health promotional activities as & when organized / supported by BPCL.

2.1.4 Disclosure

The contractor shall disclose any such important medical information he has, to the medical facility at BPCL in writing, if any of his workers has any potential or recognized significant health hazard to the health of the worker / his colleagues.

2.1.5 IMPROVEMENTS

The contractor shall periodically update his supervisors & the workers about the prevailing medical related requirements at BPCL.

2.2 Safety Guidelines for Contractors/ Sub-Contractors:

2.2.1 Responsibilities

i. The contractor shall be fully responsible for supervision of its personnel to ensure that they strictly adhere to all applicable Safety requirements.
ii. The contractor shall appoint one of its personnel on the work site as a Safety Representative.
iii. The contractor's Site Manager on site shall be responsible for coordinating the contractor's safety activities.

2.2.2 Alcohol and Drugs

The contractor shall ensure that any time during the performance of the work his personnel are not under the influence of any alcoholic liquor, drug or other intoxicating substances.

2.2.3 Conduct of Contractor's Personnel

The contractor shall instruct his personnel to comply with the following:

i. No one shall enter any part of the complex, including the work site except for undertaking the work assigned.
ii. Smoking is strictly prohibited. Anybody found smoking would be immediately removed from the complex. Such a person shall be barred from working for any other contractor employed by BPCL.
iii. No fire or naked light, matches, cigarette lighters or any apparatus that can cause ignition, shall be allowed in the complex.
iv. Personal Protective equipment shall be used and worn in accordance with the safety procedure.
v. It is essential that good housekeeping is maintained throughout the period of any work, both at work site and around any temporary building. The working area shall be kept tidy at all times, escape and other access ways shall be kept clear of objects.

vi. Safety equipment shall be kept in an accessible place. Scrap/surplus material shall be removed daily, cleaning up only at the end of the job is not considered sufficient.

vii. Spillage of oil or chemical shall be cleared up immediately in view of the fire hazard, slippery surfaces, toxic substances etc. Appropriate safety precaution shall be taken during the cleaning up. While returning permit, acceptor will certify housekeeping and issuer will check the same before signing the permit.

2.2.4 Equipment supplied by Contractor

The contractor shall provide and operate his equipment in compliance with the BPCL Procedures. Maintenance and use of equipment should be as per the standard practice and it should not create any hazard during the use. Contractor should deploy skilled workmen for operating the machine.

Contractors to inspect tools/tackles at quarterly interval and necessary records are to be maintained as per company format. Engineer In-charge will carry out random audits to ensure system compliance.

2.2.5 Personal Protective Equipment

i. The contractor/ sub-contractor shall supply following mandatory personal protective equipment to its all employees & supervisors:

S No.	PPE Type	Specification	Quantity	Frequency
1.	Safety Helmet	EN:397, IS:2925	1	Yearly
2.	Safety Goggles	EN:166, ANSI: Z 87.1	1	Quarterly
3.	Safety Hand Gloves	Polka Dotted	2 Pairs	Weekly
4.	Boiler Suit	Cotton	3 Sets	Yearly
5.	Safety Shoes	EN-345, IS:15298	1 Pair	Yearly
**Note: No Contractor shall use red colour boiler suits and helmets inside the premises other than the firefighting crew. ***Note: The service provider shall obtain approval from F&S department before selecting colour of coverall and helmets.				

ii. The contractor/ sub-contractor shall also provide following PPEs as per job requirements such as but not limited to:

SN	PPE Type	IS/EN/EU	Quantity	Frequency
1.	Ear Plug (Ear Muff on need base)	EN 352-2, ANSI: Z3.19, EN-352-1	1	Monthly
2.	Dust Mask	IS:9473,EN-149	2	Weekly
3.	Full Body Harness with double lifeline	IS: 3521	Job Specific	Need Base
4.	Face Shield	EN:166.1.B.3.9	Job Specific	Need Base
5.	PVC/Nitrile/Rubber gloves (For Chemical/Civil Jobs)	EN-374-(JKL) AND EN-388-CE, EN-374-CE	1 Pair	Weekly
6.	Gum Boots (Civil Jobs)	EN-345	1 Pair	Half Yearly
7.	Leather Gloves for Welders	CE-0493	1 Pair	Monthly
8.	Leather Apron	EN-398, EN-407	Job Specific	Need Base
9.	Helmet mounted welder's shield	IS:2925 ,EN-166	1	Yearly
10.	Chemical Splash Goggles (need base)	ANSI: Z 87.1	1	Quarterly
11.	Over Spectacles Goggles (need base)	EN-166, EN-170, EN-172	1	Quarterly

iii. The contractor/ sub-contractor shall ensure that the quality of PPE's is maintained as per BPCL guidelines. Contractor/ sub-contractor is responsible for providing personal protective equipment to their employees as per above specifications, quantity & frequency.

iv. The contractor/ sub-contractor shall ensure that personal protective equipment is maintained in good condition and shall be worn as per the requirement.

v. All the PPE should be available while working and proper supply to be ensured by the contractor for routine wear and tear/loss.

vi. Use of PPE is mandatory and any violation of the same shall be penalized.

vii. Contractor shall provide contractor's employees with the mandatory personal protective equipment and the personal protective / safety equipment as specified in the work permits. The contractor shall also provide additional PPE, if instructed for safe execution of the job.

viii. Contractor's PPE and other safety equipment shall conform to BPCL specifications and sample shall be approved by BPCL safety representative before procurement. Sufficient stock of mandatory PPEs shall be kept and maintained at site.

ix. Contractor employees and employees of Subcontractors shall wear safety helmet and coverall of the same color with logo/emblem of the main contractor.

x. Contractor employees should be trained in proper use and maintenance of PPE.

xi. The damaged PPE shall be periodically replaced with new ones.

2.3 ENVIRONMENT:

2.3.1 The contractor shall perform their jobs in an eco-friendly manner and in consonance with the objective of BPCL Environment Management System. The contractor shall inculcate environmental awareness among their workmen/personnel and strive for enhancement of systems and skills for minimizing the environmental impact out of their activities/services.

2.3.2 The contractor shall avoid wastage of water, compressed air, electric power, steam, etc. supplied to them from owner's source of supply for execution of the job.

2.3.3 The contractor shall ensure that while carrying out Modification/Repair/Replacement jobs of any equipment or pipeline, the spillage of Hydrocarbon, Oily Sludge etc. are cleaned and routed to nearby OWS, at regular interval as well as after completion of jobs.

2.3.4 Before attending any blinding/de-blinding jobs, during pipeline transfer operation all tools, tackles &spares shall be kept ready at site in order to minimize Hydrocarbon spillage.

2.3.5 Should there be a discharge or escape of appreciable quantity of pollutants or contaminants during performance of its obligations under this Contract which occurs as a result of activities of Contractor or its sub-Contractor, the Contractor shall immediately take all action necessary to contain, control, recover or disperse the substance and to eliminate the safety and environmental risks and correct the damage resulting there from.

2.3.6 The contractor shall clear and level the work site and remove all metallic and nonmetallic surplus materials, scrap, debris and other waste materials generated out of his job, from time to time as well as after completion of job. The contractors shall not throw away cut gaskets, used electrode pieces, hand gloves, cotton bags, polythene bags, etc., into open channel drains or pipelines system. They are to be collected and to be deposited in bins/waste collectors earmarked for the purpose or disposed off in the areas as per the direction of Engineer-in-Charge. The contractor is responsible for keeping his place neat and clean. Also all temporary office shall be maintained in a healthy and hygienic condition.

2.3.7 Contractor shall return all surplus materials & scrap to the owner's stores.

2.3.8 Contractor's vehicles, trucks, tractor, cranes and other portable equipment e.g. Air Compressor, DG Set, Dewatering Pumps etc. used inside refinery premises (where Hydrocarbon is used as fuel) for execution of the job must be mechanically sound and have an exhaust complying pollution norms. The contractor shall ensure to avoid idle running of vehicles and equipment used for execution of the job.

2.3.9 Contractor shall comply all the applicable rules and regulations as per MoEF guidelines while working/ handling equipment inside refinery premises.

2.3.10 Special precautions and personal protection shall be taken as per refinery HSE procedures during the following jobs:

i. Handling of Hazardous Chemicals, Gases & Materials etc. (e.g. Spent Catalyst/Clay/Carbon/Resins, Acids, Chlorine, Ammonia, Pyrophoric Iron, etc.).

ii. Working in presence of Suspended Solids (e.g. Catalyst, Refractory, Sand, Dust, etc.)

iii. Cleaning/handling of Oily Sludge.

2.3.11 BPCL, Bina is having **"QUALITY, ENVIRONMENT, OCCUPATIONAL HEALTH AND SAFETY (QEHS) POLICY." Please refer Annexure I.** Contractor/ Sub-contractor will educate their personnel working inside the refinery w.r.t. QEHS Policy of the refinery and all out efforts shall be made for compliance to the above policy.

2.3.12 For contracts related to construction related activities, the contractor to use only fly-ash based products for building materials and road embankment, such as cement or concrete, fly-ash bricks/blocks/tiles, clay fly-ash bricks/blocks/tiles or cement fly-ash bricks/blocks/tiles or similar products in combination or in aggregate of them in every project in line with MoEF gazette notification.

2.3.13 For contracts related to solid material handling such as fly ash, pet-coke, coal, limestone, sulfur, etc., the contractor is required to take all necessary precautions so as avoid the dusts getting air borne or spillages on roads & drains, etc. during transportation and handling of the same. Precaution during transportation may include use of enclosed vehicles, proper covering of the consignment with tarpaulin, water sprinkling, etc. as suitably directed by Engineer-in-charge.

2.3.14 For activities related to generation & handling of E-Waste, spent lead acid batteries & contaminated chemical drums the contractor is required to ensure the handling of the same is carried out in line with related refinery Environment dept. guidelines.

3.0 ADMISSION TO BPCL PREMISES

3.1 ENTRY IN REFINERY PREMISES

CONTRACTOR shall allow only its employees, Subcontractors, and suppliers directly connected with the work, to enter BPCL premises only after attending necessary safety induction training endorsed by F&S.

3.2 VEHICLES AND PARKING

3.2.1 Contractor shall furnish transportation for all of Contractor’s employees from the designated entry gate to the job site and return. The BPCL Representative will designate the routes and parking areas to be used by Contractor's vehicles in BPCL premises. Contractor shall observe all of the BPCL’s traffic regulations at all times while in the refinery and other BPCL premises.

3.2.2 All Contractors owned, rented, or leased vehicles or equipment (i.e. air compressors, generators, welding equipment, forklifts, cranes, etc.) entering the Refinery and other BPCL premises shall be properly identified and has a valid Safety Certificate and Gate Pass. Only vehicles required for execution of work are allowed in the Refinery and other BPCL restricted premises; all other vehicles shall be parked outside the Refinery or BPCL restricted premises.

3.2.3 A safety clearance from F&S dept. is required to all the vehicles entering in BPCL operational area. The timings of vehicle inspection is from 09:00 AM to 11:00 AM.

3.2.4 The contractor shall comply with all points of checklist given in **Annexure II** of safety inspection of vehicles before coming for inspection.

3.3 TRAFFIC REGULATIONS

All traffic signs, signals, and road markings must be obeyed. Unless otherwise posted, the speed limit in BPCL facilities is 30 KMPH. In all cases, the low posted speed limit shall govern.

4.0 SAFETY RULES AND PROCEDURES

4.1 SMOKING AND CARRYING OF MATCHES / LIGHTERS

Smoking is prohibited in all BPCL Areas. Carrying of matches and lighters into Refinery premises is prohibited. Violators will be refused entry into the restricted area and shall be dealt administratively as violation. Contractor shall be responsible for strict adherence to these regulations by contractor's employees or the employees of contractor's sub-contractors.

4.2 BATTERY OPERATED AND ELECTRICAL ITEMS

Non-intrinsically safe battery operated items e.g. flashlights, mobile phone, pagers, personal monitors, etc. are not permitted inside the operational area. Electrically operated tools & equipment should be suitable for use as per the area classification and should be certified by BPCL electrical dept.

4.3 FIRE FIGHTING EQUIPMENT

Contractors shall furnish all portable fire extinguishers and safety equipment required at construction sites during construction. The fire extinguishers shall be certified by BPCL Fire & Safety dept. and proper tag / sticker shall be provided by the contractor. The firefighting equipment shall be regularly inspected & maintained.

Contractors shall not use, alter, or move BPCL firefighting equipment. Firefighting equipment shall be accessible at all times.

4.4 SCAFFOLDING AND LADDERS

4.4.1 All scaffolds shall be erected by competent and qualified personnel and shall conform to requirements of BPCL guidelines and safe work practices for scaffolds and ladders. These requirements include the mandatory inspection, tagging, approval, and certification of erected scaffold before use.

4.4.2 Contractor's scaffold material samples shall be approved by BPCL prior to procurement. Scaffolding should be regularly inspected by competent person & provided with inspection tag.

4.5 USE OF RADIOACTIVE MATERIAL

4.5.1 Only authorized personnel holding valid 'Radiation Work Permit License' issued by BARC shall handle radioactive material.

4.5.2 Contractor shall comply with all safety precautions and requirements as specified in relevant clauses of BPCL procedures and guidelines.

4.5.3 Contractor shall ensure that the following basic rules are strictly enforced:

i. The ionizing radiation source shall not be left unattended.
ii. Radiation film badge dose meter shall be used.
iii. The exposure area shall be clearly identified, barricaded by rope or other effective means and radiation warning signs posted.
iv. Contractor shall coordinate with BPCL Inspection\ Instrumentation Representative to ensure that, the Dose Rate at the barricade does not exceed 0.25 milirems per hour.
v. Contractor shall ensure availability of radiation meter at work site of radiography
vi. Contractor shall give 12 hours' prior notice to Engineer incharge Inspection \ Instrumentation before starting any radiography work inside refinery.

4.6 COMPRESSED GAS CYLINDERS

4.6.1 Contractor shall comply with the BPCL requirements for storing, handling and using of compressed gas cylinders.

4.6.2 Cylinders which are approved by PESO should only be allowed to use in refinery complex.

4.7 ROAD CLOSURES

4.7.1 No roads shall be barricaded or blocked in any way without written approval from the BPCL's representative & F&S dept. Use of a flag man is required to direct traffic around congested areas. Road workers and workers on roadsides shall wear reflective coverall or jacket.

4.7.2 Barricades, temporary walkways, signs, etc. should be provided for the safety of pedestrians and roadside facilities. Barriers shall be equipped with reflectors or lights so that it is readily visible at night.

4.8 VEHICLE / EQUIPMENT SAFETY CERTIFICATE

4.8.1 All vehicles and engine driven equipment entering BPCL premises require a 'Safety Certificate' as such, contractor should meet the following general requirements:

4.8.2 CONTRACTOR'S Vehicle or mobile equipment shall be in good condition and meet the requirements of 'Vehicle and Equipment Safety'. The number of vehicles/ mobile equipment shall be kept to the minimum essential for the site personnel and work requirements.

4.8.3 Contractor's vehicle or equipment shall be provided with the appropriate type and size of fire extinguisher certified by BPCL Fire & Safety dept.

4.8.4 An approved type of spark arrestor shall be fixed to the exhaust of equipment and vehicles entering hazardous area. Pool cars or buses shall not be allowed to enter hazardous area. Mobile equipment, lifting appliances and vehicles to load or unload material shall only be allowed with work permit and prior authorization.

4.8.5 In addition, contractor's lifting equipment shall have a valid load test certificate from a BPCL approved third party. Safety valves on mobile equipment shall also be third party certified.

4.9 WELDING AND CUTTING

4.9.1 Contractor should obtain a Hot Work Permit prior to any welding works in BPCL premises and all requirements pertaining to hot work shall be strictly enforced. Only a BPCL approved type of Welding Blanket shall be used.

4.9.2 When welding work is carried out in a workshop or any similar location classified as a permit free area, which is approved by CGM (Mfg.), a work permit is not required but the work shall be adequately supervised. The work area shall at all times be kept clean of combustible and flammable material.

4.10 WORK PERMITS

4.10.1 As a general principle, no work in the BPCL premises can be carried out unless authorized by appropriate work permit, except those specified in the BPCL Guidelines and Procedures for Work Permit System. The nature of work may also require additional permission, such as permission for radiography & Excavation.

4.10.2 Contractor shall obtain appropriate written work permit (and additional permission if required) through its BPCL representative before starting any work and an approved copy of the permit must be available at the job site.

5.0 CONTRACTOR'S EQUIPMENT / MATERIALS

i. Contractor's engine driven equipment shall be equipped with BPCL approved type of spark arrestor and should be in good operating condition before it can enter the Refinery and other BPCL premises.

ii. All battery boxes shall be covered and all gasoline lines and carburetors free from leakages.

iii. A current and valid BPCL Safety Certificate shall be attached to all engine driven equipment entering the Refinery.

iv. Operation of engine driven equipment must comply with BPCL Rules and Regulations.

5.1 THIRD PARTY 'TEST CERTIFICATE'

5.1.1 Contractor shall secure BPCL approved Third Party 'Test Certificate' (before using any) of the following contractor's equipment / equipment accessories:

i. Lifting appliances (crane, boom truck, truck, jig lift, forklift, pulley, D shackle etc.)

ii. Safety valves on mobile equipment, e.g. air compressor, hydro test machine, vacuum truck etc.

iii. Cargo tank of tank vehicles, e.g. fuel tanker, vacuum tank or pressurized tank, etc.

iv. All pressure vessels, e.g. compressor's air receiver, SMPV, etc.

5.1.2 And also produces test certificate once in year for all lifting appliance, valve vacuum tank, pressure vessel, & once in six month for lifts, hoist, man basket etc.

5.2 FORKLIFTS, INDUSTRIAL TRUCKS AND CRANES

Only persons holding appropriate Driving License may operate forklifts, industrial trucks and cranes. Personnel are not permitted to ride/travel on forklifts, industrial trucks and cranes.

5.3 STORING FUEL AND REFUELING ON BPCL PREMISES

5.3.1 Contractor should not store fuel for refueling (vehicles & equipment) inside BPCL premises without BPCL Representative approval.

5.3.2 Contractor should not transport fuel on vehicles or containers not approved for that purpose.

6.0 On-the job Control:

Following tools are useful to ensure the safe practices on the job.

6.1 Safety Supervision:

6.1.1 It is the duty of the contractor to supervise his workmen during the job. The concerned plant personnel shall oversee the supervision of safety, health and environmental matters.

6.1.2 It is mandatory that contractor's supervisor is present within the plant premises till the job continues. The contractor's supervisor will be in the close contact with BPCL Engineer in charge.

6.2 Safety Inspections and Safety Audits:

6.2.1 Safety inspection and auditing are important means for monitoring contractor safety. Contractor's Supervisor must discourage unsafe practices by contractor employees through regular inspection at the work site. The compliance with work permit system, mandatory PPE's of personnel, the operational condition of safety equipment and the reliability, use of tools appropriate for the job**,** serviceability
and maintenance of work tools and equipment should be established by spot checks. Concerned contractor's safety supervisors shall carry out audit of their facilities and equipment. It is the responsibility of Contractors to ensure that necessary action is taken to rectify in a time bound manner.

6.2.2 Contractor should participate in half yearly HSE audit conducted by F&S department of BPCL. The result of these audits should be used for setting goals for future improvements and winners should be awarded accordingly. A written Inspection report shall be prepared and distributed to top management of the same. The checklist for half yearly audit is as per **Annexure III.**

6.3 Non Compliance/ Safety Violation:

6.3.1 Whenever the contractor is found to be working unsafe, he shall be advised accordingly by the concerned plant management and F&S person to take corrective

action. If needed work shall be stopped until the situation is rectified. Delay in work as a result of such stoppages shall be regarded as a breach of contractual obligations.

6.3.2 Non-compliance / violation of safety standards by the contractor shall be viewed seriously by the HOD of concerned plant/ Dept. / HOD F&S.

7.0 Contract Employees Safety Training:

It is the policy of BPCL to provide systematic safety training and education to Company's contractors and transporters personnel for observing safe work practices.

7.1 Safety Induction, Mandatory and Job Specific Fire & Safety Training:

As a minimum requirement, all the contractor's personnel working at refinery Complex are required to be trained in HSE aspects as detailed below:

7.1.1 Every person will be provided safety induction prior to deployment on work.

7.1.2 Permanent contractor has to fulfill the requirements of *mandatory* fire & safety trainings.

7.1.3 Contractor employees will also attend job specific training on need basis.

7.1.4 Further, Contractor nominated safety representative also to train their workmen and keep a systematic records of training as per details given below:

i. Date and time of training given

ii. Name and Signature of Safety Representative

iii. Name and Signature of individual taken the training

iv. Periodically contractor workmen training activities will be audited by record checking and validation at random by Fire & Safety Dept.

7.2 Toolbox talks:

The toolbox talks as a part of continuous training for effective use of safety tips on the job planned for that day. The Supervisor-in-charge of the Contractor should give a ten to fifteen minutes talk to the Contract employees. This is the most effective channel of communication as it takes less time, it is at the work place and it is covering the immediate job they are handling so they can precisely correlate the training while working. Toolbox talk is the right tool to boost the safety awareness and to improve the Contract employees' participation as it involves a small group where direct contact is established to make the safety message more effective. Records are to be maintained by Contractor Supervisor of Tool Box talks. This should also reflect in monthly HSE report.

8.0 EMERGENCY RESPONSE AND INCIDENT REPORTING

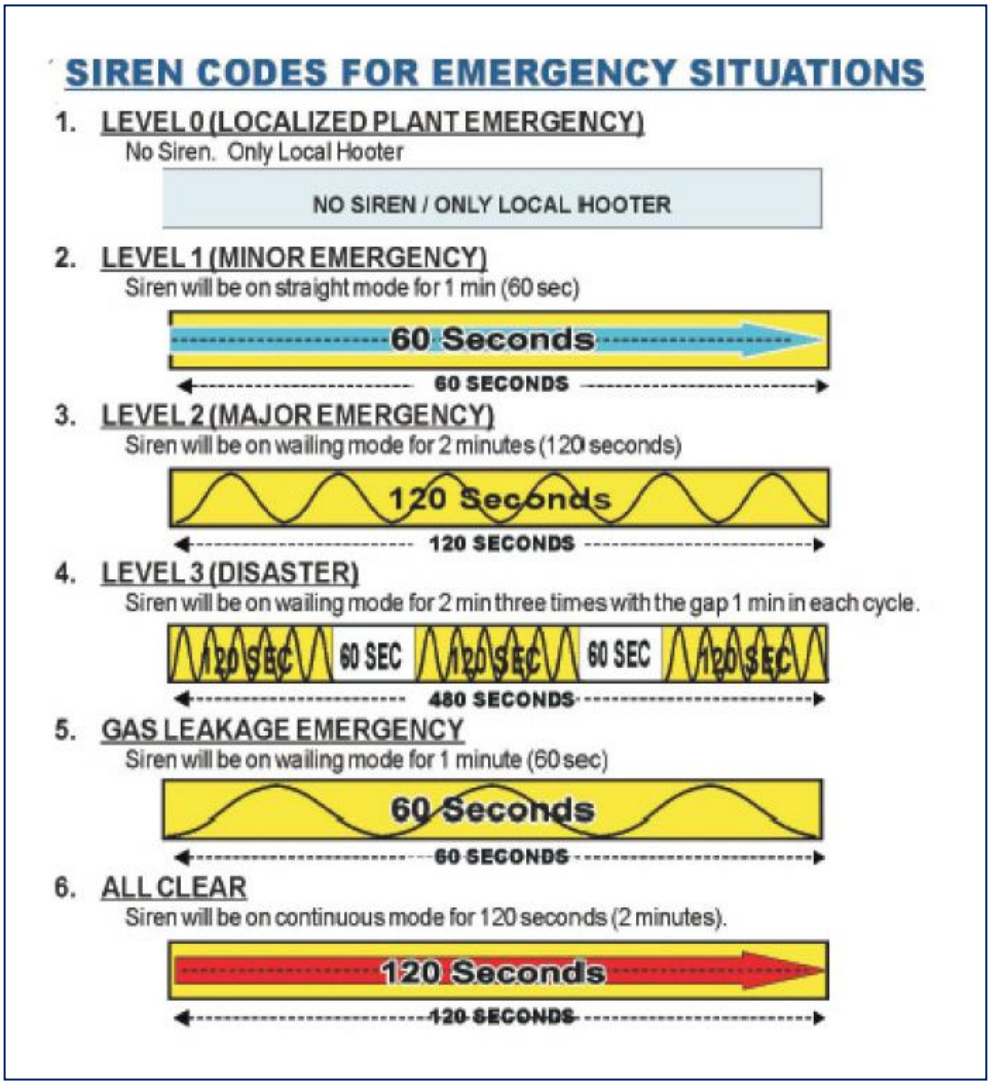
8.1 EMERGENCY RESPONSE

8.1.1 Contractor shall ensure that contractor employees clearly understand their responsibility for an appropriate emergency response as per the BPCL Emergency Response & Disaster Management Plan through awareness / refresher training and Safety Talks.

8.1.2 In the event of a major fire/ evacuation, contractor shall move contractor's employees away from the vicinity of the fire and out of the way of firefighting activities in an orderly manner.

8.2 EMERGENCY SIRENS

There are various sirens to indicate emergency situation in the refinery, as tabulated below. Proceed upwind, or crosswind if gas release is upwind of your location, as indicated by wind socks/steam plumes. Proceed to the appropriate emergency assembly area by the evacuation route as indicated/ communicated.



8.3 Incidents Reporting:

8.3.1 All incidents, property damage and near miss cases pertaining to contractor activities shall be reported by Contractor to the engineer in charge and Fire & Safety department.

8.3.2 Contractor employee, in case of any injury shall report to the plant personnel and if nobody is available, should rush to the Occupational Health Centre for the treatment. If further treatment is required outside company, contractor will arrange for the further treatment. In case of lost time injury or fatality, contractor is responsible for the treatment and compensation of the affected workmen. The contractor will not only give information during the investigation of the Incident to the investigation team but also arrange the witness of the same.

9.0 Responsibilities:

9.1 Responsibilities of Contractor:

9.1.1 To ensure that all tools and equipment used by his working crews are maintained in good working condition and have been tested by the competent authority.

9.1.2 Contractor is required to make safety documents and records available to BPCL Representative upon request. These include, but are not limited to work procedures, training records, performance records, environmental records, licenses, permits, registrations and compliance plans.

9.1.3 To employ adequately qualified, trained, skilled and experienced persons for specified activities.

9.1.4 To appoint adequate number of supervisors, who will be responsible for implementing their HSE program.

9.1.5 To take immediate action to correct any violation of safety rules observed or reported.

9.1.6 To ensure that appropriate warning signboards or tags are displayed on site.

9.1.7 To comply with safety norms lay down from time to time as per requirement of job.

9.1.8 To keep a constant liaison with Engg-in-charge /BPCL representative on safety issues.

9.1.9 Photography is prohibited in all BPCL controlled areas unless authorized. Contractor shall not take photographs without approval of the BPCL representative. Contractor shall obtain permission from BPCL representative. Appropriate Work Permit shall be obtained.

9.1.10 To ensure that his personnel are provided with mandatory personal protective equipment. Also, contractor should ensure that job specific personal protective equipment is available to his personnel.

9.1.11 The contractor has to give an undertaking before start of contract on HSE related aspects as per annexure IV.

9.2 Responsibilities of Contractor Supervisor / Site In-charge of Contractor:

9.2.1 Contractor supervisor is the key person to comply with the HSE standards at work site. He is responsible for overall coordination of the HSE procedures prescribed herein:

i. To facilitate AE/SIC, Fire & safety representative or any other person from BPCL to carry out safety inspections of his site.

ii. To comply with recommendations given by concerned BPCL Officer. All Contractor's Safety Personnel, including designated Safety Representatives, should make daily inspection of the work area. The inspection should be routine, planned, and designed to include communications with specific people in the work place, and not just a visual site visit.

iii. To get information from the concerned BPCL personnel on hazards associated with a particular job and to ensure that necessary precautions are taken during the execution of that job accordingly.

iv. Contractor's job supervisors also should make daily inspection of their work areas for the specific purpose of correcting unsafe acts or hazardous conditions.

v. To take action in consultation with concerned BPCL personnel to rectify the unsafe conditions at work site prior to start of the work.

vi. When work is in restricted area, to select personnel adaptable to the work at hand and will ensure that all safety requirements are being adhered to.

vii. To ensure the use of mandatory PPEs by working crew under his control.

viii. To review the work area for unsafe practices and conditions and initiate corrective actions as required.

ix. To maintain a constant awareness of fire hazards in their area of work responsibility and to take action to eliminate the fire hazards if possible. Matters beyond his ability to handle shall be reported to the concerned engineer in charge.

x. To know the plant emergency procedures. This will broaden the leadership base, which may be required to scope up with serious incidents, personal injuries, fires or evacuation.

xi. To provide all relevant information to incident investigation team for any incident resulting in personal injury, property/ environmental damage.

10.0 HEALTH, SAFETY AND ENVIRONMENTAL PROGRAM

Besides meeting BPCL and other regulatory safety provisions, contractors must have a written safety Program and shall be approved by Fire & Safety department. The actual program that shall be developed will depend on variables such as size of the firm, size of the project, nature of activities and the location & number of contract employees.
The Contractor Management shall commit resources and all necessary support to ensure the program is implemented to the satisfaction of the BPCL. Contractor shall ensure adherence to all laws, rules, regulation, and notification of various government departments pertaining to health, safety and environment.

10.1 SITE SAFETY ORGANIZATION AND RESPONSIBILITIES

10.1.1 The contractor's safety program should establish responsibilities for managers, engineers, supervisors, safety representatives, and the employees.

10.1.2 The contractor's safety program should also include site safety organization with respect to the overall site organogram. The contractor's employee in-charge of safety should be among the top in the organogram and should have authority over other activities. There should be at least one dedicated, qualified and experienced contractor's safety Engineer or Supervisor exclusively responsible for safety implementation / co-ordination. He shall be free from any other responsibility and no compensation will be made by the BPCL for the deputation of contractor's safety staff. The details of the safety officer/supervisor shall be submitted to BPCL F&S dept. in a format given in **annexure V**. Depending upon the nature and size of the job, minimum strength of the contractor's safety personnel shall be as indicated in the table below.

Employee Strength (including sub-contractor)	Minimum Strength of Safety Staff
Max. No. of employees 30	One discipline (Engr./ Supvr.) with safety experience can function on part time basis
No. of employees: 30 – 100	One Safety Supervisor on full time responsibility
No. of employees: 101 – 250	One Safety Engineer on full time responsibility + One Safety Supervisor on full time responsibility
No. of employees: 251 – 500	Two Safety Engineer on full time responsibility + Two Safety Supervisor on full time responsibility
No. of employees: > 500	One Safety Engineer + One Safety Supervisor (for each 250 employees) on full time responsibility

10.1.3 The number of employees mentioned above represents the maximum number of contractor employees estimated to be engaged at the site on any day by the contractor and their subcontractor. In case of block shutdown or turnaround when the contractor is required to bring in additional manpower, the number of contractor safety personnel shall be increased as per above table.

10.1.4 Contractor's safety personnel shall possess the requisite qualification and experience as given below:

10.2 Safety Engineer

Shall be a graduate engineer (Mechanical / Chemical / Electrical/ Civil/ IP/ CTM/ Safety) having a minimum of Two (2) years working experience in the field of Safety. He should possess a recognized degree or diploma in industrial safety. He must be able to speak, read and write English very well.

10.3 Safety Supervisor

10.3.1 He shall be a diploma holder in engineering or science graduate having five (5) years' experience in handling construction or maintenance projects in process Plant. He should possess a recognized degree or diploma in industrial safety. He must be able to speak, read and write English well.

10.3.2 Curriculum Vitae of contractor's safety personnel along with copies of all certificates shall be submitted for BPCL's review and approval before posting at BPCL site. The BPCL reserves the right to evaluate the candidate based on review of CV and verification of original certificates and/or personal interview.

10.4 SAFETY ORIENTATION

10.4.1 New contractor's key personnel (i.e. supervisors, engineers and managers) along with the workforce shall receive safety induction training from BPCL F&S department, as per applicable safety training procedure. In turn, these trained Contractor's key personnel shall conduct orientation to their respective employees prior to job site mobilization / beginning work in form of tool box talks on regular basis and generate record for the same. Such orientation should include provisions of the written safety program and procedures applicable to the contractor's scope of work, and also should include the following:

i. Clarification of the HSE responsibilities for contractor, subcontractor, employee and all construction/project site personnel.

ii. Clarification of HSE expectations of the contractor employees.

iii. HSE rules& regulations within BPCL.

iv. The procedure / responsibilities on Incident reporting for personal injuries, occupational illnesses, fire incidents, property damage incidents, environmental incidents, traffic incidents and near-miss incidents.

v. Toolbox meeting schedule, agenda and attendance mandatory requirement.

vi. The mandatory use of personal protective equipment on various specific activities

vii. Prompt reporting of unsafe acts or conditions.

viii. Overview of BPCL's emergency response plans and the contractor employees action in case of an emergency/drill

ix. Waste Handling and Disposal.

10.5 CONTRACTOR'S HSE MEETINGS AND TRAINING

Contractor site in charge along with the safety officer/ supervisor shall attend monthly HSE meeting conducted on every second Tuesday of the month by BPCL. The meeting agenda should include HSE records and activities, statistics, incidents, personal protective equipment and other employees' concern on HSE at work. Minutes of meeting shall be prepared by F&S dept. and circulated to top management and participants. The format of the monthly report is given in **annexure VI.**

10.6 SAFETY COMMUNICATION AND COORDINATION

For all practical purposes, it should be the responsibility of the contractor to have all its employees & sub-contractors etc. informed and involved in various safety communication and coordination activities.

10.7 RECORDKEEPING AND DOCUMENTATION

10.7.1 Records are required to support activities of contractor safety programs for both control and audit purposes. Records that shall be maintained and retained within the contract duration at the job site should include the following:

i. Log of all injury cases reported and treated, showing date, name of injured, job nature of injury and type of treatment given.

ii. All incident investigation report (i.e. injury, illness, traffic, property damage, environmental incident and as well as Near Miss Incidents).

iii. Safety meetings or toolbox meeting records or minutes showing date of meeting, who attended, the subjects discussed and who conducted the meeting.

iv. Job site inspection / audit reports and status of the action plans.

v. Records to show dates, name of participants and subject of training programs.

vi. Lifting Tackles and crane or equipment inspection records, 3rd party certificate.

vii. PPE's stock & distribution records shall be maintained

11.0 SAFETY REPORTS & RECORD REQUIREMENTS.

The Contractor shall prepare and submit the monthly safety reports in prescribe format given as Annexure II (through BPCL representative) to Fire & Safety department within the first five working days of the month.

12.0 COMPLIANCE WITH STATUTORY REQUIREMENT

Consultants, contractors/ sub-contractors or other third parties working in the field shall abide by:

i. The safety procedures for working in areas of the work as defined in scope of work.
ii. All requirements under The Factories Act 1948 and the rules framed there-under in the M P Factories Rules& Gujarat Factory Rules, as applicable.
iii. Applicable Environment Regulations in force and also the systems and procedures in M.P/Gujarat state of work.
iv. Contractor shall follow complete HSE (Health, Safety and Environmental Policy) guidelines of BPCL.

13.0 SAFETY INFRINGEMENT AND PENALTY SCHEME

All contractors/ sub-contractors and their employees working in BPCL premises shall comply with the BPCL safety procedures, guidelines and safe work practices. Violation of these BPCL procedures / guidelines / safe work practices shall be dealt according to penalty system as follows:

13.1 PENALTY STAGES

VIOLATION	FIRST	SECOND	THIRD	FOURTH
MINOR	**Caution Notice**	**Penalty Rs. 500/-**	**Penalty Rs. 1000/- ***	**Multiplied**
MAJOR	**Penalty Rs. 1000/-***	**Penalty Rs. 2000/- ***	**Penalty Rs. 5000/- ***	**Multiplied**

* The BPCL reserves the right to impose more severe penalty, i.e. suspend/terminate the employee, his supervisor or the site manager.
Note: - The penalties may be revised from time to time by BPCL management.

BPCL employee is authorized to charge the infringement note to contractor for any violation observed at site in prescribe format (Annexure- II) with the copy to safety dept. In case of any disagreement, BPCL SAFETY representative shall be the final authority to decide whether an infringement is minor or major for violations which are not listed in the penalty system. Fire & Safety Department is authorized to issue infringement report to the BPCL representative. The format of the penalty is as per **annexure VII**. The Engineer in Charge of the Contract shall take necessary action and provide feedback to Fire & Safety Department with copy of receipt from bank.

13.2 Minor Violation (Examples but not limited to)

i. Not wearing personal protective equipment (PPE) at work site.

ii. Minor traffic violation (wrong parking)

iii. Blocking of emergency equipment or exits.

iv. Using unapproved scaffolding.

v. Not keeping proper housekeeping

vi. Not providing shoring for the excavations.

vii. Over speeding

13.3 Major Violation (Examples but not limited to)

i. Smoking, carrying matches or lighter.

ii. Working without valid work permit.

iii. Non-compliance to work permits condition.

iv. Repeating minor violations more than twice.

v. Major traffic violation.

vi. Found guilty of negligent driving resulting in a vehicle incident.

Annexure II

VEHICLE / EQUIPMENT SAFETY CHECKLIST

Vehicle/Equipment type : _____ Vehicle Reg./Serial No.:_____ **☐ BPCL ☐ Contractor Company Name: _____ Re-validation: Six Month**			**Date** _____
Sr. No	**ITEM**	**REQUIREMENT**	**Y / N / NA**
1.	Fire Extinguisher	Approved type and size, properly mounted, easily retrievable	
2.	Exhaust System	Should not leak	
3.	Spark Arrestor	Fitted with approved spark arrestor	
4.	All Lights	Operable and covered with standard lens (includes reverse, brake, hazard lamps & turn indicators), not cracked or broken	
5.	Reverse Beeper/ Horn	Available in vehicles where driver cannot see the rear, horn loud enough, activated by gear lever	
6.	Seat Belt	Seat Belt with seat belt assembly in proper working condition	
7.	Tyres	Good condition	
8.	Battery	Secured by clamp, terminals covered	
9.	Fuel/Hydraulic System	Good condition and not leaking	
10.	Engine/Rotating part guards	Guards in place where applicable	
11.	Wind Shield	Good condition having proper visibility, no cracks	
		Wipers/Washers	
12.	Brakes/Parking Brake	Foot Brake Operable and efficient	
		Hand Brake Operable and efficient	
13.	Rear View Mirrors	Both Side / Rear View in driver cab available and adjustable, no cracks	
14.	Body/canopy/booms	Good condition	
15.	First Aid Kit	Available & maintained	
Additional Checks For Cranes			
16.	Safe Load Indicator	Working condition & tripping system not bypassed.	
		Anti-two Block Alarm/Cut - out	
		Load Indicator	
		Over Hoist Alarm	
		Over Boom Cut – Out/Alarm	
17.	Limit Switches	For crawler & hydraulic cranes	
18.	Glass enclosure for Forklift	Good condition having proper visibility, no cracks	
19.	ELCB Available	Applicable for welding machine or powered devices above 24V	
20.	Third Party Certificate	Valid certificate from approved third party for lifting appliances, PSV of equipment. & tank/vessel/cylinders of tankers	

21.	Safety latches	Available in hooks & in good condition.	
		Wire Ropes Condition/anchorages	
		Hook with Latch in good condition	
22.	Slings	Slings with load test and marking.	
	Operator	Operator's certificate of competency	
	Operator/Helper: Identity	Availability of Yellow Colour Jackets	

Driver's Name & Sign: Validity up to:

Checked by Safety Steward
(Name & Sign with seal)

Approved by: F&S Officer; BPCL

Fire & safety department is responsible for the safety clearance at the time of inspection. Responsibility of the vehicle before & after the inspection lies with the user department/Engineer in charge.

Contractor's Safety Performance Checklist

F/03/CPM/FSG/03

Date:		**Time: Hrs**		
Location / Area of audit :				
Name of contractor company:				
Name of auditees during audit:				
Type of work involved:				
Name of auditors:				
Reporting department:		**Name of Engineer Incharge:**		
SN	**Check Points**	**Max. Marks**	**Marks Obtained**	**Remarks**
Compliance to Contractor Safety Guidelines				
1	Does the Contractor have adequate number of Supervisors for the jobs?	2		
2	Are the Supervisors competent to ensure that the work force adhere to all applicable safety requirements? (As per the scope of safety guidelines)	4		
3	Is there any incident/Accident/LTI occurred, (If 2 FAC - 0 , 1 FAC - half marked)	10		
4	Detail Report available, Remedial measure taken , Briefing about the incident done.	4		
5	Does the contractor know the accident / incident including Nearmiss reporting system of BPCL? Interview any Two Persons (supervisor & site incharge).	2		
6	Whether all the tools / equipment Including PPE used are meeting the standards of Contractor Safety Guidelines? (any certification CE, ISI Marked)	3		
Personal Protective Equipment				
7	Whether PPE are being used and in good condition? (Available with Workers at field)	10		
	• Full sleeve (Cotton overall)/ Boiler Suit			
	• Safety Shoes			
	• Safety Helmet			
	• Safety Goggles			
	• Hang gloves while working			
	• Ear Plug/Muff in high noise area			
	• Any specific PPE such as safety harness, respiratory protectors / mask, welder's screen, gum boot etc.			
Fire & Safety Protection System				
8	Does the workmen know about the nearest location of:	10		
	• MCP (with full form)			
	• Fire extinguishers (Act to operate)			
	• Safety Shower,			
	• Assembly Point, Wind socks, Siren Codes			
	• First Aid Box,			
	• Wind sock cloth?			
Compliance of Work Permit System				
9	Are contractor's personnel aware of the various types of permits for different kinds of jobs?	5		
10	Are the specified conditions of the permit complied?	5		

Chemical/ Material Safety				
11	Workplace maintained clean and orderly during / after the job?	5		
12	Chemicals / materials handled properly?	2		
Healthiness of Tools & Tackles				
13	Is the following equipment used by the contractors maintained in good condition? (check for the different legal requirement & BPCL requirement like list, internal inspection)	8		
	• Tools , Tackles			
	• Electrical / Welding Generators/ Cutting Set with Flash back Arresters.			
	• Scaffolds			
	• Cranes			
Maintaining Safety Records				
14	Whether the contractor workmen/supervisor familiar with safety sign, BPCL Area classification, etc.?	4		
15	Whether workmen undergone Safety training and records kept? (compulsory training all were attended seek record)	5		
16	All employee were taken basic fire & safety induction (record & interview any two persons)	5		
17	Whether toolbox talk conducted regularly and records kept properly? Record checked	4		
18	Asked the information from any of worker about tool box talk subject	2		
19	Does the contractor attend safety committee meetings regularly?	2		
Familiarization with Emergency Actions				
20	Does the contractor personnel know about the hazard associated with their job/ chemicals / material handled and precautions to be taken? (Brief discussion at field)	3		
21	Are the contractor's personnel familiar with emergency actions?	5		
	• Emergency telephone numbers			
	• What to do in case of fire?			
	• What to do in case of toxic release?			
Housekeeping & Safety Promotional Activities				
22	Site condition & equipment preparation & housekeeping.	10		
23	Safety promotion activities	10		
Process Safety Management				
24	Does the PSM Awareness among workers, PSM Poster/Beacon Displayed at site?	10		
25	Does the Contractor have a safety policy as per PSM Contractor Safety Management / OISD-207?	10		
26	Is Safety Statistics of Last 3 years Total Injury Frequency Rate (LWC+MTC) record maintained by contractor as per prequalification questionnaire of PSM Contractor Safety Management work process. **Calculation =[(No. of Injury cases)x(200,000)hrs/(Total hrs worked)]**	10		
	Total	150		
	Overall Rating			

Ref. of Rating: **0-50%**- Below Avg,**51-60%** - Average, **60-75%** - Satisfactory, **76-85%** - Good, **86-95%** -V Good,**96-100%** - Excellent

Name & Signature Auditor(BPCL) Auditee (Contractor/Owner)

Annexure IV

UNDERTAKING

We, M/s _____ have been awarded contract work order no. _____ dtd. __.__._____ by M/s Bharat Petroleum Refineries Ltd. We hereby undertake as follows:

1. That we have understood the details of the work to be executed with reference to the aforesaid work order and the requirements of manpower, equipment, tools/tackles, safety equipment and other resources necessary to execute the work thereof.
2. That we have got competent supervisors and workers with required qualification, relevant experience / skills and trained for safe execution of the work. Our supervisors are well aware of the work hazards and have got adequate knowledge and familiarity about the safe work practices / safe work methods, necessary safety measures and precautions to be taken to avoid accidents during execution of the work.
3. That we have read and understood the General and Special Conditions of the contract work order under reference and agree to abide by the same.
4. That we have familiarized ourselves with the working conditions, understood all necessary requirements for safe execution of the work, including HSE policy and procedures of BPCL and obtained all clarifications regarding the job.
5. That we undertake to ensure and strictly comply with safety procedures and safe practices / methods relevant to the work for safety of our employees and property of the company BPCL and provide required personal protective equipment to all our employees, as necessary for safety & to prevent probable injuries to our workers and as per the safety requirements of the Company (BPCL). We further undertake to carry out the work in accordance with the HSE policy and procedures of BPCL
6. That we shall also comply with all applicable regulations with respect to environmental protection.
7. That we undertake to deploy competent and trained personnel for the job identified who will possess requisite skill, certificate / license.
8. That we shall ensure use of right type of tools, tackles & equipment, maintained in good working condition, suitable to the nature of the job under execution.
9. That we shall be responsible for safety of our employees and other persons at site / property of the company and accountable for any accident due to negligence / fault of our employees or our company and shall be ready to accept the responsibilities for any legal consequences.

Signed, Sealed & Delivered by –

(Signature of the proprietor of the Company / Authorized person)

Name :

Date :

Name of Company :

Company Seal :

Witnesses:

1. Signature : _____
   Name : _____
   Date : _____
   Address : _____
   _____

2. Signature : _____
   Name : _____
   Date : _____
   Address : _____
   _____

Annexure V

Safety Engineer / Supervisor appointment

Contractor's Name: - .....
Nos. of Work force at site:-.....
Details of Safety officer / Supervisor
Full Name: - .....
Date of Birth: - .....Designation: - .....
Contact No :- ..... Email ID: - .....
Appointment date: - .....
Educational Qualification: -
1).....
2).....
3).....
Professional Experience (In Chronological Order)

S.N.	Name of Organization	Period of Service		Designation	Area of Responsibility
		From	To		

Stamp and Signature of Contractor's Owner / Site Incharge
Date:-_____

Annexure VI: **F/03/CPM/FSG/04**

Contractor's Monthly Safety Performance Report

BHARAT PETROLEUM CORPORATION LIMITED
BINA REFINERY
CONTRACTOR'S MONTHLY SAFETY PERFORMANCE REPORT

REPORT FOR THE MONTH	
CONTRACT NO	
CONTRACTOR NAME	
CONTRACT TITLE	
CONTROLLING DEPT./TEAM	
SITE INCHARGE NAME - Mr.	SIGNATURE
THROUGH - ENGINEER INCHARGE NAME -	SIGNATURE
TO, FIRE & SAFETY DEPT NAME - Mr.	SIGNATURE

Following data to be furnish

Sr./No.	DESCRIPTION	THIS MONTH	YEARLY FY (22-23)	CUMMULATIVE	REMARK
	ManHours worked				
	Average No. of Employees Monthly				
	No of Employees				
	Leading Indicators				
1	Near-Miss (NM) Reporting				
2	Toolbox Talk Meeting (No.)				
3	Safety Awareness Training conducted (No.)				
4	BOSOP (No.)				
5	Safety Suggestion (No.)				
6	Safety Audits				
7	Fire & Safety Training (No. of Employee)				
8	Safety Promotion Activities				
9	Unsafe Act Reporting				
10	Unsafe Condition Reporting				
	Lagging Indicators				
1	First Aid cases (FAC)				
2	Medical Treatment cases (MTC)				
3	Restricted work Cases (RWC)				
4	Lost Time Injury (LTI)				
5	Lost Work - Days				
6	Accident/Incident				
7	Dangerous Occurrences (DO)				
8	Fatality				
9	Violation				

What is Safety Activity Rate (SAR) -

The safety activity rate is the overall safety promotional & awareness activity which including safety training & safety inspection conducted in a year with respect to total employees present & man hours worked in a month.

$$SAR = \frac{\text{Total No. of Safety Activities - Lagging Indicators (Excluding LTI)} \times 5 \times 10}{\text{Man Hours Worked} \times \text{No. of employees Present in a Month} \times 30} \times 6 = \text{SAR Benchmark}$$

Safety Activities Rate (SAR) % =	A	B	SAR %

Note : (1) Lagging Indicator includes Violation Notifications/Penalty Note/Warning/FAC/MTC/RWC/Lost Work -Days / Accident/Incident/DO.
(2) In case of any LTI the Safety Performance (SAR) of the company will be considered is zero.

Detail of Accidents/ Near miss/ Dangerous Occurrence

Date &time	Emp Name, ID,& Desig.	Brief Description	Recommendation

Detail of ToolBox Talk & Training

Date &Time	No of participants	Topic

Detail of safety Audits (copy of Report should be attached with report)

Date &Time	Audit done by		Auditee

Detail of Safety Violations by contractors (Report attached if any)

Date &Time	Breif Description of violation	Action taken / Remark

Annexure VII

F/03/CPM/FSG/05

Bharat Petroleum
energising lives

NOTIFICATION FOR CONTRACTORS SAFETY VIOLATIONS

From : Date : .....

To : Engineer in Charge, BPCL

Given below are violation detail of Safety Regulation / Site Instructions committed by a contractor working for your division.

Name of contractor's Employee / Workmen :
Emp. No. :

Contractor's Name/Agency EIC Name

Location of Violation : PO No.:

Date : Time :

Details of Violation : .....

.....

Immediate action taken : .....

.....

This Violation is : ☐ Minor ☐ Major

Action recommended : ☐ Written warning ☐ Penalty Rs. _____

☐ Suspension ☐ Dismissal ☐ Other _____

BPCL shall have right to recover increased amount of penalty from the contractor as per BPCL's sole discretion based on gravity of violation. In addition the contractor shall suspende/terminate his concerned employee, supervisor or the site manager etc. as the case may be due to said violations.

Sign of Person/Supervisor Violation Safety Norms

Name & Sign of Safety Officer/EIC

CC,
Head, Fire & Safety Department, BPCL

Annexure – I

Colour Code Matrix for Service Provider's Boiler Suits working at Bina Refinery

Sr. No.	Category / Service	Boiler Suit Colour	Sample / Picture
1	BR Employees	Royal Blue Colour	
2	Fire Fighting Services	Red Colour	
3	Mechanical Services / Tank M&I Services	Coffee Colour	
4	Electrical Services	Orange Colour	
5	Instrumentation Services	Olive Green Colour	

6	Operation Services (BDT/Offsite/ Refinery)	Navy Blue Colour	
7	Power Plant	Khaki Colour	
8	Utility / Canteen / Civil Services	Grey Colour	
9	Grass cutting / Housekeeping services / Gardening / Green belt Services	Green Colour	
10	Project Services	Dark Blue Colour	

Note: -

1. For other services which are not mentioned above, respective Engineer In-charges shall ensure different colour boiler suits than above colours for contractors.
2. Company Logo, Safety message and design of boiler suits is as per individual service provider's company policy.

LABOUR COMPLIANCE

1. On the award of a contract, the contractor shall contact BPCL HR department to understand the requirements for onward process/ procedure for BPCL HR related activities and submit details/ contact number(s)/ email id(s) of their point of contact and authorization letter (for signing any BPCL HR related compliance document) of the person named so.

2. The scope of obligations of the contractors underlined also includes those of its subcontractor(s) and the contractor shall have the sole ownership and accountability for the same.

3. **Adherence to Statutes, Regulations, Schemes, Rules, BPCL's rules and procedures**: The contractor shall undertake to ensure due and complete compliance with respect to all Statutes, Regulations, Schemes, Rules, BPCL's rules and procedures etc. (which may be amended from time to time) whether of Central Govt. or State Govt. or any other competent authority applicable to the contractor and or employees employed or whose services are otherwise availed of by contractor or sub-contractor appointed by such contractor. Such laws shall also include Minimum Wages Act, 1948, Contract Labour (Regulation and Abolition) Act,1970, Employees State Insurance Act, 1948. Employees' Compensation Act, 1923, Payment of Gratuity Act, 1972, Provident Fund & Miscellaneous Provisions Act, 1952, Payment of Bonus Act, 1965, Apprentices Act,1961 and all other applicable Act, laws, rules, regulations and orders as may be in force from time to time. The Contractor must ensure strict compliance with respect to all applicable Acts.

4. The Gate Passes for contractors' employees are processed through Contract Man Management System (CMMS) online portal. The contractor shall fill in details pertinent to the LOI/ LOA/ PO, Labour license (if applicable), accidental insurance (Employees State Insurance Act, 1948/ Employees Compensation Act, 1923 policy details) and personal details of contractors' employees in CMMS through its login credential. The contractor shall contact BPCL HR department to understand the requirements and process.

5. Documents related to the contractor's employees to be submitted to BPCL and or uploaded in CMMS:
   5.1. Character certificate (Police verification)
   5.2. Medical fitness certificate
   5.3. Insurance policy (Pehchan Card under ESIC/EC policy/Group Personal Accident (GPA) as applicable)
   5.4. Photo Id (preferably Aadhar)
   5.5. Education/ Experience certificate (as required)
   5.6. Bank account, mobile number and UAN details; if not available, after the first month of the running of the contract
   5.7. Any additional requirement will be communicated and shall be required to be complied

6. For Bina location, medical examination of the employees is to be done mandatorily at BPCL (VK BR) hospital, located in BPCL Township, Bina as per the applicable charges. The gate pass is issued only those who are declared medically fit. Medical fitness of employees

involved in the high-risk jobs like confined space entry, inert space entry, work at height etc. is reassessed for specific requirements (on form-32) at Occupational Health Centre.

7. BPCL has the sole proprietorship of the Gate Passes issued to the contractors' employees and the contractor is obligated to return all the gate passes issued to the contractor. In case of non-submission of the Gate passes / lost Gate passes / damaged Gate passes suitable amount per gate pass will be deducted by BPCL. Also, the case of non-submission of the Gate passes / lost Gate passes shall require the contractor to lodge complaint at the local Police Thana and submit a copy of the same to BPCL Security.

8. **Confirmation to BPCL HR department of Compliance under various Act applicable:** It shall be the responsibility of the Contractor to confirm to BPCL HR of conformance to statutory compliances under various Acts applicable and submit the required documents to BPCL HR in CMMS through its log in credentials, on monthly basis. The contractor is required to contact BPCL HR department to understand the requirements and process.

   8.1. Contractor shall ensure timely payment to employees, remittance of PF & Pension & ESIC contributions and maintain statutory documents & registers under various applicable Acts.
   8.2. The checklist of the documents and formats etc. to be maintained and submitted to BPCL can be obtained from the BPCL HR department after the award of contract.
   8.3. On submission of the aforementioned documents, BPCL HR will inspect and issue 'HR Clearance Certificate'. Clearance of invoices shall be subject to completion of all labour compliances and getting HR Clearance Certificate from BPCL HR.

9. **Inspections/ Audits:** The contractor shall maintain and keep a copy of statutory documents at site and shall present itself at the designated time and venue with the required documents as when demanded by the BPCL and or any statutory authorities.

Quality, Energy, Environment, Health & Safety

Work Permit Procedure

Common Procedure Manual

(ISO 9001: 2015, ISO50001:2018, ISO 14001:2015, &ISO45001:2018)

(Fire & Safety)

(CPM/03 /WPS/02)

	Prepared By:	Reviewed & Issued By:	Approved By:
Name	Veera Prasad Mukka	Sanjay B Kamdi	S Chatterjee
Designation	Mgr. (F & S)	CM (F & S)	GM (F, S & E)
Signature			
Date	18/11/2022	18/11/2022	18/11/2022

The Manual is a property of BPCL. This is a controlled document and any unauthorized alterations and copies must not be made. Alterations are permitted only with the prior permission of Approval Authority.

Bharat Petroleum

Quality, Environmental, Occupational Health and Safety (QEHS) Policy

We at Bharat Petroleum Corporation Limited, Bina Refinery (BPCL-BR) are committed to achieve Customer satisfaction by providing Quality products & services while demonstrating continual improvement in our QEHS performance to meet our stakeholder's expectations. Prevention of harm to human beings, environment and property are intrinsic to our Business philosophy.

To achieve the above objectives, we shall:

- **Proactively** anticipate & assess risks and opportunities, address them through short and long-term objectives and implement mitigation plans.
- **Inculcate** process-based thinking as a core responsibility in all functions to enhance individual ownership, accountability and performance.
- **Comply** with all applicable legislation and other requirements.
- **Focus** on protection of the environment, waste reduction and prevention of injuries and ill-health.
- **Emphasize** on QEHS aspects, technology upgradations, asset integrity, process improvements & cost reduction at planning & operational levels.
- **Ensure** effective Management of Energy and other Resources.
- **Institutionalize** EHS hazard & risk assessment methodologies, safe work practices & behaviors by benchmarking with international practices.
- **Develop** an effective response plan for quick implementation for foreseeable potential emergency situations.
- **Strengthen** awareness, skills, competence of our employees & business associates to continually improve performance standards through consultation and participation.
- **Periodically** review the suitability, adequacy and effectiveness of our Integrated Management Systems.

We shall communicate this Policy to all employees and service providers working in the organization and make it available to the public and other interested parties.

Date : 01st July 2023
Place : Bina

Chacko M Jose
Executive Director - BR

	Prepared By	Reviewed & Issued By
Designation	Mgr. (F & S)	CM (F & S)

Bharat Petroleum

Energy Policy

We at Bharat Petroleum Corporation Limited, Bina Refinery (BPCL-BR) are committed to continual improvement in Energy performance and Energy Management System, which shall be demonstrated by:

- **Proactively** anticipate & assess risks and opportunities, address them through short and long-term objectives and implement mitigation plans.
- **Ensuring** effective Management of Energy, Information and Resources to achieve Objectives & Targets and Complying with all applicable legislation and other requirements.
- **Strengthening** purchase of energy efficient products & services by utilizing latest technology to improve our energy performance.
- **Monitoring** & Controlling energy consumption through well-structured reviews.
- **Attaining** participative culture of energy conservation by creating awareness through training.

Date : 1st July 2023

Place : Bina

Chacko M Jose

Executive Director - BR

	Prepared By	Reviewed & Issued By
Designation	Mgr. (F & S)	CM (F & S)

1. Distribution of this Manual shall be controlled by CM (F&S).

DISTRIBUTION LIST

The controlled copies of this manual are distributed as per the list given below:

Sr. No.	Copy No.	Controlled copy holder
01	--	Master Copy CM (F&S)
02	01	Server Copy

2. The Master copy of this manual shall be maintained by CM (F&S).

3. Controlled copy of manual shall be issued as per approved distribution list, which shall be revised under authority of HOD. as and when required. Manual can also be issued to other official with due approval of HOD.

4. In case of Holder department ceases to exit, the controlled copy shall be returned to CM (F&S) by the holder.

5. If there are total no of 20 revisions in the entire manual or any major change in process, the manual will be re-issued from 1, 2, 3 ……. After re-issue the revision number of all the Chapters of the Manual will turn to be 00.

	Prepared By	Reviewed & Issued By
Designation	Mgr. (F & S)	CM (F & S)

Sr. No.	DOC. NO.	ISSUE /REV. NO.	DATE	DETAILS OF AMMENDMENTS	REMARK
1	CPM/03/WPS/02	02/00	10/04/2018	Entire Manual Revised as Per ISO9001:2015,ISO14001:2015,ISO50001:2011 and ISO45001:2018	
2	CPM/03/WPS/02	02/01	01.07/2019	NEW QEHS and Energy policy updated	
3	CPM/03/WPS/02	02/01	01/07/2019	Entire Manual Revised as per ISO50001:2018	
4	CPM/03/WPS/02	02/02	30/07/2020	Changes in Manual related to RA, e-RA, IT-Failure.	
5	CPM/03/WPS/02	03/00	15.11.2022	Organizational Change-Merger of BORL to BPCL	
6	CPM/03/WPS/02	03/00	03.07.2023	NEW QEHS and Energy policy updated	

	Prepared By	Reviewed & Issued By
Designation	Mgr. (F & S)	CM (F & S)

BARC - Bhabha Atomic Research Centre

CWP - Cold Work Permit

COT - Crude Oil Terminal

CPP - Captive Power Plant

HOD - Head of Department

F & S - Fire & Safety

FZS - Fire Zone Signatory

GSI - Gas Safety Inspector

H2S - Hydrogen Sulphide

CO - Carbon Monoxide

HVAC - Heating, Venting, Air Conditioning

HWP - Hot Work Permit

RA - Risk Assessment

MCR - Main Control Room

OISD - Oil Industry Safety Directorate

PPE - Personal Protective Equipment

RSO - Radiological Safety Officer

ELCB - Earth Leakage Circuit Breaker

CBD - Closed Blow Down

IDLH - Immediate Danger to Life and Health

SCBA - Self Contained Breathing Apparatus

SOP - Standard Operating Procedure

AE / JE - Associative Executive /Junior Executive

E - Executive

CSE - Confined Space Entry ,VBPL - Vadinar Bina Pipe Line

Section	Description
1	Introduction
2	Purpose and General Requirements for work permit system
2.1	Scope
2.2	Objectives
2.3	Applicability
2.4	Exemptions on use of Work Permit System Procedure
3	Definitions
4	Work Authorizations
4.1	Types of on line –Work Authorizations
4.2	Procedure for Obtaining On Line Authorization
4.2.1	A1 Authorizations: For Cold Work; Radiography, Vessel box up and Working at Height
4.2.2	A2 & A2a Authorizations for Hot work, Use of 230/440 V & Excavation:
4.2.3	A3 Authorizations for Confined space entry
4.2.4	A4 Authorizations for Electrical work:
5.0	Types of Work Permit
5.1	Routine jobs
5.2	Non Routine jobs
5.3	Procedure for Obtaining On Line Work Permits
5.3.1	Non Routine Work Permits: Cold Work Permit (Non-Routine) Cold Jobs, Vessel Box Up, Radiography (P1):
5.3.2	Working at Height Permit (P1a)
5.3.3	Excavation Work(P2)
5.3.4	Hot job, use of 230/440 V Permit (P2):
5.3.5	Confined Space Entry Permit (P3):
5.3.6	Electrical work at Sub Station /Switch Yard Permit (P4)
6.0	Routine Permits
6.a	Routine Permits Routine Electrical Isolation Permit (P5 I)
6.b	Routine Electrical Energization Permit (P5 E):
6.c	Routine Cold work Permit (P6) :
6.d	Routine Hot work Permit (P7) :
7	Renewal of work permit: (both routine and non-routine work)

8	**Closure of work permit (both routine and non-routine work)**
9	**Work Permit Validity Period and Renewal**
10	**Procedure for LOTO**
11	**Safety Compliance:**
12.	**Area Distribution**
13.	**Process of Authorization for Issuer / Executor**
14	**Roles And Responsibilities of Personnel Involved In Permit Process**
14.1	**Roles of Issuing Department**
14.2	**Roles of Executing Department**
14.3	**Area Owner / Section Head**
14.4	**Fire Zone Signatories / Gas Safety Inspectors**
14.5	**Fire & Safety Department**
14.6	**Fire Watch**
14.7	**Confined Space attendant**
14.8	**Fire Standby**
15	**Positive Isolation Certificate and Tag**
16	**Scaffolding Certificate and Tag**
17	**Record of Fire Water Network Isolation**
18	**Risk Assessment (RA)**
18.1	**RA Procedure**
19	**General Information**
19.1	**WPS Flow Chart:**
20	**Process common to all the permits:**
21	**General Safety Guidelines**
22	**Radiography and Nucleonic Level Gauges**
22.1	**Permission for Radiography**
22.2	**Nucleonic Level Gauge Isolation**
22.3	**General Safety Precautions for Radiography Source**
23	**Precautions for Excavations**
23.1	**Clearances of Permission Note in online system:**
24.	**General safety precautions**

	Prepared By	Reviewed & Issued By
Designation	Mgr. (F & S)	CM (F & S)

25	**Work Stop Authority**
26	**Records**
27	**Verification, Corrective and Preventive action:**
28	**Storage of Records & Retention Time:**

Annex. 1	**Explanatory notes to salient work permit conditions.**
Annex. 2	**Area Distribution & Designated GSI/FZS**
Annex. 3	**Cold work permit non routine- P1 format**
Annex. 4	**Hot work permit non routine- P2 format**
Annex. 5	**Work at Height permit routine- P1a format**
Annex. 6	**Cold work permit routine- P6 format**
Annex.7	**Hot work permit routine- P7 format**
Annex. 8	**Confined Space Entry Permit- P3 format**
Annex. 9	**Electrical Work Permit- P4 format**
Annex. 10	**Electrical isolation/Energization (P5) permit format**
Annex. 11	**Permit for Electrical Energization (P5E) Format**
Annex. 12	**Risk Assessment Format**
Annex.13	**Fire Zone distribution map**
Annex.14	**Positive Isolation Certificate**
Annex.15	**Scaffolding Certificate and Tag**
Annex.16	**Record format of fire water network isolation**
Annex.17	**Electrical Isolation Tag**
Annex.18	**Danger 'Do not Operate' Tag**

1	**PURPOSE:**	The purpose of this document is to provide uniform guidance for permitting all operational / maintenance / construction work and to identify precautions to be taken in order to ensure safety of personnel, avoid damage to environment and assets & comply with the statutory requirements.
2	**SCOPE OF APPLICATON:**	This procedure shall be applicable to below BPCL Facilities. These includes, but not limited to: 1. Bina Refinery Complex 2. Bina Dispatch Terminal (BDT) 3. Crude Oil Terminal (COT Vadinar) 4. Betwa Weir & Pump House
3	**CROSS REFERENCES:**	OHSAS 45001:2018- Clause No. 8.1 & OISD 105
4	**PROCEDURE:**	

	Prepared By	Reviewed & Issued By
Designation	CM (F&S)	GM (HSSE)

E- WORK PERMIT SYSTEM

1.0 Introduction`

The Work Permit System is an important tool for ensuring safety in hydrocarbon processing / handling industry. Work Permit System is a procedure to authorize non-routine work to be carried out in a controlled manner. The procedure explains the precautions to be taken to ensure the safety of personnel, installations and environment while performing the work.

The purpose of this document is to provide uniform guidance for permitting all operational / maintenance / construction work and to identify precautions to be taken in order to:

a. Ensure safety of personnel
b. Avoid damage to environment and assets
c. Comply with the statutory requirements

2.0 Purpose and General Requirements for Work Permit System

The procedure given under shall be followed uniformly at the entire **BPCL Bina Refinery Premises and COT Vadinar.**

2.1 Scope

This procedure shall be applicable to all BPCL Facilities. These includes, but not limited to:

a. Bina Refinery Complex
b. Bina Dispatch Terminal (BDT)
c. Crude Oil Terminal (COT Vadinar)
d. Betwa Weir & Pump House

2.2 Objectives

This procedure shall be followed with the following objectives:

a. Safety of the person overrides all the work place targets.
b. Adequate assessment of risks is carried out prior to commencement of the Critical jobs at site.
c. Roles and responsibilities of personnel undertaking the work are clearly defined and made aware of, to the concerned.

d. The jobs are undertaken in a safe manner after isolation of all hazards and proper preventive and control measures are in place before commencement of the work.
e. To establish a record of conditions accepted between the persons executing the job and the person who authorizes such execution.

2.3 Applicability

This procedure is applicable to all the works involving hot and cold works but not limited to the following activities:

a. Mechanical repair/welding.
b. Work on electrical distribution, generation and storage systems such as transformers, batteries, and switch yard in sub stations.
c. Work in closed tanks, vessels and working on or above false ceilings.
d. Hot tapping.
e. Use of x ray machines and radiography sources.
f. Any repair jobs within process unit and process equipment.
g. Non-routine chemical sampling/dosing.
h. Mechanical grass cutting in battery limits of process unit and dykes.
i. Use of non-flame proof gadgets in the hazardous areas.

2.4 Exemptions on use of WPS Procedure

Emphasis should be on removal of hazards first & then executing the job with proper observance of the Work Permit Procedure. In cases where hydrocarbons are continuously present such as Hazardous Zone 0 or 1, proper shut-down should be taken, hydrocarbons bleed off and only upon confirmation of no hydrocarbons through gas tests, the works shall be undertaken.

a. Routine welding / cutting and similar jobs carried out in the contractor yard and permit should be taken by the different departments like Projects and Mechanical Dept with one-week blanket limit. In central workshop A blanket permit with one month expiry shall be issued with defined scope of activities and each dept should take different permit for their jobs in workshop (viz Mechanical, Instrument, Electrical).
b. Routine activities not requiring work on equipment such as vibration monitoring, Visual stroke checking, use of tachometer, thermal sensing, noise monitoring, steam trap checking etc. However, these needs to be communicated verbally to the plant personnel prior to commencement and the equipment should be explosion proof as per Electrical area classification.

Routine sampling for the purpose of laboratory analysis. Routine chemical solution preparation. Note: Hazardous non - routine sampling will require a work permit. This activity shall be done after proper risk assessment.

c. BPCL Canteens for cooking, preparing tea/food etc.

d. Use of spark igniter for lighting up furnaces during start up in plant & other jobs for lighting lamp/ burner in central laboratory.

e. Watering/gardening work relating to horticulture. Grass cutting in open area other than dyke areas & battery limits of process units does not require work permit.

f. Manual sweeping of plant roads, control buildings, sub-stations, SRRs, workshops and other buildings. Vacuum cleaners and other gadgets requiring power supply should not be used for sweeping/cleaning of plant areas.

g. Any other activity / area declared as permit free by Factory Manager.

h. All Emergency Fire & Safety Fixed/Mobile/Potable System which were covered under SOP shall be exempted from Work permit system.

i. More number of permits in the area can be allowed after discussion with the Plant/Area incharge, based on the criticality and adequate resources will be mobilized for monitoring of the activities. The same will be recorded in the daily permit register.

3.0 Definitions

a. **Permission through system:** It is a type of clearance for doing radiography and excavation job in plant/ Refinery. An agency can take up work of radiography or excavation after taking clearance on it from different plant/ units in online system.

b. **Authorization:** Approved written document in prescribed format for specific terms & conditions required to supplement the work permits of non-routine nature and critical work. Authorization of work is to be issued by the GSI & FZS of respective Fire Zones.

c. **Routine Permit**: Type of Permit Required for low risk jobs.

d. **Non- Routine Permit**: Type of Permit Required for high risk/critical jobs.

e. **Cold work** -Activity which do not produce sufficient heat to ignite a flammable air - hydrocarbon mixture or a flammable substance and does not specifically pose an explicit or implicit hazardous condition of spark, hot surface or source of ignition.

f. **Hot work** -Any activity that can produce explicit or implicit or have potential to generate spark - sufficient heat / spark / source of ignition having sufficient

energy to cause ignition where the potential for flammable vapors, gases, or dust exists / capable of igniting flammable gases.

g. **Confined Space** -Area where deficiency of oxygen (<19.5 % v/v) or presence of toxic/flammable gases/fumes e.g. H_2S/ CO etc. is likely and / or the access is difficult during maintenance/ inspection work. This area has restricted / limited means of entrance / access and exit means and are not designed for continuous human occupancy / is not normally occupied by people and is usually not well ventilated. Examples - Vessels, columns, large pipe lines, storage tanks, spheres, bullets, coolers, flue ducts, HVAC ducts, false ceilings and floors. Entry on floating roof tank when the roof is 3 m. below the top, Excavation deep more than 1.2 m etc. shall also be considered as Confined Space.

h. **Electrical Isolation** - Means positive isolation of equipment connected to an electrical power system for the purpose of maintenance and installation.

i. **Excavation** - Means digging, road cutting, removing soil, chipping, grading and excavation work which involves excavation of ground regardless of the depth either using mechanical equipment or manually. **Manual weed** out with the help **of spade is exempted** for gardening purpose from excavation. Excavation is to be always issued with hot work permit and after permission from different dept. like electrical/instrumentation/ IT/ F&S etc.

j. **Work at Height**:" Work at height" means work in any place where, if there were no precautions in place, a person could fall a distance liable to cause personal injury (for example a fall through a fragile roof).

k. **Issuer** - Person authorized by HOD based on technical competency & position (Plant Shift Incharge/E/AM) and trained, tested and certified by Fire & Safety Department.

l. **Executor-** The person who applies for a permit and completes the work. He is responsible for ensuring that a Job performer/contractor supervisor is nominated at all times when the work is under way.

Person from the work executing departments authorized by their HOD based on technical competency & position and trained tested & certified by Fire & safety Department who accepts the permit and performs a job.

m. **Contract Supervisor-** The person nominated by the Executor and holds the permit and Incharge of a worksite. He is responsible for ensuring that the work party obeys the requirements of the Work Permit System and other relevant procedures.

n. **Fire Zone Signatory:** Senior & experienced person designated by Factory Manager

o. Based on his position (Area DGM /GM in general) who is responsible for reviewing the hot permit activities in his jurisdiction and specifying control measures to carry out these jobs in a safe manner.

p. **Hazardous Area-** Area surrounding a hydrocarbon bearing facility in which an explosive gas/air mixture could be present, as defined in "Institute of Petroleum - Area Classification Code for Petroleum Installations". In summary, Hazardous Areas are subdivided in three Zones as follows:

   a. Zone 0 - An area in which an explosive gas atmosphere is present continuously or for long periods.

   a. Zone 1 - An area in which an explosive gas atmosphere is likely to occur in normal operation.

   b. Zone 2 - An area in which an explosive gas atmosphere is not likely to occur in normal operation and, if it does occur, is likely to do so only infrequently and will exist for a short period only.

j. **Gas Safety Inspector:** Person designated by Factory Manager based on his position (Manager of the area in general) who is responsible for reviewing the critical jobs earned out in his jurisdiction and specifying measures to carry out the jobs in a safe manner.

k. **Radiological Safety Officer (RSO)** - Person who is trained and certified to handle, install and inspect radiation sources as per the requirements of Bhabha Atomic Research Centre (BARC), Mumbai.

l. **Work at height** - Means any work at and above **1.8** mtr. Elevation from ground level where permanent platforms / railings are not available. Some of the jobs that necessitate work at height are painting, inspection, removing valves, installing blinds, pipeline re-routing, roof repair works, insulation, erection of scaffolding etc. Work at height may be either a cold or hot activity depends upon the nature of job.

m. **Work Permit:** Approved written document with specific terms & conditions required to carry out routine and non-routine work inside BPCL Facilities.

Special Remark:

1. In case of ambiguity, Area GSI/FZS shall decide the type of Authorization and permit (Routine/Non Routine) required. In Case of any bigger conflict then GM HSSE in consultation with Factory Manager/Occupier shall decide and amicably resolve the issue.

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2. During silent hours, the continuation of hot work jobs should be avoided; if required, then information shall be given to RSM and Fire SIC after obtaining clearance from concern area owner / HOD & Head (HSSE).

3. All main roads shall be under the scope of offsite area excluding BDT.

4. GSI & FZS are responsible for compliance of work permit system and enforcement of fire and safety regulations as per safety manual.

5. Physical Countersign of Electrical person on Hot Work Permit Non Routine where 220V and 415V temporary supply - Demanded by electrical department.

6. In Case of IT Failure of EWPS Application, Manual Work permit system will be used with immediate effect.

7. Blanket Photography Permission (Max. validity-01 Month) is to be obtained from GM HSSE, however issuance of work permit is as per the discretion of Area SIC.

8. As per factories Act clause 36A, no portable electric light or any other electric appliance of voltage exceeding 24 volts shall be permitted for use inside confined space, however if job required than a written permission note shall be issued in this regard to perform the job.

4.0 Work Authorizations

4.1 Types of on line –Work Authorizations

Work Authorizations:

a. No work in the BPCL refinery can be carried without valid authorization and valid permit. The work to be carried out is classified as Routine & Non-routine work. For routine jobs authorization is not required. Those jobs can be carried out through valid permit. For Non-routine work valid authorization as well as valid permit is required to do the work.

b. The authorization are being used in BPCL refinery which are as follows. Work Authorization & Permit shall be accompanied by a Risk Assessment Sheet (RA).

Authorization	Work
A1	Cold Job, Vessel Box Up , Radiography, Work At Height
A2	Hot job, use of 230/440V
A2a	Excavation
A3	Confined Space Entry
A4	Electrical work at SS /Switch Yards

4.2 Procedure for Obtaining On Line Authorization:

a. The executor has to log in - on line work permit system. Depending on the nature of the job, executor to select the type of the job and initiate the authorization. In this he has to fill the following details i.e. the name of persons whom permission to be granted, Section/ Department of issuer and executor, description of job, location of work, equipment number & identification, fire zone, name of contractor who will perform the job and its vendor code. Where ever critical job is being done, executor has to upload Risk Assessment Sheet. After completion of above details, executor has to forward it to area GSI /FZS for on line authorization. The area GSI has to review and edit/ upload the Risk Assessment Sheet.

b. On approval of area GSI/ FZS/HOD executor has to accept on line and take the print out for further process of obtaining the work permit from issuer section.

4.2.1 A1 Authorizations: For Cold Work; Radiography, Vessel box up and Working at Height. Select the job and after filling all the details along with E-RA apply for the authorization to respective area GSI. The area GSI has to review, edit and upload the Risk Assessment Sheet. For A1 Authorization FZS approval is not required. On approval of area GSI, executor has to accept on line and take the print out for further process of obtaining the work permit from issuer section.

a. For Non-routine cold work executor has to fill up all the details online. If required, executor uploads E-RA depending upon the nature of work. After filling the details executor has to apply for the authorization to respective area GSI. The area GSI has to upload the RA. Executor area in charge (Concerned Maintenance Incharge) has to approve E-RA. If the counter signature is required for this job from other area, he selects the other area GSI. Yellow colour band will appear on electronic authorization where counter signature is required. On approval of area GSI, Executor has to accept on line authorization and take the print out for further process of obtaining the work permit from issuer section.

b. For Radiography job executor after filling all the details apply to the Inspection section for approval. Once it is approved from Inspection it

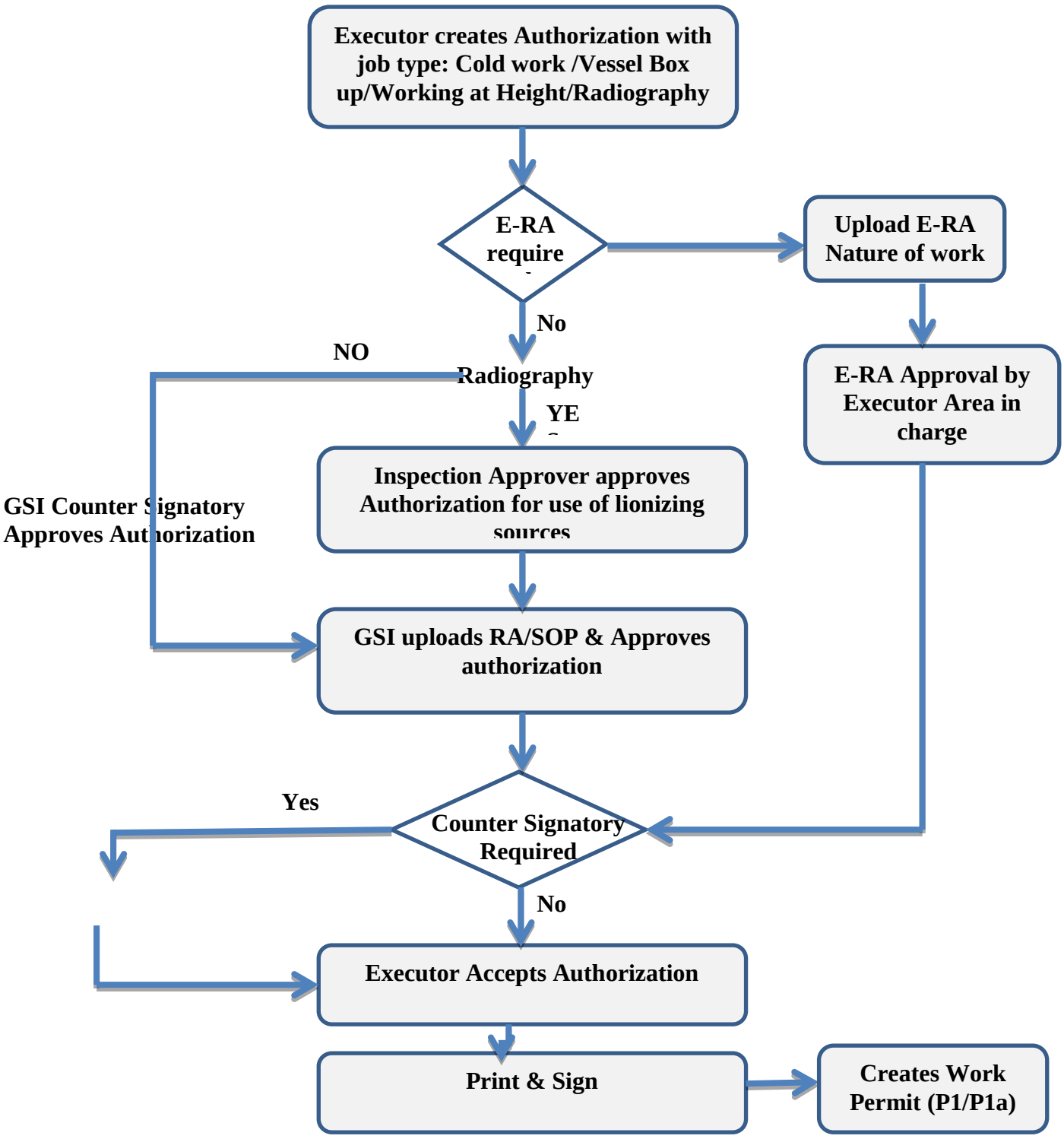
goes to respective area GSI. GSI uploads RA and approve this radiography authorization. If the counter signature is required for this job from other area, he selects the other area GSI. Yellow colour band will appear on electronic authorization where counter signature is required. On approval of other area GSI, Executor has to accept on line authorization and take the print out for further process of obtaining the work permit from issuer section.

c. For Vessel Box up, executor to select the job and after filling all the details apply for the authorization to respective area GSI. The area GSI has to upload the RA. On approval of area GSI, Executor has to accept on line authorization and take the print out for further process of obtaining the work permit from issuer section.

d. For Working at Height, executor to select the job and after filling all the details along with E-RA apply for the authorization to respective area GSI and Maint. Area incharge. The area GSI has to upload the RA. On approval of area GSI and E-RA to be approved by Maint/Proj. Line incharge, Executor has to accept on line authorization and take the print out for further process of obtaining the work permit from issuer section.

AUTHORIZATION FOR COLD WORK (A1)

(Cold Job/Vessel Box Up/Work AT Height / Radiography)



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4.2.2 A2 & A2a Authorizations for Hot work, Use of 230/440 V & Excavation:

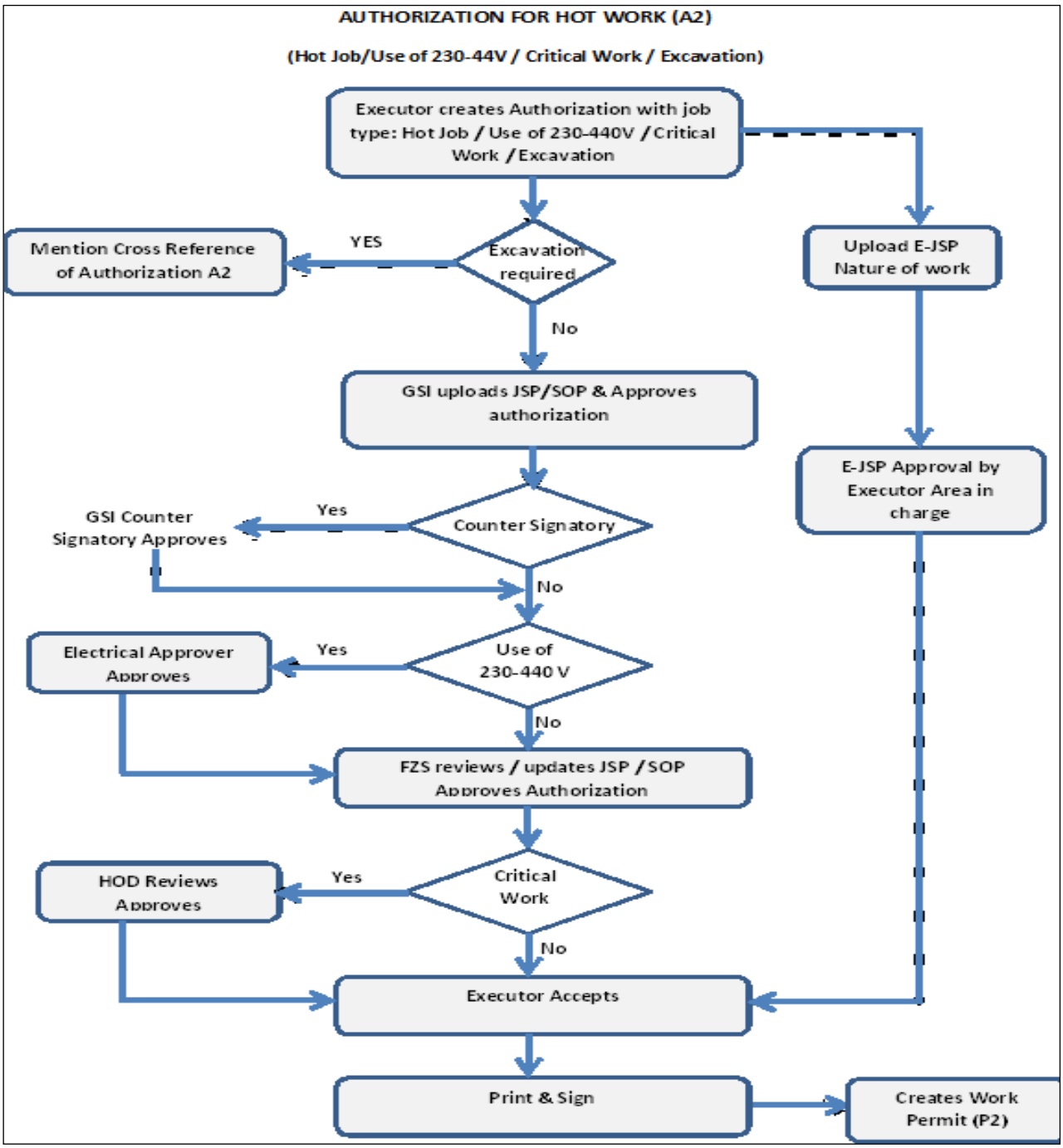
a. A2 Authorization is required for following nature of the jobs i.e. Hot work; Use of 230/440 V. A2a & A2 Authorizations are required for Excavation. Executor has to select the job. After filling all the details and uploading the E-RA, apply for the authorization to respective area GSI/FZS. This E-RA has to be approved by respective maintenance area in charge. Area GSI shall fill up on line the work conditions, mention additional precautions etc. as per nature of job. Then GSI has to forward to FZS/ HOD for review and approval. If the counter signature is required for this job, GSI will select the other GSI of that area. At a time four nos. of counter signatures can be selected. Yellow colour band will appear on electronic authorization where counter signature is required. Once this is accepted by counter signatory, Executor has to accept on line authorization and take the print out for further process of obtaining the work permit from issuer section.

b. For Hot work, A2 Authorizations is required. Executor has to select the hot job and after filling all the details apply for the authorization to respective area GSI/FZS. The executor should upload the E-RA before sending to GSI. This E-RA has to be approved by maintenance area in charge. Area GSI shall fill up on line the work conditions, mention additional precautions etc. as per nature of job and forward to FZS for review and approval of the same. If the counter signature is required for this hot job, he will select the GSI of that area. At a time four nos. of counter signatures can be selected. Yellow colour band will appear on electronic authorization where counter signature is required. If the job is critical in nature FZS shall forward this authorization to HOD. HOD reviews, updates RA & SOP if require, and he/she approves the same. Executor has to accept on line authorization and take the print out for further process of obtaining the work permit from issuer section.

c. For use of 230-440 V for Hot work A2 Authorizations is required. Executor has to select the hot job by using the 230-440 V and after

filling all the details apply for the authorization to respective area GSI/FZS. Executor has to upload the E-RA before sending to GSI. This E-RA has to be approved by maintenance/projects area in charge. Area GSI shall fill up on line the work conditions, mention additional precautions etc. as per nature of job and forward to area electrical for approval. If the counter signature is required for this job, he will select the GSI of that area. At a time four nos. of counter signatures can be selected. Yellow colour band will appear on electronic authorization where counter signature is required. Area electrical upload the conditions for use of 230/440 V for necessary precautions and approves the authorization. This comes to FZS for review and approval of the same. If the job is critical in nature FZS shall forward this authorization to HOD. HOD reviews, updates RA & SOP if require, and he approves the same. Executor has to accept on line authorization and take the print out for further process of obtaining the work permit from issuer section.

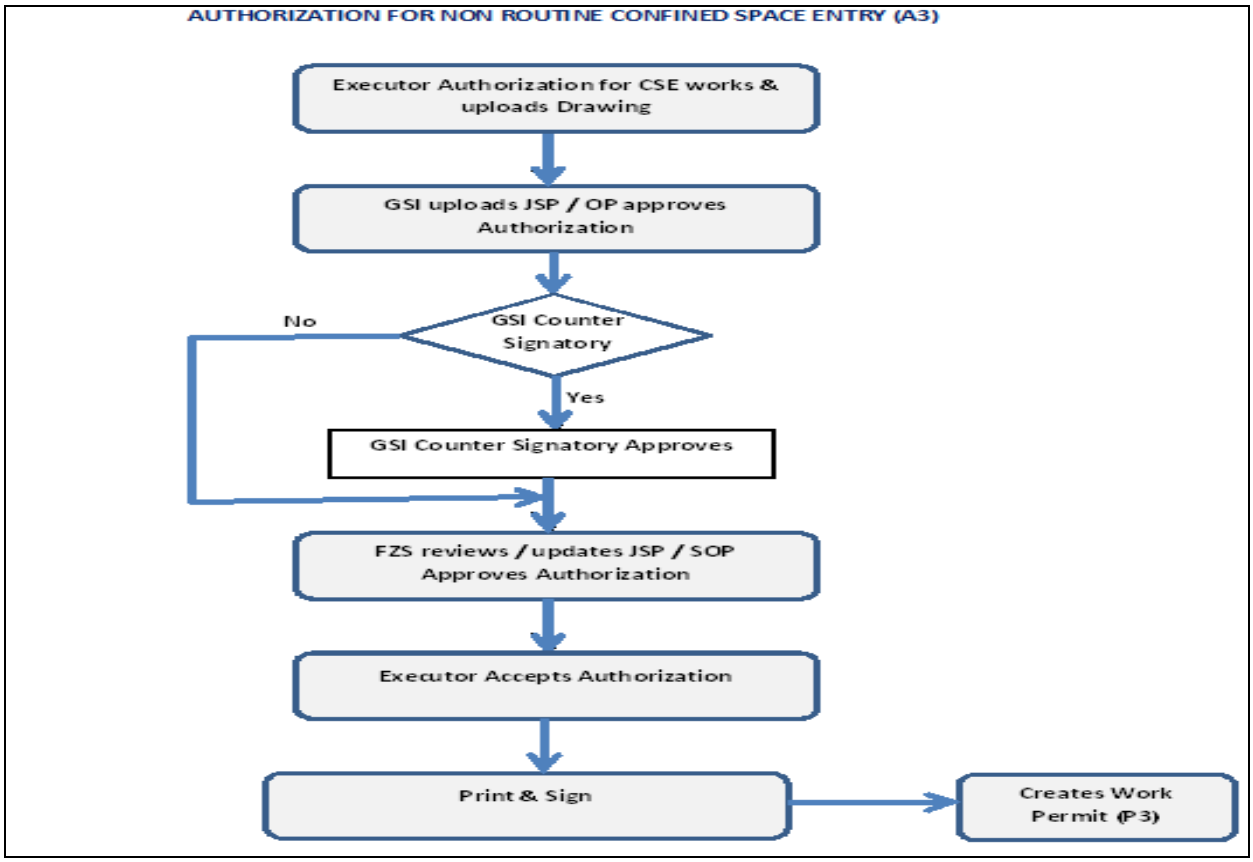
d. For Excavation job, A2a & A2 Authorizations are required. Executor has to select the excavation work for which executor has to upload drawing where the work has to be carried out. After filling all the details apply for the approval from Design & Drawing office. After approval from Design & Drawing office it goes to area electrical maintenance for approval. Electrical maintenance approves authorization after checking site conditions. If the job involves road cutting, then approval from Fire and Safety is must. During the monsoon season all excavation work requires approval from Fire and Safety Incharge. Executor has to accept on line A2a authorization and give as cross reference for excavation hot work under A2.



4.2.3: A3 Authorizations for Confined space entry

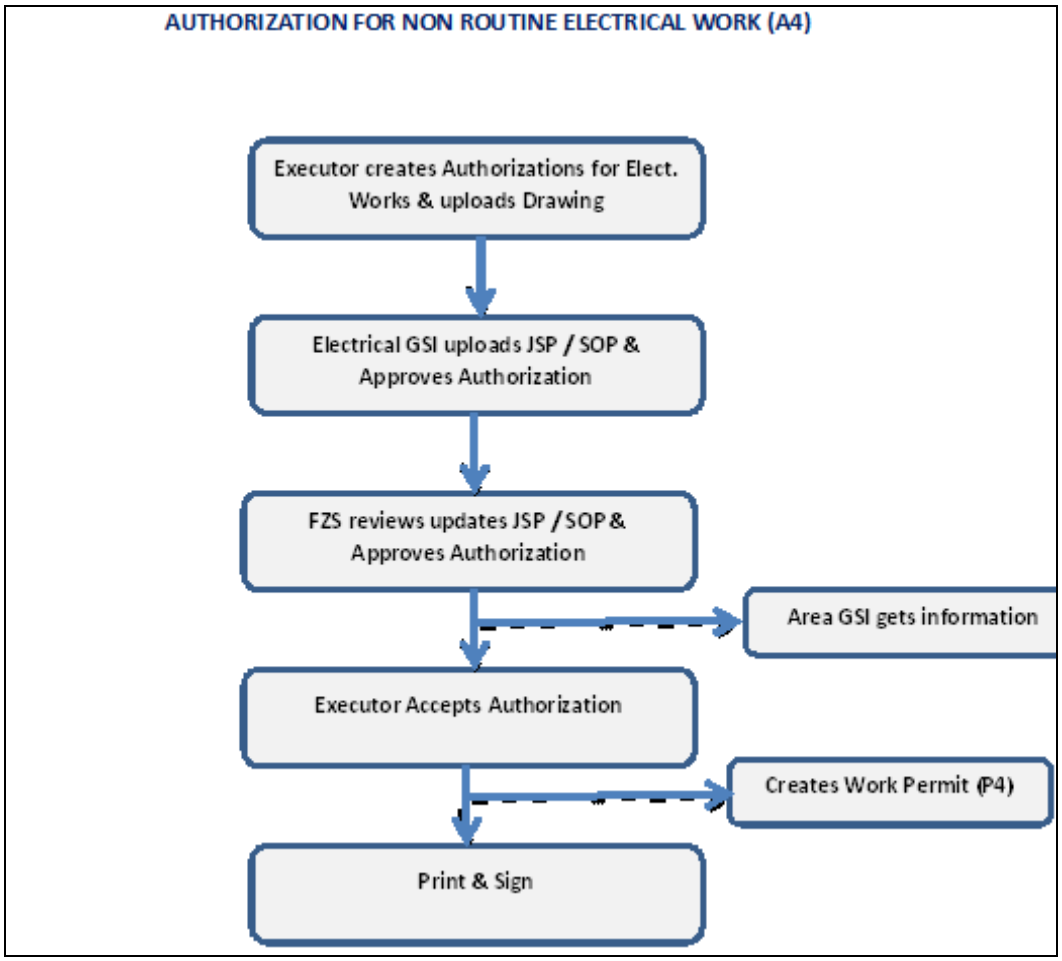
For Confined space entry A3 Authorizations is required. Executor has to select the Confined space entry authorization and after filling all the details apply for the authorization to respective area GSI/FZS. In this executor can upload the drawing of the equipment. Area GSI shall fill up on line the work conditions, offload RA, mention additional precautions etc. as per nature of job and forward to FZS for review and

approval of the same. If the counter signature is required for this confined space entry, issuer will select the other GSI of that area. Yellow color band will appear on electronic authorization where counter signature is required. At a time four nos. of counter signatures can be selected. Executor has to accept on line authorization and take the print out for further process of obtaining the work permit from issuer section



4.2.4 A4 Authorizations for Electrical work:

For Electrical work in Substation, Switch yards and Electrical installation, A4authorization is required. Executor from electrical section has to select the Electrical work authorization and after filling all the details apply for the authorization to respective area Electrical GSI/FZS. In this executor upload the drawing of the equipment/system. Area Electrical GSI shall fill up on line the work conditions, offload RA, mention additional precautions etc. as per nature of job and forward to FZS for review and approval of the same. On approval from the Electrical FZS it goes to operation area GSI for information. Executor has to accept on line authorization and take the print out for further process of obtaining the work permit from issuer section.



Note: After discussion / explaining with contractor supervisor on authorization conditions, RA & E-RA, executor has to approach issuing authority for obtaining the work permit to carry out the job. The printed authorization is system generated with serial number and remain in the system once it is approved.

Executor request for extension of authorization online to respective area GSI or FZS. Respective area of GSI / FZS approves extension of authorization. Executor accepts and take the print out of authorization. Executor can create the permit against this authorization.

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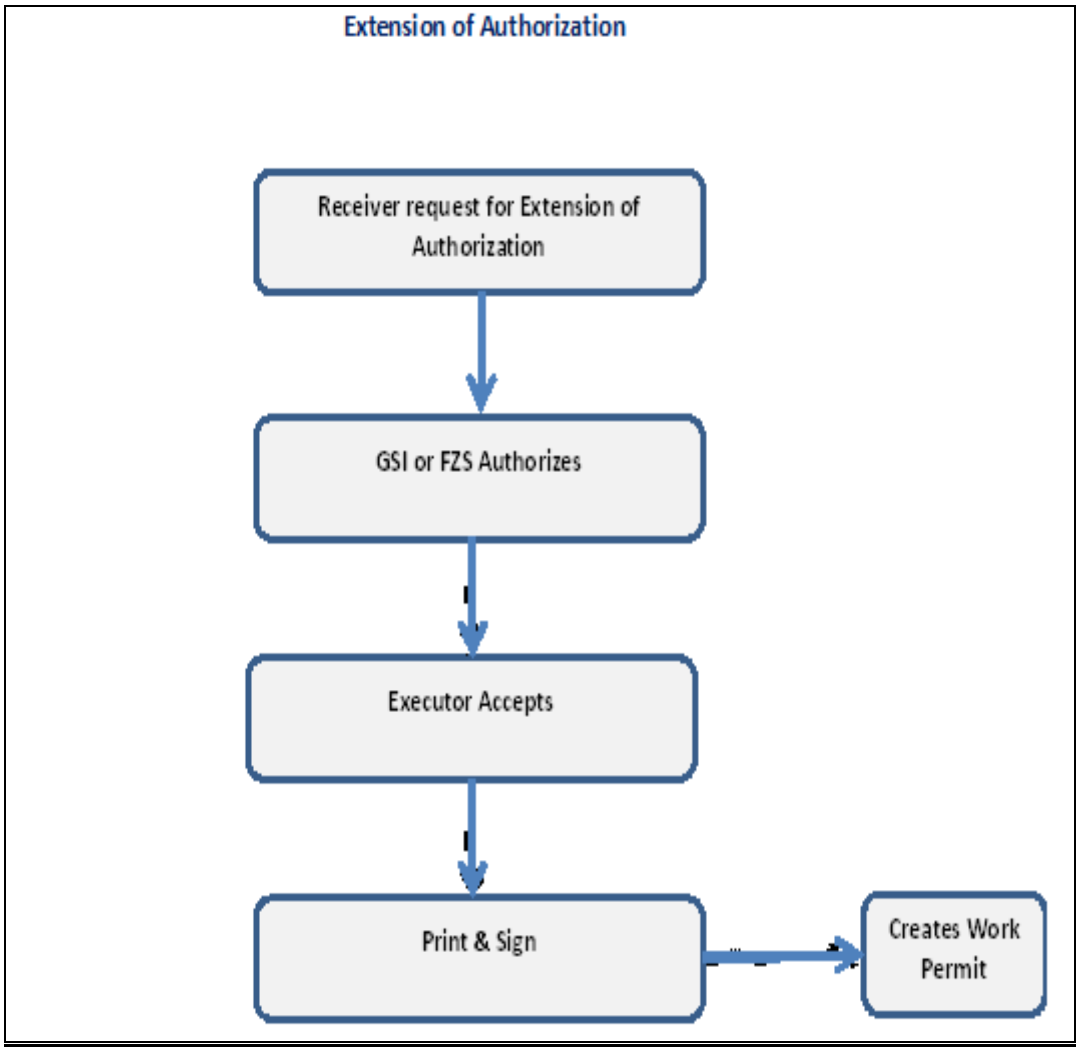

5.0 Types of Work Permit

No job shall be undertaken without a valid work permit

The electronic work permit shall be filled up carefully and accurately. Detailed and complete information to be provided in all sections, sub section, columns. General instructions and job specific instructions are printed for the purpose of communication and understanding of executing agency and contractors. The details to be filled about the name of persons as permission to be granted, section/ Dept. of issuer and executor, description of job, location of work, equipment number & identification, fire zone, name of contractor who will perform the job and its vendor code.

Supplementary formats, sketches, checklists, RA to be Uploaded along with issued electronic work permit. Ensure the cross reference entry in part A of the electronic work permit. Gas test results to be filled in Part B of the electronic work permit.

The original copy of electronic work permit should be signed by the issuer, Executor, and contractor supervisor. The original signed copy of electronic work permit should be at site. Duplicate Copy (soft copy) will remain in PC. A permit is valid only if it bears the signature of all signatories except counter signatories.

Separate Work permit must be issued for each job depending upon the nature of job. Multiple jobs in a single permit are prohibited.

Permit to be issued for single shift, where work to be continued same should be renewed after checking the conditions at site. The subsequent renewal to be done for seven calendar days' maximum. A fresh permit to be obtained after seven days as per the requirements.

In case of turnaround activities or 12 hrs. rota at specified or major project sites (with proper segregation and barricading of work area from operating areas) work permit with extended duration to be used accordingly as per the approval from Factory Manager.
The executor has to approach area Shift in charge of respective Fire zone for obtaining the electronic work permit to carry out the job at site.

5.1 Routine jobs:

For routine nature of jobs electronic work authorization is not required. The executor has to directly approach to the area issuer (Shift in charge) for obtaining the electronic work permit to carry out the job at site. If the counter signature is required, Issuer will select the counter signatories of that area. Parallel approval of Electronic work permit will be done by counter signatories. (same as Authorization) On line Executor receives electronic work permit counter signatories. On acceptance he/she can take the print of work permit. Issuer, Executor and contractor supervisor need to sign final print out of work permit. Routine natures of jobs are as follows.

Routine Work Permits	
Permit Codes	Type of work
P5 I	Electrical Isolation
P5 E	Energization
P6	Routine Cold Jobs
P7	Routine Hot Jobs

5.2 Non Routine jobs

For non-routine nature of jobs, the executor has to approach to the area issuer (Shift in charge) along with the approved e- authorization for obtaining the electronic work permit to carry out the job at site. Electronic Permit with only valid Authorization can be created / extended. The issuer then refers the related work authorization (for non-routine work), visits the site with executor and issues a related electronic work permit to carry out the job at site after satisfying the conditions prescribed therein. Issuer can change the physical conditions against valid authorization and issues work permit (condition variation from "not required" to "done" is allowed).

If the counter signature is required for this cold job, Issuer will select the counter signatories of that area. Parallel approval of Electronic work permit will be done by counter signatories (same as Authorization) On line executor receives electronic work permit; on acceptance he can take the print of work permit. Issuer, Executor and contractor supervisor need to sign final print out of work permit. Non-Routine natures of jobs are as follows.

Non Routine Work Permits	
Permit Codes	Type of works
P1	Cold job, Vessel box up &Radiography
P1 a	Working at Height
P2	Hot job, Use of 230/440 V &Excavation work
P3	Confined Space Entry
P4	Electrical Work (SS/SY)Use of 230/240 V at Sub Station

The executor / officer from civil, project, electrical, mechanical, process/ operations or instruments department under whose direct supervision job is to be carried out, indicates the location and brief description of job to the issuing authority.

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5.3 Procedure For Obtaining On Line Work Permits
Non Routine Work Permits:
5.3.1 Cold Work Permit (Non-Routine) Cold Jobs, Vessel Box Up, Radiography (P1):

A1 Authorizations is required for following non-routine nature of the job i.e. cold work; radiography, vessel box up and Working at height etc. The executor has to approach to the area issuer (Shift in charge) along with the approved e- authorization for obtaining the electronic work permit to carry out the job at site. Electronic Permit with only valid Authorization can be created / renewed. Issuer will select the required authorization and open the work permit system on clicking "the creates".

The issuer refers the related work authorization (for non-routine work), visits the site with executor and issues a related electronic work permit to carry out the job at site after satisfying the conditions prescribed therein. Issuer can change the physical conditions against valid authorization and issues work permit (condition variation from "not required" to "done" is allowed). Yellow color band will appear on electronic permit on change of condition variation from "not required" to "done" in permit.

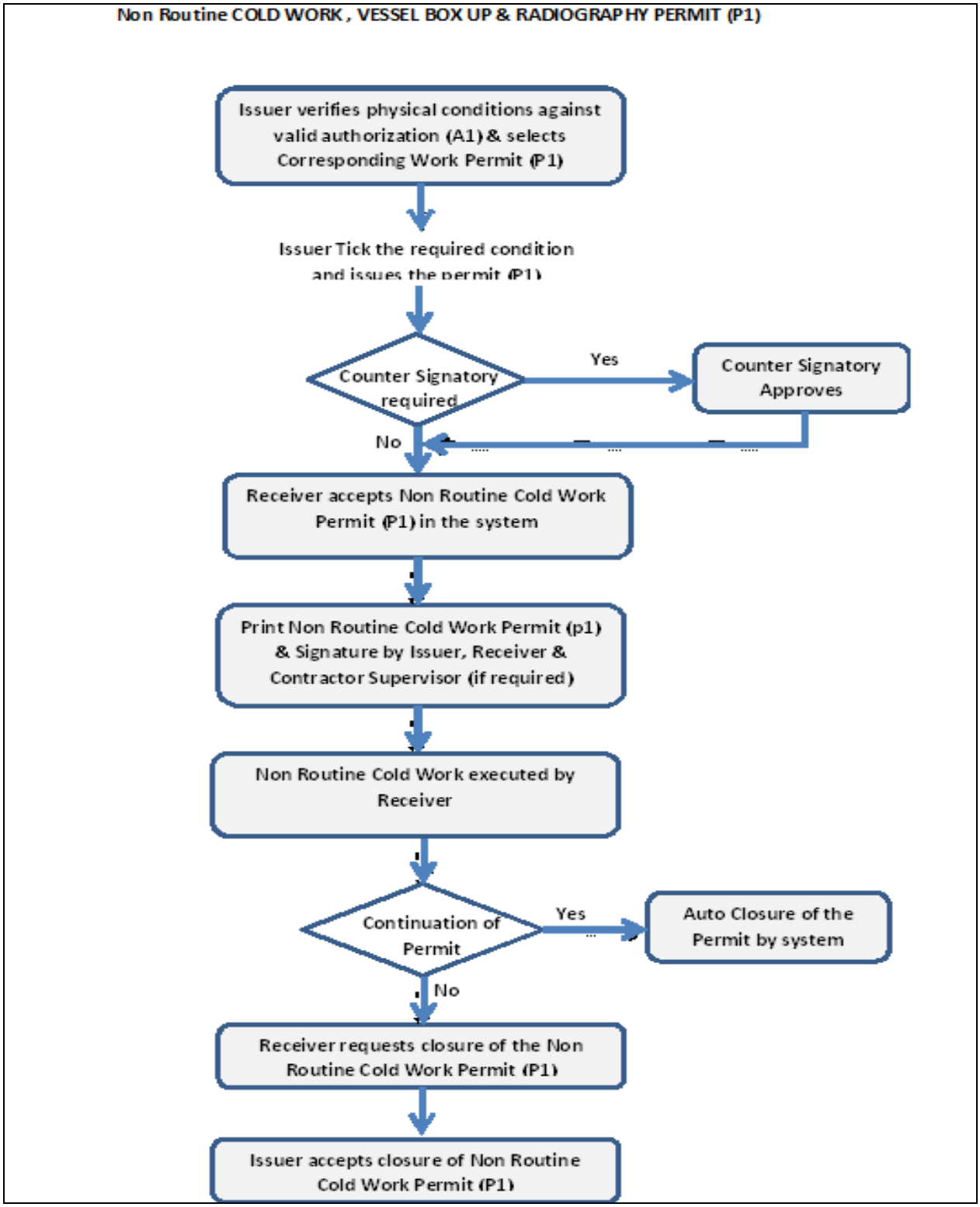
If the counter signature is required for this cold job, Issuer will select the counter signatories of that area. Parallel approval of Electronic work permit will be done by counter signatories (same as Authorization). On line Executor receives electronic work permit, on acceptance he can take the print of work permit. Issuer, receiver and contractor supervisor need to sign on the original permit before commencement of the job.

These are works of cold nature without potential to cause spark and hence do not pose fire hazard but still has considerable criticality due to the inherent risk of injury to personnel and hence require review by Area Gas Safety Inspector for assessment of potential hazards and defining adequate controls. These permits are required to be approved by Area GSI before issuing clearance by the Shift Incharge.
For these works the Executor has to apply for Cold Work Permit to the Area GSI for necessary review and approval. The work can then be carried out by Executor after clearance from Plant Shift Incharge and final acknowledgement by the AE / JE.
Typical examples, but not limited to, of cold work are as follows:

a. Erection and removal of scaffolding (working above 1.8 mts height.).

b. Opening of Turbine, pumps and compressors including sumps and crank cases where applicable.
c. Maintenance work on electrical equipment in the process area.
d. De-choking and clearance of process and utility line.
e. Providing temporary extra electrical lighting / connection.
f. Work on fragile roof.
g. Painting of equipment, Pipelines or Technical Structure inside process area/ battery limit.
h. Cable jointing.
i. Shot Blasting.
j. Unsure / non-routine activities.
k. Fermenting & online sealing
l. Pneumatic testing.
m. Hydro jetting.
n. Use of lifting tools
o. Suction strainer cleaning including hydrocarbon service.
p. Work involving radioactive sources, x-ray & radiography equipment.
q. Vessel Box Up.

Note: P1a electronic permit has to be taken for Working at height.



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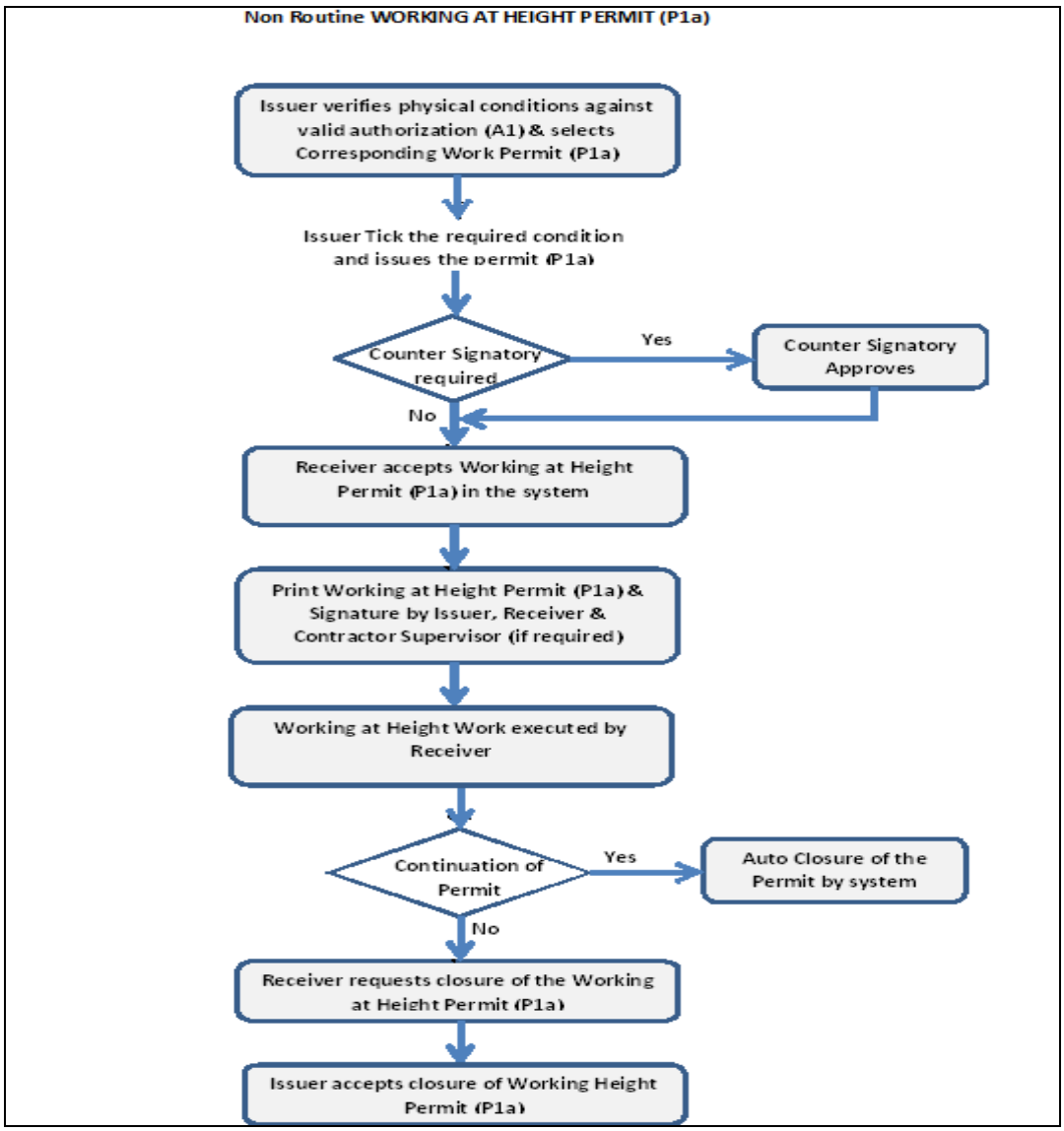
5.3.2 Working at Height Permit (P1a):

Any work required to be carried out at temporary structures and elevated portions /platforms from ground or from elevated platform shall have working at Height permits.

This permit must be used at major project sites / selectively in plant areas where scaffolds have to be used for work at elevated area (like stacks , columns, flare line blinding/deblinding, sheds, specific areas requiring nets as per OISD std. -192. (Refer Sr. No. 11e)



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5.3.3 Excavation Work(P2) :

Excavation work with valid permit (P2) to be issued against the valid work authorizations A2a & A2.

The executor has to approach to the area issuer (area Charge hand / Shift in charge) along with the approved e- authorization printout for obtaining the electronic work permit to carry out the job at site. Permit with only valid Authorization can be created / renewed. Issuer will select the required authorization and open the work permit system on clicking „the creates“. The issuer refers the related work authorization (for non-routine work), visits the site with executor and issues a related electronic work permit to carry out the job at site after satisfying the conditions prescribed therein. Issuer can change the physical conditions against valid authorization and issues work permit (condition variation from “not required” to “done” is allowed). Yellow color band will appear on electronic permit on change of condition variation from “not required” to “done” in permit.

5.3.4 Hot job, use of 230/440 V Permit (P2):

The executor has to approach to the area issuer (Shift in charge) along with the approved e- authorization A2 for obtaining the electronic work permit to carry out the job at site. Electronic Permit with only valid Authorization A2can be created / extended. Issuer will select the required authorization and open the work permit system on clicking "the creates". The issuer refers the related work authorization (for non-routine work), visits the site with executor and issues a related electronic work permit to carry out the job at site after satisfying the conditions prescribed therein. Issuer can change the physical conditions against valid authorization and issues work permit (condition variation from "not required" to "done" is allowed). Yellow color band will appear on electronic permit on change of condition variation from "not required" to "done" in permit. If any permit condition is missed to tick on electronic permit, it gives red colour band and courser will move to the required window. On entry of gas test value reconfirmation is asked for the entered value.

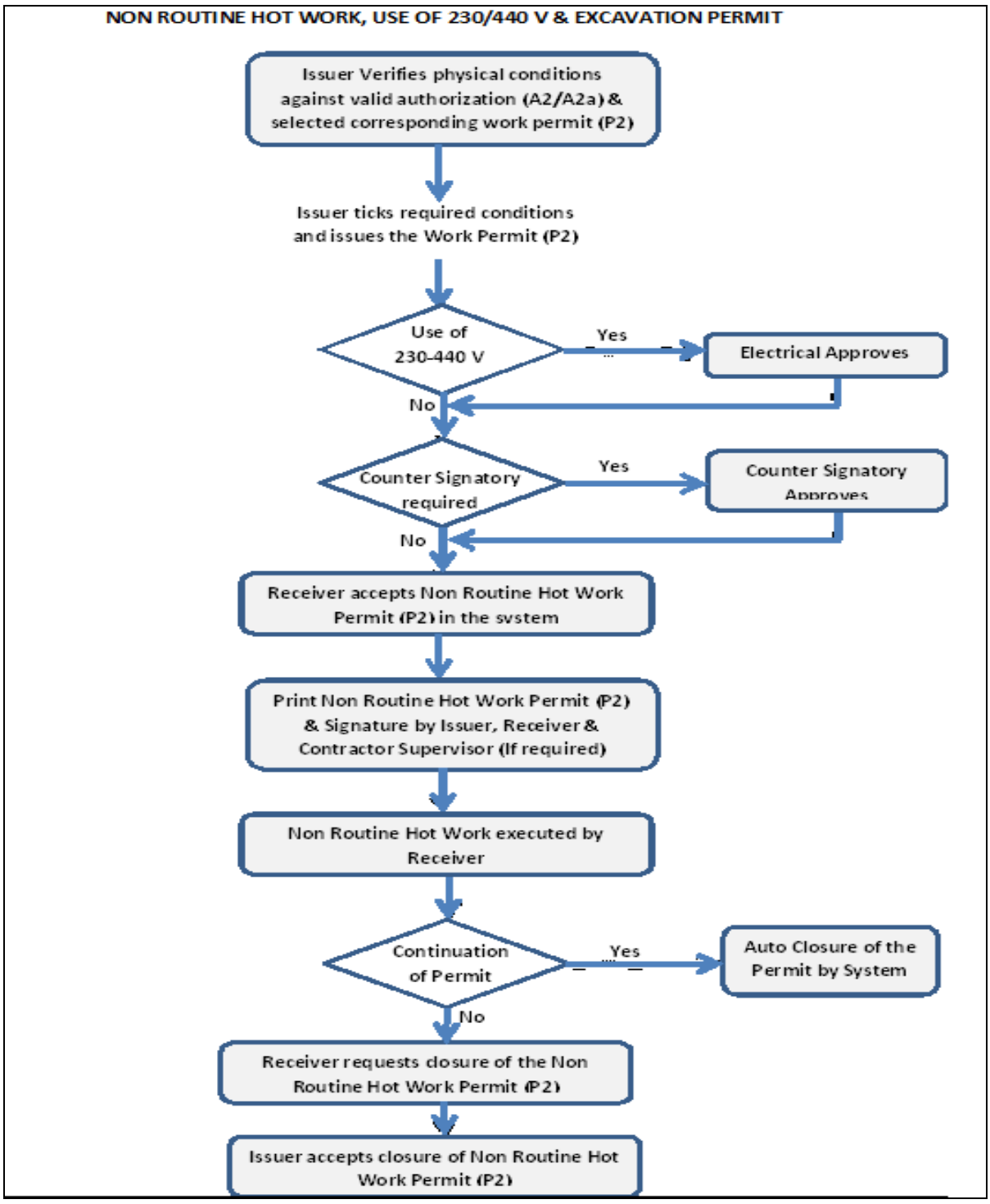
If the counter signature is required for this hot job, Issuer will select the counter signatories of that area. Parallel approval of Electronic work permit will be done by counter signatories (same as Authorization) On line Executor receives electronic work permit; on acceptance he can take the print of work permit. Issuer, Executor and contractor supervisor need to sign on the original permit before commencement of the job.

These are mainly works with naked flames or works with exposure to toxic vapors radiation etc. and of considerable criticality due to high potential for causing fire / injuries and hence require review by experienced personnel at senior level which is the designated Area Fire Zone Signatory. These permits are required to be approved by Area Fire Zone Signatory and Area GSI before issuing clearance by the Shift Incharge.

For these works, the Executor has to apply/create the request for Hot Work Permit to the Area GSI for necessary review and approval in e-permit portal, which will be further reviewed by the Area FZS. The work can then be earned out by Executor after clearance from Plant Shift Incharge and final acknowledgement by the AE/JE.

Typical examples of sources of ignition are:

a. Welding/Cutting/Grinding/Buffing/Drilling.
b. Spark producing hand tools in Hazardous Zone.
c. Diesel / motor driven mobile equipment such as dewatering pump.
d. Hot tapping involving welding & drilling of pipelines.
e. Use of equipment operated by internal combustion engines/ non-routine diesel / IC driven equipment.
f. Road Closure /making/repairs with asphalting.
g. Road cutting using powered tools.
h. Excavation work with using powered equipment.
i. Hacksaw cutting on Hydrocarbon line.
j. Holiday test.
k. Dyke cutting.
l. Flare line blinding / de-blinding.
m. Hydro-jetting
n. Cable Jointing
o. Hot bolting/ bolt tightening machine using electrically driven motor
p. Pneumatic operated chisel / breaker.
q. Fire water network isolation entire unit/more than one unit.
r. Erection of equipment/Structure etc. in the plant battery limit.
s. Blinding and de blinding activities where toxic gas, High temperature/pressure hydrocarbon etc. is expected to come out.



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5.3.5 Confined Space Entry Permit (P3):

The executor has to approach to the area issuer (Shift in charge) along with the approved e- authorization A3 for obtaining the electronic work permit for entry in confined space. Electronic Permit with only valid A3, Authorization can be created / renewed. Issuer will select the required authorization and open the work permit system on clicking "the creates". The issuer refers the related work authorization (for non-routine work), visits the site with executor and issues a related electronic work permit for entry in confined space after satisfying the conditions prescribed authorization A3. Issuer can change the physical conditions against valid authorization and issues work permit (condition variation from "not required" to "done" is allowed). Yellow color band will appear on electronic permit on change of condition variation from "not required" to "done" in permit. If any permit condition is missed to tick on electronic permit, it gives red colour band and cursor will move to the required window. On entry of gas test value reconfirmation is asked for the entered value.

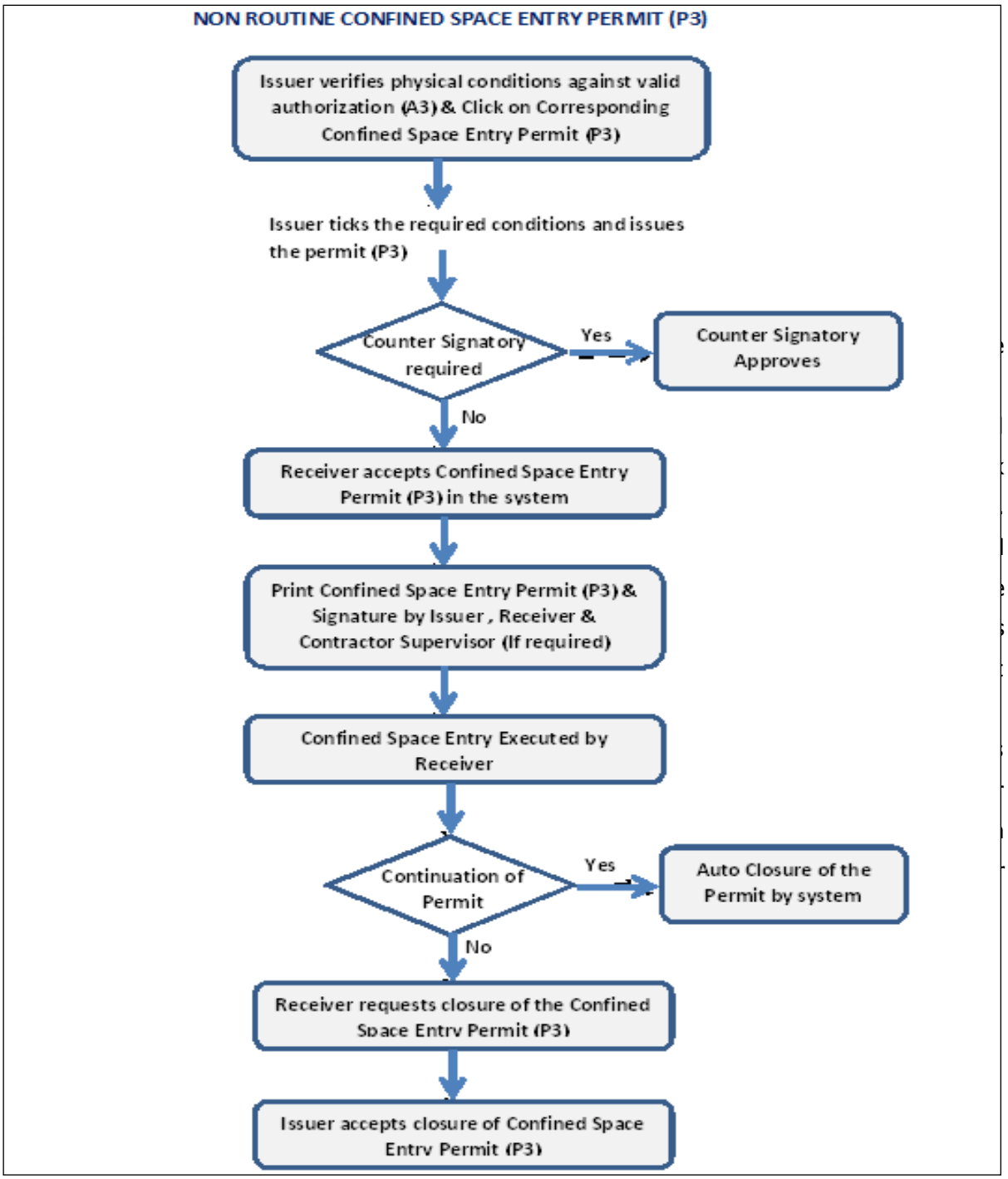
If the counter signature is required for the confined space entry, Issuer will select the counter signatories of that area. Parallel approval of Electronic work permit will be done by counter signatories (same as Authorization) On line executor receives electronic work permit, on acceptance he can take the print of work permit. Issuer, receiver and contractor supervisor need to sign on the original permit before entering in confined space.

This permit is required for entry of personnel into confined spaces/vessel for the purpose of repair / maintenance / inspection / cleaning works. In practical terms confined spaces/vessel at refinery complex would mean space containing or having contained or space which may have contained gas, hydrocarbons, chemicals or deficient in oxygen for normal breathing and it is not designed for continuous human occupancy. Some of the examples of confined space are oil

tanks, water tanks, condensate tanks, columns, reactors, oil water sewer pits, coolers, condensers, reservoirs, pipe lines, tanker trucks, skirts of column and vessels, floating roof decks etc. Prior to issue of a confined space / vessel entry permit the following activities shall be completed:

Job request to be created by executor in e-portal.

a. Draining
b. Removal of sludge
c. Washing
d. Purging
e. Positive Isolation Ventilation
f. Confined space atmosphere testing
g. Radiation level check



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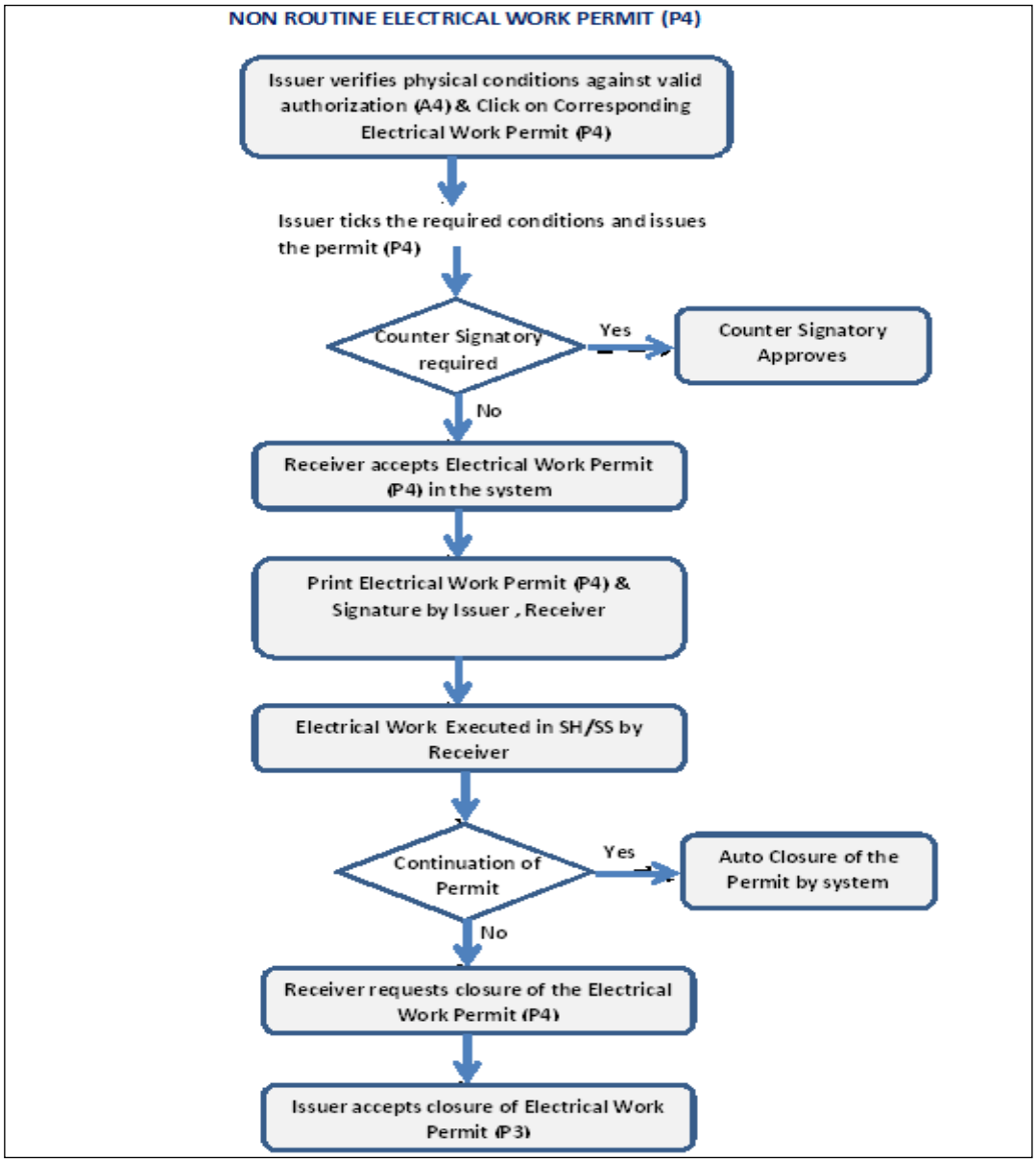
Designation	Mgr. (F & S)	CM (F & S)

5.3.6 Electrical work at Sub Station /Switch Yard Permit (P4)

To Work in Substations and in Switch Yards, Separate Electrical Work Permit is to be issued along with the Proper Risk Assessment/Job Safety Plan.

The executor from electrical section has to approach to the area issuer (from electrical section) along with the approved e- authorization A4 for obtaining the electronic work permit to carry out the job in Substation, Switch yards and Electrical installation. Electronic Permit with only valid Authorization can be created / renewed. Issuer will select the required authorization and open the work permit system on clicking "the creates". The issuer refers the related work authorization (for non-routine work), visits the site with executor and issues a related electronic work permit to carry out the job at site after satisfying the conditions prescribed in authorization.

If the counter signature is required for this job, Issuer will select the counter signatories of that area. Parallel approval of Electronic work permit will be done by counter signatories (same as Authorization) On line Executor receives electronic work permit, on acceptance he can take the print of work permit. Issuer, Executor and contractor supervisor need to sign on the original permit before commencement of the job.



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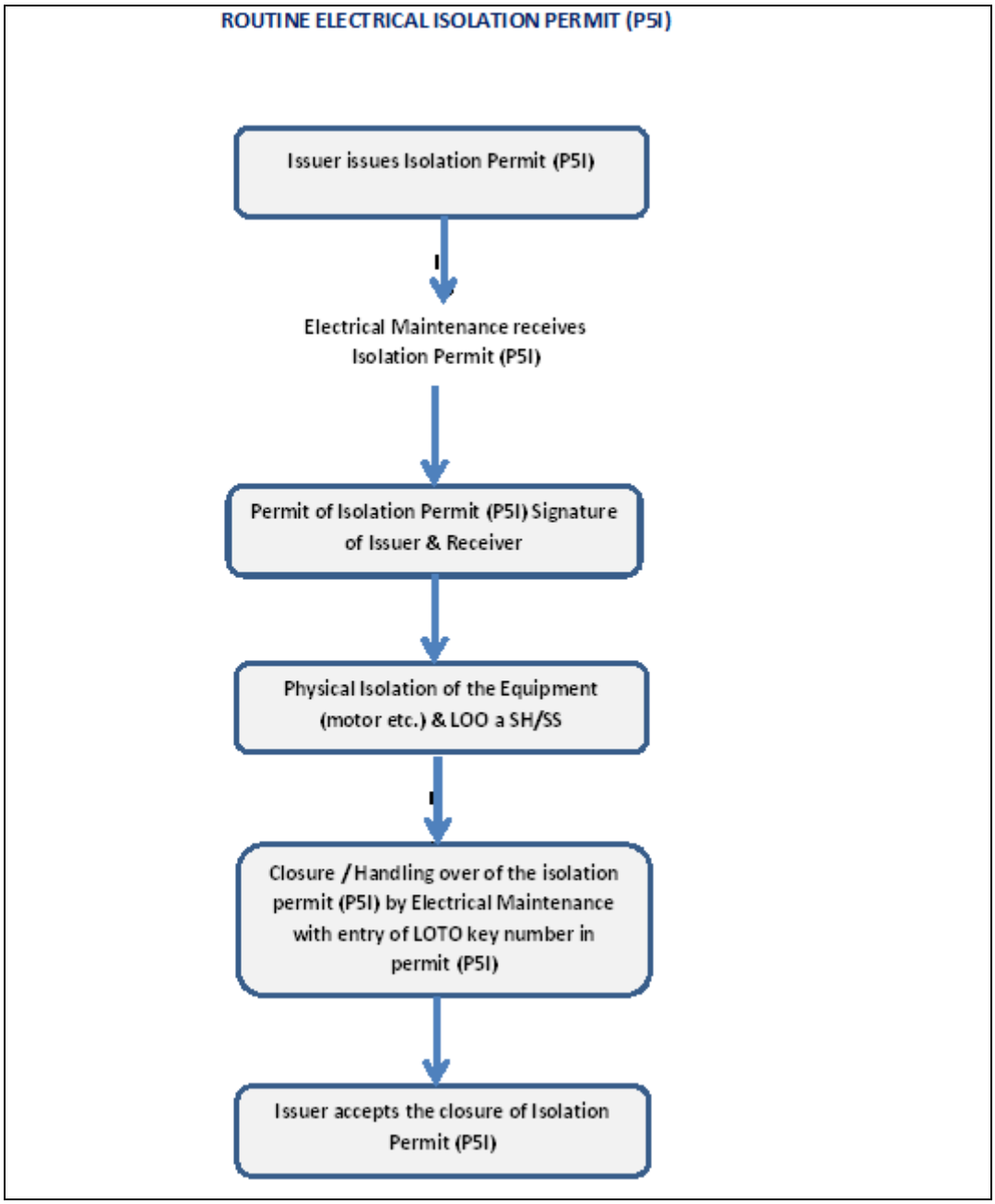
6.0 Routine Permits

a) Routine Electrical Isolation Permit (P5 I)

For routine electrical isolation / energization jobs, e-authorization is not required. The executor has to directly approach to the area issuer (Shift in charge) for obtaining the online Electrical Isolation permit (P5I) or Energization Permit (P5 E).

Issuer will initiate electrical equipment isolation permit online. Issuer Tick the required conditions and approves the Permit (P5I). On line Executor receives electronic work permit, on acceptance he can take the print of electrical isolation permit. Issuer and Executor need to sign on the original permit before isolation of electrical equipment. Physical Isolation of the Equipment (motor etc.) & LOTO (Executor put a tag and mechanical lock on the energy isolation device) at SS/Switch Yard. Receiver will enter the lock/key number in the permit and complete/hand over the permit on line. The same will be accepted by issuer.

After closing of electrical isolation permit, issuer will go and padlock the stop button of the electrical equipment at site. He will put a mechanical lock on the padlocked stop button. Then mention the lock/key number in the permit and issue on line permit to executor (maintenance / electrical, etc.) for maintenance job.



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6.b) Routine Electrical Energization Permit (P5 E):

On completion of the job on the equipment by executing agency (mechanical maintenance etc.), the permit will be completed / handed over to issuer. Issuer will receive back all the permits, if multiple permits have been issued.

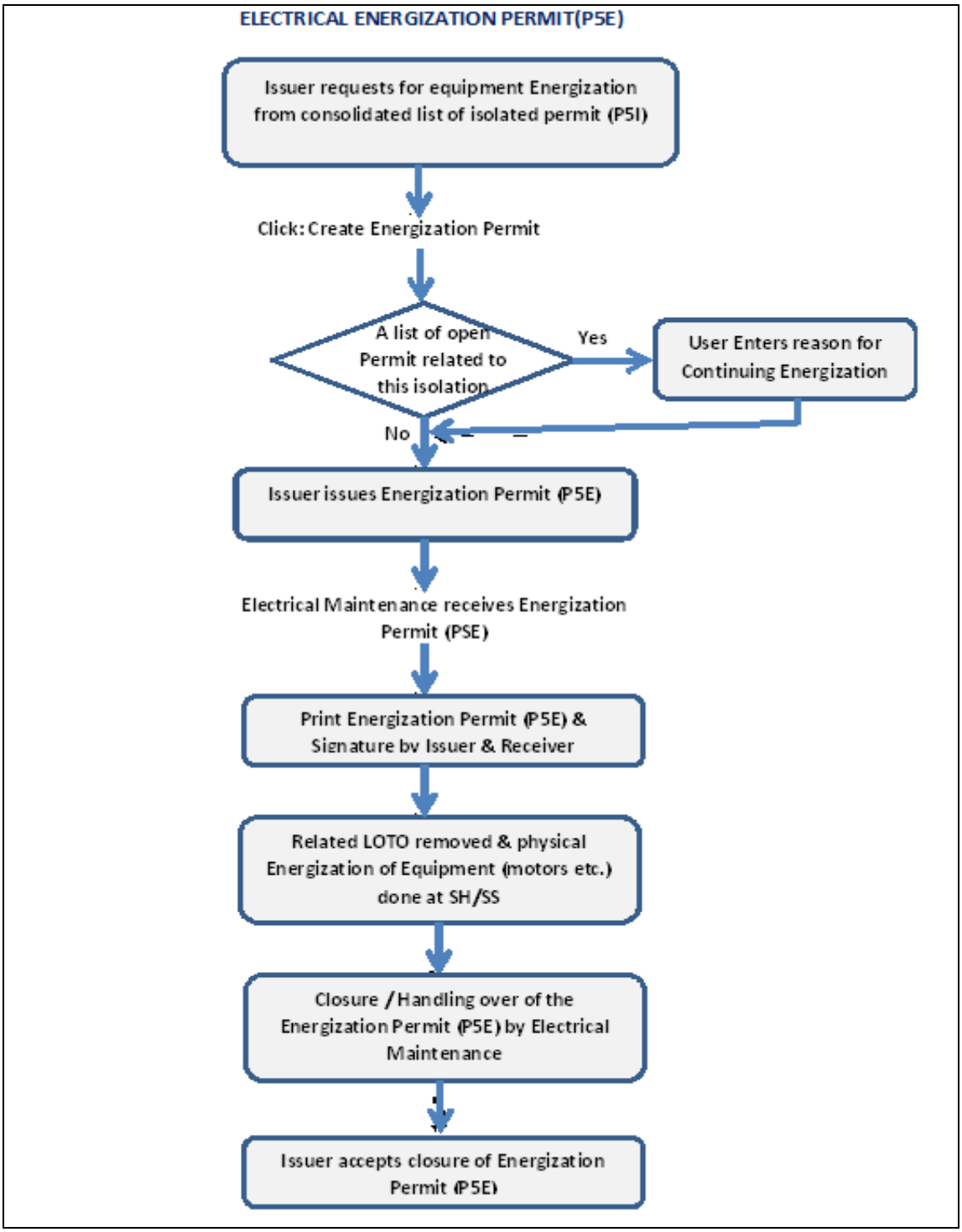
Issuer will check on line that all permits (if multiple permits are issued) connected to the equipment have been completed / handed over. Issuer will then go to site, verify and remove the lock from the site stop button.

Issuer requests for online Energization permit (P5E) to Executor (electrical). Consolidated list of isolated permits to be energized in that area will appear in the system.

On clicking of required equipment energization, system prompts IF user wants to continue Isolation. In that case, if energization is not required, issuer can put the remarks for continuing isolation. Otherwise issuer proceeds for creating the energization permit. Issuer Tick the required conditions and approves the Permit (P5E).

Executor accepts Energization Permit (P5E) in the system and take the print of work permit. Issuer and receiver need to sign final print out of work permit.

Executor will go to electrical switch house/ sub-station and remove the tag and mechanical lock. On completion of the electrical energization, executor initiate request online closure of the Energization Permit (P5E). The permit(P5E) is closed by issuer on receiving the Energization Permit (P5E) in the system.



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6. **c) Routine Cold work Permit (P6) :**

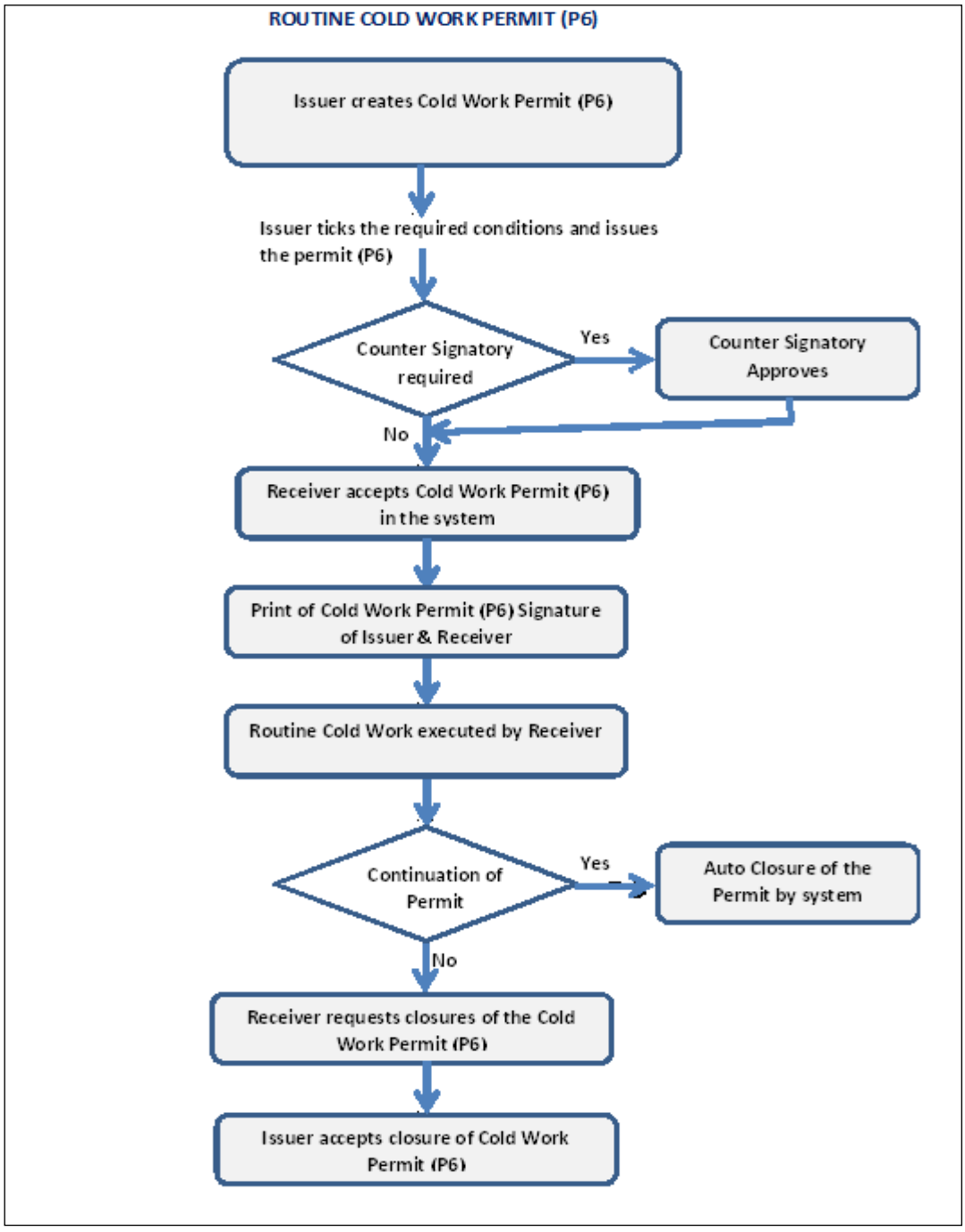
For routine nature of jobs on line Work Authorization is not required. The executor has to directly approach to the area issuer (area Charge hand / Shift in charge) for obtaining the Work Permit to carry out the job. If the counter signature is required for this cold job, Issuer will select the counter signatories of that area. Parallel approval of work permit will be done on line by counter signatories. (Same as Authorization). On line receiver receives Work Permit. On acceptance receiver can take the print of the work permit. Issuer, receiver and contractor supervisor need to sign final print out of work permit before commencement of the job.

These are the routine works carried out in the facilities with minimal injury hazard and can be reviewed & approved by the Plant Shift Incharge for ensuring adequate controls for safe execution, Job request to be created by executor in e-portal.

Activities included in this category are routine PM of pumps / motors, suction strainer cleaning (excluding hydrocarbon service), greasing etc.

For these works, Cold work permit shall be issued by Shift Incharge of the plant and no further approval from **GSI / FZS is required.**

r. Routine preventive maintenance of pumps / motors valves / exchangers, etc.
s. Suction strainer cleaning excluding hydrocarbon service.
t. Piping, valves, fittings replacement.
u. Masonry / construction job.
v. Cold cutting.
w. Cold insulation job.
x. Hydro testing.
y. Glands, seal bearing replacement etc.
z. Replacing lamps.
aa. Painting/Spray painting.
bb. Road closure / making / repairs without asphalting.
cc. Manual Excavation.



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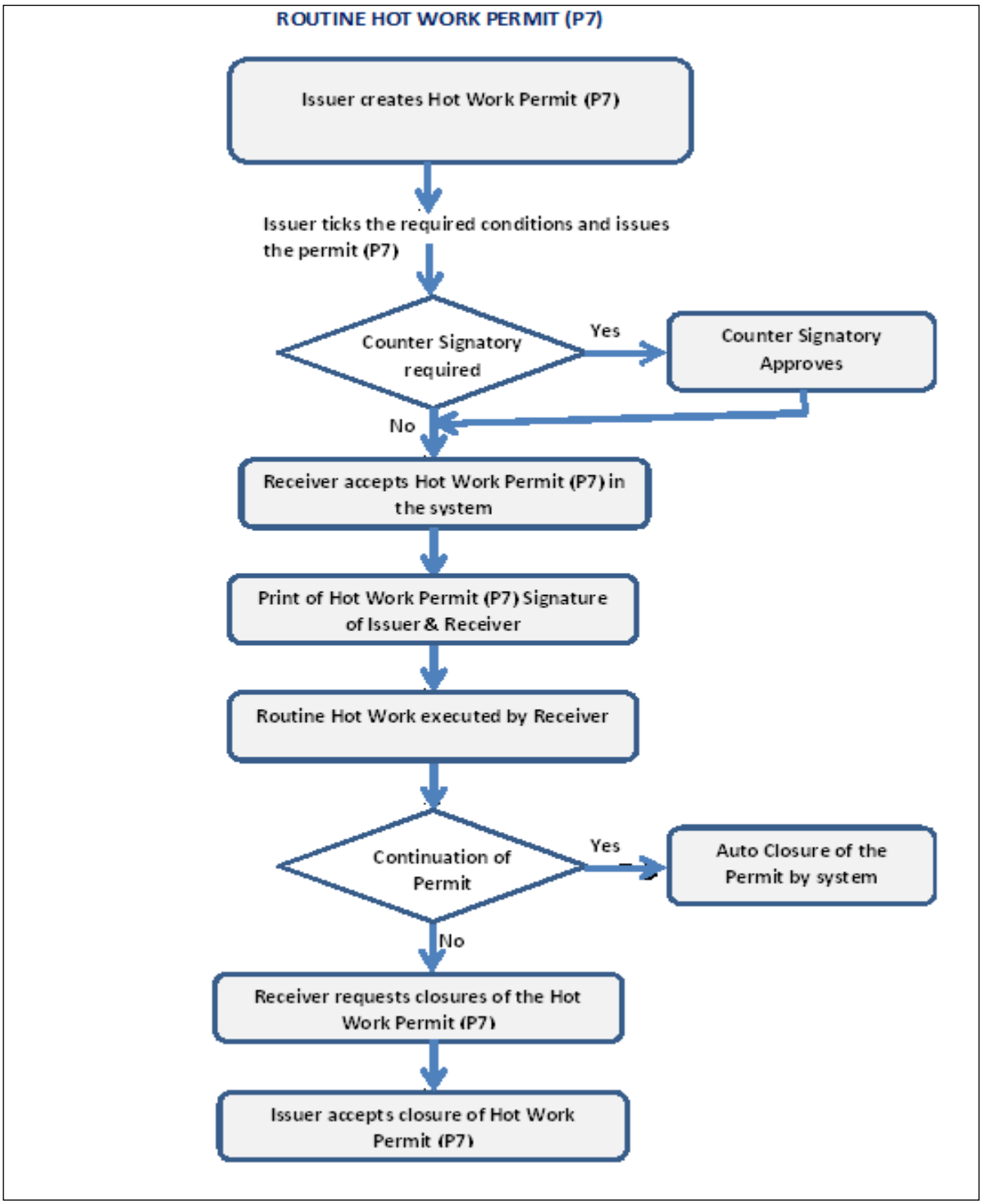
6.d) Routine Hot Work Permit (P7) :

For routine nature of hot jobs i.e. Chipping except Hydrogen related services / units, Vehicle Entry inside battery limit area, Photography, Use of battery operated equipment and cable fault finding etc. On line work authorization is not required. The executor has to directly approach to the area issuer (area Charge hand / Shift in charge) for obtaining the on line hot work permit to carry out the job in plant area. If the counter signature is required for this hot job, Issuer will select the counter signatories of that area. Parallel approval of work permit will be done on line by counter signatories. (Same as Authorization). executor receives work permit on line. On acceptance executor can take the print of work permit. Issuer, executor and contractor supervisor need to sign final print out of work permit before commencement of job.

These are the routine works carried out in the facilities with minimal fire / injury hazard and can be reviewed & approved by the Plant Shift Incharge for ensuring adequate controls for safe execution.

a. Activities included in this category are BPCL certified vehicle entry, chipping, photography, use of battery operated equipment, valve/gasket replacement, routine PM of pumps / motors, suction strainer cleaning, greasing etc.
b. For these works, based on the nature of work Cold or Hot Work permit shall be issued by Shift Incharge of the plant and no further approval from GSI / FZS is required.
c. Chipping.
d. Vehicle entry inside battery limit.
e. Photography.
f. Use of Battery operated equipment.
g. Fire water network isolation within unit.



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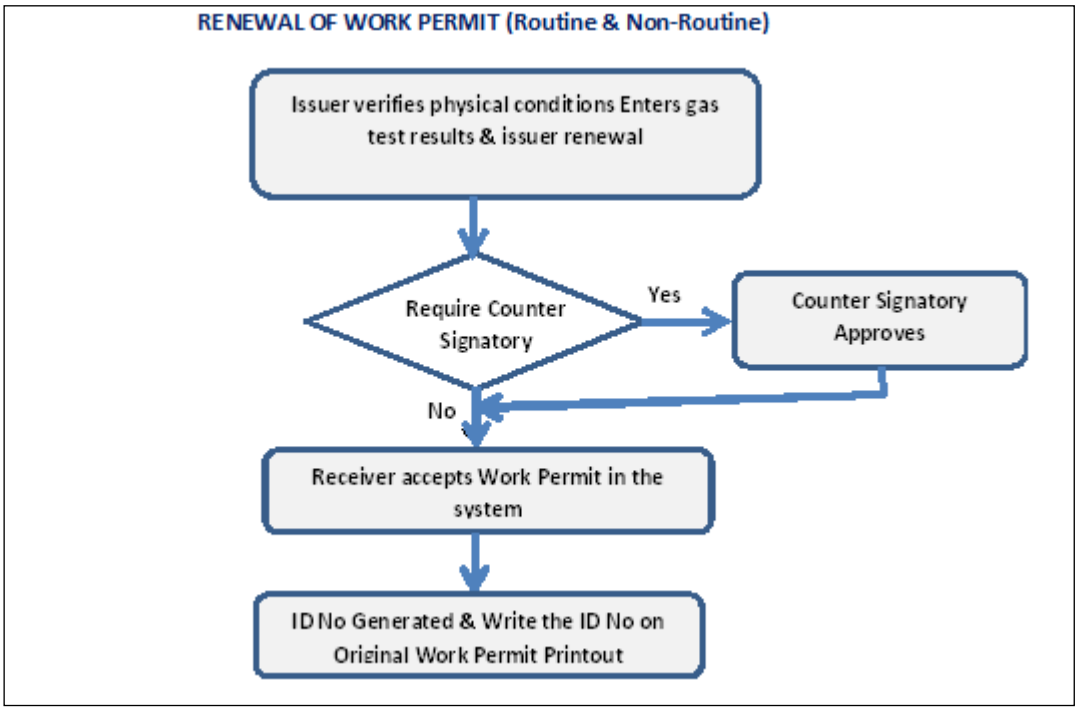
7.Renewal of work permit: (both routine and non-routine work)

The issuer then refers the related work authorization (for non-routine work), visits the site with executor and issues a related work permit to carry out the job at site after satisfying the conditions prescribed therein. Issuer enters the gas test results and issue renewal on line. If Issuer select the counter signatories of that area, parallel approval of work permit will be done by counter signatories. (Same as Authorization) Receiver receives work permit on line. On acceptance of the permit one ID is generated. This ID no. has to be written on the original print out. Issuer, receiver and contractor supervisor need to sign on the original permit before commencement of the job.



8.Closure of work permit (both routine and non-routine work)

On completion of job, executor applies online for the closer of the work permit to area issuer. Issuer closes the work permit on line.

9.Work Permit Validity Period and Renewal

Work permit to be issued / renewed for routine/ non routine jobs as per the details mentioned below.

Category	Validity Period	Renewal
a. Routine	Up to 7 days	Permit needs to be renewed after every shift.
b. Non Routine	Up to 7 days	Permit needs to be renewed after every shift

10.Procedure for LOTO:

First Step: isolation / de-energization

Process/Operations SIC issues an EIP to authorized Electrical person for isolation of an Electrical driven equipment clearly mentioning the purpose of isolation. A lock with its key is also given along with EIP. This lock shall be blue in Colour.

PROCESS /Ops

MECHANICAL

ELECTRICAL

OTHERS

Colour Code for LOCKS

- Authorised Electrical person isolates the Energy isolating device, applies this lock on isolating device and puts a Tag on the feeder. The key is given back to Process/Ops SIC along with EIP**.**

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- Process/Ops SIC keeps this key inside the one of the group lotobox with proper Recording in LOTO register

- Process/Ops SIC issues a different lock & key (Red / Yellow / Green) along with a work permit to the requester dept. and keeps a record in **LOTO register.**

- Receiver dept. applies this lock on the same group lotobox in which key is kept and keeps the key with him till job is completed in all respect.
- In cases where more than one dept. requires lockout on the same equipment, Process/Ops SIC issues one lock & key to each dept. having different colors along with work permits.
- Each dept. places their lock on the same group lotobox in which the process key has been kept and retains their key with them till completion of the job in all respect.

ENERGISATION / RESTORATION :

- After completion of the job, each dept. removes their lock and returns it back to Process/Ops SIC along with the permit.
- When ALL the issued permits along with the locks and keys is returned back to Process/Ops SIC, Process S/I initiates the process of energization of the feeder.
- Process S/I certifies that job has been completed and returns back the EIP and key to Authorized Electrical Person.
- For More details, refer LOTO SOP.

11.Safety Compliance:

Several activities involved in the above permits require compliance to safety requirements prior to commencement of work. Following safety compliance in support of work permit system to be followed as per applicability:

a. Permit for Electrical Isolation/Restoration. Coupled with LOTO.
b. Permission for Excavation through system, to be taken by Executor from diff. departments.
c. Permission for Radiography to be taken in P1.
d. Positive Isolation Certificate/Blind List.
e. Scaffolding Certificate and Tag, Filling and Tagging to be done by concerned Executor
f. Record of Fire Water Network Isolation
g. Electrical Isolation Tag
h. Danger "Do Not Operate Tag", Filling and Tagging to be done by concerned Issuer

	Work Permit			Permission for radiography/ excavation through system	
	Cold	Hot	Electrical Isolation	Radiography	Excavation
Approval for permit	GSI	GSI / FZS	Shift I/C / Elect. GSI	RSO/Inspection.	Elect, Civil, IT, Inst, F&S, TS, Area GSI
Acknowledgement	AE / JE	A.E / JE	AE / JE	-----	-----

Special Approval: In cases including but not limited to following, the approval shall be obtained from Factory Manager:

1. Entry in inert atmosphere or where oxygen concentration is below 19.5 % & more than 22.5%.
2. LEL reading (presence of combustible gases & vapors) is more than 10%.
3. Toxic Gas concentration is more than TLV.
4. Any other case referred by Area-DGM/CM.
5. In case of outsourcing of activities respective area DGM/CM (Process / Maintenance) as per applicability, will nominate the Contractors Supervisor based on his technical competence for nomination as Issuer / Executor, who then will be trained, tested & authorized by F&S Dept.

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12. Area Distribution:

a. Based on the process activities and for convenience of ensuring adequate work controls for carrying out activities, the entire facilities shall be divided in Fire Zones.
b. Factory Manager to issue the Fire Zones Distribution for all the facilities and the same should be reviewed periodically.
c. Inside the facilities, the Roads will be owned by the respective Area Managers.
d. CM will take over in case of non-availability (vacancy) of DGM where applicable.
e. In absence of designated GSI, the FZS will sign the work permits as GSI.
f. In absence of FZS, the alternate person as indicated in the list will sign as FZS.
g. Refinery Shift Manager will be FZS in case of emergency works after normal working hours and holidays.
h. Factory Manager is authorized to revise / delegate the authority of GSI / FZS as per requirements.

13. Process of Authorization for Issuer / Executor

a. Head of Dep. shall identify Issuers / Executors based on technical competency and send Nomination of the identified persons for authorization as Issuers & Executors for work permit training to Training Center.
b. Fire & Safety Dept. shall plan & arrange training.
c. F&S Dept. shall prepare, Impart training for Issuers & Executors. All issuers & Executors shall have to undergo a refresher training every year or after every major revision.
d. Validation questionnaire shall be prepared by Safety Dept. Based on validation safety Dept. they will certify the issuer / Executors in line with minimum requirement i.e. 80% in validation. Fire & Safety Dept. shall declare final list of issuers/executors & Maintain record. Fire & Safety Dept. shall issue the Authorization cards to all issuers/executors.
e. F&S Dept. shall maintain list of all approved issuers & Executors.
f. Validity of certification shall be maximum one year from date of training.

14.Roles And Responsibilities of Personnel Involved In Permit Process

BPCL operations (Refinery Complex, BDT & COT Vadinar) involve transportation, storage, & refining of crude, intermediate & finish products. While the titles of responsible persons may differ from location to location based on their functional roles, the broad classification of their roles in the Work Permit process remains uniform. Where clarity of individual's role is lacking, the Permit custodian gives such clarification in consultation with the Factory Manager BPCL refinery.

Role in WPS System	Examples of Job Titles
Contract Supervisor	Authorized Supervisor of Contractor/ Service Provider/Agency.
O&M Engineer	Authorized to Sign as Issuer/Executor and AE/JE wherever required and authorized.
Executor	Maintenance Managers / Shift In-charge/ E/AM/AE /JE
Assistant Engineer	Field Officer/designated area engineer
Issuer	Plant Shift Incharge/Dept. AM/E
GSI	Manager of the area in general, as per approved list of GSI. Refer Annexure - 2.
FZS	Area DGM /GM in general / individual unit head/ Dept. head (wherever applicable), as per approved list of FZS. Refer Annexure - 2.

14.1 Issuing Department

a. Overall responsibility for issue of work permits & permission note and their control lies with the permit issuing authority.
b. The shift Incharge shall ensure that adequate cleaning and purging is carried out and the atmosphere is tested. Issuing Authority is responsible for preparation & handing over of the equipment in safe condition to perform the work. His signature as issuer shall mean understanding the job, safe handing over & monitoring of site conditions.
c. The issuer shall close the permit after the job has been completed/stopped.

d. To renew the permits along with Assistant engineer as requested by the maintenance, after satisfying that site conditions that are safe for renewal of the permit procedure.

e. The Assistant Engineer shall read the work permit, check the site compliance to permit conditions & sign original permit. He shall monitor the site conditions & executing group's compliance to permit conditions. He shall have work permit awareness training. Permit is valid only after obtaining Assistant Engineer signature or alternate person assigned by HOD to fulfill Assistant Engineer responsibility.
f. Carry out gas checks as per the requirement of the permits.
g. Shift incharge should inform to panel engineer about status of permits issued.
h. Issuer shall maintain a daily register of permits issued, renewed and closed in a register. The register shall be updated in every shift to provide accurate status of the permits. Refer Annexure – 15.

14.2Roles of Executing Department

a. Responsible for the safe execution of the job and shall ensure that all the precautions pointed out in the permit and Authorizations are adequately complied with, and the safety gadgets and appliances are made available and used.
b. To obtain all clearances / countersigns / registrations for the permit as per requirement.

c. Upon completion of the job, the Executor shall ensure that the job location is cleared of all the unwanted materials, made safe & ensuring housekeeping.
d. The Executor shall return the permit for closure as soon as the job specified in the permit is completed. To request for the extension of the permit well in advance.
e. To ensure that all relevant PPE as identified in the permit are worn by the contractor personnel.
f. To ensure all tools, tackles, welding machines and gas cutting equipment are inspected and is in Good condition for use.
g. Executor also ensures that the vehicle & welding machine has proper & valid safety & electrical certificate respectively.
h. To provide proper access for all jobs which are above 1.8 m height.
i. To Provide to the point Executor risk assessment (E-RA) covering all engineering and equipment hazards of executing department/agency.

14.3 Area Owner / Section Head

a. Area Owner / Section Head shall send request for training of personnel in implementing the safe work permit.
b. The Area Owner / Section Head shall ensure that the permit issuers and Executors are trained in safe work permit procedure and shall authorize persons by name.

14.4 Fire Zone Signatories / Gas Safety Inspectors

a. Decide whether the work is critical & inspect the work site with the Executor before issuing the permit. He shall inform Fire Control Room about all critical works.
b. All critical work permits will be reviewed and issued by Fire Zone Signatory of the concerned area after specifying the permit requirements.
c. All other work permits, other than the critical work permits will be reviewed and issued by Gas Safety Inspector of the concerned area after specifying the required conditions.

14.5 Fire & Safety Department

a. Responsible for training of personnel on Safe Work Permit procedure jointly with fire & safety.
b. Shall provide guidelines for validation and authorization of issuers and Executors to the concerned Area Owner / Section Head.
c. They shall recommend to the Area Owner / Section Head for enlisting the name of a person as authorized issuer, Executor for the particular type of permit.
d. Endorsement of all hot work non routine and confined space entry permits shall be done by respective area safety officer.

14.6 Fire Watch

The Fire Watch is a member of the work team or provided by the Company who is trained in the use of fire hoses/extinguishers. He is responsible for maintaining a fire watch during the entire period of work extending to additional thirty-minute period after any naked flame work has ceased, to ensure that no combustible materials have been ignited during the final stages of the work. He must know how to raise an alarm, and what to do in the event of an emergency.

Fire Watch – will be a trained authorized person from permit executing department.

14.7 Confined Space Attendant

The confined space attendant is a member of the work team or provided by the company who is trained in confined space entry procedure. He shall be responsible for monitoring safety of all the persons entered inside confined space during the period of work inside confine space. He must be trained in rescue techniques and should know how to raise an alarm and what to do in the event of an emergency.

For special situations such as naked flame work inside a vessel etc. he should also undergo fire watch training.

Confined Space Attendant – will be a trained authorized person from permit executing department.

14.8 Fire Standby

In cases of works having high potential of fire/ emergency or any critical jobs, Fire crew with fire tender to be provided as fire standby on request of Area Owner/ Section Head as per Fire Standby procedure BPCL/FIRE/SOP/02.

15 Positive Isolation Certificate and Tag

Whenever the work on any process equipment/machine, pipe line or any entry into confined space are to be carried out, it is necessary to carry out positive isolation of the equipment/pipeline from all possible sources of energy materials.

The isolation certificate will include a diagram (P & ID) showing the isolation locations during the work on any process equipment/machine or pipeline.

For one job there may more isolations were required, for which one isolation certificate will be taken. Isolation Tags "DO NO OPERATE" to be provided on identified equipment/machine or pipeline. The number of Isolation Tags may be more than one. Danger Do not operate tag filling and tagging shall be done Concerned Process/Operations Dept.

See **Annexure – 15** for Positive Isolation certificate, **Annexure – 20** for the Positive isolation tag.

16.Scaffolding Certificate and Tag

The Scaffolding Certificate defines the requirements to check the stability and strength of the scaffold that is being used for work at height. See **Annexure -16** for the format of Scaffolding Certificate. Scaffolding tag is to be provided after inspection and getting signed certificate of Scaffolding. Scaffolding certificate original copy to be kept with competent inspection authority and one copy of certificate to be provided to area in-charge where scaffolding erected for any job purpose. Concerned Mechanical Maintenance of the unit shall fill the checklist and provide the tag on the scaffold.

17.Record of Fire Water Network Isolation

The fire water network comprising of fire pumps and fire water header (underground and aboveground) is the only source of fire water supply to the associated fire protection systems such as hydrants, monitors, MVWS, HVWS and Water spray system, Semi - fixed foam systems, etc. The network is provided with number of isolation valves incorporated at strategic locations so that the repair and maintenance of the fire pumps,

fire water headers, isolation valves and all other related downstream systems is carried out whenever required without endangering safety of the plants in the complex.
Whenever fire water network isolation is needed to carry out any repair or maintenance job of hydrants, monitors, MVWS, HVWS and Water spray system, Semi - fixed foam systems, etc., inform Fire & Safety to isolate required section/loop of fire water network. Fire & Safety is responsible for isolation/de-isolation of any section/ loop of fire water network and will maintain record of isolation/de-isolation in

prescribed format as per Annexure – 20. Isolation tag "Do Not Operate" to be provided on isolated valves.

18. Risk Assessment (RA)

Risk Assessment is a technique that shall be used for identification and assessment of the risks from critical works carried out in the BPCL facilities. After the assessment of the risk, control measures are implemented to reduce the risk to acceptable or tolerable levels.

a. Risk Assessment shall be carried out for all Critical works (Hot work permit, Excavation (P2 & P2a)/ confined space entry(P3)/ Electrical Work Permit (P4) and Cold work permit non routine. A copy of the RA sheet shall be attached with the permits.
b. Copy of the approved RA sheets shall be kept along with the permit and displayed at the work site. The risk assessment sheet shall be returned to the issuer along
c. with closed permit for records.
d. Conducting RA for non-critical works (Hot/Cold routine permits) shall be discretion of Area GSI.
j. Risk Assessment shall be carried out by respective GSI for process/operation dept. Executor risk assessment (E-RA) will be submitted by job executor and get it approved by his/her line incharge as E-RA Approver covering all engineering and equipment hazards of executing department/agency.
e. As per the case requirement in critical jobs a Multidisciplinary RA will be made in which process/operation, Executor Department, Fire & Safety, TS, Inspection or any other department if required will participate and prepare risk assessment

sheet. In some Cases, O&M Agency shall also get involved in preparation of RA or may be called in for participation as per applicability.

18.1 RA Procedure

a. Selection of Task for RA

The task selected shall be divided into basic job steps in order to determine the risk involved, precautionary measures and contingency plant required to mitigate the risk.

b. Potential Hazards

It is highly essential to identify potential hazards associated with each step of the task to be accomplished. Every possible source of energy (such as electrical,

mechanical, hydraulic, pneumatic) damage as well as injury must be identified. It is required to look the entire work sequence & location to determine every possible hazard that might exist.

c. Control Measures

a. Based on the sequence of steps and potential hazards associated with each step, the control measure shall be adopted to eliminate, control or minimize hazards that could lead to accidents, injuries, damage to environment or possible occupational illness.

b. Each precaution shall correspond to the job steps and identified hazards.

c. RA for jobs that involve the use of chemicals should include a review of MSDS sheet as a part of RA.

d. Contingency Plan

Contingency plan is to be prepared for identified hazards. Contingency plan should comprise details of action taken in case of any emergency.

e. Departmental HIRA

If applicable, Departmental HIRA should be used as a cross reference for identifying hazards involved in selected jobs for RA.

f. RA Format

A Risk assessment format is given in Annexure - 13, which is to be used for record & to carry out RA for a particular task or activity.

19.General Information

a. If the work is being earned out on equipment which has owner other than the issuing area the area owner issues the work permit & is then counter signed by equipment owner shift Incharge/ Area Owner of the equipment.

b. It is advisable to prepare a relevant sketch / P&ID duly identified and marked with locations of isolations including inter plant isolations, adjacent lines / equipment to be protected, etc., and attach the same with the work permit.

c. No person shall issue a permit to himself.

d. In case a job has to be earned out by a contractor, the application shall be made by respective BPCL maintenance personnel under whose supervision the work is going to be earned out. All such permits are registered in the name of concerned maintenance personnel. However name of the contractor shall be indicated on the permit and the Contractor Supervisor shall sign the permit to ensure that he understands and accepts the conditions mentioned in the permit. In case contractor supervisor is not required, please mention NA (not applicable) in the signature column of acknowledgement.

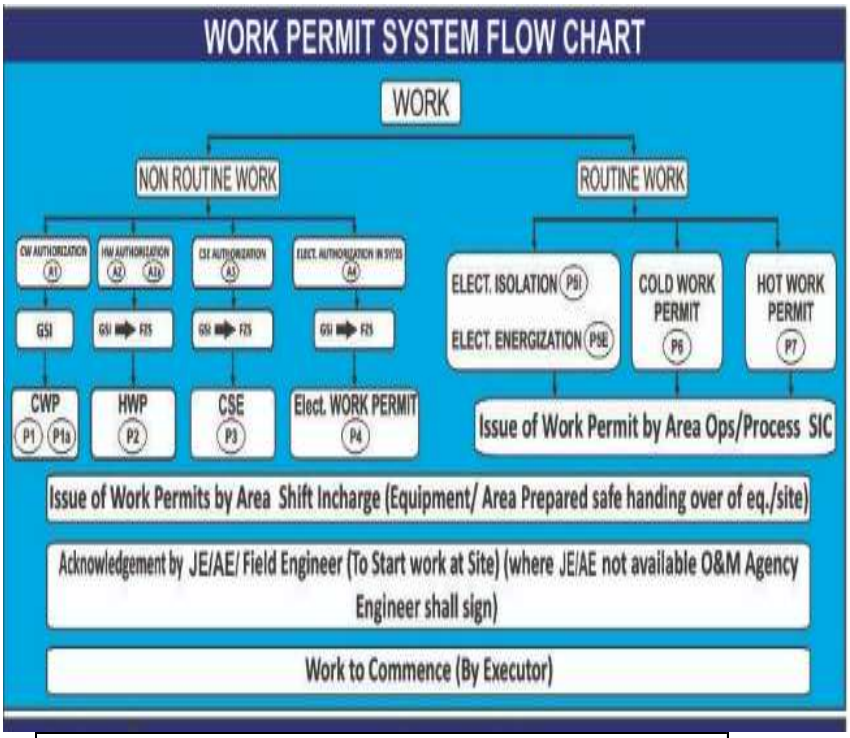
e. In cases different groups of a single contractor are working in the same unit carrying different jobs, then each group will be issued a separate permit depending on the nature of job. In cases the job are earned out at separate locations with same executing /contractor agencies then separate permit respective to the each location shall be issued.

f. Permits for general jobs in sub-stations or SRR like welding, cutting, floor repair, painting, excavation, etc., shall be issued by shift engineer or by concerned electrical/instrument engineer. Counter signed by Shift Incharge is required if the plant is affected.

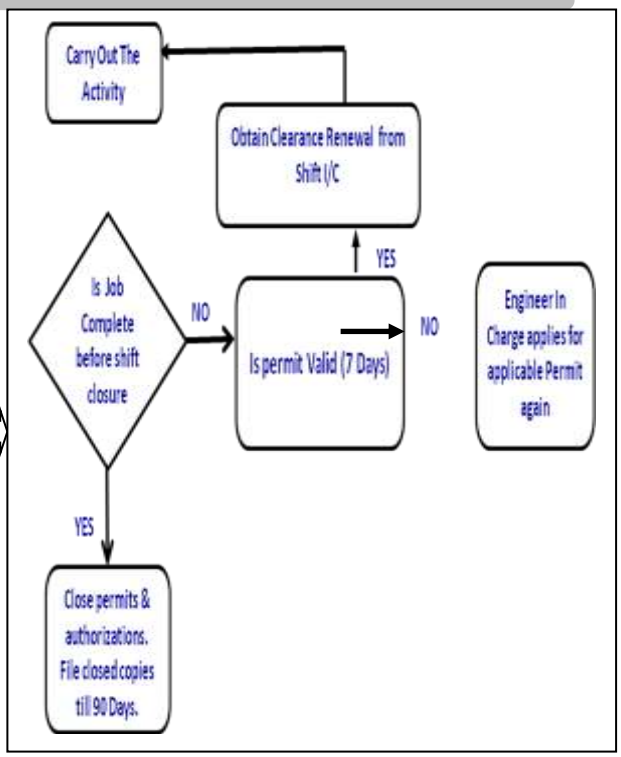
19.1 Flow Chart:

Depending upon the type of work to be earned out the Executor will approach the respective GSI / FZS as per the Fire Zones Distribution. The process for the permits & permission is on next page:

WORK PERMIT FLOW CHART



RENEWAL/CLOSURE OF THE PERMIT



Types of Permit	
Routine Work Permits	
Permit Codes	Type of work Work
P5 I	Electrical Isolation
P5 E	Energization
P6	Routine Cold Jobs
P7	Routine Hot Jobs
Non Routine Work Permits	
Permit Codes	Type of work Work
P1	Cold job, Vessel box up &Radiography
P1 a	Working at Height
P2	Hot job, Use of 230/440 V &Excavation work
P3	Confined Space Entry
P4	Electrical Work()Use of 230/240 V at Sub Station

COUNTERSIGN REQUIRED	
WHEN	AUTHORIZED PERSON
ELECTRICAL (>230v)	AREA ELECT. ENGINEER
EXCAVATION	Elect, Civil, IT, Inst, F&S, TS, Area GSI
RADIOGRAPHY	RSO/Inst./Insp.
WORK ON COMMON EQUIPMENTS/AREA	EQUIPMENT / AREA OWNERS
JOB ON FIRE HEADER	SR. MANAGER/MANAGER - FIRE
DYKE CUTTING	DGM/GM-TS
HOT TAPPING	CGM (MFG)
ROAD CUTTING	SR.MGR/CHIEF MGR/DGM-F&S

	Prepared By	Reviewed & Issued By
Designation	Mgr. (F & S)	CM (F & S)

WORK IN DIFFERENT CATEGORY

Work	Routine Work		Non Routine Work	
PERMITS	COLD WORK & ELECT. ISOLATION & ENERGIZATION	HOT WORK	COLD WORK, RADIOGRAPHY, VESSEL BOXUP, WORK AT HEIGHT & CSE	HOT WORK, EXCAVATION, CSE & ELECTRICAL WORK IN SS/SWITCH YARD
Sr. No.	Authorization not required		Authorization by GSI / FZS / HOD	
1	Cold cutting.	Dechoking and cleaning of process and utility line.	Erection and removal of scaffolding (working above 1.8 mts height.).	Welding/Cutting/Grinding/Buffing/Drilling.
2	Cold insulation job.	Providing temporary extra electrical lighting / connection.	Opening of Turbine, pumps and compressors including sumps and crank cases where applicable.	Spark producing hand tools in Hazardous Zone.
3	Hydro testing.	Chipping	Maintenance work on electrical equipment in the process area.	Diesel / motor driven mobile equipment such as dewatering pump.
4	Manual Excavation.	Vehicle entry inside battery limit	Work on fragile roof.	Use of equipment operated by internal combustion engines/ non-routine diesel / IC driven equipment.
5	Replacing lamps.	Photography	Painting of equipment, Pipelines or Technical Structure inside process area/ battery limit.	Road Closure /making/repairs with asphalting.
6	Painting/Spray painting.	Use of battery operated equipment	Shot Blasting.	Hacksaw cutting on Hydrocarbon line.
7	Road closure / making / repairs without asphalting.	Fire water network Isolation within unit.	Unsure / Cold non-routine activities.	Holiday test.
8	Suction strainer cleaning excluding hydrocarbon service.		Fermenting & online sealing.	Dyke cutting.
9	Glands, seal bearing replacement excluding hydrocarbon service.		Pneumatic testing.	Flare line blinding / de-blinding.
10	Routine preventive maintenance of pumps /motors valves / exchangers.		Use of lifting tools	Confined space/Inert atmosphere entry.
11			Vessel Box up	Hot bolting/ bolt tightening machine using electrically driven motor.
12			Suction strainer cleaning involving hydrocarbon service.	Pneumatic operated chisel / breaker.
13			Piping, valves, fittings replacement.	Fire water network isolation entire unit/more than one unit.
14			Masonry / construction job.	Erection of equipment/Structure etc. in the plant battery limit.
15			Glands, seal bearing replacement of hydrocarbon service.	Blinding and deblinding activities where toxic gas, High temperature/pressure hydrocarbon etc. is expected to come out.
16			Any other job which was not covered under cold work routine permit.	Hot tapping involving welding & drilling of pipelines.
17			Work involving radioactive source Isolation/Shifting, x-ray & radiography equipment.	Road cutting using powered tools.
18				Cable jointing.
19				Hydro jetting.

Note :

A. Risk assessment shall be carried out for all critical works (Hot work permit/Cold work permit/Electrical work permit/ confined space entry) A copy of the R.A. Sheet shall be attached with permits.

B. Conducting R.A. for non critical works (Hot/Cold Routine) Shall be discretion of Area GSI.

C. Uploading RA and E-RA is compulsory for non-routine jobs with required approval cycles.

	Prepared By	Reviewed & Issued By
Designation	Mgr. (F & S)	CM (F & S)

20. Process common to all the permits:

a. The Executor and issuer shall jointly visit the site and assess the risk of the job and the compliance of conditions specified by GSI / FZS. Upon his satisfaction the permit will be issued by the Shift In-Charge.

b. All maintenance/ inspection / construction jobs in the Refinery complex at a height of 1.8 meter or above where permanent access and platform is not provided. Scaffolding with proper access shall be prepared & certified by Mechanical Maintenance engineer.

c. Separate permits shall be issued for preparatory jobs like equipment blinding, isolation, scaffolding erection, etc. before a permit is issued for actual job execution.

d. Hot & CSE Permit shall be made in triplicate. Cold Work permit will be made in duplicate. The Executor shall take the original copy for display, the second copy shall be retained by the issuer and the third copy sent to Fire & Safety Department in case of Hot & CSE permits. In case of Cold Work Permit no copy is required to be sent to Fire & Safety.

e. All Hot & CSE permits shall be registered with the fire department by the issuer over telephone and a registration number to be obtained which will be mentioned in the permit.

f. Necessary gas testing shall be done by the AE /JE where AE /JE not available the person nominated by plant SIC may take gas test. who shall be authorized by Fire & Safety after proper training. Gas testing shall be done after 30 minutes once purging is completed / stopped to ensure correct reading. Results of gas testing are entered in the permit in the appropriate location. Gas testing shall be done as per the frequency specified in the permit but during each renewal. Gas Testing Reading shall be mentioned in Plant SIC Log Book also as permit he can mention in the starting of shift. In case of a hot work in CSE gas test shall be earned out after every break in the job.

g. Jobs which require assistance of Fire crew for standby purposes shall be communicated to the fire department a day in advance by the issuer. Area Owner / Section Head in consultation with Mgr/CM of F&S will decide regarding such requirements.

h. Before commencing work, the field officer (may be a O&M Agency Engineer if authorized to do so by head of area and F&S dept.) or A. E.(wherever available) shall ensure that necessary precautions have been completed as detailed in the permit and acknowledge that the job has commenced in his presence by signing on the permit copy of the Executor.

i. If an emergency, siren is sounded in the plant/area while hot work is in progress, then all the hot jobs shall be stopped until all clear siren is sounded.
Except for the routine testing of siren.

j. A blanket permit for one week will be issued. However, for hot works normal procedure for hot work shall apply.

k. In case of BPCL operated Workshops /Contractor Yards a blanket Hot work permit for 1 week validity /will be issued. However the scope of activities shall be defined in the permit.

l. Validity and Extension

a) Issuer & Executor shall inspect the work site before giving clearance for the job.
b) Hot Work Permits & Cold Work Permits can be issued for a total seven calendar days maximum.
c) In case the job is continued beyond the shift of permit issue the Executor has to renew the permit every shift in which the job is to be earned out from the issuer.
d) The issuer and AE/O&M Agency Engineer shall inspect the job location before renewing the permit.
e) Renewals for Hot Works shall be registered with Fire & Safety Department.
f) GSI / FZS can extend the permit validity for a maximum 7 days. For work beyond seven days, a new work permit has to be issued after closing the present work permit as per the same procedure followed before.
g) Details of renewal /extension shall be recorded on the permit

21. General Safety Guidelines

a. Cold Work Permit

a. Issuer shall ensure that, before issuing a Cold Work Permit, all necessary preparations are done to ensure that the work can be undertaken in a safe manner.

b. Executor shall ensure that tools used do not produce any spark (ex. brass hammer, running water while concrete chipping, cold cutting or cold drilling).

c. Executor shall indicate to issuer that his battery/electric-operated items are intrinsically safe or explosion-proof. If not he/she shall provide necessary requirements to counter any emergency and safeguarding dangers involved.

d. Respiratory protection will be required while working in open areas due to presence or the possibility of release of toxic/flammable gas during the course of work. Only trained personnel shall wear appropriate respiratory protection.

e. Gas masks (cartridge respirators)/ Escape air mask can be worn if the toxic concentration is known but is not Immediately Dangerous to Life or Health. Escape air mask or self-contained breathing apparatus (SCBA) shall be available for emergency use.

f. Airline Mask with escape cylinder shall be used if toxic concentration exceeds TLV level. An attendant (standby man) ready with SCBA/ Air Mask shall remain in a nearby safe area, upwind of the job site and in line of sight of the work area, to undertake any rescue if required. He shall be equipped with proper means of communication with workers.

a. Work on or near (but not inside) any vessel, pipeline, pump, etc., which had been in the service of products containing Hydrogen Sulfide (H_2S) shall be handled with additional precautions.

b. Permit for Hot Work/Excavation/Critical Works (P2)/Confined Space Entry(P3)/ Electrical Work Permit(P4)

a. Permits shall be issued only if the atmosphere is free from flammable gases and all applicable isolations are identified and in place with proper tagging. Any reading on the explosimeter/LEL Meter/other portable or area monitor other than zero reading (0% LEL) indicates unsafe condition and hence permit shall not be issued.

b. If the hot work has to be done in a confined space, a check also is to be done to ensure that 19.5%-22.5% v/v oxygen is available inside confined space/vessel where hot work is to be earned out. If the oxygen concentration is more than 22.5 %, permit shall not be issued. A confined space/vessel entry permit shall also be obtained for all hot works planned to be earned out inside confined space. Gas Test shall be earned out after every break in hot work inside a Confined Space.

c. The issuer shall also ensure that there is no extraneous combustible material present within 8 meters' spherical distance from the job location. All the Hot work jobs are required to be effectively covered with welding blankets. When the job is done at height, running water hose should be provided for quenching the falling sparks. In other cases, the fire water hose can be kept ready with slight opening of the valve.

d. While hot work is in progress, no other conflicting hazardous work like breaking of lines, venting of flammable material from nearby equipment etc. shall be carried out. Issuer of the hot work permit must ensure that Panel Officer is aware of the job. Process parameters should be adequately monitored to ensure that there is no release from safety devices in to open atmosphere.

e. No hot work shall be allowed on associated pipelines/ equipment unless isolated and purged accordingly.

f. All the pipe lines/ equipment carrying hydrocarbons related to job location should necessary be depressurized, gas freed, steamed out, nitrogen purged, positively isolated and made free from residual material as per the standard operating procedure of the equipment preparation as approved by Area Owner.

g. The Executor shall make a stand by men available at job locations where hazardous materials are either stored or processed within 8 m. radius of hot

work. If sparks can fall on the places more than 8 m away, then those areas should also be covered with welding blankets.

h. While gas cutting or burning inside a confined space/vessel, the gas cutting torch / hoses shall not remain inside a confined space/vessel when not in use unless they have been disconnected from the gas cylinders. The gas cylinders should remain outside the confined space all the time. The acetylene cylinders shall be covered with wet welding blanket and shall be kept in upright position in a trolley.

i. All non-flame proof electric arc welding equipment shall be located in an area tested for free from flammable materials.

j. All Types of photography/Videography work inside the operational areas of plants shall be permitted with issuance of hot work permit. Other approval /Permission shall be taken as per Admin / Security Procedures.

k. All portable power tools viz. grinding machine, drilling machine shall be given electrical supply through ELCB/or any other workable circuit breaker only.

l. It is recommended that all portable power tools / equipment in use shall be tested and certified by electrical maintenance department.

m. For all practical purposes, the pipe works such as hydrocarbon lines, sprinkler lines etc. shall be removed from the plant for welding. The surrounding area shall be cordoned off and wet welding blankets should be used to prevent sparks flying through air.

n. For carrying out welding on on-line equipment, separate approved procedure made by Engineering department shall be followed.

o. Issuer / Executor must review the requirements of hot jobs in the plant. Hot works are to be earned out in the plant only in the cases it is impossible to carry out the same away from the plant. Fabrication to the extent possible shall always be done away from the plant in contractor shed / fabrication shop and only final hot jobs shall be done at the site, Also planning and prioritization of hot job is to be done in advance

p. While carrying out oxy-acetylene welding/cutting, it is recommended that Projects & Engineering services/ Mechanical maintenance engineer shall verify for valid inspection record of the particular gas cutting set as per approved procedure of engineering services - mechanical maintenance department.

q. Gas cutting set cylinders should always be carry in trolley. Carrying cylinders in loose fashion viz. on shoulder, by rolling shall not be permitted.

r. For excavation job using power equipment hot work permit and permission for excavation is required. For manual excavation work cold clearance and permission for excavation is required. The issuer, acceptance and validity for the check sheet will be applicable as per the permit procedure described in the various sections.

s. Mark excavation job in hot work permit as applicable.

t. Permission to be signed by respective departments prior to excavation job as mentioned in Annexure – 8.

u. For radiography job, cold work permit to be taken. The issuer, acceptance and validity for the check sheet will be applicable as per the permit procedure described in the various sections.

v. Mark the Radiography job in cold work permit as applicable. RSO permission is required before taking any cold work permit involving radiography.

c. <u>Electrical Isolation / Restoration coupled with LOTO</u>

a. The request for electrical isolation / restoration permit is made up of single sheet with Section A and B. Section A is to be prepared for electrical isolation / de-energization and Section B shall be prepared for de isolation / energization after completing the JOB.

b. Operations Shift Incharge requiring isolation of electrical power, first makes the request for electrical isolation and it is sent to Electrical Department for carrying out the isolation.

c. After isolating the electrical power, taking adequate applicable safety precautions as specified and providing pad lock and fixing the 'danger tag' on the panel, the electrical engineer or his authorized officer acknowledges the same and send permit to Operation department along with pad lock key. Please check Danger Isolation tag in Annexure – 17.

d. The shift Incharge keeps the key displayed in Control Room and then hand over the permit to maintenance engineer (permit Executor) after his endorsement.

e. When the job is completed and power restoration is required, the maintenance engineer fills the relevant section in the permit and returns to Operation department along with pad lock key after his endorsement. Operations send this to Electrical department by filling request portion of Section B for Restoration of the electrical power. Electrical engineer upon receipt of pad lock key & permit restores the power supply and acknowledges the same in the permit and send back to Operations after keeping a copy in his records.

f. Electrical engineer shall also maintain an independent register of recording of electrical isolations / restorations in the substation.

g. In case the isolation is required for Electrical Department activities the permit will be issued by the Electrical Department GSI of the area and countersign from Process if required shall be obtained.

d. Permission for Excavation and Radiography in addition to permit through system

Permission required for Excavation and Radiography jobs and take hot work and cold permit respectively as per Annexure - 4. It is a written document in approved prescribed formats for specific work or activity and is an integral part of attachment to the associated hot work permit. The issue, acceptance and validity for the check sheet shall be applicable as per the permit procedure described in the various sections.

e. Confined Space Entry

Special Care for Confined Space Entry

This permit is required for entry of personnel into confined spaces/vessel for the purpose of repair / maintenance / inspection / cleaning works. In practical terms confined spaces/vessel at refinery complex would mean space containing or having contained or space which may have contained gas, hydrocarbons, chemicals or deficient in oxygen for normal breathing and it is not designed for continuous human occupancy. Some of the examples of confined space are oil tanks, water tanks, condensate tanks, columns, reactors, oil water sewer pits, coolers, condensers, reservoirs, pipe lines, tanker trucks, skirts of column and vessels, floating roof decks etc. Prior to issue of a confined space / vessel entry permit the following activities shall be completed:

h. Draining
i. Removal of sludge
j. Washing
k. Purging
l. Positive Isolation Ventilation
m. Confined space atmosphere testing
n. Radiation level check

f. Positive Isolation

a. Physical disconnection and slip plating are both acceptable means of mechanical / positive isolation for the purpose of entry into confined space/vessel. Shift engineer should prepare a list of all positive isolations done in a standard prescribed blind list before issuing confined space / vessel entry permit.
b. All instrument purge connections (N2, steam, etc.,) must also be positively blanked off. Location of blinds / slip plates should be as close to the vessel as possible.
c. All the associated electrical systems shall be isolated by issue of electrical isolation permit.
d. Blind List showing the equipment sketch (P & ID) and location of mechanical isolations shall be attached to the display copy of the permit.
e. Cross reference of other permits issued for mechanical isolation shall be entered into the confined space entry permit.
f. Positive Isolation certificate to be filled and issued to Executer with original copy. Duplicate copy of certificate to be kept for reference along with Shift Engineer.

g. Ventilation

Dispersal of fumes generated inside confined space / vessel by jobs like those that of welding, grinding, gouging etc. shall be done by using air movers / exhaust fans. However, such requirements shall be indicated by the issuer in the permit itself.

h. Atmosphere Testing

Before the initial entry is made into a confined space/vessel, the atmosphere shall be tested to determine whether it is safe for entry with or without breathing apparatus. The internal atmosphere of a confined space is free from danger once the following conditions are established. In case of it is required to enter a vessel for gas test by the Issuer, CSE permit shall be obtained which will be issued by the GSI of the area to the Gas Testing Authority (Shift Incharge). The gas test section

in this case shall not apply. However necessary respiratory protection shall be used and all other conditions shall be complied.

a. The oxygen content is between 19.5 and 22.5 % v/v.
b. The explosive meter tests, if relevant, indicate the absence of flammable gas or vapor.
c. The concentration of toxic gases or vapors is at a safe level i.e., less than the 50 % value of TLV. Vessel entry where no hot work is to be earned out may be permitted if combustible gases are up to 5 % of the Lower Explosive limit. Entry with a fresh air line mask may be permitted with LEL up to 50 %.
d. The gas testing shall be conducted from outside a confined space/vessel, but if it is necessary to enter to enable sampling, approved breathing apparatus shall be worn. Distress alarm may be worn for all confined space entries. In such cases gas tester shall obtain confine space entry permit. This permit shall fulfill all the condition of CSE permit except gas concentration test.
e. The results of the gas test shall be entered in the permit and duly signed. Periodic gas tests results shall also be entered on the permit copies.
f. Air Supply : Mechanical Air Ventilation to the confined space shall be stopped 30 minutes prior to atmosphere testing. This will enable correct reading of the atmosphere in the vessel. The ventilation should be restarted and maintained during the vessel entry.

i. Radiation Sources

Where radioisotopes are installed inside a confined space/vessel, the radioactive source must be withdrawn into the source holder and the shutter closed and locked before an entry permit is issued. If this is not possible, the source must be physically removed.

j. Electrical isolations

Positive isolation of all equipment operated by electric supply and associated/attached to the equipment shall be done in accordance with the procedure outlined in this document.

k. General Safety Precautions

a. In case of single man way vessels, it is to be ensured that adequate ventilation is ensured by opening / disconnecting flanges / nozzles of the vessel.
b. A trained standby person with appropriate BA set/other rescue devices should be provided by the Executor to keep in regular contact with the person(s) working inside confined space and to raise alarm in the event of an emergency.
c. The standby person shall maintain a list of persons working in confined space and shall collect the identity cards of the persons. He shall log the time spent in the vessel/ confined space. He should have emergency communication devices like radio set.

d. Always use special gadgets like fall arrest system with full body harness with double lanyard life line, distress alarm etc., while working inside deep vessels, columns, etc.
e. The standby person shall always remain at the man entry point. In case of more entry point separate standby persons shall kept for every man entry point.
f. Entrances or manholes shall be suitably covered and caution notice should be displayed at all times except when an entry permit is in force.
g. All the persons entering a confined space/vessel shall formally receive training in "Use of breathing apparatus".
h. Entry into hot equipment shall not be permitted unless the temperature has come down to below 50°C in the confined space and maintained with or without artificial ventilation.
i. All illumination hand lamps should be of max. 24V only. The hand lamp should have the lamp guard. For using in flammable atmosphere the hand lamps should be flame proof type only.
j. Use of 230V operated portable power tools / any other electrical device inside a confined space/vessel is prohibited.
k. Electrical equipment including lamps shall be in line with Hazardous Area Classification of the area.
l. Non Flame proof electrical equipment may be permitted for use in hazardous areas only when the area is declared as free from hydrocarbons.
m. In case of emergencies like toxic gas release or fire, the persons working in confined space must be withdrawn outside. The existing permit shall be closed in such cases and a fresh permit shall be issued after due Risk Assessment.

n. Persons shall also be withdrawn from the confined space whenever air mover / exhaust fan has stopped and also in case of power failure.

o. As far as possible use of volatile solvents shall be prohibited inside the confined spaces. If use of solvents is absolutely necessary, then no hot work permit is allowed inside the confined space. Suitable risk assessment shall be done and recorded in such cases.

p. When manholes are not provided at the ground level as an access or not provided with a platform at an elevated position, a scaffolding platform must be erected & certified prior to entry.

q. In case of requirement to enter a confined space by the plant person for carrying out gas test inside the authorization shall be obtained from the Area GSI / FZS.

22.Radiography and Nucleonic Level Gauges

22.1 Permission for Radiography

Permission for radiography is required while carrying out any radiography of weld joints. The competency of authorized agency to be verified and should be filled in the permission for radiography. The RSO of the agency should ensure its compliance. The inspection department should endorse it in approval section.

The executor is responsible to mention job details in the permission for radiography and will request inspection department to carry out radiography.

The contractor supervisor should acknowledge that necessary precautions/compliance is ensured.

Mandatory Precautions –

a. Precautionary boards are to be displayed at work site.

b. Radiation level at barricaded perimeter should be as per AERB limit and it is to be ensured by contractor Supervisor while performing the job.

c. Radioactive Source to be stored in AERB approved pit rooms.

22.2 Nucleonic Level Gauge Isolation

a. Obtain Valid Work Permit from Operation for attending the specified nucleonic level gauge.

b. Ensure that permit is counter signed by RSO.

c. Ensure that radiation survey has been done by RSO and max radiation dose rate at working place has been mentioned in permit with time stamp.

d. Ensure that mentioned dose rate in permit are well within safe limit.

e. Ensure that specific radioactive source shutter is OFF and locked.

22.3 General Safety Precautions for Radiography Source

a. Factory Manager shall notify the name of approved Radiological Safety Officer as per the guidelines of BARC, Mumbai.

b. Radiation survey meters shall be calibrated once in a year through a vendor approved by BARC, Mumbai. It shall be taken care by RSO.

c. The location where work with ionizing radiation sources are to be earned out must be barricaded from all sides with radiation warning signs. During dark hours, additional warning lights must be placed near the radiation signs.

d. The Executor must ensure that unauthorized persons shall not enter the radiation zone. The Executor shall intimate the RSM just before starting the radiography.

e. Radio - active sources for non - destructive material analysis shall not be left unattended without supervision of a Radiological Safety Officer or a trained and authorized person on an installation or department.

23.Precautions for Excavations

The excavation authorization is applicable to all excavations regardless of the depth. Excavation includes digging, road cutting, removing soil, etc. using mechanical equipment or manually in BPCL Refinery Complex. Excavation Permission is valid for Maximum 30 days.

23.1Clearances of Permission Note in online system:

a. Executor shall obtain clearances from the Elect, Civil, IT, Inst, F&S, TS, Area GSI who shall check the underground services presence before issuing clearance for excavation online.

b. While issuing clearances, the section Incharge shall clearly mention whether the underground cables / service lines exist or not. In case of cables or existence of service lines, specific precautions shall be mentioned very clearly in the authorization.

c. In case the cables / service lines are present, no mechanical excavation is permitted. All digging shall be earned out manually in the presence of the concerned engineer /in-charge.

d. In case of presence of live cables, isolation of power should be considered before work is started.
e. If the depth of exaction is more than 1.2 Meter then such excavation shall be considered as a confined space, and to work or enter in such area, confine space entry authorization shall be issued.

24. General safety precautions

a. Excavation of roads should be earned out in such a way that one half of the road is always available for movement in case of emergency.
b. If the depth of excavation is more than 1.5 meter or more depending upon the soil condition, it shall be shored or sides shall be sloped back to a safe angle.
c. Excavated area shall be suitably barricaded. Barricading should be luminous and visible in the night. It should be done from all possible entry / movement sides and at least at a distance of 1 meter away from the excavated land / opening.
d. If water seepage is seen into the excavated pit, then work should be stopped, dewatering should be done prior to restart of the job.
e. Dump the earth at least 1 meter away from the edge of the excavation or one half of the depth of the pit whichever is more.
f. Safe means of access & egress from excavated pit should be provided.
g. All excavation work shall be stopped if there is any emergency alarm in the plant/area and seepage of toxic / hazardous material observed in the excavated area.
h. Where the existence of underground service lines is suspected or the exact route / location is not known, sample excavations shall be done manually to identify the existence / location of the cable, pipeline etc.
i. It is the responsibility of the Executor to ensure that the excavated area is cleared of all debris, tools and other unwanted equipment from the job sit.
j. It is recommended to carry out the excavation job in the day time except in emergency, In case the excavated area gets water logged due to seepage, arrangements should be made to clear the water before carrying out welding. Water logged pits can be potential hazard.
k. Shoring up to be done for deeply excavated areas.

25. Stop work authority:

A Stop Work Authority program is a safety-based process. Stop Work Authority is essential because it saves time and resources. It can stop the emotional impact of incidents in the workplace and build a safety culture. It's an easy way for employers to empower employees in the safety culture of their own workplace.

It gives every employee and contract worker, the permission to stop work in situations that could result in an incident or injury. For instance, an employee/contract worker could stop work if they see: an unsafe condition or an unsafe act happening.

Stop Work Authority should be initiated for conditions or behaviours that threaten danger or imminent danger to person(s), equipment or the environment. Situations that warrant a Stop Work Authority may include, but are not limited to the following:

- Change in conditions
- Changes to scope of work or work plan
- Emergency situation
- Equipment used improperly
- Lack of knowledge, understanding or information
- Near-miss incident
- Unsafe conditions
- Alarms

Steps of a Stop Work Authority procedure are:

- Stop the work.
- Notify the supervisor, SIC or EIC.
- Investigate the stop work action.
- Correct the situation.
- Resume the work.
- Follow up.

26.Records

1. Records of the closed work permits and the check sheets shall be maintained by issuer, Executor, and copy recipients at the designated places in the plants / units.

	Prepared By	Reviewed & Issued By
Designation	Mgr. (F & S)	CM (F & S)

2. Copies of all completed /used permits/ authorization/Tags/Annexure shall be properly filed & kept as record for future reference for at least three months, (i.e. Last three months closed /completed permits/Tags/Annexure shall be kept as record).
3. A register for daily permits shall be maintained either in hard copy or soft copy, to keep track of all the issued/renewed permits. Format for daily permit register is given in the **Annexure - 15**.
4. O&M Permits will be for CPP, Utility and BDT Areas only (After Due Approvals).

27. Verification, Corrective and Preventive action:

Concerned HOD shall ensure the implementation of the above procedure. In case of any deviation corrective and preventive actions shall be initiated.

28. Storage of Records & Retention Time:

Record Title	Record No.	Location	Responsibility	Retention Time
Work Permit System	--	Respective Department	Respective HOD/Incharge	3 Months

Annexure-1

EXPLANATORY NOTES TO WORK PERMIT FORMS/AS PER OISD 105

a. **Exact Location (Area / Unit / Equipment no):** Exact location of the area or the unit in which the work is to be carried out shall be written against it.

b. **Description of work:** Precise description of the work to be performed shall be written. Sketches should be attached wherever possible to avoid miscommunication.

c. **Equipment / Area inspected:** Equipment or area where work is to be conducted, should be inspected to ensure that it is safe to carry out the work and assess other safety requirements / stipulations. In case of equipment / vessel box-up permit, it should be ensured that the work is complete, all personnel are out, no maintenance gear is left behind and debris removed.

d. **Surrounding area checked / cleaned:** Unsafe conditions for performance of work may arise from surrounding area. It should be cleaned-up to remove flammable material such as oil, rags, grass etc.

e. Sewers, Manholes, Closed Blow Down (CBD) etc. and Hot Surfaces covered: Flammable gases may be released from nearby sewers. Hot un-insulated surfaces (equipment / pipelines) may provide a source of ignition and therefore, these are to be properly covered to prevent fire.

f. Hazard from other routine / non-routine operations considered and persons alerted: Other activities (routine / non-routine) being carried out near-by, which can create conditions unsafe for performance of the permit work, should be taken into consideration and the concerned persons should be alerted accordingly.

g. **Equipment electrically isolated and tagged:** Before issuing a permit, it shall be ensured that electrical isolation has been done, switches are locked-out and cautionary tags duly signed with date and time are attached.

h. Running water hose / Portable extinguisher provided / Fire water system available: Running water hose and portable fire extinguisher are required to flush /

dilute in case of release of any hazardous chemical or to quench sparks and to put out small fires immediately.

i. **In order to meet any contingency**, it should be ensured that the fire water system including firewater pumps, storage, network etc. is checked and kept ready for immediate use.

j. **Equipment blinded / disconnected / closed / isolated / wedge opened:** Equipment for which the work permit is being issued, should be isolated from the rest of the plant in order to ensure that there is no change in the work environment with respect to presence of toxic / flammable gases, liquids, hazardous chemicals etc. in the course of the work.

k. **Blinding is one of the most effective ways of isolation.** Blinds should be installed as close to the equipment as possible. If lines cannot be blinded, these should be disconnected and the open ends should be made safe by installing pipe caps / plugs, blind flanges etc.

l. **Equipment properly drained / depressurized:** Equipment under pressure should be depressurized after isolation. This should be followed by draining / purging / water flushing etc. as the case may be.

m. **Equipment containing liquid hydrocarbons should be drained completely.** There may be a possibility of overlooking of liquid collected in pockets or inaccessible areas such as level gauges, small nozzles / bleeders on vessels, laterals in pipe work etc. All low point drains should be in unplugged condition.

n. **Equipment properly steamed / purged:** Purging of equipment (tanks, vessels, pipelines etc.) is done to make them free of flammable hydrocarbon and toxic gases. Steam / Inert Gas is used for gas freeing of vessels and pipes in refineries and other locations. Other means of purging is by displacement with water and final traces of gas removed by properly earthed air educator. All high point vents should be unplugged while purging. It should be done in a systematic manner to cover the entire equipment / plant and continued till the concentration of toxic / flammable gas is lowered to allowable level.

o. **Equipment water flushed:** Water flushing is an effective means of cooling, cleaning and even gas freeing of equipment. It is also employed to remove traces of acids / chemicals. Equipment metallurgy must be considered before using sea / saline water. Sometimes, flushing with dematerialized water would be necessary depending upon the metallurgy of the equipment.

p. **Gas / Oxygen deficiency test done:** Gas test includes measurement of:

   i. Hydrocarbons by Explosive meter Oxygen Deficiency by Oxygen Meter

ii. Toxic gases like Hydrogen Sulphide, Carbon Monoxide, Nickel Carbonyl, and Chlorine etc. by techniques like Indicator Tube method, Lead Acetate Paper etc.

q. **Shield against sparks provided:** Hot works like welding, grinding etc. generates sparks which can provide source of ignition to the surroundings. In order to protect operating area from the hazards of sparks generated, shields are to be provided to contain the sparks generated. The shield material should be non-flammable and should be kept wet with water.

r. **Proper ventilation and lighting provided:** Where natural ventilation is not available, fans / air educators are provided. These are also required for speedy dispersal of fumes generated by welding job. Only approved reduced voltage extension lights (not exceeding 24 volts) are to be allowed for work inside vessels from consideration of personal safety.

s. **Proper means of exit provided:** Proper means of exit is required in case of emergencies developed on account of the work or otherwise. Availability of an alternate route of escape should be considered.

t. **Area cordoned off and caution boards provided:** To prevent any unwarranted entry in the work area and also to caution other personnel taking actions which may endanger people working on the permit job, precautionary tags / boards are to be provided to display like "No Entry" sign on roads or "Caution - Men at Work Inside" on the manhole of a vessel, "Danger - Radiography in progress" etc.

u. **Portable equipment / Hose nozzles properly grounded:** As a precaution against static electricity generation, portable equipment / hose nozzles e.g. nozzle of a shot blasting gun, are to be grounded. Use of hydrocarbon lines for earthing should be avoided. 30 mille-amp circuit breaker shall be installed on electrical circuits / cables feeding power supply to portable equipment.

v. **Standby person provided for entry to confined space:** Whenever a person is entering in a confined space, minimum two designated persons shall be kept at the manhole or entry point. The designated person shall be in constant communication with the persons inside the confined space. **Standby personnel provided for fire watch from Process / Maintenance / Contractor / Fire Department:** Depending on the criticality of the job, work permit issuer shall decide the type of standby to be provided i.e. from which department, of which level, how many and also additional fire fighting support facilities etc.

w. **Iron Sulphide removed / kept wet:** Pyrophoric substances may be present in operating area / equipment handling hydrocarbon. Iron Sulphide scale is the most common pyrophoric substance encountered. These should be either removed to safe locations or kept wet all the time to prevent their auto-ignition.

x. Clearance obtained for excavation / Road cut / dyke cutting etc.: **For any excavation work** which may affect underground sewers / telephone lines / cables / pipelines etc., clearance shall be obtained from all the concerned sections. Markers should be put around the area where excavation is to be done and the depth to be indicated in the work permit.

y. Road cutting can hamper the movement of the fire vehicles; initial clearance should be obtained from Fire Department and final approval from the higher designated authorities.

z. When the dyke is cut, any mishap in the tank farm can lead to a free flow of oil to outside the bund. A higher level authority should be designated for authorizing dyke cutting. Further, it should be ensured that dyke would be reconstructed in the shortest possible time.

aa. **Checked spark arrestor on mobile equipment:** No vehicle / engine without spark arrestor shall be permitted in operating areas.

bb. **Checked for oil / gas trapped behind lining in equipment:** Before undertaking hot jobs, a check should be done for oil / gas trapped behind lining in the equipment.

Annexure-2

List of Gas Safety Inspectors & Fire Zone Signatories-BPCL Refinery

Sample Only

FIRE & SAFETY DEPARTMENT – Bina Refinery (BR)

BR/F&S/WPS/GSI/FZS/REV. 20 Date: 05.05.2023

Approved By : CGM (Manufacturing) 5.5.2023

Through : GM (HSSE) 5.5.23

Subject: List of Gas Safety Inspectors & Fire Zone Signatories-Bina Refinery (BR)

In view of recent changes in organisational set up, following changes in the list of GSI & FZS is proposed for smooth & effective implementation of work permit system within Refinery complex along with below guidelines.

1. Revised list of GSI &FZS is as below, which will be effective from 05.05.2023
2. GSI & FZS are responsible for compliance of work permit system and enforcement of fire and safety regulations as per safety manual.
3. This note supersedes all the earlier office notes that have been issued from time to time.
4. All main roads shall be under the scope of offsite area excluding BDT.
5. During silent hours, the continuation of hot work jobs should be avoided; if required, then information shall be given to RSM and Fire SIC after obtaining clearance from concern area owner / HOD & GM (F, S&E).
6. The GSI/FZS list will be updated subject to any organisational changes.

Zone	Area covered under the Fire Zone	Gas Safety Inspector(GSI)	Alternate GSI	Fire Zone Signatory	Alternate FZS
A-1	CDU/VDU block &Main Control Room.	Nilesh Sheshrao Jadhao Mgr. (Process) (CDU/VDU)	Vineet Kumar AM (Process) (CDU/VDU)	Rajesh Nandanwar CM (Process) (CDU/VDU & DCU)	Supriya Sapre DGM (Process) (MSB & KHDS)
A-2	MS Block	Amit K Shrivastava Sr. Mgr. (Process)(MSB)	Ankush Agnihotri AM (Process) (MSB)	Supriya Sapre DGM (Process) (MSB & KHDS)	Rajesh Nandanwar CM (Process) (CDUVDU & DCU)
A-3	Delayed Coker Unit	N. Swaminathan Sr. Mgr. (Process)(DCU)	Umesh Kumar Verma AM. (Process) (DCU)	Rajesh Nandanwar CM (Process) (CDU/VDU & DCU)	Supriya Sapre DGM (Process) (MSB & KHDS)
A-4	Crude & Intermediate Tank farm area (Which includes PS-1, 2, 3.	Pradeep Shahu Mgr. (OFFSITE)	Arvind Singh AM (OFFSITE)	Umesh B Raut DGM (P,U & O)	Rajshekhar Patne CM (P&U)
A-5a	HGU	Om Prakash Singh Mgr. (Process) (HGU)	Yogendra Kumar Singh AM(Process) (HGU)	Yadav H K DGM (Process) (HGU,SRU & HCU)	Supriya Sapre DGM (Process) (MSB & KHDS)
A-5b	SRU. VPSA & Flare Area	Sushant Mahale Mgr.(Process) (SRB)	Praveen Bisht AM (Process) (SRB)	Yadav H K DGM (Process) (HGU,SRU & HCU)	Supriya Sapre DGM (Process) (MSB & KHDS)

A-5c	KHDS	Vedant Mishra Mgr.(Process) (KHDS)	Aamir Hussain Executive (Process) (KHDS)	Supriya Sapre DGM (Process) (MSB & KHDS)	Yadav H K DGM (Process) (HGU,SRU & HCU)
A-6	Hydrocracker unit & facility	Sanjay Ashok Sawant Sr. Mgr. (Process) (HCU)	Deepanshu Srivastava AM (Process) (HCU)	Yadav H K DGM (Process) (HGU,SRU & HCU)	Supriya Sapre DGM (Process) (MSB & KHDS)
A-7	CPP- CFBC and Utility boilers, STG's, BOP and Solid Material handling Systems.	Ambarish Mahajan Mgr. (CPP)	Tarun Kumar Sahu AM-CPP	Rajshekhar Patne CM (P&U)	Umesh B Raut DGM (P,U & O)
A-8	Substation 2,7,9,24,25 & 26	Abhishek Agrawal Mgr. (Electrical)	Sourabh Jain Mgr. (Electrical)	Rijo R S Sr. Mgr. (Electrical)	Ramesh Panchal GM (Electrical)
	Substation 3 & 8	Hemraj Sahu Mgr. (Electrical)	Abhishek Agrawal Mgr. (Electrical)	Rijo R S Sr. Mgr. (Electrical)	Ramesh Panchal GM (Electrical)
	Substation 1,16 & 17	Sourabh Jain Mgr. (Electrical)	Pankaj Kumar Malviya Mgr. (Electrical)	Rijo R S Sr. Mgr. (Electrical)	Ramesh Panchal GM (Electrical)
	Substation 4,5,6,11,12, 14 & 15	Pankaj Kumar Malviya Mgr. (Electrical)	Satyam Mishra Mgr. (Electrical)	Rijo R S Sr. Mgr. (Electrical)	Ramesh Panchal GM (Electrical)
	Substation 10 CPP, UBSS-SS23, MHL-SS -21, Wagon tippler substation SS-19. Old 132KV Swyd-SS20, 220KV Swyd-SS22, CPP-EDG SS-27	Pankaj Kumar Malviya Mgr. (Electrical)	Satyam Mishra Mgr. (Electrical)	Rijo R S Sr. Mgr. (Electrical)	Ramesh Panchal GM (Electrical)
A-9	Satellite Rack Rooms 2/3/4/5/6 & AAQMS	Abhilash Sanodiya Mgr.(Inst.)	Souman Dutta Sr. Mgr. (Inst.)	Nirmalya Nandi CM (Inst.)	Praveen Kumar GM (Inst.)
A-10	Non plant Area Including Admin, Canteen, Training centre & OHC.	Vinay Sharma Mgr. (HR)	D. N. Sharma (HR)	Suraj P. Chaudhari CM (HR)	K. P. Mishra CM (HR)
A-11	Security Facilities &Gates, Boundary Wall and adjoining roads, Open Land Area.	Prashant Raghuvanshi Sr. Mgr. (Security)	D. N. Sharma (HR)	Suraj P. Chaudhari CM (HR)	K. P. Mishra CM (HR)
A-12	Warehouse & Material yards	Deepak Kumar Jain Mgr. (Commercial - Warehouse)	Vaibhav Srivastava AM (Commercial-Warehouse)	Durgendra Sharma Sr. Mgr. (Commercial)	Mukherjee A GM (Commercial)
A-13	Mech. Maint. Workshop	Vinurse Jain Mgr. (Mech.)	Kaushal Joshi Mgr. (Mech.)	Rakesh Sharma Sr. Mgr. (Mech.)	Manish Pandey CM (Mech.)

	Elect Maint. Workshop	Sourabh Jain Mgr. (Electrical)	Abhishek Agrawal Mgr. (Electrical)	Rijo R S Sr. Mgr. (Electrical)	Ramesh Panchal GM (Electrical)
	Inst. Maint. Workshop	Ashwani Kumar Sr. Mgr. (Inst.)	Sathish Ramasamy Mgr. (Inst.)	Nirmalya Nandi CM (Inst.)	Praveen Kumar GM (Inst.)
A-14	Fire station & Fire training Ground	Anuj Rathore Mgr. (F & S)	Sachin Akote Mgr. (F & S)	Sanjay B. Kamdi CM (F & S)	Medhe Anil DGM (E,PSM & BE)
A-16	Laboratory	Bharat Sharma Mgr. (QA)	Rameshwar Dwivedi Mgr. (QA)	Adalazhagan K DGM (QA)	Asawari Kelkar GM (Process Tech., QA, APC & Digital Solution)
A-17	Engineering Office	Nilesh Palekar Mgr. (M&C Planning)	Vikant Maithil AM (M&C Planning)	Manish Pandey CM (Mech.)	Praveen Kumar GM (Inst.)
A-18	Hazardous Waste storage facility & Green Belt Area	Prabhat Kumar Bag Mgr.(Env.)	Arun Kumar AM. (Env.)	Medhe Anil DGM (E,PSM & BE)	Sanjay B Kamdi CM (F&S)
A-19	Betwa P/H, RWTP, Nitrogen plant, DG House, ETP, RCT, Fire water pump house, Nitrogen & RODM Control room.	Mahendra Singh Bhadauria Mgr. (Utilities)	O.P. Saini AM (Utilities)	Umesh B Raut DGM (P,U & O)	Rajshekhar Patne CM (P&U)
A-20	Mech. Contractor Yard	Manish Singh Mgr. (Mech.)	Kaushal Joshi Mgr. (Mech.)	Rakesh Sharma Sr. Mgr. (Mech.)	Manish Pandey CM (Mech.)
	Project Contractor Yard	Surendra Lodhi Mgr. (E&P)	Amit Baruah Mgr. (E&P)	Anoop D Bhat Sr. Mgr. (E&P)	Sudeep Shrivastava GM (E&P)
B -1	Bina Dispatch Terminal & Weigh bridges	Nitin Kumar Gupta Mgr. (BDT)	Dhiraj Shetty AM(BDT)	Vinay Kumar Giri Sr. Mgr. (BDT)	Gajanan Koshatwar Sr. Mgr. (BDT)
B - 2	Contractor Yard - BDT	Nitin Kumar Gupta Mgr. (BDT)	Dhiraj Shetty AM(BDT)	Vinay Kumar Giri Sr. Mgr. (BDT)	Gajanan Koshatwar Sr. Mgr. (BDT)
C - 1	COT Vadinar	Jayant Namdeo Asst. Mgr. (COT)	Anurodh Aharwal Manager (COT)	Sunil Prasad CM(COT)	Ketan Thakkar Mgr. (COT)

Note: Other areas which are not in the above list, owner will be as per approved work permit area demarcation Refinery plot plan approved drawing no. 99-26-A0-0589 Rev 3 dtd 03.05.2023.
Submitted for kind approval please.

Sanjay Kamdi
CM (Fire & Safety)

	Prepared By	Reviewed & Issued By
Designation	Mgr. (F & S)	CM (F & S)

Annexure -3

Cold Work Permit Non Routine(P1) Format

Permit No.: BRAU-CPN2303266

BHARAT PETROLEUM CORPORATION LIMITED
BINA REFINERY, BINA, M.P , 470124
COLD WORK PERMIT - NON ROUTINE

P1

☑ COLD JOB ☒ VESSEL BOX UP ☒ RADIOGRAPHY

CONTACT NUMBERS : FIRECALL : 6666 AMBULANCE / OHC / MEDICALCENTRE : 6111

AUTHORIZATION NO : BRAU-CLD2300617 VALID UPTO : 03/07/2023 16:00 Hrs

JOB DETAILS & PERMIT

ISSUER DEPT/SECTION: Bina Dispatch Terminal EXECUTOR DEPT/SECTION: Bina Dispatch Terminal

1.	PERMISSION GRANTED TO	: ABHISHEK SRIVASTAVA
2.	DESCRIPTION OF WORK (Nature of Work & Tools/Equipments to be used)	: Erection /dismantling of scaffolding Erection/Dismantling of Scaffolding outside tank 5E for M&I activity
3.	LOCATION OF WORK & EQUIPMENT TAG NO.	: Tank 05E
4.	FIRE ZONE/AREA	: B1 - BINA DISPATCH TERMINAL & WEIGH BRIDGES
5.	NAME OF CONTRACTOR & CODE NO.	: DEE GEE SAW & METAL WORKS PVT LTD (107866)
6.	VALID FROM	: 02/05/2023 06:43 Hrs
7.	VALID TO	: 02/05/2023 14:00 Hrs

THE FOLLOWING ITEMS SHALL BE CHECKED BEFORE ISSUING THE PERMIT

Sl No.	CONDITIONS TO BE ADHERED TO FOR COLD JOBS (ROLE OF ISSUER)	Done	Not Reqd.	Sl No.	CONDITIONS TO BE ADHERED TO FOR COLD JOBS (ROLE OF EXECUTOR)	Done	Not Reqd.
1.	Checking of ☑ Equipment ☑ Work Area	☑	☒	11.	Area ☒ Covered ☑ Cordoned off ☑ Display of caution boards ☒ Tags provided	☑	☒
2.	Surrounding area ☑ Cleaning ☑ Checking	☑	☒	12.	Mean of access provided i.e. ☑ Ladder ☑ Scaffolding (BORL Std.) ☒ Man basket ☒ Bosun chair ☒ Crawling board	☑	☒
3.	Equipment electrically isolated & tagged (mention details below part 'A')	☑	☒	13.	Fire water hose with ☑ Fog nozzle ☒ Steam Lance ☑ Portable DCP fire extinguisher at work site	☑	☒
4.	Equipment ☑ Blinded ☒ Disconnected ☒ Closed ☒ Isolated ☒ Wedged open ☒ Tagged	☑	☒	14.	Display of contractors work execution board at site	☑	☒
5.	Equipment properly ☑ Drained ☒ Depressurised	☑	☒	15.	Alternate means of escape/exit available	☑	☒
6.	Equipment properly ☒ Steamed ☒ Purged ☑ Water flushed	☑	☒	16.	Precautions against falling of material in work area	☑	☒
7.	Gas test (mention values in Part 'B') ☑ HC ☑ O2 ☒ H2s (IDLH Value-100 PPM) ☑ CO ☒ SO2 ☒ Other,if any	☑	☒	17.	Proper ventilation at site	☑	☒
8.	Cross reference of related Authorization / permit (mention details in Part 'A')	☑	☒	18.	Proper lighting at site	☑	☒
9.	Considered hazard from other routine / non routine operations and concerned persons working at site alerted	☑	☒	19.	Iron Sulphide ☒ Removed ☒ Kept wet	☒	☑
10.	Standby personnel provided from ☒ Issuer Dept. ☒ Executor Dept. ☑ Contractor ☒ Fire stn. (for fire watch)	☑	☒	20.	Risk Assessment (RA) by ☑ Issuer ☑ Executor	☑	☒

USE OF PERSONNEL PROTECTIVE EQUIPMENT

Safety helmet	☑	Gloves	☑	Goggles	☑	Safety shoes	☑	Boiler suit	☑	Fresh air mask	☒	PVC apron	☒
Lifeline	☒	Ear plug	☒	Face shield	☒	Dust mask	☑	Breathing apparatus	☒	Double lanyard safety belt	☑		

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Annexure -4

Hot Work Permit Non-Routine (P2) Format

Permit No.: BRAU-HPN2301565

BHARAT PETROLEUM CORPORATION LIMITED
BINA REFINERY, BINA, M.P , 470124
HOT WORK PERMIT- NON ROUTINE

P2

☑ HOT JOB ☒ USE OF 230V ☒ USE OF 440V ☒ EXCAVATION ☒ CRITICAL WORK

CONTACT NUMBERS : FIRECALL : 6666 AMBULANCE / OHC / MEDICALCENTRE : 6111

AUTHORIZATION NO : BRAU-HOT2300154 VALID UPTO : 10/05/2023 16:00 Hrs

JOB DETAILS & PERMIT

ISSUER DEPT/SECTION: Bina Dispatch Terminal EXECUTOR DEPT/SECTION: Bina Dispatch Terminal

1.	PERMISSION GRANTED TO	: ABHISHEK SRIVASTAVA
2.	DESCRIPTION OF WORK (Nature of Work & Tools/Equipments to be used)	: Use of diesel driven Mobile Air Compressor in the plant area GRASS CUTTING THOUGH PETROL DRIVEN MACHINE
3.	LOCATION OF WORK & EQUIPMENT TAG NO.	: OUTSIDE DYKE WALL TANKFARM AREA(NOT PERMITTED IN LPG AREA)
4.	FIRE ZONE/AREA	: B1 - BINA DISPATCH TERMINAL & WEIGH BRIDGES
5.	NAME OF CONTRACTOR & CODE NO.	: Aarvi Encon Private Limited (102195)
6.	VALID FROM	: 02/05/2023 06:25 Hrs
7.	VALID TO	: 02/05/2023 14:00 Hrs

THE FOLLOWING ITEMS SHALL BE CHECKED BEFORE ISSUING THE PERMIT

Sl No.	Conditions to be adhered to for - Hot work/hot tapping/excavation/ flare blinding /flare deblinding (Role of Issuer)	Done	Not Reqd.	Sl No.	Conditions to be adhered to for - Hot work/ hot tapping/excavation/flare blinding /flare deblinding (Role of Executor)	Done	Not reqd.
1.	Checked ☑ Equipment ☑ WorkArea	☑	☒	18.	Means of access provided i.e. ☒ Ladder ☒ Scaffolding ☒ Man basket ☒ Bosun chair ☒ Crawling board	☒	☑
2.	Surrounding area ☑ Checked ☑ Cleaned up of oil / Rags / Grass etc,	☑	☒	19.	Iron sulphide ☒ Removed ☒ Kept wet	☒	☑
3.	Standby personnel provided from ☒ Issuer Dept, ☒ Executor Dept, ☑ Contractor ☒ Fire Station	☑	☒	20.	Sewer, Manholes, CBD, Hot surface covered	☑	☒
4.	Considered hazard from ☑ Other routine ☑ Non-routine operations	☑	☒	21.	Area cordoned off, Euipments covered and display of caution boards / tags provided	☑	☒
5.	Equipment electrically isolated and tagged (Mention Details in Part 'A')	☒	☑	22.	Precaution against public traffic taken	☑	☒
6.	Fire water system checked for readiness	☑	☒	23.	Authorization obtained for excavation from electrical / concerned department	☒	☑
7.	Gas test (mention values in part 'B') ☑ HC ☒ O2 ☒ H2s (IDLH Value-100 PPM) ☑ CO ☒ SO2 ☒ Other,if any	☑	☒	24.	Authorization obtained for Road cutting from Fire Station	☒	☑
8.	Equipment ☒ Blinded ☒ Disconnected ☒ Isolated ☒ Closed ☒ Wedge opened	☒	☑	25.	Authorization obtained for dyke cutting from Area FZS / HOD	☒	☑
9.	Checked for oil or gas trapped behind lining in equipmwnt	☑	☒	26.	Checked flame arrestor on mobile equipment	☑	☒
10.	Equipment properly ☒ Drained ☒ Depressurized	☒	☑	27.	Welding machine checked, earthed, fitted with proper flame and located at safe location	☒	☑
11.	Equipment properly purged ☒ Steam ☒ Nitrogen	☒	☑	28.	Shield / booth against sparks provided	☒	☑
12.	Equipment water flushed	☒	☑	29.	Return / Earthing to be connected closest and only to the equipment being welded	☒	☑
Sl No.	Conditions to be adhered to for - Hot work/ hot tapping/excavation/flare blinding /flare deblinding (Role of Executor)	Done	Not Reqd.	30.	Oxygen/acetylene kept outside confined space (tank/vessel /column etc.)	☒	☑
13.	Provided ☑ Fire water hose ☒ Steam lance ☑ DCP Fire extinguisher	☑	☒	31.	ELCB provided on Portable electrical equipment	☒	☑
14.	Proper ventilation provided	☒	☑	32.	Flash back arrestor provided on gas cutting set / cylinders	☒	☑
15.	Proper means of exit / escape provided	☑	☒	33.	Proper lighting provided	☑	☒
16.	Precautionary tags , boards / Contractor work execution board provided	☑	☒	34.	Risk Assessment (RA) by ☑ Issuer ☑ Executor	☑	☒
17.	Portable euipment, Nozzles properly grounded	☒	☑				

USE OF PERSONNEL PROTECTIVE EQUIPMENT

Safety helmet	☑	Gloves	☑	Goggles	☑	Safety shoes	☑	Boiler suit	☑	Fresh air mask	☒	PVC apron	☒
Lifeline	☒	Ear plug	☒	Face shield	☑	Dust mask	☑	Breathing apparatus	☒	Double lanyard safety belt	☒		

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	Prepared By	Reviewed & Issued By
Designation	Mgr. (F & S)	CM (F & S)

Annexure -5

Permit for work at Height (P1a) Format

Permit No.: BRAU-WHP2301080

BHARAT PETROLEUM CORPORATION LIMITED
BINA REFINERY, BINA, M.P , 470124
WORKING AT HEIGHT PERMIT

P1a

☑ WORK AT HEIGHT

CONTACT NUMBERS : FIRECALL : 6666 AMBULANCE / OHC / MEDICALCENTRE : 6111

AUTHORIZATION NO : BRAU-CLD2300385 VALID UPTO : 26/05/2023 16:00 Hrs

JOB DETAILS & PERMIT IN CONTINUATION OF PERMIT NO : BRAU-WHP2301009

ISSUER DEPT/SECTION: Process EXECUTOR DEPT/SECTION: Mechanical & Civil

1.	PERMISSION GRANTED TO	: HEMANT PATEL
2.	DESCRIPTION OF WORK (Nature of Work & Tools/Equipments to be used)	: Material handling – manually & mechanically Material lifting shifting work for M&I activity,
3.	LOCATION OF WORK & EQUIPMENT TAG NO.	: 52-TT-CR-05A TANK
4.	FIRE ZONE/AREA	: A4 - CRUDE & INTERMEDIATE TANK FARM AREA
5.	NAME OF CONTRACTOR & CODE NO.	: ALPHA BETA ENGINEERING (101554)
6.	VALID FROM	: 02/05/2023 06:56 Hrs
7.	VALID TO	: 02/05/2023 14:00 Hrs

THE FOLLOWING ITEMS SHALL BE CHECKED BEFORE ISSUING THE PERMIT

Sl No.	CONDITIONS TO BE ADHERED FOR WORKING AT HEIGHT	Done	Not Reqd.	Sl No.	CONDITIONS TO BE ADHERED FOR WORKING AT HEIGHT	Done	Not reqd.
1.	Checking of ☑ Equipment ☑ Surrounding Area	☑	☒	10.	Alternate means of escape / exit available at work site (fixed ladder with 1 meter projection, platform without any obstructions)	☑	☒
2.	Provided ☑ Area cordoned off ☒ Covering of floor openings ☒ Display of caution boards ☒ Tags	☑	☒	11.	Considered hazard from routine / non routine operations and concerned persons alerted	☒	☑
3.	Means of access provided i.e, ☒ Ladder ☑ Scaffolding (BORL Std.) ☒ Man basket ☒ Bosun chair ☒ Crawling board	☑	☒	12.	Proper lighting provided at work site, Provision of ELCB (Earth Leakage Circuit Breaker) for use of portable tools / equipments being used at work site	☒	☑
4.	Precautions against falling of material in work area and material carried up at elevation are fall protected	☑	☒	13.	Proper ventilation provided at work site	☑	☒
5.	Standby personnel provided from ☒ Issuer Dept. ☒ Executor Dept. ☒ Project ☑ Contractor ☒ Fire Station	☑	☒	14.	Power lines / HT lines are not in the close proximity of work area or isolated / disconneted	☒	☑
6.	Provision of ☒ Roof ladder ☒ Crawling board	☒	☑	15.	Cross reference of related Authorization / Work Permit	☒	☑
7.	Scaffolding erected as per BORL Standard, inspected and display of safe to use board at site	☑	☒	16.	Gas Test ☑ HC ☑ O2 ☑ H2s (IDLH Value-100 PPM) ☑ CO ☑ SO2 ☑ Other,if any	☑	☒
8.	Provision of Safety net at site (As per nature of job and RA prepared by Executing Agency)	☒	☑	17.	Risk Assessment (RA) by ☑ Issuer ☑ Executor	☑	☒
9.	Provision of Fall arrestor at site (As per nature of job and RA prepared by Executing Agency)	☒	☑				

USE OF PERSONNEL PROTECTIVE EQUIPMENT

Safety helmet	☑	Gloves	☑	Goggles	☑	Safety shoes	☑	Boiler suit	☑	Fresh air mask	☒	PVC apron	☒		
Lifeline	☒	Ear plug	☒	Face shield	☒	Dust mask	☒	Breathing apparatus	☒	Double lanyard safety belt	☑				

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Annexure -6

Permit for Cold work permit routine (P6) Format

Permit No.: BRAU-CWP2314255

BHARAT PETROLEUM CORPORATION LIMITED
BINA REFINERY, BINA, M.P , 470124
COLD WORK PERMIT- ROUTINE

P6

CONTACT NUMBERS : FIRECALL : 6666 AMBULANCE / OHC / MEDICALCENTRE : 6111

JOB DETAILS & PERMIT

ISSUER DEPT/SECTION: Bina Dispatch Terminal **EXECUTOR DEPT/SECTION:** Bina Dispatch Terminal

1.	PERMISSION GRANTED TO	: ABHISHEK SRIVASTAVA
2.	DESCRIPTION OF WORK (Nature of Work & Tools/Equipments to be used)	: Graphiting, Alternate bolt removal, Wedge opening, Valve & Fitness replacement & general cold jobs, Bolt torquering, missing bolt, gland filling, hand wheel repair etc, MFL testing job to be done.
3.	LOCATION OF WORK & EQUIPMENT TAG NO,	: Tank 8A
4.	FIRE ZONE/AREA	: B1 - BINA DISPATCH TERMINAL & WEIGH BRIDGES
5.	NAME OF CONTRACTOR & CODE NO.	: DEE GEE SAW & METAL WORKS PVT LTD (107866)
6.	VALID FROM	: 02/05/2023 06:39 Hrs
7.	VALID TO	: 02/05/2023 14:00 Hrs

THE FOLLOWING ITEMS SHALL BE CHECKED BEFORE ISSUING THE PERMIT

Sl No.	CONDITIONS TO BE ADHERED TO FOR COLD JOBS (ROLE OF ISSUER)	Done	Not Reqd.	Sl No.	CONDITIONS TO BE ADHERED TO FOR COLD JOBS (ROLE OF EXECUTOR)	Done	Not Reqd.
1.	Checking of ☑ Equipment ☑ Work Area	☑	☒	11.	Area ☒ Covered ☒ Cordoned off ☑ Display of caution boards ☒ Tags provided	☑	☒
2.	Surrounding area ☑ Cleaning ☑ Checking	☑	☒	12.	Mean of access provided i.e. ☑ Ladder ☑ Scaffolding (BORL Std.) ☒ Man basket ☒ Bosun chair ☒ Crawling board	☑	☒
3.	Equipment electrically isolated & tagged (mention details in Part 'A')	☒	☑	13.	Fire water hose with ☒ Fog nozzle ☒ Steam Lance	☒	☑
4.	Equipment ☑ Blinded ☒ Disconnected ☑ Closed ☒ Isolated ☒ Wedged open ☒ Tagged	☑	☒	14.	Display of contractors work execution board at site	☒	☑
5.	Equipment properly ☒ Drained ☒ Depressurised	☒	☑	15.	Alternate means of escape/exit available	☑	☒
6.	Equipment properly ☒ Steamed ☒ Purged ☒ Water flushed	☒	☑	16.	Precautions against falling of material in work area	☑	☒
7.	Gas test (mention values in part 'B') ☒ HC ☒ O2 ☒ H2s (IDLH Value-100 PPM) ☒ CO ☒ SO2 ☒ Other,if any	☒	☑	17.	Proper ventilation at site	☑	☒
9.	Considered hazard from other routineon routine operations and concerned persons working at site alerted	☑	☒	18.	Proper lighting at site	☑	☒
10.	Standby personnel provided from ☒ Issuer Dept. ☒ Executor Dept. ☑ Contractor ☒ Fire stn. (for fire watch)	☑	☒	19.	Iron Sulphide ☒ Removed ☒ Kept wet	☒	☑
11.	Decabling	☒	☑				
12.	Cabling	☒	☑				

USE OF PERSONNEL PROTECTIVE EQUIPMENT

Safety helmet	☑	Gloves	☑	Goggles	☑	Safety shoes	☑	Boiler suit	☑	Fresh air mask	☒	PVC apron	☒
Lifeline	☒	Ear plug	☒	Face shield	☒	Dust mask	☒	Breathing apparatus	☒	Double lanyard safety belt	☒		

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	Prepared By	Reviewed & Issued By
Designation	Mgr. (F & S)	CM (F & S)

Annexure -7

Permit for Hot work permit routine (P7) Format

Permit No.: BRAU-HWP2301591

BHARAT PETROLEUM CORPORATION LIMITED
BINA REFINERY, BINA, M.P , 470124
HOT WORK PERMIT- ROUTINE

P7

CONTACT NUMBERS : FIRECALL : 6666 AMBULANCE / OHC / MEDICALCENTRE : 6111

JOB DETAILS & PERMIT **IN CONTINUATION OF PERMIT NO :** BRAU-HWP2301487

ISSUER DEPT/SECTION: Process **EXECUTOR DEPT/SECTION:** Mechanical & Civil

1.	**PERMISSION GRANTED TO**	: HEMANT PATEL
2.	**DESCRIPTION OF WORK (Nature of Work & Tools/Equipments to be used)**	: Vehicle entry inside battery limits area (forklift, trailer, tractor, crane, hydra, pickup van, gully sucker etc.), for liquid and solid sulpher loading. Vehicle entry for material handling at CR-05A
3.	**LOCATION OF WORK & EQUIPMENT TAG NO.**	: CR-05A
4.	**FIRE ZONE/AREA**	: A4 - CRUDE & INTERMEDIATE TANK FARM AREA
5.	**NAME OF CONTRACTOR & CODE NO.**	: ALPHA BETA ENGINEERING (101554)
6.	**VALID FROM**	: 02/05/2023 06:55 Hrs
7.	**VALID TO**	: 02/05/2023 14:00 Hrs

THE FOLLOWING ITEMS SHALL BE CHECKED BEFORE ISSUING THE PERMIT

Sl No.	Conditions to be adhered to for-Crane/Forklift/IC Engine Operation/Vechicle Entry/Cable fault Finding/Chipping other than Hydrogen Services/Units/Use of battery operated equipments	Done	Not Reqd.	Sl No.	Conditions to be adhered to for-Crane/Forklift/IC Engine Operation/Vechicle Entry/Cable fault Finding/Chipping other than Hydrogen Services/Units/Use of battery operated equipments	Done	Not reqd.
1.	Checked ☒ Equipment ☑ WorkArea	☑	☒	5.	Area cordoned off, Euipments covered and display of caution boards / tags provided	☒	☑
2.	Provided at site ☒ Fire water hose ☒ Steam lance ☑ DCP Fire extinguisher	☑	☒	6.	Checked flame arrestor on mobile equipment	☑	☒
3.	Equipment electrically isolated & tagged (Mention Details in Part 'A')	☒	☑	7.	Gas test (mention values in part 'B') ☑ HC ☑ O2 ☑ H2s (IDLH Value-100 PPM) ☑ CO ☑ SO2 ☑ Other,if any	☑	☒
4.	Considered hazard from ☒ Other routine ☑ Non-routine operations	☑	☒	8.	Pre use checklist done for the equipement being used by the executor (Special care while nearby Hydrogen Area)	☒	☑

USE OF PERSONNEL PROTECTIVE EQUIPMENT

Safety helmet	☑	Gloves	☑	Goggles	☑	Safety shoes	☑	Boiler suit	☑	Fresh air mask	☒	PVC apron	☒
Lifeline	☒	Ear plug	☒	Face shield	☒	Dust mask	☒	Breathing apparatus	☒	Double lanyard safety belt	☒		

Annexure -8

Permit for Confined Space Entry (P3) Format

Permit No.: BRAU-CSP2300573

BHARAT PETROLEUM CORPORATION LIMITED
BINA REFINERY, BINA, M.P , 470124
CONFINED SPACE ENTRY PERMIT

P3

CONTACT NUMBERS : FIRECALL : 6666 AMBULANCE / OHC / MEDICALCENTRE : 6111

AUTHORIZATION NO : BRAU-CSE2300050 VALID UPTO : 15/05/2023 16:00 Hrs

JOB DETAILS & PERMIT

ISSUER DEPT/SECTION: Bina Dispatch Terminal EXECUTOR DEPT/SECTION: Bina Dispatch Terminal

1.	PERMISSION GRANTED TO	: ABHISHEK SRIVASTAVA
2.	DESCRIPTION OF WORK (Nature of Work & Tools/Equipments to be used)	: Confined space entry - Storage tanks Confined Space Entry in Tank-08A for M&I Activity.
3.	LOCATION OF WORK & EQUIPMENT TAG NO,	: Tank 8A
4.	FIRE ZONE/AREA	: B1 - BINA DISPATCH TERMINAL & WEIGH BRIDGES
5.	NAME OF CONTRACTOR & CODE NO.	: DEE GEE SAW & METAL WORKS PVT LTD (107866)
6.	VALID FROM	: 02/05/2023 06:29 Hrs
7.	VALID TO	: 02/05/2023 14:00 Hrs

THE FOLLOWING ITEMS SHALL BE CHECKED BEFORE ISSUING THE PERMIT

Sl No.	CONDITIONS TO BE ADHERED FOR CONFINED SPACE ENTRY (Role of Issuer/ Executor)	Done	Not Reqd.	Sl No.	CONDITIONS TO BE ADHERED FOR CONFINED SPACE ENTRY (Role of Issuer/ Executor)	Done	Not reqd.
1.	Checked ☑ Equipment ☑ Work area	☑	☒	11.	Checked for oil or gas trapped behind lining in equipment	☑	☒
2.	Considered Hazard from other routine operations and Non routine operations and concerned persons alerted	☑	☒	12.	Adequate (24V) lighting provided	☑	☒
3.	Equipment ☑ Properly drained ☑ Depressurised	☑	☒	13.	Use of ☑ Air hose ☒ Breathing apparatus	☑	☒
4.	Equipment properly purged ☒ Steam ☒ Nitrogen	☒	☑	14.	Iron sulphied ☑ Removed ☒ Kept wet	☑	☒
5.	Equipment ☑ Water flushed ☒ KMnO4 flushed ☒ Passivation ☒ Chemical cleaning	☑	☒	15.	Means of communication provided	☑	☒
6.	Equipment electrically isolated and tagged (mention details in part 'A')	☒	☑	16.	Proper means of access / exit provided(mention details in part 'A')	☑	☒
7.	Equipment ☑ Blinded ☒ Disconnected ☒ Closed ☑ Isolated ☒ Wedge opened	☑	☒	17.	Precautionary tag boards / Contractor work execution boards / Display of Safe to enter board provided	☑	☒
8.	Adequate ventilation provided	☑	☒	18.	Blind list attached (Vessel / Column / Process Equipments etc,)	☑	☒
9.	Gas Tests(mention values in part 'B') ☑ HC ☑ O2 ☑ H2s (IDLH Value-100 PPM) ☑ CO ☒ SO2 ☒ Other,if any	☑	☒	19.	Risk Assessment (RA) attached by ☑ Issuer ☑ Executor	☑	☒
10.	Standby attendant provided ☑ Contractor ☒ Issuer Dept. ☒ Executor Dept. ☒ Fire Station	☑	☒				

USE OF PERSONNEL PROTECTIVE EQUIPMENT

Safety helmet	☑	Gloves	☑	Goggles	☑	Safety shoes	☑	Boiler suit	☑	Fresh air mask	☒	PVC apron	☒
Lifeline	☒	Ear plug	☒	Face shield	☒	Dust mask	☑	Breathing apparatus	☒	Double lanyard safety belt	☑		

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Annexure -9

Permit for Electrical work (P4) Format (Sample only. No p4 permit available after merger. As and when available same will be updated.

Permit No.: BRAU-ELP1800001

BHARAT OMAN REFINERIES LTD.
BINA, M.P , 470124
ELECTRICAL PERMIT

P4

CONTACT NUMBERS : FIRECALL : 6666 AMBULANCE / OHC / MEDICALCENTRE : 6111

AUTHORIZATION NO : BRAU-ELE1800001 VALID UPTO : 18/04/2018 16:00 Hrs

JOB DETAILS & PERMIT

ISSUER DEPT/SECTION: Electrical EXECUTOR DEPT/SECTION: Electrical

1.	PERMISSION GRANTED TO	: ANIL KUMAR SHARMA
2.	DESCRIPTION OF WORK (Nature of Work & Tools/Equipments to be used)	: Numerical Relay data uploading Job. TCE setting uploading in Motors 35-P-102 A/B/C
3.	LOCATION OF WORK & EQUIPMENT TAG NO.	: SS-12 Switchgear hall
4.	FIRE ZONE/AREA	: A6 - SS 12
5.	NAME OF CONTRACTOR & CODE NO.	: Siemens Limited (100130)
6.	VALID FROM	: 22/01/2018 09:07 Hrs
7.	VALID TO	: 22/01/2018 18:00 Hrs

THE FOLLOWING ITEMS SHALL BE CHECKED BEFORE ISSUING THE PERMIT

Sl No.	CONDITIONS TO BE ADHERED FOR ELECTRICAL WORK (Role of Executor)	Done	Not Reqd.	Sl No.	CONDITIONS TO BE ADHERED FOR ELECTRICAL WORK (Role of Executor)	Done	Not reqd.
1.	The apparatus to be worked upon has been isolated ☒ Racking out of Breaker ☒ Switching off of FSUs ☒ Removal of main fuses ☒ Removal of Neutral link	☒	☑	14.	Fixing of caution tag/Notice on it or adjacent to live apparatus	☑	☒
2.	Power supply ☒ Isolated from supply end ☒ Removal of main fuses	☒	☑	15.	In case of cutting and removal of cable , identification of cable by suitable means to confirm the cable and its dead condition.	☒	☑
3.	Control supply ☒ Isolation of control supply ☒ Removal of control fuses	☒	☑	16.	Cordoning off/covering of the area	☒	☑
4.	Space heater supply ☒ Isolation of supply ☒ Removal of fuses	☒	☑	17.	Proper ventilation at site	☑	☒
5.	Interlocking or any other supply ☒ Isolation of supply ☒ Removal of fuses	☒	☑	18.	Monitoring of other critical parameters of standby equipment	☒	☑
6.	Checking of Isolation of apparatus visually, electrically and mechanically	☒	☑	19.	Ensuring proper tools / tackles / measuring instruments and other safety equipments	☒	☑
7.	In case of HT equipment checking with discharge rod/by any other method to make sure the equipment is dead and safe to work	☒	☑	20.	Erection of ☒ Scaffolding ☒ Monsoon protection shed	☒	☑
8.	Carrying out of Earthing by suitable means	☒	☑	21.	Continuous supervision during execution of the job by ☑ BORL Supervisor ☒ Consultant ☒ Contractor Supervisor	☑	☒
9.	In case of HT Breaker Locking of safety shutters / doors	☒	☑	22.	Ensuring Housekeeping around the working area	☑	☒
10.	Gas test (mention values in part 'B') ☒ HC ☒ O2 ☒ H2S ☒ CO ☒ SO2 ☒ Other,if any	☒	☑	23.	Proper lighting at site	☑	☒
11.	Standby person ☒ Contractor ☑ Maint ☒ Project	☑	☒	24.	Cross reference of related Authorization (mention details in Part 'A')	☒	☑
12.	Considered hazard from other routine operations / non routine operation and concerned persons alerted including GSI of Fire zone	☒	☑	25.	Risk Assessment (RA) by ☑ Issuer ☑ Executor	☑	☒
13.	Fixing of Danger tags with Signature	☒	☑				

USE OF PERSONNEL PROTECTIVE EQUIPMENT

Safety helmet	☑	Gloves	☑	Goggles	☑	Safety shoes	☑	Boiler suit	☑	Fresh air mask	☒	PVC apron	☒	Lifeline	☒
Ear plug	☒	Face shield	☒	Dust mask	☒	Breathing apparatus	☒	Double lanyard safety belt	☒	Insulated Gloves	☑	Insulating Mat	☑		

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	Prepared By	Reviewed & Issued By
Designation	Mgr. (F & S)	CM (F & S)

Annexure -10

Permit for Electrical Isolation (P5I) Format

Permit No.: BRAU-EIP2304214

BHARAT PETROLEUM CORPORATION LIMITED
BINA REFINERY, BINA, M.P , 470124
ELECTRICAL ISOLATION PERMIT

P5I

CONTACT NUMBERS : FIRECALL : 6666 AMBULANCE / OHC / MEDICALCENTRE : 6111

JOB DETAILS & PERMIT

ISSUER DEPT/SECTION: Power & Utilities **EXECUTOR DEPT/SECTION:** Electrical

1.	PERMISSION GRANTED TO	: GURU BAKSHEESH AHIRWAR
2.	DESCRIPTION OF WORK (Nature of Work & Tools/Equipments to be used)	: Electrical Isolation of Motors EIP of motor.
3.	LOCATION OF WORK	: ss 10 - BOILER #3 PETCOKE RAV #3a
4.	EQUIPMENT TAG NO,	: BOILER #3 PETCOKE RAV #3a BOILER #3 PETCOKE RAV #3a
5.	FIRE ZONE/AREA	: A7 - CPP
6.	NAME OF CONTRACTOR & CODE NO.	: THYSSENKRUPP INDUSTRIES INDIA (107075)
7.	VALID FROM	: 08/05/2023 06:40 Hrs
8.	VALID TO	: 08/05/2023 14:00 Hrs
9.	LOTO Key Number	:

Sl No.	CONDITIONS TO BE ADHERED FOR ELECTRICAL WORK (Role of Issuer)	Done	Not Reqd.	Sl No.	Conditions to be checked by Electrical Department (Circuit Breaker FEEDER)	Done	Not Reqd.
1.	Contractor / SFU Feeder No PMCC-303 (1R-E)	☑	☒	3.	Switch off control supply	☒	☑
Sl No.	**Conditions to be checked by Electrical Department (Contractor / SFU FEEDER)**	**Done**	**Not Reqd.**	4.	Rack out the CB isolated position	☒	☑
3.	Make power switch/MCCB/MCB off	☑	☒	5.	Remove space heater fuses / Make space heater supply off	☒	☑
4.	Remove control fuses	☑	☒	6.	Discharge the cable,before removal	☒	☑
5.	Remove power fuses	☑	☒	7.	Space heater cable removed at equipment	☒	☑
6.	Make space heater supply off/Remove fuse	☒	☑	8.	Power cable removed at equipment	☒	☑
7.	Discharge the cable,before removal	☒	☑	9.	Space heater cable removed at equipment	☒	☑
8.	Power cable removed at equipment	☒	☑				
9.	Space heater cable removed at equipment	☒	☑				
1.	Circuit Breaker Feeder No	☒	☑				
2.	Put the L/R switch to local mode	☒	☑				

USE OF PERSONNEL PROTECTIVE EQUIPMENT

Electrical Gloves	☑	Arc Shield	☑	Goggles	☑	Arc protection Suit	☑	Apron	☒	Helmet	☑	Other (Specify)	☒

Additional precautions/instructions(if any)

Additional Precautions not given for this Permit

Remarks(If Any)

Sr. No.	Authority	Person Name	Remark
1	PermitExecutor	GURU BAKSHEESH AHIRWAR	LOCK-YO1531 ,TAG-2575

Permit Approval Cycle :

	Name	Staff No.	Signature	Date & Time
Field Engineer Acknowledge				
PermitIssuer	SACHIN PAL	61550		
Contractor/O&M Issuer				
PermitExecutor	GURU BAKSHEESH AHIRWAR	65234		
Contractor/O&M Executor				
Contractor/O&M CloseIssuer				
IsolationCertificateIssuer				
IsolationCertificateExecutor				
Field Engineer Closure				

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Annexure 11

Permit for Electrical Energization (P5E) Format

Permit No.: BRAU-EEP2303997

BHARAT PETROLEUM CORPORATION LIMITED
BINA REFINERY, BINA, M.P , 470124
ELECTRICAL ENERGIZATION PERMIT

P5E

CONTACT NUMBERS : FIRECALL : 6666 AMBULANCE / OHC / MEDICALCENTRE : 6111

JOB DETAILS & PERMIT

ISSUER DEPT/SECTION: Bina Dispatch Terminal **EXECUTOR DEPT/SECTION:** Bina Dispatch Terminal

1.	PERMISSION GRANTED TO	: GAJANAN CHANDRAKANT KOSHATWAR
2.	DESCRIPTION OF WORK (Nature of Work & Tools/Equipments to be used)	: Electrical energization of Motors ELECTRICAL ENERGIZATION
3.	LOCATION OF WORK	: S/S
4.	EQUIPMENT TAG NO,	: 70PMCF1B 70PMCF1B POL MOTOR
5.	FIRE ZONE/AREA	: B1 - BINA DISPATCH TERMINAL & WEIGH BRIDGES
6.	NAME OF CONTRACTOR & CODE NO.	: Aarvi Encon Private Limited (102195)
7.	VALID FROM	: 02/05/2023 08:41 Hrs
8.	VALID TO	: 02/05/2023 14:00 Hrs
9.	LOTO Key Number	: 3649

Additional precautions/instructions(if any)

Additional Precautions not given for this Permit

Remarks(If Any)

Sr. No.	Authority	Person Name	Remark
Remarks not given for this Permit			

Permit Approval Cycle :

	Name	Staff No,	Signature	Date & Time
Field Engineer Acknowledge				
PermitIssuer	Nitin Singh Tomar	61851		
Contractor/O&M Issuer				
PermitExecutor	GAJANAN CHANDRAKANT KOSHATWAR	61575		
Contractor/O&M Executor				
Contractor/O&M CloseIssuer				
EnergizationCertificateIssuer				
EnergizationCertificateExecutor				
Field Engineer Closure				

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Annexure 12

Risk Assessment Form

Risk Assessment Form

Plant :

Permit No :

Activity :

Dept HIRA Ref. No. :

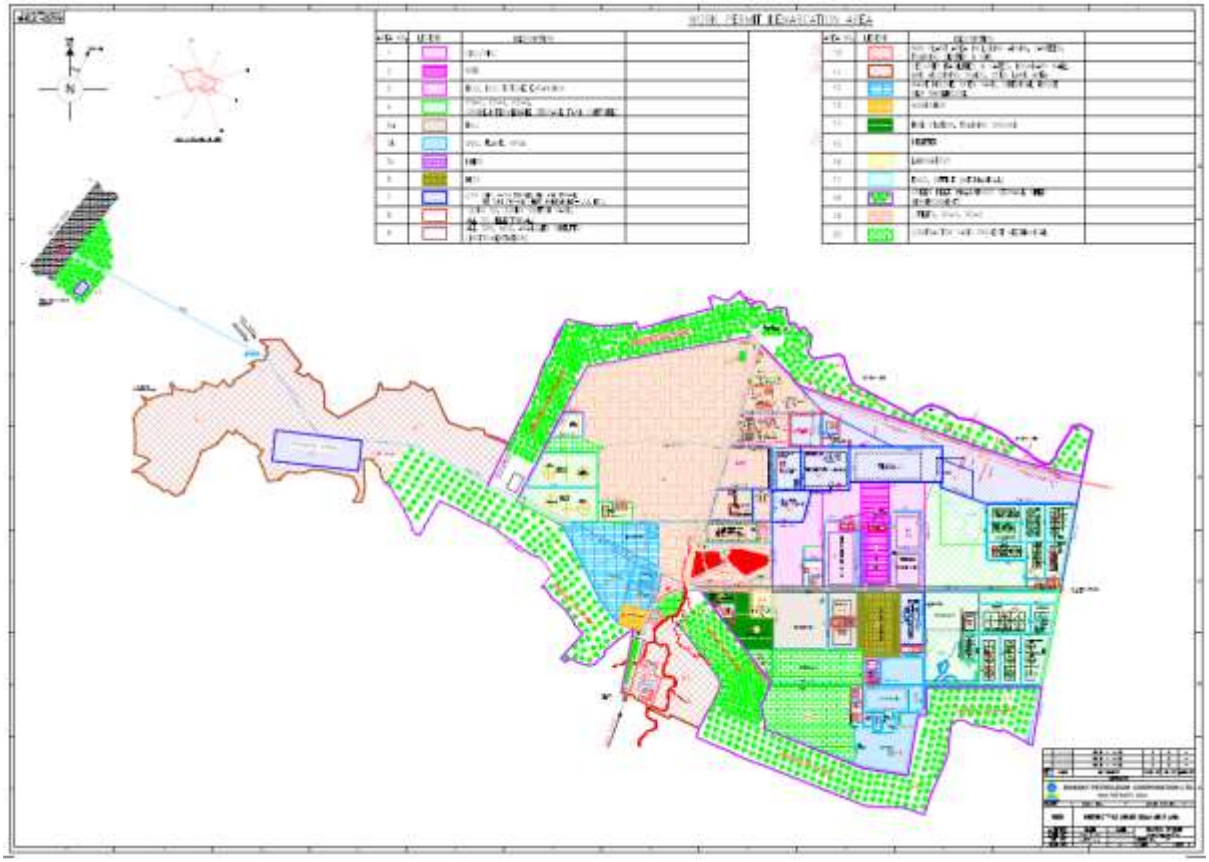
Sr. No	Hazard Identification "What can go wrong"	Control Measures "For each Identified Hazard	Contingency Plan "Action in case of Emergency
1			
2			
3			
4			
5			
6			
7			
8			
9			
10			
11			
12			

Prepared By:	Name	Signature	Date
Issuer			
Executor			
Reviewed By:	Name	Signature	Date
GSI/other			

F/03/CPM/WPS/08

Annexure -13

Fire Zone Distribution Map



	Prepared By	Reviewed & Issued By
Designation	Mgr. (F & S)	CM (F & S)

Annexure -14

Positive Isolation Certificate

POSITIVE ISOLATION CERTIFICATE

Work Permit Number	
Location : Plant / Unit	
Process System / Sub-system	
Job Description (Attach the sketch/relevant P & ID showing the position of isolation and blinds along with the certificate)	

Sl. No.	Description of Mechanical Isolation (Blind etc) & position (Equip. No. /Line No.	Size / Rating	Installed By AE (Operation)		Mech. Isolation Verified by Issuer (Operation)		Removal By AE (Operation)		Removal Verified by Issuer (Operation)	
			Sign	Date / Time	Sign	Date / Time	Sign	Date / Time	Sign	Date / Time
1										
2										
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27										

	Name	Signature	Date	Time
Positive Isolation Certificate Authorized by GSI				

	Name	Signature	Date	Time
Work Completed. Request for De-isolation by Permit Application				
Authorized to carry De-isolation (Issuer)				

	Name	Signature	Date	Time
I accept the De-isolation is completed (Issuer)				

Type

D	DISCONNECTED	LOCK	LOCKED
L	LINES	BD	BLOCKING DEVICE
S	SLIP BLIND	OTHERS	OTHER SPECIFY

Note : This positive isolation/Blinding certificate will be retained by the issuer and will be available for inspection / auditing

F/03/CPM/WPS/09

	Prepared By	Reviewed & Issued By
Designation	Mgr. (F & S)	CM (F & S)

Annexure -15

Scaffolding Certificate & Tag

SCAFFOLDING CERTIFICATE

" Scaffolding request, inspection and certificate"

Part 1 REQUEST FOR SCAFFOLDING

I hereby request that the scaffolding for purpose of .....be erected for the duty (Select from load table as given below) and height .....Meter.

Load duty	Light		Medium	Heavy / Special		
Maximum Safe load in Kg.	75	150	225	300	450	600
Maximum bay length / width in meter	2.7	2.2	1.8	1.4	1.0	0.8
Tick whichever applicable						

(Name & Signature of Maintenance Engineer)

M/s _____ **Date :**

(Scaffolding Contractor)

Part 2 INSPECTION CHECK LIST

Sl. No.	Check Points	Yes/ No/NA	Remarks
1	Are the scaffolding erected as per the load duty requested		
2	Is every work platform fitted with handrail (top rail 1200mm and mid rail 600mm high)and a toe board (150mm) secured to the platform sides		
3	Are the scaffolding in plumb and level ?		
4	Are the planks/grating placed in order without undue gaps and anchored ?		
5	Are the footing / anchorage for scaffolds sound and the bay lengths maintained as per the maximum Intended load (duty)?		
6	Are the poles, legs or uprights of scaffolding are securely braced to prevent swaying / displacement ?		
7	Are the base plates (150x150x6mm) provided for scaffolding posts ?		
8	Are the base Plates supported by sole plate (300x300x6mm) at unpaved area ?		
9	Is kicker lift (at distance 150mm from ground/base) provided for scaffold of height more than 6.0 meter ?		
10	If the scaffolding is erected above walkways or work areas, are the space between toe boards and railing screened ?		
11	If Work is done over men who are working on scaffolding, is overhead protection provided ?		
12	Has the scaffolding area suitably barricaded during erection / usage / dismantling ? As far as practicable, barricades shall be provided by keeping a clear distance of 1.0 meter from scaffold structure.		
13	Is free standing scaffolding tower protected from tipping by guying or other means ?		
14	Is there a safe and convenient means of access? If a Ladder is used, is it rising at least 1050mm above the platform ?		
15	Are relevant status boards (tags) attached to the scaffolding completed / under erection as applicable ?		
16	Is safe access to equipment or emergency egress restricted by scaffolds?		
17	Are wall scaffolding anchored every 10 m of length and 8 m of height ?		
18	Are landing platforms provided for access ladders more than 9 meter height?		
19	If two pipes are connected, are they overlapped at least 600mm and at least two clamps used.?		

Part 3 CERTIFICATE OF FITNESS OF SCAFFOLDING

i hereby certify that the scaffolding erected for work permit no. ---------- is ready and fit for use. I further certify that it is intended for light duty / General purpose (Medium duty/) Heavy duty or special duty (Tick whatever applicable) service and fit for a load of ..... Kg and should not be overloaded.

Name and Signature of

Maintenance Engineer

(Dept. .....)

Name and Signature of

Scaffolding Supervisor

M/s _____

(Scaffolding Contractor)

*** This checklist is to be filled up for every new scaffolding erected and thereafter every week as long as the scaffold is in use.***

SCAFFOLDING
READY FOR USE

PURPOSE : .....

TYPE OF SCAFFOLDS : VERY LIGHT/LIGHT/GENERAL PURPOSE / HEAVY DUTY

_____(kgf. / cm²)

MADE BY : _____(kgf. / cm²)

LOCATION _____

PERMIT NO. _____

(NAME OF CONTRACTOR)

DATE	NAME OF AUTHORIZED PERSON	SIGN.

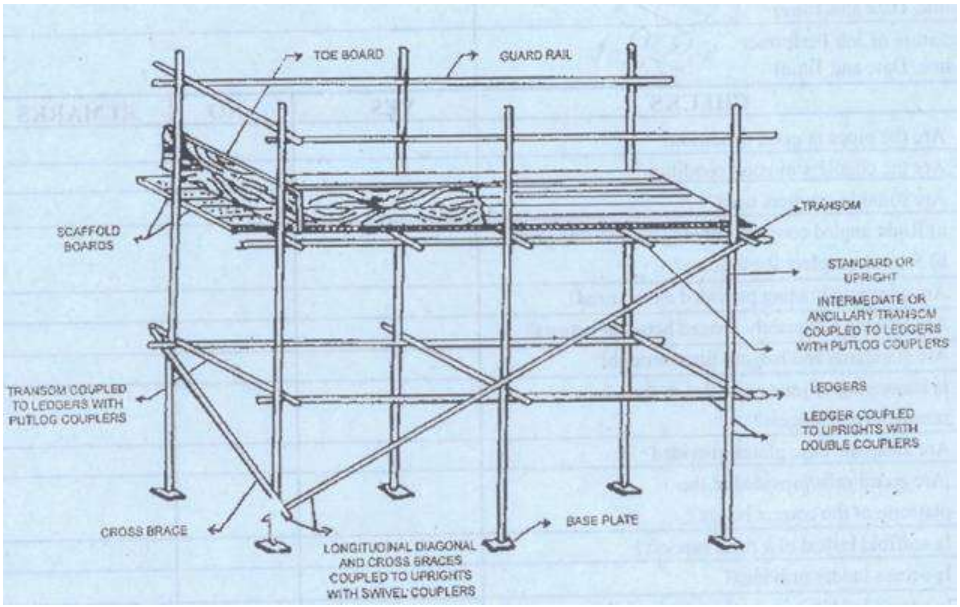
NOTE :

1. SCAFFOLDING SHALL BE INSPECTED EVERY WEEK & AFTER EVERY ALTERATION / MODIFICATION.
2. SCAFFOLDING SHALL BE REINSPECTED IN CASE OF ANY ADVERSE WEATHER CONDITION VIZ HEAVY RAIN CYCLONE ETC.

WARNING

REMOVAL OR INTERFERENCE WITH THIS SIGN WILL MAKE YOU LIABLE TO DISCIPLINARY ACTION

Document No. F/03/CPM/WPS/11



Annexure -16

Record of Fire water network Isolation

Record of Fire Water Network Isolation in Refinery Process Area

Sr.No	Plant/Area	Date & Time of Isolation/Normalization		Isolation Valve no.	Details of activity to be carried out	Equipment Isolated	Status	Name of Fire SIC	Remarks
1		Start Date:							
		Start Time:							
		End Date:							
		End Time:							
2		Start Date:							
		Start Time:							
		End Date:							
		End Time:							
3		Start Date:							
		Start Time:							
		End Date:							
		End Time:							
4		Start Date:							
		Start Time:							
		End Date:							
		End Time:							
5		Start Date:							
		Start Time:							
		End Date:							
		End Time:							
6		Start Date:							
		Start Time:							
		End Date:							
		End Time:							

	Prepared By	Reviewed & Issued By
Designation	Mgr. (F & S)	CM (F & S)

Annexure -17

Electrical Isolation Tag

	Prepared By	Reviewed & Issued By
Designation	Mgr. (F & S)	CM (F & S)

Annexure -18

Danger 'Do not Operate' Tag

	Prepared By	Reviewed & Issued By
Designation	Mgr. (F & S)	CM (F & S)

ANNEXURE-G TO SPC

TERMS & CONDITIONS FOR INDIAN SOURCED COMPONENTS / SERVICES

TERMS & CONDITIONS FOR INDIAN SOURCED COMPONENTS / SERVICES

Foreign bidder may source components / sub-supplies and services from India, if allowed as per Material Requisition. For such sub-supplies / services, Commercial Terms & Conditions of the RFQ shall stand modified to the following extent:

1. **PRICING:**

1.1 Unit and total price on FOT Despatch Point basis including packing and forwarding charges.

1.2 Details of Taxes and duties (rates) payable extra on the finished goods, applicable on Indian sub-suppliers.

1.3 Separate and clear break-up of charges for inland transportation is to be quoted by the bidder.

1.4 Materials if ordered against the RFQ are required to be dispatched on door delivery basis through a reliable bank approved transporters.

1.5 Transit insurance of Indian sub supplies shall be borne and arranged by the owner.

2. **CURRENCY OF QUOTE:**

The quoted price of sub-supplies/ services shall be in Indian Rupees only.

3. **AWARD OF ORDER:**

Wherever, a foreign supplier order involving part supply/site work/site services in INR, separate orders shall be issued by referring to the main PO for tax compliance purpose. Foreign Principal shall be the single point responsible Vendor for entire scope.

4. **DELIVERY:**

The delivery period for sub-supplies shall be on FOT site basis within specified delivery period for foreign bidder as per Terms of RFQ/Bidding document.

5. **PRICE REDUCTION SCHEDULE:**

PRS shall be applicable in totality on foreign scope + Indian sourced component / site work for delay in supply of goods/ site work either by foreign principals or Indian counterpart.

6. **PAYMENT TERMS:**

Payment of Indian sub supplies/Services

a) 85% through E-Payment with taxes and duties will be paid against receipt of Indian sourced goods/material at project site.

b) 10% against receipt of Indian supplies at site and delivery of main equipment by foreign bidder, as per Terms of bidding document and completion of site work, wherever applicable.

c) 5% on submission of Final/As built Drawings/Documents/Data/Manual in requisite number of copies/sets/CDs as per VDR specified in Purchase Requisition, by main bidder.

Note

- Payment of Indian sub supplies/Services shall be released directly to Indian counterpart against Invoices raised by Indian counterpart duly certified by foreign principal.
- In case of Foreign bids with Indian sub supplies, the payment terms of Foreign bidder against shipping documents stands reduced by 5% which shall be released as follows:

  5% payment shall be released thru wire transfer, on delivery of main equipment by foreign principal (as per terms of enquiry document) as well as receipt of Indian supplies at site.

- The payments shall be made after adjustment of Price Reduction Schedule.
- If foreign principal delivers all their foreign sourced goods with Indian sourced delivery yet to be completed and further requests for release of last 10% payment, then this last 10% shall be released to foreign principal by owner against the submission of bank guarantee for this 10% of order value valid for 03 months from CDD plus 1 month claim period or till completion of Indian sourced items whichever is later.

7. **CONTRACT PERFORMANCE BANK GUARANTEE:**

Foreign principal shall submit a single Contract performance bank guarantee for 5% of total order value including value of foreign portion and Indian sourced components / site work, in the foreign currency of quote. For the purpose of conversion of Indian sourced components / site work to equivalent foreign currency, RBI reference rate as on the date of price bid opening shall be considered.

If RBI reference rate is not available for the date of Price Bid opening, the latest available rates of RBI shall be considered.
In the absence of RBI reference rate, SBI TT Sell (Telegraphic Transfer) reference rate on the date of price bid opening or the latest available will be considered. In absence of RBI reference rate, SBI TT reference rate, the conversion Rate shall be taken from the Internet such as:

https://www.xe.com/currencyconverter
https://www.oanda.com/currency/converter
https://economictimes.indiatimes.com/markets/forex/currency-converter

ANNEXURE-H TO SPC

Procedure for Vendor Invoice Processing- data collection template

Vendor master

Social Media Policy for Business Partners

Vendor Advisory on Environmental Criteria

Business Process Excellence Centre

To Our Esteemed Suppliers/ Contractors,

BPCL has setup a Business Process Excellence Centre (BPEC) for Vendor Invoice processing.

BPEC will function as a payments factory to receive, digitize and process vendor invoices in a timely and accurate manner. In addition, the centre will receive and account for Bank Guarantees (BGs) & other allied activities like release of retention money/ security deposit etc.

➢ Bill Payments

Effective 1st May 2017, the following original documents will need to be sent to BPEC for release of payments:

i) Original Commercial / Tax invoice
ii) Any Supporting documents for payments e.g. Octroi certificate, freight bills, IRN, test certificate
iii) Copy of the Works Contract Tax (WCT) Exemption Certificate for lower/Nil deduction of WCT (Original must be submitted to Kochi Refinery procurement team for their records)

Please send these documents to the following address for payment processing*:

BUSINESS PROCESS EXCELLENCE CENTRE (BPEC)
4th FLOOR, BPCL OFFICE COMPLEX
PLOT NO. 6 SECTOR – 2
BEHIND CIDCO GARDEN, KHARGHAR
NAVI MUMBAI-410210

**Please note that this does not change the BPCL address that needs to be put on the invoice.*

The following documents should not be sent to BPEC:

- Excise invoice (Duplicate invoice For Transporter- DFT)
- User reference manuals
- Test booklets
- BG against Earnest Money Deposit (EMD) etc.

**These documents should be sent to the procurement location i.e Kochi Refinery*

How to Track Status of Bills sent to Business Process Excellence Centre (BPEC)?

1) For every valid bill received at BPEC, the vendor will be communicated with a unique DPID no. on their registered email ID & mobile no. as per BPCL records
2) Vendors can contact Toll Free No. 1800 224 221 during working days between 9.00 AM to 5.00 PM for any payment/ bill related queries
3) Vendors can write to z_vendorhelpdesk@bharatpetroleum.in for any queries
4) The payment status of your invoices can also be check in Vendor Portal (*https://efp.bpcl.in/*)
5) The payment status of your invoices can also be check in Mobile Application (https://ebiz.bpc.co.in/EbizPortal/)
6) For status of specific invoices, vendor can also use SMS application by sending SMS **"STAT (Space) <DPID>"** to 9223112222 from their registered mobile no.

General Guidelines for Invoices

All invoices should be legible and accompanied with supporting documents required for invoice processing as per the PO. Invoices should be compliant with government requirements on tax invoices and should have the following information:

- PO number, clearly mentioned (45XXXXXXXX)
- Vendor code (Available with your BPCL contract)
- Vendor name
- Vendor address, telephone number, email address and point of contact
- Tax registration number (VAT, Service Tax, Excise etc. as applicable)
- The invoice should be in name of Bharat Petroleum Corporation Limited (BPCL)
- Invoice number
- Invoice date
- Specification of goods and services delivered
- Total gross amount and breakup
- Taxes applicable, with individual tax rates matching with the purchase order
- BPCL Location name and address
- Kindly ensure multiple invoices are not bunched together (stapled) whilst sending the same to BPEC for processing.

**Please note that the above information should be present on the invoice, to ensure that the invoice is processed in a timely manner*.

➢ Release of Security Deposit/ Retention Money

Standard Template for Release of Retention Money & Security Deposit is duly attached herewith which should be used by all vendors/contractors while submitting their release of Retention/Security deposit requests to BPEC.

With respect to the said template vendors are required to note the following point:

1) Only single Purchase Order (45XXXXXXXX) / Contract (46XXXXXXXX) can be provided per request letter (separate requests letters for each Purchase Order/ Contract)
2) **Photo copies of old invoices/bills** to which the retention money pertains **should not be attached** with the request letter
3) Request letter must be duly signed by the vendor or their authorized representative
4) There is no requirement for BPCL officers to sign on the said request letter
5) Request letter must be sent to BPEC only after completion of job (for security deposit) or completion of defect liability period (for retention money)
6) Vendors can also send scan copy of the said letter duly signed to z_vendorhelpdesk@bharatpetroleum.in
7) Vendors will also be receiving emails for tracking of these requests on their registered email ID's

➢ Guidelines for Bank Guarantees and Performance Bank Guarantees

All PBGs and BGs should be accompanied with a cover letter stating one of the following (available with your BPCL contract)

- PO/ Contract number
- RFQ number

In addition, please clearly state the following:

- Vendor number
- Vendor Name, address, email address and phone number
- Vendor point of contact
- BPCL location and address

Further, currently on receipt of these BG's, letters are being sent to issuing Bank for BG Confirmation. On many occasions there are delays or no response from Banks with regards to confirmation of BG's which ultimately leads to delay in release of vendor payments.

Considering the above pain points, BPCL has tied up with SBI for implementation of SFMS (Structured Financial Messaging Service) Bank Guarantee Process and the salient features are as given below:

1) Vendors/ Contractors shall provide BPCL's Bank Account No. & IFSC Code (Details given below) to their existing Bank at the time of application for Bank Guarantee in favor of BPCL
2) Your Bank shall issue the Bank Guarantee & send SFMS message to BPCL Bank confirming the Bank Guarantee as genuine
3) **BPCL's Bank (SBI) shall in turn send the said SFMS message to BPCL's dedicated email ID basis which BPEC shall consider the said Bank Guarantee as verified by Bank**
4) Once the above process is completed, BPEC Team shall proceed with the release of payment to vendors which is due against the said Bank Guarantee.

Name of Bank: State Bank of India
Branch: CAG Branch, Mumbai
Account No: 11083980831
IFSC Code: SBIN0009995

REQUEST FOR RELEASE OF SECURITY DEPOSIT

Date: DD/MM/YYYY

To,

The Allied Process Team
BUSINESS PROCESS EXCELLENCE CENTRE
4th FLOOR, BPCL OFFICE COMPLEX
PLOT NO. 6 SECTOR – 2
BEHIND CIDCO GARDEN, KHARGHAR
NEW MUMBAI-410210

Dear Sir,

Sub: - **Request for Release of Security Deposit**

Request you to kindly release the Security Deposit money held by Bharat Petroleum Corp Ltd as per the details given below:

Purchase Order	**(45XXXXXXXX)**
Contract No (if applicable)	**(46XXXXXXXX)**
Vendor Code	
Vendor Name	
Description of Services / Job Carried	
Security Deposit Amount	

(Only one PO/Contract # per Request letter will be accepted)

Thanking you,

Yours faithfully
For M/s…….

_____

REQUEST FOR RELEASE OF RETENTION MONEY

Date: DD/MM/YYYY

To,

The Allied Process Team
BUSINESS PROCESS EXCELLENCE CENTRE
4th FLOOR, BPCL OFFICE COMPLEX
PLOT NO. 6 SECTOR – 2
BEHIND CIDCO GARDEN, KHARGHAR
NEW MUMBAI-410210

Dear Sir,

Sub: - **Request for Release of Retention Money**

Request you to kindly release the retention money held by Bharat Petroleum Corp Ltd as per details given below

The request to release is based on (Please tick whichever applicable)

- ☐ Retention money is due since defect liability period is complete
- ☐ Performance Bank Guarantee submitted against PO/Contract

Purchase Order	**(45XXXXXXXX)**
Contract No (if applicable)	**(46XXXXXXXX)**
Vendor Code	
Vendor Name	
Description of Services / Job Carried	

(Only one PO/Contract # per Request letter will be accepted)

S. No	Invoice Ref. No.	Invoice Date	Invoice Amount	Performance Bank Guarantee No. (if retention release against submission of PBG)	Retention Amount
1					
2					

Thanking you,

Yours faithfully
For M/s……

A. Guidance Note for filing the template for new vendor creation-

1. All annexure/details in annexure are mandatory to be filled. If any of the annexure/detail is not applicable to you, please write "Not Applicable" (NA) for the same.
2. All the annexure are required to be dated, signed and stamped by the authorized signatory as per table below –

S. No.	Type of organization	Authorized signatory
1	Individual/ Sole proprietor	Individual /Sole proprietor (with seal)
2	HUF	Karta of Family(with seal))/authorized signatory (with seal)
3	Partnership Firm	Designated partner (with seal))/authorized signatory (with seal)
4	Others	Designated officer (with seal))/authorized signatory (with seal)

3. Please attach self attested copies of all relevant certificates/documents (latest) as mentioned below while submitting the details to us –

Annexure	Particulars	Documents required
1	Company and Tax related data	a. Certificate of incorporation under relevant act/ partnership deed/trust deed b. PAN card c. GST registration certificate, if registered
2	NEFT data	a. Latest Bank Certification- dated, signed and attested with bank seal **OR** b. Cancelled copy of cheque, self attested and stamped.
3	MSME	MSME/Udyog Aadhar registration certificate, if registered under MSME

4. Please indicate E-mail Id and mobile No. to be used by BPCL for sending communication relating to invoice status, TDS certificates, Payment advice etc.
5. The address provided should be as per the GST registration address. However, a different communication address can be given in the Annexure-1 provided the state for which GST number is given and the state of communication address is same.
6. Please indicate whether you are registered, registered under composition scheme of GST act or unregistered under GST**. In case of GST registrations in more than one state, kindly fill in separate template as well as provide full set of documents for each registration**. In case, there is more than one registration no. in one state, please specify “Business Division” of each GST registration number as well.
7. If you are registered under MSME/Udyog Aadhar, please fill Annexure-3 as well.

B. <u>Guidelines for change in master data for existing vendor code-</u>

In case of updation of specific details for your existing vendor code, following details is mandatory-

S.no. as per Annexure-1	**Particulars**	**Mandatory/Optional**
2	E-mail ID	Mandatory
3	Mobile No.	Mandatory
4	Telephone No.	Optional
5	Communication Address as per GST registration address	Mandatory
6	PAN Number	Mandatory, if only PAN updation
7	Whether registered under GST	Mandatory , if only GST updation
8	GST Regn no. /Composition registration no.	
9	Whether unit **for which GST no. is provided** is located in SEZ	
10	Whether having multiple registration in a state	

Template for Updation of Contact Details

Sr. No	Description	Vendor Response	Remarks
1	Vendor code		
2	Vendor Name		
3	PAN Card No.		
4	E-mail ID		Pls. indicate e-mail Id to be used by us for sending invoice status, payment advice, TDS certificate, Communication etc.
5	Mobile No.		
6	Telephone No.	STD Code: Landline No. :	Pls. indicate STD code followed by Telephone No.
7	Name of Contact person		

I/We confirm that information provided above is true to my knowledge & belief.

Date :_____

_____ (Name of Authorized signatory)

_____ (Signature of Authorized signatory)

_____ (Company Seal)

Place:_____

BHARAT PETROLEUM CORPORATION LIMITED
SOCIAL MEDIA POLICY FOR BUSINESS PARTNERS

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TERMS AND CONDITIONS FOR ACCEPTABLE USE OF SOCIAL MEDIA BY BUSINESS PARTNERS

1. OBJECTIVE

Social media has become part of everyday life and a means of communication and sharing information with others. Every organization recognises the benefits that social media tools can provide, and also reckons the challenges it brings.

These terms and conditions ("**Social Media T&Cs**") seek to provide clear guidance on acceptable standards of conduct and practices to be followed by the Business Partners (*as defined below*) of Bharat Petroleum Corporation Limited ("**Corporation**"), in the usage of social media tools during and post their association with the Corporation. These terms and conditions are intended to protect and safeguard *inter alia* the interests and reputation of the Corporation, in the access, use of or participation on Social Media (*as defined below*) platforms by such constituents.

It is important to maintain the highest degree of professional standard that is associated with the Corporation's name, brand and reputation. Constituents must constantly be aware of the risk of damaging the Corporation's name or reputation in public forums. These terms and conditions should be adhered to by each constituent at all times and should be read harmoniously and in conjunction with the terms of their engagement with the Corporation, as well as other applicable policies and directions issued by Corporation, from time to time, including the Relevant Documents (*as defined below*).

1.1. Social Media

Social Media includes any web or mobile based platform that enables an individual or agency to communicate interactively and enables exchange of user generated content. The term "**Social Media**" describes internet-based technologies and practices that people use to share opinions, insights, experiences and perspectives. It may be internal (housed within the Constituent's technology infrastructure and open for use only by the Constituents) or public (widely available to the population of internet users).

These terms and conditions are applicable equally to a wide range of websites and mobile phone / tablet applications, including the following:

(a) Social Networking sites, for example - Facebook, Twitter, and LinkedIn.
(b) Media Sharing sites, for example - Instagram, Snapchat, YouTube
(c) Discussion forums, for example - Reddit, Quora, Digg, Glassdoor
(d) Content Curation network, for example - Pinterest, Flipboard

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(e) Blogging and Publishing sites, for example - WordPress, Tumblr, Medium including blogs
(f) Interest-based network, for example - Goodreads, Houzz
(g) Information sharing sites, such as Wikipedia
(h) Opinion sites (e.g. Yahoo! Answers)
(i) Any other social media platform/s

1.2. Scope and Applicability

These Social Media T&Cs are applicable to all Business Partners (*as defined below*), including any prospective partners of the Corporation (the "**Constituents**").

The Social Media T&Cs provides a framework for the usage of Social Media by the Constituents and non-conformance with these Social Media T&Cs or any other applicable policy or directions issued by the Corporation as may be relevant to the Constituents, may result in penalties ranging from financial to legal liabilities, as set out under the respective contractual understanding between each Business Partner and the Corporation.

1.3. Relevant Documents

These Social Media T&Cs have been formulated in line with the Framework & Guidelines for Use of Social Media for Government Organizations, issued by the Department of Electronics and Information Technology, Ministry of Communications & Information Technology, Government of India.

In addition, these Social Media T&Cs must be read in conjunction with the underlying contract documents including the following documents (collectively, the "**Relevant Documents**"), as may be applicable to each Constituent:

(a) General Conditions of Contract for vendors (relevant clauses are placed at Annexure I);

(b) Transportation Contract Agreement Bulk LPG Transportation Contract By Road (relevant clauses are placed at Annexure II);

(c) PCVO, Retail and Lubes Transport guidelines.

2. CONTENT GUIDELINES

This section seeks to set out the guidelines for content management as well as administration rights of all official Business Partner Social Media accounts and ensure accountability of the authorised representatives of such Business Partner.

The following guidelines on content sharing ("**Content Guidelines**") must be followed, in relation to all content created, posted or shared on Social Media:

(a) All post and other content shared via Social Media shall abide by applicable laws, including the Information Technology Act, 2000 and rules made thereunder, as amended.

(b) The content posted or shared though official Social Media accounts, shall be relevant, engaging and in line with the Corporation's brand and communication strategy, whether in the form of text, images, gifs, videos, etc.

(c) The Constituents shall be mindful of content and the tone associated with it. A negative tonality, sarcasm, dry humour, pun, memes, etc. should be avoided to steer clear from any controversy.

(d) The Constituents shall be careful and ensure that any content posted or shared through the official Social Media accounts does not bring disrepute to the Corporation. Opinion or comments on political observations, religious beliefs, gender biases, etc. must be avoided while operating official Social Media accounts. In the use of official Social Media accounts, the Constituents shall refrain from forwarding or sharing any videos or images or messages, which are considered inappropriate or any content that is considered offensive, obscene or derogatory in nature.

(e) The Constituents shall be cognizant of concerns regarding confidentiality and disclosure requirements, and must at all times, adhere to the Relevant Documents as well as these terms and conditions, to understand what shall be disclosed on a public platform. For instance any communication marked as "privileged" or "restricted" or "confidential" or "not for circulation" should not be shared on Social Media. The Constituents are absolutely prohibited from disclosing commercially sensitive, anticompetitive, private or confidential information. If unsure whether the information that is proposed to be shared falls within one of these categories, authorised representatives of the Constituent may discuss with the concerned official as designated by the Corporation.

(f) The Constituents shall ensure that any references to the Corporation or its employees, or other customers, partners and vendors do not contravene any non-disclosure agreements. The Constituents shall avoid disclosure of any information pertaining to any employee / vendor / customer or individual associated with the Corporation, without their prior consent.

(g) The Constituents shall be vigilant about tagging, mentions and conversations around the Corporation. If it notices any customer complaint, dealer/ distributor/ vendor grievances, media story etc., the same may be flagged to the official channels of the Corporation and will be responded to by authorized personnel within the Corporation.

(h) In the operation of official Social Media accounts, the Constituents shall be cognizant of maintaining professional etiquette for all interactions and shall not initiate or engage in discussions which may be characterised as showcasing a personal opinion such as political or religious beliefs. In

addition, official Social Media accounts should not share any content or comment that may be viewed as colouring the relations between the Corporation and the Government of India or any Ministry / Department of the Central or State Governments.

(i) The Constituents, particularly in the use of official Social Media accounts, shall only post original content, which is free of any copyright infringement or plagiarism. To ensure the reputation and principles of the Corporation are safeguarded, all Constituents must avoid posting content that violates the law, infringes the intellectual property rights of the Corporation and its group companies or of any individual or organization. Any inadvertent posts, which violates these principles, must be removed / deleted immediately upon becoming aware of the implications as set out in these guidelines.

As responsible business partners of the Corporation, the following points must be strictly observed and followed by the Constituents:

(i) Text, photos, images, musical work in any form, video clips, movie clips, or any other content for which the Constituent does not own copyright, must not be used in any form, and in particular for official purposes to promote any activities related to the Corporation, without obtaining consent from the copyright owner. If the copyright owner for such work cannot be identified or if the consent for use of such work is not provided by the copyright owner, the work must not be used by the Constituent.

(ii) Capturing photographs and/or videos of the Corporation's offices, facilities, and other establishments (within or outside) or customer sites is strictly prohibited. Any such illegal images and/or videos of the Corporation's establishments, offices, facilities and factories or other sites and whether directly emailing or otherwise circulating such content via Social Media posts on the Internet, shall attract legal consequences. Official visual materials may be availed from the Corporation and can be requested through email, to the relevant State / Territory team.

(iii) Creation, sharing and/or distribution of videos which make use of unlicensed music is strictly prohibited.

(iv) Unauthorized videos of any events hosted by the Corporation, whether within or outside the Corporation's premises that may be captured by Constituents shall not be shared/distributed on Social Media.

(v) All Constituents must take due care to protect the Corporation's copyright and intellectual property within and outside the organization.

(j) The authorised personnel operating official Social Media accounts of respective Business Partner shall not post unverified news, or news from dubious 'sources', that may project the Corporation in a negative light.

(k) The admins operating official Social Media accounts shall clearly state the source and give due disclaimers while quoting any third-party content through such Social Media accounts.

(l) Additionally, content on official Business Partner Social Media Accounts shall be limited to the coverage of activities related to the business only. However, these accounts can re-share / retweet the posts of Corporation's official Social Media accounts, subject to the veracity of such accounts.

3. ACCEPTABLE USAGE OF SOCIAL MEDIA BY BUSINESS PARTNERS

The following guidelines are applicable to vendors, suppliers and other contractors of the Corporation ("**Business Partners**"), and these are intended to supplement, and do not to replace the terms and conditions or any other agreement or guidelines (including the applicable provisions set out under Annexure I or II of these Social Media T&Cs), which are currently in place to regulate the conduct of such Business Partners:

(a) Business Partners have the discretion to decide whether their Social Media accounts will be used for personal or professional purposes. However, in any event, whether such Social Media accounts are used for official purposes or personal purposes, to the extent that they declare their affiliation with the Corporation in any way, it is deemed that they will abide by these terms and conditions read with the applicable contractual provisions and the Framework & Guidelines for Use of Social Media for Government Organizations, issued by the Department of Electronics and Information Technology, Ministry of Communications & Information Technology, Government of India.

(b) Only official Business Partners accounts are eligible to declare their association with the Corporation or using any content owned by or belonging to the Corporation, including logo, product specifications, product pictures, product catalogues, etc. Such accounts may only post content that are official in nature and reasonably expected to promote the activities specific to its business. Such official Business Partner Social Media account shall be akin to a professional page to promote business interactions and shall not post any content which may showcase the account as expressing opinion on ancillary matters which are not in furtherance of the objective set out under the Relevant Documents, such as posts related to entertainment industry, or political views etc. However, such affiliation or use of Corporation's content, such as logo, product pictures etc. is only limited to use by official Social Media accounts of such Business Partner, and will not, at any time, be used by any authorised or other personnel of such Business Partner, in the operation of a personal Social Media account.

(c) Every Business Partner's official or personal (individual) Social Media account is prohibited from posting / circulating any official communication / document or disclosing any business-related or other confidential information, pertaining to the Corporation, in accordance with the Relevant Documents.

(d) Each Business Partner Social Media account, particularly those accounts which have been permitted to acknowledge their association with the Corporation, has an obligation to exercise caution in the posting or sharing of content on Social Media, and shall undertake adequate diligence prior to posting any content. In particular, such accounts shall be fully cognizant of posting or providing traction to any 'fake news' and shall refrain from posting or sharing unlawful, controversial or unverified news, or news from dubious 'sources', particularly in relation to the Corporation and the Central / State Governments.

(e) The Business Partner Social Media account which are maintained for official purposes, shall refrain from engaging in unlawful or inappropriate posts or sharing any content that may be defamatory or may have the effect of downplaying the Corporation's business or competitors. In addition, such account should also not post or share content using derogatory language or is likely to demean sentiments of anyone with whom they engage in any public communication using Social Media.

(f) Business Partners using Social Media for official purposes and especially those accounts that have been approved by the Corporation, shall maintain professional and proper etiquette in online interaction via Social Media and shall not engage in inappropriate behaviour. Such inappropriate behaviour includes but may not be limited to posting, sharing or endorsing in any form, any content which may be considered as:

(i) Divisive, unethical or unlawful at the workplace;

(ii) False, or derogatory, or amounting to bullying, trolling, intimidating, or harassing including using offensive, defamatory, threatening, discriminating, obscene or insulting language;

(iii) A misrepresentation of the Corporation, such as creating any unofficial groups or networks (whether intentional or unintentional) using the Corporation's name, logo, or email address;

(iv) Compromising the confidentiality (of the Constituents and/or the Corporation's information), or creating a conflict of interest;

(v) Disclosing commercially sensitive, anticompetitive, or information which is marked as restricted for internal circulation within the Corporation;

(vi) Misleading and misrepresentative, such as creating or endorsing any video channel / account representing the Corporation or any specific Business Unit, or otherwise posting or sharing any content owned by the

Corporation, unless such content has been posted on verifiable official Social Media accounts of the Corporation;

(vii) Amounting to pornographic material (that is, writing, pictures, films and video clips of a sexually explicit nature) or content that could be considered as offensive, obscene or criminal; or

(viii) Creating or likely to create any liability (whether criminal or civil, for the Corporation).

Where evidence of misuse or inappropriate behaviour is brought to the notice of the Corporation, the Corporation may undertake a more detailed investigation in accordance with its procedures, which may involve the examination and disclosure of records by those nominated to undertake the investigation and any witnesses involved in the investigation. If necessary, action may be taken against such Business Partner under the respective contractual agreement and in case required, such information may be handed to authorities in connection with the investigation.

(g) Any violation of these Social Media T&Cs shall be treated as violation of General Conditions of Contract of the Corporation and may invite action by the Corporation as deemed fit, based on the sole discretion of the Corporation.

(h) The Corporation has a zero-tolerance policy for any complaints that may be brought to its notice via Business Partner Social Media accounts. In the event the Business Partner or its associates *etc.* are dissatisfied with the Corporation, or have any unresolved query or grievance against the Corporation or any individual who is in the employment or association of the Corporation, the Business Partner or such person associated with it must reach out to the designated official and follow the hierarchy established within the Corporation. All such communication must follow the formal processes that are available as per contractual agreement with the Corporation. In the event the Business Partner, whether by itself or its employee or associate publishes any such information on Social Media or discloses details of any complaint or dispute with the Corporation on a public forum through Social Media, it will be in breach of the terms of these T&Cs and its agreement with the Corporation, and the Corporation will have the right to pursue such legal remedies as may be appropriate and available under law.

(i) Upon termination or expiry of the Relevant Document / underlying contractual agreement between the Corporation and the Business Partner, the Business Partner shall ensure that all references and posts which disclose any affiliation with the Corporation has been scrubbed from the Business Partner's Social Media account and a formal written declaration to this effect must be provided to the Corporation, within 7 days of such termination or expiry.

4. ENFORCEABILITY AND COMPLIANCE

4.1. These Social Media T&Cs are construed to be a part of the Relevant Documents and form an integral part of the contractual understanding between the Corporation and the Business Partner.

4.2. Any violation of the Social Media T&Cs shall be treated as violation of respective contractual understanding between the Corporation and the Business Partner, and may invite appropriate action by the Corporation as deemed fit.

4.3. The Business Partner agrees and understands that all activities of the Business Partner's official Social Media Account is subject to monitoring and periodic audits by the Corporation, if required.

4.4. The Business Partner will provide its written acknowledgement to these Social Media T&Cs, in the form set out in Annexure III, failing which the Corporation may take such action as may be necessary to ensure compliance with these terms and conditions.

4.5. The concerned official of the Corporation shall be responsible for reviewing the compliance of these Social Media T&Cs as may be required to ensure that it meets legal requirements and reflects best practice.

ANNEXURE I

GENERAL CONDITIONS OF CONTRACT FOR VENDORS

Clause 34: Contractor's Subordinate Staff and Their Conducts:

34.2 If and whenever any of the Contractor's or sub-contractor's agents, sub-agents, assistants supervisor or other employees shall in the opinion of Engineer-in-Charge be guilty of any misconduct or be incompetent or insufficiently qualified or negligent in the performance of their duties or that in the opinion of the owner or Engineer-in-Charge, it is undesirable for administrative or any other reason for such person or persons to be employed in the works, the contractor, if so directed by the Engineer-in- Charge, shall at once remove such person or persons from employment thereon. Any person or persons so removed from the works shall not again be employed in connection with the works without the written permission of the Engineer-in-Charge. Any person so removed from the works shall be immediately replaced at the expense of the contractor by a qualified and competent substitute. Should the contractor be requested to repatriate any person removed from the works he shall do so and shall bear all costs in connection herewith.

34.3 The contractor shall be responsible for the proper behaviour of all the staff, supervisor, workmen and others and shall exercise a proper degree of control over them and in particular, and without prejudice to the said generality, the contractor shall be bound to prohibit and prevent any employees from trespassing or acting in any way detrimental or prejudicial to the interest of the community or of the properties or occupiers of land and properties in the neighbourhood and in the event of such employee so trespassing, the contractor shall be responsible therefore and relieve the Owner of all consequent claims or actions for damages or injury or any other grounds whatsoever. The decision of the Engineer-in-Charge upon any matter arising under this clause shall be final. Contractor shall ensure that none of their employees are ever engaged in any anti-national activities.

Clause 44: Liens

44.2 Contractor will not disclose details of the work to any person or persons except those engaged in its performance, and only to the extent required for the particular portion of the work being done. Contractor will not give any items concerning details of the work to the press or a news disseminating agency without prior written approval from Engineer-in-Charge. Contractor shall not take any pictures on site without written approval of Engineer-in-Charge.

ANNEXURE II

TRANSPORTATION CONTRACT AGREEMENT FOR BULK LPG TRANSPORTATION CONTRACT BY ROAD

Clause 28:

(a) The Transporter shall remain at all times liable to the Corporation for any loss or damage caused to any building, plant machinery or the property of the Corporation due to careless, negligent, inexperienced act or default of the Transporter, their agents, representative or employees. The Corporation shall be entitled to deduct from the amounts payable to the Transporter under this Agreement or otherwise the loss or damages so suffered.

(b) The Transporter will be liable for any loss and/or injury to Corporation's employee due to careless, negligent, wrongful act or default of the Transporter, his/their representatives or employees in carrying out the job under this contract.

Clause 38:

All terms & conditions stipulated in the Guidelines for Bidders, Tender Terms & Conditions, Declarations, Agreement, Industry Bulk LPG Transport Discipline Guidelines and other documents furnished with the Tender and related correspondence shall form part of the contract. The Corporations are entitled to frame and implement the Policy(ies) applicable to Transporters, and to modify and amend the same from time to time, and that the Policy(ies) as framed, amended and modified would be binding on the Transporters, immediately upon being communicated to them.

Clauses from Transportation Agreement of Retail and MAK Lubricants

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ANNEUXRE III

FORMAT OF ACKNOWLEDGEMENT

To,
[*insert details to whom such acknowledgement may be addressed***]**

[*in the case of an individual or sole proprietorship*] I am _____ , an inhabitant of _____ and carrying on business of _____

OR

We are [*insert names of all partners of firm*] carrying on business at _____ in partnership under the firm name and style of M/s. _____

OR

[*insert name of Limited Company or a Co-operative Society / Trust Co-operative*] incorporated under the laws of India and having its Registered Office at _____
_____

I / We have entered into a [insert name of agreement] dated [*insert date*] ("**Agreement**") for the [*insert purpose*], with Bharat Petroleum Corporation Limited ("**BPCL**").

In furtherance thereof, we have been provided with a copy of the Terms and Conditions for Acceptable Use of Social Media by Business Partners, issued by the Corporation.

I / We have read and understood BPCL's Terms and Conditions for Acceptable Use of Social Media by Business Partners and agree to abide by it.

I / We understand that any violation of the above conditions may result in disciplinary action, or termination or revocation of the Agreement.

In acknowledgement thereof, please see below our acceptance of the Terms and Conditions for Acceptable Use of Social Media by Business Partners, issued by the Corporation, duly signed and acknowledged by [*insert name*], in the capacity of our authorised representative.

A copy of such authorisation is also attached for your record.

_____
(Signature & seal)

Name:
Designation: Date:

BPCL Supplier / Vendor Advisory on Environmental Criteria

Dear Suppliers / Vendors,
As you aware that environment is one of the most precious gifts given to us by Mother Nature. We must be conscious of our actions and act responsibly to preserve and conserve the environment. BPCL has always endeavoured to be a responsible & conscious corporate citizen. We would also want to engage you - our suppliers - in the efforts to reduce our impact on the environment.

Below are the advisory guidelines on environmental criteria, which we want our suppliers to follow:

1. Emission / Pollution Control (Air, Water, Soil, Noise etc.)

a. The organization and its all operations should follow all laws related to emission / pollution norms.
b. The organization should get all necessary approvals & certifications for emission / pollution control from relevant authorities for plants, equipment, vehicles etc.
c. Monitoring mechanism should be put in place for all emissions / pollution emitted from organization owned assets e.g. Equipment, vehicles etc.
d. Organization should conduct training and awareness programs for the staff on emission / pollution impacts & prevention.

2. Energy

a. Monitoring energy consumption by the organization from all sources should be done.
b. Organization should strive to reduce energy consumption by employing energy efficiency & conservation measures.
c. Use of alternate fuel sources & renewable energy should be promoted by the organization.

3. Water

a. Water consumption from all the sources should be monitored by the organization.
b. Reduction in water consumption should be aimed by treating waste water & alternative use of waste water.
c. Waste water should be treated to remove harmful elements before releasing it to the eco-system.

4. Reducing Resource Intensity

a. Optimization / re-use / recycle techniques should be used to reduce the use of resources.
b. Minimizing use of resources having major environmental impact should be done and substitutes should be found.
c. Proper handling should be done for hazardous resources (chemicals etc.) having impact on humans & eco system.

5. Waste Management

a. Waste segregation based on type of waste (solid, liquid, hazardous, etc.) generated by the organization should be done.
b. Opportunities for recycling & re-use of waste should be identified & promoted by the organization.
c. Hazardous waste should be handled by trained personnel & disposed to authorized agencies only.

6. Risk Mitigation

a. Environmental Risk Assessment should be carried out for all the organization's operations.
b. The severity / extent of damage due to the environmental risk should be estimated.
c. Staff / personnel involved in operations related to environmental risk should be trained and regular awareness programs should be conducted.

The guidelines are indicative of the direction that the suppliers should take to be more environmentally supportive. Suppliers should join hands with BPCL in making a value chain that is environmentally aware and responsible.

ANNEXURE-I TO SPC

PACKING, MARKING, SHIPPING AND DOCUMENTATION SPECIFICATION

स्वदेशी सामग्रियों के लिए पैकिंग, मार्किंग, शिपिंग और दस्तावेज विनिर्देश

PACKING, MARKING, SHIPPING AND DOCUMENTATION

SPECIFICATIONS FOR INDIGENOUS MATERIALS

Rev. No	Date	Purpose	Prepared by	Reviewed by	Approved by
2	20.04.2024	ISSUED FOR COMPLIANCE	DDC	DRC	CGM & HOD (Shipping)
1	10-09-2018	ISSUED FOR COMPLIANCE	DDC	DRC	ED (SCM)
0	05-12-2012	ISSUED FOR COMPLIANCE	DDC	DRC	GM (I)

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Abbreviations:

CM	-	Centimeters
EIL	-	Engineers India Limited
E-way bill	-	Electronic Way Bill
Kg	-	Kilograms
FTL	-	Full Truck / Trailer Load
KGS	-	Kilograms
L.R.	-	Lorry Receipt
GR.	-	Goods Receipt
mm	-	Millimetre
MT	-	Metric Ton
NO. / NOS.	-	Number / Numbers
P.O.	-	Purchase Order
RCM	-	Resident Construction Manager

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1. GENERAL

1.1 Purpose

This specification details the minimum requirements for the preservation, packing, marking, shipping and documentation of Products, materials and equipment as specified in the respective Purchase Orders or Contracts. This specification forms an integral part of the Purchase Order or Contract issued. However, whenever specific instructions are detailed in the Purchase Order / Purchase Requisition and are in conflict with this specification, particular instructions mentioned in the individual Purchase Order /Purchase Requisition or Contract shall prevail over this general specification.

1.2 Requirements and Conditions

The following requirements are intended as minimum requirements, and compliance to these requirements in no way absolves or relieves Supplier of any responsibility or obligation outlined in the Purchase Order. Supplier shall ensure compliance to the preservation, packing ,marking ,shipping and documentation guidelines specified in this document.

In all circumstances, the packing will be designed and constructed in order to support materials during transportation as well as to prevent the materials from damage due to impact, extreme climatic conditions, sun and rain. It must be ensured that the materials and equipments are delivered to the job site by sea, road or air, in good condition.

The Supplier shall, at its own cost, ensure items to be transported are carefully packed and protected in accordance with best practice, having due regard to the climatic conditions encountered during the passage, method of carriage and handling / loading / unloading processes. In addition to any of the measures detailed within this Specification, the Supplier shall apply any other measures that, in its experience, are required to safeguard the particular item. The Supplier shall obtain the approval of EIL / Owner for any variation to the packing, marking and shipping requirements outlined in this Specification.

1.3 Responsibility and liability

Supplier shall be held responsible for any damages and / or losses of all and any kind that may occur by not respecting these specifications. Owner / EIL reserves the right to reject any packing when the packing does not conform to these specifications / instructions and / or when the packing does not ensure perfect protection of the goods and materials. Supplier is responsible for the weights and dimensions declared and the marking of the packages. Supplier will be held responsible in the event goods and materials becoming useless, broken or damaged as a result of poor packing and / or stowing or due to corrosion because of insufficient or inadequate protection. All direct and indirect costs resulting thereof will be back charged to Supplier.

2. CLEANING AND PRESERVATION

2.1 Cleaning

All equipment, materials and parts shall be thoroughly cleaned inside and outside and shall be free from grease, oil, weld spatter, rust and all other foreign matter prior to preservation.

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2.2 Preservation

Articles may be exposed to severe environmental or climatic conditions, moisture and dust. All materials and equipment shall be packaged suitable to prevent damage and deterioration during transportation and storage. Where damage occurs due to inadequate packaging of items, the liability for costs associated with rectification of the damage will be to the Supplier's account. All metals subject to corrosion shall be treated with a corrosion preservative suitable for the purpose intended. Products susceptible to corrosion must be packaged in a dry non-corrosive environment for the duration of shipment and storage, for a minimum of 1 year or any other higher duration specified in the PO/PR. All bright and machined parts shall be coated with a recognized rust preventative suited to the particular application concerned. All internal parts of machinery shall be treated with lubricant containing rust and oxidation inhibitors to protect equipment from any possible damage. Such lubricants shall be compatible with those which will subsequently be used in service and shall be identified by appropriate tagging. Electrical equipment and instrumentation shall be packed with a suitable desiccant. Delicate equipment such as instruments, electrical switchboards and panels etc. shall be packed for protection to eliminate the effects of vibration.

Wherever necessary, desiccant packs shall be kept to avoid excessive moisture in the packing.

3. PACKING

3.1 General

The instructions herein shall be considered as general directives and minimal requirements, which are applicable to the packing of all equipment and materials. The Supplier is responsible for the correct and adequate packing of the equipment and materials so that these equipment and materials will arrive at destination undamaged and the packing itself in such a condition that it will be suitable for a minimum of 1 year storage or as specified otherwise.

3.2 Packaging Materials

All packaging together with packaging and protective materials shall be new, maintain its integrity and perform its intended function while being transported, handled and stored.

The quality of packing shall provide maximum protection against damage, breakage and pilferage during transport, storage and multiple handling, including handling by hoisting, lifting devices and / or forklift trucks. Material used for packaging, packing, wrapping, sealers, moisture resistant barriers and corrosion preservatives shall be of recognized brands and grades and shall conform to the best world standards.

Packaged Products showing any damage, defect or shortage resulting from improper & inadequate packaging, packaging materials or packing procedure or having concealed damage or being short at the time of unpacking shall be subject to rejection and be replaced at the Supplier's cost

3.3 Packing requirements

3.3.1 Wooden Boxes and Crates

Interior support board shall be of strength to withstand multiple handling. Tops of crates shall be one piece wherever possible to avoid seepage through cracks; otherwise a top coating is required. Waterproof lining shall be used for sides, ends and top of crates, proper venting of cargo boxes containing machinery is required, as well as sufficient use

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of desiccants. Crates shall be diagonally braced on all faces and suitable for hooks, slings and forklifts. Heavy items shall be secured with wood braces. Fragile items shall be cushioned. Material packed in large boxes shall be layered between plywood sheets to maintain load integrity during transit. Banding shall be used on all boxes to prevent distortion / deformation of the box.

3.3.2 Pallets

When equipment and/or materials are packed on pallets (wood or synthetic), these should be solid double deck pallets that provide adequate load support during transportation and storage (under not always ideal conditions). The pallets should have a dynamic load capacity, enough to carry the mass loaded on the pallet. Where feasible, the top surface of the pallet must be flat. The pallet design must enable safe handling by forklift, cranes etc. and storage on rough surface. Pallets shall be covered with wrapping. All corners, horizontal and vertical shall be protected with cardboard protection strips. The pallet must be tide on all sides with steel or synthetic straps.

3.4 Packaging

All equipment and materials shall be properly fixed (by bolts, clamps, supporting beams, etc.) in such a way that internal movements and / or loosening is impossible. Under the top cover (roof) depending on the case and crate length, sufficient number of strong beams shall be placed and properly fixed in order to allow stacking of the cases and crates avoiding any compression. Equipment parts and materials which may be subject to damage by vibration and /or shock must be protected using shock-absorbing material. All equipment and materials which may be damaged by moisture shall be packed in airtight bags in which sufficient desiccant material (e.g. silica gel) is placed. All openings on the equipment must be closed with wooden / metal or plastic covers to prevent damage to the openings and interiors. Fragile and loose parts easily damageable pertaining to the equipment must be securely and properly packed in a separate case.

3.5 Waterproofing

Cases including the cover shall be internally lined with a strong type of waterproof paper or plastic foil. Equipment and materials shall always be packed in a foil (polyethylene or aluminum) for extra (double) protection against rainfall. Those foils shall be applied in such a way that they are self draining.

3.6 Hazardous cargo

The hazardous materials shall be packed in accordance with and in cognizance to the applicable rules, regulations and tariff of all Governmental Authorities and other Governing bodies. Hazardous materials shall always be packed and documented separately from any other material. It shall be the responsibility of the seller of hazardous materials to designate the materials as hazardous and to identify each material by its proper commodity name and its hazardous materials class code. Safety and emergency procedures shall be displayed outside the package. Any certificates required for transportation or for statutory authorities as applicable, needs to be provided before shipment of the goods.

4. GUIDELINES FOR PACKING GOODS

In subsequent paragraphs details of different types of packing for different types of goods are defined. Supplier shall make packing details / procedure based on the applicable guidelines

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Chemicals in powder form, catalysts, refractories & like materials etc. shall be packed in drums only.

4.1 Pipe

All pipes 2" included and below shall be packed in crates.. Pipes over 2" up to 6", shall be bundled and banded in bundles of uniform length. Bundling is carried out with U-IRON or traversal planks, joined with threaded connecting rods with locknuts.. Bundle weight shall not exceed 2,000 kg. All pipes are to be capped and ends sealed with waterproof tape (tape is not necessary if end caps are of the pre-shrunk or self-sealing type).Pipes larger than 6" shall be shipped as single lengths with the ends capped. End caps are to be of the recessed type to enable the use of soft faced hooks, but still completely sealing the end and also protecting the weld. All stainless steel / non-ferrous piping must be packed separately in wooden crates. Any banding of bundles is to be with the same material. The bundling and packing of pipe and instrument tubing shall enable the safe discharge of pipe on site using clamps and forklifts. All pipes shall be supported along their lengths to prevent bending / flexing during transport. During loading / unloading slings shall be applied to the center of the load as well as on each end to prevent bowing.

Pipe and rigid conduit smaller than DN50 diameter shall be bundled in units not to exceed 1000 kg. Threaded and coupled pipe shall be equipped with plastic thread protectors. All material shall be segregated and shipped by generic material type to prevent cross contamination. Where wire rope or chains are used, adequate padding shall be used at points of contact with pipe. Care must be taken to prevent any chafing of pipes against each other or against the metal structures of the vehicle during transportation. Where necessary, such metal structures must be padded with planks or plastic tubes. Skids and dunnage must be used between the bundles in transit as well as in the storage of coated pipes.

4.2 Pipe Fittings, Flanges, Valves and Gaskets

All pipe fittings, flanges and valves up to 6", are to be packed in cases / crates. For items over 6", these may be fixed securely to a pallet base and enclosed in a crate, for protection. All flange faces / bevel ends shall be suitably protected with plastic caps / end protectors. Where valves have actuators attached, rigidity must be ensured for the valve and actuator. The vulnerable parts of the actuator are to be completely protected within a wooden crate. Empty spaces shall be filled with expanded PU foam to restrict movement in the crate. All stainless steel fittings, flanges and valves of all sizes, must be packed separately in wooden crates. Any strapping is to be with the same material. Gaskets are considered fragile and shall be treated as such. Individual gasket sizes shall be boxed and labeled separately.

All threaded fittings and pipes should be greased and provided with plastic caps.

4.3 Steel Structure and Plates

Structural steel sections and plates shall be strapped in bundles of convenient size and weight for handling. Rolled and shaped plates shall be provided with suitable bracing to eliminate distortion during transit, and shall be bundled in uniform lengths. Each bundle shall be marked with a metal tag, hard stamped, secured under steel wrapping.

4.4 Itemized Equipment

Units or parts belonging to main equipment but separately packed shall be clearly marked for easy identification with the main equipment to which they relate.

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All gasket face of flanges, machined working surfaces and threaded parts of all equipment shall be covered with rust preventive tape or by application of oil based alkyd primers or zinc bases epoxies or thin zinc silicate coatings specially formulated for the preservation of CS and Alloy Steels. All flanged connections of vessels shall be protected by metal plates correctly casketed by wooden plugs or plastic caps suitably secured in position.

Vessels shall, where possible, be packed on skid constructions and secured with adjustable steel straps. Manholes and other major openings shall be protected with cover flanges or metallic plates firmly secured. Smaller openings shall be closed with plastic plugs / caps.

All vessel internals and items not installed by Supplier at works including accessories such as small parts, bolts, nuts, gaskets, etc. shall be packed in wooden cases separately for each vessel or apparatus and marked with the same item number as the vessel / apparatus in order to protect all parts from loss or damage in transit. Internals, bolts and gaskets for service / testing operations shall be supplied with the vessels / items by Supplier and all internals shall be boxed separately and marked according to marking procedure.Each item shall be supplied correctly and identified for field installation by others.

All vessels / heat exchangers or items of such construction shall be dried, thoroughly cleaned inside and be free of all dirt and loose foreign materials. The equipment shall be filled with Nitrogen. Make up arrangement for loss of Nitrogen along with a pressure gauge shall be installed.

All commissioning spare parts shall be packed separately and marked with the relevant main item number.

Pumps, compressors, rotating equipment, turbines and motors will require specific packing and preservation as per the relevant Technical Specification. For skidded equipment openings, flange faces, threaded connections, wires, valve stems, and other component parts that may be subjected to mechanical damage or corrosion shall be adequately protected. This protection shall be applied to all components, both those removed and boxed and those remaining in place on the skid assembly. Each skid shall have one box strapped to it containing a complete set of drawings together with a manual covering installation and operating instructions and other pertinent instructions required for reassembly of components that were disassembled for shipment.

4.5 Control Panels and Electrical Devices

Equipment such as control panels, instruments and electrical devices shall be packed in an interior moisture / vapor-proof barrier with silica gel or comparable desiccant. Desiccants shall be bagged to avoid dispersing in containers. The quantity of desiccant shall be calculated in accordance with the manufacturer's recommendations. Equipment must be secured to the case with bolts, blocks or straps. Adequate precautions (for example, shaft locks to prevent longitudinal / rotational movement of rotor shafts in motors) shall be included in the packaging of all equipment which has plain, ball or roller bearings so as to minimize the risk of bearing damage.

4.6 Instruments

Instruments shall be thoroughly clean, dry and free from rust and individually wrapped using polythene sheets / U foam / Thermocol sheets depending upon the items and then packed in wooden boxes. The left out spaces and top of the boxes should be filled with rubberized coir to get proper cushioning effect. Special attention shall be paid for arresting movements of their operating mechanism during transportation. Silica gel or

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desiccant (with recognized brands / grades) shall be strapped inside but shall not come into contact with the paintwork.

4.7 Cables

All electric cables to be packed in new cable drums made of steel and painted with epoxy resin paint. Cable ends to be carefully protected before packing. Polythene sheet should be wrapped over the cables and sealed properly. Cable drum can be put in wooden crates for ease in handling and transportation.

4.8 Saddles, Supports, Spiders and Lifting Equipment

All items which cannot be transported without independent supports must be supplied with Shipping saddles suitable for land and / or ocean transit. Such transport saddles are to be included within the scope of supply. Supplier is to advise of any requirement for lifting beams or other specialized lifting equipment and will include provision for use of such equipment for loading purposes. The Supplier is responsible for ensuring that all modules and oversize items are adequately braced and where required, plastic wrapped suitable for transport. Modules and oversize items shall be packaged to prevent damage during transport.

4.9 Assortment Of Package / Spare Parts for Erection and Commissioning

Equipment and / or parts of different item numbers shall not be packed together in the same package. Small goods such as accessories, spare parts for erection and commissioning and special tools shall be packed separately in respective inner boxes with tags or labels attached there, being clearly indicating their contents. In case such accessories, spare parts and special tools are packed in separate boxes / crates, item no. of main equipment shall be clearly mentioned in Main Shipping Mark for easy identification.

5. MARKING

5.1 General

The purpose of the marking is to identify the packages and detail the weight and dimensions to assure efficient and correct handling during transport and upon arrival at destination.

5.2 Marking Instructions & dispatch details

Packages and crates will be marked with indelible black paint. Marking must be perfectly legible. All packages shall be clearly and properly marked in English language if not otherwise specified.

The shipping marks, shall be stenciled on two sides and one end marked with clear characters at least 5 centimeters high (where crate size permits, otherwise use optimum size for each package dimension).

The texts shall be printed by means of stamps, stencil-plates or electronically. The use of stickers is not allowed, unless securely covered by plastic. Bundles shall be marked by embossing on two metal tags bearing the shipping marks and placed on each side of the package and securely attaching them to the goods. Paint shall be used on metal surfaces.

Labels or tags to be clearly visible and shall be of a quality to remain visible and remain attached during transit, handling and storage for a minimum period of 12 Months.

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Crates containing fragile articles must be packed with special precaution against risk of breakage and must be stenciled on all sides "FRAGILE - HANDLE WITH CARE". Where crates are not to be overturned, Supplier must show on the crates, clear and readily visible identification, to ensure they are kept in the correct position.

Packages / equipment of 2,000 kg or more must be marked with slinging points on all sides, in addition to the centre of gravity marks.

Number packages consecutively i.e. 1 of 10, 2 of 10, etc. Do not duplicate package numbers. SUPPLIER is responsible for any loss or damage caused by incorrect marking.

All cases/crates shall also be marked with the appropriate international standard graphic symbols for handling.

As a minimum, all cases/crates are to be marked clearly on all four sides with:

"HANDLE WITH CARE" "RIGHT SIDE UP" "KEEP DRY"

In the case of packages with a single gross weight totaling 2,000 kg and / or a height of more than 1m, the centre of gravity shall be clearly marked with the symbol on two adjoining sides. For all items of equipment with an eccentric centre of gravity, this symbol shall be marked at the bottom, side and top of the package.

The slinging and lashing points shall be marked with a chain symbol.

When packing in cases / crates, these packages shall also have metal corners at the slinging points.

External front and rear sides of the boxes shall be planed for writing instructions. To facilitate identification, the required colour coding as per the specifications shall be carried out on each package and on corners of pipes & plates.

In case of bundles or other packages wherever marking cannot be stenciled, the same shall be embossed on metal or similar tag and wired securely at minimum two convenient points and both ends shall be protected / covered with gunny bags upto 18" (Eighteen Inches). In case of loose pipes, sticker of above markings should be pasted on inner wall corner of each pipe on both sides

Dispatch details such as consignor / consignee address, contract and case details, stacking instructions shall be written on one side of the boxes. One copy of packing slip wrapped in polyethylene bag covered with aluminum packing slip holder to be nailed on the external surface of the box. A packing list and preservation instructions shall be enclosed in a clear weatherproof plastic re-sealable envelope stapled to the box such that the receiver may determine contents without opening the container. An additional packing list is to be enclosed in a clear waterproof plastic re-sealable envelope stapled inside the container. Stapling of the envelopes shall not prevent removal of the documents.

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5.3 Shipping Marks

Each package shall be marked on three sides with proper paints / indelible waterproof ink as follows:

(OWNER)

PROJECT

WITH COMPLETE

ADDRESS

(DESTINATION)

PURCHASE ORDER NO. ----------

NET WEIGHT ---------- KGS. GROSS WEIGHT ---------- KGS.

DIMENSIONS ---------- X ---------- X ---------- CMS

PACKAGE NOS. (SL. NO. OF PACKAGE) OF (TOTAL NO. OF PACKAGES)

TAG / ITEM NO. ----------

SUPLLIER'S NAME----------

The details of the Owner / Project are defined specifically in the Purchase Order / Contract.

5.4 Storage Code

The type of storage required is required to be specified, on each packaging in RED colour as follows:

X	Crates or packages to be stored outdoor without covers
XX	Crates or packages to be stored under tarpaulin
XXX	Crates or packages to be stored in covered or enclosed premises
XXXX	Crates or packages which must be stored in air-conditioned premises

6. SHIPMENT

Dispatch of material shall be made in accordance with the relevant terms of Purchase Order. Name of the owner, Project, location and other relevant information shall be as per the relevant annexure(s) to the Purchase Order / Contract.

Any change in mode of transport shall be resorted to only after prior approval in writing from EIL / Owner. Supplier shall ensure dispatch of equipment / materials immediately

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after they are inspected and released. All consignments should be booked in the name of 'owner' and not under 'self' basis.

6.1 Dispatch By Road:

a) The Materials shall be dispatched on Door-Delivery basis (smalls or FTL) through a registered transporter.

However, in case, the transporter is nominated by EIL / Owner, the goods shall be dispatched through the same only.

b) The supplier shall ensure with Transport Company the delivery of materials within a reasonable and minimum transit period. A complete set of dispatch documents (Delivery Challan / Invoice / Packing List / Test Certificate / L.R. / E-way Bill number etc.) shall be sent to concerned officials of EIL / Client (as specified elsewhere in RFQ/PO).

6.2 Shipment By Air:

Whenever supplier is instructed by EIL/ Owner to airfreight any material, the supplier shall take prompt action for the same. Immediately after air-shipment is effected, the vendor shall intimate by e-mail, the details of Airway Bill number and date, the flight No., Number of packages etc. to concerned officials of EIL / Client (as specified elsewhere in RFQ/PO).

6.3 Destination:

The consignments should be dispatched to the Consignee / Address as detailed in the Purchase Order.

6.4 Advance Information:

Immediately after a shipment is made supplier shall intimate Underwriter, other concerned officials of EIL / Client (as specified elsewhere in RFQ/PO) vide mail regarding particulars of materials, value, Purchase Order No., date of dispatch, L.R. number, E-way Bill No., truck no., name of Transport Company.

6.5 Transmission of Dispatch Documents :

Supplier shall, within 48 hrs. of the dispatch of the materials depending upon the payment terms of the Purchase Order, either negotiate through Owner's / EIL's Bankers (as applicable) or forward directly, by Courier the complete set of dispatch Documents to Owner / EIL. as applicable in line with the PO terms & conditions. The supplier shall be responsible for any delay in clearance of the consignment at destination and consequent wharfage / demurrage, if any, due to delay in transmittal of the required documents.

7. TRANSIT RISK INSURANCE

All equipments / materials will be insured for transit risk by (Owners) unless otherwise specified. The insurance cover will be provided from warehouse-to-warehouse.

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विदेशी सामग्रियों के लिए पैकिंग, मार्किंग, शिपिंग और दस्तावेज विनिर्देश

PACKING, MARKING, SHIPPING AND DOCUMENTATION SPECIFICATIONS FOR IMPORTED MATERIALS

Rev. No	Date	Purpose	Prepared by	Reviewed by	Approved by
2	20-04-2024	ISSUED FOR COMPLIANCE	DDC	DRC	CGM (I) & HOD (Shpg)
1	10-09-2018	ISSUED FOR COMPLIANCE	DDC	DRC	ED (SCM)
0	05-12-2012	ISSUED FOR COMPLIANCE	DDC	DRC	GM (I)

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Abbreviations:

CM	-	Centimeters
DDP	-	Delivered Duty Paid
DGR	-	Dangerous Goods Regulation
EIL	-	Engineers India Limited
ETA	-	Estimated time of arrival at Destination Port
ETD	-	Estimated time of Departure at the Port of Loading
EXIM	-	Export Import Policy of India
FCA	-	Free Carrier
IATA	-	International Air Transport Association
IMDG	-	International Maritime Dangerous Goods
ISPM 15	-	International Standards of Phytosanitory Measures 15
Kg	-	Kilograms
mm	-	Millimetre
MSDS	-	Material Safety Data Sheet
MT	-	Metric Ton
NO. / NOS.	-	Number / Numbers
P.O.	-	Purchase Order
UN NO.	-	Unique Identification Number given for Hazardous Goods

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1. GENERAL

1.1 Purpose

This specification details the minimum requirements for the preservation, packing, marking, shipping and documentation of Products, materials and equipment as specified in the respective Purchase Orders or Contracts. This specification forms an integral part of the Purchase Order or Contract issued. However, whenever specific instructions are detailed in the Purchase Order / Purchase Requisition and are in conflict with this specification, particular instructions mentioned in the individual Purchase Order or Contract or Purchase Requisition shall prevail over this general specification.

1.2 Scope

Supplier shall be responsible for sea worthy export packing meeting the minimum requirement specified herein & capable of performing all necessary functions like prevention of damage to the contents, sufficient to support frequent handling and lengthy period of outdoor storage in adverse weather conditions. Workmanship and materials used shall be of high standard meeting the technical requirements and in accordance with best commercial export packing practices.
The scope of this specification is to define Supplier's responsibilities in terms of:

- Preservation of the materials and equipments before packing.
- Packing of the materials and equipments for road, rail, sea and/or air transportation to ultimate destination i.e. project site.
- Making cases/crates
- Chemical Treatment/Fumigation before packing to prevent fungus and damage
- Marking of cases/crates.
- Documentation for shipments

1.3 Responsibility and liability

Supplier shall be held responsible for any damages and/or losses of all and any kind that may occur by not respecting these specifications. Owner/EIL reserves the right to reject any packing when the packing does not conform to these specifications/instructions and/or when the packing does not ensure perfect protection of the goods and materials. Supplier is responsible for the weights and dimensions declared, and the marking of the packages. Supplier will be held responsible in the event goods and materials becoming useless, broken or damaged as a result of poor packing and/or stowing or due to corrosion, because of insufficient or inadequate protection. All direct and indirect costs resulting thereof will be back charged to Supplier.

1.4 Requirements and Conditions

The following requirements are intended as minimum requirements, and compliance to these requirements in no way absolves or relieves Supplier of any responsibility or obligation outlined in the Purchase Order / Purchase Requisition. In all circumstances, the packing will be designed and constructed in order to support materials during transportation as well as to prevent the materials from damage due to impact, extreme climatic conditions, sun and rain. It must be ensured that the materials and equipments are delivered to the job site by sea, road or air, in good condition.

The method of packing and packaging materials must be sufficient to protect the goods from the hazards associated with handling and storage conditions encountered in transit

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and at site. The method of marking packages must be sufficient to distinguish each package from others. The documentation prepared for shipments must be sufficient for use in international transportation and customs clearance procedures.

The Supplier shall, at its own cost, ensure items to be transported are carefully packed and protected in accordance with best practice, having due regard to the climatic conditions encountered during the passage, method of carriage and handling / loading / unloading processes. In addition to any of the measures detailed within this Specification, the Supplier shall apply any other measures that, in its experience, are required to safeguard the particular item. The Supplier shall obtain the approval of EIL/Owner for any variation to the packing, marking and shipping requirements outlined in this Specification and PO/PR as applicable.

2. CLEANING AND PRESERVATION

2.1 Cleaning

All equipment, materials and parts shall be thoroughly cleaned inside & outside and shall be free from grease, oil, weld spatter, rust and all other foreign matter prior to preservation.

2.2 Preservation

Articles may be exposed to severe environmental or climatic conditions, moisture and dust. All materials and equipment shall be packaged suitable to prevent damage and deterioration during transportation and storage. Where damage occurs due to inadequate packaging of items, the liability for costs associated with rectification of the damage will be to the Supplier's account. All metals subject to corrosion shall be treated with a corrosion preservative suitable for the purpose intended. Products susceptible to corrosion must be packaged in a dry non-corrosive environment for the duration of shipment and storage, for a minimum of 1 year or any other higher duration specified in the PO/PR. All bright and machined parts shall be coated with a recognized rust preventative suited to the particular application concerned. All internal parts of machinery shall be treated with lubricant containing rust and oxidation inhibitors to protect equipment from any possible damage. Such lubricants shall be compatible with those which will subsequently be used in service and shall be identified by appropriate tagging. Electrical equipment and instrumentation shall be packed with a suitable desiccant. Delicate equipment such as instruments, electrical switchboards and panels etc. shall be packed for protection to eliminate the effects of vibration.

Wherever necessary, desiccant packs shall be kept to avoid excessive moisture in the packing.

3. PACKING

3.1 General

The instructions herein shall be considered as general directives and minimal requirements, which are applicable to the packing of all equipment and materials. The Supplier is responsible for the correct and adequate packing of the equipment and materials so that these equipment and materials will arrive at destination undamaged and the packing itself in such a condition that, if not otherwise required, it will be suitable for a minimum of 1 year storage.

3.2 Packaging Materials

All packaging together with packaging and protective materials shall be new, maintain its integrity and perform its intended function while being transported, handled and stored.

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The quality of packing shall provide maximum protection against damage, breakage and pilferage during transport, storage and multiple handling, including handling by hoisting, lifting devices and / or forklift trucks. Material used for packaging, packing, wrapping, sealers, moisture resistant barriers and corrosion preservatives shall be of recognized brands & grades and shall conform to the best world standards.

Timber material shall be treated / fumigated to prevent infestation by insects or similar, for all material in accordance with ISPM 15. ISPM 15 describes phytosanitary measures to reduce the risk of introduction and/or spread of quarantine pests associated with solid timber packaging material (includes dunnage). Any packing made of wood, must be made from new treated wood (according to ISPM 15 IPPC, latest version). Used cases, crates and cardboard packing are not allowed. Packaged Products showing any damage, defect or shortage resulting from improper & inadequate packaging, packaging materials or packing procedure or having concealed damage or being short at the time of unpacking shall be subject to rejection and be replaced at the Supplier's cost

3.3 Packing requirements

3.3.1 Wood treatment

All solid wood, used for packing (including wooden pallets) and/or stowage should be treated (heat treatment or fumigation) according to the international standard ISPM 15 (IPPC), latest version. Use of untreated wood is not acceptable. Phytosanitary Certificate, Fumigation or treatment certificates have to be issued by the official government authorities and must accompany the original set of shipping documents.

3.3.2 Wooden Boxes and Crates

Interior support board shall be of strength to withstand stevedore handling. Tops of crates shall be one piece wherever possible to avoid seepage through cracks; otherwise a top coating is required. Waterproof lining shall be used for sides, ends and top of crates, proper venting of cargo boxes containing machinery is required, as well as sufficient use of desiccants. Crates shall be diagonally braced on all faces and suitable for hooks, slings and forklifts. Heavy items shall be secured with wood braces. Fragile items shall be cushioned. Material packed in large boxes shall be layered between plywood sheets to maintain load integrity during transit. Banding shall be used on all boxes to prevent distortion / deformation of the box.

3.3.3 Pallets

When equipment and/or materials are packed on pallets (wood or synthetic), these should be solid double deck pallets that provide adequate load support during transportation and storage (under not always ideal conditions). The pallets should have a dynamic load capacity, enough to carry the mass loaded on the pallet. Where feasible, the top surface of the pallet must be flat. The pallet design must enable safe handling by forklift, cranes etc. and storage on rough surface. Pallets shall be covered with wrapping. All corners, horizontal and vertical shall be protected with cardboard protection strips. The pallet must be tide on all sides with steel or synthetic straps.

3.4 Packaging

All equipment and materials shall be properly fixed (by bolts, clamps, supporting beams, etc.) in such a way that internal movements and / or loosening is impossible. Under the

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top cover –(roof) depending on the case and crate length, sufficient number of strong beams shall be placed and properly fixed in order to allow stacking of the cases and crates avoiding any compression. Equipment parts and materials which may be subject to damage by vibration and/or shock must be protected using shock-absorbing material. All equipment and materials which may be damaged by moisture shall be packed in airtight bags in which sufficient desiccant material (e.g. silica gel) is placed. All openings on the equipment must be closed with wooden / metal or plastic covers to prevent damage to the openings and interiors. Fragile and loose parts easily damageable pertaining to the equipment must be securely and properly packed in a separate case.

3.5 Waterproofing

Cases including the cover shall be internally lined with a strong type of waterproof paper or plastic foil. Equipment and materials shall always be packed in a foil (polyethylene or aluminum) for extra (double) protection against rainfall. These foils shall be applied in such a way that they are self draining.

3.6 HAZARDOUS CARGO

All hazardous material must be packed in adherence to the packing, marking and labeling requirements as required by the appropriate Government and International Transportation regulations.

Hazardous materials shall be suitably packaged, packed separately from other materials and shall not be encased inside other packaging containers. All packages shall be marked and labeled with markings and labels as stipulated by Road Transport, and the Dangerous Goods Regulations (DGR), laid down by the International Air Transport Association (IATA) for airfreight and Sea freight IMDG Codes and Regulations in accordance with government and agency requirements. Regulations and Codes as defined by the International Maritime Organization (IMO) together with Government and Regulatory Agencies within the country of origin, country of destination or country that the products shall transit through shall be adhered to at all times. All crates / boxes / drums / packages containing Hazardous material shall be marked clearly on the outside with the relevant international details (UN No, IMCO / IMDG class, Packing group etc.) and the relevant Material Safety Data Sheets (MSDS) must accompany the goods. The Supplier shall produce any necessary hazardous cargo certificates, as required by the appropriate/concerned Government and International Transportation regulations, for all such shipments.

Seller to inform Buyer on the following in details after shipment of Cargo:

- Hazard Identification
- Fire Fighting Measures
- Accidental Release Measures
- Handling & Storage

4. GUIDELINES FOR PACKING GOODS

In the subsequent paragraphs, details of different types of packing for different types of goods are defined. Supplier shall make packing details/procedure based on the guidelines

Chemicals in powder form, catalysts, refractories & like materials etc. shall be packed in drums only.

4.1 Pipe

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All pipes 2" included and below shall be packed in crates. Pipes over 2" up to 6", shall be bundled and banded in bundles of uniform length. Bundling is carried out with U-IRON or traversal planks, joined with threaded connecting rods with locknuts.. Bundle weight shall not exceed 2,000 kg. All pipes are to be capped and ends sealed with waterproof tape (tape is not necessary if end caps are of the pre-shrunk or self-sealing type).Pipes larger than 6" shall be shipped as single lengths with the ends capped. End caps are to be of the recessed type to enable the use of soft faced hooks, but still completely sealing the end and also protecting the weld. All stainless steel / non-ferrous piping must be packed separately in wooden crates. Any banding of bundles is to be with the same material. The bundling and packing of pipe and instrument tubing shall enable the safe discharge of pipe on site using clamps and forklifts. All pipes shall be supported along their lengths to prevent bending/flexing during transport. During loading/unloading slings shall be applied to the center of the load as well as on each end to prevent bowing.

Pipe and rigid conduit smaller than DN50 diameter shall be bundled in units not to exceed 1000kg.Threaded and coupled pipe shall be equipped with plastic thread protectors. All material shall be segregated and shipped by generic material type to prevent cross contamination. Where wire rope or chains are used, adequate padding shall be used at points of contact with pipe. Care must be taken to prevent any chafing of pipes against each other or against the metal structures of the vehicle during transportation. Where necessary, such metal structures must be padded with planks or plastic tubes. Skids and dunnage must be used between the bundles in transit as well as in the storage of coated pipes.

4.2 Pipe Fittings, Flanges, Valves and Gaskets

All pipe fittings, flanges and valves up to 6", are to be packed in cases/crates. For items over 6", these may be fixed securely to a pallet base and enclosed in a crate, for protection. All flange faces / bevel ends shall be suitably protected with plastic caps / end protectors. Where valves have actuators attached, rigidity must be ensured for the valve and actuator. The vulnerable parts of the actuator are to be completely protected within a wooden crate. Empty spaces shall be filled with expanded PU foam to restrict movement in the crate. All stainless steel fittings, flanges and valves of all sizes, must be packed separately in wooden crates. Any strapping is to be with the same material. Gaskets are considered fragile and shall be treated as such. Individual gasket sizes shall be boxed and labeled separately. All threaded fittings and pipes should be greased and provided with plastic caps.

4.3 Steel Structure and Plates

Structural steel sections and plates shall be strapped in bundles of convenient size and weight for handling. Rolled and shaped plates shall be provided with suitable bracing to eliminate distortion during transit, and shall be bundled in uniform lengths. Each bundle shall be marked with a metal tag, hard stamped, secured under steel wrapping

4.4 Itemized Equipment

Units or parts belonging to main equipment but separately packed shall be clearly marked for easy identification with the main equipment to which they relate.

All gasket face of flanges, machined working surfaces and threaded parts of all equipment shall be covered with rust preventive tape or by application of oil based alkyd primers or zinc bases epoxies or thin zinc silicate coatings specially formulated for the preservation of CS and Alloy Steels. All flanged connections of vessels shall be protected by metal plates correctly casketed by wooden plugs or plastic caps suitably secured in position.

Vessels shall, where possible, be packed on skid constructions and secured with adjustable steel straps. Manholes and other major openings shall be protected with

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cover flanges or metallic plates firmly secured. Smaller openings shall be closed with plastic plugs / caps.

All vessel internals and items not installed by Supplier at works including accessories such as small parts, bolts, nuts, gaskets, etc. shall be packed in wooden cases separately for each vessel or apparatus and marked with the same item number as the vessel/apparatus in order to protect all parts from loss or damage in transit. Internals, bolts and gaskets for service/ testing operations shall be supplied with the vessels/ items by Supplier. All internals should be boxed separately and marked according to marking procedure; each item shall be supplied correctly and identified for field installation by others.

All vessels / heat exchangers or items of such construction shall be dried, thoroughly cleaned inside and be free of all dirt and loose foreign materials. The equipment shall be filled with Nitrogen. Make up arrangement for loss of Nitrogen along with a pressure gauge shall be installed.

Accessories for apparatus and vessels (small parts, bolts, nuts, washers, gaskets, etc.) are to be packed in wooden cases, separately for each apparatus or vessel. These cases must be marked with the same item number as the apparatus / vessel to which they belong. All commissioning spare parts to be packed separately, shall be marked with the relevant main item.

Pumps, compressors, rotating equipment, turbines and motors will require specific packing and preservation as per the relevant Technical Specification. For skidded equipment openings, flange faces, threaded connections, wires, valve stems, and other component parts that may be subjected to mechanical damage or corrosion shall be adequately protected. This protection shall be applied to all components, both those removed and boxed and those remaining in place on the skid assembly Each skid shall have one box strapped to it containing a complete set of drawings together with a manual covering installation and operating instructions and other pertinent instructions required for reassembly of components that were disassembled for shipment.

4.5 Control Panels and Electrical Devices

Equipment such as control panels, instruments and electrical devices shall be packed in an interior moisture/vapor-proof barrier with a silica gel or comparable desiccant. Desiccants shall be bagged to avoid dispersing in containers. The quantity of desiccant shall be calculated in accordance with the manufacturer's recommendations. Equipment must be secured to the case with bolts, blocks or straps. Adequate precautions (for example, shaft locks to prevent longitudinal / rotational movement of rotor shafts in motors) shall be included in the packaging of all equipment which has plain, ball or roller bearings so as to minimize the risk of bearing damage.

4.6 Instruments

Instruments shall be thoroughly clean, dry and free from rust and shall be individually wrapped using polythene sheets/U foam/ thermocol sheets depending upon the items and then packed in wooden boxes. The left out spaces and top of the boxes should be filled with rubberized coir to get proper cushioning effect. Special attention shall be paid for arresting movements of their operating mechanism during transportation. Silica gel or other approved desiccant shall be strapped inside but shall not come into contact with the paintwork.

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4.7 Cables

All electric cables to be packed in new cable drums made of steel and painted with epoxy resin paint. Cable ends to be carefully protected before packing. Over the cables polythene sheet should be wrapped and sealed properly. Cable drum can be put in wooden crates for ease in handling and transportation.

4.8 Saddles, Supports, Spiders and Lifting Equipment

All items which cannot be transported without independent supports must be supplied with Shipping saddles suitable for land and ocean transit. Such transport saddles are to be included within the scope of supply. Supplier is to advise of any requirement for lifting beams or other specialized lifting equipment and will include provision for use of such equipment for loading purposes. The *Supplier* is responsible for ensuring that all modules and oversize items are adequately braced and where required, plastic wrapped suitable for transport. Modules and oversize items shall be packaged to prevent damage during transport.

4.9 Assortment Of Package/ Spare Parts for Erection and Commissioning

Equipment and /or parts of different item numbers shall not be packed together in the same package. Small goods such as accessories, spare parts for erection and commissioning and special tools shall be packed separately in respective inner boxes with tags or labels attached there being clearly indicating their contents. In case that such accessories, spare parts and special tools is packed in separate boxes/ crates, item no. of main equipment shall be clearly mentioned in Main Shipping Mark for easy identification.

4.10 Containerization

As required the Supplier shall stuff the goods into 20 or 40 foot container (dry, open top, flat rack etc). Supplier to check the size of container before starting packing of equipment.

4.11 Protection of Cases/Crates

Since shipping containers are in general not water tight, packing in contact with the floor of the container shall be raised in order to prevent it from being damaged by accumulation of water.

It is responsibility of the Supplier to ensure that the cases/crates are stowed, secured and fastened inside the container. The Supplier shall take all the necessary precautions to conform to maximum weight allowed and centre of gravity of the container. The securing and fastening of the crates/cases can be carried out by nailing timbers on the bottom or on the vertical sides of the container.

4.12 Air Transport Packing

Air freight of goods and materials will be exceptional and shall be used only for goods and materials urgently required at site & which are highly sensitive to shock or vibrations such as instruments or those of small dimensions and weight.

In all instances the packaging of materials and equipment to be transported by air shall be in accordance with International Air Transport Authority (IATA) regulations. Type of packing depends on the goods to be packed and Supplier may use one of the following types:

- Triple-corrugated container

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- Wooden/cardboard packing cases
- Plywood cases

5. Marking

5.1 General

The purpose of the marking is to identify the packages and detail the weight and dimensions to assure efficient and correct handling during transport and upon arrival at destination.

5.2 Marking Instructions & despatch details

Packages and crates will be marked with indelible black paint, resistant to seawater. Marking must be perfectly legible. All packages shall be clearly and properly marked in English language if not otherwise specified

The shipping marks, which will be shall be stenciled on two sides and one end in clear characters at least 5 centimeters high (where crate size permits, otherwise use optimum size for each package dimension).

The texts shall be printed by means of stamps, stencil-plates or electronically. The use of stickers is not allowed, unless securely covered by plastic. Bundles shall be marked by embossing on two metal tags bearing the shipping marks and placed on each side of the package and securely attaching them to the goods. Paint shall be used on metal surfaces.

Labels or tags to be clearly visible and shall be of a quality to remain visible and attached during transit, handling and storage for a minimum period of 12 Months or any other higher period if specifically defined in the PO/PR.

When the goods are to be shipped in containers then marking may be stenciled on one end only. However, packages must be stowed in a manner that shows these marks.

Crates containing fragile articles must be packed with special precaution against risk of breakage and must be stenciled on all sides "FRAGILE - HANDLE WITH CARE". Where crates are not to be overturned, Supplier must show on the crates, clear and readily visible identification, to ensure they are kept in the correct position.

Packages/equipment of 2,000 kg or more must be marked with slinging points on all sides, in addition to the centre of gravity marks.

Packages should be marked consecutively i.e. 1 of 10, 2 of 10, etc. Do not duplicate package numbers. SUPPLIER is responsible for any loss or damage caused by incorrect marking.

All cases/crates shall also be marked with the appropriate international standard graphic symbols for handling.

As a minimum, all cases/crates are to be marked clearly on all four sides with:

"HANDLE WITH CARE" "RIGHT SIDE UP" "KEEP DRY"

In the case of packages with a single gross weight totaling 2,000 kg and/or a height of more than 1m, the centre of gravity shall be clearly marked with the symbol on two adjoining sides. For all items of equipment with an eccentric centre of gravity this symbol shall be marked at the bottom, side and top of the package.

The slinging and lashing points shall be marked with a chain symbol.

When packing in cases/crates, these packages shall also have metal corners at the slinging points.

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External front and rear sides of the boxes shall be planed for writing instructions. To facilitate identification, the required colour coding as per the specifications shall be carried out on each package and on corners of pipes & plates.

Dispatch details such as consigner/consignee address, contract/PO and case details, country of origin, port of delivery, stacking instructions shall be written on one side of the boxes. One copy of packing slip wrapped in polyethylene bag covered with aluminum packing slip holder to be nailed on the external surface of the box. A packing list and preservation instructions shall be enclosed in a clear weatherproof plastic re-sealable envelope stapled to the box such that the receiver may determine contents without opening the container. An additional packing list is to be enclosed in a clear waterproof plastic re-sealable envelope stapled inside the container. Stapling of the envelopes shall not prevent removal of the documents.

5.3 Shipping Marks

Each shipping unit (package) shall be marked as shown below using letters of at least 50 mm in height. Markings shall be shown on the top and two (2) adjacent sides of each shipping unit/package and shall be of waterproof ink or exterior grade, waterproof paint in a colour which produces high contrast with the background. Packages in any one consignment shall be numbered consecutively and in sequence commencing with the number one (1).

(OWNER)

PROJECT

WITH COMPLETE

ADDRESS

VIA (PORT) INDIA

PURCHASE ORDER NO. ----------

NET WEIGHT ---------- KGS. GROSS WEIGHT ---------- KGS.

DIMENSIONS ---------- X ---------- X ---------- CMS

PACKAGE NOS. (SL. NO. OF PACKAGE) OF (TOTAL NO. OF PACKAGES)

TAG / ITEM NO. ----------

COUNTRY OF ORIGIN----------

SHIPPER'S NAME----------

The details of the Owner / Project are defined specifically in the Purchase Order / Contract.

5.4 Cautionary Symbols

In order to facilitate loading unloading and handling of cargo, Supplier shall stencil the necessary Cautionary Symbols on the proper place at two (2) opposite ends of the package. Symbols for special handling are illustrated below. These symbols must be used whenever appropriate.

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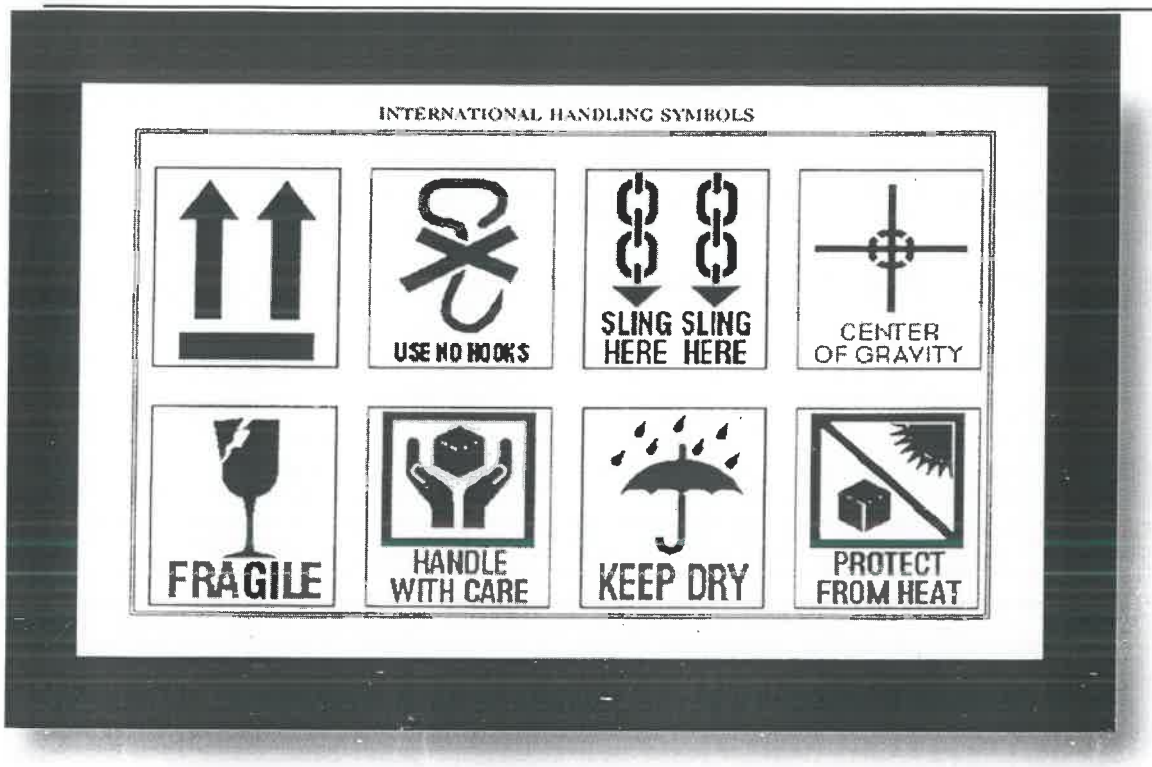

Symbols will be applied with exterior grade paint or waterproof ink in a colour that produces a High contrast with the surrounding background. Easily damaged material shall be Marked "FRAGILE" and also when required, "HANDLE WITHCARE", "COOL STORAGE", and / or "USE NO HOOKS". Material that must be kept upright to prevent damage, such as machinery, motors, etc., will be marked "THIS WAY UP" and if appropriate "TOP HEAVY", with arrows on all sides of box pointing to top. When required, due to length or unbalanced weight, crates or boxes will have a centre of gravity indicated by the relevant symbol and the words "CENTER OF GRAVITY" will appear in letters at least 24mm (1.0 inch) high, adjacent to stripes. Proper placement of the "SLING HERE" symbol will better insure correct use of lifting gear. Special marks, such as "FRAGILE", "KEEP DRY" or positional "DIRECTION ARROWS" shall be in RED.

5.5 Storage Code

The type of storage required is required to be specified, it will be shown on each packaging in RED colour

X	Crates or packages to be stored outdoor without covers
XX	Crates or packages to be stored under tarpaulin
XXX	Crates or packages to be stored in covered or enclosed premises
XXXX	Crates or packages which must be stored in air-conditioned premises

6. Shipment:

6.1 By Sea:

For C & F / CIF Contracts

All shipment of Break bulk material and containerized cargo shall be made by suitable vessels certified for sea worthiness and complying with National / International safety

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regulations .No Trans-shipment is permitted for Break Bulk Cargo. All shipments shall be under-deck unless carriage on deck is unavoidable / permitted by consignee.

6.2 By Air:

Wherever the shipments are to be effected by Air (in case of FCA shipments), the same shall be dispatched through Consolidation Service Agent to be nominated by Owner/EIL.

6.3 Shipping Terms :

All shipping terms will be interpreted in accordance with INCOTERMS 2020 and all subsequent amendments/revisions.

7. Documentation

7.1 All documents shall be in English Language.

7.2 Documents Required Before Shipment

7.2.1 The required Cargo Details (Preliminary) shall be provided by the supplier within the period defined in the P.O. Final Packing List with weight / dimension of individual package shall be provided to EIL/Client at least four weeks before the contractual / actual date delivery at Port of loading.

Transport and lifting arrangement drawings are to be supplied for all Over –Weight and Over-Dimensioned packages as mentioned below or where shipping saddles are being provided. Such drawings must show clearly full dimensions, weights, centre of gravity, lifting and securing points and saddle locations.

7.2.2 The sketches of Over Dimensioned Cargo shall be mailed as follows :

EIL New Delhi - Head Shipping

EIL Port Office at Discharge Port - In-Charge (Shipping)

The Over Dimensioned Cargo shall mean any package exceeding any of the following limits.

Weight - 18 MT
Length - 12 Meters
Width - 03 Meters
Height - 03 Meters

7.3 Documents Required After Shipment

7.3.1 The supplier shall forward copies of the shipping documents as defined in the PO by Email including the following :

1. Commercial Invoice
2. Bill of Lading / Airway Bill
3. Packing List
4. Certificate of Origin (issued by Chamber of Commerce of the country of origin)
5. Inspection Release Note

Shipping Documents should be forwarded to the officials at EIL /Owner defined in the PO including the following:

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a) Project Manager at EIL New Delhi

b) Head (Shipping) at EIL New Delhi

c) In-Charge (Shipping) at EIL Port Office (Port of Discharge)

d) Owner of the Project

In addition to above, complete set of original documents are required to be sent to (OWNER) / Paying Authority through Bank in terms of 'Letter of Credit'.
The supplier shall be fully responsible for any delay and / or demurrage that may become payable at destination Port on account of delay in transmittal of shipping documents as detailed in the Purchase Order.

7.3.2 In case of air shipments one set of non-negotiable documents consisting of Commercial Invoice (ink signed), Packing List, Certificate of Origin, Technical Literature shall be handed over to Freight Forwarder/Airlines with the instructions that the same should be handed over along with cargo arrival notice and copy of Airway Bill to Destination Airport Notify Party.

7.4 BILL OF LADING :

Bill of lading must be 'clean', must be endorsed "shipped on board" and must show details of gross weight and cubic measurement. If shipment is being arranged by the supplier it must also be endorsed "freight prepaid". Bill of Lading shall be made in favor of (OWNER) /Engineers India Limited/or order of bank (and **not order of the shipper**) , as applicable as per the provisions of the PO and the notify column should indicate Engineers India Ltd. (PORT OFFICE).

7.5 COMMERCIAL INVOICE:

Commercial Invoice shall inter alia, indicate (i) PO No. & Date, (ii) Unit prices, (iii) Total Value, (iv) Full description of goods in conformity with the description of goods given in Purchase Order, (v) Inco Terms, (vi) Payment Terms, (vii) Import License No. (viii) Country of Origin (ix) HSN Code (Harmonized System of Nomenclature), (x) GSTIN No of Consignee.

Invoice value shall be for the materials actually shipped. Billing breakup if required for partial shipment shall be freezed and provided before shipment of the first lot of cargo.

In case of CHEMICALS / HAZARDOUS cargo FLASH-POINT should be indicated in all documents and a separate certificate giving composition and flash-point shall be sent.

7.6 PACKING LIST :

Packing lists shall show (i) PO No.(ii) Details of contents of each case including PO line Item number, Tag Number (Including sub-items and description); (iii) Number of packages by type and total number of packages (i.e. package 1 of 5, 2 of 5 and so on);(iv) Gross and net weight per package (including quantity of items per package);(v) Dimensions and cubic measurements per package in metric units
(length, width and height); (vi) Cubic measurements and total gross and net weights of the entire shipment.

Where containers are used, a separate packing list must be produced for each Container. In case of pipes & plates in bundles, no. of pipes / plates with individual length in each bundle must be indicated.

8. SHIPPING ADVICE :

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8.1 Within 24 hours of shipment, the supplier shall send shipping advice by e-mail to officials provided in the PO including the:

1) Project Manager at EIL, New Delhi
2) Head-Shipping at EIL, New Delhi
3) EIL-Port office
4) Owner
5) Insurance Company as detailed in the Purchase Order

Giving particulars of the shipment, vessel's name / Airlines, Flight & Date on which material actually left (and not tentative flight No. and Date), Port of shipment, Bill of Lading / Airway Bill Number & Date, contents in brief, Purchase Order Number, total Invoice and Freight Values, Number of Packages and total gross weight, ETD & ETA of vessel. In case of Air shipment through consolidation services information must contain both Master Airway / House airway Bill Number.

8.2 In case of free replacement / supply of components / parts, the supplier shall intimate by e-mail above dispatch particulars along with specific statement '**Free Supply**' and **Value for customs purposes only**' and particulars of original shipment i.e., vessel name, Bill of Lading Number and date, Invoice Number etc. and send documents to EIL (Port Office, to be obtained separately from EIL) with Invoice bearing this statement.

9. TRANSIT RISK INSURANCE

All equipments / materials shall be insured against all marine and transit risks on warehouse to warehouse basis by owner and the necessary dispatch intimation shall be sent to the underwriters of Owner (as detailed in the Purchase Order) by Supplier. However, the Supplier shall ensure that in effecting shipments clean Bill of Lading is obtained and the carrier's responsibility is fully retained on the carrier so that consignee's interest are fully safeguarded and are in no way jeopardized.

10. SHORT SHIPMENTS

Supplier should thoroughly check all the items packed before shipment. If any item(s) are found short-packed in sound boxes on examination at project site by EIL, supplier shall be responsible to supply short-packed items free of charge (on Delivery Duty Paid at site basis), on receipt of advice from EIL.

11. Seller shall advise freight forwarder to indicate on the Invoice, Packing List & Bill of lading / Airway bill that the subject import into India is as per the provision of EXIM Policy prevalent in India.

12. Other Services to be provided by Supplier

In addition to packing and shipping documentation Supplier must carry out loading including lifting, securing, lashing and stowing of all cases, crates and packages onto means of transportation such as but not limited to trailers, containers etc.

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General Purchase Conditions **Date: 10.11.2025**

The following conditions shall be applicable for all Non Hydrocarbon procurement unless specifically mentioned in the Special Purchase Conditions.

I N D E X

1. DEFINITIONS
2. REFERENCE FOR DOCUMENTATION
3. RIGHT OF OWNER TO ACCEPT OR REJECT TENDER
4. LANGUAGE OF BID
5. PRICE
6. TAXES AND DUTIES
7. INSPECTION
8. SHIPPING
9. INDIAN AGENT COMMISSION
10. ORDER AWARD / EVALUATION CRITERIA
11. CONFIRMATION OF ORDER
12. PAYMENT TERMS
13. GUARANTEE/WARRANTY
14. PERFORMANCE BANK GUARANTEE / INSURANCE SURETY BOND
15. PACKING & MARKING
16. DELIVERY
17. UNLOADING AND STACKING
18. TRANSIT INSURANCE
19. VALIDITY OF OFFER
20. DELIVERY DATES AND PRICE REDUCTION SCHEDULE
21. RISK PURCHASE CLAUSE
22. FORCE MAJEURE CLAUSE
23. DISPUTE RESOLUTION
24. INTEGRITY PACT (IP)
25. RECOVERY OF SUMS DUE
26. CONFIDENTIALITY OF TECHNICAL INFORMATION
27. PATENTS & ROYALTIES
28. LIABILITY CLAUSE
29. LIMITATION OF LIABILITY FOR GOODS PROCUREMENT
30. COMPLIANCE OF REGULATIONS
31. REJECTION, REMOVAL OF REJECTED GOODS AND REPLACEMENT
32. NON-WAIVER
33. NEW & UNUSED MATERIAL
34. PURCHASE PREFERENCE CLAUSE
35. CANCELLATION
36. ANTI –COMPETITIVE AGREEMENTS/ABUSE OF DOMINANT POSITION
37. ASSIGNMENT
38. GOVERNING LAW
39. AMENDMENT
40. NOTICES
41. POLICY ON HOLIDAY LISTING
42. ORDER OF PRECEDENCE FOR PURCHASES
43. TERMINATION FOR CONVENIENCE
44. BUILDING AND OTHER CONSTRUCTION WORKERS CESS

GENERAL PURCHASE CONDITIONS

1. DEFINITIONS:

The following expressions used in these terms and conditions and in the purchase order shall have the meaning indicated against each of these:

1.1. **OWNER:** Owner means Bharat Petroleum Corporation Limited (a Government of India enterprise), a Company incorporated in India having its registered office at Bharat Bhavan, 4 & 6 Currimbhoy Road, Ballard Estate, Mumbai 400038 and shall include its successors and assigns (hereafter called BPCL as a short form).

1.2. **VENDOR:** Vendor means the person, firm or the Company/ Corporation to whom this Request for quotation (RFQ)/purchase order is issued and shall include its successors and assigns.

1.3. **INSPECTOR:** Person/ agency deputed by BPCL for carrying out inspection, checking/testing of items ordered and for certifying the items conforming to the purchase order specifications..

1.4. **GOODS/ MATERIALS:** means any of the articles, materials, machinery, equipments, supplies, drawing, data and other property and all services including but not limited to design, delivery, installation, inspection, testing and commissioning specified or required to complete the order.

1.5. **SITE/ LOCATION:** means any Site where BHARAT PETROLEUM CORPORATION LIMITED desires to receive materials any where in India as mentioned in RFQ.

1.6. **"RATE CONTRACT"** means the agreement for supply of goods/ materials between Owner and Vendor, for a fixed period of time (i.e till validity of Rate Contract, with no commitment of contractual quantity) on mutually agreed terms and conditions. The actual supply of goods/ materials shall take place only on issue of separate purchase orders for required quantity as and when required by Owner.

2. REFERENCE FOR DOCUMENTATION:

2.1. The number and date of Collective Request for Quotation (CRFQ) must appear on all correspondence before finalization of Rate Contract / Purchase Order.

2.2. After finalization of Contract / Purchase Order: The number and date of Rate Contract/ Purchase Order must appear on all correspondence, drawings, invoices, dispatch advices, (including shipping documents if applicable) packing list and on any documents or papers connected with this order.

2.3. In the case of imports, the relevant particulars of the import Licence shall be duly indicated in the invoice and shipping documents as well as on the packages or consignments.

3. RIGHT OF OWNER TO ACCEPT OR REJECT TENDER:

The right to accept the tender will rest with the Owner.

4. LANGUAGE:

The Bid and all supporting documentation and all correspondence whatsoever exchanged by Vendor and Owner, shall be in English language only. In case any of the supporting documents (either technical or financial) are not in English language, then the English translation copy of the same shall also be furnished duly certified, stamped and signed by local Chamber of Commerce of bidder's country or Indian embassy in bidder's country or their embassy in India.

5. PRICE:

Unless otherwise agreed to the terms of the RFQ, price shall be:

Firm and no escalation will be entertained on any ground, except on the ground of statutory levies applicable on the tendered items.

6. TAXES AND DUTIES:

All vendors shall have GST registration in the concerned State as applicable and vendor shall quote their GSTIN number in the quotation wherever required.

6.1 GST:

6.1.1. GST extra as applicable at the time of delivery within scheduled delivery period will be payable by BPCL against documentary evidence. Vendor shall mention in their offer, the percentage of GST applicable at present. Any upward variation in GST rates, beyond the contractual delivery period, shall be to vendor's account.

6.1.2. In case GST is not applicable at present: In case GST gets levied due to change in turnover of Vendor/Supplier, shall be borne by the vendor/supplier. If GST becomes applicable due to change in the law in future, the same will be borne by vendor subject to 6.1.1. In case of change in stand of vendor/supplier about applicable rate of GST towards higher side, the same will not be payable.

6.1.3. Owner shall take Input Tax Credit of the GST paid on the material supplied for both GST and cess component as applicable and accordingly GST / Cess should be quoted separately wherever applicable.

Vendor shall ask the transporter of the goods to hand over the copy of GST invoice (transporter's copy) at the time of delivery of goods at owner's site.

6.1.4 The vendor shall take steps viz. mention relevant GSTIN of BPCL in GST invoices and returns, uploading invoice in GSTR 1, payment of the tax liability on the said invoices and filing of Returns etc. and comply with all the requirements of applicable laws including GST laws for the time being in force to enable the OWNER to avail tax credit/s including input tax credit.

Deferment of GST Amounts shall be done for those vendors who have got instances of open mismatches due to non-compliance. Open mismatches refer to cases whereby OWNER could not claim the GST Input Tax Credit in the month of payment of invoice due to non-compliance/ delayed compliance by the VENDOR. Accordingly, Over and above any payment term mentioned in the tender including that mentioned in the GPC/GCC, payment to VENDOR by OWNER for the basic amount (i.e. amount excluding GST) shall be made as mentioned in GPC/GCC or as mentioned anywhere else in the tender as applicable. However, GST amount of the Invoices shall be paid only after the amount gets reflected in the return (GSTR-1 Return of outward supplies/GSTR- 3B) submitted by the vendor on GSTIN portal (GSTR 2B of OWNER) to the satisfaction of OWNER. Till such time GST amount with correct details is reflected in GSTIN portal to satisfaction of OWNER, amount shall be withheld by OWNER.

Over and above, VENDOR is also required to issue e-invoice if the same is applicable to the OWNER. In absence of GST e-invoice, any loss of Input Tax Credit to the OWNER shall be indemnified by the VENDOR.

Deferment of GST amounts to the vendors are subject to compliance of any applicable Act.

6.1.5 In case of vendors for whom deferment of GST amounts were not done, Any loss or non-availability of input tax credit by the OWNER due to non- compliance of applicable tax law including but not limited to GST laws in force or otherwise, on the part of VENDOR, an amount equivalent to any tax liability accruing to the OWNER and/or to the extent of any loss accrued to the OWNER due to the non-availability of input tax credit or any liability accrued to the OWNER shall either stand cancelled or deducted from the payment due to the VENDOR or shall be reimbursed by the VENDOR as the case may be till such default is either rectified or made good by the VENDOR and the OWNER is satisfied that it is in a position to claim valid input tax credit within the timelines as per applicable laws.

6.1.6 Any cost, liability, dues, penalty, fees, interest as the case may be which accrues to the OWNER at any point of time on account of non-compliance of applicable tax laws or rules or regulations thereof or otherwise due to default on the part of VENDOR shall be borne by the VENDOR. An amount equivalent to such cost, liability, dues, penalty, fees, and interest as the case may be shall be reimbursed by the VENDOR within 30 days. Any GST as may be applicable on such recovery of amount shall also be borne by VENDOR and same shall be collected by the OWNER.

6.2 FREIGHT:

6.2.1 Freight: Firm freight charges to be quoted as indicated in the Tender documents. Freight shall be payable after receipt of the Material(s) at the site, unless otherwise specified.

6.3. NEW STATUTORY LEVIES: All new statutory levies leviable on sale of finished goods to owner, if applicable are payable extra by BPCL against documentary proof, within the contractual delivery period.

6.4 VARIATION IN TAXES/ DUTIES: Any increase/decrease in all the above mentioned statutory levies on the date of delivery during the scheduled delivery period on finished materials will be on BPCL's account. Any upward variation in statutory levies after contractual delivery date shall be to vendor's account.

6.5 INCOME TAX (WITHHOLDING TAX): In the case of availment of services from Non Resident Vendors who are claiming benefits offered under the Double Taxation Avoidance Agreements signed by India with the Government of the other country (i.e. the country of the Vendor), such Non Resident Vendors are required to provide the Tax Residency Certificates at the time of submission of Bid documents. The Tax Residency Certificates shall contain the following details:

a) Name of Vendor (assessee);
b) Status (Individual, Company, firm etc.) of assessee;
c) Nationality (in case of individual);
d) Country or specified territory of incorporation or registration (in case of others);
e) Assessee's tax identification number in the country or specified territory of residence or in case no such number, then, a unique number on the basis of which the person is identified by the Government of the country or the specified territory;
f) Residential status for the purpose of tax;
g) Period for which the certificate is applicable; and
h) Address of the applicant for the period for which the certificate is applicable.

The Tax Residency Certificate shall be duly verified by the Government of the Country or the specified territory of the assessee of which the assessee claims to be a resident for the purposes of tax.

7. INSPECTION:

7.1. Materials shall be inspected by BPCL approved third party inspection agency if applicable before dispatch of materials. However, arranging and providing inspection facilities is entirely vendor's responsibility and in no way shall affect the delivery schedule.

7.2 Scope of Inspection shall be as per RFQ or as specified in the Special Purchase Conditions.
Materials shall be inspected as per scope of inspection by TPIAs which are registered under "NABCB accredited bodies as per requirement of ISO/IEC 17020 as Type A" in QCI's NABCB website as on the date of Inspection of Goods. The link is as below:
http://nabcb.qci.org.in/accreditation/reg_bod_inspection_bodies.php

7.3. Unless otherwise specified, the inspection shall be carried out as per the relevant standards/ scope of inspection provided along with the Tender Enquiry/Purchase Order.

7.4. BPCL may, at its own expense, have its representative(s) witness any test or inspection. In order to enable BPCL's representative(s) to witness the tests/ inspections, BPCL will advise the Vendor in advance whether it intends to have its representative(s) be present at any of the inspections.

7.5. Even if the inspection and tests are fully carried out, the Vendor shall not be absolved from its

responsibilities to ensure that the Material(s), raw materials, components and other inputs are supplied strictly to conform and comply with all the requirements of the Contract at all stages, whether during manufacture and fabrication, or at the time of Delivery as on arrival at site and after its erection or start up or consumption, and during the defect liability period. The inspections and tests are merely intended to prima-facie satisfy BPCL that the Material(s) and the parts and components comply with the requirements of the Contract. The Vendor's responsibility shall also not be anywise reduced or discharged because BPCL or BPCL's representative(s) or Inspector(s) shall have examined, commented on the Vendor's drawings or specifications or shall have witnessed the tests or required any chemical or physical or other tests or shall have stamped or approved or certified any Material(s).

7.6. Although material approved by the Inspector(s), if on testing and inspection after receipt of the Material(s) at the location, any Material(s) are found not to be in strict conformity with the contractual requirements or specifications, BPCL shall have the right to reject the same and hold the Vendor liable for non-performance of the Contract.

8. SHIPPING:

8.1 SEA SHIPMENT: All shipment of materials shall be made by first class direct vessels as per procedure detailed hereunder. The Foreign Supplier shall arrange with Vessels Owners or Forwarding Agents for proper storage of the entire Cargo intended for the project in a specific manner so as to facilitate and to avoid any over carriage at the port of discharge. All shipment shall be under deck unless carriage on deck is unavoidable.

The bills of lading should be made out in favour of `Bharat Petroleum Corporation Limited or order'.

All columns in the body of the Bill of Lading namely marks and nos., material description, weight particulars etc., should be uniform and accurate and such statements should be uniform in all the shipping documents. The freight particulars should mention the basis of freight tonnage, heavy lift charges, if any, surcharge, discount etc. clearly and separately. The net total freight payable shall be shown at the bottom.

SHIPPING DOCUMENTS: All documents viz. Bill of Lading, invoices, packing list, freight memos, country of origin certificates, test certificate, drawings and catalogues should be in English language.

In addition of the bill of lading which should be obtained in three stamped original plus as many copies as required, invoices, packing list, freight memos, (if the freight particulars are not shown in the bills of lading), country of origin certificate, test/ composition certificate, shall be made out against each shipment in as many number of copies as shown below.

The bill of lading, invoice and packing list specifically shall show uniformly the mark and numbers, contents case wise, country of origin, consignees name, port of destination and all other particulars as indicated under clause 2. The invoice shall show the unit rates and net total F.O.B. prices. Items packed separately should also be invoiced and the value shown accordingly. Packing list must show apart from other particulars actual contents in each case, net and gross weights and dimensions, and the total number of packages. All documents should be duly signed by the Vendor's authorised representatives.

In the case of FOB orders, shipping arrangements shall be made by the Chartering Wing of the Ministry of Surface Transport, New Delhi through their respective forwarding agents. The names and addresses of forwarding agents shall be as per Special Purchase Conditions. Supplier shall furnish to the respective agents the full details of consignments such as outside dimension, weights (both gross and net) No of packages, technical description and drawings, name of supplier, ports of loading, etc. 6-weeks notice shall be given by the supplier to enable the concerned agency to arrange shipping space.

The bill of lading shall indicate the following:

Shipper: Vendor's Name

Consignee: Bharat Petroleum Corporation Limited

In case of supplies from USA, Export Licences, if any required from the American Authorities shall be obtained by the U.S. Suppliers. If need be assistance for obtaining such export licences would be available from India Supply Mission at Washington.

8.2 **AIRSHIPMENT:** In case of Airshipment, the materials shall be shipped through freight consolidator (approved by us). The airway bill shall be made out in favour of BHARAT PETROLEUM CORPORATION LIMITED.

TRANSMISSION OF SHIPPING DOCUMENTS for both modes of shipment viz. Sea and/or Air: Foreign Supplier shall obtain the shipping documents in seven complete sets including three original stamped copies of the Bill of Lading / Airway bill as quickly as possible after the shipment is made, and airmail/send scanned copies by e-mail as shown below so that they are received at least three weeks before the Vessels arrival or immediately in case of Air shipment. Foreign Supplier shall be fully responsible or any delay and/ or demurrage in clearance of the consignment at the port due to delay in transmittal of the shipping documents.

If in terms of letter or otherwise, the complete original set of documents are required to be sent to BPCL through Bank the distribution indicated below will confine to copies of documents only minus originals.

Documents	**BPCL**
Bill of Lading/Airway Bill	4 (including 1 original)
Invoice	4
Packing List	4
Freight Memo	4
Country of Origin Certificate	4
Third party inspection certificate	4
Drawing	4
Catalogue	4
Invoice of Third Party	4

for inspection charges whenever applicable.

9. **INDIAN AGENT COMMISSION:**

Any offer through Indian agents will be considered only after authorization mentioning them as Indian agents, is received from Vendor. Indian agents commission if applicable will be payable only in Indian currency. Indian agents should be registered with Directorate General of Supplies and Disposals, Government of India and agency commission will be payable only after registration with DGS&D, New Delhi.

10. **ORDER AWARD/ EVALUATION CRITERIA:**

Unless otherwise specified, Order award criteria will be on lowest quote landed price basis. Landed price will be summation of Basic Price, Packing & Forwarding Charges, GST, Freight, Inspection Charges, Supervision of Installation & Commissioning and other taxes & levies, loading etc., if any, reduced by Input tax Credits as applicable.

11. **CONFIRMATION OF ORDER:**

The vendor shall acknowledge the receipt of the purchase order within 10 days of mailing the same. The vendor shall sign, stamp the acknowledgement copy of the purchase order and return the same to BPCL.

12. PAYMENT TERMS:

12.1. Unless otherwise specified, 100% payment shall be made within 30 days from date of receipt and acceptance of materials at Site against submission of Performance Bank Guarantee (PBG) / Insurance Surety Bond for 5% of basic order value if PBG is applicable for the tender. The eligible MSME bidders can avail Bill discounting facility as follows.

12.2. In the case of imports, payment will be made on submission of original documents directly to Owner (Telegraphic Transfer-TT) or through Bank (Cash against documents-CAD) or through Irrevocable Letter of Credit.

12.3. Unless otherwise mentioned, the specified documents (All documents listed below (one original and two copies) should be submitted to originator of P.O. (the name and contact details of whom are given in PO) and payments for despatches will be made by the originator of Purchase Order :

a) Invoice
b) GST invoice
c) The Lorry Receipt of the consignment
d) Packing list for the consignment
e) Third Party Inspector's Certificate covering the invoiced Material(s)/ Release Note, wherever applicable
f) Manufacturers Test/Composition Certificate, wherever applicable
g) Drawing(s)/Catalogue(s) covering the Material(s), wherever applicable
h) Guarantee/Warranty Certificate(s), wherever applicable.
i) Original Receipt for other statutory levies as applicable.
j) Performance Bank Guarantee / Insurance Surety Bond as applicable.

12.4. The eligible MSME bidders can avail the discounting facility as follows: -

Trade Receivables Discounting System (TReDS) is an institutional mechanism set up in order to facilitate discounting of trade receivables of MSMEs from corporate buyers through invoice discounting by multiple financiers. Bharat Petroleum Corporation Limited (BPCL) is registered with TReDS platform of the aggregators M/s. Receivables Exchange of India Ltd (RXIL), M/s Invoice mart, M/s. M1 xchange, M/s C2treds and M/s DTX. The eligible MSME bidders can avail the discounting facility by registering either in one or multiple TReDS platform of the aggregators. It enables the sellers (MSMEs) to discount their invoices through the aggregators to the financiers at competitive rates thus unlocking their working capital swiftly.

13. GUARANTEE/ WARRANTY:

13.1. Materials shall be guaranteed against manufacturing defects, materials, workmanship and design for a period of 12 months from the date of commissioning or 18 months from the date of dispatch whichever is earlier. Warranty for replacement of material / accessories should be provided free of charges at our premises. The above guarantee/warranty will be without prejudice to the certificate of inspection or material receipt note issued by us in respect of the materials. In case the defect arises within the abovementioned Defect Liability Period (DLP) and the same is repaired/replaced, the DLP for the repaired/replaced job/item will be extended suitably so as to cover the original DLP. However, in no case, such extension will exceed 24 months from date of start of initial DLP.

13.2. All the materials including components and sub contracted items should be guaranteed by the vendor within the warranty period mentioned above. In the event of any defect in the material, the vendor will replace / repair the material at BPCL's concerned location at vendor's risk and cost on due notice.

13.3. In case, vendor does not replace / repair the material on due notice, rejected material will be sent to the

vendor on "Freight to pay" basis for free replacement. Material after rectification of defects shall be dispatched by the vendor on "Freight Paid" basis. Alternatively, BPCL reserves the right to have the material repaired / replaced at the locations concerned, at the vendor's risk, cost and responsibility.

13.4. The Vendor shall provide similar warrantee on the parts, components, fittings, accessories etc. so repaired and / or replaced.

14. PERFORMANCE BANK GUARANTEES / INSURANCE SURETY BOND:

14.1. Vendor will have to provide Performance Bank Guarantee / Insurance Surety Bond for 5% of the basic value of purchase order unless otherwise specified. This bank guarantee / Insurance Surety Bond shall be valid (shall remain in force) for guarantee period (as mentioned in the guarantee clause), with an invocation period of six months thereafter. In the case of Indigenous vendors, the Performance Bank Guarantee / Insurance Surety Bond shall be given on a non-judicial stamp paper of appropriate value (currently Rs 100). PBG format is as per Annexure-I / Annexure – II as applicable.

In case, PBG / Insurance Surety Bond is not provided by the Vendor, 5% of the basic value shall be retained in lieu of PBG / Insurance Surety Bond, till the expiry of guarantee / bond and claim period.
In the case of imports, the Supplier shall furnish the Performance Bank Guarantee (as per Annexure-I) through the following:

(a) Branches of Indian scheduled banks operating in their Country.
(b) Foreign bank operating in their Country which is counter guaranteed by branches of Indian scheduled banks operating in their Country/ India.
(c) Indian branches of foreign banks.
(d) Foreign bank operating in their Country counter guaranteed by their Indian branch.

However, in respect of (c) and (d) above, the Indian branch of foreign banks should be recognized as scheduled bank by Reserve Bank of India.

14.2. If Vendor wants to submit the PBG / Insurance Surety Bond at Contract level to avoid multiple number of PBG / Insurance Surety Bond (i.e. PBG / Insurance Surety Bond issued against every purchase/ call off order) then the validity of PBG / Insurance Surety Bond will be calculated as mentioned below:

Validity of PBG / Insurance Surety Bond = Rate Contract Issue Date (Start Date of Rate Contract) + Rate Contract Period (validity of Rate Contract) + Contractual Delivery Period of material + Contractual Guarantee period + 6 month (for invocation / Claim).

14.3 Process for submitting Bank Guarantee / PBG under SFMS (Structured Financial Messaging System) mode as follows:

Vendors shall insist their Bank for issuance of SFMS Bank Guarantee for faster payments. Vendors shall provide BPCL's Bank Account No. & IFSC Code (Details given below) to their Bank as beneficiary at the time of application for Bank Guarantee in favor of BPCL. Issuing Bank shall issue the Bank Guarantee & send SFMS message to BPCL's Bank confirming the authenticity of Bank Guarantee who in turn shall send the confirmation to BPCL. Vendor should ensure the following for issue of E- bank guarantee:

a. The issuing bank is on SFMS platform
b. SFMS Message type used is 760 COV and SFMS Delivery report/ Message copy is sent along with original BG
c. For BG amendment, message type 767COV is to be used.
d. SFMS contains following details:

i. Beneficiary's bank name: ICICI Bank
ii. IFSC Code: ICIC0000393
iii BPCL'S Customer ID: 8PCL583493800

e. BG Issuing Bank should send the BG Issuance advice through SFMS to BPCL's designated Banker: ICICI Bank, Backbay Branch, Mumbai (IFSC: ICIC0000393).
f. BG Issuance advice should mention applicable Unique Identifier Code (UIC) in row/ field number 7037 of SFMS Delivery Report.
a. BPCL Location : Kharghar , Navi Mumbai
b. Head office : Ballard Estate
c. UIC : BPCL583493800
g. The Original BG should be submitted along with print out of SFMS Delivery report from the BG Issuing Bank Branch.
h. SFMS BG will help in faster verification of BGs and prompt release of payments to Vendors.

15. PACKING & MARKING:

15.1 PACKING:

15.1.1 Packing shall withstand the hazards normally encountered with the means of transport for the goods of this purchase order including loading and unloading operation both by crane and by pushing off.

In the case of imports, all equipments/ materials shall be suitably packed in weather proof, seaworthy/airworthy packing for ocean/air transport under tropical conditions and for rail or road or other appropriate transport in India. The packing shall be strong and efficient enough to ensure safe preservice upto the final point of destination.

Raw/Solid wood packaging material of imported items has to be appropriately treated & marked as per International Standard of Phytosanitary Measures (ISPM-15") for material originating from the contracting countries to the International Plant Protection Convention or the members of Food & Agriculture Organization. Material from non-contracting parties would have to be accompanied by a phytosanitary certificate of the treatment endorsed. The Custom Officer at Indian Port shall not release the material without appropriate compliance of the above provisions w.e.f. 01.11.2004.

15.1.2 The packing specification incorporated herein are supplementary to the internal and external packing methods and standards as per current general rules of J.R.A. Good Tariff Part-I. All packaging shall be done in such a manner as to reduce volume as much as possible.

15.1.3 Fragile articles should be packed with special packing materials depending on the type of Materials and the packing shall bear the words "HANDLE WITH CARE GLASS FRAGILE, DON'T ROLL THIS END UP. THIS END DOWN," to be indicated by arrow.

15.1.4 Chemicals in powder form, catalyst, refractories and like materials etc. shall be packed in drums, cans and tins only. However, Catalyst may be supplied in Jumbo bags.

15.1.5 The hazardous materials shall be packed in accordance with the applicable rules, regulations and tariff of all cognizant Government Authorities and other Governing bodies. It shall be the responsibility of the seller of hazardous materials to designate the material as hazardous and to identify each material by its proper commodity name and its hazardous material class code.

15.1.6 All packages requiring handling by crane should have sufficient space at appropriate place to put sling of suitable dia (strength). Iron/Steel angle should be provided at the place where sling marking are made to avoid damage to package/ equipment while lifting.

15.1.7 Item shipped in bundles must be securely tied with steel wire or strapping. Steel reinforcing rods, bars, pipes, structural members etc. shall be bundled in uniform lengths and the weight shall be within the breaking strength of the securing wire or strapping.

In the case of imports, for bundles the shipping marks shall be embossed on metal or similar tag and wired securely on each end.

15.1.8 All delicate surfaces on equipment/ materials should be carefully protected and printed with protective paint/compound and wrapped to prevent rusting and damage.

15.1.9 All mechanical and electrical equipment and other heavy articles shall be securely fastened to the case bottom and shall be blocked and braced to avoid any displacement/ shifting during transit.

15.1.10 Attachments and spare parts of equipment and all small pieces shall be packed separately in wooden cases with adequate protection inside the case and wherever possible should be sent along with the main equipment. Each item shall be suitably tagged with identification of main equipment, item denomination and reference number of respective assembly drawing. Each item of steel structure and furnaces shall be identified with two erection markings with minimum lettering height of 15mm. Such markings will be followed by the collection numbers in indelible ink/paint. A copy of the packing list shall accompany the materials in each package.

15.1.11 All protrusions shall be suitably protected by providing a cover comprising of tightly bolted wooden disc on the flanges. All nozzles, holes and openings and also all delicate surfaces shall be carefully protected against damage and bad weather. All manufactured surfaces shall be painted with rust proof paint.

In the case of imports, for bulk uniform material when packed in several cases, progressive serial numbers shall be indicated on each case.

15.1.12 Wherever required, equipment/ materials instruments shall be enveloped in polythene bags containing silicagel or similar dehydrating compound.

15.1.13 Pipes shall be packed as under:

(a) Upto 50mm NB in wooden cases/ crates.
(b) Above 50mm NB and upto 100mm NB in bundles and should be strapped at minimum three places.
(c) Above 100mm NB in loose.

15.1.14 Pipes and tubes of stainless steel, copper etc. shall be packed in wooden cases irrespective of their sizes.

15.1.15 Pipes with threaded or flanged ends shall be protected with suitable caps covers, before packing. In the case of imports, all pipes and sheets shall be marked with strips bearing progressive no.

15.1.16 Detailed packing list in waterproof envelope shall be inserted in the package together with equipment/materials. One copy of the detailed packing list shall be fastened outside of the package in waterproof envelope and covered by metal cover.

15.1.17 The supplier shall be held liable for all damages or breakages to the goods due to the defective or insufficient packing as well as for corrosion due to insufficient protection.

15.1.18 Packaged equipment or materials showing damage defects or shortages resulting from improper packaging materials or packing procedures or having concealed damages or shortages, at the time of unpacking shall be to the supplier's account.

All packages which require special handling and transport should have their Centres of Gravity and the points at which they may be slung or gripped clearly indicated and marked "ATTENTION SPECIAL LOAD HANDLE WITH CARE" both in English/ Hindi Languages.

In the case of imports, a distinct colour splash in say red black around each package crate/ bundle shall be given for identification.

15.1.19 Along with the packed material, supplier should attach material list, manuals/instructions and also the Inspection certificate/ release note, wherever applicable.

15.2. **MARKING:** The following details to be written on the side face of packing:

a) Purchase Order Number
b) Consignee Name & Address
c) Vendor Name
d) Batch no with manufacturing date
e) Procedure (in brief) for handling
f) Date of dispatch etc.
g) Expiry Date, if applicable

15.3 IMPORTED ITEMS: On three sides of the packages, the following marks shall appear, clearly visible, with indelible paint and on Vendor's care and expenses.

BHARAT PETROLEUM CORPORATION LIMITED
(With detailed address as given in Special Purchase Conditions)

From :

To : Bharat Petroleum Corporation Limited
With detailed address as given in Special Purchase Conditions)

Order No.:		Rev. No.:	
Item	:		
Equipment Nomenclature	:		
Net weight	:	Kgs.	
Gross weight	:	Kgs.	
Case No.	:	of	Total cases:
Dimensions	:		
Import License No.	:		

NOTE:
Marking shall be bold - minimum letter height 5 cm. For every order and every shipment, packages must be marked with serial progressive numbering.

Top heavy containers shall be so marked either Top Heavy or Heavy Ends.

When packing material is clean and light coloured, a dark black stencil paint shall be acceptable. However, where packaging material is soiled or dark, a coat of flat zinc white paint shall be applied and allowed to dry before applying the specific markings.

In case of large equipments like vessels, heat exchangers, etc. the envelope containing the documents shall be fastened inside a shell connection, with an identifying arrow sign "documents" using indelible paint.

16. DELIVERY:

16.1. Unless otherwise mentioned, Vendor is requested to quote their best delivery schedule from the date of receipt of Purchase order.

16.2. Time being the essence of this contract, the delivery mentioned in the purchase order shall be strictly adhered to and no variation shall be permitted except with prior authorization in writing from the Owner. Goods should be delivered, securely packed and in good order and condition, at the place of delivery and within the time specified in the purchase order for their delivery.

16.3. The contractual delivery period is inclusive of all the lead time for engineering/ procurement of raw material, the manufacturing, inspection / testing, packing, transportation or any other activity whatsoever required to be accomplished for affecting the delivery at the required delivery point.

16.4. Unless otherwise specified, Material(s) shall not be despatched without prior inspection and/or testing and Release Order/Material(s) Acceptance Certificate issued by the Inspector(s).

16.5. BPCL shall have the right to advise any change in despatch point or destination in respect of any Material(s). Any extra expenditure incurred by the Vendor on this account supported by satisfactory documentary evidence, will be reimbursed to the Vendor by BPCL.

17. UNLOADING AND STACKING:

Unloading and stacking will be arranged by BPCL. The Vendor shall send BPCL information of the proposed consignment well in advance by telegram/fax/e-mail/courier to enable BPCL to take necessary action.

18. TRANSIT INSURANCE:

Unless otherwise mentioned,

18.1. Transit Insurance shall be covered by BPCL against its Mega Package Policy only where risk/reward has been transferred to BPCL.

18.2 In the case of imports, insurance against all marine and transit risk shall be covered under the Owner's marine policy. However, the Vendor shall ensure that in effecting shipments clear bill of lading/airway bill are obtained and the carrier's responsibility is fully retained on the Carriers so that the consignee's interests are fully secured and are in no way jeopardized.

18.3. The Vendor shall send BPCL information of the proposed consignment well in advance by fax/e-mail/courier to enable BPCL to take necessary action for the transit insurance of the consignment. Any failure by the Vendor to do so shall place the consignment at the Vendor’s risk.

18.4. In the case of imports, as soon as any shipment is made, the Foreign Supplier shall send advance information by way of e-mail to Bharat Petroleum Corporation Limited, (with detailed address as given in Special Purchase Conditions and/or purchase order) giving particulars of the shipments, vessels name, port of shipment, bill of lading number and date, total FOB and freight value.

19 VALIDITY OF OFFER:

The rates quoted against this tender shall be valid for a period of 90 Days from the date of opening of the tender unless otherwise specified in the Special Purchase Conditions.

20. DELIVERY DATES AND PRICE REDUCTION SCHEDULE:

20.1. The time and date of Delivery of Material(s) as stipulated in the Contract shall be adhered to on the clear understanding that the Price(s) of the Material(s) has/have been fixed with reference to the said Delivery date(s).

20.2. If any delay is anticipated by the Vendor in the delivery of the Material(s) or any of them beyond the stipulated date(s) of Delivery, the Vendor shall forthwith inform BPCL in writing of such anticipated delay and of the steps being taken by the Vendor to remove or reduce the anticipated delay, and shall promptly keep BPCL informed of all subsequent developments.

20.3. The delivery period quoted must be realistic & specific. The inability of successful Vendors to execute orders in accordance with the agreed delivery schedule will entitle BPCL, at its options, to:

20.3.1. Accept delayed delivery at prices reduced by a sum equivalent to half percent (0.5%) of the basic value of any goods not delivered for every week of delay or part thereof, limited to a maximum of 5% of the total basic order value. LR date will be considered as delivery completion date for calculation of price reduction in the case of ex works contract. Date of receipt of materials at owner's premises shall be considered for calculation of price reduction for F.O.R destination contract.

In the case of imports, the contractual delivery date shall be considered from the date of Letter of Credit (L/C) or the date of L/C amendment because of Buyer's fault plus one week (to take care of transit time for receipt of L/C) plus the delivery schedule as indicated by the vendors.

In case of the shipment taking place on "Cash against documents", the contractual delivery shall be taken from the date of purchase order plus one week (to take care of transit time for receipt of order) plus delivery period.

Further the date of B/L or House airway bill shall be considered to find out the delay with respect to contractual delivery date. In case of FOB shipments if the vessel is not available then the intimation by vendors regarding readiness of the goods for the shipment shall be considered for calculating the delay if any. So vendor shall inform the readiness of material for shipment on FOB (Free on Board) basis/ FCA (Free on Carrier) basis.

20.3.2. Cancel the order in part or full and purchase such cancelled quantities from elsewhere on account at the risk and cost of the vendor, without prejudice to its right under 20.3.1 above in respect of goods delivered.

21. RISK PURCHASE CLAUSE:

BPCL reserves the right to curtail or cancel the order either in full or part thereof if the vendor fails to comply with the delivery schedule and other terms & conditions of the order. BPCL also reserves the right to procure the same or similar materials/equipment through other sources at vendor's entire risk, cost and consequences. Further, the vendor agrees that in case of procurement by the owner from other sources the differential amount paid by the owner shall be on account of the vendor together with any interest and other costs accrued thereon for such procurement.

22. FORCE MAJEURE

Circumstances leading to force majeure

(a) Act of terrorism;

(b) Riot, war, invasion, act of foreign enemies, hostilities (whether war be declared or not), civil war, rebellion, revolution, insurrection of military or usurped power;

(c) Ionising radiation or contamination, radio activity from any nuclear fuel or from any nuclear waste from the combustion of nuclear fuel, radioactive toxic explosive or other hazardous properties of any explosive assembly or nuclear component;

(d) epidemics, earthquakes, flood, fire, hurricanes, typhoons or other physical natural disaster, but excluding weather conditions regardless of severity; and

(e) freight embargoes, strikes at national or state-wide level or industrial disputes at a national or state-wide level in any country where Works are performed, and which affect an essential portion of the Works but excluding any industrial dispute which is specific to the performance of the Works or the Contract.

For the avoidance of doubt, inclement weather, third party breach, delay in supply of materials (other than

due to a nationwide transporters' strike) or commercial hardship shall not constitute a Force Majeure event.

- **Notification of Force Majeure**

Contractor shall notify within [10(ten)] days of becoming aware of or the date it ought to have become aware of the occurrence of an event of Force Majeure giving full particulars of the event of Force Majeure and the reasons for the event of Force Majeure preventing the Affected Party from, or delaying the Affected Party in performing its obligations under the Contract.

- **Right of either party to terminate**

If an event of Force Majeure occurs and its effect continues for a period of 180 (one hundred eighty days) or more in a continuous period of 365 (three hundred sixty five) days after notice has been given under this clause, either Party may terminate the Contract by issuing a written notice of 30 (thirty) days to the other Party.

- **Payment in case of termination due to Force Majeure**

The Contract Price attributable to the Works performed as at the date of the commencement of the relevant event of Force Majeure.

The Contractor has no entitlement and Owner has no liability for:

a) Any costs, losses, expenses, damages or the payment of any part of the Contract Price during an event of Force Majeure; and

b) Any delay costs in any way incurred by the Contractor due to an event of Force Majeure. Time extension for such cases will be worked out appropriately.

23. DISPUTE RESOLUTION:

23.1 In the event of a dispute arising out of or in connection with this contract, including any question regarding its existence, validity or termination, the parties shall first seek settlement of that dispute by mediation in accordance with BPCL Mediation Scheme, 2025. The venue of mediation proceedings shall be at _____ (Region/HQ from where the tender has been floated). BPCL Mediation Scheme 2025 can be accessed at https://www.bharatpetroleum.in/images/files/bpcl-mediation-scheme-2025.pdf

23.2 If the dispute is not settled by mediation in terms of BPCL Mediation Scheme, 2025, then the dispute shall be referred for adjudication through a court of competent jurisdiction in India.

23.3 The governing law of the contract shall be the substantive laws of India.

23.4 Neither party shall be entitled for any pre-filing interest, i.e., from the date of cause of action till the date of filing of civil suit. Parties agree that any claim for any such interest shall not be considered and shall be void. The Civil Court/Commercial Court shall have no right to grant any pre-filing interest to either of the parties.

23.5 In the event of any dispute or difference relating to the interpretation and application of the provisions of commercial contract(s) between Central Public Sector Enterprises (CPSEs)/Port Trusts inter se and also between CPSEs and Government Departments/Organisations (excluding disputes relating to Income Tax, Customs & Excise Departments*), such dispute or difference shall be taken up by either party for its resolution through AMRCD as mentioned in DPE OM no. 05/0003/2019-FTS-10937 dated 14th December, 2022 and the decision of AMRCD on the said dispute will be binding on both the parties.

(* The exclusion would also include disputes concerning GST, State level Sales Tax / VAT etc; though not mentioned explicitly).

24. INTEGRITY PACT (IP):

Vendors are requested to sign & return our pre-signed IP document, if applicable. This document is essential & binding. Vendor's failure to return the IP document duly signed along with Bid Document may result in the bid not being considered for further evaluation.

25. RECOVERY OF SUMS DUE:

Whenever, any claim against vendor for payment of a sum of money arises out of or under the contract, the owner shall be entitled to recover such sums from any sum then due or when at any time thereafter may become due from the vendor under this or any other contract with the owner and should this sum be not sufficient to cover the recoverable amount of claim(s), the vendor shall pay to BPCL on demand the balance remaining due.

26. CONFIDENTIALITY OF TECHNICAL INFORMATION:

Drawing, specifications and details shall be the property of the BPCL and shall be returned by the Vendor on demand. The Vendor shall not make use of drawing and specifications for any purpose at any time save and except for the purpose of BPCL. The Vendor shall not disclose the technical information furnished to or organized by the Vendor under or by virtue of or as a result of the implementation of the Purchase Order to any person, firm or body or corporate authority and shall make all endeavors to ensure that the technical information is kept CONFIDENTIAL. The technical information imparted and supplied to the vendor by BPCL shall at all time remain the absolute property of BPCL. Imparting of any confidential information by the Vendor will be breach of contract.

27. PATENTS & ROYALTIES:

The vendor shall fully indemnify BPCL and users of materials specified herein/supplied at all times, against any action, claim or demand, costs and expenses, arising from or incurred by reasons of any infringement or alleged infringement of any patent, registered design, trademark or name, copy right or any other protected rights in respect of any materials supplied or any arrangement, system or method of using, fixing or working used by the vendor. In the event of any claim or demand being made or action sought against BPCL in respect of any of the aforesaid matter, the vendor shall be notified thereof immediately and the vendor shall at his/its own expense with (if necessary) the assistance of BPCL (whose all expense shall be reimbursed by the vendor) conduct all negotiations for the settlement of the same and/or litigation which may arise thereof.

28. LIABILITY CLAUSE:

In case where it is necessary for employees or representatives of the Vendor to go upon the premises of owner, vendor agrees to assume the responsibility for the proper conduct of such employees/representatives while on said premises and to comply with all applicable Workmen's Compensation Law and other applicable Government Regulations and Ordinances and all plant rules and regulations particularly in regard to safety precautions and fire hazards. If this order requires vendor to furnish labour at site, such vendor's workmen or employees shall under no circumstances be deemed to be in owner's employment and vendor shall hold himself responsible for any claim or claims which they or their heirs, dependent or personal representatives, may have or make, for damages or compensation for anything done or committed to be done, in the course of carrying out the work covered by the purchase order, whether arising at owner's premises or elsewhere and agrees to indemnify the owner against any such claims, if made against the owner and all costs of proceedings, suit or actions which owner may incur or sustain in respect of the same.

29. LIMITATION OF LIABILITY FOR GOODS PROCUREMENT :

The aggregate total liability of the Contractor to Owner under the Contract shall not exceed the total Contract Price, except that this Clause shall not limit the liability of the Contractor for following:
(a) In the event of breach of any Applicable Law;
(b) In the event of fraud, willful misconduct or illegal or unlawful acts, or gross negligence of the Contractor or any person acting on behalf of the Contractor; or

(c) In the event of acts or omissions of the Contractor which are contrary to the most elementary rules of diligence which a conscientious Contractor would have followed in similar circumstances; or

(d) In the event of any claim or loss or damage arising out of infringement of Intellectual Property; or

(e) For any damage to any third party, including death or injury of any third party caused by the Contractor or any person or firm acting on behalf of the Contractor in executing the Works.

Neither Party shall be liable to the other Party for any kind of indirect or consequential loss or damage like, loss of use, loss of profit, loss of production or business interruption which is connected with any claim arising under the Contract.

30. COMPLIANCE OF REGULATIONS:

Vendor warrants that all goods/Materials covered by this order have been produced, sold, dispatched, delivered and furnished in strict compliance with all applicable laws, regulations, labour agreement, working condition and technical codes and statutory requirements as applicable from time to time. The vendor shall ensure compliance with the above and shall indemnify owner against any actions, damages, costs and expenses of any failure to comply as aforesaid.

31. REJECTION, REMOVAL OF REJECTED GOODS AND REPLACEMENT:

In case the testing and inspection at any stage by inspectors reveal that the equipment, materials and workmanship do not comply with specification and requirements, the same shall be removed by the vendor at his/its own expense and risk, within the time allowed by the owner. The owner shall be at liberty to dispose off such rejected goods in such manner as he may think appropriate. In the event the vendor fails to remove the rejected goods within the period as aforesaid, all expenses incurred by the owner for such disposal shall be to the account of the vendor. The freight paid by the owner, if any, on the inward journey of the rejected materials shall be reimbursed by the vendor to the owner before the rejected materials are removed by the vendor. The vendor will have to proceed with the replacement of the equipment or part of equipment without claiming any extra payment if so required by the owner. The time taken for replacement in such event will not be added to the contractual delivery period.

32. NON-WAIVER:

Failure of the Owner to insist upon any of the terms or conditions incorporated in the Purchase Order or failure or delay to exercise any rights or remedies herein, or by law or failure to properly notify Vendor in the event of breach, or the acceptance of or payment of any goods hereunder or approval of design shall not release the Vendor and shall not be deemed a waiver of any right of the Owner to insist upon the strict performance thereof or of any of its or their rights or remedies as to any such goods regardless of when such goods are shipped, received or accepted nor shall any purported oral modification or revision of the order by BPCL act as waiver of the terms hereof. Any waiver to be effective must be in writing. Any lone incident of waiver of any condition of this agreement by BPCL shall not be considered as a continuous waiver or waiver for other condition by BPCL.

33. NEW & UNUSED MATERIAL:

All the material supplied by the vendor shall be branded new, unused and of recent manufacture.

34. PURCHASE PREFERENCE CLAUSE:

Owner reserves its right to allow Public Sector Enterprises (Central/State), purchase preference as admissible/ applicable from time to time under the existing Govt. policy. Purchase preference to a PSE shall be decided based on the price quoted by PSE as compared to L1 Vendor at the time of evaluation of the price bid.

Owner reserves its right to allow Micro and Small Enterprises (MSEs), MSEs owned by Women Entrepreneurs and MSEs owned by Scheduled Caste (SC) or the Scheduled tribe (ST) entrepreneurs, purchase preference as admissible/applicable from time to time under the existing Govt. policy. Purchase preference to a MSE, a MSE owned by women entrepreneurs and a MSE owned by SC/ST entrepreneurs shall be decided based on the price quoted by the said MSEs as compared to L-1 Vendor at the time of evaluation of the price bid.

Bidders claiming purchase preference as MSE need to submit the following documents:

- Self-attested copy of all the pages of the EM-II certificate/Udyog Adhar Memorandum issued by the appropriate authorities mentioned in the Public procurement policy of MSEs-2012 and
- Vendor's declaration/affidavit in their organization/Company letter head, stating that, in the event of award of contract, all the ordered supplies shall be made from the unit for which MSE certificate has been submitted.

35. CANCELLATION:

35.1. BPCL reserves the right to cancel the contract/purchase order or any part thereof through a written notice to the vendor if:

35.1.1. The vendor fails to comply with the terms of this purchase order/contract.

35.1.2. The vendor becomes bankrupt or goes into liquidation.

35.1.3. The vendor fails to deliver the goods on time and/or replace the rejected goods promptly.

35.1.4. The vendor makes a general assignment for the benefit of creditors.

35.1.5. A receiver is appointed for any of the property owned by the vendor.

35.2. Upon receipt of the said cancellation notice, the vendor shall discontinue all work on the purchase order matters connected with it. BPCL in that event will be entitled to procure the requirement in the open market and recover excess payment over the vendor's agreed price if any, from the vendor and also reserving to itself the right to forfeit the security deposit if any, made by the vendor against the contract. The vendor is aware that the said goods are required by BPCL for the ultimate purpose of materials production and that non-delivery may cause loss of production and consequently loss of profit to the BPCL. In this-event of BPCL exercising the option to claim damages for non delivery other than by way of difference between the market price and the contract price, the vendor shall pay to BPCL, fair compensation to be agreed upon between BPCL and the vendor. The provision of this clause shall not prejudice the right of BPCL from invoking the provisions of price reduction clause mentioned in 20.3.1 as aforesaid.

36. ANTI –COMPETITIVE AGREEMENTS/ABUSE OF DOMINANT POSITION:

The Competition Act, 2002 as amended by the Competition (Amendment) Act, 2007 (the Act), prohibits anti- competitive practices and aims at fostering competition and at protecting Indian markets against anti-competitive practices by enterprises. The Act prohibits anti- competitive agreements, abuse of dominant position by enterprises, and regulates combinations (consisting of acquisition, acquiring of

control and M&A) wherever such agreements, abuse or combination causes, or is likely to cause, appreciable adverse effect on competition in markets in India. BPCL reserves the right to approach the Competition Commission established under the Act of Parliament and file information relating to anti-competitive agreements and abuse of dominant position. If such a situation arises, then Vendors are bound by the decision of the Competitive Commission and also subject to penalty and other provisions of the Competition Act.

37. ASSIGNMENT:

The Vendor does not have any right to assign his rights and obligations under these general purchase conditions without the prior written approval of BPCL.

38. GOVERNING LAW:

These General Purchase Conditions shall be governed by the Laws of India.

39. AMENDMENT:

Any amendment to these General Purchase Conditions can be made only in writing and with the mutual consent of the parties to these conditions.

40. NOTICES:

Any notices to be given hereunder by a Party to the other shall be in English and delivered by hand or sent by courier or facsimile to the other Party at the address or facsimile number stated below or such other address or number as may be notified by the relevant Party from time to time.

41. POLICY ON HOLIDAY LISTING:

The guidelines and procedures for Holiday Listing are available separately in BPCL website and shall be applicable in the context of all tenders floated and consequently all orders/ contracts / purchase orders. It can be accessed using the following link: https://www.bharatpetroleum.in/pdf/Holiday-Listing-Policy-2024.pdf

42. ORDER OF PRECEDENCE FOR PURCHASES :

1. Purchase Order
2. Detailed letter of Acceptance along with its enclosures
3. Letter of Award / Fax of Acceptance
4. Job Specifications (specific to particular job only)
5. Drawings
6. Special Purchase Conditions (SPC)
7. Technical Specifications
8. Instructions to Bidders
9. General Purchase Conditions (GPC)
10. Other Documents

Additionally, any variation or amendment / change order issued after signing of formal contract shall take precedence over respective clauses of the formal contract and its Annexures.

43. TERMINATION FOR CONVENIENCE:

The purchaser may, by written notice of 14 days sent to the seller, cancel the contract, in whole or part, at any time for his convenience. The notice of cancellation shall specify that cancellation is for the

purchaser's convenience, the extent to which performance of work under the contract is cancelled and the date upon which such cancellation becomes effective.

The goods that are complete and ready for shipment within 30 days after the seller's receipt of notice of cancellation shall be purchased by the purchaser at contract terms and prices. For the remaining goods, the purchaser may opt :-

a. To have any portion completed and delivered at the contract terms and prices

and / or

b. To cancel the remainder and pay to the seller an agreed amount for partially completed goods and materials and parts previously procured by the seller.

44. BUILDING AND OTHER CONSTRUCTION WORKERS CESS:

a. Bidders to note that under Building and other Construction Workers Welfare Act (Re&CS) Act 1996, Cess is applicable to contracts executed outside Factory Area (e.g. construction of new industrial installation, office & residential buildings etc.) as per the provisions applicable under 'The Building and Other Construction Workers Welfare Cess Act 1996'.

b. The contractor must be registered with the concerned authorities under the Building and other Construction Workers" (RE&CS) Act, 1996 or in case of non-registration; the contractor should obtain registration within one month of the award of contract.

c. The contractor shall be responsible to comply with all provisions of the Building and Other Construction Workers" (RE&CS) Act, 1996, the Building and other Construction Workers" Welfare Cess Act, 1996, the Building and other Construction Workers" (RE&CS) Rules, 1998 and the Building and other Construction Workers Welfare Cess Rules, 1998.

d. Cess, as per the prevailing rate (presently 1%), shall be deducted at source from bills of the contactors by the Engineer-in-Charge and remitted to the "Secretary, Building and other Construction Workers Welfare Board" of the concerned State.

e. The contactor shall be responsible to submit final assessment return of the Cess amount to the assessing officer after adjusting the Cess deducted at source.

BPCL

_____

_____

_____

VENDOR

_____

_____

_____

Please sign & return all the pages of GPC as a token of your acceptance of all the terms & conditions as mentioned.

Annexure I

PERFORMANCE BANK GUARANTEE
(On Non-judicial paper for appropriate value)

To,
Bharat Petroleum Corporation Limited

Dear Sir,
In consideration of the Bharat Petroleum Corporation Limited, (hereinafter called 'the Company' which expression shall include its successors and assigns) having awarded to M/s. (Name) .....(Constitution).....(address) … ..... (hereinafter referred to as "The vendor" which expression shall wherever the subject or context so permits include its successors and assigns) a supply contract in terms interalia, of the Company's Purchase order No…….. dated and the General and Special Purchase Conditions of the Company and upon the condition of vendor's furnishing security for the performance of the vendor's obligations and/or discharge of the vendor's liability under and / or in connection with the said supply contract upto a sum of Rs. (in figures)……..Rs (in words) .....only amounting to 5% (five percent) of the total contract value.

We, (Name)……..(constitution) ……(hereinafter called "the Bank" which expression shall include its successors and assigns) hereby jointly and severally undertake and guarantee to pay to the Company in ----- (Currency) forthwith on demand in writing and without protest or demur of any and all moneys any wise payable by the Vendor to the Company under in respect of or in connection with the said supply contract inclusive of all the Company's losses and expenses and other moneys anywise payable in respect to the above as specified in any notice of demand made by the Company to the Bank with reference to this Guarantee upto an aggregate limit of Rs(in figures)……Rs(in words).....only.

AND the Bank hereby agrees with the Company that

(i) This Guarantee/undertaking shall be a continuing guarantee and shall remain valid and irrevocable for all claims of the Company and liabilities of the vendor arising upto and until midnight of ……..

This date shall be 6 months from the last date of guarantee period.

(ii) This Guarantee/ Undertaking shall be in addition to any other guarantee or security of whatsoever that the Company may now or at any time otherwise have in relation to the vendor's obligation/liabilities under and /or connection with the said supply contract, and the Company shall have full authority to take recourse to or reinforce this security in preference to the other security(ies) at its sole discretion, and no failure on the part of the Company in enforcing or requiring enforcement of any other security shall have the effect of releasing the Bank from its liability hereunder.

(iii) The Company shall be at liability without reference to the Bank and without effecting the full liability of the Bank hereunder to take any other security in respect of the vendor's obligations and /or liabilities under or in connection with the said supply contract and to vary the terms vis a vis the vendor of the said supply contract or to grant time and/ or indulgence to the vendor or to reduce or to increase or otherwise vary the prices of the total contract value or to release or to forbear from enforcement all or any of the obligations of the vendor

under the said supply contract and/ or the remedies of the Company under any other security(ies) now or hereafter held by the Company and no such dealing(s), variation(s), reduction(s), increase(s) or the indulgence(s) or arrangement(s) with the vendor or release or forbearance whatsoever shall have the effect of releasing the Bank from its full liability to the Company hereunder or of prejudicing rights of the Company against the Bank.

(iv) This Guarantee /Undertaking shall not be determined by the liquidation or winding up or dissolution or change of constitution or insolvency of the vendor but shall in all respects and for all purposes be binding and operative until payment of all moneys payable to the Company in terms hereof.

(v) The Bank hereby waives all rights at any time inconsistent with the terms of the Guarantee/ Undertaking and the obligations of the Bank in terms hereof shall not be anywise affected or suspended by reason of any dispute or disputes having been raised by the vendor (whether or not pending before any Arbitrator, officer, Tribunal or Court) or any denial of liability by the vendor or any other order of communication whatsoever by the vendor stopping or preventing or purporting to stop or prevent any payment by the Bank to the Company in terms hereof.

(vi) The amount stated in any notice of demand addressed by the Company to the Guarantor as liable to be paid to the Company by the vendor or as suffered or incurred by the Company on account of any losses or damages of costs, charges and or expenses shall as between the Bank and the Company be conclusive of the amount so liable to be paid to the Company or suffered or incurred by the Company, as the case may be and payable by the Guarantor to Company in terms hereof.

Yours faithfully,

(Signature)

NAME & DESIGNATION

NAME OF THE BANK

NOTES:

Annexure II

Form of Insurance Surety Bond towards Bid Security (EMD) / Performance Security

[To be stamped in accordance with Stamp Act of India]

Insurance Surety Bond No. Date

To

[Bharat Petroleum Corporation Limited]

Dear Sirs,

In accordance with Invitation for Bids under your Tender No. & date……,
M/s.....[Bidder's Name] ..... having its Registered / Head Office at ..... (hereinafter called the 'Bidder') wish to participate / have been awarded [as the case may be] in the said tender for ..... [Procurement description / Tender Title].

As an irrevocable Insurance Surety Bond against Bid Security (EMD) / Performance Security [as the case may be] for an amount of ..... [EMD / Performance Security amount] and remain in full force for a period of …… (days) i.e. up to [Validity Date] from the Bid Due Date and with an additional claim period of ……(days) i.e. up to [Claim Period Validity Date] required to be submitted by the Bidder as a condition precedent for participation in the said bid / award of contract [as the case may be] which amount is liable to be forfeited on the happening of any contingencies as mentioned under the Bidding Documents / Contract / LoA.

We, the ..... [Name of the Insurer] registered under IRDAI having our Head Office at .....[Address of the Insurer] guarantee and undertake to pay immediately on demand by Bharat Petroleum Corporation Limited (hereinafter called the 'Beneficiary') the amount of ..... [EMD / Performance Security amount] without any reservation, protest, demand and recourse. Any such demand made by the Beneficiary shall be conclusive and binding on us irrespective of any dispute or difference raised by the Bidder and / or any right / remedy available to the bidder in terms thereof.

This Insurance Surety Bond shall be unconditional as well as irrevocable and shall remain valid up to ..... [Claim date]. If any further extension of this Insurance Surety Bond is required, the same shall be extended to such required period on receiving instructions from M/s ..... [Bidder's Name] on whose behalf this Insurance Surety Bond is issued.

The Insurer declares that it has power to issue this Surety Bond and discharge the obligations contemplated herein, the undersigned is duly authorised and has full power to execute this Surety Bond for and on behalf of the Insurer.

The Surety Bond shall not be affected by any change in the constitution or winding up of the Bidder or the Insurer or any absorption, merger or amalgamation of the Bidder or the Insurer with any other person.

In witness where of the Insurer, through its authorised officer, has set its hand and stamp on this.....day of.....20.....at.....

.....
(Signature)
.....
(Name)

.....
(Designation with Insurer Stamp)

Contact Details & Address of Surety Insurer for verification:

Name (Official): ……

Branch Address:……

Telephone No.:……

Mobile No:…….

E-mail:……..

PREAMBLE TO SCHEDULE of PRICE (SOP) / SCHEDULE OF RATES (SOR) (FOR INDIAN BIDDERS)	
Name of Item : FITTINGS- (CS, LTCS & CS-EPOXY COATED)	
RFQ No: SPN/ B933-000-WD-MR-3213/175 (Tender ID: 2026_EIL_907468)	
NAME OF BIDDER:	
OFFER REFERENCE NO:	

1	The quoted prices shall be inclusive of all Scope of Supply,P&F and testing requirements as specified in the enclosed MR. Scope of Supply shall be strictly as per Material Requisition and other documents which are part of RFQ.
2	Submision of this Price schedule by bidder, confirms that bidder has noted the contents of the Preamble to the Schedule of Price (SOP) / Schedule of Rates (SOR), RFQ, Material Requisition etc. and quoted his prices accordingly without any deviation.
3	Bidder must quote the price in enclosed Schedule of Price (SOP) formats only. The formats shall not be changed and/or retyped. For any deviation to the formats, offer may be rejected.
4	Quoted prices are firm and fixed till complete execution of the entire order and no variation on any account is allowed, unless otherwise categorically specified in RFQ documents.
5	The quoted prices shall be inclusive of all testing requirements as specified in the Bidding Document.
6	In case of discrepancies in the Item Description/Quantity in this SOP, description/quantity etc. as per MR shall prevail.
7	Bidder to quote Unit item wise prices as sought in the SOP / BOQ.
8	Bidder shall quote Unit Freight Charges upto Project Site.
9	This Schedule of Prices comprises the following : - SCHEDULE OF PRICES (BOQ1) - DETAILS OF BUILT-IN-CIF VALUE OF IMPORT CONTENT (INDIAN BIDDERS) (FORMAT-B1)
10	i). GST rate has been prefilled as 18.00%, which can be edited by the bidders. ii) It is mandatory for bidders to mention GST rate against each item.The GST Rates have been pre-filled in respective columns , Bidders shall confirm/quote the applicable GST Rates as per their own assessment. Any GST rate submitted in respective columns in price bid shall be deemed to be considered as bidder's submission only.
Notes:	i) Bidders must submit this preamble with their bid along with priced offer. ii) Bidders are requested to enter their name in the each page of Schedule of Price provided in the e-tender portal for submission of price bid

Validate | Print | Help | Item Wise BoQ

Tender Inviting Authority: EIL on behalf of BPCL

Name of Work: FITTINGS - (CS, LTCS & CS-EPOXY COATED)

RFQ No: SPN/ B933-000-WD-MR-3213/175

Notes: 01). GST rate has been prefilled as 18.00%, which can be edited by the bidders.
02) It is mandatory for bidders to mention GST rate against each item.The GST Rates have been pre-filled in respective columns , Bidders shall confirm/quote the applicable GST Rates as per their own assessment. Any GST rate submitted in respective columns in price bid shall be deemed to be considered as bidder's submission only.
03) Item Descriptions are as per MR.

Name of the Bidder/ Bidding Firm / Company :	

PRICE SCHEDULE(BOQ1)

(This BOQ template must not be modified/replaced by the bidder and the same should be uploaded after filling the relevent columns, else the bidder is liable to be rejected for this tender. Bidders are allowed to enter the Bidder Name and Values only)

NUMBER #	TEXT #	NUMBER #	TEXT #	NUMBER #	NUMBER	NUMBER	NUMBER	NUMBER #	TEXT #
Sl. No.	Item Description	Quantity	Units	UNIT SUPPLY PRICE ON FOT DESPATCH POINT BASIS (In Figures; to be entered by the Bidder) (excluding GST) in Rs (To be filled by bidder)	Rate of GST in % on supply (To be filled by bidder)	UNIT FREIGHT CHARGES UPTO PROJECT SITE (In Figures; to be entered by the Bidder) (excluding GST) in Rs (To be filled by bidder)	Rate of GST in % on Freight Charges (To be filled by bidder)	TOTAL AMOUNT including taxes Rs. P	TOTAL AMOUNT In Words
1	2	4	5	7	8	16	20	12	13
	FITTINGS - (CS, LTCS & CS-EPOXY COATED)								
1	MR Item SR Nos: 1	12	NOS		18.00		18.00	0.00	INR Zero Only
2	MR Item SR Nos: 2	30	NOS		18.00		18.00	0.00	INR Zero Only
3	MR Item SR Nos: 3	17	NOS		18.00		18.00	0.00	INR Zero Only
4	MR Item SR Nos: 4	3	NOS		18.00		18.00	0.00	INR Zero Only
5	MR Item SR Nos: 5	62	NOS		18.00		18.00	0.00	INR Zero Only
6	MR Item SR Nos: 6	17	NOS		18.00		18.00	0.00	INR Zero Only
7	MR Item SR Nos: 7	9	NOS		18.00		18.00	0.00	INR Zero Only
8	MR Item SR Nos: 8	200	NOS		18.00		18.00	0.00	INR Zero Only
9	MR Item SR Nos: 9	40	NOS		18.00		18.00	0.00	INR Zero Only
10	MR Item SR Nos: 10	405	NOS		18.00		18.00	0.00	INR Zero Only
11	MR Item SR Nos: 11	12	NOS		18.00		18.00	0.00	INR Zero Only
12	MR Item SR Nos: 12	85	NOS		18.00		18.00	0.00	INR Zero Only
13	MR Item SR Nos: 13	29	NOS		18.00		18.00	0.00	INR Zero Only
14	MR Item SR Nos: 14	9	NOS		18.00		18.00	0.00	INR Zero Only
15	MR Item SR Nos: 15	46	NOS		18.00		18.00	0.00	INR Zero Only
16	MR Item SR Nos: 16	9	NOS		18.00		18.00	0.00	INR Zero Only
17	MR Item SR Nos: 17	351	NOS		18.00		18.00	0.00	INR Zero Only
18	MR Item SR Nos: 18	49	NOS		18.00		18.00	0.00	INR Zero Only
19	MR Item SR Nos: 19	49	NOS		18.00		18.00	0.00	INR Zero Only
20	MR Item SR Nos: 20	83	NOS		18.00		18.00	0.00	INR Zero Only
21	MR Item SR Nos: 21	28	NOS		18.00		18.00	0.00	INR Zero Only
22	MR Item SR Nos: 22	12	NOS		18.00		18.00	0.00	INR Zero Only
23	MR Item SR Nos: 23	9	NOS		18.00		18.00	0.00	INR Zero Only
24	MR Item SR Nos: 24	980	NOS		18.00		18.00	0.00	INR Zero Only
25	MR Item SR Nos: 25	59	NOS		18.00		18.00	0.00	INR Zero Only
26	MR Item SR Nos: 26	782	NOS		18.00		18.00	0.00	INR Zero Only
27	MR Item SR Nos: 27	30	NOS		18.00		18.00	0.00	INR Zero Only
28	MR Item SR Nos: 28	30	NOS		18.00		18.00	0.00	INR Zero Only
29	MR Item SR Nos: 29	12	NOS		18.00		18.00	0.00	INR Zero Only
30	MR Item SR Nos: 30	173	NOS		18.00		18.00	0.00	INR Zero Only
31	MR Item SR Nos: 31	9	NOS		18.00		18.00	0.00	INR Zero Only
32	MR Item SR Nos: 32	8286	NOS		18.00		18.00	0.00	INR Zero Only
33	MR Item SR Nos: 33	1649	NOS		18.00		18.00	0.00	INR Zero Only
34	MR Item SR Nos: 34	1103	NOS		18.00		18.00	0.00	INR Zero Only
35	MR Item SR Nos: 35	75	NOS		18.00		18.00	0.00	INR Zero Only
36	MR Item SR Nos: 36	30	NOS		18.00		18.00	0.00	INR Zero Only
37	MR Item SR Nos: 37	587	NOS		18.00		18.00	0.00	INR Zero Only
38	MR Item SR Nos: 38	964	NOS		18.00		18.00	0.00	INR Zero Only
39	MR Item SR Nos: 39	13	NOS		18.00		18.00	0.00	INR Zero Only
40	MR Item SR Nos: 40	126	NOS		18.00		18.00	0.00	INR Zero Only
41	MR Item SR Nos: 41	666	NOS		18.00		18.00	0.00	INR Zero Only
42	MR Item SR Nos: 42	5	NOS		18.00		18.00	0.00	INR Zero Only
43	MR Item SR Nos: 43	15	NOS		18.00		18.00	0.00	INR Zero Only

44	MR Item SR Nos: 44	5	NOS		18.00		18.00	0.00	INR Zero Only
45	MR Item SR Nos: 45	132	NOS		18.00		18.00	0.00	INR Zero Only
46	MR Item SR Nos: 46	896	NOS		18.00		18.00	0.00	INR Zero Only
47	MR Item SR Nos: 47	535	NOS		18.00		18.00	0.00	INR Zero Only
48	MR Item SR Nos: 48	1193	NOS		18.00		18.00	0.00	INR Zero Only
49	MR Item SR Nos: 49	19	NOS		18.00		18.00	0.00	INR Zero Only
50	MR Item SR Nos: 50	5	NOS		18.00		18.00	0.00	INR Zero Only
51	MR Item SR Nos: 51	5	NOS		18.00		18.00	0.00	INR Zero Only
52	MR Item SR Nos: 52	5	NOS		18.00		18.00	0.00	INR Zero Only
53	MR Item SR Nos: 53	22	NOS		18.00		18.00	0.00	INR Zero Only
54	MR Item SR Nos: 54	5	NOS		18.00		18.00	0.00	INR Zero Only
55	MR Item SR Nos: 55	49	NOS		18.00		18.00	0.00	INR Zero Only
56	MR Item SR Nos: 56	55	NOS		18.00		18.00	0.00	INR Zero Only
57	MR Item SR Nos: 57	12	NOS		18.00		18.00	0.00	INR Zero Only
58	MR Item SR Nos: 58	3	NOS		18.00		18.00	0.00	INR Zero Only
59	MR Item SR Nos: 59	6	NOS		18.00		18.00	0.00	INR Zero Only
60	MR Item SR Nos: 60	2	NOS		18.00		18.00	0.00	INR Zero Only
61	MR Item SR Nos: 61	1	NOS		18.00		18.00	0.00	INR Zero Only
62	MR Item SR Nos: 62	2	NOS		18.00		18.00	0.00	INR Zero Only
63	MR Item SR Nos: 63	2	NOS		18.00		18.00	0.00	INR Zero Only
64	MR Item SR Nos: 64	2	NOS		18.00		18.00	0.00	INR Zero Only
65	MR Item SR Nos: 65	2518	NOS		18.00		18.00	0.00	INR Zero Only
66	MR Item SR Nos: 66	3	NOS		18.00		18.00	0.00	INR Zero Only
67	MR Item SR Nos: 67	419	NOS		18.00		18.00	0.00	INR Zero Only
68	MR Item SR Nos: 68	1712	NOS		18.00		18.00	0.00	INR Zero Only
69	MR Item SR Nos: 69	67	NOS		18.00		18.00	0.00	INR Zero Only
70	MR Item SR Nos: 70	1049	NOS		18.00		18.00	0.00	INR Zero Only
71	MR Item SR Nos: 71	1033	NOS		18.00		18.00	0.00	INR Zero Only
72	MR Item SR Nos: 72	473	NOS		18.00		18.00	0.00	INR Zero Only
73	MR Item SR Nos: 73	490	NOS		18.00		18.00	0.00	INR Zero Only
74	MR Item SR Nos: 74	154	NOS		18.00		18.00	0.00	INR Zero Only
75	MR Item SR Nos: 75	130	NOS		18.00		18.00	0.00	INR Zero Only
76	MR Item SR Nos: 76	9	NOS		18.00		18.00	0.00	INR Zero Only
77	MR Item SR Nos: 77	8	NOS		18.00		18.00	0.00	INR Zero Only
78	MR Item SR Nos: 78	11	NOS		18.00		18.00	0.00	INR Zero Only
79	MR Item SR Nos: 79	24	NOS		18.00		18.00	0.00	INR Zero Only
80	MR Item SR Nos: 80	39	NOS		18.00		18.00	0.00	INR Zero Only
81	MR Item SR Nos: 81	498	NOS		18.00		18.00	0.00	INR Zero Only
82	MR Item SR Nos: 82	33	NOS		18.00		18.00	0.00	INR Zero Only
83	MR Item SR Nos: 83	58	NOS		18.00		18.00	0.00	INR Zero Only
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85	MR Item SR Nos: 85	98	NOS		18.00		18.00	0.00	INR Zero Only
86	MR Item SR Nos: 86	155	NOS		18.00		18.00	0.00	INR Zero Only
87	MR Item SR Nos: 87	35	NOS		18.00		18.00	0.00	INR Zero Only
88	MR Item SR Nos: 88	49	NOS		18.00		18.00	0.00	INR Zero Only
89	MR Item SR Nos: 89	13	NOS		18.00		18.00	0.00	INR Zero Only
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92	MR Item SR Nos: 92	140	NOS		18.00		18.00	0.00	INR Zero Only
93	MR Item SR Nos: 93	95	NOS		18.00		18.00	0.00	INR Zero Only
94	MR Item SR Nos: 94	6	NOS		18.00		18.00	0.00	INR Zero Only
95	MR Item SR Nos: 95	33	NOS		18.00		18.00	0.00	INR Zero Only
96	MR Item SR Nos: 96	6	NOS		18.00		18.00	0.00	INR Zero Only
97	MR Item SR Nos: 97	27	NOS		18.00		18.00	0.00	INR Zero Only
98	MR Item SR Nos: 98	1	NOS		18.00		18.00	0.00	INR Zero Only
99	MR Item SR Nos: 99	77	NOS		18.00		18.00	0.00	INR Zero Only
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101	MR Item SR Nos: 101	23	NOS		18.00		18.00	0.00	INR Zero Only
102	MR Item SR Nos: 102	8	NOS		18.00		18.00	0.00	INR Zero Only
103	MR Item SR Nos: 103	8	NOS		18.00		18.00	0.00	INR Zero Only
104	MR Item SR Nos: 104	4	NOS		18.00		18.00	0.00	INR Zero Only
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106	MR Item SR Nos: 106	3	NOS		18.00		18.00	0.00	INR Zero Only
107	MR Item SR Nos: 107	2	NOS		18.00		18.00	0.00	INR Zero Only
108	MR Item SR Nos: 108	30	NOS		18.00		18.00	0.00	INR Zero Only
109	MR Item SR Nos: 109	3	NOS		18.00		18.00	0.00	INR Zero Only
110	MR Item SR Nos: 110	4	NOS		18.00		18.00	0.00	INR Zero Only
111	MR Item SR Nos: 111	8	NOS		18.00		18.00	0.00	INR Zero Only
112	MR Item SR Nos: 112	5	NOS		18.00		18.00	0.00	INR Zero Only
113	MR Item SR Nos: 113	22	NOS		18.00		18.00	0.00	INR Zero Only
114	MR Item SR Nos: 114	22	NOS		18.00		18.00	0.00	INR Zero Only
115	MR Item SR Nos: 115	8	NOS		18.00		18.00	0.00	INR Zero Only
116	MR Item SR Nos: 116	3	NOS		18.00		18.00	0.00	INR Zero Only
117	MR Item SR Nos: 117	28	NOS		18.00		18.00	0.00	INR Zero Only
118	MR Item SR Nos: 118	14	NOS		18.00		18.00	0.00	INR Zero Only
119	MR Item SR Nos: 119	32	NOS		18.00		18.00	0.00	INR Zero Only
120	MR Item SR Nos: 120	2	NOS		18.00		18.00	0.00	INR Zero Only
121	MR Item SR Nos: 121	3	NOS		18.00		18.00	0.00	INR Zero Only
122	MR Item SR Nos: 122	11	NOS		18.00		18.00	0.00	INR Zero Only
123	MR Item SR Nos: 123	2	NOS		18.00		18.00	0.00	INR Zero Only
124	MR Item SR Nos: 124	1	NOS		18.00		18.00	0.00	INR Zero Only
125	MR Item SR Nos: 125	14	NOS		18.00		18.00	0.00	INR Zero Only
126	MR Item SR Nos: 126	4	NOS		18.00		18.00	0.00	INR Zero Only
127	MR Item SR Nos: 127	30	NOS		18.00		18.00	0.00	INR Zero Only
128	MR Item SR Nos: 128	2	NOS		18.00		18.00	0.00	INR Zero Only
129	MR Item SR Nos: 129	15	NOS		18.00		18.00	0.00	INR Zero Only
130	MR Item SR Nos: 130	6	NOS		18.00		18.00	0.00	INR Zero Only
131	MR Item SR Nos: 131	26	NOS		18.00		18.00	0.00	INR Zero Only
132	MR Item SR Nos: 132	19	NOS		18.00		18.00	0.00	INR Zero Only
133	MR Item SR Nos: 133	2	NOS		18.00		18.00	0.00	INR Zero Only
134	MR Item SR Nos: 134	2	NOS		18.00		18.00	0.00	INR Zero Only
135	MR Item SR Nos: 135	6	NOS		18.00		18.00	0.00	INR Zero Only
136	MR Item SR Nos: 136	12	NOS		18.00		18.00	0.00	INR Zero Only
137	MR Item SR Nos: 137	9	NOS		18.00		18.00	0.00	INR Zero Only
138	MR Item SR Nos: 138	2	NOS		18.00		18.00	0.00	INR Zero Only
139	MR Item SR Nos: 139	2	NOS		18.00		18.00	0.00	INR Zero Only
140	MR Item SR Nos: 140	41	NOS		18.00		18.00	0.00	INR Zero Only
141	MR Item SR Nos: 141	21	NOS		18.00		18.00	0.00	INR Zero Only
142	MR Item SR Nos: 142	8	NOS		18.00		18.00	0.00	INR Zero Only
143	MR Item SR Nos: 143	2	NOS		18.00		18.00	0.00	INR Zero Only
144	MR Item SR Nos: 144	1	NOS		18.00		18.00	0.00	INR Zero Only
145	MR Item SR Nos: 145	4	NOS		18.00		18.00	0.00	INR Zero Only
146	MR Item SR Nos: 146	7	NOS		18.00		18.00	0.00	INR Zero Only
147	MR Item SR Nos: 147	8	NOS		18.00		18.00	0.00	INR Zero Only
148	MR Item SR Nos: 148	49	NOS		18.00		18.00	0.00	INR Zero Only
149	MR Item SR Nos: 149	20	NOS		18.00		18.00	0.00	INR Zero Only
150	MR Item SR Nos: 150	4	NOS		18.00		18.00	0.00	INR Zero Only
151	MR Item SR Nos: 151	85	NOS		18.00		18.00	0.00	INR Zero Only
152	MR Item SR Nos: 152	74	NOS		18.00		18.00	0.00	INR Zero Only
153	MR Item SR Nos: 153	69	NOS		18.00		18.00	0.00	INR Zero Only
154	MR Item SR Nos: 154	2	NOS		18.00		18.00	0.00	INR Zero Only
155	MR Item SR Nos: 155	5	NOS		18.00		18.00	0.00	INR Zero Only
156	MR Item SR Nos: 156	19	NOS		18.00		18.00	0.00	INR Zero Only
157	MR Item SR Nos: 157	26	NOS		18.00		18.00	0.00	INR Zero Only

158	MR Item SR Nos: 158	5	NOS		18.00		18.00	0.00	INR Zero Only
159	MR Item SR Nos: 159	2	NOS		18.00		18.00	0.00	INR Zero Only
160	MR Item SR Nos: 160	47	NOS		18.00		18.00	0.00	INR Zero Only
161	MR Item SR Nos: 161	40	NOS		18.00		18.00	0.00	INR Zero Only
162	MR Item SR Nos: 162	7	NOS		18.00		18.00	0.00	INR Zero Only
163	MR Item SR Nos: 163	2	NOS		18.00		18.00	0.00	INR Zero Only
164	MR Item SR Nos: 164	71	NOS		18.00		18.00	0.00	INR Zero Only
165	MR Item SR Nos: 165	51	NOS		18.00		18.00	0.00	INR Zero Only
166	MR Item SR Nos: 166	14	NOS		18.00		18.00	0.00	INR Zero Only
167	MR Item SR Nos: 167	3	NOS		18.00		18.00	0.00	INR Zero Only
168	MR Item SR Nos: 168	22	NOS		18.00		18.00	0.00	INR Zero Only
169	MR Item SR Nos: 169	2	NOS		18.00		18.00	0.00	INR Zero Only
170	MR Item SR Nos: 170	4	NOS		18.00		18.00	0.00	INR Zero Only
171	MR Item SR Nos: 171	2	NOS		18.00		18.00	0.00	INR Zero Only
172	MR Item SR Nos: 172	384	NOS		18.00		18.00	0.00	INR Zero Only
173	MR Item SR Nos: 173	7	NOS		18.00		18.00	0.00	INR Zero Only
174	MR Item SR Nos: 174	22	NOS		18.00		18.00	0.00	INR Zero Only
175	MR Item SR Nos: 175	306	NOS		18.00		18.00	0.00	INR Zero Only
176	MR Item SR Nos: 176	120	NOS		18.00		18.00	0.00	INR Zero Only
177	MR Item SR Nos: 177	120	NOS		18.00		18.00	0.00	INR Zero Only
178	MR Item SR Nos: 178	2	NOS		18.00		18.00	0.00	INR Zero Only
179	MR Item SR Nos: 179	73	NOS		18.00		18.00	0.00	INR Zero Only
180	MR Item SR Nos: 180	73	NOS		18.00		18.00	0.00	INR Zero Only
181	MR Item SR Nos: 181	2	NOS		18.00		18.00	0.00	INR Zero Only
182	MR Item SR Nos: 182	48	NOS		18.00		18.00	0.00	INR Zero Only
183	MR Item SR Nos: 183	1	NOS		18.00		18.00	0.00	INR Zero Only
184	MR Item SR Nos: 184	6	NOS		18.00		18.00	0.00	INR Zero Only
185	MR Item SR Nos: 185	169	NOS		18.00		18.00	0.00	INR Zero Only
186	MR Item SR Nos: 186	7	NOS		18.00		18.00	0.00	INR Zero Only
187	MR Item SR Nos: 187	29	NOS		18.00		18.00	0.00	INR Zero Only
188	MR Item SR Nos: 188	29	NOS		18.00		18.00	0.00	INR Zero Only
189	MR Item SR Nos: 189	19	NOS		18.00		18.00	0.00	INR Zero Only
190	MR Item SR Nos: 190	37	NOS		18.00		18.00	0.00	INR Zero Only
191	MR Item SR Nos: 191	42	NOS		18.00		18.00	0.00	INR Zero Only
192	MR Item SR Nos: 192	13	NOS		18.00		18.00	0.00	INR Zero Only
193	MR Item SR Nos: 193	6	NOS		18.00		18.00	0.00	INR Zero Only
194	MR Item SR Nos: 194	83	NOS		18.00		18.00	0.00	INR Zero Only
195	MR Item SR Nos: 195	7	NOS		18.00		18.00	0.00	INR Zero Only
196	MR Item SR Nos: 196	8	NOS		18.00		18.00	0.00	INR Zero Only
197	MR Item SR Nos: 197	2	NOS		18.00		18.00	0.00	INR Zero Only
198	MR Item SR Nos: 198	7	NOS		18.00		18.00	0.00	INR Zero Only
199	MR Item SR Nos: 199	3	NOS		18.00		18.00	0.00	INR Zero Only
200	MR Item SR Nos: 200	2	NOS		18.00		18.00	0.00	INR Zero Only
201	MR Item SR Nos: 201	2	NOS		18.00		18.00	0.00	INR Zero Only
202	MR Item SR Nos: 202	23	NOS		18.00		18.00	0.00	INR Zero Only
203	MR Item SR Nos: 203	8	NOS		18.00		18.00	0.00	INR Zero Only
204	MR Item SR Nos: 204	3	NOS		18.00		18.00	0.00	INR Zero Only
205	MR Item SR Nos: 205	7	NOS		18.00		18.00	0.00	INR Zero Only
206	MR Item SR Nos: 206	3	NOS		18.00		18.00	0.00	INR Zero Only
207	MR Item SR Nos: 207	2	NOS		18.00		18.00	0.00	INR Zero Only
208	MR Item SR Nos: 208	6	NOS		18.00		18.00	0.00	INR Zero Only
209	MR Item SR Nos: 209	5	NOS		18.00		18.00	0.00	INR Zero Only
210	MR Item SR Nos: 210	2	NOS		18.00		18.00	0.00	INR Zero Only
211	MR Item SR Nos: 211	1	NOS		18.00		18.00	0.00	INR Zero Only
212	MR Item SR Nos: 212	1	NOS		18.00		18.00	0.00	INR Zero Only
213	MR Item SR Nos: 213	1	NOS		18.00		18.00	0.00	INR Zero Only
214	MR Item SR Nos: 214	1	NOS		18.00		18.00	0.00	INR Zero Only

215	MR Item SR Nos: 215	1	NOS		18.00		18.00	0.00	INR Zero Only
216	MR Item SR Nos: 216	19	NOS		18.00		18.00	0.00	INR Zero Only
217	MR Item SR Nos: 217	9	NOS		18.00		18.00	0.00	INR Zero Only
218	MR Item SR Nos: 218	5	NOS		18.00		18.00	0.00	INR Zero Only
219	MR Item SR Nos: 219	2	NOS		18.00		18.00	0.00	INR Zero Only
220	MR Item SR Nos: 220	9	NOS		18.00		18.00	0.00	INR Zero Only
221	MR Item SR Nos: 221	1	NOS		18.00		18.00	0.00	INR Zero Only
222	MR Item SR Nos: 222	2	NOS		18.00		18.00	0.00	INR Zero Only
223	MR Item SR Nos: 223	3	NOS		18.00		18.00	0.00	INR Zero Only
224	MR Item SR Nos: 224	4	NOS		18.00		18.00	0.00	INR Zero Only
225	MR Item SR Nos: 225	2	NOS		18.00		18.00	0.00	INR Zero Only
226	MR Item SR Nos: 226	3	NOS		18.00		18.00	0.00	INR Zero Only
227	MR Item SR Nos: 227	12	NOS		18.00		18.00	0.00	INR Zero Only
228	MR Item SR Nos: 228	1	NOS		18.00		18.00	0.00	INR Zero Only
229	MR Item SR Nos: 229	1	NOS		18.00		18.00	0.00	INR Zero Only
230	MR Item SR Nos: 230	21	NOS		18.00		18.00	0.00	INR Zero Only
231	MR Item SR Nos: 231	1	NOS		18.00		18.00	0.00	INR Zero Only
232	MR Item SR Nos: 232	9	NOS		18.00		18.00	0.00	INR Zero Only
233	MR Item SR Nos: 233	5	NOS		18.00		18.00	0.00	INR Zero Only
234	MR Item SR Nos: 234	3	NOS		18.00		18.00	0.00	INR Zero Only
235	MR Item SR Nos: 235	600	NOS		18.00		18.00	0.00	INR Zero Only
236	MR Item SR Nos: 236	51	NOS		18.00		18.00	0.00	INR Zero Only
237	MR Item SR Nos: 237	50	NOS		18.00		18.00	0.00	INR Zero Only
238	MR Item SR Nos: 238	34	NOS		18.00		18.00	0.00	INR Zero Only
239	MR Item SR Nos: 239	9	NOS		18.00		18.00	0.00	INR Zero Only
240	MR Item SR Nos: 240	1	NOS		18.00		18.00	0.00	INR Zero Only
241	MR Item SR Nos: 241	1162	NOS		18.00		18.00	0.00	INR Zero Only
242	MR Item SR Nos: 242	180	NOS		18.00		18.00	0.00	INR Zero Only
243	MR Item SR Nos: 243	7	NOS		18.00		18.00	0.00	INR Zero Only
244	MR Item SR Nos: 244	329	NOS		18.00		18.00	0.00	INR Zero Only
245	MR Item SR Nos: 245	270	NOS		18.00		18.00	0.00	INR Zero Only
246	MR Item SR Nos: 246	396	NOS		18.00		18.00	0.00	INR Zero Only
247	MR Item SR Nos: 247	62	NOS		18.00		18.00	0.00	INR Zero Only
248	MR Item SR Nos: 248	19	NOS		18.00		18.00	0.00	INR Zero Only
249	MR Item SR Nos: 249	68	NOS		18.00		18.00	0.00	INR Zero Only
250	MR Item SR Nos: 250	17	NOS		18.00		18.00	0.00	INR Zero Only
251	MR Item SR Nos: 251	17	NOS		18.00		18.00	0.00	INR Zero Only
252	MR Item SR Nos: 252	46	NOS		18.00		18.00	0.00	INR Zero Only
253	MR Item SR Nos: 253	11	NOS		18.00		18.00	0.00	INR Zero Only
254	MR Item SR Nos: 254	2	NOS		18.00		18.00	0.00	INR Zero Only
255	MR Item SR Nos: 255	432	NOS		18.00		18.00	0.00	INR Zero Only
256	MR Item SR Nos: 256	31	NOS		18.00		18.00	0.00	INR Zero Only
257	MR Item SR Nos: 257	108	NOS		18.00		18.00	0.00	INR Zero Only
258	MR Item SR Nos: 258	3	NOS		18.00		18.00	0.00	INR Zero Only
259	MR Item SR Nos: 259	132	NOS		18.00		18.00	0.00	INR Zero Only
260	MR Item SR Nos: 260	3	NOS		18.00		18.00	0.00	INR Zero Only
261	MR Item SR Nos: 261	96	NOS		18.00		18.00	0.00	INR Zero Only
262	MR Item SR Nos: 262	61	NOS		18.00		18.00	0.00	INR Zero Only
263	MR Item SR Nos: 263	29	NOS		18.00		18.00	0.00	INR Zero Only
264	MR Item SR Nos: 264	1	NOS		18.00		18.00	0.00	INR Zero Only
265	MR Item SR Nos: 265	2	NOS		18.00		18.00	0.00	INR Zero Only
266	MR Item SR Nos: 266	25	NOS		18.00		18.00	0.00	INR Zero Only
267	MR Item SR Nos: 267	2	NOS		18.00		18.00	0.00	INR Zero Only
268	MR Item SR Nos: 268	2	NOS		18.00		18.00	0.00	INR Zero Only
269	MR Item SR Nos: 269	7	NOS		18.00		18.00	0.00	INR Zero Only
270	MR Item SR Nos: 270	2	NOS		18.00		18.00	0.00	INR Zero Only
271	MR Item SR Nos: 271	88	NOS		18.00		18.00	0.00	INR Zero Only

272	MR Item SR Nos: 272	9	NOS		18.00		18.00	0.00	INR Zero Only
273	MR Item SR Nos: 273	15	NOS		18.00		18.00	0.00	INR Zero Only
274	MR Item SR Nos: 274	5	NOS		18.00		18.00	0.00	INR Zero Only
275	MR Item SR Nos: 275	3	NOS		18.00		18.00	0.00	INR Zero Only
276	MR Item SR Nos: 276	8	NOS		18.00		18.00	0.00	INR Zero Only
277	MR Item SR Nos: 277	1	NOS		18.00		18.00	0.00	INR Zero Only
278	MR Item SR Nos: 278	2	NOS		18.00		18.00	0.00	INR Zero Only
279	MR Item SR Nos: 279	78	NOS		18.00		18.00	0.00	INR Zero Only
280	MR Item SR Nos: 280	24	NOS		18.00		18.00	0.00	INR Zero Only
281	MR Item SR Nos: 281	4	NOS		18.00		18.00	0.00	INR Zero Only
282	MR Item SR Nos: 282	3	NOS		18.00		18.00	0.00	INR Zero Only
283	MR Item SR Nos: 283	2	NOS		18.00		18.00	0.00	INR Zero Only
284	MR Item SR Nos: 284	1	NOS		18.00		18.00	0.00	INR Zero Only
285	MR Item SR Nos: 285	1	NOS		18.00		18.00	0.00	INR Zero Only
286	MR Item SR Nos: 286	5	NOS		18.00		18.00	0.00	INR Zero Only
287	MR Item SR Nos: 287	1	NOS		18.00		18.00	0.00	INR Zero Only
288	MR Item SR Nos: 288	5	NOS		18.00		18.00	0.00	INR Zero Only
289	MR Item SR Nos: 289	4	NOS		18.00		18.00	0.00	INR Zero Only
290	MR Item SR Nos: 290	2	NOS		18.00		18.00	0.00	INR Zero Only
291	MR Item SR Nos: 291	3	NOS		18.00		18.00	0.00	INR Zero Only
292	MR Item SR Nos: 292	2	NOS		18.00		18.00	0.00	INR Zero Only
293	MR Item SR Nos: 293	1	NOS		18.00		18.00	0.00	INR Zero Only
294	MR Item SR Nos: 294	4	NOS		18.00		18.00	0.00	INR Zero Only
295	MR Item SR Nos: 295	8	NOS		18.00		18.00	0.00	INR Zero Only
296	MR Item SR Nos: 296	2	NOS		18.00		18.00	0.00	INR Zero Only
297	MR Item SR Nos: 297	2	NOS		18.00		18.00	0.00	INR Zero Only
298	MR Item SR Nos: 298	1	NOS		18.00		18.00	0.00	INR Zero Only
299	MR Item SR Nos: 299	2	NOS		18.00		18.00	0.00	INR Zero Only
300	MR Item SR Nos: 300	3	NOS		18.00		18.00	0.00	INR Zero Only
301	MR Item SR Nos: 301	3	NOS		18.00		18.00	0.00	INR Zero Only
302	MR Item SR Nos: 302	3	NOS		18.00		18.00	0.00	INR Zero Only
303	MR Item SR Nos: 303	1	NOS		18.00		18.00	0.00	INR Zero Only
304	MR Item SR Nos: 304	5	NOS		18.00		18.00	0.00	INR Zero Only
305	MR Item SR Nos: 305	2	NOS		18.00		18.00	0.00	INR Zero Only
306	MR Item SR Nos: 306	1	NOS		18.00		18.00	0.00	INR Zero Only
307	MR Item SR Nos: 307	3	NOS		18.00		18.00	0.00	INR Zero Only
308	MR Item SR Nos: 308	1	NOS		18.00		18.00	0.00	INR Zero Only
309	MR Item SR Nos: 309	29	NOS		18.00		18.00	0.00	INR Zero Only
310	MR Item SR Nos: 310	4	NOS		18.00		18.00	0.00	INR Zero Only
311	MR Item SR Nos: 311	1	NOS		18.00		18.00	0.00	INR Zero Only
312	MR Item SR Nos: 312	1	NOS		18.00		18.00	0.00	INR Zero Only
313	MR Item SR Nos: 313	1	NOS		18.00		18.00	0.00	INR Zero Only
314	MR Item SR Nos: 314	3	NOS		18.00		18.00	0.00	INR Zero Only
315	MR Item SR Nos: 315	1	NOS		18.00		18.00	0.00	INR Zero Only
316	MR Item SR Nos: 316	1	NOS		18.00		18.00	0.00	INR Zero Only
317	MR Item SR Nos: 317	4	NOS		18.00		18.00	0.00	INR Zero Only
318	MR Item SR Nos: 318	34	NOS		18.00		18.00	0.00	INR Zero Only
319	MR Item SR Nos: 319	12	NOS		18.00		18.00	0.00	INR Zero Only
320	MR Item SR Nos: 320	81	NOS		18.00		18.00	0.00	INR Zero Only
321	MR Item SR Nos: 321	3	NOS		18.00		18.00	0.00	INR Zero Only
322	MR Item SR Nos: 322	20	NOS		18.00		18.00	0.00	INR Zero Only
323	MR Item SR Nos: 323	37	NOS		18.00		18.00	0.00	INR Zero Only
324	MR Item SR Nos: 324	8	NOS		18.00		18.00	0.00	INR Zero Only
325	MR Item SR Nos: 325	34	NOS		18.00		18.00	0.00	INR Zero Only
326	MR Item SR Nos: 326	2	NOS		18.00		18.00	0.00	INR Zero Only
327	MR Item SR Nos: 327	2	NOS		18.00		18.00	0.00	INR Zero Only
328	MR Item SR Nos: 328	2	NOS		18.00		18.00	0.00	INR Zero Only

329	MR Item SR Nos: 329	5	NOS		18.00		18.00	0.00	INR Zero Only
330	MR Item SR Nos: 330	1	NOS		18.00		18.00	0.00	INR Zero Only
331	MR Item SR Nos: 331	20	NOS		18.00		18.00	0.00	INR Zero Only
332	MR Item SR Nos: 332	17	NOS		18.00		18.00	0.00	INR Zero Only
333	MR Item SR Nos: 333	4	NOS		18.00		18.00	0.00	INR Zero Only
334	MR Item SR Nos: 334	7	NOS		18.00		18.00	0.00	INR Zero Only
335	MR Item SR Nos: 335	6	NOS		18.00		18.00	0.00	INR Zero Only
336	MR Item SR Nos: 336	31	NOS		18.00		18.00	0.00	INR Zero Only
337	MR Item SR Nos: 337	6	NOS		18.00		18.00	0.00	INR Zero Only
338	MR Item SR Nos: 338	27	NOS		18.00		18.00	0.00	INR Zero Only
339	MR Item SR Nos: 339	1	NOS		18.00		18.00	0.00	INR Zero Only
340	MR Item SR Nos: 340	15	NOS		18.00		18.00	0.00	INR Zero Only
341	MR Item SR Nos: 341	49	NOS		18.00		18.00	0.00	INR Zero Only
342	MR Item SR Nos: 342	3	NOS		18.00		18.00	0.00	INR Zero Only
343	MR Item SR Nos: 343	28	NOS		18.00		18.00	0.00	INR Zero Only
344	MR Item SR Nos: 344	5	NOS		18.00		18.00	0.00	INR Zero Only
345	MR Item SR Nos: 345	9	NOS		18.00		18.00	0.00	INR Zero Only
346	MR Item SR Nos: 346	9	NOS		18.00		18.00	0.00	INR Zero Only
347	MR Item SR Nos: 347	14	NOS		18.00		18.00	0.00	INR Zero Only
348	MR Item SR Nos: 348	1	NOS		18.00		18.00	0.00	INR Zero Only
349	MR Item SR Nos: 349	1	NOS		18.00		18.00	0.00	INR Zero Only
350	MR Item SR Nos: 350	1	NOS		18.00		18.00	0.00	INR Zero Only
351	MR Item SR Nos: 351	7	NOS		18.00		18.00	0.00	INR Zero Only
352	MR Item SR Nos: 352	4	NOS		18.00		18.00	0.00	INR Zero Only
353	MR Item SR Nos: 353	2	NOS		18.00		18.00	0.00	INR Zero Only
354	MR Item SR Nos: 354	4	NOS		18.00		18.00	0.00	INR Zero Only
355	MR Item SR Nos: 355	7	NOS		18.00		18.00	0.00	INR Zero Only
356	MR Item SR Nos: 356	4	NOS		18.00		18.00	0.00	INR Zero Only
357	MR Item SR Nos: 357	2	NOS		18.00		18.00	0.00	INR Zero Only
358	MR Item SR Nos: 358	2	NOS		18.00		18.00	0.00	INR Zero Only
359	MR Item SR Nos: 359	3	NOS		18.00		18.00	0.00	INR Zero Only
360	MR Item SR Nos: 360	2	NOS		18.00		18.00	0.00	INR Zero Only
361	MR Item SR Nos: 361	10	NOS		18.00		18.00	0.00	INR Zero Only
362	MR Item SR Nos: 362	1	NOS		18.00		18.00	0.00	INR Zero Only
363	MR Item SR Nos: 363	2	NOS		18.00		18.00	0.00	INR Zero Only
364	MR Item SR Nos: 364	3	NOS		18.00		18.00	0.00	INR Zero Only
365	MR Item SR Nos: 365	1	NOS		18.00		18.00	0.00	INR Zero Only
366	MR Item SR Nos: 366	8	NOS		18.00		18.00	0.00	INR Zero Only
367	MR Item SR Nos: 367	7	NOS		18.00		18.00	0.00	INR Zero Only
368	MR Item SR Nos: 368	4	NOS		18.00		18.00	0.00	INR Zero Only
369	MR Item SR Nos: 369	4	NOS		18.00		18.00	0.00	INR Zero Only
370	MR Item SR Nos: 370	5	NOS		18.00		18.00	0.00	INR Zero Only
371	MR Item SR Nos: 371	2	NOS		18.00		18.00	0.00	INR Zero Only
372	MR Item SR Nos: 372	3	NOS		18.00		18.00	0.00	INR Zero Only
373	MR Item SR Nos: 373	2	NOS		18.00		18.00	0.00	INR Zero Only
374	MR Item SR Nos: 374	2	NOS		18.00		18.00	0.00	INR Zero Only
375	MR Item SR Nos: 375	1	NOS		18.00		18.00	0.00	INR Zero Only
376	MR Item SR Nos: 376	4	NOS		18.00		18.00	0.00	INR Zero Only
377	MR Item SR Nos: 377	2	NOS		18.00		18.00	0.00	INR Zero Only
378	MR Item SR Nos: 378	2	NOS		18.00		18.00	0.00	INR Zero Only
379	MR Item SR Nos: 379	2	NOS		18.00		18.00	0.00	INR Zero Only
380	MR Item SR Nos: 380	2	NOS		18.00		18.00	0.00	INR Zero Only
381	MR Item SR Nos: 381	2	NOS		18.00		18.00	0.00	INR Zero Only
382	MR Item SR Nos: 382	2	NOS		18.00		18.00	0.00	INR Zero Only
383	MR Item SR Nos: 383	2	NOS		18.00		18.00	0.00	INR Zero Only
384	MR Item SR Nos: 384	2	NOS		18.00		18.00	0.00	INR Zero Only
385	MR Item SR Nos: 385	4	NOS		18.00		18.00	0.00	INR Zero Only

386	MR Item SR Nos: 386	3	NOS		18.00		18.00	0.00	INR Zero Only
387	MR Item SR Nos: 387	2	NOS		18.00		18.00	0.00	INR Zero Only
388	MR Item SR Nos: 388	3	NOS		18.00		18.00	0.00	INR Zero Only
389	MR Item SR Nos: 389	1	NOS		18.00		18.00	0.00	INR Zero Only
390	MR Item SR Nos: 390	7	NOS		18.00		18.00	0.00	INR Zero Only
391	MR Item SR Nos: 391	3	NOS		18.00		18.00	0.00	INR Zero Only
392	MR Item SR Nos: 392	2	NOS		18.00		18.00	0.00	INR Zero Only
393	MR Item SR Nos: 393	1	NOS		18.00		18.00	0.00	INR Zero Only
394	MR Item SR Nos: 394	2	NOS		18.00		18.00	0.00	INR Zero Only
395	MR Item SR Nos: 395	2	NOS		18.00		18.00	0.00	INR Zero Only
396	MR Item SR Nos: 396	1	NOS		18.00		18.00	0.00	INR Zero Only
397	MR Item SR Nos: 397	1	NOS		18.00		18.00	0.00	INR Zero Only
398	MR Item SR Nos: 398	1	NOS		18.00		18.00	0.00	INR Zero Only
399	MR Item SR Nos: 399	7	NOS		18.00		18.00	0.00	INR Zero Only
400	MR Item SR Nos: 400	1	NOS		18.00		18.00	0.00	INR Zero Only
401	MR Item SR Nos: 401	1	NOS		18.00		18.00	0.00	INR Zero Only
402	MR Item SR Nos: 402	1	NOS		18.00		18.00	0.00	INR Zero Only
403	MR Item SR Nos: 403	1	NOS		18.00		18.00	0.00	INR Zero Only
404	MR Item SR Nos: 404	3	NOS		18.00		18.00	0.00	INR Zero Only
405	MR Item SR Nos: 405	2	NOS		18.00		18.00	0.00	INR Zero Only
406	MR Item SR Nos: 406	9	NOS		18.00		18.00	0.00	INR Zero Only
407	MR Item SR Nos: 407	3	NOS		18.00		18.00	0.00	INR Zero Only
408	MR Item SR Nos: 408	64	NOS		18.00		18.00	0.00	INR Zero Only
409	MR Item SR Nos: 409	34	NOS		18.00		18.00	0.00	INR Zero Only
410	MR Item SR Nos: 410	57	NOS		18.00		18.00	0.00	INR Zero Only
411	MR Item SR Nos: 411	38	NOS		18.00		18.00	0.00	INR Zero Only
412	MR Item SR Nos: 412	125	NOS		18.00		18.00	0.00	INR Zero Only
413	MR Item SR Nos: 413	28	NOS		18.00		18.00	0.00	INR Zero Only
414	MR Item SR Nos: 414	35	NOS		18.00		18.00	0.00	INR Zero Only
415	MR Item SR Nos: 415	2	NOS		18.00		18.00	0.00	INR Zero Only
416	MR Item SR Nos: 416	2	NOS		18.00		18.00	0.00	INR Zero Only
417	MR Item SR Nos: 417	17	NOS		18.00		18.00	0.00	INR Zero Only
418	MR Item SR Nos: 418	37	NOS		18.00		18.00	0.00	INR Zero Only
419	MR Item SR Nos: 419	4	NOS		18.00		18.00	0.00	INR Zero Only
420	MR Item SR Nos: 420	7	NOS		18.00		18.00	0.00	INR Zero Only
421	MR Item SR Nos: 421	17	NOS		18.00		18.00	0.00	INR Zero Only
422	MR Item SR Nos: 422	1	NOS		18.00		18.00	0.00	INR Zero Only
423	MR Item SR Nos: 423	1	NOS		18.00		18.00	0.00	INR Zero Only
424	MR Item SR Nos: 424	7	NOS		18.00		18.00	0.00	INR Zero Only
425	MR Item SR Nos: 425	6	NOS		18.00		18.00	0.00	INR Zero Only
426	MR Item SR Nos: 426	1	NOS		18.00		18.00	0.00	INR Zero Only
427	MR Item SR Nos: 427	2	NOS		18.00		18.00	0.00	INR Zero Only
428	MR Item SR Nos: 428	2	NOS		18.00		18.00	0.00	INR Zero Only
429	MR Item SR Nos: 429	6	NOS		18.00		18.00	0.00	INR Zero Only
430	MR Item SR Nos: 430	2	NOS		18.00		18.00	0.00	INR Zero Only
431	MR Item SR Nos: 431	7	NOS		18.00		18.00	0.00	INR Zero Only
432	MR Item SR Nos: 432	2	NOS		18.00		18.00	0.00	INR Zero Only
433	MR Item SR Nos: 433	2	NOS		18.00		18.00	0.00	INR Zero Only
434	MR Item SR Nos: 434	9	NOS		18.00		18.00	0.00	INR Zero Only
435	MR Item SR Nos: 435	2	NOS		18.00		18.00	0.00	INR Zero Only
436	MR Item SR Nos: 436	1	NOS		18.00		18.00	0.00	INR Zero Only
437	MR Item SR Nos: 437	11	NOS		18.00		18.00	0.00	INR Zero Only
438	MR Item SR Nos: 438	2	NOS		18.00		18.00	0.00	INR Zero Only
439	MR Item SR Nos: 439	7	NOS		18.00		18.00	0.00	INR Zero Only
440	MR Item SR Nos: 440	4	NOS		18.00		18.00	0.00	INR Zero Only
441	MR Item SR Nos: 441	9	NOS		18.00		18.00	0.00	INR Zero Only
442	MR Item SR Nos: 442	1	NOS		18.00		18.00	0.00	INR Zero Only

443	MR Item SR Nos: 443	3	NOS		18.00		18.00	0.00	INR Zero Only
444	MR Item SR Nos: 444	25	NOS		18.00		18.00	0.00	INR Zero Only
445	MR Item SR Nos: 445	2	NOS		18.00		18.00	0.00	INR Zero Only
446	MR Item SR Nos: 446	2	NOS		18.00		18.00	0.00	INR Zero Only
447	MR Item SR Nos: 447	3	NOS		18.00		18.00	0.00	INR Zero Only
448	MR Item SR Nos: 448	2	NOS		18.00		18.00	0.00	INR Zero Only
449	MR Item SR Nos: 449	6	NOS		18.00		18.00	0.00	INR Zero Only
450	MR Item SR Nos: 450	5	NOS		18.00		18.00	0.00	INR Zero Only
451	MR Item SR Nos: 451	2	NOS		18.00		18.00	0.00	INR Zero Only
452	MR Item SR Nos: 452	2	NOS		18.00		18.00	0.00	INR Zero Only
453	MR Item SR Nos: 453	2	NOS		18.00		18.00	0.00	INR Zero Only
454	MR Item SR Nos: 454	4	NOS		18.00		18.00	0.00	INR Zero Only
455	MR Item SR Nos: 455	4	NOS		18.00		18.00	0.00	INR Zero Only
456	MR Item SR Nos: 456	2	NOS		18.00		18.00	0.00	INR Zero Only
457	MR Item SR Nos: 457	3	NOS		18.00		18.00	0.00	INR Zero Only
458	MR Item SR Nos: 458	2	NOS		18.00		18.00	0.00	INR Zero Only
459	MR Item SR Nos: 459	4	NOS		18.00		18.00	0.00	INR Zero Only
460	MR Item SR Nos: 460	2	NOS		18.00		18.00	0.00	INR Zero Only
461	MR Item SR Nos: 461	2	NOS		18.00		18.00	0.00	INR Zero Only
462	MR Item SR Nos: 462	2	NOS		18.00		18.00	0.00	INR Zero Only
463	MR Item SR Nos: 463	2	NOS		18.00		18.00	0.00	INR Zero Only
464	MR Item SR Nos: 464	2	NOS		18.00		18.00	0.00	INR Zero Only
465	MR Item SR Nos: 465	2	NOS		18.00		18.00	0.00	INR Zero Only
466	MR Item SR Nos: 466	2	NOS		18.00		18.00	0.00	INR Zero Only
467	MR Item SR Nos: 467	2	NOS		18.00		18.00	0.00	INR Zero Only
468	MR Item SR Nos: 468	3	NOS		18.00		18.00	0.00	INR Zero Only
469	MR Item SR Nos: 469	2	NOS		18.00		18.00	0.00	INR Zero Only
470	MR Item SR Nos: 470	7	NOS		18.00		18.00	0.00	INR Zero Only
471	MR Item SR Nos: 471	2	NOS		18.00		18.00	0.00	INR Zero Only
472	MR Item SR Nos: 472	3	NOS		18.00		18.00	0.00	INR Zero Only
473	MR Item SR Nos: 473	2	NOS		18.00		18.00	0.00	INR Zero Only
474	MR Item SR Nos: 474	3	NOS		18.00		18.00	0.00	INR Zero Only
475	MR Item SR Nos: 475	1	NOS		18.00		18.00	0.00	INR Zero Only
476	MR Item SR Nos: 476	1	NOS		18.00		18.00	0.00	INR Zero Only
477	MR Item SR Nos: 477	4	NOS		18.00		18.00	0.00	INR Zero Only
478	MR Item SR Nos: 478	2	NOS		18.00		18.00	0.00	INR Zero Only
479	MR Item SR Nos: 479	2	NOS		18.00		18.00	0.00	INR Zero Only
480	MR Item SR Nos: 480	2	NOS		18.00		18.00	0.00	INR Zero Only
481	MR Item SR Nos: 481	20	NOS		18.00		18.00	0.00	INR Zero Only
482	MR Item SR Nos: 482	1	NOS		18.00		18.00	0.00	INR Zero Only
483	MR Item SR Nos: 483	5	NOS		18.00		18.00	0.00	INR Zero Only
484	MR Item SR Nos: 484	7	NOS		18.00		18.00	0.00	INR Zero Only
485	MR Item SR Nos: 485	9	NOS		18.00		18.00	0.00	INR Zero Only
486	MR Item SR Nos: 486	1	NOS		18.00		18.00	0.00	INR Zero Only
487	MR Item SR Nos: 487	2	NOS		18.00		18.00	0.00	INR Zero Only
488	MR Item SR Nos: 488	1	NOS		18.00		18.00	0.00	INR Zero Only
489	MR Item SR Nos: 489	10	NOS		18.00		18.00	0.00	INR Zero Only
490	MR Item SR Nos: 490	1	NOS		18.00		18.00	0.00	INR Zero Only
491	MR Item SR Nos: 491	1	NOS		18.00		18.00	0.00	INR Zero Only
492	MR Item SR Nos: 492	7	NOS		18.00		18.00	0.00	INR Zero Only
493	MR Item SR Nos: 493	1	NOS		18.00		18.00	0.00	INR Zero Only
494	MR Item SR Nos: 494	1	NOS		18.00		18.00	0.00	INR Zero Only
495	MR Item SR Nos: 495	1	NOS		18.00		18.00	0.00	INR Zero Only
496	MR Item SR Nos: 496	1	NOS		18.00		18.00	0.00	INR Zero Only
497	MR Item SR Nos: 497	1	NOS		18.00		18.00	0.00	INR Zero Only
498	MR Item SR Nos: 498	1	NOS		18.00		18.00	0.00	INR Zero Only
499	MR Item SR Nos: 499	2	NOS		18.00		18.00	0.00	INR Zero Only

500	MR Item SR Nos: 500	2	NOS		18.00		18.00	0.00	INR Zero Only
501	MR Item SR Nos: 501	2	NOS		18.00		18.00	0.00	INR Zero Only
502	MR Item SR Nos: 502	2	NOS		18.00		18.00	0.00	INR Zero Only
503	MR Item SR Nos: 503	2	NOS		18.00		18.00	0.00	INR Zero Only
504	MR Item SR Nos: 504	1	NOS		18.00		18.00	0.00	INR Zero Only
505	MR Item SR Nos: 505	25	NOS		18.00		18.00	0.00	INR Zero Only
506	MR Item SR Nos: 506	2	NOS		18.00		18.00	0.00	INR Zero Only
507	MR Item SR Nos: 507	4	NOS		18.00		18.00	0.00	INR Zero Only
508	MR Item SR Nos: 508	2	NOS		18.00		18.00	0.00	INR Zero Only
509	MR Item SR Nos: 509	2	NOS		18.00		18.00	0.00	INR Zero Only
510	MR Item SR Nos: 510	2	NOS		18.00		18.00	0.00	INR Zero Only
511	MR Item SR Nos: 511	2	NOS		18.00		18.00	0.00	INR Zero Only
512	MR Item SR Nos: 512	2	NOS		18.00		18.00	0.00	INR Zero Only
513	MR Item SR Nos: 513	2	NOS		18.00		18.00	0.00	INR Zero Only
514	MR Item SR Nos: 514	1	NOS		18.00		18.00	0.00	INR Zero Only
515	MR Item SR Nos: 515	2	NOS		18.00		18.00	0.00	INR Zero Only
516	MR Item SR Nos: 516	1	NOS		18.00		18.00	0.00	INR Zero Only
517	MR Item SR Nos: 517	2	NOS		18.00		18.00	0.00	INR Zero Only
518	MR Item SR Nos: 518	751	NOS		18.00		18.00	0.00	INR Zero Only
519	MR Item SR Nos: 519	13	NOS		18.00		18.00	0.00	INR Zero Only
520	MR Item SR Nos: 520	23	NOS		18.00		18.00	0.00	INR Zero Only
521	MR Item SR Nos: 521	220	NOS		18.00		18.00	0.00	INR Zero Only
522	MR Item SR Nos: 522	29	NOS		18.00		18.00	0.00	INR Zero Only
523	MR Item SR Nos: 523	5	NOS		18.00		18.00	0.00	INR Zero Only
524	MR Item SR Nos: 524	44	NOS		18.00		18.00	0.00	INR Zero Only
525	MR Item SR Nos: 525	67	NOS		18.00		18.00	0.00	INR Zero Only
526	MR Item SR Nos: 526	11	NOS		18.00		18.00	0.00	INR Zero Only
527	MR Item SR Nos: 527	3	NOS		18.00		18.00	0.00	INR Zero Only
528	MR Item SR Nos: 528	195	NOS		18.00		18.00	0.00	INR Zero Only
529	MR Item SR Nos: 529	5	NOS		18.00		18.00	0.00	INR Zero Only
530	MR Item SR Nos: 530	11	NOS		18.00		18.00	0.00	INR Zero Only
531	MR Item SR Nos: 531	3	NOS		18.00		18.00	0.00	INR Zero Only
532	MR Item SR Nos: 532	2	NOS		18.00		18.00	0.00	INR Zero Only
533	MR Item SR Nos: 533	385	NOS		18.00		18.00	0.00	INR Zero Only
534	MR Item SR Nos: 534	3	NOS		18.00		18.00	0.00	INR Zero Only
535	MR Item SR Nos: 535	217	NOS		18.00		18.00	0.00	INR Zero Only
536	MR Item SR Nos: 536	13	NOS		18.00		18.00	0.00	INR Zero Only
537	MR Item SR Nos: 537	3	NOS		18.00		18.00	0.00	INR Zero Only
538	MR Item SR Nos: 538	4	NOS		18.00		18.00	0.00	INR Zero Only
539	MR Item SR Nos: 539	19	NOS		18.00		18.00	0.00	INR Zero Only
540	MR Item SR Nos: 540	18	NOS		18.00		18.00	0.00	INR Zero Only
541	MR Item SR Nos: 541	5	NOS		18.00		18.00	0.00	INR Zero Only
542	MR Item SR Nos: 542	132	NOS		18.00		18.00	0.00	INR Zero Only
543	MR Item SR Nos: 543	32	NOS		18.00		18.00	0.00	INR Zero Only
544	MR Item SR Nos: 544	39	NOS		18.00		18.00	0.00	INR Zero Only
545	MR Item SR Nos: 545	19	NOS		18.00		18.00	0.00	INR Zero Only
546	MR Item SR Nos: 546	2	NOS		18.00		18.00	0.00	INR Zero Only
547	MR Item SR Nos: 547	7	NOS		18.00		18.00	0.00	INR Zero Only
548	MR Item SR Nos: 548	6	NOS		18.00		18.00	0.00	INR Zero Only
549	MR Item SR Nos: 549	21	NOS		18.00		18.00	0.00	INR Zero Only
550	MR Item SR Nos: 550	38	NOS		18.00		18.00	0.00	INR Zero Only
551	MR Item SR Nos: 551	3	NOS		18.00		18.00	0.00	INR Zero Only
552	MR Item SR Nos: 552	3	NOS		18.00		18.00	0.00	INR Zero Only
553	MR Item SR Nos: 553	14	NOS		18.00		18.00	0.00	INR Zero Only
554	MR Item SR Nos: 554	6	NOS		18.00		18.00	0.00	INR Zero Only
555	MR Item SR Nos: 555	7	NOS		18.00		18.00	0.00	INR Zero Only
556	MR Item SR Nos: 556	2	NOS		18.00		18.00	0.00	INR Zero Only

557	MR Item SR Nos: 557	2	NOS		18.00		18.00	0.00	INR Zero Only
558	MR Item SR Nos: 558	11	NOS		18.00		18.00	0.00	INR Zero Only
559	MR Item SR Nos: 559	2	NOS		18.00		18.00	0.00	INR Zero Only
560	MR Item SR Nos: 560	2009	NOS		18.00		18.00	0.00	INR Zero Only
561	MR Item SR Nos: 561	45	NOS		18.00		18.00	0.00	INR Zero Only
562	MR Item SR Nos: 562	18	NOS		18.00		18.00	0.00	INR Zero Only
563	MR Item SR Nos: 563	521	NOS		18.00		18.00	0.00	INR Zero Only
564	MR Item SR Nos: 564	383	NOS		18.00		18.00	0.00	INR Zero Only
565	MR Item SR Nos: 565	92	NOS		18.00		18.00	0.00	INR Zero Only
566	MR Item SR Nos: 566	26	NOS		18.00		18.00	0.00	INR Zero Only
567	MR Item SR Nos: 567	2	NOS		18.00		18.00	0.00	INR Zero Only
568	MR Item SR Nos: 568	9	NOS		18.00		18.00	0.00	INR Zero Only
569	MR Item SR Nos: 569	2	NOS		18.00		18.00	0.00	INR Zero Only
570	MR Item SR Nos: 570	4	NOS		18.00		18.00	0.00	INR Zero Only
571	MR Item SR Nos: 571	2	NOS		18.00		18.00	0.00	INR Zero Only
572	MR Item SR Nos: 572	2	NOS		18.00		18.00	0.00	INR Zero Only
573	MR Item SR Nos: 573	4	NOS		18.00		18.00	0.00	INR Zero Only
574	MR Item SR Nos: 574	2	NOS		18.00		18.00	0.00	INR Zero Only
575	MR Item SR Nos: 575	2	NOS		18.00		18.00	0.00	INR Zero Only
576	MR Item SR Nos: 576	307	NOS		18.00		18.00	0.00	INR Zero Only
577	MR Item SR Nos: 577	5	NOS		18.00		18.00	0.00	INR Zero Only
578	MR Item SR Nos: 578	39	NOS		18.00		18.00	0.00	INR Zero Only
579	MR Item SR Nos: 579	70	NOS		18.00		18.00	0.00	INR Zero Only
580	MR Item SR Nos: 580	5	NOS		18.00		18.00	0.00	INR Zero Only
581	MR Item SR Nos: 581	7	NOS		18.00		18.00	0.00	INR Zero Only
582	MR Item SR Nos: 582	19005	NOS		18.00		18.00	0.00	INR Zero Only
583	MR Item SR Nos: 583	176	NOS		18.00		18.00	0.00	INR Zero Only
584	MR Item SR Nos: 584	219	NOS		18.00		18.00	0.00	INR Zero Only
585	MR Item SR Nos: 585	5	NOS		18.00		18.00	0.00	INR Zero Only
586	MR Item SR Nos: 586	5	NOS		18.00		18.00	0.00	INR Zero Only
587	MR Item SR Nos: 587	586	NOS		18.00		18.00	0.00	INR Zero Only
588	MR Item SR Nos: 588	7	NOS		18.00		18.00	0.00	INR Zero Only
589	MR Item SR Nos: 589	262	NOS		18.00		18.00	0.00	INR Zero Only
590	MR Item SR Nos: 590	5	NOS		18.00		18.00	0.00	INR Zero Only
591	MR Item SR Nos: 591	5	NOS		18.00		18.00	0.00	INR Zero Only
592	MR Item SR Nos: 592	80	NOS		18.00		18.00	0.00	INR Zero Only
593	MR Item SR Nos: 593	28	NOS		18.00		18.00	0.00	INR Zero Only
594	MR Item SR Nos: 594	169	NOS		18.00		18.00	0.00	INR Zero Only
595	MR Item SR Nos: 595	608	NOS		18.00		18.00	0.00	INR Zero Only
596	MR Item SR Nos: 596	10	NOS		18.00		18.00	0.00	INR Zero Only
597	MR Item SR Nos: 597	13	NOS		18.00		18.00	0.00	INR Zero Only
598	MR Item SR Nos: 598	10	NOS		18.00		18.00	0.00	INR Zero Only
599	MR Item SR Nos: 599	29	NOS		18.00		18.00	0.00	INR Zero Only
600	MR Item SR Nos: 600	442	NOS		18.00		18.00	0.00	INR Zero Only
601	MR Item SR Nos: 601	125	NOS		18.00		18.00	0.00	INR Zero Only
602	MR Item SR Nos: 602	5	NOS		18.00		18.00	0.00	INR Zero Only
603	MR Item SR Nos: 603	10	NOS		18.00		18.00	0.00	INR Zero Only
604	MR Item SR Nos: 604	17	NOS		18.00		18.00	0.00	INR Zero Only
605	MR Item SR Nos: 605	56	NOS		18.00		18.00	0.00	INR Zero Only
606	MR Item SR Nos: 606	266	NOS		18.00		18.00	0.00	INR Zero Only
607	MR Item SR Nos: 607	3	NOS		18.00		18.00	0.00	INR Zero Only
608	MR Item SR Nos: 608	11	NOS		18.00		18.00	0.00	INR Zero Only
609	MR Item SR Nos: 609	1395	NOS		18.00		18.00	0.00	INR Zero Only
610	MR Item SR Nos: 610	5	NOS		18.00		18.00	0.00	INR Zero Only
611	MR Item SR Nos: 611	17	NOS		18.00		18.00	0.00	INR Zero Only
612	MR Item SR Nos: 612	5	NOS		18.00		18.00	0.00	INR Zero Only
613	MR Item SR Nos: 613	214	NOS		18.00		18.00	0.00	INR Zero Only

614	**MR Item SR Nos: 614**	**5**	NOS		**18.00**		**18.00**	**0.00**	INR Zero Only
615	**MR Item SR Nos: 615**	**211**	NOS		**18.00**		**18.00**	**0.00**	INR Zero Only
616	**MR Item SR Nos: 616**	**12**	NOS		**18.00**		**18.00**	**0.00**	INR Zero Only
617	**MR Item SR Nos: 617**	**17**	NOS		**18.00**		**18.00**	**0.00**	INR Zero Only
618	**MR Item SR Nos: 618**	**5**	NOS		**18.00**		**18.00**	**0.00**	INR Zero Only
619	**MR Item SR Nos: 619**	**42**	NOS		**18.00**		**18.00**	**0.00**	INR Zero Only
620	**MR Item SR Nos: 620**	**3**	NOS		**18.00**		**18.00**	**0.00**	INR Zero Only
621	**MR Item SR Nos: 621**	**17**	NOS		**18.00**		**18.00**	**0.00**	INR Zero Only
622	**MR Item SR Nos: 622**	**6**	NOS		**18.00**		**18.00**	**0.00**	INR Zero Only
623	**MR Item SR Nos: 623**	**274**	NOS		**18.00**		**18.00**	**0.00**	INR Zero Only
624	**MR Item SR Nos: 624**	**24**	NOS		**18.00**		**18.00**	**0.00**	INR Zero Only
625	**MR Item SR Nos: 625**	**29**	NOS		**18.00**		**18.00**	**0.00**	INR Zero Only
626	**MR Item SR Nos: 626**	**3**	NOS		**18.00**		**18.00**	**0.00**	INR Zero Only
627	**MR Item SR Nos: 627**	**10**	NOS		**18.00**		**18.00**	**0.00**	INR Zero Only
628	**MR Item SR Nos: 628**	**9**	NOS		**18.00**		**18.00**	**0.00**	INR Zero Only

FORMAT B1 (CIF)

DETAILS OF BUILT-IN-CIF VALUE OF IMPORT CONTENT *(INDIAN BIDDERS)*

Name of Item : FITTINGS- (CS, LTCS & CS-EPOXY COATED)

RFQ No: SPN/ B933-000-WD-MR-3213/175 (Tender ID: 2026_EIL_907468)

NAME OF BIDDER:	

ITEMWISE BREAK-UP OF BUILT-IN-CIF VALUE OF IMPORT CONTENT, ITEM DETAILS OF IMPORT CONTENT AND RATES OF IMPORTS DUTY CONSIDERED AND INCLUDED IN QUOTED SUPPLY PRICE

DESCRIPTION				CIF value of Import Content included in quoted supply prices (INR)		RATE OF CUSTOM DUTY INCLUDED IN QUOTED FOT DESPATCH POINT				
For Item no./ Sl . No. as per price schedule format	Description of Imported items	Unit of Measurement	Qty			HSN CODE AS PER GST	BASIC CUSTOMS DUTY (%)	SOCIAL WELFARE SURCHARGE ON CUSTOMS DUTY (%)	IGST (%)	TOTAL CUSTOM DUTY (%)
				Rate in Figures	Rate in Words					
1	2	3	4	5	6	7	8	9	10	11
TOTAL CIF VALUE										

Note:

1	The CIF Value(s) indicated by the vendor shall be deemed to be the maximum value(s) for the purpose of payment of variation in Basic Custom Duty and Customs Social Welfare Surcharge.
2	Bidder to consider input tax credit of IGST available at their end (in case of import of raw materials / component) in their prices.

MATERIAL REQUISITION(TOP SHEET)

ITEM : FITTINGS- (CS, LTCS & CS- EPOXY COATED)

MR Category : I

Issue Status (*Fill 1 or 2 from below in this bracket*) [ ]

1. -> Entire Requisition Issued

2. -> Only Revised Pages are Issued

PDD ITEMCODE : 71AA,72AA,74AA,75AA

DOCUMENT NUMBER

(Always quote this document number given below as reference)

B933	000	WD	MR	3213	D	28-04-2026	16/43
JOB NO.	UNIT / AREA	COST CENTRE	DOC CODE	SR. NO	REV	DATE	ORIGINATING DIVN./DEPT

VENDOR CODE	VENDOR NAME

Material to be delivered at (job site) BPCL,BINA within the delivery period specified in the "Request For Quotation"(RFQ).

Notes :

1. This page is a record of all the Revisions of this Requisition.
2. The nature of the Revision is briefly stated in the "Details" column below, the Requisition in its entirety shall be considered for contractual purposes.
3. When a Requisition is revised, only the revised pages may be issued.
4. When revised pages only are issued, the revised pages shall form part of the original Requisition. The original requisition alongwith the revised pages shall be considered in its entirety for contractual purposes.
5. Vendors are required to quote strictly as per technical specifications / notes stipulated in the material requisition. The offers with deviations are likely to be summarily rejected.

REV	DATE	BY	CHK	APPD.	DETAILS
A	27-02-2026	AS	RR/DG	RKG	ISSUED FOR BIDS
B	19-03-2026	AS	MP	RKG	REVISED FOR BIDS
C	07-04-2026	AS	MP	DG/RK	REVISED FOR BIDS
D	28-04-2026	AS	MP	DG/RK	REVISED FOR BIDS

This is a system generated approved document and does not require Signature

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LIST OF ATTACHMENT

SR. NO.	DOCUMENT TITLE	DOCUMENT NO.	REVISION	
			NO.	DATE
1	TECHNICAL NOTES FOR BUTT WELDED, SOCKET WELDED AND SCREWED FITTINGS	6-44-0054	8	03-JUL-2024
2	SPECIFICATION FOR QUALITY MANAGEMENT SYSTEM REQUIREMENTS FROM BIDDERS	6-78-0001	2	12-JUN-2020
3	SPECIFICATION FOR DOCUMENTATION REQUIREMENTS FROM SUPPLIERS	6-78-0003	3	14-OCT-2024
4	MATERIAL REQUIREEMNTS FOR CARBON STEEL COMPONENTS USED IN SOUR SERVICE FOR PETROLIUM REFINERY ENVIRO	6-79-013	3	27-MAR-2026
5	STANDARD SPECIFICATION FOR POSITIVE MATERIAL IDENTIFICATION (PMI) AT SUPPLIER'S WORK	B933-6-81-0001	0	31-MAR-2025
6	INSPECTION & TEST PLAN FOR FORGED, SEAMLESS AND WELDED FITTINGS	6-81-0005	9	10-FEB-2025
7	INSPECTION AND TEST PLAN FOR EPOXY COATED PLANT PIPING MATERIAL (FLANGES, FITTINGS & VALVES)	6-81-0308	0	10-JUN-2024
8	JOB SPECIFICATION FOR SURFACE PREPARATION AND PROTECTIVE COATING (SMMS)	B957-000-06-42-PLS-01	1	11-FEB-2025
9	ADDITIONAL TECHNICAL REQUIREEMNT	B933-000-16-43-ATR-3213	D	28-APR-2026

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MR ATTACHMENT

SR.NO.	ITEMCODE	DETAIL DESCRIPTION	QTY.	U.RATE	TOT.VALUE	CDD
Item Description :	***NIPPLE, B-36.10, ASTM A 106 GR.B, PBE, SEAMLESS***					
1	PN21967Z004100080	0.5 INCH, S160, 80 MM	12 NOS			
2	PN21967Z004190100	0.5 INCH, XS, 100 MM	30 NOS			
3	PN21967Z004200100	0.5 INCH, XXS, 100 MM	17 NOS			
4	PN21967Z005100080	0.75 INCH, S160, 80 MM	3 NOS			
5	PN21967Z005100100	0.75 INCH, S160, 100 MM	62 NOS			
6	PN21967Z008190100	1.5 INCH, XS, 100 MM	17 NOS			
Item Description :	***NIPPLE, B-36.10, ASTM A 106 GR.B, PBE, SEAMLESS, H2***					
7	PN21967Z704100100	0.5 INCH, S160, 100 MM	9 NOS			
Item Description :	***NIPPLE, B-36.10, ASTM A 106 GR.B, PBE, SEAMLESS, HIC1***					
8	PN21967ZT04100100	0.5 INCH, S160, 100 MM	200 NOS			
9	PN21967ZT05100100	0.75 INCH, S160, 100 MM	40 NOS			
Item Description :	***NIPPLE, B-36.10, ASTM A 106 GR.B, PBE, SEAMLESS, IBR***					
10	PN21967Z104100100	0.5 INCH, S160, 100 MM	405 NOS			
11	PN21967Z105100100	0.75 INCH, S160, 100 MM	12 NOS			
Item Description :	***NIPPLE, B-36.10, ASTM A 106 GR.B, PBE, SEAMLESS, NAC4***					
12	PN21967ZE04100100	0.5 INCH, S160, 100 MM	85 NOS			
13	PN21967ZE05200100	0.75 INCH, XXS, 100 MM	29 NOS			
14	PN21967ZE08200100	1.5 INCH, XXS, 100 MM	9 NOS			
Item Description :	***NIPPLE, B-36.10, ASTM A 106 GR.B, PBE, SEAMLESS, NACE***					
15	PN21967Z204100100	0.5 INCH, S160, 100 MM	46 NOS			
16	PN21967Z205100100	0.75 INCH, S160, 100 MM	9 NOS			
Item Description :	***NIPPLE, B-36.10, ASTM A 106 GR.B, TOE, SEAMLESS***					
17	PN219G7Z004190100	0.5 INCH, XS, 100 MM	351 NOS			
18	PN219G7Z004200100	0.5 INCH, XXS, 100 MM	49 NOS			
19	PN219G7Z005100080	0.75 INCH, S160, 80 MM	49 NOS			
20	PN219G7Z005100100	0.75 INCH, S160, 100 MM	83 NOS			
21	PN219G7Z006190080	1.0 INCH, XS, 80 MM	28 NOS			
22	PN219G7Z006190100	1.0 INCH, XS, 100 MM	12 NOS			
Item Description :	***NIPPLE, B-36.10, ASTM A 106 GR.B, TOE, SEAMLESS, H2***					
23	PN219G7Z704100100	0.5 INCH, S160, 100 MM	9 NOS			

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MR ATTACHMENT

SR.NO.	ITEMCODE	DETAIL DESCRIPTION	QTY.	U.RATE	TOT.VALUE	CDD
Item Description : NIPPLE, B-36.10, ASTM A 106 GR.B, TOE, SEAMLESS, HIC1						
24	PN219G7ZT04100100	0.5 INCH, S160, 100 MM	980 NOS			
25	PN219G7ZT05100100	0.75 INCH, S160, 100 MM	59 NOS			
Item Description : NIPPLE, B-36.10, ASTM A 106 GR.B, TOE, SEAMLESS, IBR						
26	PN219G7Z104100100	0.5 INCH, S160, 100 MM	782 NOS			
27	PN219G7Z105100100	0.75 INCH, S160, 100 MM	30 NOS			
Item Description : NIPPLE, B-36.10, ASTM A 106 GR.B, TOE, SEAMLESS, NAC4						
28	PN219G7ZE04100100	0.5 INCH, S160, 100 MM	30 NOS			
29	PN219G7ZE05200100	0.75 INCH, XXS, 100 MM	12 NOS			
Item Description : NIPPLE, B-36.10, ASTM A 106 GR.B, TOE, SEAMLESS, NACE						
30	PN219G7Z204100100	0.5 INCH, S160, 100 MM	173 NOS			
31	PN219G7Z205100100	0.75 INCH, S160, 100 MM	9 NOS			
Item Description : ELBOW.90, B-16.11, ASTM A 105, SW, 3000						
32	WA602D2Z004ZZZZZZ	0.5 INCH	8286 NOS			
33	WA602D2Z006ZZZZZZ	1.0 INCH	1649 NOS			
34	WA602D2Z008ZZZZZZ	1.5 INCH	1103 NOS			
Item Description : ELBOW.90, B-16.11, ASTM A 105, SW, 3000, HIC1						
35	WA602D2ZT06ZZZZZZ	1.0 INCH	75 NOS			
36	WA602D2ZT08ZZZZZZ	1.5 INCH	30 NOS			
Item Description : ELBOW.90, B-16.11, ASTM A 105, SW, 3000, IBR						
37	WA602D2Z106ZZZZZZ	1.0 INCH	587 NOS			
38	WA602D2Z108ZZZZZZ	1.5 INCH	964 NOS			
Item Description : ELBOW.90, B-16.11, ASTM A 105, SW, 3000, NACE						
39	WA602D2Z208ZZZZZZ	1.5 INCH	13 NOS			
Item Description : ELBOW.90, B-16.11, ASTM A 105, SW, 6000						
40	WA602D3Z004ZZZZZZ	0.5 INCH	126 NOS			
41	WA602D3Z005ZZZZZZ	0.75 INCH	666 NOS			
42	WA602D3Z006ZZZZZZ	1.0 INCH	5 NOS			
Item Description : ELBOW.90, B-16.11, ASTM A 105, SW, 6000, H2						
43	WA602D3Z704ZZZZZZ	0.5 INCH	15 NOS			
44	WA602D3Z705ZZZZZZ	0.75 INCH	5 NOS			

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MR ATTACHMENT

SR.NO.	ITEMCODE	DETAIL DESCRIPTION	QTY.	U.RATE	TOT.VALUE	CDD
Item Description : ELBOW.90, B-16.11, ASTM A 105, SW, 6000, HIC1						
45	WA602D3ZT04ZZZZZZ	0.5 INCH	132 NOS			
46	WA602D3ZT05ZZZZZZ	0.75 INCH	896 NOS			
Item Description : ELBOW.90, B-16.11, ASTM A 105, SW, 6000, IBR						
47	WA602D3Z104ZZZZZZ	0.5 INCH	535 NOS			
48	WA602D3Z105ZZZZZZ	0.75 INCH	1193 NOS			
Item Description : ELBOW.90, B-16.11, ASTM A 105, SW, 6000, NAC4						
49	WA602D3ZE04ZZZZZZ	0.5 INCH	19 NOS			
50	WA602D3ZE05ZZZZZZ	0.75 INCH	5 NOS			
51	WA602D3ZE08ZZZZZZ	1.5 INCH	5 NOS			
Item Description : ELBOW.90, B-16.11, ASTM A 105, SW, 6000, NACE						
52	WA602D3Z204ZZZZZZ	0.5 INCH	5 NOS			
53	WA602D3Z205ZZZZZZ	0.75 INCH	22 NOS			
Item Description : ELBOW.90, B-16.11, ASTM A 105, SW, 9000						
54	WA602D4Z004ZZZZZZ	0.5 INCH	5 NOS			
Item Description : ELBOW.90, B-16.9, A 234 GR.WPB (EPOXY COATED), BW, 1.5D						
55	WAGY84Z101318ZZZZ	4.0 INCH, STD	49 NOS			
56	WAGY84Z101518ZZZZ	6.0 INCH, STD	55 NOS			
57	WAGY84Z101618ZZZZ	8.0 INCH, STD	12 NOS			
58	WAGY84Z101718ZZZZ	10.0 INCH, STD	3 NOS			
59	WAGY84Z101818ZZZZ	12.0 INCH, STD	6 NOS			
Item Description : ELBOW.90, B-16.9, ASTM A 234 GR.WP5 CL. 1, BW, 1.5D						
60	WAGT94Z101719ZZZZ	10.0 INCH, XS	2 NOS			
61	WAGT94Z101806ZZZZ	12.0 INCH, S80	1 NOS			
62	WAGT94Z101819ZZZZ	12.0 INCH, XS	2 NOS			
63	WAGT94Z101890ZZZZ	12.0 INCH, 20.6 MM THK	2 NOS			
64	WAGT94Z101906ZZZZ	14.0 INCH, S80	2 NOS			
Item Description : ELBOW.90, B-16.9, ASTM A 234 GR.WPB, BW, 1.5D						
65	WAG684Z100919ZZZZ	2.0 INCH, XS	2518 NOS			
66	WAG684Z101110ZZZZ	3.0 INCH, S160	3 NOS			
67	WAG684Z101118ZZZZ	3.0 INCH, STD	419 NOS			

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MR ATTACHMENT

SR.NO.	ITEMCODE	DETAIL DESCRIPTION	QTY.	U.RATE	TOT.VALUE	CDD
68	WAG684Z101318ZZZZ	4.0 INCH, STD	1712 NOS			
69	WAG684Z101319ZZZZ	4.0 INCH, XS	67 NOS			
70	WAG684Z101518ZZZZ	6.0 INCH, STD	1049 NOS			
71	WAG684Z101618ZZZZ	8.0 INCH, STD	1033 NOS			
72	WAG684Z101718ZZZZ	10.0 INCH, STD	473 NOS			
73	WAG684Z101818ZZZZ	12.0 INCH, STD	490 NOS			
74	WAG684Z101819ZZZZ	12.0 INCH, XS	154 NOS			
75	WAG684Z101918ZZZZ	14.0 INCH, STD	130 NOS			
76	WAG684Z101919ZZZZ	14.0 INCH, XS	9 NOS			
Item Description :	***ELBOW.90, B-16.9, ASTM A 234 GR.WPB, BW, 1.5D, H2***					
77	WAG684Z170919ZZZZ	2.0 INCH, XS	8 NOS			
78	WAG684Z171318ZZZZ	4.0 INCH, STD	11 NOS			
79	WAG684Z171518ZZZZ	6.0 INCH, STD	24 NOS			
80	WAG684Z171618ZZZZ	8.0 INCH, STD	39 NOS			
Item Description :	***ELBOW.90, B-16.9, ASTM A 234 GR.WPB, BW, 1.5D, HIC1***					
81	WAG684Z1T0919ZZZZ	2.0 INCH, XS	498 NOS			
82	WAG684Z1T1118ZZZZ	3.0 INCH, STD	33 NOS			
83	WAG684Z1T1318ZZZZ	4.0 INCH, STD	58 NOS			
84	WAG684Z1T1518ZZZZ	6.0 INCH, STD	54 NOS			
85	WAG684Z1T1718ZZZZ	10.0 INCH, STD	98 NOS			
86	WAG684Z1T1818ZZZZ	12.0 INCH, STD	155 NOS			
87	WAG684Z1T1819ZZZZ	12.0 INCH, XS	35 NOS			
88	WAG684Z1T1918ZZZZ	14.0 INCH, STD	49 NOS			
89	WAG684Z1T1919ZZZZ	14.0 INCH, XS	13 NOS			
Item Description :	***ELBOW.90, B-16.9, ASTM A 234 GR.WPB, BW, 1.5D, IBR***					
90	WAG684Z110919ZZZZ	2.0 INCH, XS	439 NOS			
91	WAG684Z111118ZZZZ	3.0 INCH, STD	155 NOS			
92	WAG684Z111318ZZZZ	4.0 INCH, STD	140 NOS			
93	WAG684Z111518ZZZZ	6.0 INCH, STD	95 NOS			
94	WAG684Z111519ZZZZ	6.0 INCH, XS	6 NOS			
95	WAG684Z111618ZZZZ	8.0 INCH, STD	33 NOS			
96	WAG684Z111619ZZZZ	8.0 INCH, XS	6 NOS			

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MR ATTACHMENT

SR.NO.	ITEMCODE	DETAIL DESCRIPTION	QTY.	U.RATE	TOT.VALUE	CDD
97	WAG684Z111718ZZZZ	10.0 INCH, STD	27 NOS			
98	WAG684Z111806ZZZZ	12.0 INCH, S80	1 NOS			
99	WAG684Z111818ZZZZ	12.0 INCH, STD	77 NOS			
100	WAG684Z111918ZZZZ	14.0 INCH, STD	51 NOS			
Item Description : ELBOW.90, B-16.9, ASTM A 234 GR.WPB, BW, 1.5D, NAC4						
101	WAG684Z1E0520ZZZZ	0.75 INCH, XXS	23 NOS			
102	WAG684Z1E0910ZZZZ	2.0 INCH, S160	8 NOS			
103	WAG684Z1E0919ZZZZ	2.0 INCH, XS	8 NOS			
104	WAG684Z1E0920ZZZZ	2.0 INCH, XXS	4 NOS			
105	WAG684Z1E1119ZZZZ	3.0 INCH, XS	3 NOS			
106	WAG684Z1E1120ZZZZ	3.0 INCH, XXS	3 NOS			
107	WAG684Z1E1319ZZZZ	4.0 INCH, XS	2 NOS			
108	WAG684Z1E1518ZZZZ	6.0 INCH, STD	30 NOS			
109	WAG684Z1E1519ZZZZ	6.0 INCH, XS	3 NOS			
110	WAG684Z1E1719ZZZZ	10.0 INCH, XS	4 NOS			
111	WAG684Z1E1898ZZZZ	12.0 INCH, 27.0 MM THK	8 NOS			
112	WAG684Z1E1908ZZZZ	14.0 INCH, S120	5 NOS			
Item Description : ELBOW.90, B-16.9, ASTM A 234 GR.WPB, BW, 1.5D, NACE						
113	WAG684Z120910ZZZZ	2.0 INCH, S160	22 NOS			
114	WAG684Z120919ZZZZ	2.0 INCH, XS	22 NOS			
115	WAG684Z121118ZZZZ	3.0 INCH, STD	8 NOS			
116	WAG684Z121120ZZZZ	3.0 INCH, XXS	3 NOS			
117	WAG684Z121318ZZZZ	4.0 INCH, STD	28 NOS			
118	WAG684Z121518ZZZZ	6.0 INCH, STD	14 NOS			
119	WAG684Z121618ZZZZ	8.0 INCH, STD	32 NOS			
120	WAG684Z121718ZZZZ	10.0 INCH, STD	2 NOS			
121	WAG684Z121918ZZZZ	14.0 INCH, STD	3 NOS			
Item Description : ELBOW.90, B-16.9, ASTM A 234 GR.WPB-W, BW, 1.5D						
122	WAG754Z102018ZZZZ	16.0 INCH, STD	11 NOS			
123	WAG754Z102019ZZZZ	16.0 INCH, XS	2 NOS			
124	WAG754Z102054ZZZZ	16.0 INCH, 6.0 MM THK	1 NOS			
125	WAG754Z102083ZZZZ	16.0 INCH, 16.0 MM THK	14 NOS			

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MR ATTACHMENT

SR.NO.	ITEMCODE	DETAIL DESCRIPTION	QTY.	U.RATE	TOT.VALUE	CDD
126	WAG754Z102089ZZZZ	16.0 INCH, 20.0 MM THK	4 NOS			
127	WAG754Z102118ZZZZ	18.0 INCH, STD	30 NOS			
128	WAG754Z102119ZZZZ	18.0 INCH, XS	2 NOS			
129	WAG754Z102163ZZZZ	18.0 INCH, 8.0 MM THK	15 NOS			
130	WAG754Z102183ZZZZ	18.0 INCH, 16.0 MM THK	6 NOS			
131	WAG754Z102218ZZZZ	20.0 INCH, STD	26 NOS			
132	WAG754Z102418ZZZZ	24.0 INCH, STD	19 NOS			
133	WAG754Z102419ZZZZ	24.0 INCH, XS	2 NOS			
134	WAG754Z102471ZZZZ	24.0 INCH, 10.0 MM THK	2 NOS			
135	WAG754Z102518ZZZZ	26.0 INCH, STD	6 NOS			
136	WAG754Z102571ZZZZ	26.0 INCH, 10.0 MM THK	12 NOS			
137	WAG754Z103018ZZZZ	36.0 INCH, STD	9 NOS			
138	WAG754Z103219ZZZZ	40.0 INCH, XS	2 NOS			
139	WAG754Z103619ZZZZ	48.0 INCH, XS	2 NOS			
Item Description :	***ELBOW.90, B-16.9, ASTM A 234 GR.WPB-W, BW, 1.5D, HIC1***					
140	WAG754Z1T2018ZZZZ	16.0 INCH, STD	41 NOS			
141	WAG754Z1T2118ZZZZ	18.0 INCH, STD	21 NOS			
142	WAG754Z1T2618ZZZZ	28.0 INCH, STD	8 NOS			
143	WAG754Z1T3119ZZZZ	38.0 INCH, XS	2 NOS			
144	WAG754Z1T3219ZZZZ	40.0 INCH, XS	1 NOS			
145	WAG754Z1T3319ZZZZ	42.0 INCH, XS	4 NOS			
146	WAG754Z1T3419ZZZZ	44.0 INCH, XS	7 NOS			
Item Description :	***ELBOW.90, B-16.9, ASTM A 234 GR.WPB-W, BW, 1.5D, IBR***					
147	WAG754Z112019ZZZZ	16.0 INCH, XS	8 NOS			
148	WAG754Z112186ZZZZ	18.0 INCH, 18.0 MM THK	49 NOS			
149	WAG754Z112218ZZZZ	20.0 INCH, STD	20 NOS			
150	WAG754Z112219ZZZZ	20.0 INCH, XS	4 NOS			
Item Description :	***ELBOW.90, B-16.9, ASTM A 420 GR.WPL6, BW, 1.5D, LT***					
151	WAGB44Z151118ZZZZ	3.0 INCH, STD	85 NOS			
Item Description :	***ELBOW.45, B-16.11, ASTM A 105, SW, 3000***					
152	WB602D2Z006ZZZZZZ	1.0 INCH	74 NOS			
153	WB602D2Z008ZZZZZZ	1.5 INCH	69 NOS			

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MR ATTACHMENT

SR.NO.	ITEMCODE	DETAIL DESCRIPTION	QTY.	U.RATE	TOT.VALUE	CDD
Item Description : ELBOW.45, B-16.11, ASTM A 105, SW, 3000, HIC1						
154	WB602D2ZT06ZZZZZZ	1.0 INCH	2 NOS			
155	WB602D2ZT08ZZZZZZ	1.5 INCH	5 NOS			
Item Description : ELBOW.45, B-16.11, ASTM A 105, SW, 3000, IBR						
156	WB602D2Z106ZZZZZZ	1.0 INCH	19 NOS			
157	WB602D2Z108ZZZZZZ	1.5 INCH	26 NOS			
Item Description : ELBOW.45, B-16.11, ASTM A 105, SW, 3000, NACE						
158	WB602D2Z206ZZZZZZ	1.0 INCH	5 NOS			
159	WB602D2Z208ZZZZZZ	1.5 INCH	2 NOS			
Item Description : ELBOW.45, B-16.11, ASTM A 105, SW, 6000						
160	WB602D3Z005ZZZZZZ	0.75 INCH	47 NOS			
Item Description : ELBOW.45, B-16.11, ASTM A 105, SW, 6000, HIC1						
161	WB602D3ZT05ZZZZZZ	0.75 INCH	40 NOS			
Item Description : ELBOW.45, B-16.11, ASTM A 105, SW, 6000, IBR						
162	WB602D3Z105ZZZZZZ	0.75 INCH	7 NOS			
Item Description : ELBOW.45, B-16.11, ASTM A 105, SW, 6000, NACE						
163	WB602D3Z205ZZZZZZ	0.75 INCH	2 NOS			
Item Description : ELBOW.45, B-16.9, A 234 GR.WPB (EPOXY COATED), BW, 1.5D						
164	WBGY84Z101318ZZZZ	4.0 INCH, STD	71 NOS			
165	WBGY84Z101518ZZZZ	6.0 INCH, STD	51 NOS			
166	WBGY84Z101618ZZZZ	8.0 INCH, STD	14 NOS			
167	WBGY84Z101718ZZZZ	10.0 INCH, STD	3 NOS			
168	WBGY84Z101818ZZZZ	12.0 INCH, STD	22 NOS			
169	WBGY84Z101918ZZZZ	14.0 INCH, STD	2 NOS			
Item Description : ELBOW.45, B-16.9, A 234 GR.WPB-W (EPOXY COATED), BW, 1.5D						
170	WBGY94Z102263ZZZZ	20.0 INCH, 8.0 MM THK	4 NOS			
171	WBGY94Z103576ZZZZ	46.0 INCH, 12.0 MM THK	2 NOS			
Item Description : ELBOW.45, B-16.9, ASTM A 234 GR.WPB, BW, 1.5D						
172	WBG684Z100919ZZZZ	2.0 INCH, XS	384 NOS			
173	WBG684Z101110ZZZZ	3.0 INCH, S160	7 NOS			
174	WBG684Z101118ZZZZ	3.0 INCH, STD	22 NOS			

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MR ATTACHMENT

SR.NO.	ITEMCODE	DETAIL DESCRIPTION	QTY.	U.RATE	TOT.VALUE	CDD
175	WBG684Z101318ZZZZ	4.0 INCH, STD	306 NOS			
176	WBG684Z101518ZZZZ	6.0 INCH, STD	120 NOS			
177	WBG684Z101618ZZZZ	8.0 INCH, STD	120 NOS			
178	WBG684Z101619ZZZZ	8.0 INCH, XS	2 NOS			
179	WBG684Z101718ZZZZ	10.0 INCH, STD	73 NOS			
180	WBG684Z101818ZZZZ	12.0 INCH, STD	73 NOS			
181	WBG684Z101819ZZZZ	12.0 INCH, XS	2 NOS			
182	WBG684Z101918ZZZZ	14.0 INCH, STD	48 NOS			
183	WBG684Z101919ZZZZ	14.0 INCH, XS	1 NOS			
Item Description :	***ELBOW.45, B-16.9, ASTM A 234 GR.WPB, BW, 1.5D, H2***					
184	WBG684Z171518ZZZZ	6.0 INCH, STD	6 NOS			
Item Description :	***ELBOW.45, B-16.9, ASTM A 234 GR.WPB, BW, 1.5D, HIC1***					
185	WBG684Z1T0919ZZZZ	2.0 INCH, XS	169 NOS			
186	WBG684Z1T1118ZZZZ	3.0 INCH, STD	7 NOS			
187	WBG684Z1T1318ZZZZ	4.0 INCH, STD	29 NOS			
188	WBG684Z1T1518ZZZZ	6.0 INCH, STD	29 NOS			
189	WBG684Z1T1618ZZZZ	8.0 INCH, STD	19 NOS			
190	WBG684Z1T1718ZZZZ	10.0 INCH, STD	37 NOS			
191	WBG684Z1T1818ZZZZ	12.0 INCH, STD	42 NOS			
192	WBG684Z1T1819ZZZZ	12.0 INCH, XS	13 NOS			
193	WBG684Z1T1918ZZZZ	14.0 INCH, STD	6 NOS			
Item Description :	***ELBOW.45, B-16.9, ASTM A 234 GR.WPB, BW, 1.5D, IBR***					
194	WBG684Z110919ZZZZ	2.0 INCH, XS	83 NOS			
195	WBG684Z111318ZZZZ	4.0 INCH, STD	7 NOS			
196	WBG684Z111518ZZZZ	6.0 INCH, STD	8 NOS			
197	WBG684Z111519ZZZZ	6.0 INCH, XS	2 NOS			
198	WBG684Z111618ZZZZ	8.0 INCH, STD	7 NOS			
199	WBG684Z111718ZZZZ	10.0 INCH, STD	3 NOS			
200	WBG684Z111806ZZZZ	12.0 INCH, S80	2 NOS			
201	WBG684Z111818ZZZZ	12.0 INCH, STD	2 NOS			
202	WBG684Z111918ZZZZ	14.0 INCH, STD	23 NOS			
Item Description :	***ELBOW.45, B-16.9, ASTM A 234 GR.WPB, BW, 1.5D, NAC4***					

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MR ATTACHMENT

SR.NO.	ITEMCODE	DETAIL DESCRIPTION	QTY.	U.RATE	TOT.VALUE	CDD
203	WBG684Z1E0520ZZZZ	0.75 INCH, XXS	8 NOS			
204	WBG684Z1E1119ZZZZ	3.0 INCH, XS	3 NOS			
205	WBG684Z1E1120ZZZZ	3.0 INCH, XXS	7 NOS			
206	WBG684Z1E1898ZZZZ	12.0 INCH, 27.0 MM THK	3 NOS			
Item Description :	***ELBOW.45, B-16.9, ASTM A 234 GR.WPB, BW, 1.5D, NACE***					
207	WBG684Z120910ZZZZ	2.0 INCH, S160	2 NOS			
208	WBG684Z121118ZZZZ	3.0 INCH, STD	6 NOS			
209	WBG684Z121318ZZZZ	4.0 INCH, STD	5 NOS			
210	WBG684Z121518ZZZZ	6.0 INCH, STD	2 NOS			
211	WBG684Z121818ZZZZ	12.0 INCH, STD	1 NOS			
212	WBG684Z121918ZZZZ	14.0 INCH, STD	1 NOS			
Item Description :	***ELBOW.45, B-16.9, ASTM A 234 GR.WPB-W, BW, 1.5D***					
213	WBG754Z102018ZZZZ	16.0 INCH, STD	1 NOS			
214	WBG754Z102019ZZZZ	16.0 INCH, XS	1 NOS			
215	WBG754Z102054ZZZZ	16.0 INCH, 6.0 MM THK	1 NOS			
216	WBG754Z102118ZZZZ	18.0 INCH, STD	19 NOS			
217	WBG754Z102163ZZZZ	18.0 INCH, 8.0 MM THK	9 NOS			
218	WBG754Z102183ZZZZ	18.0 INCH, 16.0 MM THK	5 NOS			
219	WBG754Z102218ZZZZ	20.0 INCH, STD	2 NOS			
220	WBG754Z102418ZZZZ	24.0 INCH, STD	9 NOS			
221	WBG754Z102463ZZZZ	24.0 INCH, 8.0 MM THK	1 NOS			
222	WBG754Z102471ZZZZ	24.0 INCH, 10.0 MM THK	2 NOS			
223	WBG754Z102518ZZZZ	26.0 INCH, STD	3 NOS			
224	WBG754Z102571ZZZZ	26.0 INCH, 10.0 MM THK	4 NOS			
225	WBG754Z102771ZZZZ	30.0 INCH, 10.0 MM THK	2 NOS			
226	WBG754Z103018ZZZZ	36.0 INCH, STD	3 NOS			
227	WBG754Z103071ZZZZ	36.0 INCH, 10.0 MM THK	12 NOS			
228	WBG754Z103219ZZZZ	40.0 INCH, XS	1 NOS			
229	WBG754Z103619ZZZZ	48.0 INCH, XS	1 NOS			
Item Description :	***ELBOW.45, B-16.9, ASTM A 234 GR.WPB-W, BW, 1.5D, HIC1***					
230	WBG754Z1T2018ZZZZ	16.0 INCH, STD	21 NOS			
231	WBG754Z1T2118ZZZZ	18.0 INCH, STD	1 NOS			

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MR ATTACHMENT

SR.NO.	ITEMCODE	DETAIL DESCRIPTION	QTY.	U.RATE	TOT.VALUE	CDD
Item Description : ELBOW.45, B-16.9, ASTM A 234 GR.WPB-W, BW, 1.5D, IBR						
232	WBG754Z112186ZZZZ	18.0 INCH, 18.0 MM THK	9 NOS			
233	WBG754Z112218ZZZZ	20.0 INCH, STD	5 NOS			
234	WBG754Z112418ZZZZ	24.0 INCH, STD	3 NOS			
Item Description : T.EQUAL, B-16.11, ASTM A 105, SW, 3000						
235	WE602D2Z004ZZZZZZ	0.5 INCH	600 NOS			
236	WE602D2Z006ZZZZZZ	1.0 INCH	51 NOS			
237	WE602D2Z008ZZZZZZ	1.5 INCH	50 NOS			
Item Description : T.EQUAL, B-16.11, ASTM A 105, SW, 3000, IBR						
238	WE602D2Z106ZZZZZZ	1.0 INCH	34 NOS			
239	WE602D2Z108ZZZZZZ	1.5 INCH	9 NOS			
Item Description : T.EQUAL, B-16.11, ASTM A 105, SW, 3000, NACE						
240	WE602D2Z208ZZZZZZ	1.5 INCH	1 NOS			
Item Description : T.EQUAL, B-16.11, ASTM A 105, SW, 6000						
241	WE602D3Z004ZZZZZZ	0.5 INCH	1162 NOS			
242	WE602D3Z005ZZZZZZ	0.75 INCH	180 NOS			
Item Description : T.EQUAL, B-16.11, ASTM A 105, SW, 6000, H2						
243	WE602D3Z704ZZZZZZ	0.5 INCH	7 NOS			
Item Description : T.EQUAL, B-16.11, ASTM A 105, SW, 6000, HIC1						
244	WE602D3ZT04ZZZZZZ	0.5 INCH	329 NOS			
245	WE602D3ZT05ZZZZZZ	0.75 INCH	270 NOS			
Item Description : T.EQUAL, B-16.11, ASTM A 105, SW, 6000, IBR						
246	WE602D3Z104ZZZZZZ	0.5 INCH	396 NOS			
247	WE602D3Z105ZZZZZZ	0.75 INCH	62 NOS			
Item Description : T.EQUAL, B-16.11, ASTM A 105, SW, 6000, NAC4						
248	WE602D3ZE04ZZZZZZ	0.5 INCH	19 NOS			
Item Description : T.EQUAL, B-16.11, ASTM A 105, SW, 6000, NACE						
249	WE602D3Z204ZZZZZZ	0.5 INCH	68 NOS			
250	WE602D3Z205ZZZZZZ	0.75 INCH	17 NOS			
Item Description : T.EQUAL, B-16.11, ASTM A 105, SW, 9000						
251	WE602D4Z004ZZZZZZ	0.5 INCH	17 NOS			

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MR ATTACHMENT

SR.NO.	ITEMCODE	DETAIL DESCRIPTION	QTY.	U.RATE	TOT.VALUE	CDD
Item Description :	***T.EQUAL, B-16.9, A 234 GR.WPB (EPOXY COATED), BW***					
252	WEGY84ZZ01318ZZZZ	4.0 INCH, STD	46 NOS			
253	WEGY84ZZ01518ZZZZ	6.0 INCH, STD	11 NOS			
Item Description :	***T.EQUAL, B-16.9, A 234 GR.WPB-W (EPOXY COATED), BW***					
254	WEGY94ZZ02263ZZZZ	20.0 INCH, 8.0 MM THK	2 NOS			
Item Description :	***T.EQUAL, B-16.9, ASTM A 234 GR.WPB, BW***					
255	WEG684ZZ00919ZZZZ	2.0 INCH, XS	432 NOS			
256	WEG684ZZ01118ZZZZ	3.0 INCH, STD	31 NOS			
257	WEG684ZZ01318ZZZZ	4.0 INCH, STD	108 NOS			
258	WEG684ZZ01319ZZZZ	4.0 INCH, XS	3 NOS			
259	WEG684ZZ01518ZZZZ	6.0 INCH, STD	132 NOS			
260	WEG684ZZ01519ZZZZ	6.0 INCH, XS	3 NOS			
261	WEG684ZZ01618ZZZZ	8.0 INCH, STD	96 NOS			
262	WEG684ZZ01718ZZZZ	10.0 INCH, STD	61 NOS			
263	WEG684ZZ01818ZZZZ	12.0 INCH, STD	29 NOS			
264	WEG684ZZ01819ZZZZ	12.0 INCH, XS	1 NOS			
265	WEG684ZZ01905ZZZZ	14.0 INCH, S60	2 NOS			
266	WEG684ZZ01918ZZZZ	14.0 INCH, STD	25 NOS			
Item Description :	***T.EQUAL, B-16.9, ASTM A 234 GR.WPB, BW, H2***					
267	WEG684ZZ70919ZZZZ	2.0 INCH, XS	2 NOS			
268	WEG684ZZ71118ZZZZ	3.0 INCH, STD	2 NOS			
269	WEG684ZZ71518ZZZZ	6.0 INCH, STD	7 NOS			
270	WEG684ZZ71718ZZZZ	10.0 INCH, STD	2 NOS			
Item Description :	***T.EQUAL, B-16.9, ASTM A 234 GR.WPB, BW, HIC1***					
271	WEG684ZZT0919ZZZZ	2.0 INCH, XS	88 NOS			
272	WEG684ZZT1118ZZZZ	3.0 INCH, STD	9 NOS			
273	WEG684ZZT1318ZZZZ	4.0 INCH, STD	15 NOS			
274	WEG684ZZT1518ZZZZ	6.0 INCH, STD	5 NOS			
275	WEG684ZZT1618ZZZZ	8.0 INCH, STD	3 NOS			
276	WEG684ZZT1718ZZZZ	10.0 INCH, STD	8 NOS			
277	WEG684ZZT1819ZZZZ	12.0 INCH, XS	1 NOS			

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MR ATTACHMENT

SR.NO.	ITEMCODE	DETAIL DESCRIPTION	QTY.	U.RATE	TOT.VALUE	CDD
278	WEG684ZZT1918ZZZZ	14.0 INCH, STD	2 NOS			
Item Description :	***T.EQUAL, B-16.9, ASTM A 234 GR.WPB, BW, IBR***					
279	WEG684ZZ10919ZZZZ	2.0 INCH, XS	78 NOS			
280	WEG684ZZ11318ZZZZ	4.0 INCH, STD	24 NOS			
281	WEG684ZZ11518ZZZZ	6.0 INCH, STD	4 NOS			
282	WEG684ZZ11618ZZZZ	8.0 INCH, STD	3 NOS			
283	WEG684ZZ11619ZZZZ	8.0 INCH, XS	2 NOS			
284	WEG684ZZ11718ZZZZ	10.0 INCH, STD	1 NOS			
285	WEG684ZZ11806ZZZZ	12.0 INCH, S80	1 NOS			
286	WEG684ZZ11818ZZZZ	12.0 INCH, STD	5 NOS			
287	WEG684ZZ11918ZZZZ	14.0 INCH, STD	1 NOS			
Item Description :	***T.EQUAL, B-16.9, ASTM A 234 GR.WPB, BW, NAC4***					
288	WEG684ZZE0520ZZZZ	0.75 INCH, XXS	5 NOS			
289	WEG684ZZE1119ZZZZ	3.0 INCH, XS	4 NOS			
290	WEG684ZZE1120ZZZZ	3.0 INCH, XXS	2 NOS			
291	WEG684ZZE1518ZZZZ	6.0 INCH, STD	3 NOS			
292	WEG684ZZE1609ZZZZ	8.0 INCH, S140	2 NOS			
293	WEG684ZZE1898ZZZZ	12.0 INCH, 27.0 MM THK	1 NOS			
Item Description :	***T.EQUAL, B-16.9, ASTM A 234 GR.WPB, BW, NACE***					
294	WEG684ZZ20910ZZZZ	2.0 INCH, S160	4 NOS			
295	WEG684ZZ20919ZZZZ	2.0 INCH, XS	8 NOS			
296	WEG684ZZ21118ZZZZ	3.0 INCH, STD	2 NOS			
297	WEG684ZZ21120ZZZZ	3.0 INCH, XXS	2 NOS			
298	WEG684ZZ21318ZZZZ	4.0 INCH, STD	1 NOS			
299	WEG684ZZ21518ZZZZ	6.0 INCH, STD	2 NOS			
300	WEG684ZZ21618ZZZZ	8.0 INCH, STD	3 NOS			
Item Description :	***T.EQUAL, B-16.9, ASTM A 234 GR.WPB-W, BW***					
301	WEG754ZZ02018ZZZZ	16.0 INCH, STD	3 NOS			
302	WEG754ZZ02019ZZZZ	16.0 INCH, XS	3 NOS			
303	WEG754ZZ02083ZZZZ	16.0 INCH, 16.0 MM THK	1 NOS			
304	WEG754ZZ02218ZZZZ	20.0 INCH, STD	5 NOS			
305	WEG754ZZ02418ZZZZ	24.0 INCH, STD	2 NOS			

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MR ATTACHMENT

SR.NO.	ITEMCODE	DETAIL DESCRIPTION	QTY.	U.RATE	TOT.VALUE	CDD
306	WEG754ZZ02471ZZZZ	24.0 INCH, 10.0 MM THK	1 NOS			
307	WEG754ZZ02518ZZZZ	26.0 INCH, STD	3 NOS			
308	WEG754ZZ03619ZZZZ	48.0 INCH, XS	1 NOS			
Item Description :	***T.EQUAL, B-16.9, ASTM A 234 GR.WPB-W, BW, HIC1***					
309	WEG754ZZT2018ZZZZ	16.0 INCH, STD	29 NOS			
310	WEG754ZZT2118ZZZZ	18.0 INCH, STD	4 NOS			
311	WEG754ZZT2179ZZZZ	18.0 INCH, 14.0 MM THK	1 NOS			
312	WEG754ZZT2618ZZZZ	28.0 INCH, STD	1 NOS			
313	WEG754ZZT3019ZZZZ	36.0 INCH, XS	1 NOS			
314	WEG754ZZT3319ZZZZ	42.0 INCH, XS	3 NOS			
315	WEG754ZZT3419ZZZZ	44.0 INCH, XS	1 NOS			
Item Description :	***T.EQUAL, B-16.9, ASTM A 234 GR.WPB-W, BW, NACE***					
316	WEG754ZZ220A5ZZZZ	16.0 INCH, 32.0 MM THK	1 NOS			
Item Description :	***T.EQUAL, B-16.9, ASTM A 234 WPB-W (200 BHN MAX), BW, NACE***					
317	WEGJ84ZZ22418ZZZZ	24.0 INCH, STD	4 NOS			
Item Description :	***T.RED, B-16.11, ASTM A 105, SW, 3000***					
318	WR602D2Z006ZZ05ZZ	1.0 INCH, 0.75 INCH	34 NOS			
319	WR602D2Z008ZZ04ZZ	1.5 INCH, 0.5 INCH	12 NOS			
320	WR602D2Z008ZZ06ZZ	1.5 INCH, 1.0 INCH	81 NOS			
Item Description :	***T.RED, B-16.11, ASTM A 105, SW, 3000, HIC1***					
321	WR602D2ZT08ZZ06ZZ	1.5 INCH, 1.0 INCH	3 NOS			
Item Description :	***T.RED, B-16.11, ASTM A 105, SW, 3000, IBR***					
322	WR602D2Z106ZZ05ZZ	1.0 INCH, 0.75 INCH	20 NOS			
323	WR602D2Z108ZZ06ZZ	1.5 INCH, 1.0 INCH	37 NOS			
Item Description :	***T.RED, B-16.9, ASTM A 234 GR.WPB, BW***					
324	WRG684ZZ009190510	2.0 INCH, XS, 0.75 INCH, S160	8 NOS			
325	WRG684ZZ009190819	2.0 INCH, XS, 1.5 INCH, XS	34 NOS			
326	WRG684ZZ011180819	3.0 INCH, STD, 1.5 INCH, XS	2 NOS			
327	WRG684ZZ013180819	4.0 INCH, STD, 1.5 INCH, XS	2 NOS			
Item Description :	***T.RED, B-16.9, ASTM A 234 GR.WPB, BW, HIC1***					
328	WRG684ZZT09190819	2.0 INCH, XS, 1.5 INCH, XS	2 NOS			

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MR ATTACHMENT

SR.NO.	ITEMCODE	DETAIL DESCRIPTION	QTY.	U.RATE	TOT.VALUE	CDD
Item Description :	***T.RED, B-16.9, ASTM A 234 GR.WPB, BW, NAC4***					
329	WRG684ZZE08200520	1.5 INCH, XXS, 0.75 INCH, XXS	5 NOS			
330	WRG684ZZE19081898	14.0 INCH, S120, 12.0 INCH, 27.0 MM THK	1 NOS			
Item Description :	***REDUC.CONC, B-16.9, A 234 GR.WPB (EPOXY COATED), BW***					
331	WUGY84ZZ015181318	6.0 INCH, STD, 4.0 INCH, STD	20 NOS			
332	WUGY84ZZ016181518	8.0 INCH, STD, 6.0 INCH, STD	17 NOS			
333	WUGY84ZZ018181518	12.0 INCH, STD, 6.0 INCH, STD	4 NOS			
334	WUGY84ZZ018181618	12.0 INCH, STD, 8.0 INCH, STD	7 NOS			
335	WUGY84ZZ018181718	12.0 INCH, STD, 10.0 INCH, STD	6 NOS			
Item Description :	***REDUC.CONC, B-16.9, ASTM A 234 GR.WPB, BW***					
336	WUG684ZZ011180919	3.0 INCH, STD, 2.0 INCH, XS	31 NOS			
337	WUG684ZZ013180919	4.0 INCH, STD, 2.0 INCH, XS	6 NOS			
338	WUG684ZZ013181118	4.0 INCH, STD, 3.0 INCH, STD	27 NOS			
339	WUG684ZZ013190910	4.0 INCH, XS, 2.0 INCH, S160	1 NOS			
340	WUG684ZZ015181118	6.0 INCH, STD, 3.0 INCH, STD	15 NOS			
341	WUG684ZZ015181318	6.0 INCH, STD, 4.0 INCH, STD	49 NOS			
342	WUG684ZZ016181318	8.0 INCH, STD, 4.0 INCH, STD	3 NOS			
343	WUG684ZZ016181518	8.0 INCH, STD, 6.0 INCH, STD	28 NOS			
344	WUG684ZZ017181318	10.0 INCH, STD, 4.0 INCH, STD	5 NOS			
345	WUG684ZZ017181518	10.0 INCH, STD, 6.0 INCH, STD	9 NOS			
346	WUG684ZZ018181618	12.0 INCH, STD, 8.0 INCH, STD	9 NOS			
347	WUG684ZZ018181718	12.0 INCH, STD, 10.0 INCH, STD	14 NOS			
348	WUG684ZZ018191718	12.0 INCH, XS, 10.0 INCH, STD	1 NOS			
349	WUG684ZZ019181618	14.0 INCH, STD, 8.0 INCH, STD	1 NOS			
350	WUG684ZZ019181718	14.0 INCH, STD, 10.0 INCH, STD	1 NOS			
351	WUG684ZZ019181818	14.0 INCH, STD, 12.0 INCH, STD	7 NOS			
Item Description :	***REDUC.CONC, B-16.9, ASTM A 234 GR.WPB, BW, HIC1***					
352	WUG684ZZT09190819	2.0 INCH, XS, 1.5 INCH, XS	4 NOS			
353	WUG684ZZT11180819	3.0 INCH, STD, 1.5 INCH, XS	2 NOS			

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MR ATTACHMENT

SR.NO.	ITEMCODE	DETAIL DESCRIPTION	QTY.	U.RATE	TOT.VALUE	CDD
354	WUG684ZZT11180919	3.0 INCH, STD, 2.0 INCH, XS	4 NOS			
355	WUG684ZZT13181118	4.0 INCH, STD, 3.0 INCH, STD	7 NOS			
356	WUG684ZZT15181118	6.0 INCH, STD, 3.0 INCH, STD	4 NOS			
357	WUG684ZZT15181318	6.0 INCH, STD, 4.0 INCH, STD	2 NOS			
358	WUG684ZZT16181318	8.0 INCH, STD, 4.0 INCH, STD	2 NOS			
359	WUG684ZZT16181518	8.0 INCH, STD, 6.0 INCH, STD	3 NOS			
360	WUG684ZZT17181318	10.0 INCH, STD, 4.0 INCH, STD	2 NOS			
361	WUG684ZZT17181618	10.0 INCH, STD, 8.0 INCH, STD	10 NOS			
362	WUG684ZZT18181518	12.0 INCH, STD, 6.0 INCH, STD	1 NOS			
363	WUG684ZZT19181818	14.0 INCH, STD, 12.0 INCH, STD	2 NOS			
364	WUG684ZZT19191518	14.0 INCH, XS, 6.0 INCH, STD	3 NOS			
365	WUG684ZZT19191718	14.0 INCH, XS, 10.0 INCH, STD	1 NOS			
Item Description :	***REDUC.CONC, B-16.9, ASTM A 234 GR.WPB, BW, IBR***					
366	WUG684ZZ109190619	2.0 INCH, XS, 1.0 INCH, XS	8 NOS			
367	WUG684ZZ111180919	3.0 INCH, STD, 2.0 INCH, XS	7 NOS			
368	WUG684ZZ113180819	4.0 INCH, STD, 1.5 INCH, XS	4 NOS			
369	WUG684ZZ113180919	4.0 INCH, STD, 2.0 INCH, XS	4 NOS			
370	WUG684ZZ113181118	4.0 INCH, STD, 3.0 INCH, STD	5 NOS			
371	WUG684ZZ115181318	6.0 INCH, STD, 4.0 INCH, STD	2 NOS			
372	WUG684ZZ116181518	8.0 INCH, STD, 6.0 INCH, STD	3 NOS			
373	WUG684ZZ117181318	10.0 INCH, STD, 4.0 INCH, STD	2 NOS			
374	WUG684ZZ117181518	10.0 INCH, STD, 6.0 INCH, STD	2 NOS			
375	WUG684ZZ119181718	14.0 INCH, STD, 10.0 INCH, STD	1 NOS			
Item Description :	***REDUC.CONC, B-16.9, ASTM A 234 GR.WPB, BW, NAC4***					
376	WUG684ZZE11190910	3.0 INCH, XS, 2.0 INCH, S160	4 NOS			
377	WUG684ZZE13191119	4.0 INCH, XS, 3.0 INCH, XS	2 NOS			
378	WUG684ZZE15181318	6.0 INCH, STD, 4.0 INCH, STD	2 NOS			
379	WUG684ZZE16181518	8.0 INCH, STD, 6.0 INCH, STD	2 NOS			
380	WUG684ZZE16191319	8.0 INCH, XS, 4.0 INCH, XS	2 NOS			
Item Description :	***REDUC.CONC, B-16.9, ASTM A 234 GR.WPB, BW, NACE***					
381	WUG684ZZ211100910	3.0 INCH, S160, 2.0 INCH, S160	2 NOS			

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SR.NO.	ITEMCODE	DETAIL DESCRIPTION	QTY.	U.RATE	TOT.VALUE	CDD
382	WUG684ZZ211180919	3.0 INCH, STD, 2.0 INCH, XS	2 NOS			
383	WUG684ZZ213180819	4.0 INCH, STD, 1.5 INCH, XS	2 NOS			
384	WUG684ZZ213180919	4.0 INCH, STD, 2.0 INCH, XS	2 NOS			
385	WUG684ZZ215181318	6.0 INCH, STD, 4.0 INCH, STD	4 NOS			
386	WUG684ZZ216181518	8.0 INCH, STD, 6.0 INCH, STD	3 NOS			
Item Description :	***REDUC.CONC, B-16.9, ASTM A 234 GR.WPB-W, BW***					
387	WUG754ZZ020181918	16.0 INCH, STD, 14.0 INCH, STD	2 NOS			
388	WUG754ZZ020191818	16.0 INCH, XS, 12.0 INCH, STD	3 NOS			
389	WUG754ZZ020191918	16.0 INCH, XS, 14.0 INCH, STD	1 NOS			
390	WUG754ZZ021181718	18.0 INCH, STD, 10.0 INCH, STD	7 NOS			
391	WUG754ZZ022181818	20.0 INCH, STD, 12.0 INCH, STD	3 NOS			
392	WUG754ZZ022182018	20.0 INCH, STD, 16.0 INCH, STD	2 NOS			
393	WUG754ZZ022182118	20.0 INCH, STD, 18.0 INCH, STD	1 NOS			
394	WUG754ZZ024182018	24.0 INCH, STD, 16.0 INCH, STD	2 NOS			
395	WUG754ZZ024712063	24.0 INCH, 10.0 MM THK, 16.0 INCH, 8.0 MM THK	2 NOS			
396	WUG754ZZ025182218	26.0 INCH, STD, 20.0 INCH, STD	1 NOS			
Item Description :	***REDUC.CONC, B-16.9, ASTM A 234 GR.WPB-W, BW, HIC1***					
397	WUG754ZZT20181718	16.0 INCH, STD, 10.0 INCH, STD	1 NOS			
398	WUG754ZZT20181818	16.0 INCH, STD, 12.0 INCH, STD	1 NOS			
399	WUG754ZZT21181718	18.0 INCH, STD, 10.0 INCH, STD	7 NOS			
400	WUG754ZZT21182018	18.0 INCH, STD, 16.0 INCH, STD	1 NOS			
401	WUG754ZZT21791919	18.0 INCH, 14.0 MM THK, 14.0 INCH, XS	1 NOS			
402	WUG754ZZT34193019	44.0 INCH, XS, 36.0 INCH, XS	1 NOS			
Item Description :	***REDUC.CONC, B-16.9, ASTM A 234 GR.WPB-W, BW, NAC4***					
403	WUG754ZZE21081908	18.0 INCH, S120, 14.0 INCH, S120	1 NOS			

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SR.NO.	ITEMCODE	DETAIL DESCRIPTION	QTY.	U.RATE	TOT.VALUE	CDD
Item Description :	***REDUC.CONC, B-16.9, ASTM A 234 WPB-W (200 BHN MAX), BW, NACE***					
404	WUGJ84ZZ224182018	24.0 INCH, STD, 16.0 INCH, STD	3 NOS			
Item Description :	***REDUC.ECC, B-16.9, A 234 GR.WPB-W (EPOXY COATED), BW***					
405	WVGY94ZZ031713071	38.0 INCH, 10.0 MM THK, 36.0 INCH, 10.0 MM THK	2 NOS			
Item Description :	***REDUC.ECC, B-16.9, ASTM A 234 GR.WPB, BW***					
406	WVG684ZZ009190819	2.0 INCH, XS, 1.5 INCH, XS	9 NOS			
407	WVG684ZZ011100910	3.0 INCH, S160, 2.0 INCH, S160	3 NOS			
408	WVG684ZZ011180919	3.0 INCH, STD, 2.0 INCH, XS	64 NOS			
409	WVG684ZZ013180919	4.0 INCH, STD, 2.0 INCH, XS	34 NOS			
410	WVG684ZZ013181118	4.0 INCH, STD, 3.0 INCH, STD	57 NOS			
411	WVG684ZZ015181118	6.0 INCH, STD, 3.0 INCH, STD	38 NOS			
412	WVG684ZZ015181318	6.0 INCH, STD, 4.0 INCH, STD	125 NOS			
413	WVG684ZZ016181318	8.0 INCH, STD, 4.0 INCH, STD	28 NOS			
414	WVG684ZZ016181518	8.0 INCH, STD, 6.0 INCH, STD	35 NOS			
415	WVG684ZZ017061619	10.0 INCH, S80, 8.0 INCH, XS	2 NOS			
416	WVG684ZZ017181318	10.0 INCH, STD, 4.0 INCH, STD	2 NOS			
417	WVG684ZZ017181518	10.0 INCH, STD, 6.0 INCH, STD	17 NOS			
418	WVG684ZZ017181618	10.0 INCH, STD, 8.0 INCH, STD	37 NOS			
419	WVG684ZZ018181518	12.0 INCH, STD, 6.0 INCH, STD	4 NOS			
420	WVG684ZZ018181618	12.0 INCH, STD, 8.0 INCH, STD	7 NOS			
421	WVG684ZZ018181718	12.0 INCH, STD, 10.0 INCH, STD	17 NOS			
422	WVG684ZZ018191718	12.0 INCH, XS, 10.0 INCH, STD	1 NOS			
423	WVG684ZZ019051706	14.0 INCH, S60, 10.0 INCH, S80	1 NOS			
424	WVG684ZZ019181518	14.0 INCH, STD, 6.0 INCH, STD	7 NOS			
425	WVG684ZZ019181618	14.0 INCH, STD, 8.0 INCH, STD	6 NOS			
426	WVG684ZZ019181718	14.0 INCH, STD, 10.0 INCH, STD	1 NOS			
427	WVG684ZZ019181818	14.0 INCH, STD, 12.0 INCH, STD	2 NOS			
428	WVG684ZZ019191718	14.0 INCH, XS, 10.0 INCH, STD	2 NOS			
Item Description :	***REDUC.ECC, B-16.9, ASTM A 234 GR.WPB, BW, H2***					

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MR ATTACHMENT

SR.NO.	ITEMCODE	DETAIL DESCRIPTION	QTY.	U.RATE	TOT.VALUE	CDD
429	WVG684ZZ713180919	4.0 INCH, STD, 2.0 INCH, XS	6 NOS			
430	WVG684ZZ713181118	4.0 INCH, STD, 3.0 INCH, STD	2 NOS			
431	WVG684ZZ715181318	6.0 INCH, STD, 4.0 INCH, STD	7 NOS			
432	WVG684ZZ717181618	10.0 INCH, STD, 8.0 INCH, STD	2 NOS			
433	WVG684ZZ718181618	12.0 INCH, STD, 8.0 INCH, STD	2 NOS			
Item Description :	***REDUC.ECC, B-16.9, ASTM A 234 GR.WPB, BW, HIC1***					
434	WVG684ZZT09190510	2.0 INCH, XS, 0.75 INCH, S160	9 NOS			
435	WVG684ZZT11180819	3.0 INCH, STD, 1.5 INCH, XS	2 NOS			
436	WVG684ZZT11180919	3.0 INCH, STD, 2.0 INCH, XS	1 NOS			
437	WVG684ZZT13180919	4.0 INCH, STD, 2.0 INCH, XS	11 NOS			
438	WVG684ZZT13181118	4.0 INCH, STD, 3.0 INCH, STD	2 NOS			
439	WVG684ZZT15181318	6.0 INCH, STD, 4.0 INCH, STD	7 NOS			
440	WVG684ZZT16181318	8.0 INCH, STD, 4.0 INCH, STD	4 NOS			
441	WVG684ZZT16181518	8.0 INCH, STD, 6.0 INCH, STD	9 NOS			
442	WVG684ZZT17181618	10.0 INCH, STD, 8.0 INCH, STD	1 NOS			
443	WVG684ZZT18181518	12.0 INCH, STD, 6.0 INCH, STD	3 NOS			
444	WVG684ZZT19181718	14.0 INCH, STD, 10.0 INCH, STD	25 NOS			
445	WVG684ZZT19181818	14.0 INCH, STD, 12.0 INCH, STD	2 NOS			
446	WVG684ZZT19191718	14.0 INCH, XS, 10.0 INCH, STD	2 NOS			
Item Description :	***REDUC.ECC, B-16.9, ASTM A 234 GR.WPB, BW, IBR***					
447	WVG684ZZ111180919	3.0 INCH, STD, 2.0 INCH, XS	3 NOS			
448	WVG684ZZ113180819	4.0 INCH, STD, 1.5 INCH, XS	2 NOS			
449	WVG684ZZ113180919	4.0 INCH, STD, 2.0 INCH, XS	6 NOS			
450	WVG684ZZ113181118	4.0 INCH, STD, 3.0 INCH, STD	5 NOS			
451	WVG684ZZ113190919	4.0 INCH, XS, 2.0 INCH, XS	2 NOS			
452	WVG684ZZ115181318	6.0 INCH, STD, 4.0 INCH, STD	2 NOS			
453	WVG684ZZ115191118	6.0 INCH, XS, 3.0 INCH, STD	2 NOS			
454	WVG684ZZ116181318	8.0 INCH, STD, 4.0 INCH, STD	4 NOS			
455	WVG684ZZ116181518	8.0 INCH, STD, 6.0 INCH, STD	4 NOS			
456	WVG684ZZ116191319	8.0 INCH, XS, 4.0 INCH, XS	2 NOS			
457	WVG684ZZ116191519	8.0 INCH, XS, 6.0 INCH, XS	3 NOS			

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MR ATTACHMENT

SR.NO.	ITEMCODE	DETAIL DESCRIPTION	QTY.	U.RATE	TOT.VALUE	CDD
458	WVG684ZZ117181318	10.0 INCH, STD, 4.0 INCH, STD	2 NOS			
459	WVG684ZZ117181518	10.0 INCH, STD, 6.0 INCH, STD	4 NOS			
460	WVG684ZZ118181518	12.0 INCH, STD, 6.0 INCH, STD	2 NOS			
461	WVG684ZZ118181618	12.0 INCH, STD, 8.0 INCH, STD	2 NOS			
462	WVG684ZZ118181718	12.0 INCH, STD, 10.0 INCH, STD	2 NOS			
463	WVG684ZZ119181518	14.0 INCH, STD, 6.0 INCH, STD	2 NOS			
464	WVG684ZZ119181718	14.0 INCH, STD, 10.0 INCH, STD	2 NOS			
Item Description : REDUC.ECC, B-16.9, ASTM A 234 GR.WPB, BW, NAC4						
465	WVG684ZZE17181518	10.0 INCH, STD, 6.0 INCH, STD	2 NOS			
Item Description : REDUC.ECC, B-16.9, ASTM A 234 GR.WPB, BW, NACE						
466	WVG684ZZ211180919	3.0 INCH, STD, 2.0 INCH, XS	2 NOS			
467	WVG684ZZ211200820	3.0 INCH, XXS, 1.5 INCH, XXS	2 NOS			
468	WVG684ZZ213180919	4.0 INCH, STD, 2.0 INCH, XS	3 NOS			
469	WVG684ZZ215181118	6.0 INCH, STD, 3.0 INCH, STD	2 NOS			
470	WVG684ZZ215181318	6.0 INCH, STD, 4.0 INCH, STD	7 NOS			
471	WVG684ZZ216091510	8.0 INCH, S140, 6.0 INCH, S160	2 NOS			
472	WVG684ZZ216181518	8.0 INCH, STD, 6.0 INCH, STD	3 NOS			
473	WVG684ZZ217181618	10.0 INCH, STD, 8.0 INCH, STD	2 NOS			
Item Description : REDUC.ECC, B-16.9, ASTM A 234 GR.WPB-W, BW						
474	WVG754ZZ020181618	16.0 INCH, STD, 8.0 INCH, STD	3 NOS			
475	WVG754ZZ020181718	16.0 INCH, STD, 10.0 INCH, STD	1 NOS			
476	WVG754ZZ020181818	16.0 INCH, STD, 12.0 INCH, STD	1 NOS			
477	WVG754ZZ020191618	16.0 INCH, XS, 8.0 INCH, STD	4 NOS			
478	WVG754ZZ020191818	16.0 INCH, XS, 12.0 INCH, STD	2 NOS			
479	WVG754ZZ020191918	16.0 INCH, XS, 14.0 INCH, STD	2 NOS			
480	WVG754ZZ020631718	16.0 INCH, 8.0 MM THK, 10.0 INCH, STD	2 NOS			
481	WVG754ZZ021181718	18.0 INCH, STD, 10.0 INCH, STD	20 NOS			
482	WVG754ZZ021181918	18.0 INCH, STD, 14.0 INCH, STD	1 NOS			

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SR.NO.	ITEMCODE	DETAIL DESCRIPTION	QTY.	U.RATE	TOT.VALUE	CDD
483	WVG754ZZ021182018	18.0 INCH, STD, 16.0 INCH, STD	5 NOS			
484	WVG754ZZ021192019	18.0 INCH, XS, 16.0 INCH, XS	7 NOS			
485	WVG754ZZ022181818	20.0 INCH, STD, 12.0 INCH, STD	9 NOS			
486	WVG754ZZ022182018	20.0 INCH, STD, 16.0 INCH, STD	1 NOS			
487	WVG754ZZ022182118	20.0 INCH, STD, 18.0 INCH, STD	2 NOS			
488	WVG754ZZ024182018	24.0 INCH, STD, 16.0 INCH, STD	1 NOS			
489	WVG754ZZ024182118	24.0 INCH, STD, 18.0 INCH, STD	10 NOS			
490	WVG754ZZ024192218	24.0 INCH, XS, 20.0 INCH, STD	1 NOS			
491	WVG754ZZ024712263	24.0 INCH, 10.0 MM THK, 20.0 INCH, 8.0 MM THK	1 NOS			
492	WVG754ZZ025182118	26.0 INCH, STD, 18.0 INCH, STD	7 NOS			
493	WVG754ZZ025182218	26.0 INCH, STD, 20.0 INCH, STD	1 NOS			
494	WVG754ZZ025182418	26.0 INCH, STD, 24.0 INCH, STD	1 NOS			
495	WVG754ZZ026182518	28.0 INCH, STD, 26.0 INCH, STD	1 NOS			
496	WVG754ZZ027182218	30.0 INCH, STD, 20.0 INCH, STD	1 NOS			
497	WVG754ZZ028182518	32.0 INCH, STD, 26.0 INCH, STD	1 NOS			
498	WVG754ZZ028182718	32.0 INCH, STD, 30.0 INCH, STD	1 NOS			
499	WVG754ZZ030712571	36.0 INCH, 10.0 MM THK, 26.0 INCH, 10.0 MM THK	2 NOS			
500	WVG754ZZ031713071	38.0 INCH, 10.0 MM THK, 36.0 INCH, 10.0 MM THK	2 NOS			
501	WVG754ZZ033193219	42.0 INCH, XS, 40.0 INCH, XS	2 NOS			
502	WVG754ZZ035763171	46.0 INCH, 12.0 MM THK, 38.0 INCH, 10.0 MM THK	2 NOS			
Item Description :	***REDUC.ECC, B-16.9, ASTM A 234 GR.WPB-W, BW, HIC1***					
503	WVG754ZZT20181618	16.0 INCH, STD, 8.0 INCH, STD	2 NOS			
504	WVG754ZZT20181718	16.0 INCH, STD, 10.0 INCH, STD	1 NOS			

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SR.NO.	ITEMCODE	DETAIL DESCRIPTION	QTY.	U.RATE	TOT.VALUE	CDD
505	WVG754ZZT20181818	16.0 INCH, STD, 12.0 INCH, STD	25 NOS			
506	WVG754ZZT21181718	18.0 INCH, STD, 10.0 INCH, STD	2 NOS			
507	WVG754ZZT21182018	18.0 INCH, STD, 16.0 INCH, STD	4 NOS			
508	WVG754ZZT21791919	18.0 INCH, 14.0 MM THK, 14.0 INCH, XS	2 NOS			
509	WVG754ZZT30192718	36.0 INCH, XS, 30.0 INCH, STD	2 NOS			
510	WVG754ZZT33192718	42.0 INCH, XS, 30.0 INCH, STD	2 NOS			
511	WVG754ZZT33193219	42.0 INCH, XS, 40.0 INCH, XS	2 NOS			
512	WVG754ZZT34193019	44.0 INCH, XS, 36.0 INCH, XS	2 NOS			
Item Description : REDUC.ECC, B-16.9, ASTM A 234 GR.WPB-W, BW, IBR						
513	WVG754ZZ120191718	16.0 INCH, XS, 10.0 INCH, STD	2 NOS			
514	WVG754ZZ121862083	18.0 INCH, 18.0 MM THK, 16.0 INCH, 16.0 MM THK	1 NOS			
515	WVG754ZZ124182218	24.0 INCH, STD, 20.0 INCH, STD	2 NOS			
Item Description : REDUC.ECC, B-16.9, ASTM A 234 GR.WPB-W, BW, NAC4						
516	WVG754ZZE21091898	18.0 INCH, S140, 12.0 INCH, 27.0 MM THK	1 NOS			
Item Description : REDUC.ECC, B-16.9, ASTM A 234 GR.WPB-W, BW, NACE						
517	WVG754ZZ220A51609	16.0 INCH, 32.0 MM THK, 8.0 INCH, S140	2 NOS			
Item Description : SWAGE.CONC, BS-3799, ASTM A 105, PBE						
518	WNH026ZZ005100410	0.75 INCH, S160, 0.5 INCH, S160	751 NOS			
519	WNH026ZZ005100420	0.75 INCH, S160, 0.5 INCH, XXS	13 NOS			
520	WNH026ZZ006190510	1.0 INCH, XS, 0.75 INCH, S160	23 NOS			
521	WNH026ZZ008190519	1.5 INCH, XS, 0.75 INCH, XS	220 NOS			
522	WNH026ZZ008190619	1.5 INCH, XS, 1.0 INCH, XS	29 NOS			
523	WNH026ZZ009100610	2.0 INCH, S160, 1.0 INCH, S160	5 NOS			
524	WNH026ZZ009190510	2.0 INCH, XS, 0.75 INCH, S160	44 NOS			
525	WNH026ZZ009190619	2.0 INCH, XS, 1.0 INCH, XS	67 NOS			
526	WNH026ZZ009190819	2.0 INCH, XS, 1.5 INCH, XS	11 NOS			
527	WNH026ZZ011180619	3.0 INCH, STD, 1.0 INCH, XS	3 NOS			

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SR.NO.	ITEMCODE	DETAIL DESCRIPTION	QTY.	U.RATE	TOT.VALUE	CDD
Item Description : SWAGE.CONC, BS-3799, ASTM A 105, PBE, HIC1						
528	WNH026ZZT05100410	0.75 INCH, S160, 0.5 INCH, S160	195 NOS			
529	WNH026ZZT06190510	1.0 INCH, XS, 0.75 INCH, S160	5 NOS			
530	WNH026ZZT09190510	2.0 INCH, XS, 0.75 INCH, S160	11 NOS			
531	WNH026ZZT09190619	2.0 INCH, XS, 1.0 INCH, XS	3 NOS			
532	WNH026ZZT11180819	3.0 INCH, STD, 1.5 INCH, XS	2 NOS			
Item Description : SWAGE.CONC, BS-3799, ASTM A 105, PBE, IBR						
533	WNH026ZZ105100410	0.75 INCH, S160, 0.5 INCH, S160	385 NOS			
534	WNH026ZZ106190510	1.0 INCH, XS, 0.75 INCH, S160	3 NOS			
535	WNH026ZZ108190510	1.5 INCH, XS, 0.75 INCH, S160	217 NOS			
536	WNH026ZZ108190619	1.5 INCH, XS, 1.0 INCH, XS	13 NOS			
537	WNH026ZZ109190619	2.0 INCH, XS, 1.0 INCH, XS	3 NOS			
538	WNH026ZZ109190819	2.0 INCH, XS, 1.5 INCH, XS	4 NOS			
Item Description : SWAGE.CONC, BS-3799, ASTM A 105, PBE, NAC4						
539	WNH026ZZE05100410	0.75 INCH, S160, 0.5 INCH, S160	19 NOS			
Item Description : SWAGE.CONC, BS-3799, ASTM A 105, PBE, NACE						
540	WNH026ZZ205100410	0.75 INCH, S160, 0.5 INCH, S160	18 NOS			
541	WNH026ZZ208190619	1.5 INCH, XS, 1.0 INCH, XS	5 NOS			
Item Description : SWAGE.CONC, BS-3799, ASTM A 105, TLE						
542	WNH02FZZ005100410	0.75 INCH, S160, 0.5 INCH, S160	132 NOS			
Item Description : SWAGE.CONC, BS-3799, ASTM A 105, TLE, HIC1						
543	WNH02FZZT05100410	0.75 INCH, S160, 0.5 INCH, S160	32 NOS			
Item Description : SWAGE.CONC, BS-3799, ASTM A 105, TLE, IBR						
544	WNH02FZZ105100410	0.75 INCH, S160, 0.5 INCH, S160	39 NOS			
Item Description : SWAGE.CONC, BS-3799, ASTM A 105, TLE, NAC4						
545	WNH02FZZE05100410	0.75 INCH, S160, 0.5 INCH, S160	19 NOS			
Item Description : SWAGE.ECC, BS-3799, ASTM A 105, PBE						
546	WPH026ZZ008190510	1.5 INCH, XS, 0.75 INCH, S160	2 NOS			
547	WPH026ZZ008190619	1.5 INCH, XS, 1.0 INCH, XS	7 NOS			
548	WPH026ZZ009190510	2.0 INCH, XS, 0.75 INCH, S160	6 NOS			
549	WPH026ZZ009190619	2.0 INCH, XS, 1.0 INCH, XS	21 NOS			

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MR ATTACHMENT

SR.NO.	ITEMCODE	DETAIL DESCRIPTION	QTY.	U.RATE	TOT.VALUE	CDD
550	WPH026ZZ009190819	2.0 INCH, XS, 1.5 INCH, XS	38 NOS			
551	WPH026ZZ011180819	3.0 INCH, STD, 1.5 INCH, XS	3 NOS			
Item Description : SWAGE.ECC, BS-3799, ASTM A 105, PBE, HIC1						
552	WPH026ZZT08190510	1.5 INCH, XS, 0.75 INCH, S160	3 NOS			
553	WPH026ZZT09190510	2.0 INCH, XS, 0.75 INCH, S160	14 NOS			
554	WPH026ZZT09190619	2.0 INCH, XS, 1.0 INCH, XS	6 NOS			
555	WPH026ZZT09190819	2.0 INCH, XS, 1.5 INCH, XS	7 NOS			
556	WPH026ZZT11180819	3.0 INCH, STD, 1.5 INCH, XS	2 NOS			
Item Description : SWAGE.ECC, BS-3799, ASTM A 105, PBE, IBR						
557	WPH026ZZ108190619	1.5 INCH, XS, 1.0 INCH, XS	2 NOS			
558	WPH026ZZ109190619	2.0 INCH, XS, 1.0 INCH, XS	11 NOS			
Item Description : SWAGE.ECC, BS-3799, ASTM A 105, PBE, NACE						
559	WPH026ZZ211180819	3.0 INCH, STD, 1.5 INCH, XS	2 NOS			
Item Description : CAP, B-16.11, ASTM A 105, SCRF, 3000						
560	WF60282Z004ZZZZZZ	0.5 INCH	2009 NOS			
561	WF60282Z005ZZZZZZ	0.75 INCH	45 NOS			
562	WF60282Z006ZZZZZZ	1.0 INCH	18 NOS			
Item Description : CAP, B-16.11, ASTM A 105, SCRF, 3000, HIC1						
563	WF60282ZT04ZZZZZZ	0.5 INCH	521 NOS			
Item Description : CAP, B-16.11, ASTM A 105, SCRF, 3000, IBR						
564	WF60282Z104ZZZZZZ	0.5 INCH	383 NOS			
Item Description : CAP, B-16.11, ASTM A 105, SCRF, 3000, NACE						
565	WF60282Z204ZZZZZZ	0.5 INCH	92 NOS			
Item Description : CAP, B-16.11, ASTM A 105, SCRF, 6000						
566	WF60283Z004ZZZZZZ	0.5 INCH	26 NOS			
Item Description : CAP, B-16.9, ASTM A 234 GR.WPB, BW						
567	WFG684ZZ00919ZZZZ	2.0 INCH, XS	2 NOS			
568	WFG684ZZ01618ZZZZ	8.0 INCH, STD	9 NOS			
569	WFG684ZZ02118ZZZZ	18.0 INCH, STD	2 NOS			
570	WFG684ZZ02219ZZZZ	20.0 INCH, XS	4 NOS			
571	WFG684ZZ02603ZZZZ	28.0 INCH, S30	2 NOS			

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MR ATTACHMENT

SR.NO.	ITEMCODE	DETAIL DESCRIPTION	QTY.	U.RATE	TOT.VALUE	CDD
Item Description : CAP, B-16.9, ASTM A 234 GR.WPB, BW, HIC1						
572	WFG684ZZT1118ZZZZ	3.0 INCH, STD	2 NOS			
573	WFG684ZZT2718ZZZZ	30.0 INCH, STD	4 NOS			
574	WFG684ZZT3319ZZZZ	42.0 INCH, XS	2 NOS			
Item Description : CAP, B-16.9, ASTM A 234 GR.WPB, BW, NACE						
575	WFG684ZZ2241809ZZ	24.0 INCH, STD, 2.0 INCH	2 NOS			
Item Description : CPLNG.FULL, B-16.11, ASTM A 105, SCRF, 6000						
576	WJ60283Z004ZZZZZZ	0.5 INCH	307 NOS			
577	WJ60283Z005ZZZZZZ	0.75 INCH	5 NOS			
Item Description : CPLNG.FULL, B-16.11, ASTM A 105, SCRF, 6000, HIC1						
578	WJ60283ZT04ZZZZZZ	0.5 INCH	39 NOS			
Item Description : CPLNG.FULL, B-16.11, ASTM A 105, SCRF, 6000, IBR						
579	WJ60283Z104ZZZZZZ	0.5 INCH	70 NOS			
Item Description : CPLNG.FULL, B-16.11, ASTM A 105, SCRF, 6000, NACE						
580	WJ60283Z204ZZZZZZ	0.5 INCH	5 NOS			
Item Description : CPLNG.FULL, B-16.11, ASTM A 105, SCRF, 9000						
581	WJ60284Z004ZZZZZZ	0.5 INCH	7 NOS			
Item Description : CPLNG.FULL, B-16.11, ASTM A 105, SW, 3000						
582	WJ602D2Z004ZZZZZZ	0.5 INCH	19005 NOS			
583	WJ602D2Z006ZZZZZZ	1.0 INCH	176 NOS			
584	WJ602D2Z008ZZZZZZ	1.5 INCH	219 NOS			
Item Description : CPLNG.FULL, B-16.11, ASTM A 105, SW, 3000, HIC1						
585	WJ602D2ZT08ZZZZZZ	1.5 INCH	5 NOS			
Item Description : CPLNG.FULL, B-16.11, ASTM A 105, SW, 3000, IBR						
586	WJ602D2Z106ZZZZZZ	1.0 INCH	5 NOS			
587	WJ602D2Z108ZZZZZZ	1.5 INCH	586 NOS			
Item Description : CPLNG.FULL, B-16.11, ASTM A 105, SW, 3000, NACE						
588	WJ602D2Z208ZZZZZZ	1.5 INCH	7 NOS			
Item Description : CPLNG.FULL, B-16.11, ASTM A 105, SW, 6000						
589	WJ602D3Z004ZZZZZZ	0.5 INCH	262 NOS			

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MR ATTACHMENT

SR.NO.	ITEMCODE	DETAIL DESCRIPTION	QTY.	U.RATE	TOT.VALUE	CDD
590	WJ602D3Z005ZZZZZZ	0.75 INCH	5 NOS			
Item Description :	***CPLNG.FULL, B-16.11, ASTM A 105, SW, 6000, H2***					
591	WJ602D3Z704ZZZZZZ	0.5 INCH	5 NOS			
Item Description :	***CPLNG.FULL, B-16.11, ASTM A 105, SW, 6000, HIC1***					
592	WJ602D3ZT04ZZZZZZ	0.5 INCH	80 NOS			
593	WJ602D3ZT05ZZZZZZ	0.75 INCH	28 NOS			
Item Description :	***CPLNG.FULL, B-16.11, ASTM A 105, SW, 6000, IBR***					
594	WJ602D3Z104ZZZZZZ	0.5 INCH	169 NOS			
595	WJ602D3Z105ZZZZZZ	0.75 INCH	608 NOS			
Item Description :	***CPLNG.FULL, B-16.11, ASTM A 105, SW, 6000, NAC4***					
596	WJ602D3ZE04ZZZZZZ	0.5 INCH	10 NOS			
Item Description :	***CPLNG.FULL, B-16.11, ASTM A 105, SW, 6000, NACE***					
597	WJ602D3Z204ZZZZZZ	0.5 INCH	13 NOS			
Item Description :	***CPLNG.FULL, B-16.11, ASTM A 105, SW, 9000***					
598	WJ602D4Z004ZZZZZZ	0.5 INCH	10 NOS			
Item Description :	***CPLNG.FULL, B-16.11, ASTM A 105, TOE, 6000***					
599	WJ602G3Z005ZZZZZZ	0.75 INCH	29 NOS			
Item Description :	***CPLNG.HALF, B-16.11, ASTM A 105, SW, 3000***					
600	WK602D2Z006ZZZZZZ	1.0 INCH	442 NOS			
601	WK602D2Z008ZZZZZZ	1.5 INCH	125 NOS			
Item Description :	***CPLNG.HALF, B-16.11, ASTM A 105, SW, 3000, H2***					
602	WK602D2Z708ZZZZZZ	1.5 INCH	5 NOS			
Item Description :	***CPLNG.HALF, B-16.11, ASTM A 105, SW, 3000, HIC1***					
603	WK602D2ZT06ZZZZZZ	1.0 INCH	10 NOS			
604	WK602D2ZT08ZZZZZZ	1.5 INCH	17 NOS			
Item Description :	***CPLNG.HALF, B-16.11, ASTM A 105, SW, 3000, IBR***					
605	WK602D2Z106ZZZZZZ	1.0 INCH	56 NOS			
606	WK602D2Z108ZZZZZZ	1.5 INCH	266 NOS			
Item Description :	***CPLNG.HALF, B-16.11, ASTM A 105, SW, 3000, NAC4***					
607	WK602D2ZE08ZZZZZZ	1.5 INCH	3 NOS			

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MR ATTACHMENT

SR.NO.	ITEMCODE	DETAIL DESCRIPTION	QTY.	U.RATE	TOT.VALUE	CDD
Item Description : CPLNG.HALF, B-16.11, ASTM A 105, SW, 6000						
608	WK602D3Z004ZZZZZZ	0.5 INCH	11 NOS			
609	WK602D3Z005ZZZZZZ	0.75 INCH	1395 NOS			
610	WK602D3Z006ZZZZZZ	1.0 INCH	5 NOS			
Item Description : CPLNG.HALF, B-16.11, ASTM A 105, SW, 6000, H2						
611	WK602D3Z705ZZZZZZ	0.75 INCH	17 NOS			
Item Description : CPLNG.HALF, B-16.11, ASTM A 105, SW, 6000, HIC1						
612	WK602D3ZT04ZZZZZZ	0.5 INCH	5 NOS			
613	WK602D3ZT05ZZZZZZ	0.75 INCH	214 NOS			
Item Description : CPLNG.HALF, B-16.11, ASTM A 105, SW, 6000, IBR						
614	WK602D3Z104ZZZZZZ	0.5 INCH	5 NOS			
615	WK602D3Z105ZZZZZZ	0.75 INCH	211 NOS			
Item Description : CPLNG.HALF, B-16.11, ASTM A 105, SW, 6000, NAC4						
616	WK602D3ZE04ZZZZZZ	0.5 INCH	12 NOS			
617	WK602D3ZE05ZZZZZZ	0.75 INCH	17 NOS			
618	WK602D3ZE08ZZZZZZ	1.5 INCH	5 NOS			
Item Description : CPLNG.HALF, B-16.11, ASTM A 105, SW, 6000, NACE						
619	WK602D3Z205ZZZZZZ	0.75 INCH	42 NOS			
Item Description : CPLNG.HALF, B-16.11, ASTM A 105, SW, 9000, NACE						
620	WK602D4Z205ZZZZZZ	0.75 INCH	3 NOS			
Item Description : CPLNG.HALF, B-16.11, ASTM A 350 GR.LF2 CL.1, SW, 6000, LT						
621	WK6T7D3Z505ZZZZZZ	0.75 INCH	17 NOS			
Item Description : CPLNG.LH, B-16.11, ASTM A 105, SW, 3000						
622	WL602D2Z008ZZ08ZZ	1.5 INCH, 1.5 INCH	6 NOS			
623	WL602D2Z008ZZZZZZ	1.5 INCH	274 NOS			
Item Description : CPLNG.LH, B-16.11, ASTM A 105, SW, 3000, HIC1						
624	WL602D2ZT08ZZZZZZ	1.5 INCH	24 NOS			
Item Description : CPLNG.LH, B-16.11, ASTM A 105, SW, 3000, IBR						
625	WL602D2Z108ZZZZZZ	1.5 INCH	29 NOS			
Item Description : CPLNG.LH, B-16.11, ASTM A 105, SW, 3000, NAC4						

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SR.NO.	ITEMCODE	DETAIL DESCRIPTION	QTY.	U.RATE	TOT.VALUE	CDD
626	WL602D2ZE08ZZZZZZ	1.5 INCH	3 NOS			
Item Description :	***CPLNG.LH, B-16.11, ASTM A 105, SW, 3000, NACE***					
627	WL602D2Z208ZZZZZZ	1.5 INCH	10 NOS			
Item Description :	***CPLNG.RED, B-16.11, ASTM A 105, SW, 6000, IBR***					
628	WM602D3Z105ZZ04ZZ	0.75 INCH, 0.5 INCH	9 NOS			

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बट वैल्डेड, साकेट वैल्डेड एवं पेंच फिटिंगों के लिए तकनीकी टिप्पणियाँ

TECHNICAL NOTES FOR BUTT WELDED, SOCKET WELDED AND SCREWED FITTINGS

Rev. No	Date	Purpose	Prepared by	Checked by	Standards Committee Convenor	Standards Bureau Chairman
					Approved by	
8	18.06.24	REVISED AND ISSUED AS STD SPECN	PK	SH	GB	MN
7	20.01.20	REVISED AND ISSUED AS STD SPECN	PK	SH	MI	RKT
6	25.09.14	REVISED AND ISSUED AS STD SPECN	SH	AK	RN ATD	SC
5	31.12.13	REVISED AND ISSUED AS STD SPECN	UK	SH	AK RN	SC
4	04.07.08	REVISED AND ISSUED AS STD SPECN	RN	SC	DM	VC

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Abbreviations:

AARH	:	ArithmeticAverage Roughness Height
ANSI	:	American National Standards Institute
API	:	American Petroleum Institute
ASME	:	American Society of Mechanical Engineers
ASTM	:	American Society for Testing & Materials
BHN	:	Brinell Hardness Number
CS	:	Carbon Steel
DP	:	Dye Penetrant
HAZ	:	Heat Affected Zone
HIC	:	Hydrogen Induced Cracking
IBR	:	Indian Boiler Regulations
IGC	:	Inter Granular Corrosion
IS	:	Indian Standard
LT	:	Low Temperature
MP	:	Magnetic Particle
MR	:	Material Requisition
MSS	:	Manufacturer's Standardisation Society
NACE MR	:	National Association of Corrosion Engineers : Material Requirement
NB	:	Nominal Bore
PMI	:	Positive Material Identification
PO	:	Purchase Order
PR	:	Purchase Requisition
SMYS	:	Specified Minimum Yield Strength
SS	:	Stainless Steel

Piping Standards Committee

Convenor: Mr. G. Balaji

Members :
Mr. Udayan Chakravarty
Mr. Rameshwar Prasad
Mr. K. Anjaneyulu (SMED)
Mr. Rajesh Chitara (SMMS)
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Mr. Harsh Vardhan (Projects)
Mr. P.K. Rai (Construction)

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1.0 GENERAL

1.1 Chemical composition, physical properties, tests, dimensions and tolerances, heat treatment and marking shall conform to the applicable latest codes / standards / specifications as specified in the material requisition (MR). In case of any conflict amongst documents attached with the MR, the most stringent shall govern and Owner's/ EIL decision shall be final in this regard.

Supplier shall strictly comply with MR/PR stipulations and no deviations shall be permitted. Post Order Concession/Deviation as mentioned in Cl. 5.17 of Specification for Quality Management System Requirements from Bidders (6-78-0001) is not applicable.

1.2 Testing

1.2.1 Test reports shall be supplied for all mandatory tests as per the relevant material specifications/ MR. Test reports shall also be furnished for any supplementary tests as specified in the MR & Clauses 1.7, 1.8, 1.9, 1.10 & 1.11. Material test certificates (physical properties, chemical composition & heat treatment report including chart) shall also be furnished for fittings supplied.

1.2.2 Positive Material Identification (PMI) shall be performed as per scope and procedures defined in the Specification for Positive Material Identification (PMI) at Supplier's Works (6-81-0001).

1.2.3 Refer to specification no. 6-81-0005 for Inspection and Test plan for forged, seamless and welded fittings.

1.3 All fittings shall be seamless in construction unless otherwise specified. If fittings are specified as welded, the same shall conform to clause 1.7.

1.4 Outside diameters and wall thickness (unless otherwise mentioned) of butt welded fittings shall be in accordance with ASME B36.10 and ASME B36.19 as applicable.

1.5 For reducing butt weld fittings having different wall thicknesses at each end, the greater wall thickness of the fitting shall be employed and inside bore at each end shall be matched with the specified inside diameter.

1.6 Beveled ends for all fittings shall conform to ASME B16.25. Contour of bevel shall be as follows:

Material	Wall Thickness	Weld Contour
Carbon Steel (Except Low Temp. Carbon Steel)	Upto 22 mm	Figure 2 Type A
	> 22 mm	Figure 3 Type A
Alloy Steel, Stainless Steel & Low Temp. Carbon Steel	Upto 10 mm	Figure 4
	> 10 mm &Upto 25 mm	Figure 5 Type A
	> 25 mm	Figure 6 Type A

1.7 Welded Fittings

1.7.1 All welded fittings shall be double welded. Inside weld projection shall not exceed 1.6 mm. Welds shall be ground smooth at least 25 mm from the ends.

1.7.2 For fittings made out of welded pipe, the welded pipe shall be double welded type & shall be manufactured with the addition of filler metal.

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1.7.3 Welded tees/Lateral Tees shall not be of fabricated (stub-in/stub-on) type unless otherwise specified in the MR.

1.7.4 All welded fittings shall be normalized & 100% radiographed by X-ray on all welds made by fitting manufacturers & also welds on the parent materials. Radiography by Gamma rays is also acceptable for thickness 8mm & above.

1.7.5 Welded pipes employed for manufacture of fittings shall be made by automatic welding only.

1.7.6 Specified heat treatment for carbon steel & alloy steel fittings shall be carried out again after weld repairs.

1.7.7 Irrespective of the material code requirement, all welded fittings indicated in the MR as "Cryo"& "LT" shall meet impact test requirements of ASME B31.3. The impact test temperature shall be -196°C & -45°C for stainless steel & carbon steel respectively unless specifically mentioned otherwise in the MR.

1.7.8 For welded Carbon steel fittings wherever heat treatment is specified, hardness of weld and HAZ shall be 200 BHN (max.). For welded Alloy steel fittings, hardness after heat treatment shall be as per relevant ASTM material specification unless otherwise specified.

1.8 Stainless Steel Fittings

1.8.1 All stainless steel fittings shall be supplied in solution heat treated condition.

1.8.2 Solution annealing for stainless steel fittings shall be carried out again after weld repairs.

1.8.3 For all stainless steel fittings Inter Granular Corrosion (IGC) test shall have to be conducted as per the following:

ASTM A 262 Practice "B" with acceptance criteria of "60 mils/year (max.)".

Or

ASTM A262 Practice E : The bent specimen shall be examined under 20X magnification. The acceptance criteria is that there will be no crack or fissure in the bent specimen. The bent specimen shall also be subjected to metallographic examination at 250X magnification to ensure no crack or fissure.

1.8.4 When specifically asked for in MR for high temperature application of some grades of austenitic stainless steel (eg. SS309, 310,316,316H etc.) ASTM A 262 Practice "C" with acceptance criteria of "15 mils/year" shall have to be conducted.

1.8.5 For the IGC test as described in Clauses 1.8.3 & 1.8.4, two sets of samples shall be drawn from each solution treatment lot, one set corresponding to the highest carbon content and other set to the highest fitting thickness. When testing is conducted as per ASTM A 262 Practice "E", the photograph of the bent specimen along with comments shall be submitted for review.

1.8.6 For dual grades of SS where specified, chemical composition and mechanical properties of both grades specified shall be ensured.

1.9 NACE/HIC Requirements

1.9.1 Fittings under "NACE" category or those designated as "HIC1" shall meet the requirements of NACE MR-0103 unless otherwise specified.

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1.9.2 Fittings made from plates and designated as "HIC1" shall meet the HIC requirements of EIL specification 6-79-0013 unless otherwise specified.

1.10 Thickness/schedule lower or higher than specified for the finished product shall not be accepted.

1.11 The gasket contact surfaces of stub ends shall be flat with face finish specified in the requisition. Interpretation on the specified face finish is as follows:
125 AARH : Serrations with 125 to 250 μ in AARH

1.12 Seamless stub ends shall not have any welds on the body. Stub ends shall be long pattern type.

1.13 Galvanized fittings shall be coated with zinc by hot dip process conforming to IS 4736 / ASTM A153.

1.14 Threaded ends shall have NPT taper threads in accordance with ASME/ANSI B1.20.1 up to 1.5" NB & IS 554 from 2" to 6" NB.

1.15 Unless and otherwise specified in the MR, all socket welded and screwed fittings shall be in accordance with ASME B16.11 to the extent covered in the specification except for unions which shall be in accordance with MSS-SP-83.

1.16 Special fittings like weldolet, sockolet, sweepolet, latrolet, elbolet etc., the dimensions of which are not covered in ASME, MSS-SP & EIL Standards, shall be as per manufacturer's std. Contours of these fittings shall meet the requirements of ASME B31.3.Manufacturer shall submit drawings / catalogues of these items for records after acceptance of offer.

1.17 Length of all long half couplings shall be 100 mm unless otherwise specified in the MR.

1.18 For reducers to manufacturers' standard, length of reducer shall not be less than 0.7D where D is the outside diameter of the larger end.

1.19 All seamless pipes employed for manufacturing of fittings shall be required to have undergone hydrostatic test to ASTM A 530. Welded pipes employed for manufacture of fittings shall be tested as given below :

Welded Pipe Employed For Manufacture Of Welded Fittings.	Test Criteria
ASTM A671 Gr. C65,70 (Cl.32) ASTM A672 Gr. C60,65,70 (Cl.12, 22) ASTM A671 Gr. CF60,65,70,66 (Cl.32) ASTM A691 Gr. ½Cr, 1Cr, 1¼Cr, 2¼Cr, 5Cr, 9Cr (Cl.42), 91 (Cl.42)	P = 2ST / D S = 90% of SMYS. T = Nom. Wall Thickness D = 0.D. of Pipe.
API 5L ASTM A358 TP 304, 304L, 304H, 318, 318L, 318H, 321, 347 (Cl.1, 3, 4)	P = 2ST / D S = 85% of SMYS. T = Nom. Wall Thickness D = 0.D. of Pipe.
ASTM B725	ASTM B725
ASTM B517	ASTM B517
ASTM B514	ASTM B514

1.20 The bevel ends of all butt weld fittings shall undergo 100% MP / DP test.

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1.21 Abbreviations for ends of swages and nipples shall be as follows:

PBE	:	Plain Both Ends
TBE	:	Threaded Both Ends
TOE	:	Threaded One End
TSE	:	Threaded Small End
TLE	:	Threaded Large End

1.22 All types of SS321 or SS347 fittings shall be in stabilized heat treated condition. Stabilizing heat treatment shall be carried out subsequent to normal solution annealing. Soaking temperature and holding time for stabilizing heat treatment shall be 900°C and 4 hours respectively.

1.23 For Hydrogen service fittings following special requirements shall also be met:

a. All carbon steel fittings having wall thickness 9.53 mm (0.375") and above shall be normalised. Cold drawn fittings shall be normalised after the final cold draw pass for all thicknesses. In addition, fittings made from forgings shall have Carbon- 0.35 % max. and Silicon- 0.35 % max. The normalising heat treatment shall be a separate heating operation and not a part of the hot forming operation

b. All alloy steel (Cr-Mo) fittings shall be normalised and tempered. The normalising and tempering shall be a separate heating operation and not a part of the hot forming operation. The maximum room temperature tensile strength shall be 100,000 psi.

c. For carbon steel fittings, hardness of weld and HAZ shall be 200 BHN (max.). For alloy steel fittings, hardness of weld and HAZ shall be 225 BHN (max.).

d. For all Carbon steel and Alloy steel fittings with wall thickness over 20 mm, Charpy-V Notch impact testing shall be carried out in accordance with paragraph UG-84 of ASME Section VIII, Div-1 for weld metal and base metal from the thickest item per heat of material and per heat treating batch. Impact test specimen shall be in complete heat treated condition and accordance with ASTM A370. Impact energies at 0°Celsius shall average greater than 27J (20 ft-lb) per set of three specimens, with a minimum of 20J(15 ft-lb).

1.24 For all welded alloy steel fittings with mandatory requirements of heat treatment and radiography, radiography shall be performed after heat treatment.

1.25 All 1Cr-0.5Mo & 1.25Cr-0.5Mo fittings shall be normalized and tempered. All 2.25Cr-1Mo, 5Cr-0.5Mo, 9Cr- 1 Mo & 9Cr-lMo-V welded fittings shall be normalized and tempered.

1.26 Fitting material as per ASTM A234 Gr. WP11/WP22/ WP5/WP9/WP91, wherever specified, shall be as per 'Cl.1', unless otherwise specified.

1.27 Materials designated as structural steel grades like IS 2062, SA 36 etc. or similar specification are not permitted for manufacture of fittings.

1.28 Pipe Bends (Other than Elbows)

Bending shall be as per ASME B31.3 except that corrugated or creased bends shall not be used. Final Wall thickness after bending process shall not be less than 87.5% of the thickness specified. All other tolerances shall be as per PFI ES-24.

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2.0 IBR REQUIREMENTS

2.1 IBR Documentation Required

2.1.1 Fittings under the purview of "IBR" (Indian Boiler Regulations) shall be accompanied with original IBR certificate in Form III-C duly approved and countersigned by IBR authority / local authority empowered by Central Boiler Board of India. Photocopy of the original certificate duly attested by the local boiler inspector where the supplier is located is the minimum requirement for acceptance.

2.1.2 For materials 1¼Cr - ½Mo (ASTM A 234Gr.WP11 Cl.1 & ASTM A234 Gr.WP11W Cl.1) & 2¼Cr - 1Mo (ASTM A 234 Gr.WP22 Cl.1 & ASTM A234 Gr. WP22W Cl.1) & 9Cr-1Mo-V (A234 Gr.WP91/A234Gr.WP91W),where fittings are manufactured from pipe, Form III-C approved by IBR shall include the tabulation of E_t, S_c, &S_r values for the entire temperature range given below. E_t, S_c, &S_r values shall be such that throughout the temperature range

$$\left.\begin{array}{ll} E_t / 1.5 & \geq \\ S_r / 1.5 & \geq \\ S_c & \geq \end{array}\right| S_A$$

S_A : Allowable stress at the working metal temperature.
E_t : Yield point (0.2% proof stress at the working metal temperature)
S_c : The average stress to produce elongation of 1%(creep) in 100000 hrs at the working metal temperature.
S_r : The average stress to produce rupture in 100000 hrs at the working metal temperature and in no case more than 1.33 times the lowest stress to produce rupture at this temperature.

	S_A (psi)											
Temp(F) Material	500	600	650	700	750	800	850	900	950	1000	1050	1100
A234Gr.WP11 Cl.1/ A234Gr.WP11W Cl.1	16200	15700	15400	15100	14800	14400	14000	13600	9300	6300	4200	2800
A234Gr.WP22 Cl.1 /A234Gr.WP22W Cl.1	17900	17900	17900	17900	17900	17700	17100	13600	10800	8000	5700	3800
A234Gr.WP91/ A234Gr.WP91W	28100	27700	27300	26700	25900	24900	23700	22300	20700	18000	14000	10300

Note : S_A values shall be as per the latest edition of ASME B31.3 prevailing.

2.2 For carbon steel Fittings under IBR the chemical composition shall conform to the following:

Carbon (max) : 0.25%
Others (S, P, Mn) : As prescribed in IBR.

The chemical composition as indicated in this clause is not applicable for fittings other than IBR services.

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3.0 ACCEPTABLE DEVIATIONS

3.1 Seamless fittings are acceptable in place of welded fittings, however, welded fittings are not acceptable in place of seamless fittings. Forged fittings are acceptable in place of wrought fittings. However, wrought seamless fittings are acceptable in place of forgings only in case of swages.

3.2 Fittings of Grades SS317 of corresponding material are acceptable in place of Grades SS316 or SS316(2.5Mo min.).

3.3 Fittings of Grades SS317L of corresponding material are acceptable in place of Grades SS316L or SS316L(2.5Mo min.).

3.4 Dual Grade SS304/304L conforming to all chemical composition requirements of SS304L and mechanical properties of SS304 is acceptable in place of SS304L or SS304 grades. Any specific additional requirements given in the MR shall also be complied.

3.5 Dual Grade SS316/316L conforming to all chemical composition requirements of SS316L and mechanical properties of SS316 is acceptable in place of SS316L or SS316 grades. Any specific additional requirements given in the MR shall also be complied.

4.0 MARKING AND DESPATCH

4.1 Each fitting shall be legibly and conspicuously stamped in accordance with the requirements of applicable standards along with special condition like "IBR", "Cryo", "NACE" and "H2" etc.

4.2 Steel die marking with round bottom punch may be permitted on body of butt weld CS & lower alloy steel fittings, but for SS & higher alloy steel fittings, the same should be marked by electro-etching only.

4.3 Paint or ink for marking shall not contain any harmful metals or metal salts such as Zinc, Lead or Copper which causes corrosive attack on heating.

4.4 Fittings shall be dry, clean and free of moisture, dirt and loose foreign materials of any kind.

4.5 Fittings shall be protected from rust, corrosion and mechanical damage during transportation, shipment and storage.

4.6 Rust preventive used on machined surfaces to be welded shall be easily removable with a petroleum solvent and the same shall not be harmful to welding.

4.7 Fittings coming under the purview of "IBR", "CRYO" , "NACE" & "H2"(hydrogen) shall be painted with one circumferential stripe of colour red, light purple brown, canary yellow & white respectively for easy identification. Width of stripe shall be 12mm for sizes less than 3" and 25mm for sizes 3" and above. Stripe shall be located centrally for elbows, diagonally for caps, at the larger end for reducing fittings, longitudinally for couplings and at one end near to the bevel/socket/screwed end for other fittings.

4.8 Each end of fitting shall be protected with a wood, metal or plastic cover.

4.9 Each size of fitting shall be supplied in separate packaging marked with the purchase order number, item code number, material specification, size and schedule / thickness / rating. For small quantities, fittings of different sizes may be packed in separate packing size-wise and these packing may be packed in a bigger package/ container clearly identifying the contents.

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5.0 REFERENCES

6-81-0001	:	Specification for Positive Material Identification (PMI) at Supplier's Works
6-81-0005	:	Inspection & test plan for forged, seamless and welded fittings
6-79-0013	:	Material requirements for carbon steel components used in sour service for petroleum refinery environments

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SPECIFICATION FOR QUALITY MANAGEMENT SYSTEM REQUIREMENTS FROM BIDDERS / SUPPLIERS / CONTRACTORS

Rev. No.	Date	Purpose	Prepared by	Checked by	Approved by: Standards Committee Convener	Approved by: Standards Bureau Chairman
3	29-09-2025	General Revision	QMS Standards Committee	QMS Standards Committee	AK	MN
2	12-06-2020	General Revision	QMS Standards Committee	QMS Standards Committee	SKB	SKS
1	12-03-2015	General Revision	QMS Standards Committee	QMS Standards Committee	MPJ	SC
0	04-06-2009	Issued as Standard Specification	QMS Standards Committee	QMS Standards Committee	SCT	ND

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Abbreviations:

EIL	Engineers India Limited
ISO	International Organization for Standardization
MR	Material Requisition
PO	Purchase Order
PR	Purchase Requisition
QMS	Quality Management System

QMS Standards Committee

Convener: Mr. Anil Kumar

Members: Mr. Himangshu Pal (SCM-Inspection)
Mr. Ravindra Kumar (Const.)
Mr. Vinod Kumar (CQA)
Mr. Swapnil Vaishnav (Projects)
Mr.Vijay Kumar Garg (SCM)
Mr.Raju Kumar Pandey (Equipment Division)

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1.0 SCOPE

This specification establishes the Quality Management System requirements to be met by BIDDER for following purpose:

- QMS requirements to be met by suppliers/contractors after award of work/duringcontract execution.

2.0 DEFINITIONS

2.1 Bidder

For the purpose of this specification, the word "BIDDER" means the person(s), firm, company or organization who is under the process of being contracted by EIL / Owner for delivery of some products (including service).The word "Bidder" is considered synonymous to supplier, contractor or vendor.

2.2 Project Quality Plan (PQP)

Document tailored from Standard Quality Management System Manual of BIDDER, specifying how the quality requirements of the project will be met.

2.3 Owner

Owner means the owner of the project for which services / products are being purchased and includes their representatives, successors and assignees.

3.0 REFERENCE DOCUMENTS

- Specification for Documentation Requirements from Contractors (Doc. No. 6-78-0002)
- Specification for Documentation Requirements from Suppliers (Doc. No. 6-78-0003)

4.0 QUALITY MANAGEMENT SYSTEM – GENERAL

Unless otherwise agreed with EIL / Owner, the BIDDER proposed quality system shall fully satisfy all relevant requirements of ISO 9001 "Quality Management Systems – Requirements."Evidence of compliance shall be current certificate of quality system registration to ISO 9001 or a recent compliance audit recommending registration from a certification agency.The quality system shall provide the planned and systematic control of all quality related activities for execution of contract.Implementation of the system shall be in accordance with BIDDER'S Quality Manual and PROJECT specific Quality Plan.

5.0 QUALITY SYSTEM REQUIREMENTS

5.1 BIDDER shall prepare and submit for review / record, Project Quality Plan / Quality Assurance Plan for contracted scope / job.The BIDDER'S Quality Plan shall address all of the applicable elements of ISO 9001, identify responsible parties within BIDDER'S organization, for the implementation / control of each area, reference the applicable procedures used to control / assure each area, and verify the documents produced for each area.The Project Quality Plan shall necessarily define control or make reference to the relevant procedures, for design and engineering, purchase, documentation, record control, bid evaluation, inspection, production/manufacturing, preservation, packaging and storage, quality control at construction site, pre-commissioning, commissioning and handing over (as applicable) in line with contract requirement and scope of work.

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5.2 BIDDER shall identify all specified or implied statutory and regulatory requirements and communicate the same to all concerned in his organization and his sub contractor's organization for compliance.

5.3 BIDDER shall deploy competent and trained personnel for various activities for fulfilment of PO / contract.BIDDER shall arrange adequate infrastructure and work environment to ensure that the specification and quality of the deliverable are maintained.

5.4 BIDDER shall do the quality planning for all activities involved in delivery of order.The quality planning shall cover as minimum the following:

- Resources
- Product / deliverable characteristics to be controlled.
- Process characteristics to ensure the identified product characteristics are realized
- Identification of any measurement requirements, acceptance criteria
- Records to be generated
- Need for any documented procedure

The quality planning shall result into the quality assurance plan, inspection and test plans (ITPs) and job procedures for the project activities in the scope of bidder. These documents shall be submitted to EIL/Owner for review/approval, before commencement of work.

5.5 Requirements for sub-ordering of outsourced items /sub-contracting / purchasing of services specified in MR/ contract / tender shall be adhered to. In general all outsourced items will be from approved vendors of EIL. Wherever requirements are not specified, or approved sub vendors do not exist, the sub-contractor shall establish and maintain a system for purchasing / sub-contracting to ensure that purchased product / service conforms to specified requirements in concurrence with EIL / Owner.Criteria for selection of sub-contractor, evaluation, re-evaluation, maintenance of purchasing data and verification of purchased product (sub-contractor services), constitute important components of this requirement.

5.6 BIDDER shall plan and carry production and service provision under controlled conditions.Controlled conditions shall include, as applicable

a) the availability of information that describes the characteristics of the product
b) the availability of work instructions
c) the use of suitable equipment
d) the availability and use of monitoring and measuring devices
e) the implementation of monitoring and measurement
f) the implementation of release, delivery and post-delivery activities

5.7 BIDDER shall validate any processes for production and service provision where resulting output cannot be verified by subsequent monitoring and measurement. This includes any process where deficiencies become apparent only after the product is in use or service has been delivered.

5.8 BIDDER shall establish a system for identification and traceability of product / deliverable throughout product realization.Product status with respect to inspection and testing requirements shall be identified.

5.9 BIDDER shall identify, verify, protect and safeguard EIL / Owner property (material / document) provided for use or incorporation into the product.If any Owner / EIL property is lost, damaged or otherwise found to be unsuitable for use, this shall be reported to the EIL / Owner.

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BIDDER shall ensure the conformity of product / deliverable during internal processing and delivery to the intended destination.Requirements mentioned in the MR/ tender shall be adhered to.

5.10 BIDDER shall establish system to ensure that inspection and testing activities are carried out in line with requirements.Where necessary, measuring equipment shall be calibrated at specified frequency, against national or international measurement standards; where no such standard exists, the basis used for calibration shall be recorded.The measuring equipment shall be protected from damage during handling, maintenance and storage.

5.11 BIDDER shall ensure effective monitoring, using suitable methods, of the processes involved in production and other related processes for delivery of the scope of contract.

5.12 BIDDER shall monitor and measure the characteristics of the product/deliverable to verify that product requirement has been met.The inspection (stage as well as final) by BIDDER and EIL / Owner personnel shall be carried out strictly as per the approved ITPs or ITPs forming part of the contract.Product release or service delivery shall not proceed until the planned arrangements have been satisfactorily completed, unless otherwise approved by relevant authority and where applicable by Owner / EIL.

5.13 BIDDER shall establish and maintain a documented procedure to ensure that the product which does not conform to requirements is identified and controlled to prevent its unintended use or delivery

5.14 All non-conformities (NCs) / deficiencies found by the BIDDER'S inspection / surveillance staff shall be duly recorded, including their disposal action shall be recorded and resolved suitably.Effective corrective actions shall be implemented by the BIDDER so that similar NCs including deficiencies do not recur.The BIDDER shall take appropriate actions to address the Risks and Opportunities in the project.

5.15 All deficiencies noticed and reported by EIL / Owner shall be analysed by the BIDDER and appropriate corrective actions shall be implemented.BIDDER shall intimate EIL / Owner of all such corrective action implemented by him.

5.16 BIDDER should follow the standards, specifications and approved drawings. Concessions/Deviations shall be allowed only in case of unavoidable circumstances. In such situations Concession/deviation request must be made by the BIDDER through online system of EIL vendor portal for document exchange. URL of EIL vendor portal for document exchange is http://edocx.eil.co.in/vportal. BIDDER shall have documented procedure for control of documents.

5.17 All project records shall be carefully kept, maintained and protected for any damage or loss until the project completion, then handed over to EIL / Owner as per contract requirement (Refer Specification Nos. 6-78-0002 - Specification for Documentation Requirements from Contractors and 6-78-0003 - Specification for Documentation Requirements from Suppliers), or disposed as per relevant project procedure.

6.0 AUDITS

BIDDER shall plan and carry out the QMS audit for the job. Quality audit program shall cover design, procurement, construction management and commissioning as applicable including activities carried out by sub-vendors and sub-contractors. This shall be additional to the certification body surveillance audits carried out under BIDDER'S own ISO 9001 certification scheme.

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The audit programs and audit reports shall be available with bidder for scrutiny by EIL / Owner.EIL or Owner's representative reserves the right to attend, as a witness, any audit conducted during the execution of the WORKS.

In addition to above, EIL, Owner and third party appointed by EIL/Owner may also perform Quality and Technical compliance audits.BIDDER shall provide assistance and access to their systems and sub-contractor / vendor systems as required for this purpose.Any deficiencies noted shall be immediately rectified by BIDDER.

7.0 DOCUMENTATION REQUIREMENTS

BIDDER shall submit following QMS documents immediately after award of work (Within one week) for record / review by EIL / Owner/ TPIA(Third Party Inspection Agency), as applicable:

- Organization chart (for complete organization structure and for the project)
- Project Quality Plan/Quality Assurance Plan
- Job specific Inspection Test Plans, if not attached with PR
- Job Procedures
- Inspection/Test Formats

In addition to above QMS documents, following documentation shall be maintained by the BIDDER for submission to EIL / Owner on demand at any point of time during execution of the project:

- Quality Manual
- Certificate of approval for compliance to ISO9001 standard
- Procedure for Control of Non-conforming Product
- Procedure for Control of Documents
- Sample audit report of the QMS internal and external audits conducted during last one year
- Customer satisfaction reports from at least 2 customers
- Project QMS audit report
- Technical audit reports for the project
- Corrective action report on the audits

Documents as specified above are minimum requirements. BIDDER shall submit any other document/data required for completion of the job as per EIL/Owner instructions.

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SPECIFICATION FOR DOCUMENTATION REQUIREMENTS FROM SUPPLIERS

Rev. No.	Date	Purpose	Prepared by	Checked by	Standards Committee Convener	Standards Bureau Chairman
					Approved by	
3	29-09-2025	General Revision	QMS Standards Committee	QMS Standards Committee	AK	MN
2	01-06-2020	General Revision	QMS Standards Committee	QMS Standards Committee	SKB	SKS
1	12-03-2015	General Revision	QMS Standards Committee	QMS Standards Committee	MPJ	SC
0	04-06-2009	Issued as Standard Specification	QMS Standards Committee	QMS Standards Committee	SCT	ND

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Abbreviations:

DCI	Document Control Index
EIL	Engineers India Limited
EPS	Electronic Procurement System
FOA	Fax of Acceptance
IC	Inspection Certificate
IRN	Inspection Release Note
ITP	Inspection and Test Plan
LOA	Letter of Acceptance
LR	Lorry Receipt
MR	Material Requisition
ODC	Over Dimension Consignment
PO	Purchase Order
PR	Purchase Requisition
PVC	Polyvinyl Chloride
QAP	Quality Assurance Plan
QMS	Quality Management System
RPO	Regional Procurement Office
TPIA	Third Party Inspection Agency
URL	Universal Resource Locator
V-Portal	Vendor Portal

QMS Standards Committee

Convener: Mr. Anil Kumar

Members:
Mr. Himangshu Pal (SCM-Inspection)
Mr. Ravindra Kumar (Const.)
Mr. Vinod Kumar (CQA)
Mr. Swapnil Vaishnav (Projects)
Mr.Vijay Kumar Garg (SCM)
Mr.Raju Kumar Pandey (Equipment Division)

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Annexures:

S. No.	Title	Doc. No.
1.	Format for completeness of Final Documentation	Format No. 3-78-0004

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1.0 SCOPE

This specification establishes the Documentation Requirements from Suppliers.

All documents/data against the PO / PR / MR shall be developed and submitted to EIL/Owner by the suppliers for review / records, in line with this specification.

2.0 DEFINITIONS

2.1 Supplier

For the purpose of this specification, the word "SUPPLIER" means the person(s), firm, company or organization who has entered into a contract with EIL / Owner for delivery of some products and/orservices.The word is considered synonymous to bidder, contractor or vendor.

2.2 Owner

Owner means the owner of the project for which services / products are being purchased and includes their representatives, successors and assignees.

3.0 REFERENCE DOCUMENTS

- Specification for Quality Management System Requirements from Bidders (Doc. No. 6-78-0001)

4.0 DOCUMENTATION REQUIREMENTS

4.1 Order Acknowledgement and Assigning Project Manager

After placement of order, Supplier shall acknowledge order through V-Portal within 7 days of receipt of FOA/PO. Supplier shall assign a Project Manager for that order though online portal and provide requisite details. Project Manager details shall include e-mail address, mailing address, mobile/telephone nos., fax nos. and name of Project Manager. All the system generated emails pertaining to that order shall be sent to the assigned Project Manager.

4.2 Documents/Data to be submitted by the Supplier

4.2.1 The Supplier shall submit the documents and data against the PO/PR/MR as per the list given in respectivePO/PR/MR.

4.2.2 Review of the supplier drawings/ documents by EIL would be only to review the compatibility with basic designs and concepts and in no way absolve the supplier of his responsibility/contractual obligation to comply with PR requirements, applicable codes, specifications and statutory rules/regulations.Any error/deficiency noticed during any stage of manufacturing/execution/inspection/ installation shall be promptly corrected by the supplier without any time and cost implications, irrespective ofcomments on the same were received from EIL during the drawing review stage or not.

4.2.3 Unless otherwise specified, submission of documents for Review/Records shall commence as follows from the date of Fax of Intent /Letter of Intent/ Fax of Acceptance (FOA)/ Letter of Acceptance (LOA):

QMS	-	1week
Document Control Index	-	2weeks
Other Documents/Drawings	-	As per approved Document Control Index

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4.2.4 Documents as specified in PO/PR/MR are minimum requirements.Supplier shall submit any other document/data required for completion of the job as per EIL/Owner instructions.

4.3 Style and Formatting

4.3.1 All Documents shall be in ENGLISH language and in M.K.S(Meter-Kilogram-Second) System of units.

4.3.2 Before forwarding the drawings and documents, contractor shallobtain the title block from EIL and ensure that the following information are properly mentioned in each drawing:

- Purchase Requisition Number
- Name of Equipment / Package
- Equipment / Package Tag No.
- Name of Project
- Client
- Drawing / Document Title
- Drawing / Document No.
- Drawing / Document Revision No. and Date

4.4 Review and Approval of Documents by Supplier

4.4.1 All, the Drawing/Documents shall be reviewed, checked, approved and duly signed/stamped by supplier before submission.Revision number shall be changed during submission of the revised supplier documents and all revisions shall be highlighted by clouds. Whenever the supplierrequires any sub-supplier drawings to be reviewed by EIL, the same shall be submitted by the supplier duly reviewed, approved and stamped by the supplier.Direct submission of sub-supplier's drawings without contractor's / suppliers' approval shall not be entertained.

4.5 Document Category

Following review codes shall be used for review of supplier Drawings/Documents:

Code 1 - No comments. Proceed with Manufacture / Fabrication / Construction as per the document.

Code 2 - Proceed with Manufacture / Fabrication / Construction as per commented document. Revised document required.

Code 3 - Document does not conform to basic requirements as marked.Resubmitfor review.

Code R - Document is retained for Records. Proceed with Manufacturing / fabrication as per Tender/ ContractRequirement.

Code V - Void, Document is returned as invalid.

Document is marked as Void under following conditions:

a) Wrong item drawing uploaded.
b) Superseded or obsolete submission.
c) Duplicate submission.
d) Out of sequence submission.
e) Mismatch in document name and title under which document uploaded.
f) Document not legible.
g) For PMC projects, document not signed and stamped by contractor and DEC

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4.6 Methodology for Submission of Documents to EIL/Owner

4.6.1 Document Control Index (DCI)

Supplier shall create and submit Document Control Index (DCI) forreview based on PO/PR/MR along with schedule date of submission of each drawing/document on EIL Vendor Portal.The DCI shall be specific with regard to drawing/document no. and the exact title. Proper sequencing of the drawings/documents should be ensured in schedule date of submission.

4.6.2 Submission of Drawings/Documents / Data

Drawings/documents, data and DCI shall be uploaded on the EIL Vendor Portal as per approved DCI. The detailed guidelines for uploading documents on EIL VendorPortal are available on URL:**http://edocx.eil.co.in/vportal**

4.6.3 Statutory Approvals

Wherever approval by any statutory body is required to be taken by Supplier, the Supplier shall submit copy of approval by the authority to EIL.

4.6.4 Manufacturing Schedule

Supplier shall prepare milestone based(milestones such as document submission, sub ordering, manufacturing, Inspection, dispatches, etc.) manufacturing schedule for the order, to meet delivery as per FOA/PO terms. Supplier shall submit manufacturing schedule to concerned Regional Procurement Office (RPO) of EIL, with a copy to Head office monitoring team/Owner for review within 7 days from date of FOA/PO.Same shall be uploaded in the EPS portal of EILi.e.,https://www6.eil.co.in/epsinspection/supp

4.6.5 Schedule and Progress Reporting

Supplier shall submit Monthly Progress Report(MPR) on or before the 9th of every monthindicating following milestone-based progress details as minimum:

- Drawing submission and approval status and schedule for submission of revised drawing / fresh Drawing requiring approval as per approved DCI
- Sub-ordering plan/details for all major items indicating item description, sub-order number, Date of sub-ordering, sub-vendor name, Location, contractual delivery data and expected delivery dates at main vendor's shop and other critical details requiring timely receipt of sub-ordered items at shop.
- Shop manufacturing progress indicating major milestone progress, in case of missing any milestone date, catch up plan for the same and expected dispatch date from shop and expected delivery date at site.
- Area requiring special attention/concern and proposed action plan to resolve the same.

First Monthly Progress Report (MPR) shall be submitted within2 weeks from FOA/LOA.In case of exigencies, EIL/Owner can ask for report submission as required on weekly/fortnightly/ad-hoc basis depending upon supply status and supplier shall furnish such reports promptly without any price implication.Format for progress report shall be submitted by the Supplier during kick off meeting or within 2 weeks of receiving FOA/LOA, whichever is earlier.

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4.7 Inspection and Testing

4.7.1 Quality Assurance Plan/Inspection and Test Plan

If Inspection and test plans (ITP)are attached with MR/PR same shall be followed along with additional tests requirement (if any) mentioned in MR/ PR. However for cases wherein EIL Standard ITPs not available/ have not been attached with MR/PR, Supplier shall submit within one week of receiving FOA/LOA, the Quality Assurance Plan for inspection & testing at various stages of production, quality control records for critical bought out items/ materials and site assembly & testing as may be applicable to the specific order and obtain approval from concerned Regional procurement Office of EIL/third party inspection agency, as applicable.

For Package equipment contracts, the supplier shall prepare a list of items/ equipment and their inspection categorization plan for all items included in the scope of supply immediately after receipt of order and obtains approval for the same from EIL. The items shall be categorized into different categories depending upon their criticality for the scope of inspection of TPIA and/or EIL.

4.7.2 Inspection Requirements:

Supplier shall perform internal inspection as per ITP/ approved QAP at their works based on approved documents/drawings. Upon satisfactory internal inspection, supplier shall raise inspection call through Inspection call Module of EPS (https://www6.eil.co.in/epsinspection) to concerned Regional Procurement Office (RPO) of EIL/ TPIA/ Owner with advance notice as per contractalong with Internal test reports. Where inspection is not in the scope of EIL and is carried out by nominated Third Party Inspection agency (TPIA), Inspection Release Note (IRN) issued by the nominated TPIA along with Manufacturer's Test Certificate (MTC) shall be uploaded in EIL EPS Portal (https://www6.eil.co.in/epsinspection).

All changes w.r.t. PR shall be recorded through agreed variations or Concessions & Deviations. Conflict, if any, between PR / Job specifications and approved drawings, shall be brought to the notice of EIL / owner bythe supplier/ contractor. Decision of EIL / owner will be binding on the supplier and to be complied without time and cost implications.

Identified bought out items/ raw material shall be procured under TPIA as per ITP.

4.7.3 Inspection Release Note (IRN)/ Inspection Certificate (IC)

IRN/ IC shall be issued by EIL Inspector/ third party inspection agency on successful inspection, review of test reports/ certificates as per specifications &ITP/ agreed quality plan (as applicable) and only after all the drawings/documents as per DCI are submitted and are accepted under review code-1or code R. Supplier shall ensure that necessary documents/manufacturing and test certificates are made available to EIL/TPIA as and when desired.

Note 1: Non fulfilling above requirement shall result into appropriate penalty or with- holding of payment as per conditions of PO/PR/MR.

Note 2: For items where IRN/IC is issued by TPIA, supplier to ensure that following as a minimum must be mentioned by TPIA in IRN/IC:

a) PR document number
b) List of drawings/documents with EIL approval code
c) Tests witnessed, documents reviewed

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d) Compliance statement by TPIA that product meets the requirement as specified in EIL PR, standard specifications, Inspection Test Plan/QAP and approved documents.

4.8 Transportation Plan

Transportation Plan for Over Dimensional Consignments (ODC), if any, shall be submitted within 2 weeks of receiving FOA/LOA, for approval. Unless otherwise specified, consignments with parameters greater than following shall be considered as over dimensional.

Dimensions : 4 meters width x 4 meters height x 20 meters length

Weight : 32 MT (Metric Ton)

Dimensions and weight provided above are inclusive of all nozzles, attachments, transportation saddles etc.

Physical Rout survey for ODC movement shall be submitted to EIL within 8 weeks of receiving FOA / LOA.

4.9 Dispatch Details

Upon receipt of IRN/IC from EIL inspector/TPIA, supplier shall dispatch items within 2 days. Item wise dispatch details shall be uploaded in EIL's EPS module within 24 hours of any item dispatched from shop, indicating PR item no, Quantity dispatched, Transporter's name, LR Number/ LR date.

4.10 Vendorshall ensure timely uploading of Manufacturing Schedule, Monthly Progress Report,Inspection Certificate (IRN)issued by the TPIA (as applicable for PO where Inspection is under nominated Third Party Inspection Agency)and updation ofitem wise dispatch details in EPS portal of EIL (https://www6.eil.co.in/epsinspection).

4.11 Final Documentation

4.11.1 Supplier shall prepare final documents in line with VDR(Vendor Document Requirements) attached with PR/Tender. A copy of final document along with filled in Format for Completeness of Final Documentation (Format No. 3-78-0004) to be submitted to EIL Inspector/TPIA for review & approval within 2 weeks from dispatch. Upon receipt of EIL/TPIA endorsement on Completeness of Final Documents, supplier shall submit soft/hard copies of Final documents to EIL/Owner in requisite quantity as per PO/PR details, along with covering letter. A copy of covering letter to be submitted to the concerned Regional Procurement Office (RPO) of EIL/Owner.

4.11.2 As Built Drawings

Minor Shop changes made by Supplier after approval of drawings under 'Code 1' by EIL and deviations granted through online system, if any, shall be marked in hard copies of drawings which shall then be stamped 'As-built' by the supplier.These 'As-built' drawings shall be reviewed and stamped by EIL Inspector/TPIA.Supplier shall prepare scanned images files of all marked – up 'As – built' drawings. Simultaneously Supplier shall incorporate the shop changes in the native soft files of the drawings also.

4.11.3 Packing/Presentation of Final Documents

Final Documents shall be legible photocopies in A4, A3 size only.Drawings will be inserted in plastic pockets (both sides transparent, sheet thickness minimum 0.1 mm) with an extra strip of 12 mm wide for punching so that drawings are well placed.

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Final Documentation shall be bound in Hard board Plastic folder(s) of size 265 mm x 315 mm (10½-inch x 12½-inch) and shall not be more that 75 mm thick. It may be of several volumes and each volume shall have a volume number, index of volumes and index of contents of that particular volume.Where number of volumes are more, 90mm thickness can be used.Each volume shall have top PVC sheet of minimum 0.15 mm thick duly fixed and pressed on folder cover and will have 2 lever clips.In case of imported items documents, 4 lever clip shall also be accepted.All four corners of folders shall be properly metal clamped.Indexing of contents with page numbering must be incorporated by supplier.Spiral/Spico bound documents shall not be acceptable.As mentioned above, books should be in hard board plastic folders with sheets punched and having 2/4 lever clips arrangement.

Each volume shall contain on cover a Title Block indicating package Equipment Tag No. & Name, PO/Purchase Requisition No., Name of Project and Name of Customer.Each volume will have hard front cover and a reinforced spine to fit thickness of book.These spines will also have the title printed on them.Title shall include also volume number (say 11 of 15) etc.

4.11.4 Submission of Soft Copies

Supplier shall submit to EIL, the scanned images files as well as the native files of drawings/documents, along with proper index.

In addition to hard copies, Supplier shall submit soft copies of all the final drawings and documents in pen drive or any other specified medium with proper identification tag, all text documents prepared on computer, scanned images of all important documents (not available as soft files), all relevant catalogues, manuals available as soft files (editable copies of drawings/text documents, while for catalogues/manuals/proprietary information and data, PDF files can be furnished). All soft files shall be appropriately named, systematically indexed, and duly bookmarked in PDF format to facilitate ease of reference and access.

All the above documents shall also be uploaded on the EILVendor Portal and if applicable on Client Server also.

4.11.5 Completeness of Final Documentation

Supplier shall get the completeness of final documentation verified by EIL/TPIA,as applicable, and attach the Format for Completeness of Final Documentation (Format No. 3-78-0004) duly signed by EIL Inspector or TPIA as applicable to the final document folder.

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COMPLETENESS OF FINAL DOCUMENTATION

Name of Supplier/Contractor	:	
Customer	:	
Project	:	
EIL's Job No.	:	
Purchase Order No./ Contract No.	:	
Purchase Requisition No./ Tender No.	:	Rev. No.:
Name of the Work/ Equipment	:	
Tag. No.	:	
Supplier's/ Contractor's Works Order No.	:	

Certified that the Engineering Documents/ Manufacturing & Test Certificates submitted by the supplier (as per Index sheet mentioned in Annexure-1) are complete in accordance with the Vendor Data Requirements of Purchase Requisition / Tender.

Signature	: ……	Signature	: ……
Date	: ……	Date	: ……
Name	: ……..	Name	: ……..
Designation	: ……	Designation	: ……
Department	: ……	Department	: ……
	Supplier/Contractor		EIL/TPIA

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Annexure-1

Final Documentation Index Sheet			
PR/PO/Tender No.		Revision No.	
Serial No.	Document Title	Page/ Folder No.	No. of Pages

Signature	: ……	Signature	: ……
Date	: ……	Date	: ……
Name	: ……..	Name	: ……..
Designation	: ……	Designation	: ……
Department	: ……	Department	: ……

Supplier / Contractor

EIL / TPIA

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विक्रेता कार्यशाला में सकारात्मक सामग्री पहचान के लिए मानक विनिर्देश

STANDARD SPECIFICATION FOR POSITIVE MATERIAL IDENTIFICATION (PMI) AT SUPPLIER'S WORKS

Owner : BPCL

Project : REFINERY EXPANSION & REVAMP

Job No : B933

Rev. No	Date	Purpose	Prepared by	Checked by	Approved by
0	31.03.2025	ISSUED FOR IMPLEMENTATION	BD	GS	RK

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Abbreviations:

API	:	American Petroleum Institute
AS	:	Alloy Steel
HIC	:	Hydrogen Induced Cracking
LSTK	:	Lump Sum Turn Key
NACE	:	National Association of Corrosion Engineers
PMI	:	Positive Material Identification
RTJ	:	Ring Type Joint
Sch	:	Schedule
SS	:	Stainless Steel
TPI or TPIA	:	Third Party Inspection Agency

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1.0 SCOPE

1.1 This specification applies to the requirements for Positive Material Identification (PMI) to be performed at the Supplier's works on Metallic Materials procured either directly by the Owner/EIL/ LSTK contractor or indirectly through the sub-Suppliers.

1.2 This specification covers the procedures and methodology to be adopted to assure that the chemical composition of the material is consistent with the material specifications as specified in purchase documents using 'Alloy Analyzer' at the time of final inspection before dispatch.

1.3 The scope of this specification shall include but shall not be limited to Positive Material Identification (PMI) to be performed on Materials listed below:

1.3.1 For alloy Steel materials as below:

- Alloy Steel Pipes including Clad Pipes
- Alloy Steel Flanges & Forgings
- Alloy Steel Fittings including Clad Fittings
- Alloy Steel Fasteners
- Alloy Cast & Forged steel valves
- Alloy Steel Instrumentation Items (Control Valves, Safety Valves etc.)
- Longitudinal Pipe & Fittings Welds.
- Gaskets (for Ring Type Joints)

1.3.2 For Carbon Steel materials as below:

- All Carbon Steel Piping items under NACE or HIC or H2 or Wet Hydrogen Sulfide (H_2S), Hydrofluoric acid (HF), Sulfuric acid (H_2SO_4) services, etc.
- LTCS items

1.3.3 PMI for carbon steel piping for all hydrocarbon services and critical services requiring PWHT also shall be carried out, prior to hydro test.

1.3.4 PMI shall be done for all equipment and piping (Carbon Steel above 300#, AS, SS).

Following items shall be excluded from scope of PMI examination.

- Gaskets other than for Ring Type Joints
- Internal Components of Valves if not accessible

1.4 All grades of material supplies including Stainless Steels shall be liable for PMI test at site. In case of any defective materials being found at site, the Supplier shall be responsible to effect replacement of such defective materials at project site without any delays to the satisfaction of EIL site RCM (Resident Construction Manager).

2.0 REFERENCE DOCUMENTS

2.1 API Recommended Practice 578 (Third Edition, Feb 2018) - Material Verification Program for New and Existing Alloy Piping Systems.

3.0 DEFINITIONS

3.1 **Supplier:** Any Supplier or Manufacturer on whom an order is placed for the supply of referred items. This definition shall also include any sub-Supplier or manufacturer on whom a sub-order is placed by the Supplier.

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3.2 **Inspection Lot:** A group of items offered for inspection covered under same size, Heat and Heat treatment lot.

3.3 **Alloy Material:** Any metallic material (including welding filler materials) that contains alloying elements such as Chromium, Nickel, Molybdenum or Vanadium, which are intentionally added to enhance mechanical or physical properties and/or corrosion resistance.

4.0 PMI EXAMINATION

4.1 The Supplier shall submit a procedure of PMI to comply with the requirements of this Specification. Approval of PMI Procedure shall be obtained from Owner / EIL / TPIA prior to commencing manufacture / inspection of product.

4.2 PMI examination of materials is independent of any certification, markings or colour coding that may exist and is aimed at verifying that the alloy used are as per specified grades.

4.3 The Supplier shall identify all incoming alloy materials and maintain full traceability of all alloy materials, including all off-cuts. Transfer of identification marks shall be undertaken prior to cutting to ensure maintenance of identification on off-cuts.

4.4 The Supplier shall ensure that all alloy materials are segregated and stored in separately identified locations to prevent the mix up of materials of different alloy specifications or alloy material with carbon steel. Non ferro-magnetic materials shall be segregated at all times from ferro-magnetic materials.

4.5 PMI examination is subject to surveillance inspection by Owner / EIL / TPIA.

5.0 ACCEPTABLE METHODS FOR PMI

5.1 The method used for PMI examination shall provide a quantitative determination of the alloying elements like Chromium, Nickel, Molybdenum or Vanadium in Alloy Steel items.

5.2 Instruments or methods used for PMI examination shall be able to provide quantitative, recordable, elemental composition results for positive identification of alloying elements present.

5.3 The acceptable instruments for alloy analyzer shall be either “Portable X-Ray fluorescence” or “Optical Emission” type each capable of verifying the percentage of alloy elements within specified range.

5.4 Chemical spot testing, magnets, alloy sorters and other methods using eddy current or tribo-electric testing methods are not acceptable for PMI examination.

5.5 The PMI instrument used shall have the sensitivity to detect the alloying elements in the specified range.

5.6 All PMI instruments shall have been serviced within a 6 month period of the time of use to verify the suitability of batteries, sources etc., and the data of the last service shall be stated on the PMI Report Form (Sample enclosed).

5.7 Each analyzer must be calibrated according to the manufacturer’s specification at the beginning and end of each shift. Instrument must be checked against known standard for each alloy type to be inspected during the shift.

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5.8 Certified samples, with full traceability, of a known alloy materials shall be available for use as a random spot check on the instrument calibration.

5.9 The surfaces to be examined shall be prepared by light grinding or abrasive paper and solvent cleaner. Evidence of Arc burn resulting from examination shall be removed by light grinding or abrasive paper. No permanent marks, which are injurious to the usage of product in service, are acceptable.

5.10 Alloy Steel ring type joint Gaskets shall be inspected by using portable X-Ray fluorescence instrument.

5.11 Testing shall be done as per the procedures outlined by the manufactures of alloy analyzer being used. Modification of these procedures if any must be approved by Owner/EIL.

5.12 The persons performing PMI shall demonstrate their capabilities to the satisfaction of Owner/EIL/TPIA visiting engineer. If the Supplier has qualified operator on their rolls, he may perform the examination. Otherwise PMI examination shall be sub-contracted to an independent testing agency approved by EIL.

5.13 Whenever material is identified as not meeting requirements by the visiting engineer a rejection note shall be issued.

6.0 EXTENT OF PMI EXAMINATION

Following sampling plans shall be applicable for PMI examination of various items.

A. Flanges, Fittings Valves, RTJ Gaskets - 100% by Supplier and 10% @ random witness by EIL/TPIA

B. Pipes - 100% (for pipes procured from traders)
2 random samples drawn from each Size/Heat/Lot (for pipes procured directly from mills)

C. Fasteners -

Lot Size	**Sample Size for** EIL/TPIA	Sample size for Supplier
Upto 100	2% (Min 2)	Min 10%
101 to 500	1% (Min 3)	Min 10%
501 and above	0.5% (Min 5)	Min 10%

Note:

a. For Welded Pipes and Fittings and flanges like Fig 8, Spacer and blinds etc. PMI shall be performed on Base Metal as well as weldments.

7.0 ACCEPTANCE CRITERIA

7.1 Base Metal

PMI test results showing presence of characteristic elements upto 10% less than the minimum specified value in the material specification and upto 10% more than the maximum specified value in the material specification shall be acceptable.

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7.2 Deposited Weld Metal

For deposited weld metal using welding consumables matching with base metals, the recorded presence of characteristic elements upto 12.5% less than the minimum specified value in the welding consumable specification and upto 12.5% more than the maximum specified value in the welding consumable specification shall be acceptable.

8.0 REJECTION CRITERIA

8.1 If PMI test results fall outside the acceptable range as specified in 7.0 above, the supplier shall obtain a quantitative check analysis performed by a laboratory acceptable to Owner / EIL / TPIA for a complete chemical analysis. Alternatively, the item can be tested with a spark analyser for verification. Results of this analysis shall be submitted to Owner / EIL / TPIA for final decision.

Decision of Owner / EIL / TPIA shall be final in this regard.

8.2 If any sample drawn to PMI test on the basis of percentage selection as per 6.0 above, fails to meet specification requirements, 100% of items of lot shall be tested for PMI by supplier. Any failure thereafter during sample check shall mean rejection of whole lot.

9.0 RECORDING AND DOCUMENTATION

The results of PMI examination shall be recorded in a Report Format as enclosed with this specification.

10.0 MARKING

10.1 All alloy materials tested by PMI shall be identified using either of the following methods by indicating “PMI OK”

a) Bar Code/Hologram Sticker
b) A low stress stamp marking

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	POSITIVE MATERIAL IDENTIFICATION REPORT							Page of
Project:		Client						Job No.
PMI Report No.		Supplier/Sub-Supplier						
Purchase Order No.		Testing Agency						
Purchase Requisition No:		PMI Location						
Item Type (as per Requisition)								
Material Specification/Grade Number of items in Lot								
Requisition Item No./ Description		Major content, Weight Percent						Remarks Accept/Reject
Element	Cr	Ni	Mo	V	Ti *	Cb/ Nb **	Mn ***	
Specified Range								
Actual observations 1.								
2.								
3.								
4.								
5.								
6.								
7.								
8.								
Instrument Type / ID Last Service Date		Inspection Agency						Witnessed By

* To be additionally reported in case of SS321 Material
** To be additionally reported in case of SS347 Material
*** To be additionally reported in case of CS & LTCS Material

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फ़ोर्जड, सीमलेस और वेल्डेड फिटिंग के लिए

निरीक्षण व परीक्षण योजना

INSPECTION AND TEST PLAN FOR FORGED, SEAMLESS & WELDED FITTINGS

Rev. No.	Date	Purpose	Prepared by	Checked by	Standards Committee Convener	Standards Bureau Chairman
					Approved by	
9	26.12.2024	REVISED AND RE-ISSUED	AA	CS	RK	MN
8.	01.06.2019	REVISED AND RE-ISSUED	AA	RS	RKS	RKT

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Abbreviations:

CEIL	:	Certification Engineers International Limited	MRT	:	Mechanical Run Test
CIMFR	:	Central Institute of Mining & Fuel Research	NDT	:	Non Destructive Testing
CE	:	Carbon Equivalent	NPSH	:	Net Positive Suction Head
DFT	:	Dry Film Thickness	PO	:	Purchase Order
DPT	:	Dye Penetrant Testing	PESO	:	Petroleum Explosive Safety Organization
DHT	:	De-hydrogen Heat Treatment	PQR	:	Procedure Qualification Record
ERTL	:	Electronics Regional Test Laboratory	PR	:	Purchase Requisition
FCRI	:	Fluid Control Research Institute	PMI	:	Positive Material Identification
HT	:	Heat Treatment	RT	:	Radiography Testing
HIC	:	Hydrogen Induced Cracking	SSCC	:	Sulphide Stress Corrosion Cracking
ITP	:	Inspection and Test Plan	TC	:	Test Certificate
IP	:	Ingress Protection	TPI or TPIA	:	Third Party Inspection Agency
IHT	:	Intermediate Heat Treatment	UT	:	Ultrasonic Testing
IC	:	Inspection Certificate	VDR	:	Vendor Data Requirement
IGC	:	Inter Granular Corrosion	WPS	:	Welding Procedure Specification
MPT/MT	:	Magnetic Particle Testing	WPQ	:	Welders Performance Qualification
MTC	:	Material Test Certificate			

Inspection Standards Committee

Convener: Mr. Rajeev Kumar

Members:

Mr. Suresh G
Mr. Muthuramalingam
Mr. Mahendra Mittal
Mr. Himangshu Pal
Mr. Avdhesh Agrawal
Ms. Sulakshana Hundeikari
Mr. Chandrashekhar
Mr. Anil Kumar

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1.0 SCOPE

This Inspection and Test Plan covers the minimum testing requirements of Forged, Seamless & Welded Fittings.

2.0 REFERENCE DOCUMENTS

PO/PR/Standards referred therein/ Job specifications /Approved documents.

3.0 INSPECTION AND TEST REQUIREMENTS

SL NO.	STAGE/ ACTIVITY	CHARACTERISTICS	QUANTUM OF CHECK	RECORD	SCOPE OF INSPECTION		
					SUB SUPPLIER	SUPPLIER	EIL/TPIA
1.0	**Procedure**						
1.1	Heat Treatment / NDT	Documented Procedures	100%	Procedure Documents	-	H	R
1.2	WPS, PQR, WPQ	Welding Parameters & Welding &	100%	WPS, PQR &WPQ	-	H	W- New R- Existing
1.3	NDE Operator Qualification records & Calibration records of measuring instruments & testing equipment	NDE operator qualification certificates & calibration certificates	100%	NDE & Calibration summery	-	H	R
2.0	**Material Inspection**						

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SL NO.	STAGE/ ACTIVITY	CHARACTERISTICS	QUANTUM OF CHECK	RECORD	SCOPE OF INSPECTION		
					SUB SUPPLIER	SUPPLIER	EIL/TPIA
2.1	Raw Material Identification (Billets, Rounds, Pipes, Coil, Plates, etc.) (*For pipes, coils & plates of Alloy steels and Special services like NACE, H2, HIC, Wet H2S, LTCS, UOP, AXEN etc.)	Chemical and Mechanical Properties, Size & Steel making practice etc.	100%	Mill test certificate, Supplier's Inspection Report	-	H	W* / R
3.0	**In Process Inspection**						
3.1	Forming &Welding	Forming & Welding Parameters	100%	Supplier's records	-	H	-
3.2	Ferrite Check of SS Welds (If Applicable)	% Ferrite Check	100%	Inspection Report	-	H	R
3.3	Heat Treatment	Stress Reliving, Normalizing, Tempering, Solution Annealing, Stabilization Heat Treatment etc. as applicable	100%	HT chart / Report	-	H	R
3.4	NDT-RT As Applicable	Surface & Internal Imperfections	As per PR/Purchase Specification	RT Films & Reports	-	H	R (Films Review)

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SL NO.	STAGE/ ACTIVITY	CHARACTERISTICS	QUANTUM OF CHECK	RECORD	SCOPE OF INSPECTION		
					SUB SUPPLIER	SUPPLIER	EIL/TPIA
3.5	NDT – UT (as applicable)	Surface & Internal Imperfections	As per PR/Purchase Specification	UT Report	-	H	R
3.6	NDT – DPT/MPT on Bevel Ends (as applicable)	Surface & Internal Imperfections	100%	Test Report	-	H	RW
3.7	Identification of Test Samples	Product Chemical, Mechanical, Impact, IGC and another test as applicable	Per heat, per heat treatment lot (Note-4)	Test Reports	-	H	H
3.8	Product Analysis	Chemical Composition	As per PR/Purchase Specification	Test Reports	-	H	R
3.9	Destructive Testing	Mechanical, Impact, IGC, Hardness and Other test as applicable	100%	Test Reports	-	H	H
3.10	Galvanizing (If Applicable)	Integrity Of Galvanized Coating	100%	Inspection Report	-	H	R
4.0	**Final Inspection**						
4.1	Visual and Dimension	Size, Thickness / Schedule, Dimensions, Surface quality, Marking, etc.	100%	Inspection Report	-	H	RW

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SL NO.	STAGE/ ACTIVITY	CHARACTERISTICS	QUANTUM OF CHECK	RECORD	SCOPE OF INSPECTION		
					SUB SUPPLIER	SUPPLIER	EIL/TPIA
4.2	Hardness testing on finished fittings of Alloy steels and Special services (like NACE, H2, HIC, Wet H2S, UOP, AXEN etc.) & any other services as applicable.	Hardness value of Base metal & Welds/HAZ.	Random 10%	Test Report	-	H	RW
4.3	PMI Check	Chemical Check	As Per EIL Spec. 6-81-0001	Inspection report	-	H	RW
4.4	Final Stamping	Stamping Of Accepted Fittings	Stamping of Fittings which are witnessed by EIL/TPIA.	Inspection Report	-	H	H
5.0	**Painting**						
5.1	Rust Preventive Coating & Color Coding	Visual & Color Coding as applicable	100%	Inspection Report	-	W	-
6.0	**Documentation & IC**						
6.1	Documentation & Inspection Certificate (IC)	Review of Stage Inspection Reports / Test Reports & Issue of IC	100%	Supplier TC & IC	-	H	H

Legend: H- Hold (Do not proceed without approval), P-Perform, RW - Random Witness (As specified or 10% (min.1 no. of each size and type of Bulk item)), R-Review, W-Witness (Give due notice, work may proceed after scheduled date).

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NOTES (As applicable):

1. This document describes the generic test requirements. Any additional test or Inspection scope if specified in contract documents shall also be applicable (unless otherwise agreed upon).
2. Acceptance Norms for all the activities shall be as per PO/PR/STANDARDS referred there in /Job Specification /Approved Documents.
3. For orders placed on stockiest, items shall be accepted based on manufacturer's TC with EN10204 type 3.2 certification from EIL approved suppliers.
4. Test piece marking shall be carried out from the product for each heat of raw material and for each heat treatment batch at shop floor.

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एपॉक्सी लेपित प्लांट पाइपिंग सामग्री (फ्लांगेस, फिटिंग एंव वालवेस)
के लिए
निरीक्षण और परीक्षण योजना

INSPECTION AND TEST PLAN
FOR
EPOXY COATED PLANT PIPING MATERIALS
(FLANGES, FITTINGS AND VALVES)

Rev. No.	Date	Purpose	Prepared by	Checked by	Approved by: Standards Committee Convener	Approved by: Standards Bureau Chairman
1	10.06.2024	ISSUED FOR IMPLEMENTATION	SK	CS	RK	MN

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Abbreviations:

CEIL	:	Certification Engineers International Ltd.	NDT	:	Non Destructive Testing
CE	:	Carbon Equivalent	PO	:	Purchase Order
DFT	:	Dry Film Thickness	PQR	:	Procedure Qualification Record
DPT	:	Dye Penetrant Testing	PR	:	Purchase Requisition
DHT	:	De-hydrogen Heat Treatment	PMI	:	Positive Material Identification
HT	:	Heat Treatment	RT	:	Radiography Testing
HIC	:	Hydrogen Induced Cracking	SSCC	:	Sulphide Stress Corrosion Cracking
ITP	:	Inspection and Test Plan	TC	:	Test Certificate
IP	:	Ingress Protection	TPI or TPIA	:	Third Party Inspection Agency
IHT	:	Intermediate Heat Treatment	UT	:	Ultrasonic Testing
IC	:	Inspection Certificate	VDR	:	Vendor Data Requirement
IGC	:	Inter Granular Corrosion	WPS	:	Welding Procedure Specification
MPT/MT	:	Magnetic Particle Testing	WPQ	:	Welders Performance Qualification
MTC	:	Material Test Certificate			

Inspection Standards Committee

Convenor : Mr. Rajeev Kumar

Members:

Mr. G. Suresh
Mr. Avdhesh Agrawal
Mr. Himangshu Pal
Mr. Mahendra Mittal
Mr. R. Muthuramalingam
Ms. Sulakshna Hundekari (Engg. Representative)
Mr. Chandrashekhar
Mr. Anil Kumar

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1.0 SCOPE

This Inspection and Test Plan covers the minimum testing requirements of epoxy coated plant piping including buried flanges, fittings and valves.

2.0 REFERENCE DOCUMENTS

PO/PR/Standards referred therein/ Job specifications /Approved documents.

3.0 INSPECTION AND TEST REQUIREMENTS

SL NO.	STAGE/ ACTIVITY	CHARACTERISTICS	QUANTUM OF CHECK	RECORD	SCOPE OF INSPECTION		
					SUB SUPPLIER	SUPPLIER	EIL/TPIA
1.0	**Procedure**						
1.1	Painting/Coating application procedure	Documented Procedures	100%	Procedure Documents	-	H	R
2.0	**Pre-Qualification Testing (PQT)**						
2.1	Pre-Qualification Testing	All testing as per PR/ specification	100%	Inspection/ test Reports	-	H	R- Existing H-New
3.0	**Material Inspection**						
3.1	Painting/Coating Materials	Properties as per PR/ Specification	100%	Manufacturer's test certificate	H	R	R
4.0	**Painting/ Coating**						

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SL NO.	STAGE/ ACTIVITY	CHARACTERISTICS	QUANTUM OF CHECK	RECORD	SCOPE OF INSPECTION		
					SUB SUPPLIER	SUPPLIER	EIL/TPIA
4.1	Surface Preparation for Painting/Coating application	Ambient Temp. (DBT), Degree of Cleanliness, Roughness, Surface profile, Dew Point Temperature, Relative Humidity, Salt contamination, Pre-heating temperature, Surface Imperfections & Chemical Treatment (as applicable)	100%	Inspection Report	-	H	RW
4.2	Mixing of Painting/Coating Material before application	Proportions of each component (Epoxy Resin & Curing agent), Preheating (if required) & Homogeneous mixing	100%	Inspection Report	-	H	R
4.3	Inspection of applied coating	• Holiday detection, • Adhesion test -resistance to removal/ Cross-cut test, • Adhesion test -Pull off method • Impact Test • Any other test specified in PR/ standards	As per PR/ specification	Test Reports	-	H	H
		• Visual check, • DFT, • Cut-back at the ends	As per PR/ specification	Test Reports	-	H	RW
4.4	Color Coding (as applicable)	Color and shade of paint/ coating, as applicable	100%	Inspection Report	-	H	W
4.5	Final Stamping	Stamping of accepted materials	Stamping of items, which are witnessed by EIL/TPIA	Inspection Report	-	H	H

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SL NO.	STAGE/ ACTIVITY	CHARACTERISTICS	QUANTUM OF CHECK	RECORD	SCOPE OF INSPECTION		
					SUB SUPPLIER	SUPPLIER	EIL/TPIA
5.0	**Packing**						
5.1	Verification of packing as per packing list	List of PO item including spare as per PO/PR, marking	100%	Inspection report/ Certification of packing list	-	H	W
6.0	**Documentation & IRN**						
6.1	Documentation & Inspection Release Note (IRN)	Review of Stage Inspection Reports / Test Reports & Issue of IRN	100%	Supplier TC & IRN	-	H	H

Legend:- H- Hold (Do not proceed without approval), P-Perform, RW - Random Witness (As specified or 10% (min.1 no. of each size and type of Bulk item)), R-Review, W-Witness (Give due notice, work may proceed after scheduled date).

NOTES (As applicable):-

1. This document describes the generic test requirements. Any additional test or Inspection scope if specified in contract documents shall also be applicable. (Unless otherwise agreed upon)
2. Acceptance Norms for all the activities shall be as per PO/PR/STANDARDS referred there in /Job Specification /Approved Documents.

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JOB SPECIFICATION FOR SURFACE PREPARATION AND PROTECTIVE COATING (SMMS)

PROJECT : MPMC AND PMC/EPCM SERVICES FOR ETHYLENE CRACKER UNIT AND UTILITIES & OFFSITES RELATED TO BINA PETCHEM & REFINERY EXPANSION PROJECT (BPREP)

OWNER : M/s BHARAT PETROLEUM CORPORATION LIMITED

MPMC : ENGINEERS INDIA LIMITED

JOB NO : B957

Rev. No	Date	Purpose	Prepared by	Checked by	Approved by
1	11/02/2025	Issued for tendering	JATIN	SAHIL	S. SRIDHAR
0	09/10/2024	Issued as Job Specification	JATIN	SAHIL	S. SRIDHAR

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Abbreviations:

AS	:	Alloy Steel
ASTM	:	American Society for Testing and Materials
AWWA	:	American Water Works Association
CS	:	Carbon Steel
DFT	:	Dry Film Thickness
GI	:	Galvanized Iron
ID	:	Internal Diameter
ISO	:	International Organization for Standardization
LTCS	:	Low temperature Carbon Steel
MS	:	Mild Steel
MR	:	material requisition
NB	:	Nominal Bore
NA	:	Not applicable
OD	:	Outside Diameter
OEM	:	Original Equipment Manufacturer
OSHA	:	Occupational Safety and Health Act
RCC	:	Reinforced Cement Concrete
RH	:	Relative humidity
SS	:	Stainless Steel
SOR	:	Schedule of Rate
SSPC	:	Steel Structure Painting Council
WFT	:	Wet Film Thickness
EIC	:	Engineer-In-Charge
SMMS	:	Specialist Materials & Maintenance Services

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1.0 GENERAL

1.1 This specification shall be applicable for the work covered by the contract and without prejudice to the provisions of various international codes of practice, standard specifications etc. It is understood that the CONTRACTOR shall carry out the work in all respects with the best quality of materials and workmanship and in accordance with the best engineering practice and instructions of Engineer-In-Charge in consultation with EIL-SMMS.

1.2 This specification covers the requirement for protective coating for new construction, revamp and refurbishment.

2.0 SCOPE

2.1 Scope of work covered in the specification shall include, without being limited to, the following:

This specification defines the requirements for surface preparation, selection and application of primers and coatings on external surfaces of items mentioned in clause 2.2 of this specification and quality control, inspection & testing of the coating systems. The items listed in clause 2.2 and the heading of tables of paint systems are non-exhaustive. However, the CONTRACTOR is fully responsible for carrying out all the necessary painting, coating and lining job on external and internal surfaces as per the contract requirement, technical data sheets and drawings etc.

As a special requirement of this PROJECT, Contractor/fabricator/supplier of insulated equipment like vessels, reactors, columns and equipment shall identify the type of under insulation coating required based on the criticality of the equipment in consultation with BPCL/EIL. Prior approval of BPCL/EIL is a mandatory requirement in this case.

2.2 Extent of work covered in this specification

2.2.1 The following surfaces and materials shall require shop, pre-erection and field painting, as applicable:

a. All Carbon Steel structures.

b. All Carbon Steel and Alloy steel piping, equipment, valves, fittings & stacks.

c. All Carbon Steel and Alloy steel tanks.

d. Tanks internal as per applicable datasheets, drawings & contract requirements.

e. All insulated CS, LAS, & alloy steel pipes, equipment, vessels, reactors, valves, fittings & stacks.

f. All insulated SS, DSS & SDSS pipes, equipment, vessels, reactors valves, fittings, vessels & stacks.

g. All insulated critical CS, LTCS. SS & alloy steel equipment like vessels, reactors, column & equipment

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(application of Thermally sprayed aluminum coating based on the criticality)

h. All structural steel supports, walkways, handrails, ladders, platforms etc.

i. Flare lines, external surfaces of steel chimney with or without refractory lining and internal surfaces of steel chimney without refractory lining.

j. RCC structures as per applicable drawings/relevant documents.

2.2.2 Marking and Identification of painted items:

a. Identification of color bands on all piping, as required, including aluminum cladding over insulation, galvanized, SS and nonferrous piping.

b. Identification lettering/ numbering on all painted surfaces of equipment/piping, aluminum cladding over insulation, galvanized, SS and non-ferrous piping.

c. Marking / identification signs on painted surfaces of equipment and piping including hazardous service.

2.2.3 Supply and prequalification testing of all primers, paints and all other materials required for painting (other than OWNER supplied materials)

2.2.4 Application of pre-erection/fabrication and shop primer.

2.2.5 Repair work of damaged pre-erection/ fabrication and shop primer and weld joints in the field/site before and after erection.

2.2.6 Quality control, testing and inspection during all stages of work (surface preparation, application of coating and testing of applied coating).

2.2.7 Exclusions:

(a). All metallic surfaces do require painting except for following materials. These materials are not painted unless specified by the contractual provisions and the same shall be painted as per the relevant specifications:

- Un-insulated stainless steel.
- Plastic and/or plastic-coated materials.
- Galvanized Iron.
- Aluminum.
- Ni-Alloys.
- Glass.
- Ceramics.
- Machined surfaces.

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- Label and names plates.

Note: Galvanized steel doesn't require painting for corrosion protection. However, if painting is mandated due to OWNERs instructions/contractual provision/ for colour coding requirement mentioned in this specification or by OWNER, then the coating system in Table 4.0 shall be followed.

(b). This specification does not include fire retardant paints/intumescent epoxy coatings, and the EIL specification B957-999-06-43-IF01 addresses the same.

3.0 REFERENCE CODES & STANDARDS

3.1 Latest editions of the following codes and standards are applicable for the work covered by this specification:

American Society for Testing and Materials (ASTM):

ASTM Volume 6.01	Paint - Tests for Chemical, Physical, and Optical Properties; Appearance
ASTM Volume 6.03	Paint -- Pigments, Polymers, Resins, Naval Stores, Cellulosic Esters, and Ink Vehicles
ASTM D6677	Standard Test Method for Evaluating Adhesion by Knife
ASTM D5894	Standard Practice for Cyclic Salt Fog/UV Exposure of Painted Metal, (Alternating Exposures in a Fog/Dry Cabinet and a UV/Condensation Cabinet)
ASTM D870	Standard Practice for Testing Water Resistance of Coatings Using Water Immersion
ASTM D2485	Standard Test Methods for Evaluating Coatings for High Temperature Service
ASTM D2247	Standard Practice for Testing Water Resistance of Coatings in 100 % Relative Humidity
ASTM D4417	Standard Test Methods for Field Measurement of Surface Profile of Blast Cleaned Steel
ASTM D4541	Standard Test Method for Pull-Off Strength of Coatings Using Portable Adhesion Testers
ASTM D4060	Standard Test Method for Abrasion Resistance of Organic Coatings by the Taber Abraser
ASTM D4752	Standard Practice for Measuring MEK Resistance of Ethyl Silicate (Inorganic) Zinc-Rich Primers by Solvent Rub
ASTM D638	Standard Test Method for Tensile Properties of Plastics
ASTM D4940	Standard Test Method for Conductimetric Analysis of Water Soluble Ionic Contamination of Blast Cleaning Abrasives
ASTM D4285	Standard Test Method for Indicating Oil or Water in Compressed Air
ASTM D543	Standard Practices for Evaluating the Resistance of Plastics to Chemical Reagents

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ASTM C868	Standard Test Method for Chemical Resistance of Protective Linings
ASTM G42	Standard Test Method for Cathodic Disbonding of Pipeline Coatings Subjected to Elevated Temperatures
ASTM B117	Standard Practice for Operating Salt Spray (Fog) Apparatus
ASTM D1475	Standard Test Method for Density of Liquid Coatings, Inks, and Related Products
ASTM D823	Standard Practices for Producing Films of Uniform Thickness of Paint, Coatings and Related Products on Test Panel
ASTM D2369	Standard Test Method for Volatile Content of Coatings
ASTM D1640/D1640M-14	Standard Test Methods for Drying, Curing, or Film Formation of Organic Coatings
ASTM D522/D522M	Standard Test Methods for Drying, Curing, or Film Formation of Organic Coatings
ASTM D968	Standard Test Methods for Abrasion Resistance of Organic Coatings by Falling Abrasive
ASTM D1044	Standard Test Method for Resistance of Transparent Plastics to Surface Abrasion
ASTM D1849	Standard Test Method for Package Stability of Paint
ASTM D2247	Standard Practice for Testing Water Resistance of Coatings in 100 % Relative Humidity
ASTM D5146	Standard Guide to Testing Solvent-Borne Architectural Coatings
ASTM D4258	Standard Practice for Surface Cleaning Concrete for Coating
ASTM D4259	Standard Practice for Preparation of Concrete by Abrasion Prior to Coating Application

Steel Structures Painting Council (SSPC)

SSPC SP-1	Solvent cleaning
SSPC Painting manual Vol.1	Good Painting practices
SSPC Painting manual Vol.2	Systems & specification
SSPC VIS 1	Guide and Reference Photographs for Steel Surfaces Prepared by Dry Abrasive Blast Cleaning
SSPC AB1	Mineral and Slag Abrasives
SSPC PA 2	Measurement of Dry Paint Thickness with Magnetic Gauges

Association for Materials Protection and Performance (AMPP)

NACE RP 0287	Field Measurement of Surface Profile of Abrasive Blast-Cleaned Steel Surfaces Using a Replica Tape
NACE SP 0198	Control of Corrosion under Thermal Insulation and Fireproofing Materials

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NACE SP 0188	Discontinuity (Holiday) Testing of New Protective Coatings on Conductive Substrates

International Organization for Standardization (ISO):

ISO 12944	Corrosion Protection of steel Structures by Protective Paint System
ISO 1461	Hot dip galvanized coatings on fabricated iron and steel articles-Specifications and test methods.
ISO 8501-1/ SIS-05 59 00	Preparation of steel substrates before application of paints and related products — Visual assessment of surface cleanliness— Part 1: Rust grades and preparation grades of uncoated steel substrates and of steel substrates after overall removal of previous coatings
ISO 8502-3	Preparation of steel substrates before application of paints and related products -Tests for the assessment of surface cleanliness - Part 3: Assessment of dust on steel surfaces prepared for painting (pressure-sensitive tape method)
ISO 8502-9	Preparation of steel substrates before application of paints and related products — Tests for the assessment of surface cleanliness—Part 9: Field method for the conductometric determination of water-soluble salts
ISO 2808	Paints and varnishes - Determination of film thickness
ISO 2811	Paints and varnishes — Determination of density

Other Standards

IS 5	Colors for ready mix paints and enamel
NORSOK M-501	Surface preparation and protective coating
RAL CLASSIC	Color matching system
ACI 308	External Curing of Cast-in-Place Concrete— Specification
ACI 301	Specifications for Structural Concrete
ACI 562	Code Requirements for Assessment, Repair, and Rehabilitation of Existing Concrete Structures
ACI 546	Concrete repair guide

4.0 SURFACE PREPARATION

4.1 General

Adhesion of the paint film to the surface depends largely on the degree of cleanliness of the metal surface and proper surface preparation have large contribution to the success of the paint protective system. Following method shall be employed for surface preparation:

a. Abrasive blast cleaning: Applicable in all cases.
b. Mechanical or power tool cleaning: Shall be used for repair & touch up, and any other area due to practical constraints with prior permission from EIL Engineer-in charge.

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4.2 Applicable Standards:

Latest editions of the following codes and standards are applicable for the surface preparation work:

TABLE-1: SURFACE PREPARATION STANDARDS

Sl. No.	GRADE OF SURFACE CLEANLINESS	VARIOUS INTERNATIONAL STANDARDS (EQUIVALENT)		
		ISO 8501-1/ SIS-05 59 00	SSPC, USA	NACE, USA
1.	Solvent cleaning	-	SSPC-SP-1	-
2.	Manual or hand tool cleaning	St 2	SSPC-SP-2	-
3.	Mechanical or power tool cleaning	St 3	SSPC-SP-3	-
4.	White metal	Sa 3	SSPC-SP-5	NACE No.1
5.	Near white metal	Sa 2½	SSPC-SP-10	NACE No.2
6.	Commercial Blast	Sa 2	SSPC-SP-6	NACE No.3
7.	Brush-off Blast for SS, galvanized steel and non-ferrous metals	-	SSPC-SP-16	-
8.	Surface Preparation of Concrete	-	SSPC-SP-13	NACE No.6

4.3 Sequence of surface preparation:

4.3.1 Solvent Cleaning

Mill scale, rust, rust scale and foreign matter shall be removed fully to ensure that a clean and dry surface is obtained. Unless otherwise specified, surface preparation shall be done as per provisions of relevant tables given elsewhere in this specification. Before surface preparation by blast cleaning, the surface shall be cleaned to remove all grease, oil etc. as per SSPC-SP-1.

4.3.2 Blast cleaning with abrasives

The surfaces shall be blast cleaned using one of the abrasives listed below and at an appropriate distance & angle depending on nozzle size maintaining constant velocity and pressure.

a. The quality of abrasives shall be free from contaminants and impurities and shall meet the requirements of SSPC AB1.

b. The compressed air shall be free from moisture and oil.

c. On completion of blasting operation, the blasted surface shall be clean and free from any scale or rust. Blast cleaning shall not be done outdoors in bad weather without adequate protection. If there is dew on the metal surface, it shall be cleaned. If possible, a vacuum collector shall be installed to collect and recycle the abrasives.

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d. Surface roughness profile: The surface roughness profile for carbon steel and low alloy steels to be coated shall be in accordance with the written recommendations of the paint Manufacturer and shall be measured as per ASTM D4417, method B. When roughness profile is not specified by the paint Manufacturer, then surface roughness profile as specified below in this specification shall be followed.

- The surface roughness profile shall be between 40 µm and 70 µm for coatings up to thickness 500 µm and between 70 µm and 125 µm for coating systems over 500 µm thickness. In all cases, the surface roughness shall have a sharp angular profile.

- If stainless steel, hot dip galvanised or non-ferrous metal surfaces are to be painted then blast cleaning shall be carried out as per SSPC-SP-16, using a fine non-iron containing abrasive.

- On galvanised surfaces, the zinc layer shall not be damaged; a smooth uniform surface roughness shall be achieved. No defects such as break through or crisping of the zinc layer shall occur. The surface roughness shall be in the range of 20 µm to 30 µm or as agreed with the paint Manufacturer.

e. Abrasives: Abrasive for use in blast cleaning steels shall be in accordance with ISO 8504-2. Steel or iron grit is commonly used as recyclable abrasives. When steel shot is used, it shall be used together with steel grit. The shot content of such a mix shall not exceed 67 %.For blasting stainless steel, non-(free) iron containing abrasive shall be used, e.g. Garnet or aluminium oxide. Abrasives used for blast cleaning shall be free from oil, grease, moisture, chloride contamination etc. and shall have crystalline silica not more than 1%.

Test methods for abrasives shall be in accordance with the tests specified in the ISO 11125 and ISO 11127 series for metallic and non-metallic abrasives respectively. Each batch of abrasive should be tested to check that the abrasive meets the requirements as specified in the relevant ISO standard. The conductivity of non-metallic abrasives to be used for stainless steels shall be maximum 15 mS/m. For all other non-metallic abrasives, the conductivity shall not exceed 25 mS/m. OWNER/PMC shall approve the use of alternative abrasive materials. Abrasive used shall be as per following specification:

Type	Generic Name	Standard
Metallic	Iron grit	ISO 11124-2
	Steel grit	ISO 11124-3
Natural mineral	Staurolite	ISO 11126-9
	Garnet	ISO 11126-10
Synthetic material	Aluminium oxide	ISO 11126-7
	Cu Slag	ISO 11126-3

Note:

Aluminum oxide or other abrasive (free from any chloride or iron/steel contamination) shall be used for blasting stainless steel. Copper slag and sand shall not be used.

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4.3.3 Mechanical or power tool cleaning

Power tool cleaning shall be done by mechanical striking tools, chipping hammers, grinding wheels or rotating steel wire- brushes. Excessive burnish of the surface shall be avoided as it can reduce paint adhesion. On completion of cleaning, the detached rust, mill scale etc. shall be removed by clean rags and /or washed by water/steam and thoroughly dried with compressed air jet before application of paint.

4.4 General Notes for surface preparation/blasting and paint application:

a. Surface shall not be coated in rain, wind or in an environment where injurious airborne elements exist.

b. Surface shall not be coated when the steel surface temperature is less than 3°C above dew point.

c. Surface shall not be coated, when the relative humidity is greater than 85%.

d. Surface shall not be coated when the temperature is below 10°C and the ambient/substrate temperature is below the paint manufacturers recommended temperature of application and curing.

e. Surface shall not be coated when surface temperature is greater than 40°C (unless a higher temperature is agreed by the paint manufacturer)

f. The paint application shall not be done when the wind speed exceeds 20 km per hour.

g. The illuminance during coating and inspection shall be at least 500 Lux.

4.5 Use of Dehumidifier

In case of internal coating of storage tanks, dehumidifier shall be used to control humidity level below 60%. Dehumidifier should depress the dew point of air in the enclosed space, sufficient enough so as to maintain it more than 3ºC below the metal substrate temperature during entire period of blasting and coating application. During the interval time between application of primer coat and subsequent intermediate and top coats or between blast cleaning completion and start of application of primer coat, dehumidifier unit should be in continuous operation to ensure that no condensation occurs on the substrate.

The Engineer in-Charge shall have the right to disallow usage of dehumidifier if the performance is not meeting the specified requirements. Under such circumstances, the CONTRACTOR shall remove the equipment and replace the same with another equipment to provide satisfactory results without any additional cost to the OWNER.

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4.6 Surface preparation of concrete:

The external surface of RCC to be painted shall be dry and clean. Any loose particle of sand, cement, aggregate etc. shall be removed and surface shall be prepared as per SSPC-SP-13.

5.0 COATING APPLICATION

5.1 Blast cleaned surface shall be coated with complete application of primer as soon as practicable but in no case later than 4 hours the same day. However, at times of unfavorable weather conditions, the Engineer-In-Charge shall have the liberty to control the time period, at his sole discretion and/or to insist on re-cleaning before primer application is taken up. In general, during unfavorable weather conditions, blasting and painting shall be avoided as far as practicable.

5.2 To the maximum extent practicable, each coat of paint shall be applied as a continuous film with uniform thickness and free of probes. Any spots or areas missed in application shall be re-coated and permitted to dry before the next coat is applied.

5.3 Each coat shall be in proper state of cure or dryness before the application of succeeding coat. Material shall be considered dry for re-coating when an additional coat can be applied without the development of any detrimental film irregularities such as lifting or loss of adhesion of the under coat. Manufacturer's instructions shall be followed for inter-coat interval.

5.4 When the successive coat of the same colour have been specified, alternate coat shall be tinted, when practical, sufficiently to produce enough contrast to indicate the complete coverage of the surface. The tinting material shall be compatible with the material underneath and shall not be detrimental to its service life and shall be recommended by the original paint manufacturer.

5.5 Airless spray application shall be in accordance with steel structure paint manual Vol.1 & Vol.2 by SSPC, USA

5.6 Brush application of paint shall be in accordance with the following:

a. Brushes shall be of a style and quality that will enable proper application of paint.

b. Round or oval brushes are most suitable for rivets, bolts, irregular surfaces, and rough/ pitted steel. Wide flat brushes are suitable for large flat areas but they shall not have width over 5 inches.

c. Paint shall be applied into all corners.

d. Any runs or sags shall be brushed out.

e. There shall be a minimum of brush marks left in the applied paint.

f. Surfaces not accessible to brushes shall be painted by spray, daubers, or sheepskin.

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5.7 Applied paint should have the desired wet film thickness specified by manufacturer. For each coat, the painter should know the WFT corresponding to the specified DFT and standardize the paint application technique to achieve the desired WFT. This has to be ensured in the qualification trial.

5.8 Irregular surfaces such as sharp edges, welds, small brackets, and interstices may stripe coated to ensure specified DFT is achieved. Paint manufacturer recommendation should be followed before deciding for brush application.

5.9 Unless otherwise instructed, final coating (i.e. application of field primer, intermediate and top coats) on pre-erection/ shop primed equipment shall be applied at site, only after all welding & testing like NDT are completed as well as after completion of steam blowing.

5.10 Drying of coated surfaces

a. No coat shall be applied until the preceding coat has dried. The material shall be considered dry for re-coating when another coat can be applied without the development of any film irregularities such as lifting or loss of adhesion of undercoats. Drying time of the applied coat should not exceed maximum specified for it as a first coat. If this exceeds, the paint material has possibly deteriorated or mixing is faulty.

b. No paint shall be force dried under conditions which will cause chalking, wrinkling, blistering formation of pores, or detrimentally affect the conditions of the paint.

c. No drier shall be added to paint on the job unless specifically called for in the manufacturers' specification for the paint.

d. Paint shall be protected from rain, condensation, contamination, snow and freezing until dried to the fullest extent practicable.

5.11 Spot repair of damaged primer

a. Where pre-erection/shop primer has been damaged at isolated localized spots during handling and transportation or after erection / welding, its repair shall be done as given below and as per the Table-3 of this specification.

b. Surface preparation: Quickly remove the primer from damaged area by mechanical scraping and emery paper conforming to SSPC-SP-3 to expose the white metal. Blast clean the surface, if possible. Feather the primed surface, over the intact adjacent surface surrounding the damaged area, by emery paper.

Primer shall be applied (as per the applicable design temperature and in conjunction with Table-3) wherever damage was observed on pre-erection / pre fabrication or shop primer.

c. If damaged areas are found to be extensive and spread over large areas (as required by Engineer-in charge), then entire pre-erection/pre-fabrication/shop primer shall be removed by blasting to achieve

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SSPC-SP-10 and entire blasted surface shall be primed again with F-8/ F-9 or F-16, as applicable, for the intended design temperature. (See note of Table-3). If the prepared surface lies adjacent to a sound coated surface, the surface preparation shall overlap the coated surface by at least 50mm. The remainder of existing coated surface shall be properly protected with shields or screens to prevent any possible damage to the coating.

5.12 Equipment:

a. All tools, brushes, rollers, spray guns, blast material, hand power tools for cleaning, all equipment, scaffolding materials, shot & grit blasting equipment, air compressors etc. required shall be suitable for the work and shall be arranged by the CONTRACTOR in sufficient quantity at the site. The manufacturers test certificates ***/*** data sheets for all the above-mentioned items shall be reviewed by Engineer-In-Charge at site before start of the work.

b. All paint spraying equipment, including mixers, shall be thoroughly cleaned before mixing of new materials. All coating materials shall be mixed and thoroughly stirred in accordance with the instructions of the paint Manufacturer. Sufficient agitation to maintain good mixing shall be applied until the product is used. If air is entrapped in the product during mixing/stirring, sufficient time should be allowed for the air bubbles to escape before application. Only thinners specified by the paint Manufacturer shall be used.

5.13 Shop coating

a. Shop coated equipment (coated with primer & finishing coat) should not be repainted unless paint is damaged. Repair of primer shall be carried out as per Table-3 of paint systems depending upon the compatibility of paint. Intermediate and final coats over repaired primer shall be as per applicable tables mentioned in this specification. The recommendations of paint manufacturer's datasheets including maximum overcoat interval shall be followed and recorded in the coating inspection logbook.

c. Shop primed equipment and surfaces will only be 'spot cleaned' in damaged areas by means of power tool brush cleaning or hand tool cleaning and then spot primed before applying one coat of field primer, unless otherwise specified. If shop primer is not compatible with field primer, then shop coated primer should be completely removed before application of selected paint system for a particular environment.

d. For package units/Items/ OEM equipment, shop primer & coating system should be as per the paint system given in this specification. However, manufacturers' standard may be followed after review by EIL but shall adhere to the minimum DFT specified in ISO-12944-5; C5 (Very high durability). For system under insulation, minimum guidelines as per NACE RP 0198 shall be followed.

In this case, guarantee of the coating system lies with package supplier/OEM. EIL's decision in this regard is final and binding on Supplier/Contractor/manufacturer.

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5.14 Guidelines for Documentation / records

a. A written quality plan with procedure for qualification trials and for the actual work including test and inspection plan & procedure for approval before start of work.

b. Daily progress report with details of weather conditions, particular of applications, no. of coats, overcoating intervals, pot life and type of materials applied, anomalies, progress of work versus program.

c. Results of measurement of temperatures, relative humidity, surface profile, film thickness, holiday detection, adhesion tests with signature of appropriate authority.

d. Particulars of surface preparation and paint application during trials and during the work.

e. Details of non-compliance, rejects and repairs.

f. Type of testing equipment and calibration.

g. Code and batch numbers of paint materials used.

Note: The coating applicator must maintain a job record consisting of all the information as per 5.12.b. to 5.12.g above as well as the approved procedure of work (5.12.a. above). The job record consisting of information in accordance to 5.12.b. to 5.12.g shall be entered on daily basis and should be daily signed by Engineer-in-charge. A sample template for daily coating inspection report is given in Annexure-III as reference.

6.0 PAINT MATERIALS

Typical characteristics and codes of various paint materials used in this specification are as follows.

TABLE-2: PAINT MATERIALS
(Refer to general notes at the end of this table)

DESCRIPTION	P-6	P-7	P-4	F9
Technical name	Epoxy Zinc Phosphate Primer	Cold Galvanizing product	Etch Primer/Wash Primer	Inorganic zinc silicate coating
Type and composition	Two component polyamide cured epoxy resin medium, pigmented with zinc phosphate.	One pack synthetic resin-based zinc galvanizing containing min 92% of electrolytic zinc	Two pack polyvinyl butyral resin medium cured with phosphoric acid solution pigmented with zinc tetroxy chromate.	Inorganic zinc silicate Coating containing zinc content min. 80%. Shall pass MEK rub test as per

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		dust of 99.95% purity.		ASTM D4752 with resistance rating >4
Volume solids % Minimum	49	37	9	57
DFT per coat, µ	40-50	40-50	8-10	65-75
Theoretical covering capacity in m^2/coat/ litre	9.8-12.2	3.4-4.4 m^2/kg	9.0-11.2	7.6-8.8
Weight per liter in Kg/litre (min.)	1.4±0.05	2.67 kg at 15°C	1.2±0.05	2.3
Touch dry at 30°C (max.)	30 min.	10 min.	2 hrs.	0.5 hrs.
Hard dry at 30°C (max.), Hrs.	8	24	24	12 hrs.
Over-coating interval, hrs. *Note 11	Min. 8	Min. 4	Min. 4-6	Min. 12 hrs. at 20°C & 50% RH
Pot life at 30°C for two Component paints, hrs.	6 - 8	NA	NA	4-6
Adhesion (ASTM D 4541)	>7	NA	NA	>5
Temperature resistance (min) °C (ASTM D 2485) *Note 8	80 (Method A)	50 (Method A)	NA	400 (Method B)

TABLE- 2: PAINT MATERIALS (Contd.)

DESCRIPTION	F-2	F-3	F-6A/B	F-6C
Technical name	Acrylic Polyurethane finish paint	Chlorinated rubber-based finish paint	Epoxy-High Build coating	Solvent less epoxy coating
Type and composition	Two-pack aliphatic isocynate cured acrylic finish	Single pack Plasticized chlorinated rubber based	F-6A Two-Pack Aromatic polyamine cured epoxy resin medium suitably	Two pack, cured with Amine Adduct;

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	paint (free of alkyd/polyester resins).	medium with chemical and weather resistant pigments.	pigmented. F-6B: polyamide cured epoxy resin medium suitably pigmented.	catalyzed epoxy resin suitably pigmented
Volume Solids % (min.)	40	36	57	98
DFT per coat, µ	30-40	30-40	100-125	300-450
Theoretical covering capacity in m^2/coat/litre	10-13.3	9-12	4.6-5.7	2-3.9
Weight per liter in Kg/litre (min.)	1.15	1.15	1.42	1.40
Touch dry at 30°C (max)	30 min.	30 min.	3 hrs.	3 hrs.
Hard dry at 30°C (max.).	8 hrs.	8 hrs.	16 hrs.	16 hrs.
Full cure at 30°C (for immersion/ high temperature service)	NA	NA	5 days	5 days
Over-coating Interval, hrs. *Note 11	Min.12.	Min. Overnight	Min. Overnight Max. 5 days	Min. 8. Max. 48
Pot life (approx.) at 30°C for two component paints, hrs.	5-8	NA	3-6	0.5
Adhesion (ASTM D 4541)	>5	>4	>7	>8
Abrasion Resistance (ASTM D4060) For 1000 g load	<300 mg /1000 cycles/CS17 or <100 mg /1000 cycles/CS10	NA	NA	NA
Temperature resistance (min.) °C (ASTM D 2485) *Note 8	80 (Method A)	60 (Method A)	80 (Method A)	120 (Method A)

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TABLE- 2: PAINT MATERIALS (Contd.)

DESCRIPTION	F-7	F-8	F-11	F-12	F19
Technical name	High build coal tar epoxy coating.	Self-priming type surface tolerant high build epoxy coating (complete rust control Coating)	Heat resistant synthetic medium based two pack Aluminum Paint suitable up to 250°C dry temp. *Note: 10	Heat resistant silicone Aluminum Paint suitable up to 540°C dry temp.	High build Epoxy Ceramic Filled tank liner Type and composition: High build Epoxy Novolac Ceramic Filled tank liner for sustained immersion service in Hydrocarbon cargoes, refinery distillates, furnace oils etc., kept at elevated
Volume Solids % Minimum.	62	75	35	18	-
DFT per coat in µm	100-125	100-125	15-20	15-20	150-200
Theoretical covering capacity in m^2/coat/ litre	5-6.2	6-7.5	17.5-23.3	9-12	3.5-4.7
Weight per liter in Kg/litre (min.)	1.40	1.41	0.95	1.00	-
Touch dry at 30°C (maximum)	4 hrs.	3 hrs.	3 hrs.	0.5 hrs.	2-3 hrs.
Hard dry at 30°C (maximum),	48 hrs.	24 hrs.	12 hrs	24 hrs.	10 hrs.
Full cure 30^{O}C (for immersion /high Temperature service.)	5 days	5 days	NA	NA	-
Over-coating interval, hrs. *Note 11	Min. 24 hrs Max.5days	Min. 10	Min. 24	Min. 24	Min: 12 Hrs. Max: 3 days

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Pot life at 30°C for two components Paints, hrs.	4-6	1.5	NA	NA	1-2 hrs.
Adhesion MPa (ASTM D 4541)	>5	>5	NA	NA	-
Temperature resistance (min.) °C (ASTM D 2485) *Note 8	80 (Method A)	80 (Method A)	250 (Method A)	540 (Method B)	180 (Method A)

TABLE- 2: PAINT MATERIALS (Contd.)

DESCRIPTION	F-14	F-15	F-16	F-17	F-20
Technical name	Polyamine cured coal tar epoxy	Two-component Epoxy phenolic coating cured with Polyamine adduct hardener	Inert polymeric matrix coating suitable for under insulation for CS and SS.	Novolac epoxy phenolic coating cured with Polyamine adduct hardener	Glass flake reinforced vinyl ester coating.
Type & composition	Specially formulated polyamine cured coal tar epoxy suitable for application under insulation	Two pack ambient temperature curing epoxy phenolic coating system suitable for application under insulation CS/SS piping	Suitable for high temperature service and under insulation coating for CS, alloy steel and SS	Novolac epoxy phenolic coating cured with Polyamine adduct hardener	Two component glass flake filled vinyl ester lining for under immersion services up to 90 deg. C.
Volume Solids % Minimum.	67	67	50	98	98
DFT per coat in microns	100-125	100-125	100-125	300-450	500-600
Theoretical covering capacity in m^2/coat/ litre	5.4-6.7	6.7-8.9	4-5	2.2-3.3	1.6-2

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Weight per liter in Kg/litre (min.)	1.45	1.65	>1.3	1.7	>1.2
Touch dry at 30°C (max)	4 hrs.	3 hrs.	1 hrs.	2 hrs.	2 hrs.
Hard dry at 30°C (max).	24 hrs.	24 hrs.	16 hrs.	24 hrs.	4 hrs.
Full cure 30°C (for immersion / high temp service)	168 hrs (7 days)	168 hrs (7 days)	NA	168 hrs (7 days)	96 hrs (4 days)
Over-coating Interval *Note 11	Min. 6 hrs Max.5 days	Min. 36 hrs Max.21 days	Min.6 hrs Max. Not applicable	Min. 16 hrs Max.21 days	Min. 4 hrs Max.3 days
Pot life at 30°C, hrs (for two component paints)	4	4-6	\ 1	1	50 min-1 hr.
Adhesion, MPa (ASTM D 4541)	>6	>7	NA	>8	>7, Tensile strength >20N/mm2 (ASTM D 638)
Temperature resistance (min.) °C (ASTM D 2485) *Note 8	125 (Method A)	150 (Method A)	650 (Method B)	200 (Method A)	90 (Method A)

General notes for TABLE-2:

1. Covering capacity and DFT achieved per coat depends on method of application. Covering capacity specified above is theoretical. For estimation of actual quantity of paints required, include the losses during application. Minimum specified DFT should be maintained in any case.

2. All primers and finish coats should be ambient temperature curing and air drying unless otherwise specified.

3. All paints shall be applied in accordance with manufacturer's instructions for surface preparation, intervals, curing and application. Wherever a deviation is noticed from the specification in manufacturer data sheet, more stringent one between the data sheet and the specification shall prevail e.g. if this specification recommends Sa 2 ½ and the manufacturer data sheet requires Sa3, the surface preparation shall be done as per Sa 3. However, in another case if this specification

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requires the surface preparation of Sa 2 ½ and the manufacturer data sheet recommends only Sa 2 as minimum, the surface preparation shall be done as per Sa 2 ½.

4. Technical data sheets for all paints shall be supplied at the time of submission of quotations.

5. Internationally recognized & acceptable testing method shall be used for lab testing wherever testing standards are not mentioned.

6. Touch dry, hard dry, pot life, full cure period, & over coating interval shall be as per manufacturer's data sheets and no testing is required. Slight variation in the values of these parameters along with weight per liter may be permissible with the discretion of engineer-in-charge in consultation with EIL-SMMS.

7. Temperature resistance tests (ASTM D2485) shall be carried out for minimum required temperature resistance indicated.

8. Wherever ASTM D 2485 method B is applicable, test results of the panels subjected to salt spray (ASTM B 117) after muffle furnace exposure shall be submitted for pre-qualification purpose.

9. F6-C shall be suitable for drinking water service and should have certification from competent authority.

10. Alkyd type paint system have potential flaking problems and therefore, F11 shall not be alkyd type.

11. Maximum overcoat interval shall be as per Paint manufacturer's datasheet.

7.0 SELECTION OF COATING SYSTEMS

The external coating system for EIL projects should be selected based on the C5 environment (very high durability) as per ISO12944-2, design temperature, involved services of the steel substrate and plant location.

The paint system to be applied for a specific job shall be arrived at sequentially as given below:

a. Identify the environment from area classification details and choose the appropriate table.
b. Identify the design temperature from the technical documents.
c. Identify the specific field paint system and surface preparation requirement from the above identified table and temperature range.
d. Identify the shop priming requirement from based on compatibility of the above paint system.
e. Identify the need of repair of shop primer and execute as per Table-3.

7.1 Classification based on plant location:

a) Plant located in inland area (more than 50 km from coast).

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- For offsite areas and utilities: Table-5 to be followed.

- For process units, DM plant, CPP and Cooling towers, ETP, RWTP: Table-6/7 as applicable to be followed.

b) Plant located on sea coast or within 50 km from sea coast.

- For process units, DM plant, CPP, Cooling tower, ETP, RWTP, offsite & utilities etc.: Table-6/7 as applicable to be followed.

c) For external surface of above ground tanks, Table-8 to be followed for all locations (inland or coastal)

TABLE-3: REPAIR OF PRE-ERECTION/PRE-FABRICATION OR SHOP PRIMER AFTER ERECTION/WELDING

(For all un-insulated CS, LTCS & alloy steel items in all environments)

Sl. No.	Design Temp. in ºC	Surface Preparation	Coating System	Total DFT in Microns (min.)	Remarks
3.1	-45 to 80	SSPC-SP-3	1 coat of F-8 @ 125 µ DFT/coat+ 1 coat of P-6 @ 40 µ DFT/coat	165	See Note-1 below and clause 5.11
3.2	81 to 250	SSPC-SP-11	1 coat of F-9 @ 65-75 µ DFT/coat + 1 coat of F-11 @ 20 µ DFT/coat	85-95	
3.2	251 to 400	SSPC-SP-11	1 coat of F-9 @ 65-75 µ DFT/coat + 1 coat of F-12 @ 20 µ DFT/coat	85-95	
3.3	401 to 550	SSPC-SP-3	1 coat of F-16 @ 125 µ DFT/coat	125	

Note for Table-3:

1. The application and repair of pre-erection/pre-fabrication and shop primer given in above tables shall be done for all the items to be painted. In case the damages of primer are severe and spread over large area as per Engineer In charge discretion, entire primer shall be removed by blasting to achieve SSPC-SP-10 and surfaces shall be suitably primer coated as mentioned in Table 5.0 to Table 18.0. After the repairs of the primer, suitable intermediate and final coats shall be applied as per applicable coating systems mentioned in Table 5.0 to Table 18.0.

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TABLE-4: COATING SYSTEM FOR GALVANIZED ITEMS (Refer clause 2.2.7)

Sl. No.	Design Temp. in °C	Coating System	Total DFT in Microns (min.)	Remarks
4.1	Up to 60	Hot Dip Galvanizing with thickness as per ISO 1461, Surface preparation over galvanization as per SSPC SP 16 & ISO 12944-4; 1 coat of F-6B @ 100µ DFT/coat + 1 coat of F-2 @ 40 microns DFT/coat	140µ of finish coat (excluding the thickness of galvanizing)	Special primers like etch primer (surface preparation) may also be considered for coating on galvanized surfaces

Notes for Table-4:

1. F-6B shall be modified type and suitable for coating over galvanization. Paint suppliers confirmation is mandatory.

2. Repair of the damaged areas of galvanized coatings due to welding during erection shall be carried out as per recommended practice ISO 1461, using cold galvanizing spray process. Organic paint systems are not acceptable for the repair.

3. After repair of damaged galvanized coating by cold galvanization (P-7), the repaired area shall be top coated with paint system as given in table-4 above (i.e. 1 coat of F-6B @ 100µ DFT/coat + 1 coat of F-2 @ 40µ DFT/coat).

4. Galvanized gratings don't require painting in general until otherwise specified elsewhere or as per the requirement of the OWNER. Galvanized items may require painting to meet the colour coding requirement of the OWNER. Contractor has to ensure the applicable colour coding prior to application of coating as per this clause.

TABLE-5: COATING SYSTEMS FOR INLAND PLANTS (OFFSITES & UTLITIES)

(For all new un-insulated above ground CS, LTCS & Alloy steel piping, equipment, structures, valves, Vessels & columns, stacks etc.)

Sl. No.	Design Temp. in °C	Surface Preparation & Pre-erection/Shop Primer	Coating System		Total Final DFT in Microns (min.)	Remarks
			Intermediate Coat	Finish Coat		
5.1	-45 to -15	SSPC-SP-10; 1coat of F-9 @ 65-75µ DFT/coat	-	-	65-75	a. No over-coating shall be done on

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5.2	-14 to 80	SSPC-SP-10; 1coat of F-9 @ 65-75µ DFT/coat + 1 coat of P-6 @ 40 µ DFT/ coat	1 coat of F-6B @ 100 µ DFT/coat	1 coat of F-2 @ 40µ DFT/coat	245-255	F-9. b. Surface profile for F-9 shall be 30-40 µm c. F11 shall not be Alkyd type. d. F-12 shall be ambient temperature curing type
5.3	81 to 250	SSPC-SP-10; 1coat of F-9 @ 65-75µ DFT/coat + 1 coats of F-11 @ 20µ DFT/coat	-	1 coats of F-11 @ 20µ DFT/coat	105-115	
5.4	251 to 400	SSPC-SP-10; 1coat of F-9 @ 65-75µ DFT/coat + 1 coats of F-12 @ 20µ DFT/coat	-	1 coats of F-12 @ 20µ DFT/coat	105-115	
5.5	401-650	SSPC-SP-10; 1 coat of F-16 @ 125 µ	-	1 coat of F-16 @ 125 µ	250-300	-

TABLE-6: COATING SYSTEMS FOR CORROSIVE AREAS (PROCESS UNITS, COOLING TOWER, DM, CPP, ETP, RWTP etc.)

(For all new un-insulated above ground CS, LTCS & Alloy steel piping, equipment, structures, valves, vessels & columns, furnace stacks etc.)

Sl. No.	Design Temp. °C	Surface Preparation & Pre-erection/Shop Primer	Coating System		Total DFT in Microns (min.)	Remarks
			Intermediate coat	Finish Coat		
6.1	-45 to -15	SSPC-SP-10; 1coat of F-9 @ 65-75µ	-	-	65-75	a)No over coating on F-9

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6.2	-14 to 80	SSPC-SP-10; 1coat of F-9 @ 65-75µ DFT/ coat + 1 coat of P-6 @ 40 µ DFT/ coat	2 coats of F-6B @ 100 µ DFT/coat	1 coat of F-2 @ 40µ DFT/coat	345-355	is allowed b) F-12 shall be ambient temperature curing type c) F11 shall not be Alkyd type. d) Surface profile for F-9 shall be 30-40 µm
6.3	81 to 250	SSPC-SP-10; 1coat of F-9 @ 65-75µ DFT/coat + 1 coats of F-11 @ 20µ DFT/coat	-	1 coat of F-11 @ 20µ DFT/coat	105-115	
6.4	251 to 400	SSPC-SP-10; 1coat of F-9 @ 65-75µ DFT/ coat + 1 coats of F-12 @ 20µ DFT/coat	-	1 coat of F-12 @ 20µ DFT/coat	105-115	
6.5	401-650	SSPC-SP-10; 1 coat of F-16 @ 125 µ	-	1 coat of F-16 @ 125 µ	250-300	-

NOTES for TABLE-5 & TABLE-6:

1. The list of items given in the heading of the above table is not exhaustive. There may be more items for a particular contract where these specifications are used. The CONTRACTOR is fully responsible for completing painting including prefabrication primer for all the items supplied and fabricated as per contract document and scope of work.

2. If the application of pre-erection/pre-fabrication/shop primer has already been completed, the same shall not be repeated in the field. In case the damages to the primer coat are severe and spread over large areas, the Engineer-In-Charge may decide & advise re-blasting and re-application of the primer coat. Repair of pre-fabrication/pre-erection primer, if required, shall be done as per Table-3.

3. Flare line within unit or offsite areas shall be coated as per clause 6.4 of Table-6.

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4. For external surface of RCC Chimney, 2 coats of F-6 B@ 100µ DFT/coat to obtain a total DFT of 200 µ shall be applied after proper surface preparation as per guidelines in clause 4.6. Suitable PU top coat shall also be considered.

5. At the site, shop primer coated prefabricated items/structures/equipment/vessels shall be stored in the shed area and contractor shall brush off any chalking observed with emery paper, prior to application of subsequent coats.

TABLE-7: COATING SYSTEMS FOR EFFLUENT TREATMENT PLANT (ETP) & RODM

Sl. No.	Design Temp. in ºC	Surface Preparation	Coating system		Total DFT in Microns (min.)	Remarks
			Primer	Finish Coat		
7.1	For external surfaces of steel items: screens, walk way bridges, clarifier/thickener scrapping mechanism, baffles, Media filters/vessels (PSF, DMF, MMF, & ACF etc.), vertical pumps, CS/MS tanks/ vessels and structures.					
	-14 to 80	SSPS-SP-10	1 coat of F-9 @ 65-75µ DFT/coat + 1 coat of P-6 @ 40 µ DFT/ coat	2 coats of F-6B @100µ DFT/coat + 1 coat of F-2 @ 40µ DFT/coat (2x100+40= 240)	345-355	Note 1
7.2	For internal surfaces of steel items: all effluent handling units such as TPI, DAF, tube settlers, clarifiers, tanks, sludge tanks and sewage tank, wet slop oil tanks etc., scrapping mechanism in clarifier etc.					
	-14 to 80	SSPS-SP-10	1 coat of F-15 @ 100µ DFT/coat.	2 coats of F-15 @100µ DFT/coat (2x100=200)	300	-
7.3	All R.C.C./concrete surfaces exposed to effluent water / liquid such as tanks, structures, drains etc., all effluent handling units such as API, TPI, DAF, tube settlers, clarifiers, tanks, sumps, sludge sumps/tanks and sewage sumps/tank, wet slop oil sump/tanks etc.					
	-14 to 80	As per clause 4.6 of this specification	Epoxy screed lining		3000	Note 1
7.4	Internal surface of equipment like Media filters/vessels (PSF, DMF, MMF, & ACF etc.), activated carbon filters, alkaline, acids & other high corrosive service					
	Up to 90	SSPC-SP-10	1 coat of clear two component solvent free vinyl ester primer @ 100µ DFT/ Coat + 2 coats of F-20 @ 500µ DFT/ Coat		1100	Note-2

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NOTES for TABLE-7:

1. Contractor shall follow manufacturer recommendations to develop epoxy screed lining procedure for EIL review and approval.

2. This coating system is applicable in conjunction with relevant PDS of the equipment.

TABLE-8: EXTERNAL COATING SYSTEMS FOR CARBON STEEL AND LOW ALLOY STEEL STORAGE TANKS
(except for crude tanks. Refer Annexure-II for Crude Oil Tanks painting)

Sl. No.	Design Temp. in °C	Surface Preparation	Coating system (Note-1)		Total DFT in Microns (min.)	Remarks
			Primer	Finish Coat		
8.1	All external surfaces of shell, wind girders, appurtenances, roof tops of all above ground tank including top side of external and internal floating roof and associated external structural works.					
8.1.1	-14 to 80	SSPC-SP-10	1coat of F-9 @ 65-75µ DFT/coat + 1coat of P-6 @ 40µ DFT/ coat	2 coats of F-6B @ 100µ DFT /coat + 1 coat of F-2 @ 40µ DFT/ coat	345-355	
8.1.2	81 to 450	SSPC-SP-10	1coat of F-9 @ 65-75µ DFT/coat	1 coat of F-16 @ 125 µ DFT / coat	190-200	
8.2	External surfaces of bottom plate (in contact with soil) for all storage tanks.					
8.2.1	-14 to 80	SSPC-SP-10	1 coat of F-9 @ 65-75µ DFT/ coat	3 coats of F-7@ 150µ DFT/coat (3x150=450)	515-525	-
8.2.2	81 to 200	SSPC-SP-10	1 coat of F-17 primer @ 400µ DFT/ coat	1 coat of F-17 finish coat @ 400µ DFT/ coat	800-825	Note-4
8.3	For underside of the bottom plate (not in contact with soil) (in case tank is not lifted during PWHT) (Note- 2)					

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8.3.1	-29 to 400	SSPC SP-10	1 coat of F-16 @ 125 µ	2 coat of F-16 @ 125 µ/coat	375	Note-3

Notes for TABLE-8:

1. All paint coating application including primer for tanks shall be carried out at field after erection and completion of entire welding.
2. For underside of bottom plate as per clause no.8.3.1:

a) Painting shall be carried out before laying the bottom plate for tanks with non-Post Weld Heat Treatment (PWHT).

b) For tanks with PWHT, painting shall be carried out after PWHT.

c) In case tank is not lifted during PWHT then painting shall be applied before laying the bottom plate.

3. This coating system is also applicable for temperature ranges not covered in 8.2 above.

4. This coating system is also applicable for bottom plates having MOC as Stainless Steel.

TABLE-9: INTERNAL COATING SYSTEMS FOR CARBON STEEL AND ALLOY STORAGE TANKS
(except for all crude tanks. Refer Annexure-II for Crude Oil Tanks)

Sl. No.	Design Temp. in °C	Surface Preparation	Coating system		Total DFT in Microns (min.)	Remarks
			Primer	Finish Coat		
9.1	Internal surface of cone roof with supporting structures, top shell course for free board height, underside of floating roof, oil side surface of pontoons, support structures and ladders and other CS internals etc., inside of bottom plate, internal surface of bare shell for 1.5 mtr from bottom, for storing petroleum products and intermediates such as Isomerate, Reformate, NHT / CCR / DHT feed, HSD, Gasoline, Naphtha, SKO, MS - Motor Spirits, LCGO, MTBE and Dry Slop.					
9.1.1	-14 to 45	SSPC-SP-10	1 coat of F-9 @ 65-75 µ DFT/coat	-	65-75	-

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9.1.2	46 to 90	SSPC-SP-10	1 coat of F-15 primer @ 100µ DFT/ coat	1 coat of F-15 intermediate coat @ 100µ DFT/coat + 1 coat of F-15 finish coat @ 100µ DFT/ coat	300	-
9.2	Internal surface of cone roof with supporting structures, top shell course for free board height, underside of floating roof, oil side surface of pontoons, support structures and ladders and other CS internals etc., inside of bottom plate, internal surface of bare shell for 1.5 mtr from bottom, for storing petroleum products and intermediates such as VR, VGO, IFO/RFO, HCGO and Black Slop and other high temp. hydrocarbons					
9.2.1	91 to 150	SSPC-SP-10	-	1 coat of F-17 @ 400µ DFT/coat	400	-
9.2.2	151 to 180	SSPC-SP-10	-	3 Coat of F-18 @ 125	375	F-19 shall be suitable for immersion service of the given products
9.3	Amine and Sour water storage tank All internal surfaces but not limited to internal surfaces of shell for full height, bottom plate, accessories, roof and roof structures of cone and dome roof tanks etc.					
9.3.1	up to 90	SSPC-SP-10	1 coat of F-15 primer @ 100µ DFT/ coat	1 coat of F-15 intermediate coat @ 100µ DFT/coat + 1 coat of F-15 finish coat @ 100µ DFT/ coat	300	-
9.4	Potable, Raw, Fire water, De-mineralized (DM) water & Condensates etc. All internal surfaces but not limited to internal surfaces of shell for full height, bottom plate, accessories, roof and roof structures of cone and dome roof tanks etc.					
9.4.1	-14 to 60	SSPC-SP-10	1 Coat of F-6A @ 100µ DFT/coat	1 coat of F-6C @ 300-350 µ DFT/ coat	400-450	-
9.4.2	61 to150	SSPC-SP-10	1 coat of F-15 primer @ 100µ DFT/ coat	1 coat of F-15 intermediate coat @ 100µ DFT/coat + 1 coat of F-15 finish coat @ 100µ DFT/ coat (100+100=200)	300	-
9.5	Hydrochloric acid (HCl) 10 % All internal surfaces but not limited to internal surfaces of shell for full height, bottom plate, accessories, roof and roof structures of cone and dome roof tanks etc.					

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9.5.1	-14 to 60	SSPC-SP-10	1 Coat of clear two component solvent free vinyl ester primer @ 100µ DFT/ Coat	2 Coats of F-20 @ 500µ DFT/ Coat	1100	-
9.6	Aggressive solvents like hexane, hexene, benzene, xylene and toluene etc.: All internal surfaces but not limited to internal surfaces of shell for full height, bottom plate, accessories, roof and roof structures of cone and dome roof tanks etc.					
9.6.1	-14 to 65	SSPC-SP-10	1 coat of F-9 @ 65-75µ DFT/ coat	-	65-75	-
9.7	Ethylene glycol tanks: All internal surfaces but not limited to internal surfaces of shell for full height, bottom plate, accessories, roof and roof structures of cone and dome roof tanks etc.					
9.7.1	All	SSPC-SP-10	-	3 coats of F-17 @ 75µ /Coat; (3x75=225)	225	-
9.8	Inside pontoon and inside of double deck of all floating roofs					
9.8.1	-14 to 80	SSPC-SP-3	1 coat of F-8 @ 100µ DFT/coat	1 coat of F-8 @ 100µ DFT/coat	200	-
9.8.2	81 to150	SSPC-SP-10	1 coat of F-15 primer @ 100µ DFT/ coat	1 coat of F-15 intermediate coat @ 100µ DFT/coat + 1 coat of F-15 finish coat @ 100µ DFT/ coat (100+100=200)	300	-
9.8.3	151 to 200	SSPC-SP-10	-	1 coat of F-17 @ 400µ DFT/coat	400	-
9.9	Alkalis up to 50 % concentration: All internal surfaces but not limited to internal surfaces of shell for full height, bottom plate, accessories, roof and roof structures of cone and dome roof tanks etc.					
9.9.1	Up to 60°C	SSPC-SP-10	1 coat of F-15 primer @ 100µ DFT/ coat	2 Coats of F-6 A @ 100µ DFT/coat (2x100=200)	300	-
9.10	Internal surface of underside of floating roof, bottom plate, complete shell course for full tank height, including immersed gauge pipe, still well etc. and their supporting structure, ladders and other CS internals etc. for storing **ATF-Aviation Turbine Fuel**.					

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9.10.1	Up to 80˚C	SSPC-SP-10	1 coat of primer* @ 75µ DFT/ coat	1 Coats of F-6 C @ 300µ DFT/coat (1x300=300)	375	**Primer shall be compatible with F6C. F6C shall comply with the requirements of EI-standard 1541. Shade of the paint shall be Off-white.**
9.11	Internal surface of underside of fixed roof and supporting structure for internal floating roof tank for storing **ATF-Aviation Turbine Fuel**.					
9.11.1	Up to 80˚C	SSPC-SP-10	1coat of F-9 @ 65-75µ DFT/coat + 1coat of P-6 @ 40µ DFT/ coat	2 coats of F-6A @ 100µ DFT /coat	305	

General Note for Table-9: The list of surfaces to be painted are not exhaustive. All internal surfaces of all type of tanks including structural items shall be coated as per the above table. No CS surface shall be kept un-painted.

TABLE-10: COATING SYSTEMS FOR EXTERNAL SIDE OF UNDERGROUND CARBON STEEL PLANT PIPING AND VESSELS

Sl. No.	Design Temp. in °C	Surface Preparation & Shop Primer	Coating system		Total DFT in Microns (min.)	Remarks
			Surface Preparation & Primer	Finish Coat		
10.1	Underground carbon steel plant piping.					
10.1.1	25 to 80	-	As per document B957-000-06-42-PLS-04	3layer polyethylene (3LPE) coating as per document B957-000-06-42- PLS-04	3.5 mm	--

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10.1.2	81 to 200	-	SSPC-SP-10; 1 coat of F-17 primer @400 µ DFT/ coat	1 coat of F-17 @ 400 DFT/coat	800	-
10.1.3	201 to 400	SSPC-SP -10	1 coat of F-16 primer @125 µ DFT/ coat	2 coats of F-16 @125µ DFT/ coat	375	Note 1
10.2	External side of underground vessels					
10.2.1	-45 to 80	SSPC-SP -10; 1 coat of F-9 @ 65-75µ DFT/ coat + 1 coat of F-7 @ 100µ DFT/coat	-	2 coats of F-7 @ 100µ DFT/coat	365-375	-
10.2.2	81 to 200	SSPC-SP -10	1 coat of F-17 primer @400 µ DFT/ coat	1 coat of F-17 @400µ DFT/ coat	800	-
10.2.3	201 to 400	SSPC-SP -10	1 coat of F-16 primer @125 µ DFT/ coat	2 coats of F-16 @125µ DFT/ coat	375	-

Notes for TABLE-10:

1. Coating system as per Sl. No. 10.1.3 is applicable for underground CBD line subjected to higher temperature (201-400 deg. C) and in cyclic service. Contractor shall submit suitable product datasheet, PTR and test certificate, for EIL review and approval.

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TABLE-11: COATING SYSTEMS FOR UNDER INSULATION (ALL UNIT AREAS & OFFSITES)
(For insulated piping, equipment, storage vessels, tanks, columns etc. of CS, LTCS, Alloy steel, SS, DSS and SDSS in all environments.)

Sl. No.	Design Temp. °C	Surface Preparation & Pre-erection/Shop Primer	Coating system		Total DFT Microns (min.)	Remarks
			Primer	Finish paint		
11.1	Carbon steel, LTCS and Alloy steel Piping, Storage tanks, Vessels, Equipment etc.					
11.1.1	-45 to 125	SSPC-SP-10; 1coat of F-15 @ 100µ DFT/coat	None	2 coats of F-15 @100µ DFT/coat	300	Note 1
11.1.2	126 to 560	SSPC-SP-10; 1 coat of F-16 @ 125µ DFT/coat	None	1 coat F-16 @ 125µ DFT/coat	250	
For Carbon steel, LTCS and Alloy steel Critical equipment like vessels, reactors, columns & equipment						
11.1.3	200-540	Temporary oil based varnish coating to be provided for transport and storage	Thermally Sprayed Aluminium coating (TSAC) Refer ANNEXURE-I			Critical equipment is identified through respective data sheets. Note 4
11.2	Stainless Steel, Duplex Stainless steel, Super Duplex stainless steel & Piping, Tanks, Vessels & Equipment etc.					
11.2.1	-45 to 125	SSPC-SP-16; (15-25µ surface profile) 1 coat of F-15 @100 µ DFT/coat	None	2 coats of F-15 @100µ DFT/coat	300	Note 1
11.2.2	126 to 650	SSPC-SP-16; (15-25µ surface profile) 1 coat of F-16 @125µ DFT/coat	None	1 coat of F-16 @125µ DFT/coat	250	
11.3	Cyclic service of CS, LTCS, SS, DSS, SDSS & Alloy Steels (Note-1)					

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11.3.1	-45 to 150 (Note-1)	SSPC-SP-10 For CS, LTCS & Alloy steel. SSPC-SP-16 for SS; (15-25µ surface profile) 1 coat of F-15 @100 µ DFT/coat	None	2 coats of F-15 @100µ DFT/coat	300	Note-2&3
11.3.2	-180 to 650	SSPC-SP-10 for CS, LTCS & Alloy steel. SSPC-SP-16 for SS (15-25µ surface profile) 1 coat of F-16 @ 125µ DFT/coat	None	1 coat of F-16 @ 125µ DFT/coat	250	

Notes for TABLE 11

1. Coating system for any other design temperature range not covered in Sr. No. 11.1 & Sr. No. 11.2 shall be as per Sr. No. 11.3.2.

2. In case of overlapping of cyclic temperature ranges as mentioned in 11.3.1 and 11.3.2 then clause 11.3.1 shall be followed.

3. Alternatively, for this temperature range, 1 coat of F-17 @ 400 µ is also acceptable.

4. For all insulated CS, LTCS & LAS vessels, reactors, column & equipment, Contractor/supplier shall verify with BPCL/EIL for applicability of TSA as under insulation coating.

General notes for TABLE-11:

1. “Cyclic Service” is characterized by rapid or periodical temperature fluctuation or temperature cycles or as defined in the process datasheet.

2. The blasting abrasives for SS and alloy steels shall be aluminum oxide or garnet only.

3. The coating system applicable for any other temperature range shall be reviewed if it is encountered.

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TABLE-12: INTERNAL COATING SYSTEMS FOR WATER SIDE COMPONENTS OF CS, SS, DSS & NON-FERROUS HEAT EXCHANGERS

Sl. No.	Design Temp. in °C	Surface Preparation & Pre-erection/Shop Primer	Coating System		Total Final DFT in Microns (min.)	Remarks
			Primer	Finish paint		
12.1	Up to 80	SSPC-SP-10 for CS and SSPC-SP-16 for SS	1 coat of F-15 @ 100 µ DFT/coat	2 coats of F-15 @ 100 µ DFT/coat	300	-
12.2	81 to 200	SSPC-SP-10 for CS and SSPC-SP-16 for SS	-	2 coats of F-17@ 400µ/coat	800	-

Note for Table-12:

1. Coating systems are applicable as per requirement specified in the data sheets of the respective exchangers or equipment.

TABLE-13: COATING SYSTEMS FOR CORROSIVE AREAS - BROWN FIELD PAINTING (REVAMP, REFURBISHMENT AND MAINTENANCE)

(For all existing un-insulated above ground CS, LTCS & Alloy steel piping, equipment, structures, valves, vessels & columns, furnace stacks etc.)

Sl. No.	Design Temp. °C	Surface Preparation & Pre-erection/Shop Primer	Coating System		Total DFT in Microns (min.)	Remarks
			Intermediate Coat	Finish Coat		
13.1	-45 to -15	SSPC-SP-3; 1coat of F-8 @ 100µ	-	-	100	-
13.2	-14 to 80	SSPC-SP-3; 1coat of F-8 @ 100µ DFT/ coat	2 coats of F-6B @ 100 µ DFT/coat	1 coat of F-2 @ 40µ DFT/coat	340	
13.3	81-650	SSPC-SP-3; 1 coat of F-16 @ 125 µ	-	1 coat of F-16 @ 125 µ	250-300	-

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TABLE-14: EXTERNAL AND INTERNAL COATING SYSTEM FOR CRUDE OIL TANKS PAINTINGS (REFER ANNEXURE-II)

TABLE-15: COATING SYSTEMS FOR GI TOWERS

Sl. No.	Design Temp. in °C	Surface Preparation & Pre-erection/Shop Primer	Coating System		Total Final DFT in Microns (min.)	Remarks
			Primer	Finish paint		
15.1	Up to 80	SSPC-SP-3	1 coat of F-8 @ 100 µ DFT/coat	1 coats of F-2@ 40 µ DFT/coat	140	Shade shall be as per defense requirement.

TABLE-16: COATING SYSTEMS FOR STREET POLES

Sl. No.	Description	Surface Preparation & Pre-erection/Shop Primer	Coating System		Total Final DFT in Microns (min.)	Remarks
			Primer	Finish paint		
16.1	Street Light Poles	SSPC-SP-3	1 coat of P-6 @ 40 µ DFT/coat	2 coats of F-2@ 40 µ DFT/coat	120	-

Note for Table-15 & 16:

1. For revamp and refurbishment, surface preparation shall be SSPC-SP3 and coating system shall be same as mentioned in Table 15 & 16.

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TABLE-17: COATING SYSTEMS FOR PSV

Sl. No.	Description	Surface Preparation & Pre-erection/Shop Primer	Coating System		Total Final DFT in Microns (min.)	Remarks
			Primer	Finish paint		
17.1	PSV, PRV, PV, RV, TRV	SSPC-SP10/SP-3	1 coat of F-8 @ 100 µ DFT/coat	1 coats of F-2@ 40 µ DFT/coat	140	- LPG service: RAL 5013 (cobalt blue) - Conventional type: RAL 3024 (Luminous Red) - Bellow Type: RAL 1026 (Luminous yellow color)

TABLE-18: TEMPERATURE INDICATING PAINT

Sl. No.	Description	Max Temp °C	Surface Preparation & Pre-erection/Shop Primer	Coating System		Total Final DFT in Microns (min.)	Remarks
				Primer	Finish paint		
18.1	Cold Collector, Transfer line, TPR & PG boiler inlet channel at HGU	400	Note-1				

Notes for TABLE-18:

1. Contractor shall propose suitable product for the temperature indicative paint application in the given temperature range, and submit their datasheet, Past Track Record and test certificate, for EIL review and approval.

GENERAL NOTES FOR TABLE: 5 TO 18

1. For uninsulated or insulated items, scope of surface preparation, application of primers to finish coat including repair shall be as per applicable contractual documents like SOR, MR, and PR etc. The list of items is not exhaustive.

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2. At the site, shop primer coated prefabricated items/structures/equipment/vessels shall be stored in the shed area and contractor shall brush off any chalking observed with emery paper, prior to application of subsequent coats.

8.0 GUIDELINES FOR STORAGE & HANDLING

8.1 All paints and painting materials shall be stored in rooms only which are to be arranged by CONTRACTOR and approved by Engineer-In-Charge for the purpose. All necessary precautions shall be taken to prevent fire. The storage building shall preferably be separate from adjacent building. A signboard bearing the word "PAINT STORAGE- NO NAKED LIGHT-HIGHLY INFLAMMABLE" shall be clearly displayed outside. Manufacturers' recommendation /Materials safety datasheet shall be followed for storage and handling of paint materials.

Note: This standard doesn't address all the safety concerns if any, associated with its use. It is responsibility of the user of this specification to establish appropriate safety and health practice and determine the applicability of regulatory limitations prior to use.

9.0 COLOUR CODE, IDENTIFICATION AND MARKING

9.1 For identification of pipelines, the following color-coding scheme shall be followed (except for ATF)

TABLE-19: COLOR CODING

SR. No.	SERVICE	RECOMMENDED COLOUR FOR PAINT SYSTEM	RAL COLOUR CODE	
			BASE COLOUR	BAND COLOUR
HYDROCARBON LINES (UNINSULATED)				
1	CRUDE SOUR	Basalt Grey with 1 deep orange band	7012	2011
2	CRUDE SWEET	Basalt Grey with 1 signal red band	7012	3001
3	LUBE OILS	Basalt Grey with 1 grass green band	7012	6010
4	FLARE LINES	White Aluminum	9006	
5	LPG	Deep Orange with 1 oxide red band	2011	3009
6	PROPYLENE	Deep Orange with 2 Cobalt blue bands	2011	5013
7	NAPTHA	Deep Orange with 1 grass green band	2011	6010
8	M.S.	Deep Orange with 1 Basalt Grey band	2011	7012

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9	AV. GASOLINE (96 RON)	Deep Orange with 1 band each of grass green, white and signal red bands	2011	6010	9010	3001
10	GASOLINE (regular, leaded)	Deep Orange with 1 Jet black band	2011		9005	
11	GASOLINE (premium, leaded)	Deep Orange with 1 Cobalt blue band	2011		5013	
12	GASOLINE (white)	Deep Orange with 1 white band	2011		9010	
13	GASOLINE (Aviation 100/130)	Deep Orange with 1 signal red band	2011		3001	
14	GASOLINE (Aviation 115/145)	Deep Orange with 1 traffic purple band	2011		4006	
15	N-PENTANE	Deep Orange with 2 Cobalt blue bands	2011		5013	
16	DIESEL OIL (White)	Oxide red with 1 white band	3009		9010	
17	DIESEL OIL (Black)	Oxide red with 1 traffic yellow band	3009		1023	
18	KEROSENE	Oxide red with 1 grass green band	3009		6010	
19	HY. KEROSENE	Oxide red with 2 grass green bands	3009		6010	
20	DISUFIDE OIL (EX-MEROX)	Oxide red with 1 jet black band	3009		9005	
21	M.T.O	Oxide red with 3 grass green bands	3009		6010	
22	DHPPA	Oxide red with 2 white bands	3009		9010	
23	FLUSHING OIL	Oxide red with 2 jet black bands	3009		9005	
24	LAB FS	Oxide red with 2 Basalt Grey bands	3009		7012	
25	LAB RS	Oxide red with 3 Basalt Grey bands	3009		7012	
26	LAB (Off. Spec)	Oxide red with 1 light grey band	3009		7035	
27	N-PARAFFIN	Oxide red with 1 Cobalt blue band	3009		5013	
28	HEAVY ALKYLATE	Oxide red with signal red band	3009		3001	
29	BLOW DOWN, VAPOR LINE	Off white / Aluminum with 1-Brown band	9006		8004	
30	BLOWDOWN	Off white / Aluminum with 2 copper brown bands	9006		8004	
32	TOULENE	Clay Brown with 1 traffic yellow band	8003		1023	
33	BENZENE	Clay Brown with 1 grass green band	8003		6010	
34	LAB PRODUCT	Clay Brown with 1 Cobalt blue band	8003		5013	
35	FUEL OIL	Jet Black with 1 traffic yellow band	9005		1023	

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36	FULE OIL (Aromatic rich)	Jet Black with 2 traffic yellow bands	9005	1023
37	ASPHALT	Jet Black with 1 white band	9005	9010
38	SLOP AND WASTE OILS	Jet Black with 1 deep orange band	9005	2011
39	SLOP AROMATICS	Jet Black with 2 deep orange bands	9005	2011
CHEMICAL LINES				
40	TRI-SODIUM PHOSPHATE	Lemon Yellow with 1 violet blue band	1012	5000
41	CAUSTIC SODA	Lemon Yellow with 1 jet black band	1012	9005
42	SODIUM CHLORIDE	Lemon Yellow with 1 white band	1012	9010
43	AMMONIA	Lemon Yellow with 1 Cobalt blue band	1012	5013
44	CORROSION INHIBITOR	Lemon Yellow with 1 Aluminum band	1012	9006
45	HEXAMETA PHOSPHATE	Lemon Yellow with 2 jet black bands	1012	9005
46	ACID LINES	Golden Yellow with 1 signal red band	1004	3001
47	RICH AMINE	Lemon Yellow with 2 Cobalt blue bands	1012	5013
48	LEAN AMINE	Lemon Yellow with 3 Cobalt blue bands	1012	5013
49	SOLVENT	Lemon Yellow with 1 grass green band	1012	6010
50	LCS	Lemon Yellow with 1 Blue Grey	1012	7031
WATER LINES				
51	RAW WATER	Yellow Green with 1 jet black band	6018	9005
52	INDUSTRIAL WATER	Yellow Green with 2 signal red band	6018	3001
53	TREATED WATER	Yellow Green with 1 oxide red band	6018	3009
54	DRINKING WATER	Yellow Green with 1 grass green band	6018	6010
55	COOLING WATER	Yellow Green with 1 light brown band	6018	1011

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56	SERVICE WATER	Yellow Green with 1 signal red brown	6018	3001
57	TEMPERED WATER	Yellow Green with 2 grass green bands	6018	6010
58	DM WATER	Yellow Green with 1 aluminum band	6018	9006
59	DM WATER ABOVE 150°F	Yellow Green with 2 jet black bands	6018	9005
60	SOUR WATER	Yellow Green with 2 traffic yellow bands	6018	1023
61	STRIPPED WATER	Yellow Green with 2 Cobalt blue bands	6018	5013
62	ETP TREATED WATER	Yellow Green with 2 oxide red bands	6018	3009
FIRE PROTECTION SYSTEM (ABOVE GROUND)				
63	FIRE WATER FOAM & EXTINGUISHERS	Carmine Red	3002	
AIR & OTHER GAS LINES (UNINSULATED)				
64	SERVICE AIR	Sky blue with 1 signal red band	5015	3001
65	INSTRUMENT AIR	Sky blue with 1 jet black band	5015	9005
66	NITROGEN	Lemon Yellow with 1 deep orange band	1012	2011
67	FREON	Yellow green with 1 traffic yellow band	6018	1023
68	CHLORINE	Lemon Yellow with 1 oxide red band	1012	3009
69	SO_2	Lemon Yellow with 2 white bands	1012	9010
70	H_2S	Deep Orange with 2 oxide red bands	2011	3009
71	GAS (Fuel)	Deep Orange with 1 aluminum band	2011	9006
72	GAS (Sour)	Deep Orange with 2 aluminum bands	2011	9006
73	GAS (Sweet)	Deep Orange with 2 signal red band	2011	3001
74	HYDROGEN	Deep Orange with 1 Pale green band	2011	6021

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STEAM AND CONDENSATE LINES (UNINSULATED)				
75	HP STEAM	White Aluminum with 1 traffic yellow band	9006	1023
76	MP STEAM	White Aluminum with 1 signal red band	9006	3001
77	MLP STEAM	White Aluminum with 1 orange band	9006	2011
78	LP STEAM	White Aluminum with 1 light green band	9006	6021
79	CONDENSATE	Yellow green with 1 white band	6018	9010
80	CONDENSATE ABOVE 150°F	Yellow green with 3 oxide red band	6018	3009
81	BFW	Yellow green with 2 signal red bands	6018	3001
Note: For all insulated steam lines, the colour coding shall be followed as given for un-insulated lines with the specified length of colour bands.				
INSULATED HYDROCARBON PIPING				
82	IFO SUPPLY	Jet Black ground colour with 1 traffic yellow band in centre	9005	1023
83	IFO RETURN	Jet Black ground colour with 1 grass green band in centre	9005	6010
84	HPS	Jet Black ground colour with 1 signal red band in centre	9005	3001
85	BITUMEN	Jet Black ground colour with 2 signal red bands in centre	9005	3001
86	CLO	Jet Black ground colour with 1 brown band in centre	9005	8004
87	VB TAR	Black ground colour with 2 copper brown bands in centre	9005	8004
88	VR AM (BITUMEN / VBU FEED)	Jet Black ground colour with 1 Cobalt blue band in centre	9005	5013
89	VR BH	Black ground colour with 2 Cobalt blue bands in centre	9005	5013
90	VAC. SLOP	Black ground colour with 1 white band in centre	9005	9010
91	SLOP	Black ground colour with 1 deep orange band in centre	9005	2011
92	CRUDE SWEET	Basalt Grey ground colour with 1 signal red band in centre	7012	3001

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93	CRUDE SOUR	Basalt Grey ground colour with 1 deep orange band in centre	7012	2011
94	VGO / HCU	Oxide red ground colour with 2 iron grey bands in centre	3009	7011
95	OHCU BOTOM / FCCU FEED	Oxide red ground colour with 2 iron grey bands in centre	3009	7011
UNINSULATED EQUIPMENT, TANKS AND STRUCTURES				
96	HEATER STRUCTURE	Iron grey	7011	
97	HEATER CASING	White Aluminum	9006	
98	VESSELS & COLUMNS	White Aluminum	9006	
99	HYDROGEN BULLETS	Antique Pink	3014	
100	LPG VESSELS	Oxide red	3009	
101	SO_2 VESSEL	Lemon Yellow	1012	
102	HEAT EXCHANGER	White Aluminum	9006	
103	FO TANK AND HOT TANKS	Jet Black	9005	
104	ALL OTHER TANKS *Note 2	Pure White	9010	
105	CAUSTIC / AMINE / ACID TANKS	Golden yellow	1004	
106	SOUR WATER	Sky Blue		
107	OUTER SURFACE IN BOILER HOUSE	Aluminum	9006	
108	COMPRESSORS AND BLOWERS	Basalt Grey	7012	
109	PUMPS	Pigeon Blue	5014	
110	MOTORS & SWITCH GEAR	Pastel Blue	5024	
111	HAND RAILING	Signal red	3001	
112	STAIRCASE, LADDER AND WALKWAYS	Jet Black	9005	
113	LOAD LIFTING EQUIPMENT AND MONORAILS ETC	Clay Brown	8003	
114	GENERAL STRUCTURE	Steel blue (equivalent to British Airways Blue as per British Standard)	5011	
115	FLUE GAS STACK	Jet Black	9005	

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PIPES AND FITTINGS OF ALLOY STEEL AND SS MATERIAL IN STORE				
115	IBR	Signal red	3001	
116	9Cr-1Mo	Pale Green	6021	
117	5Cr-0.5Mo	Light Blue	5012	
118	$2_{1/4}$Cr-1 Mo	Luminous Yellow	1026	
119	$1_{1/4}$Cr-½ Mo	Traffic Yellow	1023	
120	SS-304	Grey Blue	5008	
121	SS-316	Blue Lilac	4005	
122	SS-321	Pigeon Blue	5014	
SAFETY COLOUR SCHEMES				
123	DANGEROUS OBSTRUCTION	Jet Black and Briht Red Orange band	9005	2008
124	DANGEROUS OR EXPOSED PARTS OF MACHINERY	Bright Red Orange	2008	

Note for Table-19:

1. As per latest DGCA guide line for ATF service color coding shall be Leaf Brown with two black bands.

2. Sr. no 104 - “All other tanks” having pure white (RAL 9010) as top coat shall have intermediate coat in colour: Signal white (RAL 9003) or Traffic White (RAL- 9016) to have lighter intermediate coat.

9.2 Ground Color

The system of colour coding consists of a ground colour and secondary colour bands superimposed over the ground colour. The ground colour identifies the basic nature of the service and secondary colour band over the ground colour distinguishes the particular service. The ground colour shall be applied over the entire length of the un-insulated pipes. For insulated lines, ground colour shall be provided as per specified length and interval to identify the basic nature of service and secondary colour bands to be painted on this specified length to identify the particular service. Above colour code is applicable for both unit and offsite pipelines.

9.3 Color band & Identification lettering (except for ATF service)

For ATF service, 2 color bands of 100 mm with 50 mm gap in between them shall be provided.

The following specifications of color bands shall be followed for identifying the piping contents, size and location of bands & letters. The bandwidth and size of letters in legends will depend to some

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extent upon the pipe diameter. Either white or black letters are selected to provide maximum contrast to the band color. Bands are spaced 25 mm apart when two bands are employed.

Outside dia of pipe or covering in mm	Width of color band in mm
19-32	200
38-51	200
64-150	300
200-250	600
Over 250	800

In addition, ground colour as per specified length should be provided on insulated piping for easy identification of nature of fluid, on which the colour bands should be painted for identification of each service. The length of the ground colour should be 3 times the width of normal band or 2 meters, whichever is suitable depending on the length of the pipe.

Size of letters stenciled/ written for equipment shall be as given below:

Column and vessel: 150 mm (Height)

Pump, compressor and other machinery: 50 mm (Height)

9.3.1 Color band

In addition, the contents of the pipe and/or direction of flow may be further indicated by arrows and legend. If a hazard is involved it must be identified clearly by legend.

The location and size of bands, as recommended, when used, shall be applied to the pipe.

• On both sides of the valves, tees and other fittings of importance.

• Where the pipe enters and emerges from walls and where it emerges from road & walkway overpasses, unit battery limits.

• At uniform intervals along long sections of the pipe.

• Adjacent to tanks, vessels, and pumps.

9.3.2 Color band specification

The location and size of bands, as recommended, when used, shall be applied to the pipe.

• Unit Area: Bands at intervals of 6.0 meters.

• Offsite Area: Bands at intervals of 10.0 meters.

• Each pipe segment will have minimum one band indication, irrespective of length.

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- The bands shall also be displayed near walkways, both sides of culverts, tanks dykes, tanks, vessels, suction and discharge of pumps/ compressors, unit battery limit, near valves of line, etc.

9.3.3 For piping, writing of name of service and direction of flow for all the lines shall be done at following locations

• The letters will be in black on pipes painted with light shade colors and white on pipes painted with dark shade colors to give good contrast.

• Only writing of service name shall be done on stainless steel lines. Precautions should be taken while painting by using low chloride content painting to avoid any damage to the stainless-steel pipes. It is preferable to use adhesive plastic tapes to protect stainless steel pipes.

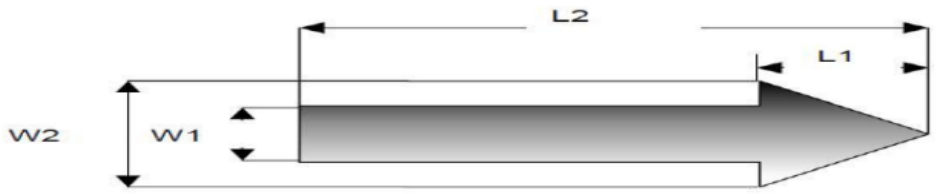
Size of Lettering and Direction Arrow shall be as follows:

Lettering

Pipe diameter	Width x Height- spacing
2" to 6" inclusive	30 x 30mm - 10 mm min.
6" to 50" inclusive	80 x 80mm - 25 mm min.
Greater than 50"	100 x 100mm - 30 mm min.

Direction arrow

Pipe Diameter	W1 (mm)	W2 (mm)	L1 (mm)	L2 (mm)
2" to 6" inclusive	10	30	45	135
6"to50" inclusive	40	80	90	270
Greater than 50"	50	100	150	450



10.0 QUALITY CONTROL, INSPECTION AND TESTING

10.1 All painting materials including primers and thinners brought to site by CONTRACTOR for application shall be procured directly from manufactures as per specifications and shall be accompanied by manufacturers' test certificates. Paint formulations without certificates are not acceptable (see section 12.0 & 13.0).

10.2 The CONTRACTOR must produce test certificate from pre-qualified paint manufacturer for various tests as detailed out in section 15.0 of this document. The Engineer-In-Charge, in consultation with SMMS, shall have the right to test wet samples of paint at random for verifying quality of paint supplied.

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CONTRACTOR shall arrange to have such tests, as instructed, performed at his cost at any one of the NABL accredited laboratories under a TPI agency.

Samples for the test will be drawn at random in presence Engineer-In-Charge or his representations. Following tests to be carried out if called:

a. Specific Gravity
b. % solids by weight (% zinc content in case of inorganic or organic zinc primer)
c. Drying time (touch dry & full curing)
d. Adhesion test on a test panel prepared at the site (ASTM D 6677).

Test methods for above tests shall be as per relevant ASTM or ISO Standard.

10.3 The painting work shall be subject to inspection by Engineer-In-Charge at all times. In particular, following stage-wise inspection will be performed and CONTRACTOR shall offer the work for inspection and approval of every stage before proceeding with the next stage. The record of inspection shall be maintained in the registers. Stages of inspection are as follows:

a. Surface preparation
b. Primer application
c. Each coat of paint

10.3.1 Following tests are to be carried out during surface preparation:

a. Test for presence of oil/grease and contamination

The steel substrate after degreasing as per SSPC-SP-1 shall be tested as per following procedure to validate absence of oil and grease contamination:

- Visual inspection - continue degreasing until all visible signs of contamination are removed.

- Conduct a solvent evaporation test by applying several drops or a small splash of residue-free tri-chloromethane on the suspect area especially pitting, crevice corrosion areas or depressed areas. An evaporation ring formation is indicative of oil and grease contamination. Continue degreasing and inspection till test is passed.

b. **Tests for surface finish of blasted surface** shall be done by visual inspection using SSPC-VIS1. Clear cellophane tape test as per ISO 8502-3 shall be used to confirm absence of dust on blasted surface. Checks shall be done on each component at least once per 200 m^2 of blasted surface and a minimum of 3 checks per shift.

c. **Test for presence of soluble salt** as per method ISO 8502-9. Maximum allowable salt content shall be considered 20 mg/m^2.Checks shall be done on each component at least once per 200 m^2 of blasted surface and minimum of 3 checks per shift. In case salt exceeds specified limit,

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the contaminated surface shall be cleaned by method as per Annexure-C of ISO 12944-4 (water cleaning). After cleaning, surface shall be retested for salt after drying.

d. **Blast Profile Measurement**: (In-Process testing during actual production before application coating). The angular profile depth measurement shall be done by profile tape as per method ASTM D 4417 method B (Profile depth gauge micrometer)/ calibrated Digital gauge meter. Spot measurement shall be carried out every 15m^2 of blasted surface. At each spot three measurements shall be taken over an area of 10 m^2 and average of measurements to be recorded and reported. If profile is less than specified range, blasting shall continue till greater specified depth profile is achieved.

e. **Tests for blasting media:** Blasting Media (For every fresh batch of media and one random test during blasting)**.** Blasting Media shall be visually inspected for absence of contamination and debris using 10 X magnification.

- Inspection for the absence of oil contamination shall be conducted using following procedure:
  - Fill a small clean 200 ml bottle half full of abrasive.
  - Fill the bottle with potable water, cap and shake the bottle.
  - Inspect water for oil film/slick. If present, the blasting media is not to be used.

- Soluble salt contamination if suspected shall be verified by method ASTM D 4940. If present, media to be replaced.

- Clean blasting equipment, especially pot and hoses, and then replace blasting media and retest.

f. **Test for Blasting Air** (Once Daily before start of blasting and once at random during Blasting). The air for blasting shall be free from moisture and oil. The compressor air shall be checked for oil and water contamination per ASTM D 4285.

In addition to above, record should include type of shop primer already applied on equipment e.g. zinc silicate or zinc rich epoxy or zinc phosphate. Any defect noticed during the various stages of inspection shall be rectified by the CONTRACTOR to the entire satisfaction of Engineer-In-Charge before proceeding further. Irrespective of the inspection, repair and approval at intermediate stages of work, CONTRACTOR shall be responsible for rectifying any defects found during final inspection/guarantee period/defect liability period as defined in general conditions of the contract. Dry film thickness (DFT) shall be checked and recorded after application of each coat and extra coat of paint should be applied to make-up the DFT specified without any extra cost to OWNER, the extra coat should have prior approval of Engineer-in-charge.

10.4 Final inspection of finished coating shall consist of the following:

Coating DFT & WFT check: DFT measurement shall be as per ISO 2808. Type-II electronic gauge shall be used as described in ASTM D7091. DFT gauge calibration, adjustment of gauge coating thickness, frequency and number of coating thickness measurement shall be as per ASTM D7091

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and SSPC-PA2. Measured DFT shall have a tolerance as per SSPC-PA-2 level-3 of the dry film thickness, specified in this specification. Once in every layer of coating application, spot checks of WFT shall be carried out during the coating application according to ISO 2808, Method No. 1A- comb gauge. This is to ensure that film thickness is being achieved as per the specification. The frequency of WFT check shall be one per 10 m^2.

Adhesion testing: Adhesion of the primer to the steel substrate and inter-coat adhesion of the subsequent coat(s) after curing for at least a week after application of the topcoat shall be examined by a knife test in accordance with ASTM D6677. For the knife test, if the rating is better than 8, the adhesion is considered acceptable. The adhesion is destructive and tested areas shall be repaired afterward using the spot repair procedure. Alternatively, the applicator may perform the adhesion test on a steel panel coated using the same surface preparation and coating application procedure as the work piece. Adhesion testing shall be carried out for each component at least once per 200 m^2 of coated surface.

Holiday detection check: Holiday testing of non-conductive coatings shall be carried out in accordance with NACE SP0188. For immersion, buried & under insulation services, 100% of coated area shall be inspected for holidays. For atmospheric exposure, 10% of coated area which must include weld seams, corners and edges to be holiday tested. Voltage at which test is to be carried out will depend upon DFT of coating being tested and shall be as per NACE SP0188. Any holiday is unacceptable and should be marked and repaired immediately**.**

The CONTRACTOR shall arrange for spot checking of paint materials for specific gravity, glow time (ford cup) and spreading rate.

11.0 PAINT MATERIAL GUARANTEE CERTIFICATE

The CONTRACTOR shall guarantee that the chemical and physical properties of paint materials used are in accordance with the specifications contained herein/to be provided during execution of work and shall submit necessary certificate of the paint material.

12.0 QUALIFICATION CRITERIA OF PAINTING CONTRACTOR/SUB-CONTRACTOR

Painting CONTRACTOR who is awarded any job for EIL, Projects under this standard must have necessary equipment, machinery, tools and tackles for surface preparation, paint application and inspection. The CONTRACTOR must have qualified, trained and experienced surface preparator, paint applicator, inspector and supervisors. The CONTRACTOR supervisor, inspector, surface preparator and paint applicator must be conversant with the standards referred in this specification.

13.0 PRE-QUALIFICATION/ACCEPTANCE CRITERIA FOR PAINT COATING SYSTEM

13.1 Pre-qualification of paint coating manufacturer and their products

Paint manufacturer meeting the following requirements shall be considered by the CONTRACTOR for supply of the paint products.

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a) Manufacturer should have been in continuous business of paint coating formulation and manufacturer for at least past 5 years.
b) Manufacturer should possess past experience of supplying products to hydrocarbon, petrochemical, fertilizer, chemical processing, offshore or heavy industry in the past 5 years.

c) Coating manufacturer should have supplied at least 10000 litre of an individual product to hydrocarbon, petrochemical, fertilizer, chemical processing, offshore or heavy industry.

d) The manufacturer's manufacturing procedure & QA/QC system shall meet ISO 9001 requirements and preferably should possess ISO 14000 certificate.

e) The Quality control set up should be manned by qualified paint technologists whose biodata should be sent along with quality control organization chart.

The Past Track record of the manufacturers as mentioned above shall be substantiated by providing relevant documents to EIL-SMMS for their review and acceptance. This shall include Work Orders, Purchase orders and ISO 9001 certification covering all the requirements mentioned from bullets a) to e) above.

CONTRACTOR shall procure the paint materials from the qualified manufacturer meeting above requirements and after obtaining prequalification testing approval as per requirements mentioned in clause 15.2 below.

13.2 Pre-Qualification Testing procedure:

The paint manufacturer engaged by the mechanical contractor shall carry out the tests in NABL accredited government laboratories or in suggested list of laboratories below, as a part of qualification. Paint manufacturer shall provide the paint samples to laboratory for testing of the parameters mentioned in Table-2 (typical characteristics) and Table-20 (tests on coating systems) of this specification. The testing laboratory will confirm the compliance of the paint material with respect to the acceptance criteria mentioned in the respective tables.

Colored photographs of coated test panels should be taken before and after the test and should be enclosed along with test report. Contractor shall furnish these test certificates along with all necessary supporting documents/information to EIL-SMMS for approval/ acceptance. The paint manufacturer will be qualified and approved by EIL-SMMS for supply of paints after review/assessment of the submissions made by the contractor. Test certificates which are more than 3 years old will not be considered. Paint manufacturers are advised to carryout pre-qualification testing accordingly for paints supply to EIL projects.

List of suggested laboratories:

1. National Test house – Kolkata
2. National Test house-Mumbai

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3. HBTU- Kanpur
4. GIRDA (Gujarat Industrial Research & Development Agency)- Vadodara
5. Indian institute of chemical technology – Hyderabad
6. RITES – Kolkata
7. ICT- Mumbai

TABLE-20: PRE-QUALIFICATION TESTING

SYSTEM No.	COATING SYSTEM	REFERENCE CLAUSE (from table-3 to 12)	TOTAL DFT µ (min)
1.	F-9+P6+F6B+F2	6.2	345
2.	F9+F12+F12	6.4	105
3.	F9+F11+F11	6.3	105
4.	F15+F15+F15	11.1.1	240
5.	F16+F16	8.3.1	250
6.	F17	9.2.1	400
7.	F8	3.1	125
8.	F20+F20	9.5.1	1100
9.	F6C+ F6C + F6C	Annexure II	675
10.	F9+F7+F7+F7	10.2.1	365
11.	F15+F6A+F6A	9.9.1	280
12.	F19+F19+F19	9.2.2	375

S. No.	TEST	FOR SYSTEM NUMBER	DURATION	ACCEPTANCE CRITERIA
1.	Cyclic Test Salt Spray : 72 hrs. Drying in air: 16 hrs. UV-A340 nm weather meter: 80 hrs. One cycle: 168 hrs. (25 cycles at 168 hrs. each cycle) (ASTM D5894)	1	4200 hrs.	Shall pass. No chalking, cracking, flaking, blistering or peeling shall be observed.
2.	Chemical Resistance Test (ASTM D543)			
2a.	10% & 40% NaOH	4, 6, 8, 10 11 & 12	1000 hrs.	Shall pass. No cracking, discoloration, blistering, peeling or softening of film shall be observed.
2b.	5% H2SO4		168 hrs.	
2c.	Xylene		4 weeks	
2d.	Acetone		4 weeks	

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2e.	Ethanol		4 weeks	
2f.	Kerosene		4 weeks	
2g.	Sea water		2000 hrs.	
3.	Immersion in DM/DI water @90^0 (ASTM C868)	4, 6, 8, 10 11 & 12	30 days	No softening, blistering or film damage.
4.	Resistance to DM water using water immersion. (ASTM D870)	9	2000 hrs.	Shall pass. No chalking, cracking, flaking, blistering or peeling.
5.	100% Humidity Test (ASTM D2247)	1 to 12 (except system-2 & 3)	1440 hrs.	Shall pass
6.	Thermal Shock Resistance Test; 5 cycles @ 30 minutes in furnace at 120 º C and 15 minutes in water after quenching in water for each cycle. (ASTM D2485 method A)	2, 3, 5, & 11 (For system-2, testing to be done after heating the panels at 400°C for 2 hrs.) & (For system-3, testing to be done after heating the panels at 250°C for 2 hrs.)	-	Shall pass
7.	Cathodic Disbondment Test (ASTM G42 @80°C)	4, 5, 10, 6 & 11	-	Diameter of cathodic

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				Disbondment < 10 mm with 6 mm diameter artificial holiday.
8.	Assessment of Adhesion and artificial ageing as per ISO 19277	4, 5, 6, 7, 11 & 12	-	Shall Pass

Each coating product to be qualified shall be identified by the Specific gravity of base and curing agent (ISO 2811). The identification shall be carried out on the batch, which is used for the pre-qualification testing.

13.3 Information to be furnished during delivery of paint materials:

CONTRACTOR along with delivery of paint material has to furnish following information from paint manufacturer to EIL for acceptance/approval of products:

a) Batch test certificates:

Along with paint products delivery to site from the pre-qualified coating manufacturer, CONTRACTOR has to produce test certificate (from paint manufacturer) for each category of product for the following test items. All test results must mention clearly the batch no. and category of product tested. Tests to be conducted for following properties:

- Specific Gravity
- % solids by weight (% zinc content in case of inorganic or organic zinc primer) ~ ASTM D521.

b) Product information sheet/ technical data sheet for each category of product.
The contractor shall be fully responsible for the quality of the paints products as per prequalification testing. After the paint materials are supplied to site, the supplier shall organize random sampling and testing in a NABL laboratory as per discretion of the Engineer-in-charge in consultation with SMMS. Failing to meet the specified quality requirements may cause rejection of the paint products.

c) Remaining Shelf life shall be at least 50% of the total duration at the time of above application of procured material by contractor / owner. However, it is preferred to have the materials from the fresh stock for better performance of coatings.

14.0 METHOD OF SAMPLING & DISPATCH FOR LABORATORY TESTING

(Pre-Qualification tests (sec. 13.2), Batch testing (sec. 13.3) and Inspection testing (sec. 10.0))

14.1 Samples of coating materials should be submitted to the laboratory in sealed containers with batch no. and test certificate on regular format of manufacturer's testing laboratory.

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14.2 All test panels should be prepared by testing laboratory. Surface preparation for a system shall be done in accordance with this specification. For individual products testing, minimum shall be Sa 2.5. Colour photographs of test panels should be taken before and after the test and should be enclosed along with test report. Sample batch no. and manufacturer's test certificate should be enclosed along with the report. Test report must contain details of observation and rusting if any, as per the testing code.

14.3 Manufacturers should intimate EIL, details of sample submitted for testing, name of testing agency, date, and contact personnel of the testing agency.

15.0 RCC PAINTING

RCC structures shall be coated with protective coatings as per the requirements laid out in respective drawings/relevant documents.

15.1 Concrete surface preparation and coating application

a. The proper surface preparation of concrete surface is critical for ensuring strong adhesion of coatings, sealants, overlays, and repair materials. The surface preparation removes contaminants, weak layers (like laitance), and provides a rough texture for mechanical bonding.

b. The prepared concrete surface should be free of contaminants, laitance, loosely adhering concrete, and dust, and should provide a sound, uniform substrate suitable for the application of protective coating or lining systems.

c. The surface preparation shall remove protrusions such as from sharp edges, fins, and concrete spatter, voids and other defects that are at or near the surface. Concrete damaged by exposure to chemicals shall be removed so that only sound concrete remains. All contamination, form-release agents, efflorescence, laitance and curing compounds shall be removed.

d. Detergent water cleaning as described in ASTM D4258 shall be used to remove oils and grease from concrete.

e. The minimum surface preparation shall be as per SSPC-SP-13, Clauses 4.3.1, 4.3.2 & 4.4. The surface preparation method, or combination of methods, should be chosen based on the condition of the concrete and the requirements of the coating system to be applied by the CONTRACTOR. Inspection testing and acceptance criteria as applicable shall be as described in sections 5 & 6 of SSPC-SP-13.

f. The DFT of the applied coating shall be checked by using ultrasonic DFT gauge in accordance with SSPC-PA-9

g. All concrete surfaces to be prepared and coated shall be visually inspected for signs of concrete defects, physical damage, chemical damage, contamination, and excess moisture.

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h. All concrete should be cured using the procedures described in ACI 308. Curing requires maintaining of sufficient moisture and temperatures for a minimum time period. The surface preparation performed on insufficiently cured or low-strength concrete may result in excessively coarse surface profile or excess removal of concrete.

i. Concrete that has been damaged because of physical forces such as impact, abrasion, or corrosion of reinforcement shall be repaired before surface preparation if the damage would affect coating performance. Repairs should be made in accordance with ACI 301, ACI 562, ACI 546.

15.2 RCC coating system

Table 21- Coating system on concrete surface

S. No	Description	Coating system	Remarks
1	RCC super structure surfaces	1 Priming coat of water based 100% Acrylic exterior emulsion anti-carbonation primer with light fast pigments and resistant to fungus and algae growth, alkali and UV degradation @ 50µ per coat + 3 coats of finish coat with water based 100% acrylic exterior emulsion anti-carbonation paint with light fast pigments and resistant to fungus and algae growth, alkali and UV degradation @ 50 µ per coat = 3×50 = 150 µ	Note 1
2	All external Cooling tower RCC surfaces and structures, which are prone to carbonization as well as algae & fungus attack due to continuous exposure of water & sea water etc.	1 Priming coat of water based 100% Acrylic exterior emulsion primer with light fast pigments and resistant to fungus and algae growth, alkali and UV degradation @ 50µ per coat + 3 coats of finish coat with water based 100% acrylic exterior emulsion paint with light fast pigments and resistant to fungus and algae growth, alkali and UV degradation @ 50 µ per coat = 3×50 = 150 µ	Note 1
3	Cooling tower internal surfaces including all the inner surfaces but not limited to walls, columns, beams, basins, sumps, channels, all RCC above fills and below fills etc.	3 coats of F-7 @ 125 µ per coat. Total DFT=375 µ	-

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Notes for Table 21:

1. Contractor shall propose suitable coating product and submit their necessary datasheet, test certificates and Past Track record for EIL review and approval.
2. No painting shall be done in rainy season.
3. Painting shall be done in given pattern in desired colors preferably bright in shades. Colour Shall be Azure Blue for RCC foundations of pumps & Equipment and Ivory for Piperack. and track. For any other RCC structures, contractors shall propose suitable color code for EIL review and approval.

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ANNEXURE-I

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SPECIFICATION FOR THERMALLY SPRAYED ALUMINIUM (TSA) COATING

1.0 SCOPE

The following sections outlines the requirement of supply, application and testing of thermally sprayed aluminum coatings (TSAC) for corrosion protection of insulated critical carbon steel, LTCS, LAS equipment like vessels, reactors, columns & equipment within the design temperature range of 200-540°C. Contractor shall establish the criticality in consultation with BPCL/EIL, and finalize the type of under insulation coating required.

2.0 ITEMS TO BE THERMALLY SPRAYED

Vessels, reactors, columns & equipment to be protected by TSAC shall be as per Table 11.0 of this specification. Components thermally sprayed shall not have any uncoated area or shall not be in mechanically connected by flanges etc. to any uncoated bare steel work. Such adjacent areas to TSA coated areas, if not coated by TSA shall have suitable paint coating system as per the standard specification.

3.0 TSAC REQUIREMENTS

3.1 Surface Preparation

All the parts to be sprayed shall be degreased according to SSPC-SP 1. The absence of oil and grease after degreasing shall be tested by method given elsewhere in the specification (Refer Sec. 6.7 of this annexure). Thereafter the surface to be abrasive blasted to white metal finish as per NACE 1/SSPC-SP 5 for marine and immersion service. Using SSPC VIS 1, it is to be visually assessed that the blast cleaned surface meets requirement of SSPC-SP 5. Thereafter clear cellophane tape test as per ISO 8502-3 shall be used to confirm absence of dust on the blasted surface. Finally blasted surface shall be tested for presence of soluble salts as per method ISO 8502-9. Maximum allowable salt content shall be considered 20mg/m^2 (2 micrograms/cm^2). In case salt content exceeds specified limit. The contaminated surface shall be cleaned by method as per Annex C of IS 12944-4 (Water Cleaning). After cleaning the surface shall be retested for salt content after drying. Testing shall be carried out at least on each component, once per 200 m^2 and a min of 3 times per shift during progress of work.

The blasting media shall be either chilled iron or angular steel grit as per SSPC-AB-3 of mesh size G-16 to G-40. Copper, Nickel slag, Garnet or Aluminum Oxide as abrasives will also be suitable having mesh size in the range of G16 to G24 (10-30 mesh), conforming to SSPC-AB-1. Mesh size shall be required as appropriate to the anchor tooth depth profile requirement and blasting equipment used. The blasted surface should be having angular profile depth not less than 65 microns with sharp angular shape but shall not exceed 85 microns. The profile depth shall be measured according to NACE standard RP 0287 (Replica Tape) or ASTM D 4417 method B (Profile depth gauge).

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For manual blasting one profile depth measurement shall be taken every 10-20 m^2 of blasted surface.

Surface preparation shall be completed in one abrasive blast cleaning operation wherever possible.

If rust bloom (visual appearance of rust) appears on the blast cleaned surface before thermal spraying, the affected area shall be reblasted to achieve specified degree of cleanliness after which only thermal spraying shall commence.

Air blasting pressure at nozzle shall be normally maintained at 100 psi. Air pressure and media size should be reduced and adjusted to preclude damage/distortion to thin gauge materials. Blasting time on work piece should be adjusted to only clean the surface and cut required anchor tooth with minimum loss of metal. Blast angle should be as close to perpendicular as possible but in no case greater than $\pm$ 30 ^{0} from perpendicular to work surface. Blasting media must be free of debris, excessive fines, and contaminants such as NaCl and sulfur salts (Ref. Sec. 6.0 of this annexure). Blast cleaning shall not be performed when the surfaces to be blasted are wet or less than 3°C above dew point temperature or when the relative humidity in the vicinity of the work is greater than 85%.

3.1.1 Blasting Equipment

The TSAC applicator shall use mechanical (centrifugal wheel) or pressure pot blast cleaning equipment and procedures. Suction blasting equipment shall not be used. Sec 6.6.2 of this annexure shall be used to validate clean and dry air.

3.1.2 Feed Stock

The feed stock shall be in the form of wire. The feed stock shall be 99.5% aluminum of commercial purity grade, its composition shall be in accordance with requirement of BS 1475 or ISO 209-1 type A1 (wrought aluminum and aluminum alloys, wire). Wire shall be supplied in protective wrapping indicating batch number and other details.

3.1.3 Thickness Requirement

The nominal thickness of finished TSAC shall be 250 microns having minimum value of 225 microns at low thickness areas (valleys) and not more than 275 microns at peak areas.

The finished thickness shall be measured using SSPC-PA 2 type 1 fixed probe gauge (Magnetic Gauge).

3.1.4 Coating Bond Strength Requirement

The TSAC coating shall have a minimum individual tensile-bond strength value of 1000 psi for flame sprayed and 1500 psi for arc sprayed coating with an average of 2000 psi for arc

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sprayed coatings. Minimum tensile bond strength should be achieved by proper anchor tooth profile of blasted surface, laying down the TSA thickness in multiple passes and carrying out TSA application under controlled environment

3.1.5 Porosity

All thermally sprayed metallic coatings will have porosity. For thermally sprayed aluminum coatings porosity shall not exceed 15% of total surface area for flame sprayed coating and 8% for arc spray coating.

4.0 Thermal Spray Application Procedure

Items in the atmospheric zone to be coated by TSA shall be applied by either Flame spray or Arc spray method only. For coating under insulation, application shall be by arc wire method.

4.1 Equipment Set Up

4.1.1 Thermal spray equipment shall be set up calibrated, operated (1) according to manufacturer instructions/technical manuals and also TSAC applicators refinement thereto and (2) as validated by Procedure Qualification (Sec 7.0 of this annexure).

4.1.2 Spray Parameters

Spray parameters (see 4.1.3 below) and thickness of each crossing pass shall be set and shall be validated with bend test (See 6.5 of this annexure).

4.1.3 Spray Parameters

Spray Parameters	Method of Application	
Arc voltage	Arc wire Spray	Flame Wire Spray
	27 V	-
Air pressure	80 psi	80 psi
Steel surface cleanliness	NACE-1 white metal	NACE-1 white metal / or near white metal
Steel surface profile	60-75 microns	60-75 microns
Arc current	250-280A	-
Coating thickness	225 microns (nominal)	225 microns(Nominal)
Coating adhesion	> 1500 psi (Total coating), see 3.1.4	>1000 psi
Coating porosity	Less than 8%	Less than 15%.
Spray distance (spray Gun work piece)	6-8”	5-7”
Spray Pass width	40mm	20 mm

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The above parameters to be validated with a bend test by the contractor before start of work (for details of bend test see Sec 6.5 of this annexure).

4.2 Post Blasting Substrate Condition and Thermal Spraying Period.

4.2.1 The steel surface temperature shall be at least 3^0C above dew point of ambient air temperature.

Steel substrate surface temperature shall be recorded by with a contact pyrometer.
Thermal spraying should commence within 15 minutes from the time of completion of blasting

4.2.2 Holding Period

Time between the completion of final anchor tooth blasting and completion of thermal spraying of blasted surface should be no more than four hours. If within this period rust bloom appears Sec 4.4.1 of this annexure will apply.

4.3 Pre-Heating

For flame spraying, the initial starting area of 1-2 square feet to be preheated to approx.120 °C to prevent condensation of moisture in the flame on the substrate. For arc spraying the preheating is not required.

4.4 Thermal Spraying

Spraying should commence only after validation of equipment set up by procedure qualification test and spray parameter validation tests described in Sec 7.0 and 6.5 respectively. Thermal spraying must commence within 15 minutes from the time of completion of blast cleaning

The specified coating thickness shall be applied in several crossing passes. The coating bond strength is greater when the spray passes are kept thin. Laying down an excessively thick spray pass increases the internal stresses in TSAC and decreases the bond strength of total TSAC. The suitable thickness for crossing passes shall be determined by procedure qualification test described in Sec 7.0 of this annexure.

For manual spraying, spraying to be done in perpendicular crossing passes to minimize thin spots in coating. Approx. 75-100 microns of TSAC shall be laid down in each pass.

The surface geometry of the item or area to be sprayed should be inspected before application. The spraying pass and sequence shall be planned according to following.

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- Maintain Gun as close to perpendicular as possible and within $\pm 30^0$ from perpendicular to the substrate.

- Maintain nominal standoff distance and spray pass width as given below:

Spray method	Standoff (Inches)	Spray pass width (Inches)
Arc Wire	6-8	1 ½ (40mm)
Flame wire	5-7	¾ (20mm)

4.4.1 Rust Bloom (Visual appearance of rust or Discoloration)

If rust bloom appears on the blasted surface before thermal spraying, the affected area shall be re-blasted to achieve the specified level of cleanliness.
If Rust bloom in form of discoloration, or any blistering or a degraded coating appears at any time during application of TSAC, then spraying shall be stopped and acceptable sprayed area shall be marked off. The unsatisfactory areas shall be repaired to the required degree of surface cleanliness and profile.
Blast the edges of the TSAC to provide for 2-3" feathered area overlaps of the new work into existing TSAC.
Then apply TSAC to the newly prepared surfaces and overlap the existing TSAC to the extent of feathered edge so that overlap is a consistent thickness.

4.4.2 Masking

Masking all those parts and surfaces which are not required to be thermally sprayed as instructed by purchaser should be inspected by applicator to ensure that they are properly marked and covered by purchaser.

Complex geometries (flanges, valve manifolds, intersections) shall be masked by applicator to minimize overspray i.e. TSAC applied outside spray parameters (primarily gun to substrate distance and spray angle).

4.4.3 TSAC Finish

The deposited TSAC shall be uniform without blisters, cracks, loose particles, or exposed steel as examined with 10 X magnification.

5.0 SEALER

Sealant shall be applied after satisfactory application of TSAC and completion of all testing and measurements of the finished TSAC as per Sec 6.0 of this annexure. For shop work, sealer shall be applied immediately after thermal spraying and for field work sealer

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shall be applied within 8 hours. The sealcoat shall be thin enough to penetrate into the body of TSAC.

The sealant shall be silicone alkyd aluminium paint having DFT not more than 35-40 micron. Typically seal coat shall be applied at a spreading rate resulting in theoretical 38 microns DFT. The seal coat shall be applied in accordance with SSPC-PA 1 and the paint manufacturer instruction for sealing.

6.0 TESTING AND MEASUREMENT SCHEDULE

6.1 Surface Finish

That the blasted cleaned surface meets the required criteria (NACE 1/SSPC-SP 5) shall be visually inspected using SSPC-VIS 1. The clear cellophane-tape test as per ISO 8502-3 shall be used to confirm absence of dust or foreign debris on the cleaned surface. Checks shall be done on each component at least once per 200 m^2 of blasted surface and minimum of 3 checks per shift.

6.2 Blast Profile Measurement: (In-Process testing during actual production before application of TSA coating)

The angular profile depth measurement shall be done by profile tape as per method NACE Standard RP 0287 or ASTM D 4417 method B (Profile depth gauge micrometer). Spot measurement shall be carried out every 15m^2 of blasted surface. At each spot three measurements shall be taken over an area of 10 cm^2 and average of measurements to be recorded and reported.
If profile is <65 microns blasting shall continue till greater than 65 microns depth profile is achieved.

6.3 TSAC Thickness (In-Process Testing For finished coating during regular production)

6.3.1 TSAC finished thickness shall be measured using SSPC-PA 2 type 1 fixed probe gauge.

6.3.2 For flat surfaces, measurements shall be taken along a straight measurement line, one measurement line for every 15 m^2 of applied TSAC shall be selected along which 5 measurements to be taken at 25 mm internal and average to be reported.

6.3.3 For curved surface or complex geometry, 5 measurements shall be taken at a spot measuring 10 cm^2 in area. One spot to be taken for every 15 m^2 of applied TSAC area.

6.3.4 The TSAC thickness in surface changes or contour changes, welds and attachments shall be also measured and reported.

6.3.5 If TSAC is less than specified minimum thickness, apply additional TSAC until specified thickness range is achieved.

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6.3.6 All locations and values of TSAC thickness measurements shall be recorded in Job Record (JR).

6.4 Tensile Bond Testing (In-Process testing for finished coating during regular production)

- Tensile Bond strength of the TSAC finish coat shall be determined according to ASTM D 4541 using a self-aligning adhesion tester.

- One measurement shall be made every 50 m^2. If tensile bond at any individual spot is less than 1000 psi for flame sprayed coating and 1500 psi for arc sprayed coating the degraded TSAC shall completely remove and reapplied.

- The tensile bond portable test instrument to be calibrated according to ASTM C 633

6.5 Bend Tests

Bend test shall be carried out at beginning of each work shift. Bend tests shall also be conducted on sample coupons before start of thermal spraying work to qualify the following as mentioned earlier in this specification.

- To qualify spray parameters and thickness of each crossing pass.

6.5.1 Test Procedure

a) Five corrosion control steel coupons each of dimension 50 mm x 150 mm x 1.3 mm thk. to be prepared.

b) Surface shall be prepared by dry abrasive blast cleaning as per this specification.

c) TSAC shall be applied as per specified thickness range. TSAC should be sprayed in crossing passes laying down approx. 75-100 microns in each pass.

d) TSAC applied coupons shall be bent 180^0 around a 13 mm diameter mandrel.

e) Bend test shall be considered passed if on bend radius there is

- No cracking or spalling or lifting by a knife blade from the substrate

- Only minor cracking that cannot be lifted from substrate with a knife blade.

f) Bend test fails if coating cracks with lifting from substrate.

6.6 Tests for blasting media, blasting air

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6.6.1 Blasting Media (For every fresh batch of media and one random test during blasting)

Blasting Media shall be visually inspected for absence of contamination and debris using 10 X magnification.

a) Inspection for the absence of oil contamination shall be conducted using following procedure:

- Fill a small clean 200 ml bottle half full of abrasive.
- Fill the bottle with potable water, cap and shake the bottle.
- Inspect water for oil film/slick. If present, the blasting media is not to be used.

b) Soluble salt contamination if suspected shall be verified by method ASTM D 4940. If present, media to be replaced.

c) Clean blasting equipment, especially pot and hoses, and then replace blasting media and retest.

6.6.2 Test for Blasting Air (Once Daily before start of blasting and once at random during blasting)

The air for blasting shall be free from moisture and oil. The compressor air shall be checked for oil and water contamination per ASTM D 4285.

6.7 Test for presence of oil/grease and contamination

The steel substrate after degreasing as per SSPC-SP 1 shall be tested as per following procedure to validate absence of oil and grease contamination.

a) Visual inspection - Continue degreasing until all visible signs of contamination are removed.
b) Conduct a solvent evaporation test by applying several drops or a small splash of residue-free trichloromethane on the suspect area especially pitting, crevice corrosion areas or depressed areas. An evaporation ring formation is indicative of oil and grease contamination.
Continue degreasing and inspection till test is passed.

7.0 TSAC APPLICATOR QUALIFICATION

Following tests to be carried out as part of procedure qualification test for the applicator.

- Thickness measurement
- Coating bond strength
- Porosity test
- Bend strength

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TSAC applicator's surface finishing and application process and equipment set up, calibration and operation shall be qualified by application of TSA on a reference sample which shall be used as a comparator to evaluate the suitability of application process. Only that applicator will be permitted to carry out the work when test specimens coated by the applicator meets the desired requirements as cited below.

The sample shall be made of a steel plate measuring approx. 18"x 18" x ¼" thick. If the actual work is less than ¼" thick then the sample to be made from material of representative thickness.

The surface preparation, TSAC application shall be made with actual field equipment and process/spray parameters and procedures as per the specification. The depth profile of blasted surface, TSAC coating thickness for each cross pass and total thickness range shall be as per specification.

The surface preparation and thermal spraying shall be carried out in representative environmental conditions spraying with makeshift enclosure.

7.1 After application of coating, thickness and tensile bond measurements shall be made in following manner.

- Divide the sample piece into four quadrants.
- Measure thickness along the diagonal line of each quadrant.
- Four each quadrant five in-line thickness measurements at 1" interval shall be done using SSPC-PA 2 type 2 fixed probe gauge. Thus, a total of four "five in line" thickness measurements to be done for the whole sample.
- One tensile bond measurement using ASTM D 4541 type III or IV portable self-aligning test instrument to be done at center of each quadrant. Total of 4 measurements for the sample.
- One porosity evaluation test by Metallographic examination shall be conducted to demonstrate the achievement of porosity within the limits specified. Sample shall be prepared for Metallographic examination as per ASTM E-3.
- The procedure shall be considered qualified if thickness and tensile-bond strength and porosity values meet the specification requirement.

7.2 Bend test: Bend test shall be carried out as detailed at sec. 6.5 of this annexure.

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Applicators thermal spray equipment set-up, operation and procedure of application including in-process QC checkpoints adopted during procedure qualification as described above should be always subsequently followed during entire duration of work.

8.0 DOCUMENTATION

The following information shall be provided by TSAC applicator before award of work.

- TSAC application process consisting of equipment capabilities and their technical parameters, feed stock material and source of procurement.

- Detailed application procedure and in-process quality control check points for (a) surface preparation (b) thermal spraying (c) seal coats.

- Type and specification of instruments to be deployed for measurement of blast profile depth, TSAC thickness and tensile bond.

- Paint manufacturer data sheet for the selected sealing coat to be applied.

- Applicator shall submit repair procedure and all relevant documents for restoring the existing TSAC which will be removed for routine maintenance/NDT testing.

9.0 RECORDS

- The TSAC applicator shall maintain job record to record production and QC information. All the results of the tests and quality control checks shall be entered in the record for each component/part thermally sprayed. All the result of tests (thickness, tensile bond, bend tests) and other validation tests (e.g. procedure qualification test, test for surface cleanliness after abrasive blasting, test for cleanliness of abrasives and air) shall also be recorded and duly signed by owner.

- All the information mentioned in Sec 8.0 above should also form part of the Job record.

- Any modification affected after procedure qualification in the procedure, QC, spray parameter, equipment spec to the original information (submitted before award of the work) must also form part of Job record.

10.0 WARRANTY

The TSAC applicator shall warrant the quality of material used by providing the purchaser with a certificate of materials used to include

- Spray feed stock: Alloy type/designation, Lot Number, wire diameter, chemical analysis, name of supplier, manufacturer.

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- Sealant: Name of manufacturer, application data sheet.

11.0 SAFETY

The TSAC applicator shall follow all safety procedures required by the purchaser/owner. Owner shall also give compliance requirement to be followed by applicator. The applicator shall follow all appropriate regulatory requirements.

12.0 CODES AND STANDARDS

This specification shall apply in case of conflict between specification and following applicable standards:

AWS C. 2.17	Recommended Practice for Electric arc Spray.
ASTM C 633	Test Method for Adhesive/Cohesive Strength of Flame Sprayed Coatings.
ASTM D 4285	Method for indicating Oil or Water in Compressed Air.
ASTM D 4417	Test Method for Field Measurement of Surface Profile of Blasted Steel.
BS 2569	Specification for Sprayed Metal Coating.
NACE Standard RP 0287	Field Measurement of Surface Profile of Abrasive Blast Cleaned Steel Surfaces Using a Replica Tape.
ASTM D 4541	Test method for Pull-Off Strength of Coating Using Portable Adhesion Testers.
ANSI/AWS C2.18	Guide for the Protection of Steel with Thermal Spray Coatings of Aluminum, Zinc and Their Alloys and Composites.
NACE No. 12/AWS C2.23M/SSPC-CS 23.00	Specification for the application of thermal spray coatings (Metallizing) of aluminum, zinc, and their alloys and composites for the corrosion protection of steel.
SSPC Publication	The inspection of coatings and linings: A Handbook of Basic practice for Inspectors, Owners, and Specifiers.
SSPC-AB 1	Mineral and Slag Abrasives.
SSPC-AB 3	Ferrous Metallic Abrasives.
SSPC-PA 1	Shop, Field, and Maintenance Painting of Steel.
SSPC-PA 2	Measurement of Dry Coating Thickness with Magnetic Gages.
NACE No. 1/SSPC-SP 5	White Metal Blast Cleaning.
NACE No. 2/SSPC-SP 10	Near –White Metal Blast Cleaning.
SSPC-VIS 1	Guide and Reference Photographs for Steel Surfaces Prepared by Dry Abrasive Blast Cleaning.

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Annexure-II

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25. CRUDE OIL TANKS PAINTINGS

25.1 Scope

This standard exclusively covers the painting of crude oil storage tanks in BORL Refinery including COT, Vadinar. This standard has been derived from existing SOP/09/11, Rev.-1 & AE-S-5430, Rev. 2 (BPCL, MR) and painting practices being followed at BPCL MR. Intent of this standard is to have better protection of Crude tanks against adverse environments.

25.2 Tank operating conditions

Operating temperature: Not above 65 degree Celsius.
Operating pressure: Ambient.

25.3 Surface preparation

The purpose of surface preparation is to create a continuous highly adherent, homogeneous and defect free paint film with an even thickness over the tank surfaces. For new painting, **all the internal & external surfaces shall be blasted to achieve the surface profile as given in Annexure – A.** Light shades and streaks are not allowed. When steel shot is used, it shall be used together with steel grit. The purpose of surface preparation is to create a continuous highly adherent, homogeneous and defect free paint film with an even thickness over the tank surface. Compressed air used shall be free of moisture and oil. Adequate separators and traps shall be provided, installed in the coolest part of the system. The presence of oil and water shall be determined at least two (2) times per eight hours and following every compressor start-up. The air discharge temperature shall not exceed 100 °C. The blasting nozzles should be venturi style with tungsten carbide or boron carbide as the materials for liners. Blasting nozzles shall be replaced when the specified minimum blast pressure, surface cleanliness and surface roughness can no longer be achieved. Blasting equipment and the equipment being blasted shall be properly earthed to prevent the occurrence of electrostatic discharges. If possible, vacuum collector shall be installed for collecting the abrasives for recycling. Recycled shot shall be used only after ensuring that it is clean enough to provide the minimum surface preparation mentioned above.

When working in confined spaces, adequate ventilation and intrinsically safe lighting shall be used. As a minimum, ventilation shall ensure sufficient air changes such that the threshold limit value (TLV) of the various coating materials in use shall not be exceeded. Access for coating work should be constructed so as to provide easy and sufficient access for surface preparation, painting and inspection of all surfaces

25.4 Recommended environment conditions for Paint Application

For all cases, paint manufacturer guidelines shall be followed. Following restrictions are given as

recommended practices:

25.4.1 Coating application shall not be permitted in the following conditions.

4.1.1 During fog, mist or rain.

4.1.2 When the relative humidity is 85 percent or above.

4.1.3 When the steel surface temperature and/or ambient temperature is below 10°C (50°F).

4.1.4 When the steel surface temperature and/or ambient temperature is above 50°C (120°F).

4.1.5 When the steel surface temperature is less than 3°C (5°F) above the dew point.

25.4.2 For all internal painting work, the dehumidification of the surrounding air dew point shall be maintained 5 degree Celsius below the prevailing surface temperature. The relative humidity shall be maintained not more than 45% from preparation to curing of coatings. It is strongly recommended to use Dehumidifiers to maintain the better conditions for painting and effective results.

25.4.3 The measurement of the following shall ensure prior to start of work and shall be done every three hours for the entire duration of the painting work and shall extend till the paint is dried and cured.

4.3.1 Relative Humidity (RH).

4.3.2 Ambient air temperature.

4.3.3 Surface temperature of the object being painted.

4.3.4 Air temperature at surrounding of the painting.

4.3.5 Air flow

25.4.4 There shall be no welding activity or radiography testing on the shell during and after installation of coating system.

25.4.5 Humidity and dew point readings shall be taken with a sling Psychometric meter and calculated using psychometric tables.

25.4.6 Coatings shall not be applied before the surface has been inspected and the preparatory work approved.

25.4.7 All edges shall be ground to a minimum radius of 3.2 mm. Flame cut areas and weld spatter shall have been ground flush. All rough welds shall be ground to remove sharp edges and other such irregularities. The amount of grinding performed shall be judicious and performed only to the extent necessary to prepare the weld surface and surrounding metal surfaces in accordance with the specification. Over grinding, which would result in

decreasing the wall thickness or the integrity of the weld beyond the limitations imposed by good welding practices, applicable welding codes, or tank or vessel ratings, shall be avoided. All weld spatter and arc strikes must be removed. (Refer NACE SP 0178).

25.4.8 Salt water spray areas shall require fresh water blasting or fresh water (Max. Chloride content 50 ppm) mopping to remove the salts deposited on metal surface before application of primer. Mopping can be repeated before application of other coats to remove salts deposited on previous coats, if such deposits are suspected.

25.4.9 Blast cleaned steel surfaces shall not be touched by bare hand.

25.4.10 If the surface being cleaned is adjacent to a coated surface, the blast cleaning shall cut in to the coated surface by at least 50 mm. The edges of the existing coating system shall be feathered. The remainder of the existing coated surface shall be properly protected with shields or screens to prevent any over blast damage.

25.4.11 To prevent dust and abrasive contamination, blast cleaning shall not be carried out adjacent to painting operations or wet (painted) surfaces.

25.5 Mixing and Painting

25.5.1 Mixing & Thinning

All paint spraying equipment, including mixers, shall be thoroughly cleaned before mixing of new materials. All coating materials shall be mixed and thoroughly stirred in accordance with the instructions of the paint Manufacturer. Sufficient agitation to maintain good mixing shall be applied until the product is used. If air is entrapped in the product during mixing/stirring, sufficient time should be allowed for the air bubbles to escape before application.

25.5.2 Application of paint/primer:

5.2.1 Blast cleaned surface shall be coated with one complete application of primer as soon as practicable but in no case later than 4 hrs. the same day or as per the time frame stipulated in the technical data sheet of the paint, whichever is earlier.

5.2.2 To the maximum extent practicable, each coat of material shall be applied as a continuous film uniform thickness free of porous. Any spots or areas missed in application shall be recoated and permitted to dry before the next coat is applied. Applied paint should have the desired wet film thickness.

5.2.3 No coat shall be applied until the preceding coat has dried and cured as

recommended by Paint Manufacturer. Next coat shall be applied within the time stipulated by the paint manufacturer. Before over coating, over-runs, drips and smears shall be removed and any coating damage or imperfection shall be repaired. The material shall be considered dry for re-coating when another coat can be applied without the development of any film irregularities such as lifting or loss of adhesion of undercoats. Drying time of the applied coat should not exceed maximum specified for it as a first coat; if it exceeds the paint material has possibly deteriorated or mixing is faulty.

5.2.4 No paint shall be force dried under conditions, which will cause cracking, wrinkling, blistering formation of pores, or detrimentally affect the conditions of the paint. No drier shall be added to paint on the job unless specifically called for in the manufacturer's specification for the paint. Paint shall be protected from rain, condensation and contamination until dry.

5.2.5 All paints and painting materials shall be stored only in rooms to be arranged by contractor and approved by Engineer-in-charge for the purpose. All necessary precautions shall be taken to prevent fire.

5.2.6 Surface preparation and paint application shall be done in presence of Manufacturer’s representative. Manufacturer’s representative shall have necessary certification from agency like NACE to supervise and ensure the quality of paint applied.

5.2.7 All personnel shall be provided with personnel protection, e.g. protective clothing, safety glasses, safety shoes, hard hats, goggles, respirators, earplugs, fresh air-fed hood and any other necessary safety equipment. All safety equipment shall be maintained in a good working condition. Warning signs shall be prominently displayed at all access points to areas where abrasive blasting and painting is in progress.

5.2.8 The Contractor shall protect all equipment, structures and any other areas from mechanical damage, environmental damage, blockage or obstruction and damage caused by over blasting, dripping paint, paint splashes and overspray.

5.2.9 To minimize the risk of damage, no lifting, transportation, erection or fabrication operations shall be done before the paint has been fully dried and/or cured.

5.2.10 Abrasive blast cleaning and coating operations should be carried out during daylight hours. However, grit blasting and coating may be carried out at night providing the lighting and environmental conditions are acceptable. Minimum lighting requirements for abrasive blasting, painting and inspection are 500 lux.

5.2.11 For internal tank coatings and the external coatings of buried or immersed equipment and structures, pinhole testing for electrically non-conductive coatings shall be carried out in accordance with NACE SP0188. The high voltage technique shall be used; nominally set at 5 V/µbased on DFT, or as agreed with the paint Manufacturer but not exceeding 25 kV in total. For coating thickness < 500 µ DFT, the low voltage wet sponge technique shall be used.

25.5.3 Spray application

Spraying is the required method of application. The painting Contractor shall supply the required range of spray tips, sizes and fan angles for the work being undertaken. The spray pressure shall be uniform and the spray pattern smooth.

25.5.4 Brush application

Brush application may be done for Maintenance operations, in those cases where spray application may affect other plant, equipment, property or personnel in or near the work site. Where the coating product is specified as only being suitable for brush application. Manufacturer shall confirm in writing that paint is suitable for brush application and will able to meet the guarantee period. Brush application shall be done only with concurrence of Engineer in charge. Coatings applied by brush shall be smooth and even

25.5.5 Roller application

Roller application shall only be allowed for steel floors and for panels and equipment inside climate-controlled areas. Rollers shall be of good quality to ensure uniformity of the applied coating.

25.5.6 Stripe coat

Before spray application of each coat, irregular surfaces such as sharp edges, welds, small brackets, interstices etc. shall be stripe-coated, usually by brush, to ensure the specified film thickness is provided. Stripe coat shall be applicable in all the painting systems.

25.5.7 Repair of coating defects

Damaged areas, defects in the coating system such as over-runs, drips and smears that have to be removed or areas with inadequate dry film coating thickness shall be re-cleaned. The re-cleaning shall carry over on to the sound coating for not less than 50 mm all round, the edges of which shall be feathered.

After the surface cleaning, the specified coating system shall be re-applied. Any additional coats shall blend in with the final coating at adjoining areas. Paint Manufacturers shall be consulted if the existing coating requires abrading before over-coating to obtain good bonding.

25.5.8 Only thinners specified by the paint Manufacturer shall be used

25.6 Paint Procurement

Painting Contractor shall procure paint material from BORL approved manufacturers only.

25.7 Inspection and testing

25.7.1 Refer **section 18** or point no. **25.12** for testing of paint material

25.7.2 Minimum suggested stages of inspection shall be:

a. Surface Preparation
b. Primer application
c. Each coat of paint

25.7.3 All defects noticed during stages of inspection, shall be rectified free of cost by the contractor. All records shall be kept by the contractor.

25.7.4 Wet film thickness measurements shall be made throughout the course of painting in order to ascertain the adequacy and uniformity of thickness. The readings shall be taken at least one every ten (10) square meters.

25.7.5 Dry film thickness shall be taken on each coat after drying and curing of the coat. Dry film thickness (DFT) readings shall be taken using a non-destructive dry film thickness instrument capable of storing the readings. Sufficient readings shall be taken covering each coat prior to application of the following coat to ensure the correct required DFT.

25.7.6 The DFT indicated against each system shall be obtained by applying one or more coat of the paint based on paint properties. The Contractor is responsible to obtain the indicated DFT as per painting system specification.

25.7.7 DFT meter used shall be calibrated before each inspection and shall be witnessed by the Inspector. It is the duty of the Inspector to satisfy him/herself with the performance of the DFT meter.

25.7.8 Criteria for acceptance of painting work shall be in accordance with table – 2.

TABLE - 2

Test	Standard	Frequency	Acceptance criteria
Surface cleanliness	ISO 8501-1	One per ten (10) square meters	Sa 2 ½
Surface Profile	ISO 8503-2	One per ten (10) square meters	As per coating procedure / data sheet
Total Soluble salt contamination [1]	ISO 8502-9	One per twenty (20) square meters or minimum 5 tests whichever is more.	<5 g/cm^2
Dust	ISO 8502-3	One per ten (10) square meters	Rating 2 or better
Adhesion	ISO 4624	One pretest panel, per shift	5 MPa
Holiday Detection	NACE SP0188	100% of surface	Zero defects
Dry Film Thickness [1]	SSPC PA-2	As per Annexure - F	Shall not be less than 80 % and more than 120 % of the Specified dry film thickness. (DFT).
Wet Film Thickness	ISO 2802	One per ten (10) square meters	Consistent with providing required DFT

25.8 Painting Contractor's Responsibility

25.8.1 Contractor shall mobilize the adequate capacity dehumidification unit at site for all internal painting work, if required. The surrounding air dew point shall be maintained 5 degree Celsius below the prevailing surface temperature. The relative humidity shall be maintained not more than 45% from preparation to curing of coatings.

25.8.2 The contractor shall ensure proper functioning of the dehumidification unit, measuring RH and temperature, measuring air flows and maintained 24 hours till coating work is completed in the tank.

25.8.3 All paints and consumables for a particular tank painting work shall be sourced from one manufacturer only to have desired paint performance, guarantee and single point responsibility.

25.8.4 Painting contractor shall deploy adequate number of NACE CIP Level 2 qualified

coating Inspectors to supervise, monitor, inspect & control entire painting process right from the surface preparation, storage, handling, mixing and application on substrate of the painting/coating and to ensure the compliance of this specification. These qualified painting inspectors will report to and shall get guided by BORL Inspection Dept.

25.8.5 Each contractor shall possess relevant standards and deploy all inspection tool/instrument to carry out the all above inspection and testing as per relevant standard.

25.8.6 Organizing of testing all the painting parameters, supply of all the testing instruments, consumables for testing each parameter as defined in clause 7.10 above, including getting accepted by BORL, shall be the responsibility of painting contractor.

25.8.7 The Inspection test plan which will be mandatory part of the contract shall be prepared by the above qualified coating inspector and get it approved by BORL inspection department. The Contractor's qualified coating inspector and BORL shall sign an inspection report as per approved inspection test plan.

25.8.8 The report shall consist, as a minimum, of the following in addition to the inspection parameters and acceptable criteria:

8.8.1 Names of the applicator and the responsible personnel.
8.8.2 Dates when work was carried out.
8.8.3 Paint testing parameters tested
8.8.4 Equipment and techniques used.
8.8.5 Type and calibration of instruments used.
8.8.6 Weather and ambient conditions.

25.9 Frequency and Guarantee of painting

25.9.1 Frequency of Crude oil tanks Painting system for both internal and external painting shall be once in 10 years.

25.9.2 Painting Contractor shall furnish Guarantee for minimum 10 years for both internal and external painting with shot blasting as per Annexure – B, C, D & E.

25.9.3 BORL reserves the right to invoke the guarantees in case contractor (paint applicator) or contractor fail to repair the paint failed area within reasonable time.

25.10 Painting system

25.10.1 The painting system shall be as mentioned in Annexure – A.

25.10.2 No painting is considered for roof legs for new tanks. Roof legs to be hot dip galvanized. Schedule 80 pipes to be used for both roof legs and sleeves. The sufficient clearance shall be ensured between sleeves and roof legs. However, painting shall be as per directions & recommendations of inspection in case of Old roof legs with CS pipes or as applicable.

25.11 SIGN WRITING

All painting work information shall be mentioned (sign writing) with date of completion on Tank shell as per Engineer-in-charge instructions.

25.12 INSPECTION AND TESTING OF PAINTING MATERIAL

25.12.1 All the procured paint material along with batch/test certificates shall be offered for BORL inspection for approval. Remaining Shelf life shall be at least 90% of the total duration at the inspection above.

25.12.2 All paint materials shall be accompanied by Manufacturer Test Certificate. Inspection Engineer at his discretion may test paint formulations, if required.

ANNEXURE – A

THIS PAINTING SYSTEM SHALL BE APPLICABLE FOR CRUDE TANKS AT COT VADINAR FOR ALL EXTERNAL PAINTINGS EXPOSED TO ENVIRONMENT AND FOR CRUDE TANKS AT BINA REFINERY FOR TOP SHELL COURSE PAINTING (FREE BOARD) & EXPOSED PORTION OF FLOATING ROOF
(APPLICATION - AIRLESS SPRAY)

SR. NO.	SURFACES	SURFACE PREPARATION	SURFACE PROFILE	PRIMER	FINISH COAT	TOTAL DFT, MICRONS
1	Bottom plate under side (soil side)	Blast cleaning with grit and shot to Sa 2.5	Profile of 40-70 microns	1 Coat of F-15@ 100 DFT/Coat	2 Coats of F-15@ 100 DFT/Coat 2x100 = 200	300
2	Top shell internal 100 mm above top of shunt of secondary seal marked at safe filling height during hydro test. (Free Board area)	Blast cleaning with grit and shot to Sa 2.5	40 microns	1 coat of F9 (VS 65%; 85% zinc on dry film minimum) – 1X 70 Microns DFT + 1 coat of P-6 @ 40µ DFT/ coat	1) Low VOC (Volatile Organic Compounds) two component internally flexibilised high build surface tolerant epoxy suitably pigmented coating – 2 X 125 µ - Note 1 2) F2- One (1) coats of aliphatic acrylic polyurethane with minimum 55% vol solids - 2 x 40 microns DFT.(in approved colour only)	400

SR. NO.	SURFACES	SURFACE PREPARATION	SURFACE PROFILE	PRIMER	FINISH COAT	TOTALDFT, MICRONS
3	a) Shell external surface. b) Vertical Gauging band.	Blast cleaning with grit and shot to Sa 2.5	40 microns	1 coat of F9 (VS 65%; 85% zinc on dry film minimum) – 1X 70 Microns DFT + 1 coat of P-6 @ 40µ DFT/ coat	1) Low VOC (Volatile Organic Compounds) two component internally flexibilised high build surface tolerant epoxy suitably pigmented coating – 2 X 125 µ - Note 1 2) F2- Two (2) coats of aliphatic acrylic polyurethane with minimum 55% vol solids - 2 x 40 microns DFT.(in approved colour only)	440

SR. NO.	SURFACES	SURFACE PREPARATION	SURFACE PROFILE	PRIMER	FINISH COAT	TOTALDFT, MICRONS
4	Roof deck plates top surface (Floating roof top surface)	Blast cleaning with grit and shot to Sa 2.5	40 microns		1) Two component Amine / Amine adduct cured high solid glass flake epoxy coating (in conformance to ISO 20340) – 2 X 300 micron DFT – Note- 1 2) F2- Aliphatic acrylic modified high solids weather resistant recoatable two pack polyurethane (finish coat) – 2 X 40 micron DFT	680
5	Pontoon inside surface	SSPC-SP10 / SA 2 ½ **OR** SSPC – SP2/ST2	Not applicable	1 coat of F9 (VS 65%; 85% zinc on dry film minimum) – 1X 70 Microns DFT **OR** 1 Coat of F-8 @ 100µ DFT/Coat	1) Low VOC (Volatile Organic Compounds) two component internally flexibilised high build surface tolerant epoxy suitably pigmented coating – 2 X 125 µ - Note 1	320 **OR** 350

SYSTEM FOR EXTERNAL PAINTING OF CRUDE TANKS AT BORL, BINA REFINERY (EXCEPT FREE BOARD INTERNAL AND FLOATING ROOF TOP SURFACE WHICH SHALL BE AS PER ABOVE TABLE)

SR. NO.	SURFACES	SURFACE PREPARATION	SURFACE PROFILE	PRIMER	FINISH COAT	TOTALDFT, MICRONS, MIN
1	External surfaces of bottom plate (soil side) for Crude tanks.	Blast cleaning with grit and shot to SA 2.5	Profile of 40-70 microns	1 Coat of F-15@ 100 DFT/Coat	2 Coats of F-15@ 100 DFT/Coat 2x100 = 200	300
2	External shell, wind girders, rolling and stationary ladders, spiral stairways, hand rails for all environments for crude oil	Blast cleaning with grit and shot to SA 2.5	Profile of 40 microns	1 coat of F-9 @ 65-75µ + 1coat of P6 @ 40 µ DFT / coat	2 coats of F-6A @ 100µ DFT /coat + 1 coat of F-2 @ 40µ DFT/ coat	345

SYSTEM FOR INTERNAL PAINTING OF CRUDE TANKS AT BPCL, BINA REFINERY (EXCEPT FREE BOARD) & AT COT, VADINAR (FOR INTERNAL FREE BOARD SECTION OF CRUDE TANK AT BORL, BINA, REFER ABOVE TABLES)

SR. NO.	SURFACES	SURFACE PREPARATION	SURFACE PROFILE	PRIMER	FINISH COAT	TOTALDFT, MICRONS, MIN
1	Underside of floating roof, oil side surface of pontoons, support structures and ladders and other CS internals etc, inside of bottom plate, internal surface of bare shell for 1.5 mtr from bottom , for storing **Crude Oil and Crude + Water Tank (52-TT-CR-15).**	Blast cleaning with grit and shot to SA 2.5	Profile of 40 microns	1 coat of Primer @ 75 µ DFT/ coat (Primer shall be compatible with F-6C & F-6C should be suitable for immersion service of products given) Note-1	2 Coats of F-6C @ 300µ DFT/ Coat 2X300=600	675

SR. NO.	SURFACES	SURFACE PREPARATION	SURFACE PROFILE	PRIMER	FINISH COAT	TOTALDFT, MICRONS, MIN
2	Internal surfaces of bare shell above 1.5 mtrs from bottom including underside of cone roof and supporting structures for Crude + Water Tank (52-TT-CR-15).	Blast cleaning with grit and shot to SA 2.5	Profile of 40 microns	1 Coat of F-15 @ 100 µ DFT/Coat	2 Coats of F-15 @ 100µ DFT/ Coat 2X100=200	300
3	Inside surface of pontoon of all floating roofs.	Blast cleaning with grit and shot to SA 2.5		1 Coat of F-8 @ 100µ DFT/Coat	1 Coat of F- 8 @ 100µ DFT/Coat	200

Notes

1) Contractor shall submit suitable product datasheet, PTR and test certificate, for EIL review and approval.
2) Stripe coat is must for weld area, edges and corners.
3) Over zinc silicate, intermediate coat to be applied in mist coat and full coat technique.
4) In PU paint of silver shade, total thickness to be built in two coats.
5) For PU paint QUVA 340 requirement of 80 % gloss retention after 3000 hrs.
6) All sharp edges to be grinded well before painting.
7) Pitted area having width greater than 2mm or depth greater than 5 mm to be filled with solvent less polyamine adduct cured epoxy.
8) Camouflaging not to be do

Annexure-III

Paint Inspection
Daily Coating Inspection Report

Date: / / Su M Tu W Th F Sa		Pg ____ of ____
Project #:		Copy to: QC Super Owner Contr ____
Inspector:		
Project/Client:		
Location:		Attachments: DFT Sheet NCR/CAR ____
Description:		
Requirements:		
Contractor:	Spec #:	Revision #:

Description of Areas and Work Performed

Hold Point Inspections Performed

- ☐ 1. Pre Surface Preparation/Condition and Cleanliness
- ☐ 2. Surface Preparation Monitoring
- ☐ 3. Post Surface Preparation/Cleanliness and Profile
- ☐ 4. Pre Application Prep/Surface Cleanliness
- ☐ 5. Application Monitoring/Wet Film Thickness (WFT)
- ☐ 6. Post Application/Application Defects
- ☐ 7. Post Cure/Dry Film Thickness (DFT)
- ☐ 8. Nonconformance/Corrective Actions Follow-Up
- ☐ 9. Final Inspection

Approved by:

Surface Conditions

- ☐ New ☐ Maint ☐ Primer/Paint ☐ Age/Dry/Cure ____
- ☐ Steel ☐ Galvanize ☐ Concrete ☐ Other ____
- ☐ Hazard ____ ☐ Sample Report # ____
- ☐ Degree of contamination: ____
- Test: ☐ Cl ____ µg/cm² (µs/cm) ☐ Fe ____ ppm ☐ pH ____
- ☐ Degree of Corrosion: ____
- ☐ Scale ☐ Pitting/Holes ☐ Crevices ☐ Sharp Edges
- ☐ Weld ____ ☐ Moisture ☐ Oils ☐ Other ____
- ☐ Painted Surface Condition: ____
- Dry to: ☐ Touch ☐ Handle ☐ Recoat
- ☐ Dry/Over Spray ☐ Runs/Sags ☐ Pinholes ☐ Holidays
- ☐ Abrasion ☐ Fall Out ☐ Other ____

Ambient Conditions

Time (Indiciate AM or PM)	:	:	:	:
Dry Bulb Temp° (C/F)	°	°	°	°
Wet Bulb Temp° (C/F)	°	°	°	°
% Relative Humidity	%	%	%	%
Surface Temp° (C/F) Min/Max	/ °	/ °	/ °	/ °
Dew Point Temp° (C/F)	°	°	°	°
Wind Direction/Speed				
Weather Conditions				

Surface Preparation

Start Time: Finish Time: Est Sq Ft:

- ☐ Solvent Clean ☐ Hand Tool ☐ Power Tool
- ☐ HP Wash PSI ____ ☐ Other ____
- ☐ Abrasive Blast ☐ Abrasive Type ____ ☐ Sample
- ☐ Blast Hose Size ____ ☐ Nozzle Size/PSI ____
- ☐ Air Supply CFM ____ ☐ Air Supply Cleanliness
- ☐ Water/Oil Trap Check ☐ Equipment Condition Check

Surface Cleanliness and Profile Measurement

- ☐ Job Specification ☐ SSPC/NACE SP ____
- ☐ SSPC/NACE Spec/Visual Stds ☐ ____
- ☐ Profile Check ____ ☐ Disc ☐ Tape ☐ Gage
- ☐ Specified ____ mils avg/Achieved ____ mils
- ☐ Surface Effect on DFT Gage/BMR ____ mils

Application

Start Time: Finish Time: Est Sq Ft:

☐ Primer ☐ Intermediate ☐ Topcoat ☐ Touch-Up

Generic Type:	Qty Mixed:
Mfr:	Mix Ratio:
Prod Name:	Mix Method:
Prod #:	Strain/Screen:
Color:	Material Temp: °F
Kit Sz/Cond:	Sweat-In Time: Min/Hrs
Shelf Life:	Pot Life: Min/Hrs
Batch #s	Reducer #:
(A)	Qty Added: Pt/Qt/Gal
(B)	% by Vol: %
(C)	Specified WFT Avg: Mils
Reducer:	Achieved WFT Avg: Mils

☐ Airless/Conv Spray ☐ Brush ☐ Roller ☐ Other ____

Pump Pot:	Hose Diameter:	Air Check:
Ratio/Size:	Hose Length:	SEP/Trap:
GPM/CFM:	Spray Gun:	Filter:
PSI:	Tip Size:	Agitator:

Inspector Signature: Date:

Dry Film Thickness (DFT) Gage Calibration Record

Gage Type/ Model	Gage Serial #	Plate/Shim Mils/µm	Gage Adj +/–	Spec Avg DFT	DFT Last Coat	DFT This Coat

पेट्रोलियम रिफाइनरी वातावरण में सॉर सर्विस में इतेमाल होने वाले कार्बन स्टील अवयवों हेतु सामग्री अपेक्षा

MATERIAL REQUIREMENTS FOR CARBON STEEL COMPONENTS USED IN SOUR SERVICE IN PETROLEUM REFINERY ENVIRONMENTS

Rev. No	Date	Purpose	Prepared by	Checked by	Approved by: Standards Committee Convenor	Approved by: Standards Bureau Chairman
3	27.03.26	REVISED & ISSUED AS STANDARD SPECIFICATION	NS	PVC	PS	NK
2	05.07.19	REAFFIRMED AND RE-ISSUED	SM	DD	SG	RKT
1	07.10.11	REVISED & ISSUED AS STANDARD SPECIFICATION	AR	SG	PPL	DM
0	07.10.04	REVISED & ISSUED AS STANDARD SPECIFICATION	GM	VRK	KKM	SKG

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Abbreviations:

ANSI	:	American National Standards Institute
API	:	American Petroleum Institute
ASME	:	American Society of Mechanical Engineers
ASTM	:	American Society for Testing and Materials
ISO	:	International Organization for Standardization
NACE	:	National Association of Corrosion Engineers

SMMS Standards Committee:

Convener : Mr. Prasenjit Saha

Members :
Mr. Udayan Chakravarty (Piping)
Mr. Dipak Panchal (Project)
Mr. R Muthu Ramalingam (SCM)
Mr. MS Gunjiyal (Pipelines)
Mr. Prag Goel (Fired Heaters)
Mr. Tarun Kumar (SME)
Dr. Arijit Roy (SMMS)
Mr. Indrajit Neog (Construction)
Mr. Prasenjit Pal (SMMS)
Mr. Satya Sridhar (SMMS)
Mr. Biswarup Sarkar (SMMS)
Mr. Prabhakar Chowdhary (SMMS)
Mr. Samiran Das (SMMS)

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1.0 SCOPE

1.1 Wherever this standard is specified, NACE International Standard MR0103(latest editions) shall be complied. In addition, where Hydrogen Induced Cracking (HIC) resistant carbon steel is specifically mentioned in the process documents, this specification shall be followed for complying HIC requirements.

1.2 This specification lays down the requirements related to the chemical composition, manufacture, fabrication and testing requirements for carbon steel components intended to be used in sour service in petroleum refinery environments. These requirements are specified in order to make the carbon steel component resistant to the various forms of material damage in a sour environment, such as Sulfide Stress Cracking (SSC), Hydrogen Induced Cracking (HIC), Stress Oriented Hydrogen Induced Cracking (SOHIC), Blistering etc. These requirements can be used for resisting Alkaline Stress Corrosion Cracking (ASCC) also. This specification is applicable for corrosive petroleum refining facilities.

1.3 The service medium is defined as "Sour" when the service environment conforms to one of the following conditions, as defined in NACE International Standard MR0103:

Service environments containing free water (in liquid phase) and

(a) >50 ppmw dissolved H_2S in the free water,

(b) Free water pH < 4 and dissolved H_2S present,

(c) Free water pH >7.6 and ≥20 ppmw dissolved hydrogen cyanide (HCN) in the water and dissolved H_2S present,

(d) > 0.0003 MPa absolute (0.05psia) partial pressure H_2S in the gas phase associated with aqueous phase of a process.

2.0 REFERENCED CODES/STANDARDS

Standard Number	Title
NACE MR 0103	Petroleum, petrochemical and natural gas industries — Metallic materials resistant to sulfide stress cracking in corrosive petroleum refining environments
ASTM A 694	Standard Specification for Carbon and Alloy Steel Forgings for Pipe Flanges, Fittings, Valves, and Parts for High-Pressure Transmission Service
ASTM A 770	Standard Specification for Through-Thickness Tension Testing of Steel Plates for Special Applications
NACE RP 0472	Methods and Controls to Prevent In-Service Environmental Cracking of Carbon Steel Weldments in Corrosive Petroleum Refining Environments
ASTM A 216	Standard Specification for Steel Castings, Carbon, Suitable for Fusion Welding, for High-Temperature Service

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Standard Number	Title
ASTM A 370	Standard Test Methods and Definitions for Mechanical Testing of Steel Products
NACE Publication 8X194	Materials and Fabrication Practices for New Pressure Vessels Used in Wet H2S Refinery Service
NACE Publication 8X294	Review of Published Literature on Wet H2S Cracking of Steels through 1989
ASTM A 106	Standard Specification for Seamless Carbon Steel Pipe for High-Temperature Service
ASTM A 578	Standard Specification for Straight-Beam Ultrasonic Examination of Rolled Steel Plates for Special Applications
NACE TM 0284	Evaluation of Pipeline and Pressure Vessel Steels for Resistance to Hydrogen-Induced Cracking
API 5L	Specification for Line Pipe
ASME SEC II PART C	Specifications for Welding Rods, Electrodes, and Filler Metals
ASTM A 20	Standard Specification for General Requirements for Steel Plates for Pressure Vessels
API 6A	Specification for Wellhead and Christmas Tree Equipment
ASME SEC VIII-DIV.1	Rules for Construction of Pressure Vessels Division 1
ASTM A 516	Standard Specification for Pressure Vessel Plates, Carbon Steel, for Moderate- and Lower-Temperature Service
ASTM E 18	Standard Test Methods for Rockwell Hardness of Metallic Materials
ASME SEC IX	Welding, Brazing, and Fusing Qualifications
ASTM A 105	Standard Specification for Carbon Steel Forgings for Piping Applications
ASTM E 45	Standard Test Methods for Determining the Inclusion Content of Steel
ANSI B 16.34	Valves Flanged, Threaded, and Welding End
ASTM A 234	Standard Specification for Piping Fittings of Wrought Carbon Steel and

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Standard Number	Title
	Alloy Steel for Moderate and High-Temperature Service
ASTM E 92	Standard Test Methods for Vickers Hardness and Knoop Hardness of Metallic Materials
ANSI B 31.3	Process Piping

All ASTM Standard designations shall be applicable for corresponding ASME designations which would be read as ASME SA XXX instead of ASTM A XXX.

3.0 GENERAL REQUIREMENTS

3.1 The steel for sour service shall be manufactured by either basic oxygen or electric arc furnace route and shall be fully killed and fine grained.

3.2 Carbon steel shall not contain intentional additions of elements such as lead, selenium or sulphur to improve machinability.

3.3 Carbon steel shall be used in one of the following heat treatment conditions.

(i) Hot-rolled
(ii) Annealed
(iii) Normalised
(iv) Normalised and tempered
(v) Normalised, austenitised, quenched and tempered
(vi) Austenitised, quenched and tempered.

3.4 All material after cold forming shall be thermally stress relieved to meet a hardness requirement of 200 BHN maximum.

3.5 All products shall be free of low temperature transformation microstructures such as bainite bands or islets of martensite.

4.0 MATERIAL SPECIFICATION

All items are required to conform to the chemical composition of the respective specification as listed below.

Plate: ASME SA516 Gr.60

Pipe: ASME SA106 Gr. B or SA333 Gr.1 or 6

Forgings: ASME SA105 or SA350 Gr.LF1 or LF2 or SA266 Class 1

Fittings: ASME SA234 Gr. WCB or SA420 Gr.WPL6

Castings: ASME SA216 Gr. WCA, WCB or WCC or SA352 Gr. LCA, LCB or LCC

Tubing: ASME SA179 or SA214

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5.0 PRODUCT SPECIFIC HIC REQUIREMNTS

5.1 Plates and Rolled Products

All rolled products such as plates and sheets and fittings / pipes made of rolled products shall be HIC resistance steels and meet the following specific requirements, Whereas forgings, castings, seamless pipes are exempt from HIC concerns.

5.1.1 The steel shall be made through a clean steel making route and shall have minimum of inclusions.

5.1.2 The sulphur level shall be restricted to 0.002 wt%.

5.1.3 The steel shall be calcium treated for inclusion morphology control and the Ca/S ratio shall be in the range of 2 to 3. When sulphur content is less than 0.0015%, then Ca/S ratio is not applicable and calcium can be present up to 50 ppm.

5.1.4 For plates including and above 25 mm thick, through-thickness tensile testing shall be carried out in accordance with ASTM A770, with minimum reduction in area being 35% as determined in accordance with ASTM A370, on one plate per heat.

5.1.5 No repair welding shall be permitted on plates.

5.1.6 When the fabrication of the components from the previously HIC tested plates involves no heavy wall thickness reduction or material flow, such as bending, spinning or welding, no fresh HIC test would be required on the final product. However, for fabrication of products where heavy reduction of thickness and heavy flow of material is encountered while forming such as like forging, extrusion or drawing, metallographic examination of the final product shall be required to be carried out to ensure absence of elongated inclusions.

5.1.7 The plates shall be procured only from pre-qualified manufacturers.

5.2 Pre-qualification criteria for manufacturers/suppliers with prior experience track record

The manufacturers/suppliers who have proven track record of supplying materials for sour service applications in petroleum refineries to any of the process licensors such as UOP/IFP/EXXON/BP/CHEVRON or any of the reputed operating companies/consultants like ONGC/IOCL/HPCL/BPCL/EIL will be considered as 'pre-qualified manufacturers", on production of the relevant purchase orders and test certificates, certified by a witnessing third party inspection agency such as DNV/LLOYDS/BV/ABSTECH/TUV/SGS/CEIL for the conformance of the materials to the respective materials specification of the mentioned operators/engineering consultants. For pre-qualified vendors, Clause No. 5.4 is not applicable.

5.3 Pre-qualification criteria for new manufacturers/suppliers without track record

The manufacturers/suppliers who have no track record of supplying sour service materials to any of the process licensors or the reputed operating companies/consultants as mentioned in Clause No. 5.2 above, shall be considered as new manufacturers and shall be subjected to the elaborate pre-qualification by any one of the reputed third party inspection agencies like DNV/LLOYDS/BV/ABSTECH/TUV/SGS/CEIL as per the requirements of NACE MR0103 (latest edition)

5.4 Hydrogen Induced Cracking (HIC) Test

The requirements for HIC test shall be as follows.

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(i) This test is required for manufacturers pre-qualification only.

(ii) This test shall be performed on a set of three specimens representing each production batch/heat of rolled products in accordance with NACE TM0284 with the following acceptance criteria:

(a) Crack Length Ratio (CLR) $\leq$ 10.0%
(b) Crack Sensitivity Ratio (CSR) $\leq$ 1%
(c) Crack Thickness Ratio (CTR) $\leq$ 1.5%

(iii) In case of failure of any one of the specimens, three (3) more specimens from the same product shall be retested and all the specimens shall meet the acceptance criteria. In case of failure of any retest sample, the material shall be rejected.

6.0 POST WELD HEAT TREATMENT (PWHT) AND HARDNESS REQUIREMENT

All the weld joints, irrespective of thickness, shall be given a post weld heat treatment. The temperature range for PWHT is 595-650°C with a close control. Other aspects such as rate of heating, holding time etc. for PWHT shall be as per ASME Sec.VIII, Div.I /ANSI B31.3 requirements. The hardness of the weldment after PWHT shall be 200 BHN maximum.

PWHT may be waived off for socket welds and butt joints of valve size 1.5" and below as high temperature may damage the soft seat. Welding procedure for such joints shall demonstrate the cross-section hardness of the weld do not exceed RC22.

PWHT of components made out of Thermo Mechanically controlled plates (TMCP) is not required. However, hardness of weldment shall not exceed RC22.

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ADDITIONAL TECHNICAL REQUIREMENTS (FITTINGS- (CS, LTCS & CS- EPOXY COATED))

Rev. No	Date	Purpose	Prepared by	Checked by	Approved by
D	28/04/2026	ISSUED FOR BIDS	AS	MP/DG	RKG
C	07/04/2026	ISSUED FOR BIDS	AS	MP/DG	RKG
B	19/03/2026	ISSUED FOR BIDS	AS	MP/DG	RKG
A	25/02/2026	ISSUED FOR BIDS	AS	RR/DG	RKG

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1. Bidder to note that no correspondence whatsoever shall be entered into or entertained after the bid submission.

2. Bidder shall furnish quotations only for those items, for which he is approved by EIL and which he can supply strictly as per MR specifications.

3. **No technical details of any nature shall be included in the offer. If the offer contains any technical deviation or clarification or stipulates any technical specifications (even if in line with the MR requirements), the offer shall be liable for rejection**.

4. The submission of prices by the bidder shall be construed to mean that he has confirmed compliance with all technical specifications of the corresponding item(s).

5. Bidder shall ensure compliance to all the specifications/documents as per "List of Attachment" attached with the Material Requisition Doc. No.- B933-000-WD-MR-3213.

6. Fittings specified with 'Epoxy Coated' as per Specification No. B957-000-06-42-PLS-01.

7. EIL approved fitting manufacturers shall bid against this MR with coating applicator, fulfilling the coating requirements as stated in Doc. No. B957-000-06-42-PLS-01.

8. For Fittings under "**IBR"** category shall meet the requirements of Indian Boiler Regulation & all amendments as specified in technical notes of Fittings (Doc. No.-6-44-0054)**.**

9. For Fittings under "**NACE"** category shall meet the requirements of **NACE MR0103.**

10. For Fittings under "**H2"** category shall meet the requirements of technical notes of Fittings (Doc. No.-6-44-0054)**.**

11. For Fittings under "**LT"** category shall meet the requirements of technical notes of Fittings (Doc. No.-6-44-0054)**.**

12. For Fittings under **"HIC1" (NACE + HIC)** shall be met as per following:

    a) NACE category shall meet the requirements of **NACE MR0103.**

    b) HIC category Requirement as defined in "Material requirements for carbon steel components used in sour service in Petroleum Refinery Environments" (Doc No. 6-79-0013).

    c) Refer Clause 4.7 of technical notes for Butt Welded, Socket Welded and Screwed Fittings (6-44-0054), in addition to the services mentioned in this clause, the fittings under "HIC1" shall be painted one stripes of canary yellow and one stripes of blue color.

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13. Bidder to note that quantities of the Items specified in the MR may be increased or decreased up to 25 % of the MR quantity while ordering, if warranted.

14. In case of any conflict amongst documents attached with the MR, the most stringent requirement shall govern and Owner's / EIL decision shall be final in this regard.

15. **Bidder shall note that following Material to be delivered at (job site) Bharat Petroleum Corporation Ltd (BPCL), COT Vadinar, Gujarat (Postal code 361010) within the delivery period specified in the "Request for Quotation"(RFQ), out of the quantity mentioned in the MR. Balance quantity of below mentioned MR Sr. Nos. and other MR Sr. Nos. shall be delivered at (job site) BPCL, Bina.**

MR SR. NO.	ITEMCODE	DESCRIPTION	MR QTY FOR COT
20	PN219G7Z005100100	NIPPLE, B-36.10, ASTM A 106 GR. B, TOE, SEAMLESS, 0.75 INCH, S160, 100 MM	**7**
22	PN219G7Z006190100	NIPPLE, B-36.10, ASTM A 106 GR. B, TOE, SEAMLESS, 1.0 INCH, XS, 100 MM	**12**
33	WA602D2Z006ZZZZZZ	ELBOW.90, B-16.11, ASTM A 105, SW, 3000, 1.0 INCH	**8**
41	WA602D3Z005ZZZZZZ	ELBOW.90, B-16.11, ASTM A 105, SW, 6000, 0.75 INCH	**4**
65	WAG684Z100919ZZZZ	ELBOW.90, B-16.9, ASTM A 234 GR.WPB, BW, 1.5D, 2.0 INCH, XS	**1**
68	WAG684Z101318ZZZZ	ELBOW.90, B-16.9, ASTM A 234 GR.WPB, BW, 1.5D, 4.0 INCH, STD	**1**
127	WAG754Z102118ZZZZ	ELBOW.90, B-16.9, ASTM A 234 GR.WPB-W, BW, 1.5D, 18.0 INCH, STD	**4**
131	WAG754Z102218ZZZZ	ELBOW.90, B-16.9, ASTM A 234 GR.WPB-W, BW, 1.5D, 20.0 INCH, STD	**26**
132	WAG754Z102418ZZZZ	ELBOW.90, B-16.9, ASTM A 234 GR.WPB-W, BW, 1.5D, 24.0 INCH, STD	**19**
137	WAG754Z103018ZZZZ	ELBOW.90, B-16.9, ASTM A 234 GR.WPB-W, BW, 1.5D, 36.0 INCH, STD	**9**
139	WAG754Z103619ZZZZ	ELBOW.90, B-16.9, ASTM A 234 GR.WPB-W, BW, 1.5D, 48.0 INCH, XS	**2**
160	WB602D3Z005ZZZZZZ	ELBOW.45, B-16.11, ASTM A 105, SW, 6000, 0.75 INCH	**4**
166	WBGY84Z101618ZZZZ	ELBOW.45, B-16.9, A 234 GR.WPB (EPOXY COATED), BW, 1.5D, 8.0 INCH, STD	**3**
169	WBGY84Z101918ZZZZ	ELBOW.45, B-16.9, A 234 GR.WPB (EPOXY COATED), BW, 1.5D, 14.0 INCH, STD	**2**
176	WBG684Z101518ZZZZ	ELBOW.45, B-16.9, ASTM A 234 GR.WPB, BW, 1.5D, 6.0 INCH, STD	**12**
179	WBG684Z101718ZZZZ	ELBOW.45, B-16.9, ASTM A 234 GR.WPB, BW, 1.5D, 10.0 INCH, STD	**1**

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182	WBG684Z101918ZZZZ	ELBOW.45, B-16.9, ASTM A 234 GR.WPB, BW, 1.5D, 14.0 INCH, STD	**4**
216	WBG754Z102118ZZZZ	ELBOW.45, B-16.9, ASTM A 234 GR.WPB-W, BW, 1.5D, 18.0 INCH, STD	**9**
217	WBG754Z102163ZZZZ	ELBOW.45, B-16.9, ASTM A 234 GR.WPB-W, BW, 1.5D, 18.0 INCH, 8.0 MM THK	**5**
219	WBG754Z102218ZZZZ	ELBOW.45, B-16.9, ASTM A 234 GR.WPB-W, BW, 1.5D, 20.0 INCH, STD	**2**
226	WBG754Z103018ZZZZ	ELBOW.45, B-16.9, ASTM A 234 GR.WPB-W, BW, 1.5D, 36.0 INCH, STD	**3**
229	WBG754Z103619ZZZZ	ELBOW.45, B-16.9, ASTM A 234 GR.WPB-W, BW, 1.5D, 48.0 INCH, XS	**1**
266	WEG684ZZ01918ZZZZ	T. EQUAL, B-16.9, ASTM A 234 GR.WPB, BW, 14.0 INCH, STD	**1**
308	WEG754ZZ03619ZZZZ	T. EQUAL, B-16.9, ASTM A 234 GR.WPB-W, BW, 48.0 INCH, XS	**1**
341	WUG684ZZ015181318	REDUC.CONC, B-16.9, ASTM A 234 GR.WPB, BW, 6.0 INCH, STD, 4.0 INCH, STD	**2**
343	WUG684ZZ016181518	REDUC.CONC, B-16.9, ASTM A 234 GR.WPB, BW, 8.0 INCH, STD, 6.0 INCH, STD	**4**
345	WUG684ZZ017181518	REDUC.CONC, B-16.9, ASTM A 234 GR.WPB, BW, 10.0 INCH, STD, 6.0 INCH, STD	**2**
387	WUG754ZZ020181918	REDUC.CONC, B-16.9, ASTM A 234 GR.WPB-W, BW, 16.0 INCH, STD, 14.0 INCH, STD	**2**
390	WUG754ZZ021181718	REDUC.CONC, B-16.9, ASTM A 234 GR.WPB-W, BW, 18.0 INCH, STD, 10.0 INCH, STD	**6**
394	WUG754ZZ024182018	REDUC.CONC, B-16.9, ASTM A 234 GR.WPB-W, BW, 24.0 INCH, STD, 16.0 INCH, STD	**2**
421	WVG684ZZ018181718	REDUC.ECC, B-16.9, ASTM A 234 GR.WPB, BW, 12.0 INCH, STD, 10.0 INCH, STD	**4**
485	WVG754ZZ022181818	REDUC.ECC, B-16.9, ASTM A 234 GR.WPB-W, BW, 20.0 INCH, STD, 12.0 INCH, STD	**8**
520	WNH026ZZ006190510	SWAGE.CONC, BS-3799, ASTM A 105, PBE, 1.0 INCH, XS, 0.75 INCH, S160	**11**
524	WNH026ZZ009190510	SWAGE.CONC, BS-3799, ASTM A 105, PBE, 2.0 INCH, XS, 0.75 INCH, S160	**1**
548	WPH026ZZ009190510	SWAGE.ECC, BS-3799, ASTM A 105, PBE, 2.0 INCH, XS, 0.75 INCH, S160	**2**
560	WF60282Z004ZZZZZZ	CAP, B-16.11, ASTM A 105, SCRF, 3000, 0.5 INCH	**69**
583	WJ602D2Z006ZZZZZZ	CPLNG.FULL, B-16.11, ASTM A 105, SW, 3000, 1.0 INCH	**13**
599	WJ602G3Z005ZZZZZZ	CPLNG.FULL, B-16.11, ASTM A 105, TOE, 6000, 0.75 INCH	**8**
600	WK602D2Z006ZZZZZZ	CPLNG.HALF, B-16.11, ASTM A 105, SW, 3000, 1.0 INCH	**4**
601	WK602D2Z008ZZZZZZ	CPLNG.HALF, B-16.11, ASTM A 105, SW, 3000, 1.5 INCH	**6**
609	WK602D3Z005ZZZZZZ	CPLNG.HALF, B-16.11, ASTM A 105, SW, 6000, 0.75 INCH	**31**

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