

**BHARATH HEAVY ELECTRICALS LIMITED**

(A Government of India Undertaking)

PIPING CENTRE, MATERIAL MANAGEMENT

Phone:044-28161244

Fax:044-28161341

PUR 002/01

80, Gopathy Narayanaswamy Road, T.Nagar, Chennai – 600 017.

INDIGENOUS ENQUIRY

ENQUIRY REFERENCE

DATE

4011100028

20.08.2011

DUE DATE FOR QUOTATION : 02.09.2011

THIS IS ONLY A REQUEST FOR
QUOTATION AND NOT AN ORDER

Suppliers Are Requested To Go Through Terms & Conditions Before Submission of Offers.

Sl. No.	Material Code	Description & Specification	Unit	Qty.	DELIVERY SCHEDULE		
					Qty.	Date	Remarks
		----- As per Annexure -----					

Encl. to Enquiry:

- | | |
|-------------------------------------|-----------------|
| 1. Enquiry | 4. Price Format |
| 2. Important Information to Bidders | 5. Painting QP |
| 3. TDC : TDG : 07 : 05 | 6. MOU Terms |

Dear Sirs,

Please submit your lowest quotation in triplicate, subject to our terms and conditions overleaf, for the above materials, so as to reach us on or before the due date by 2.00 P.M.

1. Quotations will be opened at 2-30 P.M. on the due date in camera/In the presence of the tenderers who may like to be present.
2. Price should be net FOR destination inclusive of risk in transmit and remain valid for 60 days from the due date.
3. If any Sales tax and Excise duty are payable as extra to the quoted price the percentage of the same should be specifically stated in the quotation failing which the purchaser will not be liable for payment of Sales Tax / Excise Duty. Our T.N.G.S.T.No.3560005/dt.1-4-95, C.S.T.No.239383 dt.11-6-91.
4. If the enquired items are coming under D.G.S & D rate contract, please indicate the rate contract prices duly sending a copy of the rate - contract along with your offer.
5. No revision of prices will be entertained after tenders are opened.
6. Manufacturers name, brand name trademark or patent No. if any should be specified. Illustrate leaflets giving particulars are required along with quotation wherever necessary.
7. Products with I.S.I.certification marks will be preferred.
8. The purchaser shall be under no obligation to accept the lowest or any other tender and shall be entitled to accept or reject in part or full without assigning any reason whatsoever.
9. Late tenders are liable to be rejected.
10. Any deviations to the enquired technical and commercial conditions shall be clearly indicated in the covering letter of the quotation.

Note : 1. Clause No 3 of Terms & Condition given overleaf is superceded by MOU for CW Pipes.
2. Clause No.4 of Terms & Condition not applicable.

Yours faithfully,

For BHARATH HEAVY ELECTRICALS LIMITED

PRIYA BALAJI

Manager / Purchase

BHEL / Piping Centre

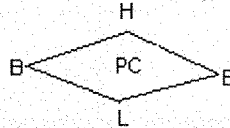
T. Nagar, Chennai - 600 017.

TERMS AND CONDITIONS

1. QUOTATION: Each tender should be sent in double cover; inner cover should be sealed with tenderer's distinctive seal and super scribed with correct tender No. Item of supply and due date of opening. The outer cover should only bear the address of this office and should not have any indication that a tender is within. Two or more quotations should not be sent in one cover but the quotation against each tender should be sent separately to avoid confusion.

Tenders should be free from CORRECTIONS AND ERASURES: Corrections if any, must be attested. All amounts shall be indicated both in words shall prevail.

2. PAINTING, PACKING AND MARKING: The supplier shall arrange for securely protecting and packing the stores to avoid loss or damages during transit, as per enquiry specification wherever applicable. The following marking should be made in each packages.



The mark should be stenciled on the package itself. Should the packages be too small suitable cards giving these details may be tagged under seal of the seller. Special precaution shall be taken to prevent rusting and corrosion of metal parts during transit.

3. TERMS OF PAYMENT: Payment will be made within 30 days of satisfactory receipt of materials at BHEL stores / site as required by the purchaser. The successful tenderer must send the operation and maintenance manuals, test certificate, drawing, etc., for the manuals ordered. These should be sent immediately after dispatch of the materials and statement to that effect should be made in the invoice. Failure to comply with this provision will result in delay in payment of the bills. Goods dispatched either by V.P.P. or by the document presented through bank will not be accepted unless agreed to by the purchaser.

4. SECURITY DEPOSIT: In the case of orders above Rs.5,000/- with deliveries of 3 months or above, the seller shall, within 14 days after written notice of acceptance of his tender quotation has been pasted to him deposit with the purchaser (in cash or equivalent in Govt. Securities or Bankers Guarantee bond) a sum equal to 5% of total value of the stores detailed in the order as security for the due fulfillment of the contract. No claim shall lie with the purchaser in respect of interest on cash deposits on Govt. Securities or depreciation there of. Purchaser shall be entitled to deduct from the said deposit any loss or damages which they may be put to by reason of any act or default to the seller and recoverable by them from the seller and to call upon the seller to maintain the deposit as its original limit by making further deposits in the event of the seller failing to make and to maintain the Security of deposit in the manner aforesaid the purchaser shall be entitled to cancel the order.

5. LIQUIDATED DAMAGES: It is clearly among the parties to the contract that time is the essence of the contract. Therefore the delivery of the goods specified, in the purchase order should be made within the time limit prescribed. Where the seller supplies or dispatches the goods beyond the delivery period specified, the purchaser will have no obligation to accept the goods if accepted liquidated damages, at the rate of ½% of the value of goods delayed for each week of delay or part thereof subject to a maximum of 5% of the order value will be levied without prejudice to any other relief or compensation due to the purchaser under any other condition of this contract.

6. RISK PURCHASE: Alternatively the purchaser at this option will be entitled to terminate the contract and to purchase elsewhere at the risk and cost of the seller either the whole of the goods or any part which the supplier has failed to deliver within the time stipulated as aforesaid or if the same were not available, the best and the nearest available substitute therefore. The supplier shall be liable for any loss which the purchaser may sustain by reason of such risk purchases in addition to penalty at the rate mentioned in clause 6 above.

7. PREFERENTIAL DELIVERY: It is noted if a correct is placed on a higher tenderer as a result of this invitation to tender in preference to the lowest acceptable offer in consideration of the earlier delivery, the seller will be liable to pay to the purchaser the difference between the contract rate and that of the lowest acceptable tender on the basis of final price F.O.R. Destination, including all elements of freights, sales tax, duties and other incidentals in case of failure to complete supplies in terms of such contract within the date of delivery specified in the tender and incorporated in the contract.

8. GENERAL: The purchaser reserves the right to split up the tender and place order for individual terms with different, tenderers and also increase the quantity.

Any other conditions, which might have been quoted by the seller and are in contravention to the terms prescribed in the order and which have not been specifically accepted in by the purchaser will not be applicable to this contract.



ENQUIRY
(INDIGENOUS)

BHARAT HEAVY ELECTRICALS LIMITED

(A Government of India Undertaking)
80, G.N.ROAD, T.NAGAR
Purchase Department - Piping Centre
CHENNAI - 600 017.
TAMILNADU (INDIA)

PHONE : 044-28161 244
GRAMS : BHARATELEC
FAX NO : 044-28161 741
E-mail : Pb@bhel.mpc.co.in
Web : www.bhel.com

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Collective No.	Enquiry Date	Due Date for Quotation
4011100028	20.08.2011	02.09.2011 Due Date for

Please quote Enquiry No, Date and due date in all correspondences.
This is only a request for quotation and not an order

RFQ No: 4011100028

Item	Description	Unit	Quantity	Delivery Quantity	Schedule Date
10	1593870400UG PIPE 2435X18 IS3589FE410(SPIRAL/LS) TDC: TDG:07:05	M	450.000	450.00	31.10.11
20	159387040000 PIPE 2435X18 IS3589FE410(SPIRAL/LS) TDC: TDG:07:05 Length:	M	15.000	15.00	31.10.11
30	159387000000 PIPE 1829X16 IS3589Fe410MPa LS/SPIRAL-OG TDC: TDG:07:05	M	30.000	30.00	31.10.11

General Note:

Enclosures:

"LD clause has to be confirmed without fail."

The offers should reach us 30 minutes before the time of opening of tenders.
The offers will be opened at 14.30 hrs on the due date of tender in the presence of tenderers who have submitted their offer and who may like to be present for the tender opening. Late and delayed offers are liable to be rejected.

Yours faithfully,
For BHARAT HEAVY ELECTRICALS LIMITED

PRIYA BALAJI
Manager / Purchase
BHEL Piping Centre

T. Nagar, Chennai - 600 017.



BHEL : PIPING CENTRE : CHENNAI – 600 017

ENQUIRY NO: 4011100028

DATE: 20.08.2011

IMPORTANT INFORMATION TO BIDDERS.

1. This Tender is a **TWO PART BID**.
Type and quantum of work is detailed in "SCOPE OF WORK"
2. The quoted price shall be " FIRM " till the complete execution of the scope.
3. Mode of Operation for Price Bid – Reverse Auction.
4. Last date for submission of offer **02.09.11 - Time - 14.00 Hours.**
5. Techno-Commercial Bid Opening Date **02.09.11 - Time - 14.30 Hours.**
6. The above bid shall be sent in a sealed cover duly indicating

Enquiry No. & date, Tender Opening date and "CW PIPES (IS 3589) –DPL Durgapur".

**To
ADDL.GM / MM
BHEL - Piping Centre
Old No 93, (New No:80) G N Chetty Road
T Nagar / Chennai 600 017 . PHONE : 28161244 / 28161331**

SCOPE OF WORK :

BHEL requires the below mentioned quantity of Welded Pipe – Pipes either **Spiral or Longitudinal Seam Weld** conforming to IS 3589 FE 410 Pipes with Painting and as per TDC-TDG:07:05 and to be delivered to DPL Durgapur project site. The raw material plate is to be arranged by suppliers themselves.

LIST OF ITEMS :

Enq. Sl.no	Pipe Size in MM OD x Thickness	Qty. Mtrs	Delivery	Project Site	Work Order Details
10	2435 mm x18 mm UG	450	31.10.11	DPL Durgapur	P 7132 1 80 468 - 001
20	2435 mm x18 mm OG	15	31.10.11		P 7132 1 80 468 - 002
30	1829 mm x16 mm OG	30	31.10.11		P 7132 1 80 468 - 003

Total Weight ~ 520.358 MT

TECHNICAL CUM COMMERCIAL

Technical :

1. The bidder shall supply the Welded Pipes, as per IS 3589 Specification and BHEL TDC. The Bidder shall also comply with the following BHEL documents.
 - a. Technical requirements viz. Length, Edge Preparation, Spider Arrangement, Quality Plan etc, as finalized and agreed in MOU.
 - b. Painting requirements for CW Piping as per the enclosed Painting QP for DPL Durgapur Project.



ENQUIRY NO: 4011100028 DT.20.08.2011

Commercial :

1. The prices quoted by the Bidder shall be on F.O.R. Ex-works basis inclusive of Packing and Forwarding charges with Freight extra for transportation of Finished pipes to DPL Durgapur project site. Price quoted shall be "FIRM" till the execution of the complete scope with raw material plate in their scope.
2. Payment for freight will be based on per meter.
3. The bidder shall furnish all the breakups as requested in the price bid format as enclosed.
4. The bidder shall clearly indicate the source of supply and all the applicable Taxes / Duties / CESS.
5. Delivery – Supplies to be completed before 31.10.2011. The Bidder shall strictly confirm to our delivery requirement.

Delivery is the essence of the Contract/ PO. BHEL may accept or reject the price bid if delivery is not as specified, or if offered delivery is not suiting Project Plan/ Production plan as per BHEL.

BHEL has the right to order partly or fully considering the various requirements. BHEL may short close/cancel an order or divert to another vendor if the performance of the vendor is poor, or the delivery requirement of the item is very critical and not being met, at any time during the currency of the Contract/PO irrespective of the PO Delivery date, if there is no response for improvement in delivery as per BHEL requirement.

BHEL may counter offer the final L1 rate to other eligible vendors for acceptance and decide to distribute the Purchase orders fully or partly to the accepting vendors for ensuring deliveries meeting production/ project requirement. BHEL decision will be final in this regard. BHEL has the right to reject delayed deliveries or accept on a conditional basis.

6. Bidder shall give a minimum validity of 60 days from the date of Technical bid opening.
7. All other commercial terms as per MOU
8. In case of incomplete/inadequate information provided against the requirements of this tender, the offer shall be liable for rejection.
9. Offers with deviation from the above Commercial and Technical Terms will not be considered.



ENQUIRY NO: 4011100028 DT.20.08.2011

PRICE :

The bidder shall provide the price strictly as per the price format annexed herewith. In this addition to the hard copy, the bidder has to submit in soft copy also in excel format (Preferably in CD).

- a. Base Price shall include Cost of Raw Material plus conversion cost per Meter of bare pipe including Edge Preparation and providing Spider Arrangement and Testing as per BHEL TDC : TDG : 07 : 05.
- b. Ordering shall be on FOR – DPL Durgapur Project Site basis.
- c. Percentage of applicable Taxes, Duties, CESS, Service Tax on Transportation etc shall be clearly indicated.
- d. Service Tax, if included in Freight or extra, shall be clearly indicated. Proof for the Payment of Service Tax shall be produced for the reimbursement of same.
- e. A soft copy of the price format with price details are also to be sent along with price bid.

Prices quoted shall be " FIRM " till complete execution of the scope and bidder shall give **validity** of this price offer for a period of **minimum 60 days** from the date of opening of Bids.

LIST OF DOCUMENTS ENCLOSED :

1. Painting Quality Plans
QP Reference for DPL Durgapur - QP NO:7132:QPC:12 Rev:01 Dt.02.06.2011
2. BHEL TDC : TDG : 07 : 05
3. Techno-Commercial Statement
4. Price Format
5. MOU Terms

The above documents form part of this tender document and bidder shall ensure that they have received all these along with tender and confirm.

- **Pre Qualified** is the criteria for consideration for other than the BHEL PC/Chennai Approved Vendors for supply of CW Pipes. After qualifying for registration, the new Vendors, may be considered for future in line with the system and policy. **Such Vendors will not be considered in this Enquiry.**
- The new Vendors may download Vendor registration forms from BHEL Web Site www.bhel.com and submit all relevant data for formal registration.

Manager/Purchase

PRIYA BALAJI

**Manager / Purchase
BHEL / Piping Centre**

T. Nagar, Chennai - 600 017.

BHEL : PIPING CENTRE : CHENNAI - 17
Limited Tender No. 4011100028 Dt.20.08.2011

PRICE FORMAT

ITEM SL.NO. 10

ITEM DESCRIPTION : CW (IS 3589) Pipe Dia 2435 mm x 18 mm UG - 450 Meters - Despatch to DPL Durgapur Project Site

Item Sl No	Tender Serial No ----->	10
	Item Description ----->	PIPE DIA 2435 mm x 18 mm UG - 450 Meters (LS/SPIRAL) IS3589-410 MPA TDC : TDG : 07 : 05 DPL Durgapur Project Site
	Elements of Cost	Rate per Meter in INR
1	BASE PRICE including P & F (for Bare Pipe) : Detail Description (To be filled by the vendor in INR)	
	Painting Charges -Underground Piping	
	a. Internal - Epoxy based Zinc Rich Primer-1 x 50 Microns - Primer Coat	
2	b. Internal - Coal Tar Epoxy - 2 x 75 Microns - Finish Coat	
	c. External - Red Oxide Zinc Phosphate - Alkyd base to IS 12744 - 1 x 30 Microns - Primer Coat	
3	Excise Duty with Cess applicable on Base Price	%
4	CST (Applicable on Base price+Painting+ED) or VAT	%
5	Freight Charges excluding service tax (up to DPL Durgapur Project site)	Rate per Meter
6	Service Tax, if and as applicable, on Freight - PI mention % and Rate	%
7	Other Statutory Levies, if and as applicable - PI mention % and Rate	%
8	Transit Insurance Charges {Transit insurance by BHEL @ 0.05% on Basic Price including P&F, Taxes, Duties and Freight - (1+2a+2b+2c+3+4+5+6+7*0.05%)} %	%
9	Total Price (Rate per Meter)	
10	Net Cash Outflow - Unit All-inclusive price - Rate per Meter	

*** - Please mention the % of Service Tax, other Statutory levies, if applicable

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BHEL : PIPING CENTRE : CHENNAI - 17
Limited Tender No. 4011100028 Dt.20.08.2011

PRICE FORMAT

ITEM SL.NO. 20

ITEM DESCRIPTION : CW (IS 3589) Pipe Dia 2435 mm x 18 mm OG - 15 Meters - Despatch to DPL Durgapur Project Site

Item Sl No	Tender Serial No ----->	20
	Item Description ----->	PIPE DIA 2435 mm x 18 mm OG - 15 Meters (LS/SPIRAL) IS3589-410 MPA TDC : TDG : 07 : 05 DPL Durgapur Project Site
	Elements of Cost	Rate per Meter in INR
1	BASE PRICE including P & F (for Bare Pipe) : Detail Description (To be filled by the vendor in INR)	
	Painting Charges - Overground Piping	
	a. Internal - Epoxy based Zinc Rich Primer-1 x 50 Microns - Primer Coat	
2	b. Internal - Coal Tar Epoxy - 2 x 75 Microns - Finish Coat	
	c. External - Red Oxide Zinc Phosphate - Alkyd base to IS 12744 - 2 x 25 Microns - Primer Coat	
	d. External - Synthetic Enamel Long Oil Alkyd Base to IS:2932 - Smoke Grey Shade No. 692 of IS 5 - 2 x 35 Microns - Finish Coat	
3	Excise Duty with Cess applicable on Base Price	%
4	CST (applicable on Base price+Painting+ED) or VAT	%
5	Freight Charges excluding service tax (up to DPL Durgapur Project site)	Rate per Meter
6	Service Tax, if and as applicable, on Freight - PI mention % and Rate	%
7	Other Statutory Levies, if and as applicable - PI mention % and Rate	%
8	Transit Insurance Charges {Transit Insurance by BHEL @ 0.05% on Basic Price including P&F, Taxes, Duties and Freight - (1+2a+2b+2c+2d+3+4+5+6+7*0.05%)} %	%
9	Total Price (Rate per Meter)	
10	Net Cash Outflow - Unit All-inclusive price - Rate per Meter	

*** - Please mention the % of Service Tax, other Statutory levies, if applicable

BHEL : PIPING CENTRE : CHENNAI - 17
Limited Tender No. 4011100028 Dt.20.08.2011

PRICE FORMAT

ITEM SL.NO. 30

ITEM DESCRIPTION : CW (IS 3589) Pipe Dia 1829 mm x 16 mm OG - 30 Meters - Despatch to DPL Durgapur Project Site

Item Sl No	Tender Serial No ----->	20 PIPE DIA 1829 mm x 16 mm OG - 30 Meters (LS/SPIRAL) IS3589-410 MPA TDC : TDG : 07 : 05 DPL Durgapur Project Site
	Item Description ----->	Rate per Meter in INR
	Elements of Cost	
1	BASE PRICE including P & F (for Bare Pipe) : Detail Description (To be filled by the vendor in INR)	
	Painting Charges - Overground Piping	
	a. Internal - Epoxy based Zinc Rich Primer-1 x 50 Microns - Primer Coat	
2	b. Internal - Coal Tar Epoxy - 2 x 75 Microns - Finish Coat	
	c. External - Red Oxide Zinc Phosphate - Alkyd base to IS 12744 - 2 x 25 Microns - Primer Coat	
	d. External - Synthetic Enamel Long Oil Alkyd Base to IS:2932 - Smoke Grey Shade No. 692 of IS 5 - 2 x 35 Microns - Finish Coat	
3	Excise Duty with Cess applicable on Base Price	%
4	CST (applicable on Base price+Painting+ED) or VAT Freight Charges excluding service tax (up to DPL Durgapur Project site)	% Rate per Meter
5	Service Tax, if and as applicable, on Freight - PI mention % and Rate	%
6	Other Statutory Levies, if and as applicable - PI mention % and Rate	%
7	Transit Insurance Charges {Transit insurance by BHEL @ 0.05% on Basic Price including P&F, Taxes, Duties and Freight - (1+2a+2b+2c+2d+3+4+5+6+7*0.05%)} %	%
9	Total Price (Rate per Meter)	
10	Net Cash Outflow - Unit All-inclusive price - Rate per Meter	

*** - Please mention the % of Service Tax, other Statutory levies, if applicable



BHEL : PIPING CENTRE : CHENNAI - 17

Statement - Commercial Terms - BHEL Terms vis-à-vis Terms quoted by the Bidders

ENQ NO. 4011100028 DT.20.08.11 - CW (IS 3589) Pipes for DPL Durgapur Project (1 x 250 MW) with Internal and

External Coating

1. Pipe Dia 2435 mm x 18 mm UG - 450 Mtrs
2. Pipe Dia 2435 mm x 18 mm OG - 15 Mtrs
3. Pipe Dia 1829 mm x 16 mm OG - 30 Mtrs

COMMERCIAL			
A	TERMS OF PAYMENT	100% within 45 days from the date of submission of despatch documents	
1	PRICE VARIATION	FIRM	
2	LIQUIDATED DAMAGES	1/2 % PER WEEK - MAX 5%	
3	DELIVERY	31.10.2011	
4	TOLERANCE	+/-2 Mtrs of PO Qty	
5	VALIDITY	60 DAYS	
6	SERVICE TAX ON TRANSPORTATION	WHETHER INCLUDED OR NOT QUOTED - TO CLEARLY INDICATE	
7	QTY OFFERED	Pipe Dia 2435 mm x 18 mm UG - 450 Mtrs	
		Pipe Dia 2435 mm x 18 mm OG - 15 Mtrs	
		Pipe Dia 1829 mm x 16 mm OG - 30 Mtrs	
B	TECHNICAL		
1	TDC	TDC:07 : 05	
2	PAINTING SCHEME	AS PER QP:7132:QPC:12 REV:01 DT.02.06.2011	
3	SUPPLY LENGTH OF PIPE	7 - 12.5 Meters	
4	SUPPLY FROM	WORKS	
5	APPLICABLE TAXES	VAT / CST	
6	MOU TERMS	ACCEPTANCE	
	Remarks		

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Sl. NO	PGMA / Description	Surface Preparation & Surface Profile	Primer coat			Intermediate coat			Finish coat			REMARKS
			Primer	No of coats	Paint	No of coats	Shade	Paint	No of coats	Shade	Total DFT Microns (Min.)	
1	2	3	4	5	6	7	8	9	10	11	12	13
1	(a) Internal Surface - CW Pipe (for pipe dia - 1000 mm and above)	Blast Cleaning SSPC SP-10 SA 2½ (Refer Note 1)	Epoxy based Zinc rich Primer (Refer Note 2)	1 (50 Microns Min. per coat)	—	—	—	Coal tar epoxy (Refer Note 2)	2 (75 Microns Min. per coat)	—	200 Microns (Refer Note 3)	
	(b) Holiday test (Refer Note 3)	Holiday testing by low voltage (75 Volts Min.) wet sponge Holiday detector or by High voltage (Voltage per micron of DFT is as recommended by Paint Manufacturer subjected to minimum of 5V / Micron). Holiday test Equipment to be calibrated before testing.										
2	External Surface of CW -Buried Piping (For pipe dia- 1000 mm and above) (Temporary Protection for transportation from works to site). *Further protection to be done by BHEL Erection Group as per Contract requirement. -Refer Note-4	SSPC-SP3 / Power Tool Cleaning	Red Oxide Zinc Phosphate (Alkyd base to IS 12744)	1 (30 Microns per coat)	—	—	—	—	—	—	30 Microns	
3	External Surface (over ground piping) of CW/ACW/ (For all diameters)	SSPC-SP3 / Power Tool Cleaning	Red Oxide - Zinc Phosphate (Alkyd base to IS: 12744)	2 (25 Microns per coat)	—	—	—	—	—	—	30 Microns	
4	External Surface of ECW, Plant water (For all diameters)	SSPC-SP3 / Power Tool Cleaning	Red Oxide - Zinc Phosphate (Alkyd base to IS: 12744)	2 (25 Microns per coat)	—	—	—	—	—	—	30 Microns	
5	Galvanised and Stainless steel Piping	No painting										

Notes:

1. Blast cleaning to near white metal to obtain roughness as per epoxy paint data sheet.

2. Application of Epoxy based Zinc rich Primer, Coal Tar Epoxy shall be done as per manufacturer's data sheet / recommendation, meeting the thickness requirements as per this document approved except as distributed.

3. Witness by BHEL / BHEL nominated inspection agency.

4. All Buried Piping shall be given protective coating, wrapping and design & installation shall follow AWWMA or international accepted standard.

PREPARED BY: *Vivekananda Yellu*

APPROVED BY: *G.Panneer Selvam*

VIVEKANANDA YELLU Engr / QA

G.PANNEER SELVAM DGM / QA

For Customer use

3 Approved

3 Approved except as noted. Forward final drawing.

5 Disapproved. See accompanying letter Page 11

6 For information and record only.

DISTRIBUTED BY: *2*

DATE: 08.08.2024

DEVELOPMENT CONSULTANT

3 ** Smoke Grey (Shade No. 120 at shop + 1 coat at site) (Refer Note 2 or 3 for 35 microns per coat)

3 ** Smoke Grey (Shade No. 120 at shop + 1 coat at site) (Refer Note 2 or 3 for 35 microns per coat)

Notes:
 1. Blast cleaning to near white metal to obtain roughness as per epoxy paint data sheet.
 2. Application of Epoxy based Zinc rich Primer, Coal Tar Epoxy shall be done as per manufacturer's data sheet / recommendation, meeting the thickness requirements as per this drawing except as noted.
 3. Witness by BHEL / BHEL nominated Inspection agency.
 4. All Buried Piping shall be given protective coating, wrapping and design & installation shall follow AWWA or international accepted standard.

PREPARED BY: *Vivekananda Yellu* **APPROVED BY:** *G.Panneer Selvam*
VIVEKANANDA YELLU Engr / QA **G.PANNEER SELVAM DGM / QA**

DEVELOPMENT CONSULTANT'S
DATE: 08.06.2011
DISTRIBUTED BY: *2*
Letter T/0171 **Date: 08.06.2011**

SEE COVERING LETTER