



**STEEL AUTHORITY OF INDIA LIMITED  
IISCO STEEL PLANT  
BURNPUR**

**Tender No. MKTG/20-21/DISP/IA-BF#2/OFA-04    Dated: 15.07.2020**

**Corrigendum**

**FOR**

***DISMANTLING AND SALE OF BLAST FURNACE No. 2, ISP***

***Corrigendum to clause no. 31 for EMD of OFA part –II***

**For making RTGS payments the following account of SAIL-ISP may be referred:**

Beneficiary Name	SAIL-IISCO STEEL PLANT, BURNPUR
Bank Name	STATE BANK OF INDIA
Account No	10981831604
Branch	Burnpur
IFSC Code	SBIN0000049



**STEEL AUTHORITY OF INDIA LIMITED**

**IISCO STEEL PLANT  
BURNPUR**

**Tender No. MKTG/20-21/DISP/IA-BF#2/OFA-04    Dated: 15.07.2020**

**ONLINE FORWARD AUCTION NOTICE**

**FOR**

***DISMANTLING AND SALE OF BLAST FURNACE No. 2, ISP***

**OFA DOCUMENT    PART-I**



**STEEL AUTHORITY OF INDIA LIMITED**  
**IISCO STEEL PLANT**

Marketing Department, Burnpur Works, Burnpur – 713325 (W.B.)  
Phone Nos. 0341-2240497, 2240567. FAX NO: 0341-2240704 / 2240018

**MKTG/20-21/DISP/IA-BF#2/OFA-04 Dated: 15.07.2020**

**ONLINE FORWARD AUCTION NOTICE**

1. The following Materials are available on **“AS IS WHERE IS” AND “NO COMPLAINT”** basis at SAIL- IISCO Steel Plant, Burnpur for sale through online forward auction process.

***DISMANTLING AND SALE OF BLAST FURNACE No. 2***, Ex Burnpur Works, Burnpur, West Bengal as detailed in **APPENDIX-A**, after dismantling of all the items in **TS** consisting of Mild Steel scraps(structural/Mechanical/Electric and Instrumentation/Loose items ),Cast Iron items, Refractory items and Salamander-Pig Iron etc. arising from the dismantling of Blast Furnace #2 and its auxiliary systems like stoves, stock house, gas cleaning unit and thickeners, Kulti ladle house , new ladle house .PCM's ,open gantry , ore handling plant ,thickener, flash mixer, utility pipelines etc. along with some left over items in the old BF Shop through Online Forward Auction (OFA) process to be held on the Auction platform of Service Provider on “As is Where is” and “No Complaints” basis subject to the conditions herein. Both disposable and non-disposable quantity mentioned in the tender /TS are tentative only. Party has to complete full dismantling job of actual quantity in each category mentioned in **TS**.

Party has to quote only the Lump Sum Amount for purchase of all Disposable items quantities as indicated as mentioned in **APPENDIX-A**, keeping in mind that all the items listed in **TS** both disposable and non-disposable (**ANNEXURE 2.2.13-1**, **ANNEXURE 2.3.9-1**, **ANNEXURE 2.4.16-1**, **ANNEXURE 2.6.4-1**, **ANNEXURE- 2.7.3-1**, **ANNEXURE- 2.8.2-1**) are to be dismantled/ removed and non-disposable items to be disposed-off to designated place within ISP Works, Burnpur as per **TS** and then entire area of **BLAST FURNACE No. 2** are to be levelled up to ground level.

**The H-1 bidder will be decided through the Online Forward Auction bidding, on the Lump Sum Amount, quoted by the bidders for purchase of all Disposable items quantities as indicated as mentioned in APPENDIX-A. On the basis of H-1 Total Lump sum amount, a) Individual Item Rate per MT of the Sales Order and b) Item-wise Sales Order Amount will be calculated as per Pre-fixed Weightage mentioned in OFA. The example of calculation is given as under-**

**For example, let us take that the H-1 bidder Lump Sum Amount for purchase of all**

items of APPENDIX-A is Rs. 50 Crores with the prefixed weightage as mentioned in the table. Then the Item wise Sales Order Amount and Individual Item Rate per MT of the Sales Order will be calculated as follows:

ITEM NO.	ITEM DESCRIPTION	QTY IN MT	PRE-FIXED WEIGHTAGE	ITEM WISE TOTAL VALUE	ITEM WISE RATE (RS/MT)
1	DISMANTLED MILD STEEL SCRAP - (MECHANICAL, UTILITIES, STRUCTURAL, ELECTRIC AND INSTRUMENTATION AND LOOSE ITEMS)	10825	85.6888	= 500000000 X 85.6888% = 428444000	=428444000/ 10825 = 39579.12
2	DISMANTLED CAST IRON SCRAP - (MECHANICAL, UTILITIES, STRUCTURAL ITEMS)	1180	8.2085	= 500000000 X 8.2095% = 41042500	=41042500 / 1180 = 34781.78
3	DISMANTLED REFRACTORY SCRAP	10283	1.2333	= 500000000 X 1.2333% = 6166500	=6166500 / 10283 = 599.68
4	DISMANTLED PIG IRON SCRAP (SALAMANDER)	700	4.8694	= 500000000 X 4.8694% = 24347000	=24347000 / 700 = 34,781.43
GRAND TOTALPRICE				= 500000000.00	

However, the item wise weightage mentioned above is only indicative and has been given, to explain to the prospective customers, how Individual Item wise Sales Order Amount and Rate per MT will be calculated. The actual/ final applicable weightage to be considered by ISP will be communicated to all techno-commercial acceptable Customers before the actual forward auction through m-Junction.

H-1 bidder will have to deposit the Total Sales Value plus all the duties and taxes as applicable on all the disposable items mentioned in **APPENDIX-A**.

Invoice for the Material (item) delivered/ removed (out of ISP premises through designated Gate) by the Party will be made on actual weighment of material and will be subject to GST & TCS.

## 2. INSPECTION OF MATERIALS

Bids are accepted on the assumption that the bidders have first inspected the materials and are sure what they are bidding for. The principle of 'Caveat Emptor' shall apply. The materials offered for sale are on **"AS IS WHERE IS" and "NO COMPLAINT"** basis. The materials will be lifted from the **site of storage (i.e. either the materials are on ground or above the ground at site or in whatever way it is available at the site as the case may be after dismantling, cutting, bending etc.)** with all faults and errors in description or otherwise, if any. Quantity, quality, size measurement, marks and number stated in the OFA documents are approximate and no warranty or guaranty shall be implied. The bidders are advised to inspect the material before bidding.

3. INSPECTION DATE: 17.07.2020 TO 01.08.2020
4. INSPECTION TIMINGS: 9.30 A.M. to 1.00 P.M.
5. CONTACT PERSON(S) FOR INSPECTION: **Sri. MANOJ KUMAR, GM(BF)**
6. The sale of materials shall be governed by “SAIL – GTC-SA: 2017: General Terms & Conditions for Sale and Auction from Plants / Units of SAIL”. OFA notice, addendums, corrigendum etc. Copy of SAIL- GTC-SA: 2017 may be downloaded from <http://auction.metaljunction.com>.
7. SAIL-ISP reserves the right to withdraw from the sale after advertising or after issue of Acceptance Offer / Sale Order / Offer Letter for any item of any quantity of the materials by number or weight without assigning any reasons thereof to the customer. SAIL-ISP will not be responsible for any damage / loss whatsoever to the customer on account of such withdrawal.
8. SAIL-ISP reserves the right to dispose off any item by other means even after inviting bids for sale of such materials by auction through internet.
9. SAIL / SAIL-ISP reserves the right to accept or reject any or all the bids and their decisions shall be final
10. Bidding by Consortium or Joint Venture is permissible.
11. DOCUMENTS TO BE SUBMITTED: Customers intending to participate in the forward auction would be required to submit the 1) Online Forward Auction Notice along with the enclosed Letter of Interest 2) Auction Terms and Conditions 3) Documents in support of Eligibility Criteria Letter of Interest, 4) Tender Specification duly signed 5) Standard Operating Practices 6) Copy of the SAIL GTC-SA:2017 (General Terms & Conditions for sale and Auction from Plants / Units of SAIL”, 7) Integrity Pact filled up and duly signed with two witness, 8) All Annexure, 9) Appendix, 10) Corrigendum, Addendums etc. **duly signed and stamped** as a token of bidders acceptance of the same in toto to service provider. The service provider will provide a user ID and a pass word to each such individual customer.
12. DEPOSIT OF EMD AMOUNT: The customer shall be required to deposit non-interest bearing EMD of **Rs.35.00 Lakhs** by way of RTGS/ NEFT/ Demand Draft/ Pay order/ Banker’s Cheque, Bank Guarantee obtained from a Nationalized / Scheduled Bank and Drawn in favour of **the SAIL-ISP and payable at, Burnpur / Asansol** along with self-attested copies of the required documents to participate in the online forward auction process. EMD and the documents detailed complete in all respect, should reach the office of Sr. Mgr. (MARKETING), ISP BURNPUR WORKS, BURNPUR -713325 **before 15:00 Hrs. on 07.08.2020.**
13. TENDER DOCUMENT VALIDITY PERIOD: The tender documents submitted by the tenders should have a minimum validity for 120 days.

14. TENDER OPENING DATE (TOD): Tender will be opened on **07.08.2020 after 15:30 Hrs.** in the presence of such tenderers who might choose to be present at the time of opening. The bidders bid will be evaluated technically and commercially and the qualified bidders will be informed to participate in on line Forward Auction at Metaljunction Service Platform.
15. Before actual participation, the bidders may obtain necessary help from the service provider, Metaljunction Service Ltd., so as to enable them to participate in the online forward auction process without difficulty.
16. Final bids given by the Bidders in the online forward auction should be kept valid for 45 working days from the date of conduct of online forward auction for acceptance by SAIL-ISP Authority.
17. Bidders may download the entire Online Forward Auction documents from Service Provider's web sites in [www.metaljunction.com](http://www.metaljunction.com), or websites <https://sailtenders.co.in>. Auction document will not be sent by post.
18. The concerned persons may be contacted for any details:
  - (i) Rakesh Roshan, Sr Mgr (Mktg) - 9434776909 from SAIL-IISCO Steel Plant, Burnpur.
  - (ii) Mr. Abhishek Chakraborty C/o Marketing Department SAIL-IISCO Steel Plant, Burnpur Phone- 9163348279 from Mjunction Services Limited.
  - (iii) Mr. Suranjan Mallick, Junction, Kolkata (W.B.) Mobile No: 8336925957 from Mjunction Services Limited.
19. In case where the bids given by the bidders in the online forward auction are not accepted, the EMD amount would be refunded in full within 7 days of Auction by the service provider to the bidder. If the bids are accepted and the materials are offered through Offer Letter and the customer do not make payment as stipulated in Offer Letter the EMD would stand forfeited.
20. On receipt of the payment as per the Offer letter issued to the party, ISP will issue the Delivery/ Sales order.
21. Lifting and Transporting Material from the Plant / unit shall be customer's responsibility following all the prevailing safety and other rules applicable for delivery of Material
22. In situations where customers have obtained Delivery Order/ Sales Order after making full payment but have failed to lift the offered quantities in full or part within the time stipulated in Delivery Order/ Sales Order, necessary action for forfeiture of material value and security deposit will be taken as per clause- 20 of SAIL- GTC –SA:2017 (General Terms & Conditions for Sale and Auction from Plants / Units of SAIL).
23. If for any reason beyond the control of the SAIL/SAIL-ISP all the materials offered through online forward auction or part thereof cannot be delivered, the liability of the SAIL/SAIL-ISP will be limited only to refund the proportionate amount paid by the customer as applicable for the quantity not delivered.
24. The prices shall remain firm during the tenure of the contract. In case the bidder is unable to bid a firm price, SAIL-ISP reserves the right to reject the offer.

25. Quantities and volume of work in respect of various items of works elaborated in this specification are tentative. Variation in the quantities may occur during actual execution.
26. In the event, goods are found excess of the Delivery Ordered Quantity, the Customer will have to buy the surplus quantity at the same sales rate, terms and conditions. The offer letter will be issued for the excess quantity to the Customer for deposit of the offered amount. SAIL-ISP also has the right either to adjust the additional sale value from the Security Deposit or demand the customer to remit the additional amount due. A New Delivery Order/ Sales Order will be issued.
27. In the event, goods are found less than the Delivery Ordered Quantity, the refund will be made for the shortfall quantity to the Customer in his bank account.  
Encl- As above.

(Rakesh Roshan)  
Sr. Mgr. (Marketing)

## APPENDIX- A

OFA NO: MKTG/20-21/DISP/IA-BF#2/OFA-04 Dated: 15.07.2020

### SCHEDULE OF QUANTITY (INDICATIVE) FOR DISPOSABLE ITEMS

SL.	ITEM DESCRIPTION	UNIT	INDICATIVE QUANTITY
1	DISMANTLED MILD STEEL SCRAP - (MECHANICAL, UTILITIES, STRUCTURAL, ELECTRIC AND INSTRUMENTATION AND LOOSE ITEMS)	TON	10825
2	DISMANTLED CAST IRON SCRAP - (MECHANICAL, UTILITIES, STRUCTURAL ITEMS)	TON	1180
3	DISMANTLED REFRACTORY SCRAP	TON	10283
4	DISMANTLED PIG IRON SCRAP (SALAMANDER)	TON	700



**DISMANTLING OF BLAST FURNACE #2****OFA NO: MKTG/20-21/DISP/IA-BF#2/OFA-04 Dated: 15.07.2020****LOT-NO# BU:1 EMD: RS. 35 LACS****EXECUTING AUTHORITY: CGM (BF), ISP, BURNPUR****ANNEXURE 2.2.13-1****LIST OF MECHANICAL ITEMS TO BE DISMANTLED (INDICATIVE)**

<b>SL NO</b>	<b>EQUIPMENT</b>	<b>MATERIAL</b>	<b>QTY</b>	<b>UNIT</b>	<b>UNIT WEIGHT (TON)</b>	<b>TOTAL WEIGHT (TON)</b>
<b>1.00</b>	<b>MATERIAL HANDLING EQUIPMENT</b>					
1.01	CAST HOUSE EOT CRANE	MS	1	NOS	50	50.00
1.02	NEW LADLE HOUSE CRANE (110+30)	MS	1	NOS	200	200.00
1.03	KULTI LADLE HOUSE CRANE (110 +30)	MS	1	NOS	200	200.00
1.04	PCM NO#4 EOT OPEN GANTRY CRANE	MS	3	NOS	80	240.00
1.05	PCM NO#6 EOT OPEN GANTRY CRANE	MS	2	NOS	55	110.00
1.06	PCM NO#6 FEEDING CRANE	MS	1	NOS	25	25.00
1.07	HOIST FOR SKIP CAR OF 5T CAP	MS	1	NOS	2	2.00
1.08	OUTRIGGING 20T ELECTRIC HOIST	MS	1	NOS	5	5.00
1.09	3 T JIB CRANE AT +58159 MM FOR BLEEDER VALVE MAINTENANCE	MS	1	NOS	10	10.00
1.10	2 T JIB CRANE AT+37309 MM FOR SKIP BRIDGE DIVERSION PULLEY	MS	1	NOS	7	7.00
1.11	ELECTRIC HOIST AT STOCK HOUSE# 2T	MS	2	NOS	1.5	3.00
1.12	ELECTRIC HOIST OF CAP 30 T	MS	1	NOS	5	5.00
1.13	ELECTRIC HOIST.10T HOT BLAST V/V	MS	1	NOS	2	2.00
1.14	ELECTRIC HOIST of 10 T FOR BACK DRAGHT VALVE	MS	1	NOS	2	2.00
1.15	GEAR TROLLEY HOIST 2T AT GCP	MS	1	NOS	1	1.00
1.16	HOIST FOR SKIP WINCH OF 1T CAP	MS	1	NOS	1	1.00
1.17	HOIST FOR WINCH ROOM OF 5T CAP	MS	1	NOS	2	2.00
1.18	HOIST FOR WINCH ROOM OF 10T CAP	MS	1	NOS	2	2.00
1.19	HOIST AT CW PUMP ROOM	MS	1	NOS	1	1.00
1.20	ELECTRIC HOIST, HYDRAULIC ROOM	MS	1	NOS	1	1.00
1.21	ELECTRIC HOIST AT PCM#6 AT+6 MTR	MS	1	NOS	2	2.00
1.22	HOIST FOR LIME TANK BUILDING	MS	1	NOS	2	2.00
1.23	ELECTRIC WINCH AT DUST CATCHER WINCH ROOM OF CAP 1.5 T	MS	1	NOS	1	1.00
1.24	WINCH, DUST CUT OFF VALVE 3.5T	MS	1	NOS	2	2.00
1.25	ELECTRIC HOIST, CA FAN HOUSE 5T	MS	1	NOS	2	2.00
1.26	HOIST FOR SKIP CAR OF 5 T CAP	MS	1	NOS	2	2.00
1.27	HOIST FOR MUD GUN & DRILLER	MS	1	NOS	2	2.00
1.28	RAIL CRANE OF CAPACITY 10 TONS	MS	1	NOS	18	18.00
	<b>SUB TOTAL</b>					<b>900.00</b>

## ANNEXURE 2.2.13-1

**LIST OF MECHANICAL ITEMS TO BE DISMANTLED (INDICATIVE)**

SL NO	EQUIPMENT	MATERIAL	QTY	UNIT	UNIT WEIGHT (TON)	TOTAL WEIGHT (TON)
<b>2.00</b>	<b>CAST HOUSE</b>					
2.01	MUD GUN	MS	1	NOS	15	15.00
2.02	DRILLING MACHINE	MS	1	NOS	10	10.00
2.03	CLAY HOIST MECHANISM	MS	1	NOS	4	4.00
2.04	STEAM CYLINDER (C.I)	C.I	1	NOS	5	5.00
2.05	PULLEY ETC FOR SPLASHER PLATE	MS	1	SET	1	1.00
	<b>SUB-TOTAL</b>					<b>35.00</b>
<b>3.00</b>	<b>PIG CASTING MACHINE No. 4</b>					
3.01	PIG CASTING MACHINE WITH TWIN STRAND MOULDS AND DRIVE	MS	1	NOS	60	60.00
3.02	WINCH	MS	1	NOS	20	20.00
	<b>SUB-TOTAL</b>					<b>80.00</b>
<b>4.00</b>	<b>PIG CASTING MACHINE No. 6</b>					
4.01	TWIN STRAND WITH MOULDS, MACHINE (LINKAGES AND SPROCKETS)	MS	1	LUMP SUM	100	100.00
4.02	HAULAGE WAGON	MS	4	NOS	30	120.00
4.03	WINCH	MS	1	NOS	20	20.00
	<b>SUB-TOTAL</b>					<b>240.00</b>
<b>5.00</b>	<b>WINCH ROOM</b>					
5.01	SKIP CAR WINCH	MS	1	SET	35	35.00
5.02	BELL (SMALL AND LARGE) WINCH	MS	2	SET	15	30.00
5.03	BLEEDER VALVE OPERATION WINCH	MS	2	SET	1	2.00
5.04	ROTATING DISTRIBUTOR WINCH	MS	1	SET	10	10.00
5.05	STOCK LEVEL INDICATOR WINCH	MS	1	SET	3	3.00
	<b>SUB-TOTAL</b>					<b>80.00</b>
<b>6.00</b>	<b>SKIP BRIDGE</b>					
6.01	SKIP CAR WITH GUIDE ROLLERS, WIRE ROPES AND SKIP RAIL	MS	1	SET	70	70.00
6.02	ROPE PULLEY ASSEMBLY (GUIDE/DIVERSION)	MS	4	NOS	0.5	2.00
6.03	ROPE TENSIONING DEVICE	MS	1	SET	2	2.00
6.04	BULL WHEEL ASSEMBLY	MS	2	NOS	3	6.00
	<b>SUB-TOTAL</b>					<b>80.00</b>

**ANNEXURE 2.2.13-1**

**LIST OF MECHANICAL ITEMS TO BE DISMANTLED (INDICATIVE)**

SL NO	EQUIPMENT	MATERIAL	QTY	UNIT	UNIT WEIGHT (TON)	TOTAL WEIGHT (TON)
<b>7.00</b>	<b>FURNACE PROPER EQUIPMENT</b>					
7.01	BELL LEVER ASSEMBLIES, FULCRUM & CW	MS	1	SET	20	20.00
7.02	BIG BELL HOPPER ASSEMBLY	MS	1	NOS	25	25.00
7.03	BIG BELL ROD ASSEMBLY	MS	1	NOS	20	20.00
7.04	BIG BELL	MS	1	NOS	15	15.00
2.05	SMALL BELL HOPPER ASSEMBLY	MS	1	SET	5	5.00
7.06	SMALL BELL	MS	1	SET	2	2.00
7.07	SMALL BELL ROD ASSEMBLY	MS	1	SET	2	2.00
7.08	TENSIONING DEVICE, BELL ROPES	MS	2	SET	0.5	1.00
7.09	GAS SEAL ASSEMBLY	MS	1	SET	3	3.00
7.10	ROTATING HOPPER & DISTRIBUTOR ASSEMBLY WITH DRIVE SYSTEM	MS	1	SET	40	40.00
7.11	RECEIVING HOPPER	MS	1	SET	15	15.00
7.12	BELL EQUALIZER VALVE & HANGER ROD	MS	1	SET	2	2.00
7.13	BIG BELL & SMALL BELL EQUALISING VALVE	MS	4	NOS	0.25	1.00
7.14	STOCK LEVEL INDICATOR & CHAIN DRIVE	MS	2	SET	1	2.00
7.15	SPIGOT VALVES	MS	2	NOS	0.5	1.00
7.16	TUYERES STOCK ASSEMBLY	MS	12	NOS	5	60.00
7.17	IRON NOTCH	MS	1	SET	5	5.00
7.18	SLAG NOTCH	MS	1	SET	5	5.00
7.19	HEARTH COOL PLATE & STACK COOLER	C.I	1	SET	100	100.00
7.19	TUYERES, INT COOLER & MONKEY	CU	1	SET	12	12.00
7.20	STOCK SEAL PLATE	MS	1	NOS	40	40.00
	<b>SUB-TOTAL</b>					<b>376.00</b>
<b>8.00</b>	<b>STOCK HOUSE</b>					
8.01	VIBRATING FEEDERS FOR ORES	MS	15	NOS	2	30.00
8.02	ORE WEIGH HOPPER	MS	2	NOS	0.5	1.00
8.03	VIBRATING FEEDERS FOR ADDITIVES	MS	8	NOS	1	8.00
8.04	ADDITIVE WEIGH HOPPER	MS	4	NOS	0.5	2.00
2.05	VIBRATING FEEDERS FOR COKE	MS	2	NOS	1	2.00
8.06	COKE SCREEN	MS	2	NOS	3.5	7.00
8.07	COKE WEIGH HOPPERS	MS	2	NOS	0.5	1.00
8.08	BELT CONVEYOR. G/B, (OC-1, OC-2)	MS	2	NOS	40	80.00
8.09	BUCKET ELEVATORS WITH DRIVE	MS	1	SET	15	15.00
8.10	ACTUATORS WITH GATE	MS	4	SET	0.25	1.00
8.11	RACK AND PINION GATES	MS	21	SET	1	21.00
	<b>SUB-TOTAL</b>					<b>168.00</b>

## ANNEXURE 2.2.13-1

**LIST OF MECHANICAL ITEMS TO BE DISMANTLED (INDICATIVE)**

SL NO	EQUIPMENT	MATERIAL	QTY	UNIT	UNIT WEIGHT (TON)	TOTAL WEIGHT (TON)
<b>9.00</b>	<b>STOVE EQUIPMENT</b>					
9.01	COLD BLAST VALVE	MS	3	NOS	5.5	16.50
9.02	PRESSURISING VALVE	MS	3	NOS	0.5	1.50
9.03	DEPRESSURISING VALVE	MS	3	NOS	0.5	1.50
9.04	MIXER SHUT OFF VALVE	MS	1	NOS	1	1.00
2.05	MIXER CONTROL VALVES	MS	1	NOS	0.5	0.50
9.06	SNORT VALVE	MS	1	NOS	2	2.00
9.07	GAS SHUT OFF VALVE	MS	3	NOS	1	3.00
9.08	GAS SAFETY SHUT OFF VALVE	MS	3	NOS	2	6.00
9.09	HOT BLAST VALVE	MS	3	NOS	4	12.00
9.11	MOTORISED GAS BLEEDER VALVES	MS	3	NOS	0.5	1.50
9.12	MANUAL GAS BLEEDER VALVE	MS	4	NOS	0.5	2.00
9.13	GOOGLE VALVE	MS	3	NOS	2	6.00
9.14	GAS CONTROL VALVE	MS	3	NOS	0.5	1.50
9.15	CHIMNEY VALVE	MS	6	NOS	8	48.00
9.16	BACK DRAUGHT VALVE	MS	1	NOS	6	6.00
9.17	BLOW OFF VALVES	MS	6	NOS	4	12.00
9.18	COMBUSTION AIR SHUT-OFF VALVE	MS	1	NOS	0.5	1.50
9.19	COMBUSTION AIR PNEUMATIC OPERATE VALVE	MS	3	NOS	0.5	1.50
9.20	COMBUSTION AIR SHUT OFF VALVE	MS	3	NOS	0.5	1.50
9.21	COMBUSTION AIR FAN SHUT OFF VALVE	MS	2	NOS	0.5	1.00
9.22	COMBUSTION AIR BLEEDER VALVE	MS	3	NOS	0.5	1.50
	<b>SUB-TOTAL</b>					<b>128.00</b>
<b>10.0</b>	<b>DUST CATCHER UNIT</b>					
10.1	GAS BLEEDER VALVE (400 N.B DIA)	MS	1	NOS	2	2.00
10.2	GAS BLEEDER VALVE (250 N.B DIA)	MS	1	NOS	1	1.00
10.3	DUST VALVE	MS	1	NOS	5	5.00
10.4	DUST CATCHER CUT –OFF VALVE	MS	1	NOS	20	20.00
10.5	GUIDE PULLEY ASSEMBLY	MS	4	NOS	1	4.00
10.6	DIVERSION PULLEY ASSEMBLY	MS	15	NOS	1	15.00
	<b>SUB-TOTAL</b>					<b>47.00</b>
<b>11.0</b>	<b>GAS CLEANING PLANT</b>					
11.1	VENTURI SCRUBBER	MS	1	SET	150	150.00
11.2	AG UNIT	MS	1	SET	13	30.00
	<b>SUB-TOTAL</b>					<b>180.00</b>

## ANNEXURE 2.2.13-1

**LIST OF MECHANICAL ITEMS TO BE DISMANTLED (INDICATIVE)**

SL NO	EQUIPMENT	MATERIAL	QTY	UNIT	UNIT WEIGHT (TON)	TOTAL WEIGHT (TON)
<b>12.00</b>	<b>DORR THICKENER &amp; SLURRY HANDLING PLANT</b>					
12.01	CLARIFIER RAKERS	MS	3	NOS	1	3.00
12.02	MOTOR, COUPLING, G/BOX & SHAFT	MS	3	NOS	1	3.00
12.03	CONE SCRAPER	MS	3	NOS	1	3.00
12.04	TURBINE AGITATOR OF MIXER	MS	2	NOS	1	2.00
12.05	MOTOR, COUPLING, G/BOX & SHAFT	MS	2	NOS	1	2.00
12.06	LIFTING DEVICE ARRANGEMENT	MS	2	NOS	2	4.00
12.07	TURBINE AGITATOR OF DOSING UNIT SHAFT	MS	2	NOS	1	2.00
12.08	GEARED MOTOR, COUPLING, & SHAFT	MS	2	NOS	1	2.00
	<b>SUB-TOTAL</b>					<b>21.00</b>
<b>13.00</b>	<b>ORE HANDLING PLANT</b>					
13.01	BELT CONVEYOR NO 1 AND DRIVES	MS	1`	SET	15	15.00
13.02	BELT CONVEYOR NO 2 AND DRIVES	MS	1	SET	5	5.00
13.03	BELT CONVEYOR NO 3 AND DRIVES	MS	1	SET	100	100.00
13.04	BELT CONVEYOR NO 4 AND DRIVES	MS	1	SET	20	20.00
13.05	SHUTTLE CONVEYOR NO 5 & 5A	MS	2	SET	20	40.00
13.06	BELT CONVEYOR NO 6 & 6A &DRIVES	MS	2	SET	20	40.00
13.07	BELT CONVEYOR NO 7 AND DRIVES	MS	1	SET	5	5.00
13.08	BELT CONVEYOR NO 8 AND DRIVES	MS	1	SET	5	5.00
13.09	SHUTTLE CONVEYOR NO 10 & DRIVES	MS	1	SET	5	5.00
	<b>SUB-TOTAL</b>					<b>235.00</b>
	<b>GRAND TOTAL</b>					<b>2570.00</b>

## ANNEXURE 2.3.9-1

**LIST OF UTILITIES ITEMS TO BE DISMANTLED (INDICATIVE)**

SL NO	EQUIPMENT	MATERIAL	QTY	UNIT	UNIT WEIGHT (TON)	TOTAL WEIGHT (TON)
<b>1.00</b>	<b>PIPE LINES</b>					
1.01	COOLING WATER MAIN TANK SUPPLY	MS	45.0	METER		14.70
1.02	COOLING WATER EMERGENCY DN 450	MS	55.0	METER		6.40
1.03	COOLING WATER FURNACE SUPPLY	MS	183.0	METER		14.40
1.04	COOLING WATER STOVE SUPPLY	MS	37.0	METER		1.80
1.05	COOLING WATER RETURN LINE	MS	114.0	METER		11.80
1.06	COOLING WATER SUCTION LINE	MS	880.0	METER		69.00
1.07	COOLING WATER REDUNDANT PIPES	MS	670.0	METER		57.00
1.08	COOLING WATER GCP WATER SUPPLY	MS	110.0	METER		3.60
1.09	COOLING WATER T. BLOWER HOUSE	MS	90.0	METER		18.90
1.10	COOLING WATER GCP RETURN WATER	MS	203.0	METER		8.30
1.11	COOLING WATER VARIOUS HEADER	MS	184.0	METER		4.60
1.12	COOLING WATER SLURRY LAUNDER	MS	352.0	METER		31.70
1.13	COOLING WATER COLLECTOR TROUGH	MS	1.0	LOT		3.00
1.14	COOLING WATER MANIFOLD	MS	1.0	LOT		25.00
1.15	COMBUSTION AIR (1200,1000, 850 N.B)	MS	217.0	METER		57.40
1.16	HOT AIR BLAST PIPELINE (1500,1400) NB	MS	46.8	METER		19.95
1.17	COLD AIR BLAST (1200,1000,900, 600) NB	MS	289.4	METER		71.10
1.18	GAS LINE BF#2 STOVES (33", 39" & 54")	MS	149.9	METER		32.65
1.19	BUSTLE GAS PIPE & HANGERS (1400) NB	MS	41.5	METER		18.35
1.20	BLEEDER GAS PIPELINE 150 NB	MS	64.0	METER		0.85
1.21	BACK-DRAUGHT PIPELINE 1400	MS	6.7	METER		2.80
1.22	GAS MIX PIPELINE 600 NB	MS	23.6	METER		2.76
1.23	SEMI CLEAN BF GAS LINE 2020 mm OD	MS	22.0	METER		13.20
1.24	CLEAN BF GAS AFTER GCP, 1220 OD	MS	10.0	METER		3.70
1.25	CO GAS PIPELINE size 60"	MS	50.0	METER		23.60
1.26	CO GAS PIPELINE size 50"	MS	94.0	METER		29.70
1.27	CO GAS PIPELINE size 42"	MS	33.0	METER		9.00
1.28	CO GAS PIPELINE size 60"	MS	191.0	METER		35.00
1.29	CO GAS PIPELINE size 30"	MS	222.0	METER		33.70
1.30	CO GAS PIPELINE size 12"	MS	717.0	METER		17.60

## ANNEXURE 2.3.9-1

**LIST OF UTILITIES ITEMS TO BE DISMANTLED (INDICATIVE)**

SL NO	EQUIPMENT	MATERIAL	QTY	UNIT	UNIT WEIGHT (TON)	TOTAL WEIGHT (TON)
<b>1.00</b>	<b>PIPE LINES</b>					
1.31	BF GAS PIPELINE size 96"	MS	156	METER	LUM SUM	462.38
1.32	BF GAS PIPELINE size 72"	MS	70	METER		
1.33	BF GAS PIPELINE size 66"	MS	287	METER		
1.34	BF GAS PIPELINE size 60"	MS	52	METER		
1.35	BF GAS PIPELINE size 54"	MS	168	METER		
1.36	BF GAS PIPELINE size 48"	MS	310	METER		
1.37	BF GAS PIPELINE size 45"	MS	285	METER		
1.38	BF GAS PIPELINE size 39"	MS	77	METER		
1.39	BF GAS PIPELINE size 33"	MS	277	METER		
1.40	BF GAS PIPELINE size 30"	MS	730	METER		
1.42	BF GAS PIPELINE size 27"	MS	658	METER		
1.43	BF GAS PIPELINE size 24"	MS	185	METER		
1.44	BF GAS PIPELINE size 18"	MS	154	METER		
1.45	EQUALISER PIPELINE OF DIA 300N.B	MS	32	METER		1.00
1.46	UPTAKE (1124 & 1424 MM O.D, THK 12MM	MS	77.6	METER		22.10
1.47	DOWN-COMER (12MM THK, I.D 1800 DIA)	MS	39.1	METER		48.10
1.48	COMPRESSED AIR SUPPLY PIPE DIAMETER OF SIZE DN 40 & DN25 TO CAST HOUSE AND STOVE	MS		METER		0.50
1.49	COMPRESSED AIR HEADER OF DIAMETER OF SIZE DN 50	MS		METER		0.50
1.50	OXYGEN SUPPLY TO CAST HOUSE & STOVE OF SIZE DN 50, DN40 & DN 25	MS		METER		0.50
1.51	STEAM SUPPLY LINE FOR HUMIDIFYING COLD BLAST DN80	MS		METER	LUM SUM	312.20
1.52	STEAM LINE FOR PURGING VALVES	MS		METER		
1.53	STEAM LINE FOR BELL SEALING	MS		METER		
	<b>SUB-TOTAL</b>					<b>1488.84</b>

## ANNEXURE 2.3.9-1

**LIST OF UTILITIES ITEMS TO BE DISMANTLED (INDICATIVE)**

SL NO	EQUIPMENT	MATERIAL	QTY	UNIT	UNIT WEIGHT (TON)	TOTAL WEIGHT (TON)
<b>2.00</b>	<b>PUMPS</b>					
2.01	COOLING WATER CENTRIFUGAL PUMP	MS	2	NOS	1.50	3.00
2.02	COOLING TOWER PUMP	MS	2	NOS	1.50	3.00
2.03	SUBMERGIBLE PUMP OF STOCK HOUSE	MS	2	NOS	0.50	1.00
2.04	HOT WELL PUMPS	MS	3	NOS	0.80	2.40
2.05	SLUDGE HANDLING PUMPS (DIAPHRAGM)	MS	6	NOS	0.60	3.60
2.06	CENTRIFUGAL TYPE SLUDGE LOADING PUMP	MS	6	NOS	0.70	4.20
2.07	DEWATERING PUMP	MS	2	NOS	0.70	1.40
2.08	DIAPHRAGM TYPE METERING PUMP	MS	2	NOS	0.60	1.20
2.09	LIME SPRAY PUMP AT PCM#4	MS	1	NOS	0.20	0.20
2.10	LIME SPRAY PUMP AT PCM#6	MS	2	NOS	0.25	0.50
	<b>SUB-TOTAL</b>					<b>20.50</b>
<b>3.00</b>	<b>VALVES CLEAN BF GAS LINE VALVES</b>					
3.01	ELECTRIC OPERATED GATE VALVE	MS	1	NOS	1.00	1.00
3.02	GOGGLE VALVES	MS	1	NOS	3.00	3.00
3.03	C.I FLEX EDGE GATE VALVE	C.I	1	NOS	1.00	1.00
	<b>SUB-TOTAL</b>					<b>5.00</b>
<b>4.00</b>	<b>STEAM LINE VALVES</b>			NOS		
4.01	STEAM FLOW CONTROL VALVES	MS	3	NOS	0.02	0.06
4.02	STEAM PURGING, HUMIDIFICATION & SEALING BALL VALVES	MS	13	NOS	0.075	1.00
4.03	C.I GATE / GLOBE VALVE	C.I	25	NOS	0.020	0.50
4.04	MOISTURE TRAP (STEAM, COMPRESSED AIR)	MS	5	NOS	0.10	0.50
4.05	CAST STEEL GLOBE VALVE		5	NOS	0.02	0.10
	<b>SUB-TOTAL</b>					<b>2.16</b>
<b>5.00</b>	<b>VALVES IN COOLING WATER CIRCUIT</b>					
5.01	C.I GLOBE/GATE VALVE OF SIZE >DN 150	C.I	14	NOS	0.02	0.28
5.02	C.I GLOBE/GATE VALVE of size <DN 150	C.I	93	NOS	0.04	3.72
5.03	NON-RETURN VALVE (DN450, DN300, DN250, DN200)	C.I	6	NOS	0.20	1.20
5.04	PNEUMATIC CONTROL VALVE	MS	1	NOS	0.80	0.50
5.05	C.I 3-WAY PLUG VALVES	C.I	1	NOS	0.80	0.80
5.06	DUPLEX FILTER	MS	2	NOS	3.00	3.00
	<b>SUB-TOTAL</b>			NOS		<b>9.50</b>



## ANNEXURE 2.3.9-1

**LIST OF UTILITIES ITEMS TO BE DISMANTLED (INDICATIVE)**

SL NO	EQUIPMENT	MATERIAL	QTY	UNIT	UNIT WEIGHT (TON)	TOTAL WEIGHT (TON)
<b>6.00</b>	<b>VALVES IN GCP</b>					
6.01	CAST IRON GATE VALVES	C.I	17	NOS	0.5	8.5
6.02	SWING TYPE NON-RETURN VALVE	MS	6	NOS	0.8	4.8
6.03	CONTROL VALVES FOR 2ND STAGE	MS	2	NOS	0.3	0.6
6.04	DRAIN OUT VALVE	MS	2	NOS	0.05	0.1
6.05	FLOW CONTROL VALVE	MS	1	NOS	0.2	0.2
6.06	FORGED GATE / GLOBE VALVES	MS	5	NOS	0.3	1.5
6.07	CAST STEEL GATE/GLOBE VALVE	MS	12	NOS	0.33	4.0
6.08	CAST IRON TAPER PLUG VALVE(SLURRY)	C.I	6	NOS	0.5	3.0
	<b>SUB-TOTAL</b>					<b>22.9</b>
<b>7.00</b>	<b>VALVES AT THICKENER</b>					
7.01	CAST IRON GATE	C.I	6	NOS	0.5	3.0
7.02	NON-RETURN VALVES	C.I	6	NOS	0.6	3.6
7.03	KNIFE EDGE GATE VALVES	MS	4	NOS	0.4	1.6
	<b>SUB-TOTAL</b>					<b>8.2</b>
<b>8.00</b>	<b>TANKS</b>					
8.01	MAIN WATER TANK	MS	1	NOS	39.2	39.2
8.02	EMERGENCY WATER TANK	MS	1	NOS	5.7	5.7
8.03	WATER SEAL TANK	MS	1	NOS	4.3	4.3
	<b>SUB-TOTAL</b>					<b>49.2</b>
<b>9.00</b>	<b>COMBUSTION AIR SUPPLY SYSTEM</b>					
9.01	COMBUSTION AIR FAN	MS	2	NOS	2.75	5.5
9.02	DUPLEX FILTER WITH INLET GUIDE DAMPER	MS	2	NOS	3.1	6.2
9.03	<b>SUB-TOTAL</b>					<b>11.7</b>
<b>10.00</b>	<b>MISC</b>					
10.01	SLURRY LAUNDERS (UNDERGROUND, OVERGROUND, DIVERSION)	MS	6	NOS	3	18.0
10.02	PIG IRON LAUNDERS AT PCM 4	MS	1	NOS	4	4.0
10.03	PIG IRON LAUNDERS AT PCM 6	MS	1	NOS	8	8.0
	<b>SUB-TOTAL</b>					<b>30.0</b>
<b>11.00</b>	<b>RAILWAY TRACK</b>					
11.01	HOT METAL TRACK, SLAG TRACK, SLURRY TRACK & PCM TRACK	MS	12000	NOS	0.045	540.0
	<b>SUB-TOTAL</b>					<b>540.0</b>
	<b>GRAND TOTAL (1-11)</b>					<b>2184.96</b>

**ANNEXURE 2.4.16-1**

**LIST OF STRUCTURAL ITEMS TO BE DISMANTLED (INDICATIVE)**

SL NO	EQUIPMENT	MATERIAL	QTY	UNIT	UNIT WEIGHT (TON)	TOTAL WEIGHT (TON)
<b>1.00</b>	<b>TOP PLATFORM STRUCTURE</b>					
1.01	FURNACE TOP PLATFORMS AND SUPPORTING STRUCTURE	MS	1	NOS	340	340
1.02	STOVE PLATFORM	MS	1	NOS	150	150
1.03	DUST CATCHER	MS	1	NOS	60	60
1.04	GCP PLATFORM	MS	1	NOS	50	50
1.05	THICKENER CLARIFIER PLATFORM STEEL SUPER STRUCTURE	MS	3	NOS	10	30
	<b>SUB-TOTAL</b>					<b>630</b>
<b>2.00</b>	<b>TECHNOLOGICAL STRUCTURE</b>					
2.01	BF SHELL (THROAT, STACK, BELLY, BOSCH, TUYERE, HEARTH)	MS	1	NOS	350	350
2.02	DUST CATCHER	MS	1	NOS	120	120
2.03	GAS CLEANING PLANT SHELL (PRIMARY +SECONDARY)	MS	1	NOS	85	85
2.04	STOVE SHELL OF BF#2	MS	3	NOS	60	180
2.05	STOVE SHELL OF BF#3	MS	1	NOS	100	100
2.06	BACK DRAUGHT CHIMNEY SHELL	MS	1	NOS	100	100
2.07	BF GAS BLEEDER STACK CHIMNEY	MS	1	NOS	25	25
	<b>SUB-TOTAL</b>					<b>960</b>
<b>3.00</b>	<b>STRUCTURAL SHOP</b>					
3.01	WINCH ROOM	MS	1	NOS	60	60
3.02	HYDRAULIC ROOM	MS	1	NOS	25	25
3.03	ELECTRIC PANEL ROOM& FURNACE CONTROL ROOM	MS	1	NOS	70	70
3.04	CAST HOUSE	MS	1	NOS	150	250
3.05	PCM NO. 4 M/C AND WINCH SHED	MS	1	NOS	60	60
3.06	PCM NO.4 LIME TANK SUPPORT STRUCTURE& BUILDING	MS	1	NOS	3	3
3.07	PCM NO. 6 M/C AND WINCH SHED	MS	1	NOS	140	140
3.08	LIME TANK & SPRAY UNIT 1 LDG STRUCTURES AT PCM NO#6 AND ADJACENT ARC SHED	MS	1	NOS	30+70	100
3.09	PIG YARD SHED BESIDE PCM NO. 6	MS	1	TON	170	170
3.10	COOLING WATER PUMP ROOM	MS	1	TON	25	25
3.11	GCP PUMP ROOM	MS	1	TON	15	15
3.12	STOCK HOUSE	MS	1	TON	420	420
3.13	STOCK HOUSE HOPPERS AND CHUTES	MS	1	NOS	1	9
3.14	COMBUSTION AIR FAN HOUSE	MS	1	TON	15	15
3.15	NEW LADLE HOUSE	MS	1	TON	270	300

**ANNEXURE 2.4.16-1**

**LIST OF STRUCTURAL ITEMS TO BE DISMANTLED (INDICATIVE)**

SL NO	EQUIPMENT	MATERIAL	QTY	UNIT	UNIT WEIGHT (TON)	TOTAL WEIGHT (TON)
<b>3.00</b>	<b>STRUCTURAL SHOP</b>					
3.16	KULTI LADLE HOUSE		1	NOS	235	240.00
3.17	MECHANICAL REPAIR SHOP	MS	1	NOS	50	50.00
3.18	TRANSIT BUNKER HOUSE OF OHP INCLUDING STRUCTURAL HOPPER & CHUTES	MS	18	NOS	1	18.00
3.19	JUNCTION HOUSE OF BELT NO. 2, 3 AND 4 AT OHP	MS	1	NOS	60	60.00
3.20	JUNCTION HOUSE OF BELT NO. 6 & 7 AT OHP	MS	1	NOS	60	60.00
3.21	ORE SCREENING HOUSE, HOPPER & CHUTE	MS	1	NOS	90	90.00
3.22	UNDERGROUND HOPPER AT STOCKYARD	MS	1	NOS	25	25.00
	<b>SUB-TOTAL</b>					<b>2205.00</b>
<b>4.00</b>	<b>EQUIPMENT SUPPORT STRUCTURE</b>					
4.01	CONVEYOR GALLERY & TRESTLE, OC-1 AT S. HOUSE	MS	60	METER	1.5	90.00
4.02	CONVEYOR GALLERY & TRESTLE, OC-2 AT S. HOUSE	MS	100	METER	1.1	110.00
4.03	BUCKET ELEVATOR STRUCTURE AT S. HOUSE	MS	2	NOS	5	10.00
4.04	GALLERY OF BELT CONVEYOR NO.1 OF IRON OHP	MS	120	METER	0.2	60.00
4.05	GALLERY OF BELT CONVEYOR NO.2 OF IRON OHP	MS	150	METER	0.2	75.00
4.06	GALLERY OF BELT CONVEYOR NO.3 OF IRON OHP	MS	1500	METER	0.25	375.00
4.07	GALLERY OF BELT CONVEYOR NO.4 OF IRON OHP	MS	200	METER	0.2	40.00
4.08	GALLERY FOR SHUTTLE CONVEYOR NO. 5&5A	MS	150	METER	0.5	75.00
4.09	GALLERY OF BC# 6 & 6A OF IRON OHP	MS	200	METER	0.2	40.00
4.10	GALLERY OF BELT CONVEYOR NO.7 OF IRON OHP	MS	50	METER	0.2	10.00
4.11	GALLERY OF BELT CONVEYOR NO.8 OF IRON OHP	MS	50	METER	0.2	10.00
4.12	GALLERY OF BELT CONVEYOR NO.10 OF IRON OHP	MS	50	METER	0.2	10.00
4.13	SKIP BRIDGE	MS	1	TON	200	200.00
4.14	ELEVATOR SUPPORT FRAME	MS	1	TON	25	25.00
4.15	TRESTLES OF PIPELINE & EMERGENCY WATER TANK	MS	1	TON	100	100.00
4.16	CABLE BRIDGE	MS	50	METER	0.2	10.00
4.17	SLURRY LAUNDER GALLERY STRUCTURE	MS	352	METER	0.142	50.00
4.18	PCM#6 M/C GALLERY	MS	1	TON	60	60.00
4.19	PCM#4 M/C GALLERY	MS	1	TON	50	50.00
4.20	OPEN GANTRY GIRDERS AND COLUMNS AT PIG STORAGE YARD BESIDE PCM#4	MS	1	TON	700	700.00
4.21	OPEN GANTRY GIRDERS AND COLUMNS AT PIG STORAGE YARD BESIDE PCM#6	MS	1	TON	120	120.00
4.22	CRANE GIRDERS AND COLUMNS AT CAST HOUSE	MS	1	TON	20	20.00
4.23	CAST IRON SLEEPERS	C.I	1800	NOS	0.25	450.00
	<b>SUB-TOTAL</b>					<b>2690.00</b>
	<b>GRAND TOTAL</b>					<b>6485.00</b>

**ANNEXURE 2.6.4-1**
**LIST OF ELECTRICAL ITEMS TO BE DISMANTLED (INDICATIVE)**

SL NO	EQUIPMENT	MATERIAL	QTY	UNIT	UNIT WEIGHT (TON)	TOTAL WEIGHT (TON)
<b>1.00</b>	<b>BF#2 CONTROL ROOM</b>					
1.01	PLC PANEL	MS	6	NOS	0.2	1.200
1.02	SLI PANEL	MS	2	NOS	0.07	0.140
1.03	SLI BRAKE PANEL	MS	2	NOS	0.04	0.080
1.04	SKIP DRIVE PANEL	MS	2	NOS	0.2	0.400
1.05	SKIP HOIST BRAKE	MS	2	NOS	0.1	0.200
1.06	BELL WINCH PANEL	MS	2	NOS	0.2	0.400
1.07	BELL WINCH BRAKE	MS	2	NOS	0.1	0.200
1.08	INSTRUMENTATIONPANEL	MS	1	NOS	0.15	0.150
1.09	HOPPER WEIGHING PANEL	MS	1	NOS	0.2	0.200
1.10	UPS UNIT	MS	1	NOS	0.4	0.400
1.11	CONTROL DESK PANEL	MS	1	NOS	0.15	0.150
1.12	OPERATOR DESK NOS.	MS	1	NOS	0.5	0.500
1.13	GCP DRIVE PANEL	MS	1	NOS	0.2	0.200
1.14	GCP INSTRUMENTATIONPANEL	MS	1	NOS	0.2	0.200
1.15	FIRE ALARM PANEL	MS	1	NOS	0.005	0.005
1.16	PDB (UPS)	MS	1	NOS	0.008	0.008
1.17	PDB (NON-UPS)	MS	1	NOS	0.008	0.008
1.18	PLC SUPPLY BOARD	MS	1	NOS	0.005	0.005
1.19	SLDB (SUB-LIGHTING DISTRIBUTION BOARD)		7	NOS	0.05	0.35
	<b>SUB-TOTAL</b>					<b>4.790</b>
<b>2.00</b>	<b>MOTOR CONTROL ROOM- CENTER ROOM</b>					
2.01	MCC-1 (PANEL UNIT & FEEDERS)	MS	44	NOS	0.05	2.200
2.02	MCC-2 (PANEL UNIT & FEEDERS)	MS	55	NOS	0.05	2.750
2.03	MCC-3 (PANEL UNIT & FEEDERS)	MS	53	NOS	0.05	2.650
2.04	AIR CONDITIONING PANEL UNIT	MS	10	NOS	0.05	0.500
2.05	AC PACKAGE SYSTEM	MS	2	NOS	0.4	0.800
2.06	UPS AC (DB)	MS	1	NOS	0.02	0.020
	<b>SUB- TOTAL</b>					<b>8.920</b>
<b>3.0</b>	<b>CAST HOUSE</b>					
3.01	BF#2 Cast House Crane	MS	1	NOS	30	30.000
3.02	HPP Operating Desk	MS	1	NOS	0.08	0.0800
	<b>SUB- TOTAL</b>					<b>30.080</b>

**ANNEXURE 2.6.4-1**

**LIST OF ELECTRICAL ITEMS TO BE DISMANTLED (INDICATIVE)**

<b>SL NO</b>	<b>EQUIPMENT</b>	<b>MATERIAL</b>	<b>QTY</b>	<b>UNIT</b>	<b>UNIT WEIGHT (TON)</b>	<b>TOTAL WEIGHT (TON)</b>
<b>4.00</b>	<b>POWER DISTRIBUTION ROOM</b>					
4.01	PDB BOARD (PANEL UNIT & FEEDERS)	MS	1	NOS	3	3.000
4.02	AUXILIARY PDB (PANEL UNIT, FEEDERS)	MS	1	NOS	2.5	2.500
4.03	MLDB (FEEDERS)	MS	21	NOS	0.015	0.300
4.04	DYNAMIC BRAKING PANEL (DBR)	MS	1	NOS	0.5	0.500
4.05	GCP (PMCC) PANEL UNIT & FEEDERS	MS	22	NOS	0.035	0.700
	<b>SUB- TOTAL</b>					<b>7.000</b>
<b>5.00</b>	<b>HYDRAULIC POWER PACK</b>					
5.01	HPP MCC PANEL FOR HPP	MS	1	NOS	0.5	0.500
5.02	HPP RELAY LOGIC PANEL	MS	1	NOS	0.04	0.040
5.03	MUDGUN & DRILL MACHINE PANEL	MS	1	NOS	0.05	0.050
5.04	CLS PANEL NOS.	MS	1	NOS	0.08	0.080
	<b>SUB- TOTAL</b>					<b>0.670</b>
<b>6.00</b>	<b>BF NO.2 ENGINE ROOM</b>					
6.01	JUNCTION BOX NOS.	MS	15	NOS	20	0.300
6.02	HOIST WINCH PANEL FOR SKIP, BELL & SLI MOTOR	MS	3	NOS	0.04	0.120
	<b>SUB- TOTAL</b>					<b>0.420</b>
<b>7.00</b>	<b>PIG CASTING MACHINE#6</b>					
7.01	PANEL UNIT & FEEDERS	MS	1	NOS	32	0.480
7.02	LIGHTING BOARD	MS	1	NOS	0.05	0.050
7.03	30 KW STRAND DRIVE PANEL	MS	2	NOS	0.2	0.400
7.04	CONTROL DESK PANEL	MS	1	NOS	0.3	0.300
7.05	BRAKE CONTROL PANEL	MS	1	NOS	0.15	0.150
7.06	GREASE LUBRICATION PANEL	MS	1	NOS	0.08	0.080
	<b>SUB- TOTAL</b>					<b>1.460</b>
	<b>GRAND TOTAL</b>					<b>53.340</b>
<b>8.00</b>	<b>CABLES</b>					
8.01	POWER CABLES OF DIFFERENT SIZES		25	KM		
8.02	CONTROL CABLE OF DIFFERENT SIZES		30	KM		
<b>ENTIRE RETRIEVED CABLES SHALL BE HAND OVER TO MRD, ISP (NOT FOR SALE)</b>						
<b>9.00</b>	<b>MOTORS</b>					
9.01	DIFFERENT RATINGS OF MOTOR		250	NOS	(APPOX)	
<b>ALL MOTORS SHALL BE DISMANTLED AND HANDED OVER TO ISP. (NOT FOR SALE)</b>						



**LIST OF REFRACTORY & SALAMANDER ITEMS TO BE DISMANTLED (INDICATIVE)****LIST OF REFRACTORY ITEMS TO BE DISMANTLED (INDICATIVE)**

<b>SL NO.</b>	<b>EQUIPMENT</b>	<b>QTY</b>	<b>UNIT</b>	<b>TOTAL AVAILABLE (TON)</b>	<b>SALVAGEABLE (TON)</b>
<b>1.00</b>	<b>BF#2</b>				
1.01	FURNACE PROPER UP TO MANTLE	1	NOS	400	280
1.02	FURNACE PROPER MANTLE TO TOP	1	NOS	500	350
1.03	HEARTH BASE OF HEARTH	1	NOS	720	504
1.04	HOT BLAST SYSTEM BF#2 STOVES	3	NOS	6000	4200
1.05	HOT BLAST SYSTEM BF#3 STOVES	1	NOS	2000	1400
1.06	BACK DRAFT CHIMNEY	1	NOS	2000	1400
1.07	FLUE TUNNEL	1	NOS	2500	1750
1.08	PIPELINES HOT BLAST MAIN	1	NOS	500	350
1.09	BUSTLE PIPE	1	NOS		
1.10	UPTAKE & DOWNCOMER	1	NOS		
1.11	DUST CATCHER SHELL	1	NOS		
1.12	CAST HOUSE METAL & SLAG RUNNER	4	NOS	40	28
1.13	CAST HOUSE & COLUMN ENCASING	1	NOS	30	21
	<b>GRAND TOTAL</b>			<b>14690</b>	<b>10283</b>

**LIST OF SALAMANDER AND OTHER ITEMS TO BE DISMANTLED (INDICATIVE)**

<b>SL NO.</b>	<b>EQUIPMENT</b>	<b>QTY</b>	<b>UNIT</b>	<b>TOTAL AVAILABLE (TON)</b>	<b>SALVAGEABLE (TON)</b>
<b>2.00</b>	<b>FURNACE PROPER, HEARTH, STOVES</b>				
2.01	SALAMANDER OF BF#2(PIG IRON)	1	TON	700	700
	<b>GRAND TOTAL</b>				<b>700</b>



## ANNEXURE 2.8.2-2

## LIST OF LOOSE SPARE AND SCRAP ITEMS (INDICATIVE)

SL NO	EQUIPMENT	MATERIAL	QTY	UNIT	UNIT WEIGHT (TON)	TOTAL WEIGHT (TON)
<b>1.00</b>	<b>LIST OF LOOSE SPARES AND SCARP ITEMS</b>	<b>MS</b>				
1.01	BF#2 SNATCH BLOCK OF CRANE	MS	50	NOS	0.5	25
1.02	BF#2 GEAR BOX	MS	20	NOS	5	100
<b>2.00</b>	<b>LIST OF LOOSE SPARES AND SCARP ITEMS</b>	<b>C.I</b>				
2.01	PCM & BF#2 CAST IRON SCRAP	C.I	1	NOS	100	100
2.02	LADLE HOUSE CAST IRON BOULDER	C.I	1	NOS	500	500

**LIST OF RETRIEVABLE ITEMS (INDICATIVE)**  
**(TO BE HANDED OVER TO ISP)**

SLNO	ITEM DESCRIPTION	UNIT	QUANTITY	REMARKS
1	POWER CABLES TO BE DISMANTLED & RETRIEVED OF DIFFERENT SIZES AS PER ANNEXURE#2.6.4-1(ITEM 8.01)	KM	25.00	MATERIAL CABLES TO BE RETRIEVED FROM BF#2, BUNDLED SIZE & TYPE WISE, TRANSPORTED AND HANDED OVER TO ISP
2	CONTROL CABLES TO BE DISMANTLED & RETRIEVED OF DIFFERENT SIZES AS PER ANNEXURE#2.6.4-1(ITEM 8.02)	KM	30.00	MATERIAL CABLES TO BE RETRIEVED FROM BF#2, BUNDLED SIZE & TYPE WISE, TRANSPORTED AND HANDED OVER TO ISP
3	COPPER ITEMS (MONKEY, INTERMEDIATE COOLER, TUYERE & COOLER) ANNEXURE#2.2.13-1 ITEM (7.19)	TON	12.00	EXTRACTION OF COPPER ITEMS AND HANDOVER TO ISP
4	ELECTRICAL MOTORS OF DIFFERENT RATINGS AS PER ANNEXURE#2.2.13-1(ITEM 14.01) / ANNEXURE#2.6.4-1(ITEM 9.01)	NOS	250.00	DISMANTLED/ DISMOUNTED AND TO BE HANDED OVER TO ISP
5	WOODEN SLEEPERS AS PER ANNEXURE# 2.5.6.-1 (ITEM 7.01)	TON	126.00	TO BE HANDED OVER TO ISP
6	RCC SLEEPERS AS PER ANNEXURE# 2.5.6.-1 (ITEM 7.02)	TON	600.00	TO BE HANDED OVER TO ISP

**LIST OF RETRIEVABLE ITEMS (INDICATIVE)**  
**(TO BE HANDED OVER TO ISP)**

SL NO.	EQUIPMENT	QTY	UNIT	UNIT WEIGHT (TON)	TOTAL WEIGHT (TON)
7.19	TUYERES, INT COOLER & MONKEY (COPPER ITEM)	1	SET	12	12
<b>14.00</b>	<b>MOTORS</b>				
14.01	DIFFERENT RATINGS OF MOTOR RETRIVED WHILE DISMANTLING THE <b><u>MECHANICAL ITEMS OF ANNEXURE: 2.2.13-1</u></b>	250	NOS	(APPOX)	
<b>TUYERES, INT COOLER &amp; MONKEY (COPPER ITEM, MOTORS SHALL BE DISMANTLED AND HANDED OVER TO ISP. (NOT FOR SALE)</b>					



## DISMANTLING OF BLAST FURNACE #2

OFA NO: MKTG/20-21/DISP/IA-BF#2/OFA-04 Dated: 15.07.2020

LOT-NO# BU:1

EMD: RS. 35 LACS

EXECUTING AUTHORITY: CGM (BF), ISP, BURNPUR

### SCHEDULE – 2.1.4-1

#### SCHEDULE OF QUANTITY (INDICATIVE) FOR DISPOSABLE ITEMS

SL. NO.	ITEM DESCRIPTION	UNIT	QUANTITY
1.	<b>DISMANTLED MILD STEEL SCRAP (MECHANICAL, UTILITIES, STRUCTURAL, ELECTRIC AND INSTRUMENTATION AND LOOSE ITEMS)</b> REF: ANNEXURE-2.2.13-1. ANNEXURE-2.3.9-1, ANNEXURE-2.4.16-1, ANNEXURE-2.6.4-1, ANNEXURE-2.8.2-2	TON	10825
2.	<b>DISMANTLED CAST IRON SCRAP (MECHANICAL, UTILITIES, STRUCTURAL ITEMS)</b> REF: ANNEXURE-2.2.13-1. ANNEXURE-2.3.9-1, ANNEXURE-2.4.16-1 ANNEXURE-2.8.2-2	TON	1180
3.	<b>DISMANTLED REFRACTORY SCRAP</b> REF: ANNEXURE-2.7.3-1.	TON	10283
4.	<b>DISMANTLED PIG IRON SCRAP (SALAMANDER)</b> REF: ANNEXURE-2.8.2-1	TON	700

### SCHEDULE – 2.1.4-2

#### SCHEDULE OF QUANTITY (INDICATIVE) FOR NON-DISPOSABLE ITEMS

SL. NO.	ITEM DESCRIPTION	UNIT	QUANTITY
1	CONCRETE RUBBISH, INCLUDING RCC & PCC	MT	20,750
2	BRICK RUBBISH & REFRACTORY RUBBISH	MT	2250



**STEEL AUTHORITY OF INDIA LIMITED  
IISCO STEEL PLANT  
BURNPUR**

**Tender No. MKTG/20-21/DISP/IA-BF#2/OFA-04    Dated: 15.07.2020**

***AUCTION TERMS***

**FOR**

***DISMANTLING AND SALE OF BLAST FURNACE No. 2, ISP***

**OFA DOCUMENT    PART-II**

## **SPECIAL TERMS & CONDITIONS**

1. Since many agencies may be working at site simultaneously, the SUCCESSFUL BIDDER shall have to work in close co-operation with them ensuring smooth and safe working. The exact timing of dismantling of different items shall be decided in consultation with the CERTIFYING AND EXECUTING AUTHORITY or his authorized representative, keeping in view the overall co-ordination aspects of dismantling and working requirements thereof.
2. The SUCCESSFUL BIDDER shall do all necessary site work and construction of the site office / stores as may be required by him only after taking permission from the CERTIFYING AND EXECUTING AUTHORITY or his authorized representative at the specified location shown by them.
3. All temporary lighting work required for executing this work shall be done by the SUCCESSFUL BIDDER and all materials, such as light fittings, hand lamps, distribution boards etc. shall be arranged by him. All such work shall comply with safety standards and electricity rules.
4. The CERTIFYING AND EXECUTING AUTHORITY or his authorized representative reserves the right to interrupt or alter the sequence of work, whenever such interruption or alteration is necessitated due to any special requirement at site or as thought best by the CERTIFYING AND EXECUTING AUTHORITY or his authorized representative in the overall interest of the plant, without any financial implications what-so-ever.
5. The SUCCESSFUL BIDDER shall be responsible for providing security for materials, tools and tackles and his office / stores during the pendency of the contract.
6. The entire job shall be carried out under the overall supervision of the CERTIFYING AND EXECUTING AUTHORITY or his authorized representative.
7. The CERTIFYING AND EXECUTING AUTHORITY or his authorized representative shall have the authority to make any alternation in, omission from, addition to, substitution for the original specification and instructions that may appear to be necessary or advisable during the progress of the work and the SUCCESSFUL BIDDER shall be bound to carry out the work in accordance with the instruction, which may be given to him by the CERTIFYING AND EXECUTING AUTHORITY or his authorized representative from time to time. Such alternation, omission, addition or substitutions shall not invalidate the contract and any altered, additional or substituted work, which the SUCCESSFUL BIDDER may be directed to do in the manner specified above as part of the work, shall be carried out by the SUCCESSFUL BIDDER on the same terms & conditions as agreed to for the main work.
8. All materials and equipment brought to site shall not be removed from the site without written permission of the CERTIFYING AND EXECUTING AUTHORITY or his

authorized representative. This is also applicable to equipment hired by the SUCCESSFUL BIDDER from outside agencies. Procedure regarding issue of gate pass and checking of trucks / trailers at entry and exit to the plant shall be in accordance with SAIL-ISP rules.

9. The SUCCESSFUL BIDDER shall be liable to pay compensation for any equipment / item damaged by him in course of carrying out the work.
10. The SUCCESSFUL BIDDER shall also ensure regular dumping of arising generated out of his work, as declared by the CERTIFYING AND EXECUTING AUTHORITY or his authorized representative to the dumping sites allotted for this purpose by GM (Services), SAIL-ISP; on request of the CERTIFYING AND EXECUTING AUTHORITY or his authorized representative. Such sites will be within the ISP Burnpur Works.
11. The SUCCESSFUL BIDDER shall acquaint himself, with all statutory regulations such as 'Indian Electricity Regulations', 'Indian Factories Act', 'Model Code of Safety Regulations', 'Electrical Safety Code' etc. as relevant to the job and shall follow the same. The SUCCESSFUL BIDDER shall be responsible for paying strict attention to all statutory regulations for prevention of accidents, explosions, fire hazards etc. Supply and erection of all temporary props and supports as may be needed for safe dismantling without endangering the existing plant and buildings shall be the responsibility of the SUCCESSFUL BIDDER.
12. Gas cutting in fire hazardous areas shall be done with proper planning and shall start only after obtaining written permission for specific job from the CERTIFYING AND EXECUTING AUTHORITY or his authorized representative and on implementation of necessary safety measures further to the safety provisions as per Clause 26 of SAIL GTC-SA:2017. This shall be applicable for work in gas prone areas, such as cellar and gas collecting main system etc. Such job shall be carried out only after necessary shut down and written clearance from the CERTIFYING AND EXECUTING AUTHORITY or his authorized representative is obtained.
13. The SUCCESSFUL BIDDER shall also strictly follow the safety rules, regulations and instructions issued by the Safety department of SAIL-ISP. In absence of a particular reference by SAIL-ISP, the SUCCESSFUL BIDDER shall refer to relevant Indian Standard codes and practices and also the State Government rules and regulations. The Bidder shall be personally responsible for the safety of his workmen and shall be liable for prosecution in case of any accident.
14. The SUCCESSFUL BIDDER shall supply all safety appliances to his personnel working at site. These shall include safety shoes, safety helmets, hand gloves etc. He shall also ensure use of these safety appliances during work at site.
15. Job execution programme, mutually agreed to between the CERTIFYING AND EXECUTING AUTHORITY or his authorized representative and the SUCCESSFUL

BIDDER, shall form a part of the contract and shall not be arbitrarily changed.

16. The SUCCESSFUL BIDDER shall submit daily / weekly / monthly progress report of work in the required proforma furnished by the CERTIFYING AND EXECUTING AUTHORITY or his authorized representative.
17. In case of slippage from the agreed Job execution program, the SUCCESSFUL BIDDER shall augment manpower as directed by the CERTIFYING AND EXECUTING AUTHORITY or his authorized representative for the successful and timely completion of the work. The SUCCESSFUL BIDDER shall work extra shift / hours, provide additional motivation to his personnel, if required to adhere to the schedule, at no additional cost to SAIL-ISP.
18. SUCCESSFUL BIDDER shall abide by all relevant statutory provisions including Labour Laws and Rules that may be in force from time to time in matters of engagement of workmen for the job and shall be responsible for payment of all due wages and statutory benefits in all eventualities to the labourers employed by him under the Employees Provident fund and Miscellaneous provisions Act, payment of Bonus Act, payment of Gratuity Act, Workmen Compensation Act, Minimum Wages Act, Industrial Disputes Act, Fatal Accident Act and all other applicable statutes. The Company shall not in any way be liable for such payments. Deployment of number of workmen shall also be guided by the relevant statute.
19. The responsibility of loading, unloading and safe custody of the material till dispatch shall rest with the SUCCESSFUL BIDDER. The materials shall be disposed / unloaded at SAIL-ISP's stores / dump yard within the stipulated working hours by the Bidder, as directed by the CERTIFYING AND EXECUTING AUTHORITY.

## **20. TEMPORARY FACILITIES**

The following equipment's and facilities, if required, shall be arranged by the SUCCESSFUL BIDDER

1. Site office and canteen for his supervisors and workers. For this purpose, only space shall be provided by the CERTIFYING AND EXECUTING AUTHORITY or his authorized representative.
2. Residential accommodation for his supervisors and workers outside the plant premises.
3. Yard / temporary shed for storage of all materials and equipment under the scope of dismantling. Space shall be earmarked by the CERTIFYING AND EXECUTING AUTHORITY or his authorized representative.
4. Washing / cleaning facilities for the equipment and treatment of washing / cleaning fluid and drainage as directed by the CERTIFYING AND EXECUTING AUTHORITY or his authorized representative.
5. Suitable capacity material handling / transport equipment required for dismantling of structures and equipment.
6. From One Power point (440 / 220 V) supplied free of cost, the connections to different execution sites have to be done for illumination and other purposes for



successful completion of the work by SUCCESSFUL BIDDER at its own cost.

**21. WORKING TIMING:**

Cutting and dismantling will be allowed in General Shifts (9:00 AM to 5:00 PM) on all working days excluding Sundays and Holidays. All tools and Tackles required for dismantling including Oxygen Gas and Acetylene Gas required for cutting should be arranged by the SUCCESSFUL BIDDER. at their own cost and arrangement.

**22.** Movement of vehicles inside the plant shall be governed by the prevailing rules of the plant / Units etc. Loading will be allowed in General Shift only. Loading is to be completed by 16:00 Hrs. The various items available for dismantling and disposal have been shown in the TS. All the materials as per OFA terms will be disposed off on “As is Where is” and “No Complaints” basis.

**23.** Inspection of Materials will be available for inspection on working days between 9:30 Hrs. and 13:00 Hrs. from 01.11.2019 to 25.11.2019 by prior intimation. Interested parties may visit the SITES to inspect the materials by contacting the CERTIFYING AND EXECUTING AUTHORITY or his authorized representative on the prescribed time and dates as mentioned above. Necessary entry passes may be obtained from CISF, SAIL-ISP, Burnpur or the concerned authority of other locations as the case may be.

**24.** Bidders by submitting the online bid shall be deemed to have fully familiarized themselves and assessed the Quantity, quality, condition etc. of the materials available and related activities defined in the OFA documents, other terms and conditions of the OFA documents. The bidders should fully satisfy themselves of their capabilities to undertake and perform the job & all other related aspects of the job. No complaint in any respect shall be entertained by SAIL-ISP afterwards.

**25.** The OFA document contains technical details of Materials available for sale. SAIL-ISP reserves the right to make changes in the requirement and / or procedure before the bid opening date and such changes will be published in websites <https://sailtenders.co.in>, <http://www.metaljunction.com/>  
<http://www.metaljunction.com>

**26.** All bidders should note any such changes if posted in the above-mentioned websites, and will be deemed as agreed to such changes, before participation in the OFA.

**27.** Bids of only those bidder/s shall be accepted who quote for the entire Lot covering all the items of the Lot as per this OFA Document i.e. the Bid /s which takes care of the entire Lot covering all the items of the individual Lot and becomes H-1 for the Lot excluding taxes, duties and other levies etc. in the bidding as per OFA document shall be considered as the H-1 bidder.

**28.** Non-quoting of any item(s) in the Lot will make the Bid/s liable for cancellation and EMD will be forfeited in that case.

## **29. DOCUMENTS TO BE SUBMITTED**

In respect of sale through Online forward auction process, the intending Bidder would have to submit the following documents along with EMD within the last date of submission as mentioned in Online Forward Auction Notice. Bidders will not be allowed to participate without submission of the following documents along with the Required EMD to GM(MKTG), ISP WORKS, BURNPUR within stipulated time:

1. The OFA document along with all Annexures & Appendix with all Corrigendum, addendum etc. duly signed and stamped on each page along with EMD.
2. Self-attested and stamped declaration on Bidder's letter head about the Pan / GIR No. duly received from the Concerned Appropriate Authority.
3. In case of partnership firms, the copy of Registration Certificate issued by the Registrar of Firms and Partnership Deeds under the Indian Partnership Act, duly attested by a Notary Public or, in case of Limited Company, photocopy of Certificate of Incorporation along with Memorandum of Association and Articles of Association duly attested by a Notary Public. or, in case of proprietorship concern, an Affidavit to this effect, sworn before the designated authority.  
All pages of the above documents should be signed and stamped by the bidder.
4. GST Registration Certificate
5. Name and Address of the Banker and the respective Bank Account No. of the bidder duly self-attested and stamped by the bidder.
6. Documents in support of eligibility Criteria as mentioned in PART-III of OFA Document must be submitted.
7. SAIL-ISP/ Metal Junction reserves the right at its sole discretion to cancel the bidder from participating in this online forward auction, in case of non-submission of any or all the above documents by the bidder within stipulated date & time.

## **30. PRICE BIDDING**

1. The price(s) offered / bided online should remain valid for a period of 45 (forty-five) working days from the date of online auction for acceptance by SAIL-ISP. Any modification / variation made thereto by the bidder(s) during the above period of 45(Forty-five) working days shall be construed as withdrawal from the OFA and in that event, SAIL-ISP shall reserve the right to cancel the bid(s) and forfeit the earnest money deposit(s) without any further reference to the bidder(s).

2. The Price bided should take care of the following:
  - a. The general conditions of all the materials are “Old, Used, rejected” and to be accepted on “As is where is” and “No complaint” basis and as per terms & conditions of the Online Forward Auction.
  - b. Isolation, relocation, dismantling, gas cutting, processing etc. and transportation, storing and handing over of returnable material at specified location as directed by the Executing Authority and as detailed in TS.
  - c. It is compulsory for bidding all the items of Appendix – A and Non-bidding any item of Appendix - A shall make the Bid liable for cancellation.
  - d. For any shortfall in quantity due to non –availability of material, refund will be done as per the D. O rate in Rs/MT. No complaint about the same will be entertained afterwards on the refund amount so calculated. No refund will be given for non-lifting of material covered by D.O. (including amendment to D.O.) if the same is available in stock.
3. The price bid should be on Lump sum basis for purchase of all items as mentioned in APPENDIX-A, exclusive of GST and TCS etc. payable extra. The Bidders should submit their bid(s) after assessing & getting themselves thoroughly satisfied about the availability of the materials as per OFA Document and it will be assumed that the Bid(s) have been submitted by the bidder after thorough inspection and getting themselves fully acquainted and satisfied with the scope of the work, quantity (i.e. Nos. / MT etc.) and other related aspects of the work etc. Shortfall in quantity, if any, of the items of the Lot(s) as mentioned in Appendix-A, cannot be made up and no claim for the same would be entertained afterwards. Excess quantity, if available will be offered to the H-1 bidder at the same rate, terms and conditions of the OFA document. Amount for shortfall quantity, if any, will be refunded after completion of the lifting of all available quantity, in due course. Once the materials are sold, no complain of any kind will be entertained in this regard by SAIL-ISP. Price(s) should be valid for a period of 45 (Forty-Five) days from the date of Online Forward Auction for acceptance by SAIL-ISP. The price(s) once accepted shall remain firm till completion of lifting by the SUCCESSFUL BIDDER within the validity period of the contract.
4. The materials shall be sold to the highest (H-1) bidder. In case H-1 backs out from accepting the order, his EMD will be forfeited.

### **31. EARNEST MONEY DEPOSIT**

Bidders have to deposit Earnest Money of Rs.35.00 Lakh (Rupees Thirty-Five Lakh only) by NEFT/Demand Draft / Pay Order/ Bank Guarantee (as per attached format)/Banker's Cheque drawn in favour of “SAIL- IISCO Steel Plant” on any nationalized/scheduled bank (Co-operative Banks are not acceptable) and payable at

BURNPUR /ASANSOL towards non-interest-bearing Earnest Money Deposit (EMD). If EMD is not deposited according to the above specifications the application will be summarily rejected. EMD of unsuccessful bidders will be returned / refunded as it is after the completion of e-auction. ISP will retain the EMD of H-1 Bidder till the acceptance of the H-1 bid and deposition of Security Deposit by them. However, the DD/BC/PO of the EMD of SUCCESSFUL BIDDER will be adjusted against Security Deposit, which shall not carry any interest. In the event of failure on the part of the SUCCESSFUL BIDDER to make payment for security deposit within the dates specified in the Letter of Acceptance / letter of Intent, The Management may at its discretion foreclose the OFA / contract and forfeit the earnest money so deposited as the case may be without issuing any prior notice to the SUCCESSFUL BIDDER. In case of any non-conformity / non-compliance by the SUCCESSFUL BIDDER of the clauses in the OFA document or any other fault, management reserves the right to cancel the sale and forfeit the earnest money without issuing any prior notice to the SUCCESSFUL BIDDER. Minimum validity of DD/BC/PO shall be approximately three months from the respective date of submission. EMD by cheque will not be accepted.

It will not be possible to adjust earnest money from any other sum of money due from the plant/unit, on account of pending bill, security deposit or earnest money paid towards another tender.

Public Sector Undertakings/Govt. Departments may be exempted from submission of earnest money as per prevailing SAIL/Govt. Policy.

In case the bidder refuses to accept the LOA / LOI or doesn't make the payment as mentioned above within the stipulated time, the EMD will be liable for forfeiture and his acceptance of the OFA shall be considered as withdrawn.

### **32. SECURITY DEPOSIT**

The SUCCESSFUL BIDDER shall have to furnish non-interest bearing Security Deposit representing 5% of the full value of the materials at the bided price and the deposit shall be retained by SAIL-ISP till completion of the order, on the basis of the prices bided / accepted within 15 days from the date of Offer/Letter of Acceptance by NEFT/Pay Order / Demand Draft / Banker's Cheque drawn in favour of "SAIL-IISCO Steel Plant" on a nationalized/scheduled bank (Co-operative Banks are not acceptable) and payable at BURNPUR / ASANSOL. Minimum validity of DD / BC / PO shall be of approximately three months from the date of submission, for which the payment is made. No interest shall accrue on the Security Deposit or the EMD submitted. The Security Deposit money shall be refunded on satisfactory completion of the contract, after recovery of dues if any on either side and on SUCCESSFUL BIDDERS confirmation of "No Demand" with respect to materials and amounts from SAIL-ISP against the relevant contract.

In case the bidder doesn't make the payment as mentioned above within the stipulated time, the EMD will be liable for forfeiture and his acceptance of the OFA shall be

considered as withdrawn.

SAIL-ISP Management will be entitled to recover from the Security Deposit all money due to SAIL-ISP concerning the sale and other statutory liabilities of the OFA. Delivery Order shall be issued to the SUCCESSFUL BIDDER only after submission of the Security Deposit and the full value of material(s) with due taxes, duties, other levies etc. as per terms of payment.

### **33. GST**

GST will be payable extra as applicable over and above the sale value at the quoted price as ruling at the time of delivery.

In case the party on whom order is placed is situated outside West Bengal IGST will be levied and in case where party on whom order is placed is situated within West Bengal CGST/SGST will be applicable.

In terms of section 206 (C) of Income Tax Act the Tax collected at source on the sale of items at the prescribed rate as ruling on the date of dispatch shall be payable by SUCCESSFUL BIDDER, if applicable with surcharge and Cess if any ruling at the time of delivery.

In case of any changes in tax laws the same shall be made applicable as and when required.

### **34. CONTRACT VALIDITY**

The Contract Validity period will be 18 Months from the date of issue of 1<sup>st</sup> delivery order. SAIL-ISP may extend the validity of the contract in writing if there is any delay on part of SAIL-ISP.

### **35. DELIVERY**

The GM (MM)MKTG, MKTG Department, SAIL-ISP, Burnpur or his authorized representative will co-ordinate & arrange to hand over / issue the Delivery Order (D.O) after receipt of sale value along with the applicable taxes, duties & other levies etc. and all the requisite post bid documents. The D.O. will be issued only in the name of the 'SUCCESSFUL BIDDER' on whom the Letter of Acceptance / Letter of Intent (L.O.A / L.O.I) has been released. On request if Delivery Order has to be handed over to a representative other than SUCCESSFUL BIDDER, then the SUCCESSFUL BIDDER has to make such request in his letter head in three copies in original authorizing and attesting the signature of the representative who will be receiving the Delivery Order on SUCCESSFUL BIDDER's behalf and submit those to GM (MM)MKTG who will endorse one copy of the same after proper verification of the signature of the SUCCESSFUL BIDDER with OFA document submitted by the SUCCESSFUL BIDDER. Again, SUCCESSFUL BIDDER may also have to authorize maximum three persons who will be dealing all matters on SUCCESSFUL BIDDER's behalf including lifting of materials in SUCCESSFUL BIDDER's letter head in original in four (4) copies giving their names, attesting their signatures and submit three (3) copies to GM (MM) MKTG, Marketing Department. Then

Marketing Department, Burnpur will authenticate the signatures of the persons authorised by the SUCCESSFUL BIDDERS for doing different jobs on behalf of them including lifting of materials and arrange to send the same to the CERTIFYING AND EXECUTING AUTHORITY. Delivery of the materials will be given by the CERTIFYING AND EXECUTING AUTHORITY or his authorised representative. Then, The SUCCESSFUL BIDDER shall report to the CERTIFYING AND EXECUTING AUTHORITY or his authorised representative. Loading shall be allowed on all days excepting Sundays / holidays during general shift hours. Prior permission in writing is to be obtained for placement of trucks from CERTIFYING AND EXECUTING AUTHORITY or his authorised representative/s. The entry / exit would be allowed through nominated routes/ gates only. The trucks/ trailers should ply in the route indicated by CERTIFYING AND EXECUTING AUTHORITY / CISF or their authorised representative/s only. No picking & choosing will be allowed against any of the items of the lot by the 'SUCCESSFUL BIDDER' who will have to collect the materials against the lot only.

The 'SUCCESSFUL BIDDER' shall report to the CERTIFYING AND EXECUTING AUTHORITY or his authorized representative/s, Burnpur Works, before collection of materials. The CERTIFYING AND EXECUTING AUTHORITY will give thereafter the Loading programme. The SUCCESSFUL BIDDER or his authorized representative has to arrange trucks/trailer accordingly for loading on stipulated day and will report accordingly to the CISF along with copy of D.O., loading programme & other relevant documents for the vehicles etc. for entering into the works for loading. Then as per instruction of CERTIFYING AND EXECUTING AUTHORITY/CISF or their authorized representative, the truck / trailer thereafter shall proceed to any Location inside Burnpur Works for loading of materials under supervision of CERTIFYING AND EXECUTING AUTHORITY or his authorised representative/s and the representative of CISF.

There will be weighment of all the items of the lot as mentioned in the estimated quantity column in Appendix-A. The existing procedure for road despatch as mentioned in Annexure – D will have to be followed for delivery / despatch of materials.

Delivery Challans in five copies shall be issued by the CERTIFYING AND EXECUTING AUTHORITY or his authorized representative for despatch of the items of the Lot as per Appendix – A and Annexure - III i.e. – one copy each for a)Accounts Department b)Marketing Department c) SUCCESSFUL BIDDER's authorized representative, d) CISF; e) File copy of CERTIFYING AND EXECUTING AUTHORITY and the challans will be signed by the Executive Agency or his authorized representative, CISF's representative and the authorized representative of the SUCCESSFUL BIDDER who will receive the materials. However, the standard Road despatch procedure will be followed for the despatch of items of the Lot as per Appendix – A which requires weighment.

The Trucks / trailers will be proceeding in the nominated route towards the nominated gated as per instruction of the CERTIFYING AND EXECUTING AUTHORITY or his authorized representative escorted by CISF representative. At the gate proper papers are to be submitted and then only the trucks / trailers will be allowed to go out.

Invoices will be issued from ISP's Electronic Weigh Bridge

Invoices issued shall be final for all purposes and the other materials lying in the stores/ different Sites, dump yards etc. are to be left as such and only auctioned materials shall be delivered against Delivery Order. In case of any wrongful lifting or removal of any materials by the SUCCESSFUL BIDDER, SAIL-ISP shall be within its rights to suspend further delivery to the SUCCESSFUL BIDDER until full compensation for such wrong lifting or removal has been paid and in this respect the decision of SAIL-ISP regarding the amount of such compensation shall be final and binding.

SAIL-ISP shall not recognize any third party with whom the 'SUCCESSFUL BIDDER' may enter into a contract for supply of the OFA materials. The CERTIFYING AND EXECUTING AUTHORITY will maintain the existing Dispatch Procedure, customs and practices etc. till exit of the materials from the nominated gate.

Authorized Representative of CISF is required to witness the dismantling and loading of the materials under this contract and keep track of the movement of materials.

### **36. WEIGHMENT**

All disposable Material under the lot for dismantling and sale of Structures of Blooming and Billet Mills will be delivered on actual weighment basis. The procedure given in Annexure-D will be followed in this regard.

### **37. TERMS OF PAYMENT (T.O.P)**

1. SUCCESSFUL BIDDER shall be required to deposit 50% value of the materials including applicable taxes, duties and other levies etc. within 15(Fifteen) days from the date of OFFER/Letter of Acceptance as per terms stipulated in the OFA document along with the SECURITY DEPOSIT. Balance 50% payment to be made within 15 (Fifteen) days from the date of hand over of the site to the successful bidder by ISP. Payment should be made by NEFT/ pay order / demand draft / banker's cheque/RTGS drawn in favour of "SAIL-IISCO Steel Plant" on a schedule Bank (Co-operative banks are not accepted) & payable at **BURNPUR/ ASANSOL**. Minimum validity of DD / BC / PO shall be approximately three months from the date of submission.
2. In the event, payment towards value of materials is not received within the due date, compensation at the rate of 0.1% per day for the lot value at the quoted price

shall be charged subject to a maximum of 7 (Seven) days, where after the offer shall stand cancelled and the security deposit shall stand forfeited. In case the due dates fall on a Sunday or holiday, the next working day shall be taken as the due date.

### **38. GROUND RENT**

1. In case the customer fails to complete delivery of material within delivery period mentioned in the D.O, the extension in delivery period may be allowed by ISP against payment of penalty @0.25% per day of the material value of balance quantity of the delivery order provided that the customer has lifted 50% of the Delivery Order Quantity within the Validity period of delivery order.
  - a. If the customer fails to lift less than 50% of the Delivery Order Quantity within the validity period of Delivery Order, penalty @0.5 % per day of the material value of balance quantity of the delivery order will be imposed. However, the extension of validity period is sole prerogative of ISP.
2. In case the delay in delivery of material is not attributable to the party, which the executing department has to certify, extension in delivery period may be allowed without penalty.
  - a. If the materials are not lifted beyond the above extended period, D.O. will be cancelled and SAIL-ISP will not be responsible for any loss or damage etc. and the materials so left over will be declared as 'Abandoned goods' at the risk and cost of the bidder and the Security Deposit of the 'SUCCESSFUL BIDDER' shall be liable for forfeiture. The materials so left over and declared, as "Abandoned goods" shall be dealt with as per Clause No.20 of the SAIL GTC-SA:2017. The left-over material shall be shifted to Scrap / Salvage Dept. of SAIL-ISP, Burnpur for disposal as per Company's prevailing practices. The CERTIFYING AND EXECUTING AUTHORITY or his authorized representative shall arrange to send those materials to Salvage Department with proper recording so that disposal action can be taken by the Salvage Department.

### **39. GENERAL CONDITIONS**

1. A contract shall be deemed to have been concluded between 'SUCCESSFUL BIDDER' and SAIL-ISP upon acceptance of the bid by SAIL-ISP in writing and the terms and conditions herein shall be binding on both the parties. SAIL-ISP reserves the right to accept/reject any /all OFA and is not bound to accept the highest rate.
2. SAIL-ISP shall not be responsible for any damage / theft / pilferage of 'SUCCESSFUL BIDDER's machinery's, equipment or any other things arranged by 'SUCCESSFUL BIDDER' inside the SAIL-ISP's premises. While carrying the materials to and from the Company nominated weigh bridge,



‘SUCCESSFUL BIDDER’ shall always abide by the security rules of SAIL-ISP and shall withdraw all security passes from their workers immediately prior to their retrenchment and deposit the passes in the office of pass section of Security Department under intimation to the CERTIFYING AND EXECUTING AUTHORITY.

3. The invoices issued shall be final for all purposes and calculations. The other materials lying in the stores are to be left as such and only OFA materials shall be delivered against Delivery Orders. In case of any wrongful lifting or removal of any materials by the ‘SUCCESSFUL BIDDER’, SAIL-ISP shall be within its rights to suspend further delivery to the ‘SUCCESSFUL BIDDER’ until full compensation for such wrong lifting or removal has been paid and in this respect the decision of SAIL-ISP regarding the amount of such compensation shall be final and binding.
4. In case of non – fulfilment of the contract or non – compliance of any of OFA documents terms and conditions, the company shall be entitled to recover or adjust all its losses from the ‘SUCCESSFUL BIDDER’s amount available with the Company including Security deposit. Furthermore, in case any damage is caused to any property / loss of life of any individual, in the course of removal / dismantling of materials, then the compensation for such loss, as ascertained by SAIL-ISP will be recovered from the purchaser out of his security or any other deposits. However, purchaser will ensure that all safety precautions are taken during dismantling / removal process as per terms of OFA Document.
5. For the purpose of dismantling the structure and lifting the material, the SUCCESSFUL BIDDERS will engage their own labour and transport at their cost and risk from the area allotted to them within the prescribed time limit permitted by CERTIFYING AND EXECUTING AUTHORITY, SAIL-ISP or his authorised representative depending upon the condition prevailing in the area. The SUCCESSFUL BIDDERS shall dismantle and lift the material from the area as may be earmarked by CERTIFYING AND EXECUTING AUTHORITY, SAIL-ISP or his authorised representative from time to time, which shall be final and binding on them. SUCCESSFUL BIDDERS shall observe the rules and regulations and working hours as may be fixed by CERTIFYING AND EXECUTING AUTHORITY, SAIL-ISP or his authorised representative. The SUCCESSFUL BIDDERS shall lift the materials only after fulfilling the terms of payment of the Online Auction and after obtaining the Delivery Order issued by SAIL-ISP. The SUCCESSFUL BIDDERS shall follow the procedure for taking the materials out of the premises of SAIL-ISP as prevailing, within the time allowed for the purpose. SUCCESSFUL BIDDERS should note that no lifting of material will be allowed on weekly holidays and / or closed holidays observed by SAIL-ISP.
6. ‘SUCCESSFUL BIDDER’ shall abide by all relevant statutory provisions including Labour Laws and Rules that may be in force from time to time in

matters of engagement of workmen for the job and shall be responsible for payment of all due wages and statutory benefits in all eventualities to the labourers employed by him under the Employees Provident fund and Miscellaneous provisions Act, payment of Bonus Act, payment of Gratuity Act, Workmen Compensation Act, Minimum Wages Act, Industrial Disputes Act, Fatal Accident Act and all other applicable statutes. The Company shall not in any way be liable for such payments. Deployment of number of workmen shall also be guided by the relevant statute.

7. Gas cutting / welding / dismantling / processing etc. of the materials may be allowed to facilitate loading of materials into the trucks / trailers etc. Cranes etc. required for loading will have to be brought by SUCCESSFUL BIDDERS at their cost. However, before doing so necessary permission from CERTIFYING AND EXECUTING AUTHORITY, SAIL-ISP or his authorized representative has to be obtained by SUCCESSFUL BIDDERS and if felt necessary by CERTIFYING AND EXECUTING AUTHORITY, SAIL-ISP or his authorized representative, the entire job or any part of it has to be done under the supervision of CERTIFYING AND EXECUTING AUTHORITY or his authorized representative.
8. This online auction sale being on 'AS IS WHERE IS' & 'NO COMPLAINT' basis, no guarantee regarding material quality / chemical analysis and its usage is given by SAIL-ISP. The bidders may bear this in mind while quoting the rates.

#### **40. TERMINATION**

SAIL-ISP reserves the absolute right to terminate / curtail the contract based on the performance of the SUCCESSFUL BIDDER and at its sole discretion after giving a formal notice depending on the nature of irregularities as decided by SAIL-ISP. The SAIL-ISP will have absolute right and discretion to decide upon the irregularities which will be binding and acceptable to the SUCCESSFUL BIDDER. In case of termination of contract, the Security Deposit shall be liable for forfeiture at sole discretion of the SAIL-ISP in the event of any default by the SUCCESSFUL BIDDERS in complying with the terms herein.

#### **41. HANDING OVER THE SITE TO SAIL-ISP**

On completion of site work, the SUCCESSFUL BIDDER shall dispose of the debris / arising, scrap and unwanted materials etc. generated out of his own work from the site as declared by the CERTIFYING AND EXECUTING AUTHORITY or his authorised representative to a place within the plant premises as allotted and assigned for this purpose by GM (Services), SAIL-ISP on the request of CERTIFYING AND EXECUTING AUTHORITY, SAIL-ISP or his authorised representative. Such sites will be within ISP Burnpur Works premises. The site shall be handed over to the CERTIFYING AND EXECUTING AUTHORITY, SAIL-ISP or his authorised representative in a tidy and workman like manner.

#### **42. CERTIFYING AND EXECUTING AUTHORITY OF SAIL-ISP**

CGM (Mills), ISP SAIL- ISP, Burnpur will be the Chief Executing Authority (CERTIFYING AND EXECUTING AUTHORITY) for the Dismantling and Sale of Old Mills. The CERTIFYING AND EXECUTING AUTHORITY or the Executive nominated by CERTIFYING AND EXECUTING AUTHORITY whose decision regarding day-to-day delivery program, placement and movement of trucks / vehicles. Loading, issuing of challans, co-ordination with different concerned agencies/ department etc. shall be final and binding on SUCCESSFUL BIDDER. The CERTIFYING AND EXECUTING AUTHORITY shall co-ordinate with different departments for successful execution till completion of contract. The decision of the CERTIFYING AND EXECUTING AUTHORITY shall be final and binding on SUCCESSFUL BIDDER for successful execution of the work as per terms & conditions of OFA.

- 43. In case of any dispute with regard to specification, scope, quantity and any other terms and condition of the OFA document, decision of the management shall be final and binding on both sides.
- 44. If the intending bidder/s agree to all the above terms and conditions of the OFA Document, they may quote their highest rate in the online forward auction.
- 45. **The Terms and conditions mentioned in the OFA DOCUMENT (Part-I & II) will over- ride the T.S terms and condition (OFA Part-IV) in case of any conflict**

#### **46. QUANTITY TOLERANCE**

In the event, goods are found excess of the Delivery Ordered Quantity, the Customer will have to buy the surplus quantity at the same sales rate, terms and conditions. The offer letter will be issued for the excess quantity to the Customer for deposit of the offered amount. SAIL-ISP also has the right either to adjust the additional sale value from the Security Deposit or demand the customer to remit the additional amount due. A New Delivery Order/ Sales Order will be issued for the additional quantity.

#### **47. PERFORMANCE:**

The defaulting customer (s) and the customer(s) (having common directors / Partners of defaulting customer(s)) for non-compliance of the terms of the sale contract shall be debarred from participating in any future tender /auction for Idle Assets for a period of one year from the date of expiry of the present contract. Even the forfeiture of EMD will amount to non-performance by the customer(s).

- 48. The Successful bidder must adhere to SOP for demolition work at ISP, Burnpur as per applicability. (Ref: ISP/SED/DOC/SOPD/003 dt. 18.11.2016)
- 49. Executive Authority clearance should be taken prior to job starting.
- 50. Stability Test of vulnerable structure/pipeline/vessels are to be carried out by the successful bidder and to be certified by a competent person.

- 51.** The Successful bidder must adhere to the Method of realization of penalty to be imposed by SED, ISP for violating safety norms.

**LETTER OF INTEREST**

**To: Deputy General Manager (Marketing)**  
**SAIL- IISCO Steel Plant,**  
**Burnpur**

**THROUGH:** M/s Metaljunction Services Pvt. Ltd.

**REF.:** Online Forward Auction vide Auction Notice No.  
**MKTG/20-21/DISP/IA-BF#2/OFA-04 Dated: 15.07.2020**

Dear Sir,

- (1) I/We \_\_\_\_\_ are interested in participating in the Online Forward Auction notified vide your notice No. \_\_\_\_\_ dated \_\_\_\_\_.
- (2) I/We am/are hereby submitting the Lot wise EMD/s of Rs. \_\_\_\_\_ vide DD/ Banker's Cheque/ Pay Order/ BG Nos. \_\_\_\_\_ dated \_\_\_\_\_ drawn on \_\_\_\_\_ (Bank) in favour of **The SAIL-ISP payable at Burnpur / Asansol for Lot No. ....respectively.**
- (3) I / We agree to abide by all instructions contained in the above indicated Online forward auction notice Special Terms & Conditions for dismantling & disposal , “ SAIL-GTC-SA:2017- General terms & conditions for of sale and Auction from Plants / Units of SAIL available on SAIL / Service provider's website, Letter of Interest ( **Annexure- A** ) “General Rules & Regulations governing conduct of Online Forward Auction” (**Annexure – B**), “Definition of Key Terms” (**Annexure – C**) , Procedure for Despatch of materials by Road on weighment basis ( Annexure- D ) , **Appendix- A** and **all its Annexure, Appendix, corrigendum, addendum etc.** of sale of materials.
- (4) I/We understand that my / our bid in the e-selling event would be construed as my / our acceptance to the Online forward auction notice , Special Terms & Conditions for dismantling & disposal , “ SAIL-GTC-SA:2017- General terms & conditions for sale and Auction from Plants / Units of SAIL ” available on SAIL / Service provider's website, Letter of Interest ( **Annexure- A** ) “General Rules & Regulations governing conduct of Online Forward Auction” (**Annexure – B**), “Definition of Key Terms” (**Annexure – C**) , Procedure for Despatch of materials by Road on weighment basis ( Annexure- D ) , **Appendix- A** and **all its Annexure, Appendix, corrigendum, addendum etc.** of sale of materials. I / We understand that if our bid is accepted by the service provider, and approved by SAIL / SAIL-ISP, I / We are obliged to complete the transaction.
- (5) I/We agree that I / We have been provided training by Service Provider in order to participate in Online Forward Auctions.

- (6) I/We request Service Provider to allot user ID and pass word to me / us and activate the same to participate in the above mentioned online forward auction.
- (7) I/We agree that I/we shall change the password on receipt by me/us and keep it confidential. I/We agree that Service Provider shall not be held responsible in any way for any losses that may be suffered by me/us as a result of disclosure of the password to any other person by me/us.
- (8) I/We understand that my/our inability to participate in an e-selling event due to disruption of my/our internet services, or due to band width problems with my / our local internet service providers are beyond the control of the service provider.
- (9) In the event of any failure on our part to comply with all or any of the terms & conditions regarding the online forward auction, I / We irrevocably agree for the forfeiture of our earnest money deposit and security deposit (if applicable).
- (10) We are providing the following details
- a) Name of the contact persons on your behalf :
  - b) Our contact telephone No. :
  - c) Our contact fax No. :
  - d) Our contact e- mail particular :
  - e) Bank Name :
  - f) Branch Name :
  - g) Branch telephone No. :
  - h) 9 Digit code no. of the branch :
  - i) Account type :
  - j) Other documents required by the plant / unit /, if any:

Yours faithfully

Signature of the Authorized Person  
(Name of the person signing)

Date:

For M/s. \_\_\_\_\_

Place:

(With Company seal)

Please delete portions not applicable.



**GENERAL RULES AND REGULATION GOVERNING CONDUCT OF ONLINE  
AUCTIONS ON THE “SERVICE PROVIDER” PLATFORM**

**INTRODUCTION:**

This Online Forward Auction is being conducted for The Indian Iron and Steel Co. Limited (hereinafter referred as the “**Client**”) on the Service Provider Platform (hereinafter referred as “**Service Provider**”).

“The General Rules and Regulations governing conduct of Online Forward Auctions” provided herein govern the conduct of Online Forward auctions arranged by the Service provider on its Auction Platform. These rules cover the roles and responsibilities of the parties in the online Forward Auctions on the Auction Platform. Acceptance in-toto to “SAIL FA- (General Terms & Conditions of sale from Plants / Units / of SAIL for sale through Online Forward Auction / Forward Auction (FA)”, “General Rules and Regulations governing conduct of Online Forward Auction” and Special Terms & Conditions of Sale of Materials of the Indian Iron and Steel Co. Limited is a pre-requisite for securing participation in the online auctions.

The key terms pertaining to the Online Auctions are provided in the “**Annexure-C**”. Prospective bidders are advised to go through the same.

**Role of the “Service Provider”**

I. The Service Provider is the agency primarily providing the service of the Forward auction to the “client”.

**II. Collection of EMD for SAIL Plant / Unit / other than CMO**

**Onetime EMD**

On acceptance of bid rate by the competent authority the EMD will be forwarded to the Plant / Unit /.

The Service Provider will retain the EMD of all bidders and will refund the EMD of all unSUCESSFUL BIDDERS whose bid rates have not been approved by the competent authority within 7 (Seven) working days of the conduct of auction.

The Service Provider will cheque the validity of EMD with respect to the expiry date of Demand Draft / Pay Order / Banker’s Cheque.

**Permanent EMD**

The Service Provider shall update the list of permanent bidders at their end and shall forward the EMD to the respective Plant / Unit /.

- I. The permanent EMD shall be refunded to the bidder by the Plant / Unit / only after clearance from the service provider.
- II. Defining of the bidding rules for each auction in consultation with the client.



III. Input of the auction items and defining of the bidding rules in the auction engine.

IV. Providing access to the approved bidders to participate in the Auction.

V. Summarising the Auction proceedings and communicate the outcome to the Client.

The responsibility for fulfillment of the contract rests between the bidders and the client and the responsibility of the “Service Provider” shall be restricted to the extent of the services provided by them.

## **ROLE OF BIDDER**

The role of the bidder is outlined below:

The bidder would participate in the auction with the aim of bidding to secure the auctioned item in the auction.

The bidder would be provided access to the Auction through a “User ID” protected by a “Password”. The bidder needs to ensure that the “User ID” and “Password” is not revealed to unauthorized persons. Bidders are also requested to change the password allocated to them by the “Service Provider” to keep their confidentiality. However, it would be bidder’s sole responsibility to ensure the security and privacy of the same and he / they would not hold the “Client” / “Service Provider” responsible in any manner whatsoever for any misuse of these user IDs and / or Password. Access to the auction mechanism shall be provided to all the approved bidders subsequent to obtaining their written consent to the SAIL-FA-1”(General Terms & Conditions of sale from Plants / Units / of SAIL for sale through Online Auction / Forward Auction (FA)), General Rules & Regulations governing conduct of Online Forward Auctions, Letter of Interest and Special terms & Conditions of sale, **Invitation to Online Forward Auction, all its Annexure, Appendix, corrigendum, addendum etc.**, if any. Payment of Earnest Money Deposit (EMD) as decided by the client minimum 1 working day before the start of the Forward Auction will be one of the necessary conditions for participating in the auction.

Bidders hereby confirm that they shall commit to lift the product (being bid for) at the price entered by them in the auction engine AND at the terms and conditions specified herein by the Client. All Prices entered shall be legally binding on the bidders. Bidders are strongly advised to exercise due diligence while placing bids. Failure to honor the bids placed during online bid shall render the bidders liable for any penal action as deemed fit by “Client” / “Service Provider”.

In the event of winning an allotment in the auction mechanism, the bidder shall commit to fulfill outlined obligations under the contract.

The bidders shall bid on the terms specified by the client & place their bids in the auction engine in the manner specified by “Service Provider”. The bidders shall not stipulate any conditions on his / their own unless the terms of the client (the client’s terms & conditions) expressly permit such conditions being stipulated by the bidder. Bids entered with conditions attached shall be considered Conditional bids & “service provider” reserves the right of rejecting these bids even without intimating the client.

## BIDDING RULES

The Bidding Rules refer to the information and terms defined specifically for a particular auction. The purpose of the Bidding rules is to provide approved bidders with the information and terms specific to the auction in which they are bidding. This would include:

- Definition of the unit bidding.
- Start Time and duration of the auction.
- Any extension of the duration of the auction in the event of bids being received towards the end of the pre-specified duration.
- Start Bid Price.
- Specified Unit for Bidding.
- Price Increments and any reduction in the price increment in the auction in the event of inactivity.
- Other attributes (informational / non-negotiable in nature).

While it shall be the endeavor of “Service Provider” to specify these rules at the earliest for each online bid, the “Service Provider” shall have the right to delay the announcement of these bidding rules or modify rules specified earlier at the time of the online Bid. These details would be available to the bidders on the Auction Engine at the time of bidding.

Participation in the auction process presumes complete awareness and understanding of the bidding rules.

## CONDUCT OF THE AUCTION:

Only those bidders who have been approved by the client and / or have handed over stamped and mutually signed “SAIL-FA-1(General terms & Conditions of sale from Plants / Units / of SAIL for sale through Online Auction / Forward Auction (FA))”, “General Rules & Regulations governing conduct of Online Forward Auction”, Letter of Interest, Special Terms & Conditions of Sale, **Invitation to Online Forward Auction, all its Annexure, Appendix, corrigendum, addendum etc.**, if any and the necessary EMD amount to the Service Provider in case of Plant / Unit / other than CMO at least one day prior to start of the online Auction will be given User – ID and password to enable them to view and participate in Online Auction.

However, a time of 5 working days in case of regular items and 8 working days in case of Idle Assets and non-regular items shall be provided for in between the date of the Online Auction Notice and the date of conducting the Online Forward Auction.

The Auction shall be conducted on pre-specified date. The Key Terms pertaining to the conduct of Auction such as “START TIME”, “DURATION”, “END TIME” AND “AUTO EXTENSION FACILITY” shall be specified separately for each Auction.

Service provider reserves the right to cancel or reschedule the auction, with the approval of the Competent Authority of the Client of the respective Plant / Unit / on any of the following reasons:

- I. The number of confirmed bidders is deemed insufficient to conduct the auction.
- II. Some of the confirmed bidders are unable to access the module due to infrastructure problems such as sustained power failure or telecommunication breakdown.
- III. There are no bids accepted which are equal to or below any Start Bid Price.
- IV. Any other reason which in the opinion of Service Provider / Client requires such action to be initiated.

The duration of auction may also vary from the pre-specified period of time either on account of termination of the auction by the Service Provider

- a) on the advice of the Client or
- b) In case of situations where it is felt that continuance of the auction proceedings is prejudicial to the smooth conduct and / or the integrity of the auction process.

**OR**

Due to Auto Extension during the Auction, duration may increase from specified period.

In the event of any problems being faced in the smooth conduct of the auction, the Service Provider with the approval of the Competent Authority of the respective Plant / Unit / shall have the right to undertake one or more of the following steps:

- Cancellation/ premature termination of the auction with / without a subsequent rerun of the auction on a mutually decided date.
- Cancellation of a bid.
- Lock / deactivate a bidder's account (suspension of operations in the account), etc.

In case of failure of net connection, the bidder will give his / their best price to the Service Provider. The Service Provider will bid on behalf of the bidder with the minimum increment until the bid price reaches the best price offered by the bidder, by proxy bidding mechanism.

The best price communicated by the bidder will have to be authenticated by written confirmation or fax to the Service Provider and will be kept confidential between the Service Provider and the bidder. However, the bids received through Online Auction Platform shall only be acceptable. Bidder will be bound by the price offered by him.

### **Liability of the Service Provider**

The Service Provider shall not be liable to the client / bidders in the auction or any other person(s) for:

- Any breach of contract by any of the parties in the fulfillment of the underlying contract.
- Any delays in initiating the online auction or postponement / cancellation of the online auction proceedings due to any problem with the hardware / software / infrastructure facilities or any other shortcomings.

While, reasonable care and diligence will be taken by "Service Provider" in discharge of its

responsibilities such as design of the online bid, communication of bid details and rules, guidance to client / bidders in accessing the Auction Engine and placing bids, etc. the bidders shall specifically indemnify the Service Provider from all liabilities for any shortcomings on these aspects. It is clearly understood that these activities are undertaken by “Service Provider” to assist the bidders in participation but the ultimate responsibility on all these counts lies totally with the bidders.

**Right of the Client:**

The Client reserves the right to partially or totally accept or reject any / all bids placed in the Online Auction without assigning any reason whatsoever. The decision of the client would be final and binding on the bidder in any such case.

**Confidentiality Clause:**

The Service Provider undertakes to handle any sensitive information provided by the client or confirmed bidders for the auctions with utmost trust and confidentiality.

**Jurisdiction**

Any disputes relating to the Online Forward Auction module shall be subject to the sole jurisdiction of Court of Law having jurisdiction over the Plant / Unit / from where the material is made available / sold.

**Signed in acceptance of the above terms and conditions**

**Date:**

**Name:**

**Place:**

**Designation of signatory:**

**Contact No**

**At the time of auction.**

## ANNEXURE-C

### **DEFINITION OF KEY TERMS**

#### **Auction.**

Auction refers to a forum where the participants (Bidders) bid against items available for auction.

#### **Online Auctions.**

Online auctions refer to those auctions conducted through the Internet with the bidders (from one or more locations) simultaneously for bidding, to be selected for being awarded the item (s) of an auction. In other words, the venue for the auction is on an Internet website / platform. The Service Provider's website would be the venue for the online auctions.

#### **Award at the Auction.**

In a single winner format, only one bidder (normally the bidder who quotes the highest price) is awarded the item being auctioned.

#### **Client.**

Client is the individual / business entity who has contracted “Service Provider” to conduct such auction. In case of an auction, the purpose would be the genuine intent to sell the selected items / Lot(s) to the bidders desiring to buy these items / Lot(s) from the Client.

#### **Bidder.**

Bidder is the individual / business entity participating in the auction, intending to buy the item(s) / Lot(s) from the Client. To become a Bidder in the auction, a business entity has to secure client's approval for participation.

#### **Auction Engine.**

An Auction Engine refers to the software that encapsulates the entire auction environment, processing logic and information flows. The Service Provider is the sole owner of the auction engine and retains exclusive right over the utilisation of the same.

#### **Timings of the Online Bid.**

All the timings of the Online Bid shall be based on the time indicated by the Server hosting the Auction Engine. It shall be the endeavor of the Service Provider to ensure that the Server Time reflects as closely as possible the Indian Standard Time (IST) i.e. GMT + 0530 hrs. However, in the event of any deviations between the Server Time and the Indian Standard Time, the functioning of the Auction Engine (launch, operation, and closure) would be guided by the Server Time. Bidders are advised to refresh both the windows of the Auction Module and check the exact Server Time (displayed in both the windows).

#### **Preview Time.**

Preview Time refers to the period of time that is provided prior to the commencement of bidding. This is to facilitate participants to view the auction details such as item / Lot specifications, bidding details and bidding rules. The purpose is also to familiarize participants with the functionality and screens of the auction mechanism. It is not mandatory for Service Provider to provide Preview Time.

**Start Time.** Start time refers to the time of commencement of the conduct of the online auction. It signals the commencement of the Price Discovery process through competitive bidding.

**Duration of the Auction.**

It refers to the length of time which the price discovery process is allowed to continue by accepting bids from competing bidders. The duration of the auction would normally be for a pre-specified period of time. However, the bidding rules may state the conditions when the pre-specified duration may be curtailed / extended. The conditions include:

- Curtailment of auction duration in the event of no bids for a specified period of time (Inactivity Time).
- Automatic extension in the event of bids being entered towards the end of the scheduled duration to facilitate the other bidders to view and react to the bid.

**Auto Extension of the Auction Timings.**

In the event of bids in the last few minutes of the scheduled bid time, the Bid Timings are automatically extended for a specified period from each such bid. Such Auto Extension shall continue until no bids are placed for the specified period (Engine remains inactive for the specified period). The Inactivity Time for Auto Extension purpose is normally X minutes. Service Provider however retains the right to change the same. The Inactivity Time, applicable for the particular Online Bid shall be visible to the bidders under the Bidding Rules module of the engine.

**End of the Auction.**

End of the Auction refers to the termination of the auction proceedings signaling an end to the price discovery process.

**Auction Report.**

Service Provider would provide an Auction Report to the Client containing a summary of the auction proceedings and outcome. The Auction Report would constitute the official communication from the Service Provider to the client about the outcome of the Auction.

.....

## **ANNEXURE-D**

### **PROCEDURE FOR DESPATCH OF MATERIALS BY ROAD**

#### **WHICH WILL BE DELIVERED ON WEIGHMENT**

1. The customer will authorize maximum Two persons to deal with SAIL-ISP duly attesting their signature. DO issuing authority at SAIL-ISP will also authenticate the signatures and send required documents to concerned plant departments. One of such authorised persons will nominate the transporter / lifter and will attest the signature. Based on such authorisation, signature will be taken on the Original DO by executing department and delivery will be allowed.  

Responsibility: Sales Department
2. Authorised lifter will report to vehicle gate along with copy of DO, 3 copies of authorisation letter and Vehicles(s) for loading. CISF personnel will check the DO, authorisation letters and vehicles. Vehicles should be empty and registration mark painted on the body of the vehicle. CISF will make necessary entries in their register and issue one day gate pass (entry Pass) mentioning Vehicle No. & DO No. The lifter will put his signature on the authorisation letters. These will be stamped and signed by CISF and one copy will be given to the lifter. CISF will also take signature of the lifter in their register and put date and time of entry.  

Responsibility: CISF at Vehicle Gate.
3. Vehicles will then report to 60/45T W/B along with loading program issued by the loading departments for tare weighment. Weighbridge In charge will check the DO, authorisation letter of the lifter and the balance material due to the party. CISF at W/B will check that the vehicle is empty. Weigh Bridge personnel will take tare weight of the vehicle, make necessary entries in the computer and write the tare weight & vehicle, make necessary entries in the computer and write the tare weight & vehicle no. on the back of the DO with his signature, name and date with stamp. A pink card with serial no. will be issued to the lifter and recorded in the register.  

Responsibility: 60/45T Weigh Bridge In charge
4. The Vehicle will then report to Loading Department along with Pink Card, vehicle entry pass, DO and authorisation letter. Manager or his authorised representative will check the documents and make necessary entries regarding DO No. vehicles No., name of the lifter / representative in party wise register and prepare loading clearance certificate in duplicate incorporating vehicle No., DO No., party's name, location from where materials are to be loaded, quantity to be loaded and loading supervisors name, One copy of this loading certificate will be handed over to the concerned lifter and the rest documents are to be retained by the Loading Department Office. Pink Card serial No. would also be incorporated in the loading certificate.  

Responsibility: Manager-Loading Department
5. After completion of loading with adjustment if any, which shall be done in presence of



loading supervisor and CISF personnel on duty, the respective loading supervisor and CISF personnel on duty will sign on the final loading certificate / Shipping Advice to certify that the vehicles have been loaded with only specified materials as per DO. Signature should be accompanied by full name of the personnel.

Responsibility: Loading Supervisor / CISF on duty at Loading Department

6. The lifter will take the loading certificate back to loading Department Office where Foreman/Asst. Foreman, will make necessary entries in Register indicating time of exit of the vehicle from Loading Department. The loading advice will be prepared in triplicate by the Foreman / Assistant. Foreman and put his signature on all three copies. The loading advice / Shipping Advice / Challan will be put up with all documents i.e. copy of DO, vehicle entry pass, Pink Card, authorisation letter (for lifter) and the register to Manager. If Loading Department or his authorised representative who will check and finally sign on the loading advice / Shipping Advice / Challan and hand over the documents to the lifter and allow the truck to go to 60/45T W/B for gross weighment.

Responsibility: Manager, Loading Department

7. The vehicle will move to 60/45T W/B in approved route only. In no case, the vehicle will be allowed to go out of works by CISF. Approved route will be intimated at the entry gate.

Responsibility: CISF on duty.

8. The lifter will bring the following documents to 60/45T W/B for gross weighment:
  - i) Copy of DO
  - ii) Loading Advice / Shipping Advice / Challan
  - iii) Letter of authorisation
  - iv) Vehicle Entry Pass
  - v) Pink Card.
  - vi) Loading Certificate

The 60/45T W/B In charge will check all the documents as above and the W/B personnel will take gross weighment.

Responsibility: Loading Supervisor

9. In case of any materials to be adjusted in the form of off-loading from or further loading into the vehicle an adjustment form, in duplicate, will be given to the lifter mentioning:
  - i) Vehicle No.
  - ii) Gross weighment (Before adjustment)
  - iii) DO No.
  - iv) Quantity to be off-loaded/further loaded

Form will be signed by 60/45T W/B In charge or his authorised representative.

Adjustment will be allowed for once only for a particular DO i.e. in the last trip

Responsibility: 60/45T W/B/ In charge.

10. The lifter will take the loaded vehicle along with the adjustment form to the Loading Department. After due adjustment, the Loading Supervisor and Manager or his authorised representative will sign on both copies of the adjustment form. One copy will be retained by the Loading Department and the other copy will be given to the Lifter for submitting at 60/45T W/B. Such vehicle should have Pink Card with the driver.

Responsibility: Manager Loading Department

11. Final gross weighment will be taken and necessary entries will be made in the computer. The combined Despatch Advice and Challan and Bill will be printed in no. of copies as per necessity. The original copy is for buyer and will be sent to Finance. Duplicate copy is for transporter and one copy to be used for submission at the time of exit from works at the gate. The following documents are to be retained by 60/45T W/B for their record

- i) Loading Certificate
- ii) Adjustment form, if any
- iii) Loading advice / Shipping advice / Challan
- iv) Pink Card.

60/45T W/B In charge will issue one Green Card with same Sl. No. of Pink Card to the party/ lifter. A summary sheet indicating the net weighment of each vehicle will be sent to loading Department by next day morning to enable Manager, Loading Department to cross check for any discrepancy.

Responsibility: 60/45T W/B In charge.

12. The lifter with the bill, green card and entry pass will only take approved route from 60/45T W/B to vehicle gate. Vehicles with green card will not be allowed to go back to loading point or any other place inside the plant. Approved route will be intimated.

A) Vehicles with green pass will move in group from 60/45T weigh bridge to vehicle gate with CISF personnel.

Responsibility: CISF for Sample Check.

13. The lifter will produce the combined despatch advice and challan and bill and deposit it along with the green card and Entry Pass to CISF personnel at the gate. CISF will check the documents and retain one copy of combined despatch advice and challan and bill as gate pass, Entry Pass and Green Card and allow the vehicle to go out.

Responsibility: CISF in charge at Vehicle Gate.

14. On sample basis, a loaded vehicle for going out will be brought back to 60/45T W/B for checking the weight of materials / specifications, relevant papers etc. This will be organised by the Vigilance Department through selected group of executives nominated by E.D. (Works) along with representative of CISF.

Responsibility: Vigilance Department.

15. Green Cards with serial mark retained by CISF at Vehicle Gate will be sent to 60/45T

W/B on the same day evening for reissue.

Responsibility: CISF at Vehicle Gate.

16. In case of unavoidable circumstances if any empty vehicle of the lifter entered through all formalities has to be returned empty, an authorised executive of the loading Department and CISF personnel at the Vehicle gate will jointly inspect over and above re-weighment of vehicle at 60/45T W/B and certify that the vehicle is going out as empty. Circumstances & reasons will be recorded and signed.

Responsibility: Loading Department & CISF

17. No empty vehicle will be allowed to stay inside the plant overnight. In case of break down, the vehicle partly loaded may be allowed to stay inside the plant as per the existing procedure.

Responsibility: Loading Department & PPC

18. Materials dispatched on volumetric basis with proper approval will not come under the purview of this. For Bu-products, Coke fractions, Granulated Slag weighed through other weigh bridges, existing practice will be followed.

Responsibility: Loading Department & CISF

19. In case of changes in quantity, size, validity period etc. due to price revisions or other reasons in the DO, the same will be communicated to Loading Department and 60/45T W/B by Order Department mentioning the balance quantity to be delivered. However, Loading Department shall also communicate the outstanding order position to order Department from time to time. It should also be properly recorded in original (negotiable) of DO with signature & seal.

Responsibility: Sales Department

20. In case of export and stock yard dispatches, Green Card will be issued by 60/45T W/B after invoice is raised by Finance Department and shown to 60/45 T W/B.

Responsibility: Loading Department & PPC

21. In normal course, each vehicle will be allowed to carry only one category material, under exceptional circumstances, a vehicle may be allowed carry two categories of materials having price differential provided the following conditions are made:

- I. The higher priced materials are loaded first.
- II. Approval has been taken from the concerned HOD (not below the level of GM).

Responsibility: Loading Department & CISF

(ON-NON JUDICIAL STAMP PAPER OF RS.100/-)

**FORMAT TO SUBMIT BANK GUARANTEE TOWARD EARNEST MONEY DEPOSIT (EMD)**  
**(To be established through any scheduled bank except Cooperative and Gramin Bank)**

To,  
Steel Authority of India Limited  
ISP, Burnpur Works, Burnpur,  
Asansol, Burdwan - 713325  
West Bengal (India)

Bank Guarantee No: \_\_\_\_\_

Date : \_\_\_\_/\_\_\_\_/\_\_\_\_

Letter Of Guarantee

Whereas Steel Authority Of India Limited, IISCO Steel Plant (hereinafter referred to as ISP) have invited Open Tender vide Tender No \_\_\_\_\_ (hereinafter referred to as the said Invitation to Tender) for sale of \_\_<mention item>\_\_.

And whereas the said invitation to tender requires that any eligible tenderer wishing to make an offer in response thereto shall establish an irrevocable Earnest Money Deposit (Bid Bond) in favour of SAIL/IISCO Steel Plant in the form of Bank Guarantee for an amount of Rs \_\_\_\_\_ (Rs \_\_\_\_\_) valid up \_\_\_\_/\_\_\_\_/\_\_\_\_ as a guarantee that the tenderer :

(a) Shall keep his offer firm and valid for acceptance by SAIL/IISCO Steel Plant upto \_\_\_\_/\_\_\_\_/\_\_\_\_.

(b) And whereas, M/s \_\_<name of tenderer>\_\_ (hereinafter referred to as the said Tenderer) wish to make an offer in response to the said invitation to tender for purchase of \_\_<mention item>\_\_ from SAIL/IISCO STEEL PLANT.

Now this bank hereby guarantees that in the event of the said Tenderer failing to abide by any of the conditions referred to in any of the preceding paragraphs, this bank shall pay to SAIL/IISCO Steel Plant on demand, without ISP having to substantiate its demand, and without protest or demur Rs.\_\_\_\_\_. (Rs.\_\_\_\_\_). This bank further agrees that the decision of SAIL/IISCO Steel Plant as to whether the said tenderer has committed a breach of any of the conditions referred to in the preceding paragraphs, shall be final and binding.

This bank further undertakes that this guarantee shall remain irrevocably valid and in force initially up to \_\_\_\_/\_\_\_\_/\_\_\_\_ and the same shall be extended further according to the provisions contained therein above.

Signature : \_\_\_\_\_  
Name : \_\_\_\_\_  
Designation : \_\_\_\_\_

For and on behalf of  
(Name of the Bank )

Name and address of Bank :

Duly constituted attorney  
and authorised signatory

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_



**STEEL AUTHORITY OF INDIA LIMITED  
IISCO STEEL PLANT  
BURNPUR**

**Tender No. MKTG/20-21/DISP/IA-BF#2/OFA-04    Dated: 15.07.2020**

**TECHNICAL ELIGIBILITY**

**FOR**

***DISMANTLING AND SALE OF BLAST FURNACE No. 2, ISP***

**OFA DOCUMENT    PART-III**

**TECHNICAL ELIGIBILITY CRITERIA FOR  
DISMANTLING AND SALE OF BLAST FURNACE No. 2, ISP  
(TS NO: CET/03/BU/4366/CE/01/R=2 SEPTEMBER, 2019)**

Technical Eligibility Criteria for Dismantling & Sale of BLAST FURNACE #2, ISP

1. Bidder should fulfill the following eligibility criteria:

The bidder should have completed at least one project for dismantling of any major plant / Structure involving minimum 6000 MT of steel structure during the past ten years as on date NIT, copies of following documents in support of above should be submitted

- a. Work order or any other letter of award of work issued by client or contract document.
  - b. Job Completion certificate or Final Acceptance Certificate (FAC) on or before the date of NIT
2. The average annual turnover of the bidder(s) during the last three consecutive financial years ending 31<sup>st</sup> March 2019 should be at least Rs. 3 Crore (Minimum Rupees three crore only).

**Note:** 1) Copies of the audited annual financial reports for last three consecutive financial years ending 31<sup>st</sup> March 2019 should be submitted by the Bidder in support of the above 2) Purchase Order(s) or Work Order(s) or Contract Document(s) with detail scope of work issued by client 3) Job Completion certificate(s) or Performance Certificate(s) or Final Acceptance Certificate(s).



**STEEL AUTHORITY OF INDIA LIMITED  
IISCO STEEL PLANT  
BURNPUR**

**Tender No. MKTG/20-21/DISP/IA-BF#2/OFA-04    Dated: 15.07.2020**

**TENDER SPECIFICATION (T.S)**

**FOR**

***DISMANTLING AND SALE OF BLAST FURNACE No. 2, ISP***

**OFA DOCUMENT    PART-IV**

Ref: Tender Specification prepared by CET, SAIL **CET/03/BU/4366/CE/01/R=2**

**IISCO STEEL PLANT  
BURNPUR**

**DISMANTLING OF BLAST FURNACE No. 2, ISP**

**TENDER SPECIFICATION  
FOR  
MAIN PACKAGE**



**STEEL AUTHORITY OF INDIA LIMITED  
CENTRE FOR ENGINEERING & TECHNOLOGY  
RANCHI - 834002**

**SEPTEMBER, 2019**

**CET/03/BU/4366/CE/01/R=2**



## CONTENTS - CHAPTERS

Chapter No.	Description	Page No.
1	Introduction	1.1 - 1.3
2	Scope of Work	2.1 - 2.21
3	Technical Specification	3.1- 3.28
4.	Commissioning and Performance Guarantee	4.1
	Annexures	
	Schedules	

PACKAGE LEADER(PL)	TASK FORCE LEADER(TFL)	HOD (PL)
ARINDAM SENGUPTA	ARINDAM SENGUPTA	BARUN MUMAR DAS

## CONTENTS - ANNEXURES

Annexure No.	Description	No. of Pages
2.2.13-1	LIST OF MECHANICAL EQUIPMENT/ITEMS	5
2.3.9-1	LIST OF UTILITY ITEMS	4
2.4.16-1	LIST OF STRUCTURAL ITEMS	2
2.6.4-1	LIST OF ELECTRICAL ITEMS	2
2.7.3-1	LIST OF REFRACTORY ITEMS	1
2.8.2-1	LIST OF SALAMANDER AND OTHER ITEMS	1
2.8.2-2	LIST OF LOOSE SPARE AND SCRAP ITEMS	1
2.1.5.9-1	TENTATIVE STEP-WISE SEQUENCE OF DISMANTLING ACTIVITIES	2

## CONTENTS - SCHEDULES

Schedule No.	Description	No. of Pages
1-8.1	DECLARATION OF SITE VISIT	1
1-8.2	LIST OF EXCLUSIONS	1
1-8.3	LIST OF DEVIATIONS	1
1-8.4	DETAILS OF AUTHORISED PERSON OF BIDDER DURING TENDER EVALUATION	1
1-8.5	REQUIREMENT OF CONSTRUCTION WATER & POWER	1
2.1.4-1	SCHEDULE OF QUANTITY (INDICATIVE) FOR DISPOSABLE ITEMS	1
2.1.4-2	SCHEDULE OF QUANTITY (INDICATIVE) FOR NON-DISPOSABLE ITEMS	1
2.1.4-3	SCHEDULE OF QUANTITY (INDICATIVE) FOR RETRIEVABLE ITEMS (TO BE HANDED OVER TO ISP)	1
2.1.6.2.1	TENTATIVE IMPLEMENTATION SCHEDULE	1

## CONTENTS - DRAWINGS

Sl. No.	Drawing No.	Description
1	NIL	NIL

# 1 INTRODUCTION

## 1.1 GENERAL:

1.1.1 ISP (IISCO Steel Plant), erstwhile Indian Iron and Steel Co. Ltd, is one of the oldest integrated steel plants in the country. It was set up in the year 1918 and started its production in 1922. It is situated at Burnpur in West Bengal. In 1972, it became a subsidiary of SAIL and continued so till its acquisition by SAIL on 15th February 2006 and renamed it as ISP. The plant has presently undergone the final touches of a Rs. 16,480-crore modernisation-cum-expansion programme to raise its saleable steel capacity to 2.5 million tonnes per year and now the plant is in operation.

1.1.2 The blast furnace shop of IISCO consists of 4 Nos. of Blast Furnace as mentioned below:

	BF NO.1	BF NO. 2	BF NO. 3	BF NO. 4
Date	Nov. 1922	Jan. 1924	Oct. 1958	Jan. 1958
Useful Volume(M <sup>3</sup> )	500	500	1170	1170
Rated Production (Ton)	600	600	1200	1200

The blast furnace no. 2 has been rebuilt in 2006 and it has useful volume of 530 m<sup>3</sup> and rated production of 610 TPD. Since then, the blast furnace produced crude steel consistently till 2015, when its production has been stopped after stabilisation of BF#5 in the new plant. From 2015, BF#2 is lying as idle asset. Due to non- operation, various equipment has undergone corrosion and the values are depreciating fast.

## 1.2 EXISTING FACILITIES

The old plant has stopped its production of finished steel since 2014. Only two running operations are coke production from COB#10 and power generation from PBS-1. Different shops like BF#3, SMS-I, COB#9, Old Oxygen Plant and rolling mills are in the dismantling phase. Dismantling of BF#3 is in the execution phase. Operation of the new integrated plant has started with the commissioning of BF#5 in October 2014. Moreover BF #5, which has been designed to produce 2.7 MTPA of crude steel which can cater entirely to the new integrated plant. New plant consists of new Coke Oven unit, Sinter Plant, Blast Furnace, RMHP, BOF, CCP, WRM, BM, USM etc. which have been commissioned and is under operation.

### 1.3 **OVERVIEW OF THE PROJECT**

The project covers the dismantling of BF#2 and its auxiliary systems like stoves, stock house, gas cleaning unit and thickeners, Kulti ladle house, new ladle house, PCM's, open gantry, ore handling plant, thickener, flash mixer, utility pipe lines etc. along with some left-over items in the old BF shop.

### 1.4 **IMPLEMENTATION STRATEGY**

1.4.1 The complete job of "Dismantling of BF#2, ISP" is envisaged to be executed through 1 (one) no of package.

1.4.2 This tender specification pertains to "Dismantling of BF#2, ISP" to be executed on turnkey basis.

#### 1.4.3 **Details of pre-shutdown and shutdown activities with duration:**

1.4.3.1 The project does not involve any pre-shutdown and shutdown activities, since the unit is in idle condition and is in an isolated place.

#### 1.4.4 **Other site related details**

1.4.4.1 Details of over ground facilities at erection site which may need diversion and special handling equipment to be deployed at site, if any, are to be clearly brought out by the bidder in their offer.

### 1.5 **INTENT OF SPECIFICATION**

1.5.1 The intent of this tender specification is to furnish required details for enabling the bidder to submit their best offers (technical & commercial) as per the scope of work mentioned at chapter 2.0, technical specifications at chapter 3.0, and execution & performance guarantee at chapter 4.0.

1.5.2 This tender specification shall be read in conjunction with other documents enclosed with the NIT.

### 1.6 **SITE VISIT AND OTHER REQUIREMENTS**

1.6.1 The bidder shall visit the site, study drawings/ documents and discuss with the employer/ consultant, if required, regarding any technical clarification and get satisfied with respect to the nature and extent of work involved. The bidder shall also obtain first-hand information regarding location, work terrain, climate condition, railways, roads, airports and communication etc. before offering the bid for the job.

1.6.2 All materials/ equipment/ machinery/ fabricated items used in the subject package shall be according to the specification given herein and any deviation should be clearly brought-out in schedules of exclusions and deviations attached with this TS. No mention of exclusions and deviations will mean that the bidder has accepted the scope and specification given herein.

1.7 **DRAWINGS AND TECHNICAL DOCUMENTS TO BE SUBMITTED WITH THE OFFER**

1.7.1 Not Applicable.

1.8 **SCHEDULES TO BE DULY FILLED AND SUBMITTED WITH THE OFFER**

1.8-1	DECLARATION OF SITE VISIT
1.8-2	LIST OF EXCLUSIONS
1.8-3	LIST OF DEVIATIONS
1.8-4	DETAILS OF AUTHORISED PERSON OF BIDDER DURING TENDER EVALUATION
1.8-5	REQUIREMENT OF CONSTRUCTION WATER & POWER

## 2 SCOPE OF WORK

### 2.1 GENERAL

2.1.1 The bidder shall be responsible for execution of the jobs envisaged for "Dismantling of BF#2 at ISP."

2.1.2 The Scope of work shall cover the dismantling of civil, structural, refractory, utilities, mechanical items and electrical equipment / items installed in the existing BF#2 and other auxiliary items.

2.1.3 Any equipment/ work/ service, which may not have been specifically mentioned in this document but is necessary for completeness of the work, shall be clearly brought out in the offer and included in their scope of work.

2.1.4 Schedule of quantity for disposable, non-disposable and retrieved items (loose cables, wooden & RCC sleepers, copper items) are given in **Schedule-2.1.4-1**, **Schedule-2.1.4-2** and **Schedule-2.1.4-3** respectively.

### 2.1.5 Scope of Services

- 1) Transportation of all tools and tackles like electric welding and gas cutting set, consumables, scaffoldings, and equipment like winch, cranes, tractor tailors, dumpers, dozers, trucks, etc. required for dismantling up to work site shall be in the Bidders' scope of work.
- 2) Special equipment like compressors, pneumatic hammers etc. required for expeditiously carrying out dismantling work shall be arranged by the Bidder.
- 3) Temporary illumination of the entire working area shall also be in the scope of work of the Bidder during execution of the job. Enabling power supply source shall be identified by the executing authority and supply for illumination shall be taken with full electrical protection including ELCB etc. by the bidder.
- 4) The bidder shall have to undertake that they will follow & maintain all safety precautions during the execution of this job as per the prevailing safety rules of ISP.
- 5) Safety of all personnel involved in the dismantling work shall be entirely in the scope of the bidder. The bidder shall arrange for personal protective equipment to all engaged in the dismantling work. The bidder, in his scope, shall also designate a safety officer for vigilant the safety aspect of the dismantling work.
- 6) Supporting structures are to be provided during the dismantling work wherever required. Guard railings, temporary fabricated platforms etc. shall be provided during work at height so as to ensure safe work conditions. These shall be included in the scope of bidders. These are to be executed after getting clearance from safety and as per the instruction of executing authority of ISP.
- 7) Structural stability test, repair and strengthening of the existing structures,



approaching platforms, ladders and staircases shall be in the scope of bidder.

- 8) Free falling of structures after cutting from top shall be prohibited. The bidders shall arrange, at own cost, desired equipment required for handling and lowering of dismantled structures at height.
- 9) The bidder shall carry out the dismantling work in steps as per instructions of executing authority of ISP. Tentative step-wise sequence of dismantling activities is given in **ANNEXURE -2.1.5.9-1**.
- 10) Any isolation, blanking including rerouting of service lines required and thereof to protect the same during dismantling shall be under the scope of Bidder.
- 11) The scope of work shall cover transportation of reusable dismantled items if required, and handing over to agencies designated by the Executing Authority.
- 12) Any material or unused coke, iron ore and mixed materials which have been accumulated inside the furnace shall be cleaned thoroughly before salamander removal/dismantling of furnace proper as per instruction of Executing Authority.
- 13) Debris and other undesirable items generated during dismantling shall be transported and dumped to an area within 7 km as identified by the Executing Authority. Dozing/levelling of dumped material shall also be included in the scope of work.
- 14) Controlled blasting shall be executed with proper precaution so that existing facilities and utilities are not damaged. Any loose material / item, lying inside & near vicinity of the furnace prior to start of Salamander blasting and dismantling of furnace, shall be taken out and shifted to suitable place as per direction of Executing Authority.
- 15) The bidder shall be responsible for any rectification work due to damage caused in existing facilities during dismantling of blast furnace.
- 16) The bidder shall be responsible for protection and / or diversion of underground and all existing over-ground services, wherever required and / or diversion of the underground services which are indicated in the drawing made available to the bidder. In case there are under-ground services which need to be protected and / or diverted but are not shown in the drawing, the bidder shall be responsible to execute the same at extra price, if any, to be mutually agreed between bidder & employer.
- 17) Required loading/ unloading / transportation of the equipment part, which may require repairs at employer's repair shop(s).
- 18) Periodic transportation including loading, unloading and spreading the unserviceable material, debris & surplus excavated earth with all lift and lead within plant premises unless otherwise specified.

- 19) Items e.g. left-over spares, rejects, redundant pipelines, temporary structures, unused tools & tackles etc. shall be shifted to the location as per the direction of Executing Authority.
- 20) The contract under the scope of work shall be deemed to be completed after making the site free of all debris arising out of dismantling and to the satisfaction of the Executing Authority.
- 21) The bidder shall have to undertake that they will follow & maintain all safety precautions during the execution of this job as per prevailing safety rules of ISP.
- 22) The bidder shall also submit the sequence of dismantling for different areas of activities like civil, structural, mechanical, utility, electrical, refractories and salamander removal.
- 23) Technical details and other limitations pertaining to each area have been covered separately in **Chapter 3.0**. Detailed dismantling procedure pertaining to each section is mentioned in the **Chapter 3**.
- 24) The quantities of mechanical, utility, structural, civil, electrical and refractory items mentioned in TS are all tentative.
- 25) All correspondences in the document for dismantling shall be in English.

## 2.1.6 **Implementation Schedule**

- 2.1.6.1 The project shall be implemented within a period of 24(twenty-four) months from the effective date of contract.
- 2.1.6.2 An indicative implementation schedule is shown at **Annexure 2.1.6.2-1**. However, the bidder may improve upon the same and submit a schedule with their offer, showing all major activities, with respective duration proposed.
- 2.1.7 Discipline wise scope of work has been elaborated in the subsequent clauses of this Chapter.

## 2.2 **MECHANICAL**

The scope of work covers the dismantling of all the major mechanical equipment and items like valves required for the operation of Blast Furnace#2. This includes the dismantling of the equipment from the following areas:

### 2.2.1 Stock House

This includes the major drive equipment of two Nos. of ore conveyors like high speed and low speed couplings, 3 stage gearboxes, belts, head pulleys, tail pulleys and snub pulleys with plummer block, screw type belt take up arrangement, idle rollers and return idlers.

Bucket elevator system meant for conveying the segregated cokes shall also be dismantled in individual parts like coupling, gearboxes, drive and idle shaft with bearing supports, buckets, chain and sprockets.

The feeding equipment comprises of the following:

- Ore vibrating feeder of quantity 15 Nos.
- Ore weigh hopper of quantity 2 Nos.
- Additive vibrating feeder of quantity 8 Nos.
- Additive weigh hopper of quantity 4 nos
- Coke vibrating feeder of quantity 2 Nos.
- Coke screen feeder of quantity 2 Nos.
- Coke weigh hopper of quantity 2 Nos.

The other auxiliary equipment that shall be dismantled is as follows:

- Monobloc submersible pump of quantity 2 Nos.
- Electric hoist of quantity 2 Nos.

#### 2.2.2 Skip Charging system of Blast Furnace

The major equipment, to be dismantled, is as follows:

- Skip car consisting of buckets, wheels and axles, having trunnion bearings
- Intermediate Guide pulley sheaves
- Bull wheel pulley with the bearing housing
- Cantilever skip car track
- Winch system comprising of motor coupling and gearbox, Bull wheels, Sheave pulleys, Rope drum, wire rope, shaft, plunger block bearing housings, Brakes, stoppers.

The auxiliary system consists of submersible Monobloc pumps of quantity two Nos.

#### 2.2.3 Furnace Top Equipment/Item:

The Furnace top equipment consists of the following:

- Bleeder valves at the uptake top of quantity Nos.
- Out rigging trolley of quantity 1 no present above the receiving hopper.
- Receiving hopper unit of quantity two Nos.
- Revolving distributor with drive arrangement assembly of quantity 1 no.
- Each set of bells operating lever, supporting fulcrum, axle and bearing housings along with the counter weights for the respective small bell and large bell operation.
- Two Nos. of bull wheel pulleys meant for winding the wire rope required for the operation of skip cars.
- Large and small bell charging equipment system with hoppers of quantity one

each.

- Gear Trolley of quantity one no present at the Bell lever platform
- Gas seal hopper of quantity one Nos.
- Equalising valves of quantity four Nos.
- Winch of quantity one no located at the crown ring platform.

#### 2.2.4 Cast House

The following equipment that shall be dismantled is as follows:

- Mud Gun of quantity 1 Nos.
- Drilling Machine of quantity 1 Nos.
- EOT crane of quantity 1 no
- Rail Crane of quantity 1 Nos.

#### 2.2.5 Winch Room

The following drives shall be dismantled along with the components like ropes, rope drums, set of pulleys, shaft, bearing housings, brakes, gear and coupling.

- Motorized Winch system for operation of Small and Large Bell of quantity 2 Nos.
- Motorised Winch system for operation of Skip car of quantity 1 no.
- Motorised winch system for operating the stock level indicator of quantity 1 Nos.
- Motorised winch system for operating the revolving distributor of quantity 1 Nos.
- Motorised winch system for operating of two Nos. of bleeder valves of quantity 2 Nos.

#### 2.2.6 Pig Casting Machine

The following equipment that should be dismantled comprises of the following from Pig casting machine no. 4 and no. 6:

- Pig Machine drive system like two Nos. of 4 stage gear boxes with gear coupling, output drive, pinion shaft and bull gear, bearing housings and four Nos. of sprocket for each pig casting machine.
- Pig casting machines, each comprising of the twin strand moulds, linkages, driving and driven sprockets of two Nos. present in each strand.
- Winch comprising of two bull pulleys supported by bearing housings, gearbox, rope, wire rope drum, brakes etc. of quantity 1 no. for PCM#4
- EOT Crane of quantity 1 no. for PCM#6

- EOT cranes of quantity 2 Nos. present in the pig iron storage yard beside PCM#6
- EOT twin girder cranes, capacity 30 Tonnes of quantity 3 Nos. present in the pig iron storage yard beside PCM#4.

#### 2.2.7 New Ladle House and Kulti Ladle House

The equipment present in both the ladle house is

- One Nos. of EOT four girder crane of main capacity 110 ton and auxiliary capacity 30-Ton present at new ladle house
- One Nos. of EOT four girder crane of main capacity 110 ton and auxiliary capacity 30-Ton present at the Kulti ladle house.

#### 2.2.8 Furnace Proper

- Iron Notch Frame of material Cast Steel
- Slag notch assembly consisting of Monkey and intermediate cooler of pure copper and main cooler and Cinder Notch stock arch of Grey cast Iron.
- 2 Nos. Slag Stopper assembly.
- 12 Nos. Tuyere Stock assembly.

#### 2.2.9 Furnace Stoves

The following equipment/item shall be dismantled from the stove's units. The major items consist of the following valves:

- 3 Nos. Hot Blast main valve (Hydraulic operated)
- 1 Nos. Back Draught valve (Hydraulic operated)
- 3 Nos. Gas Shut off valve (Motorized) and Gas Safety Shut off valve (Hydraulic operated) each
- 3 Nos. Motorized Gas Bleeder valve.
- 4 Nos. Manual Gas Bleeder Valve
- 3 Nos. Gas Control valve (Pneumatic)
- 3 Nos. Manual goggle valves in gas line
- 3 Nos. Cold Blast Main Valves
- 1 No. Snort Valve (pneumatic operated) along with silencer
- 3 Nos. Pressurizing valve of Cold Blast
- One no. Mixer Shut off valve (motorized) and Mixer Control valve (pneumatic)
- 3 Nos. Depressurizing valve (motorized) for Flue gas
- 3 Nos. Chimney valves (motorized) for Flue gas exhaust

Other auxiliary equipment that shall be dismantled is the material handling equipment consisting of

- Electric hoist for handling of 10-Ton capacity Hot Blast Valve,
- Electric hoist for handling the Back-draft valve.
- Elevator along with its electric operated winch.

#### 2.2.10 Dust Catcher

The following mechanical equipment/items shall be dismantled from the dust collecting unit.

- Dust catcher cut-off valves
- Motorized winch system with guide pulley, diversion pulley, wire rope and drum assembly.
- Dust Valve
- Dust catcher bleeder valves of size 250 mm N.B and 400 mm N.B

#### 2.2.11 Thickener and Flash Mixer

The following equipment shall be in the scope of dismantling work:

- Rake arm comprising of 2 long arms and 2 short arms with central driven type gearing arrangement along with the cone scraper of quantity 3 Nos. for clarifiers.
- 2 Nos. of associated lifting device, 2 Nos. of turbine type agitator with MS shaft for Flash mixer with gearing arrangement.
- 2 Nos. of turbine type agitator with MS shaft for dozing system with geared motor arrangement.
- 2 Nos. Sludge wagons unit.

#### 2.2.12 Iron Ore Handling Plant

The following equipment shall be dismantled from the ore handling plant

- 18 Nos. of iron ore vibrating feeder below transit bunkers at the underground level.
- The following 9 Nos. of belt conveyors and along with the drives like gearboxes, head pulleys, tail pulleys and snub pulleys with plummer block, belt take up arrangement, idle rollers and return idlers
  - 1) Belt Conveyor no. 1 of 120 meters length at the underground level.
  - 2) Belt conveyor no. 2 of 150 metres length from sub-ground to aerial level.
  - 3) Belt Conveyor no. 3 of length 1500 meters at the aerial level

- 4) Parallel belt conveyors no. 4 & 4A each of length 200 metres at the aerial level
  - 5) Shuttle conveyor no. 5 & 5A of length 150 meters
  - 6) Belt conveyor no. 6 & 6A each of length 200 metres from sub-ground to aerial level.
  - 7) Belt Conveyor no. 7 of 30 meters at the aerial level from junction house of conveyor no. 6 and 7 up to the screen house.
  - 8) Belt conveyor no. 8 of length 40 meters at the aerial level from screen house to fine ore silos.
  - 9) Shuttle conveyor no. 10 of length 30 metres present at the junction house of belt conveyor no. 3 and high line bunkers.
- 1 set of vibrating screen and feeder at the screening house of belt conveyor no. 7 and no. 8.
  - 2 Nos. Diverter Gate present at the junction house of belt conveyor no. 2, no. 3 and no.4 and at the junction house of belt no. 6 &7

2.2.13 Tentative list of mechanical items to be dismantled is given in **Annexure 2.2.13-1.**

## 2.3 UTILITY

### 2.3.1 Gas Cleaning Plant

The following equipment/items shall be dismantled from the gas cleaning plant as follows:

- Hydraulically actuated throttle Venturi and nozzle spray unit
- Electrically operated goggle valves at BF gas entry point
- C.I gate valve at the clean BF Gas Header,
- Forged Gate and globe valves, Cast steel gate wherever present in the main and auxiliary equipment of the GCP plant.
- Main water supply pipe line to the 1<sup>st</sup> and 2<sup>nd</sup> cleaning stage
- Semi clean and clean BF gas pipeline

The GCP pump house and hydraulic power packs are excluded from the scope of dismantling.

### 2.3.2 Thickener and Flash Mixer

The following equipment/items shall be dismantled from the following:

- Hot well pumps of centrifugal type of quantity three Nos.,
- Diaphragm type sludge handling pumps of quantity six Nos.,
- Centrifugal type sludge loading pumps of quantity six Nos.,

- Electronically operated diaphragm type metering pump (chemical dozing) of quantity two Nos. in the Flash Mixer,
- Dewatering pump of quantity 2 Nos.,
- Associated gate valves, non-return valves and foot valves, knife edge gate valve etc.
- Railway track for the transit of sludge wagons,
- 4Nos. of Diversion Launder from the dozing station to Flash Mixer.
- 2 Nos. of underground launder from the GCP of BF#1 to thickeners
- 2 Nos. of over ground launder from GCP of BF#2 to the Flash Mixer.

### 2.3.3 Cast House

The following utility equipment shall be dismantled:

- Railway track for hot metal
- Railway track for slag

### 2.3.4 Pig Casting Machine

The following utility equipment shall be dismantled:

- Railway track for hot metal from Blast Furnace to pig casting machine
- Compressed Air pipeline
- Lime tank and associated pipelines
- Haulage wagons filled with pig iron of quantity 4 Nos.

### 2.3.5 Pipelines

- BF gas pipe and CO Gas pipe,
- Hot Blast Main of O.D 1524 mm, Thickness of steel 12 mm Material IS 2062: 1999, Gr B
- Cold Blast Main of OD 1124 mm, Thickness of steel 12 mm Material IS 2062: 1999, Gr B
- Combustion Air pipeline
- Bustle main pipe of OD 1424 mm, thickness 12 mm Material IS 2062: 1999, Gr B.
- Uptake pipe of O.D 1124 mm and 1424 mm, thickness 12 mm. Down-comer pipe of O.D 1824 mm and thickness 12 mm Material IS 2062 Gr- B. Equalising pipe of O.D 323.9 mm and thickness of 4 mm as per IS 3589:1991.
- Equalising pipeline of diameter three hundred N.B
- Various other pipelines such as the Back-Draught system, Mixing Line, Bleeder



Line, Pressurising Line, Depressurising Line etc. shall also be considered in the scope of dismantling.

### 2.3.6 Combustion Air Supply System

The following items need to be dismantled from the Combustion Air circuit which are as follows.

- Combustion Air Shut-Off Valve (Motorized) and Combustion Air control valve (Pneumatic operated) of quantity 3 Nos. each.
- Combustion air fan shut off valve of quantity 2 Nos.
- Inlet Guide vane damper of quantity 2 Nos.
- Combustion Air Fan of quantity 2 Nos.
- Combustion air bleeder valve of quantity 2 Nos.
- Duplex Filter of quantity 2 Nos.

### 2.3.7 Auxiliary Systems:

2.3.7.1 The auxiliary system comprises of steam supply system, compressed air supply, oxygen supply, hydraulic and pneumatic circuits. The following equipment/items shall be dismantled.

- Steam header pipeline of diameter DN 200, DN 150, Steam pipe line of Diameter DN 80 for BF top Bell sealing, Steam purging line to Dust catcher and gas cleaning plant of diameter DN 80 and Steam pipeline of Diameter DN 80 for Cold Blast Humidification, associated steam trap/ moisture trap, ball valves, and gate/globe valves.
- Oxygen pipe line of diameter DN 50 & DN 40, branch line to Cast House and Stove platform of Diameter DN 25 and associated ball valves.
- Compressed air header of size DN 50, pipeline of various size DN 25 (in Stove area & Cast area), DN 32 (for Furnace Top) and DN 40in (GCP & Dust catcher) with associated gate/globe valves.
- Complete set of hydraulic power-packs including pump motor and valve stand have been excluded from the dismantling scope of work.

2.3.7.2 The auxiliary system also consists of the entire blast furnace gas network of iron and steel section as well as selected network of coke oven gas present in the iron and steel section of old IISCO plant.

The dismantling of the BF gas includes network up to the following areas:

- Boiler House new range and old range
- Coal Handling Plant
- Blast Furnace gas flare stack

- Coke Oven Battery No. 8, 9 & 10
- BF No. 3 Stove No. 3
- Main Gas Header of Stoves of BF#2
- Rolling Mills and Sheet Mill area
- Remaining 96" N.B diameter super clean gas header
- BF Gas header towards SMS-1

The dismantling of the Coke Oven gas includes network up to the following areas:

- Coke Oven gas pipe line on top of 96" BF gas header and branch header up to Trestle No. 251.
- Rolling Mills and Sheet Mill area
- Coke Oven gas header towards SMS-1.
- New and Old Range Boiler House

The CO Gas line from trestle no. 250 up to side of New Range Boiler House trestle through trestle no. 240 is in working condition and shall be excluded from the scope of dismantling. Similarly, the coke oven line in BF#2 region from the trestle no. 250 to trestle no. 61 and from trestle no. 63 to trestle no. 57 beside newly converted CO gas flare stack shall also be excluded from the scope of dismantling.

#### 2.3.8 Blast Furnace Cooling Water circuit

The following items/ equipment shall be dismantled from the cooling water supply circuit of Furnace proper and Stove

1. Two Nos. of Centrifugal type cold water pump with couplings, C.I gate valves, Foot valve and Non return valve
2. Two Nos. of 400 NB diameter suction pipeline.
3. Two Nos. of 400 NB diameter supply pipeline and associated CI gate valve
4. One Nos. of 450 NB diameter of Emergency pipeline
5. Return Water pipe of various diameter and maximum up to 500 N.B diameter
6. One no. of Main water tank of capacity  $m^3$ , one Nos. of Emergency water tank of capacity  $30 m^3$ , one Nos. water seal tank of capacity of  $25 m^3$ .
7. Supply Main ring present just below the Tuyere level with manifold and 3 way plug valves.
8. Two Nos. of spray rings at +19100 mm, +25000 mm and +29100 level.
9. Water collector troughs at spray header, upper stack, lower stack and Bosch zone for return water.

10. Service water pipeline to cast house.
11. One Nos. of pipe line of diameter of DN 300, 250 and 200mm and DN 25 mm for cooling 3 Nos. of hot blast valves and a back-draught valve in the Blast furnace stove area.

2.3.9 Tentative list of utility items to be dismantled is given in **Annexure 2.3.9-1**.

## 2.4 STRUCTURAL

### 2.4.1 Stock House

The following structures need to be dismantled. This includes the following:

- Entire structural work of the stock house comprising of the main columns and beams, equipment supporting beams and columns, bracings, floor beams and grating, approach platform, handrails, staircase, roof truss, purlin and roofing sheets etc.
- The structural work of conveyor gallery includes trestle support structure, girders, walkways, side sheeting, side runner bracing structure, stringer support of conveyor gallery, CGI sheet, purlins, rafter bracings and bottom chord bracings of roof etc. for ore conveyors.
- The other equipment structures of the conveyor system comprise of skirt and skirt support structure, hood, deck plates, receiving and discharging chutes, stringer support. Similarly, the supporting frame of the bucket elevator shall also be dismantled.
- The storage equipment includes 25 Nos. of steel bunker hoppers for receiving and stocking the raw materials along with the chutes for feeding materials to downstream.

### 2.4.2 Iron Ore Handling Plant

The similar structural steel items as mentioned above shall be dismantled from the OHP. This includes the following units:

- Structural steel hopper with chutes of 18 Nos. of the high line bunkers.
- Structural steel hopper with chutes of 18 Nos. of underground transit bunkers.
- 9 Nos. of discharging hopper and feeding chutes present at the transfer points of the belt conveyors.
- 1 no. of underground hopper and discharging chute at stock yard feeding point to belt conveyor 6 & 6A.
- The following conveyor galleries of the belt conveyors and shuttle conveyors of length as given below:

Belt Conveyor Gallery No. 1 of length 120 meters  
Belt Conveyor Gallery No. 2 of length 150 metres  
Belt Conveyor Gallery No. 3 of length 1500 metres  
Belt Conveyor Gallery No. 4 of length 200 metres  
Shuttle Conveyor Gallery No.5 of length 150 metres  
Belt Conveyor Gallery No.6 of length 200 metres  
Belt Conveyor Gallery No.7 of length 30 meters  
Belt Conveyor Gallery No.8 of length 40 metres  
Shuttle Conveyor Gallery No.10 of length 30 meters

#### 2.4.3 Skip Charging Structure

This unit consist of the following like

- Skip Bridge rail, rail girder and deck plate with complete supporting structure.
- Skip bridge cantilever.
- Skip elevated platforms at three levels with staircases and hand railings.
- Hoist engine room roof sheeting and its supporting structure, columns, girders, beams, drive unit base frame.

#### 2.4.4 Furnace Top Structure

The furnace top structures shall be dismantled is as follows:

- Top Bleeder Platform.
- Bell operating lever platform
- Out rigging trolley
- Receiving Hopper platform
- Revolving distributor platform
- Crown ring Platform.
- Approach staircase, platform and handrail guards to each platform
- All bracings, brackets, supporting columns, beams, cross beams

#### 2.4.5 Furnace Proper Structure

The followings technological structure shall be dismantled from the Blast furnace shell:

- Fixed throat region comprising of Armour plates of (Cast Steel) shall be dismantled after removal of hanger assembly (Mild Steel)
- Iron Notch Frame of material Cast Steel and slag notch assembly consisting of Monkey and intermediate cooler of pure copper and main cooler and Cinder Notch stock arch of Grey cast Iron.

- Stave coolers of material heat resistant low alloy cast iron plate present of various thickness 270 mm ribbed thickness plate in Bosch, 160 mm thickness plate in the hearth and Tuyere zone, and similar cooling plates of Grey C.I for Belly and Stack region shall be removed.
- Tuyere stock assembly, present in 12 nos, shall be dismantled after the removal of bustle main pipe. Tuyere stock shall be disassembled to segregate the Tuyere nozzle and Tuyere coolers, made of copper.
- Steel shell present at upper and lower Stack, Mantle ring, Belly, Bosch, Tuyere zone, Hearth, and hearth jacket plate shall be taken.
- Hearth columns (8 Nos.)
- All platforms, railings and staircase.

#### 2.4.6 Stoves

The following equipment shall be dismantled:

- 4 Nos. of stove shells (3 Nos. for BF#2 and 1 no. for BF#3).
- Associated platforms, staircase, handrails, stove support column.
- Complete Elevator structure of columns and beams supported alongside of the BF#3 stoves.

#### 2.4.7 Cast House

- The cast house structure comprises of columns, beams, cross bracings, roof truss, roofing sheets and adjoining purlins, rafter and cross bracings etc.
- Crane girders for EOT crane
- Structural portion of Hot Metal runner
- Structural portion of slag runner
- Supporting structure for mud gun and drilling machines.

#### 2.4.8 Winch Room

The following structure shall be dismantled from the winch room:

- The drive base frame for all the winches present in the room.
- Room structures comprising of the columns, beams, cross bracings, portal gable frame, roofing sheets and adjoining purlins, rafter and cross bracings etc.

#### 2.4.9 Pig casting Machine No. 4 & No.6

The following structures of Pig Casting Machine Shop #4 of area 155 m<sup>2</sup>, height 22 meter and Pig Casting Machine Shop #6 of area 200 m<sup>2</sup>, height 22 meter shall be dismantled are as follows:

- Support column, beam girder and column bracings of Casting machine, complete machine gallery walkway, floor beams, deck plate etc.
- Staircase, handrail and approach platform to the machines
- Launder support structure for both the pig casting machine.
- Roof truss, roof sheeting, purlins and rafter of the structural shed of the casting machines.
- Winch pulley support structures comprising of columns, column bracings, beams, cross beams, roof truss, purlins and rafter

The following structures shall be dismantled from open gantry crane bay girders at the pig iron yard beside PCM#4 &PCM #6.

- Crane girders and columns, bracings present at feeding pig casting machine no.6
- Column, vertical bracings and open gantry crane girders present in the pig scrap yard.

#### 2.4.10 Dust Catcher

The following structural items shall be dismantled from dust catcher.

- Main shell of Dust Catcher
- Structural support column
- Approaching staircase, platform gratings and hand railing

#### 2.4.11 Gas Cleaning Plant

The following structural items shall be dismantled from gas cleaning plant.

- Main Shell of the GCP
- Platform, staircases etc.
- Structural support column

#### 2.4.12 Structural Shops

The structural items present in the following shops shall be dismantled.

- New Ladle House
- Kulti Ladle House
- Mechanical Repair Shop

The structural work includes the column supports, girder, roof truss, purlins and sheeting, side bracing etc.

#### 2.4.13 Thickeners System

The following structural items shall be dismantled from the slurry handling unit:

- Superstructure, walkways, handrails, staircase and platforms of all 3 clarifiers

- Base, Cage, Feed well and Feed launder of respective thickeners.
- V-notch weirs and screens of the thickeners.
- Dozing room of size 2 m by 2m

#### 2.4.14 Trestles

The trestle supports for the following units which shall be in the dismantling scope are as follows:

- Emergency water tank
- Emergency water pipe line
- Water pipe line
- BF gas pipe line
- CO gas pipe line
- Cold Blast Main pipe
- Hot Blast Main pipe
- Combustion Air pipe
- Mixing Gas pipe line

The following trestles, which support the CO gas line in working condition, shall be excluded from the dismantling scope.

- Trestle no. 240 to Trestle no. 250
- Trestle no. 57 to Trestle no. 66

#### 2.4.15 Chimney

The scope of work involves the dismantling of the following chimneys after repairing and strengthening followed by erection of temporary platform and safety catch nets:

- One no. of steel fabricated chimney connected to the back-draught line from the bustle main.
- One no. of flare stack chimney of BF gas opposite to the Coal Handling Plant.
- ***The newly converted CO gas flare stack opposite to the emergency water tank shall not be considered for dismantling.***

2.4.16 Tentative list of structural items to be dismantled is given in **Annexure 2.4.16-1.**

### 2.5 CIVIL

The scope of civil work covers the deconstruction of the RCC, PCC and brickwork wherever required in the Blast Furnace No. 2 followed by excavation work.

- 2.5.1 Dismantling of cast house, electrical panel and furnace control room building structure of PCC, RCC and Brick work including staircases, platforms & walkways. Excavation work shall be done completely up to the level of hot metal track / slag metal track up to rail top level.
- 2.5.2 Dismantling of the civil foundation involving PCC and RCC of the entire cast house of Blast Furnace# 2.
- 2.5.3 Dismantling of civil foundation involving RCC and PCC of the entire Pig Casting Machine No. 4 & 6.
- 2.5.4 Dismantling of the civil foundation involving RCC & PCC for all major equipment including 4 Nos. of Stoves, Blast Furnace column support structure, Hearth base, 1 no of Dust Catcher, Shell of Gas Cleaning Plant and 3 Nos. Clarifier of thickener unit, Skip Bridge.
- 2.5.5 Dismantling of the civil foundation involving RCC & PCC for winch room, Hydraulic room, Combustion Air Fan House, Stock House, Ladle house, Electrical room of Ore Handling plant and Thickener Building also.
- 2.5.6 Dismantling of the RCC chimney of quantity 1 no. for BF # 2.
- 2.5.7 Dismantling of the entire RCC and PCC work of the entire silo building under Iron Ore Handling Plant.
- 2.5.8 ***The dismantling work excludes the concrete work of High line bunkers, transit underground bunkers of Ore handling plant.***

## 2.6 **Electrical**

The scope of the electrical work covers the dismantling of electrical items like MCC panels, PLC panels, Drive panels, Brake Control panel, Dynamic brake panel, Relay logic panels, Power Distribution Board panel units and feeders, Lighting Distribution Boards, Sub-Lighting Distribution Board, MLDBs, Control Desk panels, Operating Desk, UPS, AC package unit along with air conditioning panel, power cables, control cables and drive motors of different ratings.

- 2.6.1 The area which shall be considered for dismantling of Electrical items are as follows:
  - 1) Blast Furnace 2 Control Panel Room
  - 2) Motor Control Centre room
  - 3) Power Distribution Room
  - 4) Blast Furnace 2 Cast House
  - 5) Control Room of Pig Casting Machine No. 4 & 6
  - 6) Electrical Room of OHP



2.6.2 Power cables and control cables which are to be retrieved shall be returned MRD of SAIL-ISP by the bidder.

2.6.3 Motors of different ratings shall be handed over to MRD of SAIL-ISP by the bidder for retrieval of copper items.

2.6.4 Tentative list of electrical items to be dismantled is given in **Annexure 2.6.4-1.**

## 2.7 **Refractory and salamander Removal**

2.7.1 Dismantling of refractory work shall be done in the following equipment.

- Blast Furnace Proper
- Uptake and Down-comer pipe, Dust Catcher
- Cast House hot metal runner and slag runner
- 4Nos. of Stoves (3 of BF#2 &1 of BF#3)
- Hot Blast Main pipe, Bustle pipe, , Flue gas pipe
- 2 Nos. of Chimney (Each of BF#2 and BF #1)

2.7.2 Dismantling of salamander removal shall be done in the hearth of the furnace by controlled blasting after dismantling of the refractory bricks.

2.7.3 Tentative list of refractory items to be dismantled is given in **Annexure 2.7.3-1.**

2.7.4 Tentative list of salamander items to be dismantled is given in **Annexure 2.8.2-1.**

## 2.8 **Scrap and Loose Spares**

2.8.1 Lifting of the following scrap items and loose spare items lying in entire dismantling limit of Blast Furnace No. 2 is given as follows, with the indicative quantity:

- 1) Crane Snatch Block of different capacity of 50 Nos. approximately.
- 2) Gear-Box and its spares of different capacity of 20 Nos. approximately
- 3) Cast Iron Scrap of lot 1 no.
- 4) Cast Iron Boulder of lot 1 no.

2.8.2 List of loose spares and scrap items with indicative & weight in is given in **Annexure 2.8.2-2.**

## 2.9 **BATTERY LIMIT**

<b>Incoming</b>
-----------------

Mechanical	1. Iron Ore Handling Plant 2. Combustion Air Fan House 3. Stoves
Utilities	1. Blast Furnace Cooling water line 2. CO Gas line 3. Steam pipe line Header 4. Compressed air pipeline Header 5. Oxygen pipe line Header
Electrical	1. Electrical panels within the periphery of BF#2 & its associated areas.
Structures	1. Steel hoppers of stock house and Iron Ore handling plant 2. Trestles of Combustion Air Line and Cold Blast Main

<b>Outgoing</b>	
Mechanical	1. Pig Casting Machine No. 4 & No. 6 2. Thickener & Clarifier
Utilities	1. Clean BF Gas Pipe line 2. Sludge Launderers 3. Dorr Thickener –Slurry Handling plant 4. Slag Track 5. Hot metal track
Electrical	1. Electrical control room at BF#2, PCM No. 4&6, OHP
Structures	1 Chimneys of Flue gas 1. Flare stack of BF gas 2. Trestles of BF gas

## 2.10 EMPLOYER'S OBLIGATION

Construction water and power shall be provided to the bidder as per SBD Cl. No. 20.4.2 and 20.4.3.



### **3 TECHNICAL SPECIFICATION**

#### **3.1 GENERAL**

##### **3.1.1 CLIMATIC CONDITION**

- 1) Ambient temperature : 08-55<sup>0</sup>C
  - i) Absolute Maximum : 55<sup>0</sup>C
  - ii) Absolute Minimum : 8<sup>0</sup>C
- 2) Relative Humidity
  - i) Maximum : 70%
  - ii) Minimum : 27 %
- 3) Average Annual Rainfall : 1300 mm
- 4) Altitude : 97 Metre

##### **3.1.2 RAILWAY STATION & AIRPORT**

1. ISP is well connected by Eastern Railway at Asansol railway station on the Howrah-Delhi main line and by South Eastern Railway at Burnpur Railway Station on Asansol-Adra route. The plant site is about 8 km from Asansol Railway Station and 1 km away from Burnpur Railway Station.
2. The nearest airport is in Andal, which is about 40 km away from the plant site.

##### **3.1.3 COMMUNICATION**

Postal, Mobile & Landline telephone, internet and fax facilities are available at Asansol.

- ##### **3.1.4**
- All equipment & components are located in hot, humid, tropical and dusty atmosphere as prevalent in Mines area IISCO Steel Plant (ISP) is situated at Burnpur near Asansol in West Bengal.

#### **3.2 MECHANICAL**

- ##### **3.2.1**
- The Mechanical Equipment of the following areas shall be dismantled which are Furnace Top, Cast House, four Nos. of Stoves (3 no. for BF#2 and 1 no. of BF#3), Hoist Engine Equipment, Gas Cleaning Plant, Stock House, Iron Ore Handling Plant, 4 Nos. of Clarifier/Thickener for (BF#1 to BF#4).

### 3.2.2 Dismantling of Top equipment

- Before dismantling the top equipment, the out-rigging trolley and the maintenance trolley present in the bell lever platform is to be reconditioned and beams, cross beam and supporting structure shall be checked for sufficient strength and stability and necessary strengthening shall be done if required.
- The equipment from the top furnace shall be lowered progressively from the respective platform to the bottom platform till the ground level is reached.
- No platform shall be dismantled till all the top furnace equipment is lowered.
- The furnace bleeder valves shall be disconnected from the uptake pipe platform after the dismantling of the down-comer is completed. The valve shall be kept on the top bleeder platform and lowered using manual rigging and hauling process up to the out-rigging trolley platform.
- The large and small bell shall be secured to respective hopper using linkage before the winch ropes of the bell lever assemblies are disconnected from corresponding lever arms. Counter weight, the lever arms, fulcrum bearing housings and shafts shall be dismantled separately using the existing rigging arrangement by means of trolleys.
- Two Nos. of receiving hopper shall be dismantled after the removal of the cantilever type skip car delivery chute and two Nos. of the bull pulley wheel with its bearing support. The receiving hopper dismantled by undoing the fasteners or gas cutting (if fasteners are damaged) and lowered using the out-rigging trolley from respective platform to the crown ring platform and ultimately to the rail track level on the slag side using boom crane. The approach of the boom crane shall be at least up to the height of crown ring platform.
- Similarly, the entire revolving distributor set including motor coupling and gearbox, pinion and ring gear, guide ring, guide roller and support roller shall then be dismounted from the bell assembly and lowered up to by using rail track on the slag side with the help of out rigging trolley and boom crane.
- The gas seal hopper mounted over the large bell shall be disconnected from the crown ring by undoing the bolt fasteners. The large hopper shall be disconnected from the crown after fastening it to the gas seal hopper. The whole Bell lever assembly with the

hoppers and gas seal assembly shall be lifted by out-rigging trolley and brought down to slag side using boom crane.

- The out-rigging trolley may also be dismantled and lowered down after the top bleeder platform structures and other structural columns and beams of the bell lever platform are dismantled. Necessary care is to be taken dismantling of out-rigging trolley so as to keep it in the operating condition.

### 3.2.3 Dismantling of Charging Equipment of Blast Furnace

The bidder shall ensure that the drive motor does not have any live electric connection. The dismantling shall begin with:

- Both the skip car shall be kept at the bottom position before initiating the dismantling process and the wire rope connection shall be disconnected.
- The drive arrangement including the motor, coupling, gearbox, clutch, wire rope drum, bearing housing, counter-weight etc. shall be removed while dismantling the winch room.
- 3Nos. of sheaves resting on the elevated structural platform shall be dismantled first and lowered using sling and rigging arrangement supported from the existing platform. The bidder shall not fix the riggers on any strained or corroded structural member to avoid any buckling while loading operation. Similarly, the two bull pulleys resting on the Blast furnace platform shall be lowered to the bottom platform.
- Necessary boom cranes shall be used while lowering the equipment.
- The skip car rail track shall be dismantled along with the skip bridge structure.

### 3.2.4 Dismantling of equipment from Winch room

- The dismantling of the winch room shall begin with the removal of side and roof sheeting followed by the partial removal of column bracings for the approach required by the crane.
- The braced structure to be removed shall be far away from the columns of the three high capacity winches.
- The bidder shall ensure that there is no live power cables of the seven winches and all electric connections shall be disconnected from the winch motors. All wire rope connection shall be dismantled for the seven winches shall be disconnected.



सल SAIL

- The parts of three big winches (like motor, gearbox and wire rope drum) shall be dismantled separately using sling and rigging arrangement supported from the top beam and taken out using the boom cranes.
- The four smaller winches can be dismantled as whole or separately as per the convenience of the bidder.

### 3.2.5 Dismantling of equipment from Cast House and Ladle House

The following equipment that shall be dismantled using the existing monorail are as follows:

- Mud Gun of quantity 2 Nos.
- Drilling Machine of quantity 2 Nos.

This shall be done by disconnecting the hydraulic power track supply line and the electric connections.

The equipment shall be supported and lifting by the existing crane after undoing the foundation bolts and deconstruction of the base frame.

- Tuyere stock assembly, present in 12 Nos., shall be dismantled after the removal of bustle main pipe. Tuyere stock shall be disassembled to segregate the Tuyere nozzle and Tuyere coolers, made of copper.
- Finally, the monorail shall be dismantled after disconnecting the electric cables connection and dismantling the hoist unit by opening the trolley wheel and guide, and lowering the equipment with the help of crane.

The dismantling procedure for the EOT crane is as follows:

- The bidder shall ensure that there is no power supplied in the DSL line.
- Gas cutting of the guard railings of the crane shall be done using the rented scissor platform and lowered by wire rope.
- The electric cables shall be disconnected from the moving trolley
- Dismantling of the cross-trolley wheels using hydraulic jack support and dismounting the trolley from the crane girder with the help of truck mounted telescopic boom crane.
- The box frame connecting the double girder crane shall be gas cut, each girder shall be dismounted using the truck mounted boom crane separately and kept on the ground for further gas cutting and truncating its size.

### 3.2.6 Dismantling of equipment at Pig Casting Machine

The dismantling sequence and procedure of the twin strand pig casting machine shall be as follows:

The dismantling shall begin by disconnecting the twin strand mould mounted on rollers from the link by gas cutting process and lowering the same at the drive end in small parts. The rails shall be cut next after the mould units are completely dismantled.

Next the drive system shall be dismantled starting from the 4-stage gear box end and followed by gear coupling, pinion shaft with bearing housing, and bull gear. The bull gear shall be supported at the cantilever end using chain pulley arrangement and gas cut from the bearing housing shaft. Finally, the twin sprockets mounted on the shaft supported by bearing housing shall be dismantled as whole.

Beams and column shall be checked and strengthened if required before supporting the chain pulley arrangement. The equipment shall be finally lowered using crane.

### 3.2.7 Dismantling of equipment at Stock House

#### 3.2.7.1 The details of material conveying equipment that shall be dismantled are as follows:

- Ore belt conveyors of quantity 2 Nos. which includes the drive system like motors, low speed and high-speed coupling, triple helical gear boxes, and the driven items like head pulley, tail pulley, snub pulley, with bearings and plummer blocks, idle rollers, Belt and belt tensioning arrangement of screw take up.

#### 3.2.7.2 Bucket elevator for coke fines of quantity 1 Nos.

The dismantling of the material storage and feeding equipment shall commence from bottom to top. The general dismantling procedure is as follows:

- Dismantling of the weigh hopper
- Dismantling of the screen feeder
- Dismantling of the vibration feeder
- Dismantling of the intermediate weigh hopper
- Dismantling of the bunker hopper and chute

#### 3.2.7.3 Dismantling of the belt conveyor shall commence after removal of the structural items like receiving and discharge hopper, chute, skirt, hood etc. The dismantling procedure is as follows:

- Drive system shall be first dismantled





सल SAIL

- The screw uptake shall be dismantled using the support and suitable temporary rigging arrangement.

- Belt shall be removed from the system
- Head, tail and snub pulley shall be dismantled one by one by undoing the fasteners of the plummer blocks.
- Idler rollers and return rollers shall be dismantled.

After removal of the mechanical items, the main conveyor gallery and supporting structure shall be dismantled.

#### 3.2.7.4 Dismantling procedure of the bucket elevator

- The bidder shall ensure that the equipment is devoid of live power.
- The bucket, guide roller and chain of the elevator shall be disassembled.
- The drive system of the elevator shall be next removed.
- After the removal of the mechanical items, the structure shall be removed.

#### 3.2.8 Dismantling of equipment at Iron Ore Handling Plant

The dismantling procedure of the equipment like belt conveyors, screen and feeders shall be same as that of the stock house equipment except before dismantling some of this equipment in the underground position the following step shall be taken.

#### 3.2.9 Dismantling of Blast Furnace Stove

- The major equipment that shall be dismantled consist of the valves present at the blast air side i.e. at the front of the stoves which can be dismantled by utilising the support from the existing 10 T capacity electric hoist.
- The pipeline connecting valves shall be removed after the dismantling of the valves. The pipelines shall be externally supported at the adjacent side of the valves meant for dismantling.
- The other three valves present at the rear side of the stoves i.e. the back-draught valve, pressurising valve, depressurising valve shall be dismantled using temporary rigging arrangement of chain pulley block of desirable capacity supported from adjacent beam capable of carrying the load.
- Other auxiliary equipment that shall be dismantled is an electric hoist for handling of 10-Ton capacity Hot Blast Valve.

### 3.2.10 Dismantling of Dust catcher equipment

The following items shall be dismantled from the dust catcher unit:

- Dust catcher cut off valve: The existing winch system for operating the dust catcher valve of inlet diameter 1800 mm shall be unpowered at first from lever and disconnected from the lever arm of the valve. The valve shall be dismantled by undoing the fasteners after providing the proper support with crane.
- Next the pressure balanced plug type Dust valve of diameter 400 mm shall be first dismantled. This valve shall be dismantled after the cutting of the dust catcher shell.
- The bleeder valves of diameter 400 mm and 250 mm diameter which are electrically winch operated shall be dismantled using the same procedure of the dust catcher valve.
- Before dismantling of dust catcher platform, the electric winch system comprising of the drives, wire rope drums, brakes etc. shall be dismantled

### 3.2.11 Dismantling of equipment from Gas Cleaning Plant

- All the electrically operated goggle valves and C.I gate valve at the clean BF Gas Header, Forged Gate and globe valves, Cast steel gate and globe valves present in the main and auxiliary pipeline of the plant shall be only considered for dismantling.
- Depending upon the size of the valves, these are to be either dismantled separately or along with the pipelines, deemed to be required by the bidder. Valves, which are considered to be dismantled separately, shall be done with the help of chain pulley block. Due external support shall be provided in the pipelines with the linkage support.
- The electric hoist present in the pump room shall be dismantled after the executing authority of ISP has given the due clearance.

### 3.2.12 Dismantling of equipment at Clarifier/Thickener and Flash Mixer

- The major equipment of clarifier that shall be dismantled is 3 Nos. of rake arm comprising of 2 long arms and 2 short arms.
- The bidder, with the help of executing authority of ISP, shall ensure that there is no live power to the equipment drives, except power if

required for actuation of the lifting device.

- The clarifiers, the flash mixer and dozing tank shall be cleaned as deemed necessary for the lifting the rake arms and the turbine agitator. The rake arm assembly unit along with the cone scraper shall be lifted by the existing lifting device after decoupling it from the drive shaft. Similarly, the 2 Nos. of turbine type agitator (MOC: SS) with MS shaft for Flash mixer with gearing arrangement and 2 Nos. of turbine type agitator (MOC: SS) with MS shaft for dozing system shall be lifted manual chain pulley.
- Central driven type gearing arrangement for each of the three thickeners, with the drive motor and shaft shall be dismantled in parts with the lifting device. Lifting device shall be dismantled finally by depowering at first. The same shall be executed for the 2 Nos. of turbine type agitator (MOC: SS) with MS shaft for Flash mixer with gearing arrangement and 2 Nos. of turbine type agitator (MOC: SS) with MS shaft for dozing system with geared motor arrangement.
- The auxiliary pumps hot well pumps, sludge loading pumps, diaphragm type sludge handling pump, electronic operated diaphragm type metering pump, dewatering pumps along with the associated couplings, shall be finally disconnected by undoing fasteners/ gas cutting the same from the flanged type connection and lifted by the existing hoisting device and finally carried for disposal using the mobile cranes.
- Similarly, the gate valves, non-return valves and foot valves, knife edge gate valve etc, whatever meant for disposal shall be done in the same technique with additional support given to pipelines in case the valves are in horizontal position.

### 3.3 UTILITIES

- 3.3.1 The utility items need to be dismantled which need to be dismantled are as follows:
- 3.3.1.1 Major pipelines like Hot blast Main, Cold Blast Main, Bustle pipe, Combustion Air pipe lines, BF Gas pipe, CO Gas pipe, Uptake and Down-comer, water supply pipeline to Blast Furnace and GCP, slurry launders and pipelines to Thickeners.
  - 3.3.1.2 CA Fan, pumps for BF cooling water supply and entire slurry handling and thickener system.
  - 3.3.1.3 Auxiliary System like steam, compressed air and oxygen supply system and overhead emergency tank.
  - 3.3.1.4 The slurry launders, hot metal and slag ladles

### 3.3.1.5 Railway Tracks

3.3.2 The dismantling procedures of the pipelines are as follows

3.3.2.1 Before commencing the dismantling work, the bidder shall ensure the pipelines are de-pressurized and not in live condition. The bidder shall shut off and blank the pipelines wherever required as per direction of the executing authority of ISP.

3.3.2.2 The bidder, at his own cost, shall blank the CO gas pipe line at the battery limit, as per direction of the Executing authority of ISP. The bidder shall also arrange for the due personal protective equipment, like mask required for executing the job.

3.3.2.3 The valve units shall be removed sequentially before the dismantling of pipe section.

3.3.2.4 External trestle support shall not be removed before the dismantling of pipe.

3.3.2.5 The pipelines shall be dismantled by undoing the fasteners. In case the fasteners are damaged or the joints are of permanent nature, gas cutting shall be allowed. In case of traces of flammable material inside the pipelines, necessary fire extinguishing arrangement shall be made ready. Before the gas cutting of pipelines, due external support shall be provided either by crane or temporary structures to intended cutting zone of pipe.

3.3.2.6 The bidder shall arrange for temporary platform and guide railings for enabling the dismantling work at height.

3.3.2.7 According to the convenience of the bidder, the dismantling of the uptake and down-comer pipe may be done by gas cutting to that extent, so that recovery of refractory materials is maximized. Proper crane shall be engaged for dismantling of the pipes so that dropping of large section of pipe is arrested.

3.3.2.8 The dismantling of BF pipelines from Trestle no. 240 to trestle 250 shall be done with utmost safety precaution since pressurised CO gas line is passing over BF Gas line for the said stretch. Similar measures shall be taken while dismantling pipeline in the zone of trestle no.57 to trestle no.66.

### 3.3.3 Combustion Air Supply System:

The items shall be dismantled in the following manner:

- Combustion Air Shut-Off Valve (Motorized), Combustion Air control valve (Pneumatic operated) and bleeder valve at the delivery side shall be dismantled sequentially while dismantling the combustion air pipeline.

- Inlet Guide vane damper and Duplex filter present at the suction point shall be dismantled before dismantling of CA Fan.
- The bidder shall ensure the disconnecting of power before dismantling the Combustion Air Fan. Dismantling shall be done in parts like motor, drive mechanism, suction and delivery hood, followed by the fans.

### 3.3.4 Auxiliary Equipment:

The dismantling procedure for the auxiliary items is as follows:

#### 3.3.4.1 Dismantling of the overhead tank

- The bidder shall vacate the tank and ensure the shut off of water supply to the tank by operating the gate valve. If profuse leakage is present, then the bidder shall arrest the leakage by blanking the pipes, at his own cost.
- The bidder shall arrange for scaffolding and temporary platforms for dismantling of the emergency tank. The bidder shall arrange for the due external support at different location as required during dismantling work.
- The tank shall be scrapped and lowered by gas cutting into pieces. The bidder, at his own cost, shall arrange for the desirable crane required for lowering the cut pieces of tank.

#### 3.3.4.2 Dismantling of the other auxiliary systems

- The dismantling of these auxiliaries like steam, compressed air and oxygen supply shall be done after shutting off and depressurising and blanking the system from the main supply header as per direction of the executing authority of ISP.
- The bidder shall follow the same procedure as mentioned in **3.5.2** for dismantling the pipelines of the above systems.

### 3.3.5 Dismantling of Railway Track

The dismantling procedure of the railway track in hot metal, slag and slurry water transportation system involves the following:

- Excavation of earth deposited on the track.
- Unclamping of the railway line
- Gas cutting and lifting the railway line as per desired length as

deemed by the bidder.

- Removal of the line sleepers for disposal.

### 3.4 CIVIL

The dismantling procedure of the civil item is as follows:

- Brickwork present in the buildings like electrical panel and control room, combustion air house etc. shall be removed at first.
- The roof and floor slabs shall be demolished using the followed by the RCC column and beam structures, floor-wise.
- Finally, the RCC and PCC structures present in the civil foundation and floor shall be demolished using the pneumatic hammer.
- The bidder shall arrange for compressed air by hiring the generator driven compressors.
- Use of safety around the buildings shall be done while demolition work is in progress.
- The debris generated shall be collected and disposed at a designated place shown by the executing authority of ISP, within a radius of 5 km. The site shall be cleared and levelled to ground after demolition.

The dismantling procedure of the RCC chimney shall be as follows:

The RCC chimney shall be cut in ring pieces from the top using the diamond saw cutter. Scaffoldings have to be erected so as to approach the top of the chimney. Before cutting the portion of chimney, it has to be supported by a boom crane of approachable tower height of 45 meters. Chimney shall be cut along the circumference and portion shall be lifted using crane. The maximum height the ring pieces shall be 1 metre. The cutting action shall progress downward along the length of the chimney.

### 3.5 REFRACTORY AND SALAMANDER REMOVAL

3.5.1 Dismantling of refractory work shall be done in the following equipment.

- Blast Furnace Proper
- Uptake and Down-comer pipe, Dust Catcher
- Cast House hot metal runner and slag runner



सल SAIL

- 4Nos. of Stoves (3 of BF#2 & 1 of BF#3)
- Hot Blast Main pipe, Bustle pipe, Flue gas pipe
- 1 no. of Chimney of BF#2

### 3.5.2 Suggested Procedure for Dismantling of refractory work

- 3.5.2.1 Dismantling of refractory blocks shall begin from top to bottom level. Hence for Blast Furnace proper refractory removal shall commence from throat and subsequently pass through the Bosh level and come down to hearth level.
- 3.5.2.2 Similarly, the refractory dismantling of stoves and chimney shall be carried out from the mushroom top to the ground level.
- 3.5.2.3 Refractory dismantling shall include carbon bricks.
- 3.5.2.4 Refractory removal of the dust catcher shall be done from the top before dismantling of structural work.
- 3.5.2.5 Uptake, Down-comer, Hot blast main pipe and its branches, Bustle pipe, Flue gas pipe shall be dismantled from its position and refractory removal shall be processed after dismantled by gas cutting along the central line of riveted joint.
- 3.5.2.6 Bidder shall have to erect platform and scaffolding for dismantling of refractory work at own cost
- 3.5.2.7 The bidder shall prepare and submit his own sequence & method of dismantling for approval of ISP.
- 3.5.2.8 The entire dismantling work shall be carried out in such a way so as not to affect the working of adjoining units.

### 3.5.3 Removal of Salamander

During blowing-down operation, the burden material generally descends up to the bosh region. These materials shall be removed by cutting openings in the bosh region and through raking. In the Tuyere jacket region, materials shall be removed manually from inside. As the furnace is under shutdown since June, 2015 the removal shall be continued till the level of left out metal and slag are reached.

#### Suggested Procedure for Salamander Removal

The removal of salamander shall be as follows:

- 3.5.4 Controlled blasting of salamander has to be carried out before start of dismantling of BF shell. The salamander shall be removed by lancing or oxy-flux cutting of metal if required by authorized license holder. Explosives for controlled blasting shall be issued by ISP from its Magazine on day to day basis free of cost and unused explosive shall be returned to ISP Magazine every day before 4 PM by the bidder.

Lifting tackles, exploder, blasting shields, safety shields around the furnace and wearing precautions along a safe distance zone as per blasting regulations must be employed and used. The bidder is required to indicate the quantity of explosives required in advance to ISP.

3.5.5 Adequate number of sirens shall be fixed at strategic locations for warning before blasting.

3.5.5.1 Blasting of salamander/ jam shall be carried out as per blasting regulations by authorized licensed blaster, so that the jams so blasted shall not exceed 5.0 tons per piece. Also, the intensity of the explosion should be so regulated that it does not cause damage to the surrounding equipment and structures. The bidder has to make necessary holes for blasting by lancing also.

3.5.5.2 Bidder shall have to take the necessary statutory clearance for carrying out controlled blasting from appropriate statutory authorities.

3.5.5.3 Quantity of Refractory & Salamander Removal

Sl. No.	Description	Quantity in Tonne
1.	Refractory	10283
2.	Salamander	700

### 3.6 STRUCTURE

3.6.1 The dismantling of structure includes the following types:

3.6.1.1 Blast Furnace shell structure and other shell structure i.e. 4 Nos. of stoves, Dust catcher, Gas Cleaning Plant.

3.6.1.2 Elevated platform structures with staircase, hand railings, floor beams and bracings, gratings/ chequered plates and supporting struts present at Furnace top, Stoves, Dust catcher, Gas Cleaning plant, Skip Bridge.

3.6.1.3 Shops with structural shed like Cast House, Pig Casting shop no. 4&6 and control room, Combustion Air Fan House, Stock house, winch room, Hydraulic room, BF Control room, Electric control panel room, ladle house, slurry thickener plant.

3.6.1.4 Equipment support structure like conveyor gallery, Skip Bridge, elevator support frame, trestles structure for supporting utilities like pipelines and tank.

3.6.2 The general procedure for dismantling of any structure and equipment is as follows:

3.6.2.1 The dismantling and gas cutting of structure shall be done with utmost care so





that the other supporting structures are not damaged.

3.6.2.2 For cleated connection, only the cleat shall be gas cut and for gusseted connection, gusset plates shall be gas cut.

3.6.2.3 During dismantling of any structural assembly, the bidder shall ensure that the stable equilibrium of balance structure and equipment is not disturbed. The bidder, if feels so, shall arrange for external prop support to the structure at his own cost.

3.6.2.4 The requirement for the deployment of material handling has been indicated in the annexure no. which is only indicative. The bidder shall assess the job and arrange for equipment as per requirement of the job.

3.6.2.5 The bidder shall submit his own sequence & method of dismantling and get it approved by executing authority of ISP.

3.6.2.6 Dismantling procedure for shell type technological structure

3.6.2.7 General procedure for dismantling of shell structure:

- 1) Condition of the shell structure to be dismantled shall be inspected for corrosion so that it does not collapse while dismantling.
- 2) Structures to be dismantled shall not be a load bearing support to other structures. Shell structural support shall be dismantled after dismantling of shell structure.
- 3) All structural steel shall be lowered in a controlled manner from elevated points and shall not be allowed to drop.
- 4) The shell shall be dismantled after dismantling of the utilities.
- 5) The bidder shall arrange for the scaffolding and temporary platform support structure with passage, wherever the accessibility of work zone from existing platform is difficult.
- 6) Boom cranes of suitable approach length shall be used so that the top shell structures are accessible.
- 7) The shell structure shall be dismantled from top to bottom and from inside to outside periphery.
- 8) All approachable platforms, railings and staircase shall also be dismantled by gas cutting along with the dismantling of shell.

3.6.2.8 The dismantling sequence for the following shell is given below:

- 1) Blast Furnace shell structure:
  - Dismantling shall begin from the throat and shall proceed stepwise to other zones like stack, belly, Bosch, hearth etc.
  - Dismantling procedure of shell steel structure shall begin along

with the removal of refractory ring wise.

- At first, the fixed throat region and the upper shaft zone, which is devoid of cooling arrangement, and comprises of armour plates of (Cast Steel) shall be dismantled after removal of hanger assembly and brackets (Mild Steel).
  - After exposing the shell of the blast furnace all around its periphery, the bare portion of the shell shall be supported by crane and gas cut in symmetric fashion.
  - Similarly, as the dismantling work shall progresses downward, the G.I cast iron cooling plates with coil pipes inside the cooler shall be dismantled sequentially from the middle and lower shaft, belly region followed by the removal of stave type cooling plates of low alloy cast iron present in Bosch, Tuyere and hearth region.
  - The burden present in the blast furnace shall be cleared in steps so as to make clearance as well as provide support base for the dismantling work.
  - Dismantling in the Tuyere region shall begin after the removal of the bustle main pipe and Tuyere stock assembly.
  - Dismantling of the blast furnace shell shall continue up to a height of 8 meters, after which the controlled blasting will be conducted.
  - Steel shell present at lower Stack, Belly, Bosch, Tuyere zone, Hearth, and hearth jacket plate shall be taken apart into pieces by gas cutting.
  - Hearth columns (8 Nos.) shall be dismantled by gas cutting after the entire shell structure up to the hearth is removed.
- 2) Blast Furnace Stove Shell
- Elevator support structure shall be first removed before commencing on the stove shell dismantling.
  - The shell top shall be approached using the existing staircase.
  - A man hole opening shall be cut at the dome top for accessing the internal walls of the stove.
  - A temporary platform with scaffolding shall be engaged for dismantling of the refractory bricks. The combustion chamber opening shall be covered as a safety measure.
  - Once the refractories have been removed for a certain zone throughout the periphery, the strip of dome to be cut, shall be

supported both internally by strutting and externally by crane. The support shall be so arranged so that equilibrium is maintained and free swing of the strip is arrested.

- After the dismantling of the dome, the refractory bricks of the checker chamber and internal walls of combustion chamber shall be dismantled. Portion of the combustion chamber opening shall be covered as a safety measure.
- The support of the approachable walkway shall be cut and the redundant portion of the walkway shall be dismantled. The bidder shall arrange for temporary staircase if required to access the stove from the existing platform.
- The bare structural shell shall be gas cut and removed by the bidder using cranes in strip or ring form.
- The refractory bricks shall be removed from the bottom opening of the stoves.

### 3) Dust Catcher

In dust catcher the main shell shall be dismantled at first.

- Dust catcher unit shall be also hammered to dislodge the dust that etched on the inner surface of the dust catcher shell so as to nullify the unbalance eccentric load.
- Existing annular platform and staircase shall be strengthened for utilising this approach platform for gas cutting. Other temporary external supporting structure shall be engaged before detaching the BF gas inlet and outlet pipes and valves.
- Temporary platforms with scaffoldings and safety net shall be erected for gas cutting the shell.
- Suitable crawler crane and boom cranes of proper height and approach shall be engaged with sling support for bringing down the gas cut shell portion.
- The dust catcher shell shall be dismantled in parts by keeping the main shell in upright condition.
- The supporting column shall be dismantled after the complete dismantling of the shell.

### 4) Gas Cleaning Unit

The dismantling procedure for the Gas Cleaning Plant shall be dismantled in the same procedure as in case of blast furnace shell.

#### 3.6.2.9 Dismantling of Chimneys

The dismantling procedures shall be preceded by the following:

- Repair and Strengthening:

Cat-ladders

Annular platforms

- Erection

Temporary platform for dismantling work, use of safety Net and enclosure of the area

Dismantling of the chimneys shall take place in following order:

- i) Chimney shell
- ii) Annular platforms along with all supporting structures
- iii) Cat-ladders & intermediate platform
- iv) Sampling Ports, aviation warning lights and other electrical components etc
- v) Loading, transporting and stacking of dismantled chimney scrap at a specified place as per direction of Executing Authority.

#### 3.6.3 Dismantling procedure for the elevated platform structures

The dismantling procedures for the elevated platforms including staircase, hand railings, floor gratings, floor beam and bracings, brackets etc. are given below:

- Dismantling of the elevated platform like furnace top structure shall began after the complete removal of the mechanical, utility items like uptake and down comer pipes and technological structures.
- Derrick support shall be provided for dismantling of elevated platforms like furnace top structure, dust catcher, stoves and

skip-bridge.

- Temporary rigging arrangement shall be made for lowering of scrap materials, wherever existing hoist or crane approach is not available. Structural stability test shall be done by bidder where ever such arrangement is to be fixed.
- Derrick, if used in dismantling process, shall be done carefully to see that the floor on which it is supported is amply strong enough to carry the imposed load.
- Heavy planking shall be used for strutting to distribute the load from floor beams to the main structural beams and columns. Conditions of the existing beams shall be checked before planking.
- Floor gratings, floor beams and bracings, approach staircases, hand railings shall be gas cut and removed one by one. Major columns and beams shall then be only dismantled after checking the stability of the bare structure.
- The dismantling of platforms structures of Stoves, Dust catcher, GCP, Furnace proper shall take place simultaneously with dismantling of the technological shell structures

#### 3.6.4 Dismantling procedures of different shops of structural steel

The general dismantling procedures of different shops like cast house, stock house, Combustion Air Fan house, ladle house, hydraulic room, winch room, pig cast machine operating room, electrical panel room and operating room are as follows:

- The bidder shall start dismantling of any shop in such a manner so that the stability of the uncut structure remains unaffected. The bidder shall estimate the major load line of the structural members and identify the main the beams and columns and then proceed for dismantling of buildings.
- Floor and aerial space of the shop shall be cleared before the dismantling process commences. EOT cranes, monorail hoist present in the shop shall be dismantled and shops shall be void of any equipment.
- Dismantling shall take place from the top, and all roof and side sheeting shall be removed at first. Purlins shall be removed alternately between the roof end and adjacent truss. The truss shall be supported by means of crane or derrick before removing the balance purlins, bottom chord bracings, rafter bracings and the truss member along

the face of the columns shall be gas cut and lowered by the supporting crane.

- No beams shall be cut until precautions have been taken to prevent it from swinging freely and possibly striking any object.
- Floor beams, floor bracings with gratings and chequered plates shall be dismantled floor wise from top to bottom so as to reduce the load on the structural beams and columns.
- Crane girders and monorail beams present shall be dismantled without damaging the column structure. Bidder shall ensure that the adjacent columns and beams are only exerted by their self-load before cutting the crane girders and monorails beams.
- Longitudinal beams between the columns shall be dismantled with use of proper crane, after removing the longitudinal bracings. The bidder shall ensure that the longitudinal beams do not support any other platform and structures.
- Dismantling of columns shall proceed along with dismantling of the adjacent beams. Long columns shall be dismantled in pieces starting from top.
- For electrical panel rooms and operating room, all the floor beams and bracings shall be dismantled except the beams joined with the main building columns. These beams and columns shall be dismantled progressively downward from only when these structures are devoid of other dead loads like concrete and brickwork. Also, the bidder shall ensure, during the dismantling of electric room that the power supply, to all the electrical panels is disconnected, the region is void of live power cables and all the instruments and equipment are dismantled
- For stock house, the structural bins, hoppers with chutes, drive frame, head frame and tail frame of conveyors shall be dismantled by gas cutting or undoing the bolt fastener after removal of all the mechanical items. After that the major structural framework shall be dismantled
- For thickener and slurry handling the dozing room shall be considered for dismantling along with the feed-well super-structures of clarifiers, including staircase, platform, ladders, walkway, handrail etc.

### 3.6.5 **Dismantling of the equipment support structure**

#### 3.6.5.1 Dismantling of the Skip Bridge structure

The dismantling of the skip bridge with complete supporting structure shall be done as per the given procedures:

- Both the skip car shall be lowered and kept in the ground position before dismantling commences.
- The bidder shall ensure that process of dismantling does not disturb the stability of entire structure. The bidder shall submit his own dismantling sequence to the executing authority for approval.

The tentative dismantling sequence is given below.

- The Monorail structure for handling of the pulleys shall be dismantled, followed by dismantling of pulley supporting structure after removal of the three Nos. of pulleys.
- The pulley supporting structure shall be dismantled in four stages of platforms present in the structure. Floor gratings, staircase, floor beams and bracings shall be dismantled at first. The load bearings frame structures like trestles and beams shall be dismantled after cutting the support structures.
- The cantilever portion of the skip bridge shall be dismantled before dismantling the crown ring platform, revolving distributor platform and the receiving hopper platform.
- The winch room shall be totally dismantled and cleared to give space for dismantling of the skip bridge. The trestle supporting the skip bridge structures shall not be damaged in the dismantling process.
- The skip bridge structure like skip guide rail, support guide and 90 LB/yard skip rail with tie rod and clamp shall be removed from the skip bridge by gas cutting with rigging support from overhang the skip bridge frame and sliding down the structure along the bridge.
- The entire deck plate shall be cut from the top and lowered in small parts followed by removal of bottom and top chord and its bracings.
- Finally, the longitudinal beam and skip girder beam shall be dismantled in parts in between the trestle support, pylon support and stock house support. The trestle support and pylon support are then to be removed.

#### 3.6.5.2 Dismantling of the belt conveyor gallery structure

Before commencing the dismantling of the conveyor gallery, the mechanical and electrical equipment shall be removed. The dismantling procedure is given as below:

- The technological structures like receiving and discharging hopper with chute, drive frame, head frame, tail frame, uptake frame, deck plate, skirt and hood shall be dismantled part by part by undoing the

bolt fasteners/gas cutting as required by supporting with use of sling from the and lowering these with the help of crane.

- The roof and side sheeting along with the purlin and side runners shall be removed.
- Conveyor gallery structure shall be dismantled by gas cutting in between two adjacent trestle supports. Derricks support shall be provided between those two adjacent trestles at the cutting zone. Crane shall support the gallery from top using the slings. Slings positions shall be at the nodal points of the structures.
- Gas cutting shall start from one end of the conveyor and shall be done at the diagonally opposite connections. Gas cut shall be done first at the top end connection followed by the bottom end connection. The trestle support shall not be damaged during the gas cutting and dismantling process.
- Conveyor shall be lowered on ground with use of crane and the structures like bottom and top chord, bracings, rafter and its bracings walkway gratings stringer post shall be removed in pieces by gas cutting.

#### 3.6.5.3 Dismantling of the pig casting machine gallery

The dismantling procedure of the pig casting machine gallery is as follows:

- The mechanical equipment shall be dismantled including the twin strand pig casting moulds.
- The dismantling of the machine gallery shall begin from the elevated end.
- The rest of the machine gallery shall be dismantled in similar manner as that of the belt conveyor gallery.

#### 3.6.5.4 Dismantling of the elevator support structure

The dismantling procedure of the elevator is as follows:

- This structure shall also be deconstructed after lowering the elevator to the base floor, dismantling the counterweight and disconnecting the elevator from the drive arrangement.
- The Blast Furnace #3 stove shell shall be kept intact condition before the dismantling of elevator frame.
- The dismantling shall start top to bottom.
- The drive frame shall be dismantled from the top followed by the removal of the encapsulating sheets shall be removed from the three sides.
- The braced structure shall be dismantled stage-wise, after which the main



load bearing beams and columns will be dismantled. After the total dismantling of structure, the lift shall be removed.

#### 3.6.5.5 Dismantling of trestles support

The tentative dismantling procedure is as follows:

- The trestle support structure shall be dismantled after the removal of the main equipment, utility pipelines and tanks i.e. under no load exertion.
- The supporting trestle shall be dismantled by gas cutting in parts using crawler crane or telescopic boom crane.
- Derrick support can be utilised for arresting the free fall or swinging of the structure.

#### 3.6.6 Dismantling of the back-draught chimney

The dismantling procedure of the steel chimney is as follows:

- Dismantling of chimney shall start from the top of the chimney
- Movable hanging platform with hand railing all-around of height 1200 mm shall be lowered inside chimney by help of derrick.
- Removing of inside refractory material from the top will be maximum up to 2 m in one go by using hanging platform from top of the chimney with the help of moving derrick.
- Erection of temporary platform at a depth of 2.0 m minimum from top of chimney.
- Then, steel portion shall be cut into proper sizes and brought down.
- All refractory & steel materials shall be brought down from the top through the inside portion of chimney to the ground.
- Dismantled refractory material inside the chimney shall be brought down from top with adequate care and necessary arrangement shall be made to keep the refractory materials intact in size.
- Dismantled steel material inside the chimney shall be brought down from top with adequate care so that, it should not damage the rest of the downward refractory wall.
- All refractory & steel materials will be taken out from bottom gate.
- Cutting of steel shall start only after clearing of dismantled refractory materials from the bottom of the chimney.
- Removal of refractory materials & cutting of steel materials will not start until & unless accumulated scraps at bottom of chimney is

cleared strictly on day to day basis.

- Above steps will be followed in each go as mentioned in (2 to 11) and will be continued up to approximately 3 metre from ground level i.e. up to concrete base of chimney.
- All safety precautions and measures shall be taken for cutting the shell plate, dismantling, handling, loading and transportation of dismantled portion of the chimney.

### 3.7 ELECTRICAL

3.7.1 Dismantling of the electrical panels (like MCC, LDB, Control Desk etc.), motors, breakers, junction boxes, isolator switch and retrieval of power & control cables in the entire BF # 2 area including the electrical installation of Electrical charging control room. Incoming & outgoing cables of Electrical charging control room shall be kept intact. All other cables interconnected with different outlets & incomers of panel, isolator switch, motor, junction boxes and other electrical installations shall be disconnected and retrieved from present locations as per instruction of executing authority. Apart from the above, the resistance boxes and dry pressurized ventilation system, if any, shall be dismantled, dislodged as per the instruction of Executing Authority.

#### 3.7.2 Quantity of Dismantling of Electrical items

All electrical equipment installed in the charging control room, and in the other areas shall be dismantled & disposed off. Their indicative quantities are follows:

Sl. No.	Description	Quantity
1.	<u>Panels</u>	
i)	Electrical panels	6 Nos.
ii)	Isolator Switch	4 Nos.
iii)	Control desk	4 Nos.
	Quantity in terms of tonnage is approximately 5 Tonne.	
2.	<u>Cables</u>	
i)	Power cable	30 km
ii)	Control cable of different sizes	25 km
3.	Electrical Motors of different	250 Nos.



सल SAIL

	ratings	
--	---------	--

Quantities of retrieved cable are indicative and it will be handed over to ISP after retrieval. All electrical motors shall be dismantled and shifted to a specified location, as per instruction of executing authority and handed over to MRD of SAIL-ISP for retrieval of copper items from the motor.

### 3.7.3 Suggested Procedure & Sequence of Dismantling

#### 3.7.3.1 Suggested Procedure of Dismantling

- i) The Bidder shall make a survey of the area and identify the items to be dismantled, their location and the area of work in consultation of the Executing Authority.
- ii) Dismantling of electrical items shall be started after disconnection of the cables from the panels. All cables inter-connected with different outlets and incomers of the panels shall be disconnected, dismantled and removed from present location, salvaged handed over to MRD, ISP as per direction of Executing Authority.
- iii) While shifting both the panels as above, extension of incoming and outgoing cables as necessary shall be provided by laying additional length of cable pieces of identical size with necessary straight through joints and end terminations. The additional length of cables as well as straight through joints and end terminations required will be provided by the bidder. Lump sum price shall be considered for the tender includes supply and installation of such quantities of cables. Any other material required for relocation of electrical/cables to be supplied by the bidder at no extra cost to ISP.
- iv) The Executing Authority shall give necessary clearance for dismantling of cables passing through the BF # 2 areas but being used in some other installation.
- v) A written clearance shall have to be obtained from the appropriate authority for dismantling the particular installation, especially if the same is connected with cables whose other end is not known.
- vi) Dismantling of non-electrical installation shall not be started before removal of electrical installation housed in or supported by the same or coupled with the same installation.
- vii) Cables shall be disconnected first from supply end and preferably be removed from that end.
- viii) The Bidder shall prepare and submit his own sequence & method of dismantling for entire dismantling of electrical jobs for approval of ISP.

- ix) The entire dismantling work shall be carried out in such a way so as not to affect the working of adjoining units.
- 3.7.3.2 The Bidder shall identify these source points first and disconnect all cables from the terminals. The bidder shall also identify and disconnect any DC source that may be present, feeding the BF # 2 equipment/brake etc.
- 3.7.3.3 Sequence of Dismantling
- i) Survey of all electrical equipment and its surrounding areas by Bidder.
  - ii) Shutdown of all power lines connected to the area to be dismantled.
  - iii) Necessary permission from Executing Authority
  - iv) Disconnection of incoming and outgoing cables of panels / equipment.
  - v) Decoupling of motors from load
  - vi) Removal of motors from its base
  - vii) Removal of equipment from its place.
  - viii) Retrieval of all cables and handing over the same to ISP as per their instruction.
  - ix) Dismantling of cable racks and associated steel structure
  - x) Removal of panels, switch board breakers etc.
  - xi) Transportation of all electrical items
- 3.7.4 Boundary Condition
- The sources of existing Power Supply to BF#2 equipment shall be considered as the boundary limit of the scope of work for dismantling/disconnection. The source of power supply points are as below, however, the Bidder shall ensure the number of sources existing as a mandatory safety measure:
- i) Charging control room of BF#2.
  - ii) AC distribution panel located behind stoves of BF#2.
  - iii) DC distribution panel at Charging control room of BF#2.
  - iv) The Bidder shall prepare and submit his own sequence & method of dismantling for entire dismantling job.

### 3.8 ASSISTANCE TO BE PROVIDED BY ISP

- 3.8.1 One 3 phase 400 Amp, 415 V, 50 Hz. AC power supply shall be provided by



सल SAIL

ISP free of cost to the bidder for work site lighting and industrial power requirement. The Bidder shall have to provide necessary switch of adequate capacity and protection at his cost. Necessary cabling to the bidder's switchgear and connection to the subsequent distant points will be done by the Bidder.

- 3.8.2 One water point near BF # 2 site will be provided free of cost to the Bidder for supply of industrial water.
- 3.8.3 Oxygen and acetylene gas and gas cutting sets shall be arranged by Bidder. Air compressors shall be arranged by the Bidder for compressed air.
- 3.8.4 Before handing over the site for dismantling. ISP shall ensure that installation is not in use for present or future purpose and that the installation is also isolated from supply system. ISP shall also ensure that the installation being dismantled is not connected directly or indirectly to any supply system of any voltage grade.
- 3.8.5 Necessary arrangement has been completed by purchaser for abandoning the existing installation or switching over to new installation/equipment thereby rendering the existing installation in BF # 2 area suitable for dismantling.
- 3.8.6 SAFETY
- 3.8.7 Prior to commencing the work, the contents and environment of the work shall be satisfactorily investigated to execute work smoothly and to protect workers against hazards.
- 3.8.8 The Bidder shall be required to abide by all the statutory regulations regarding safety etc. The entire job shall be carried out in accordance with best engineering practice, in compliance with all safety rules and without any hindrance to other agencies. A high degree of safety precautions is essential for working at heights such as furnace top and dismantling of refractories to avoid hindrance due to accident arising out of such dismantling work. There is a possibility and danger of leakage of BF gas/Confirmed gas in this area and therefore, all precautions and measures shall be taken by the bidder to protect his workmen while executing the subject work.
- 3.8.9 Any scaffolds required for dismantling work shall have to be erected by the bidder at his own and subsequently dismantled after completion of the job at no extra cost to ISP. Scaffolds shall be sufficiently checked before use.
- 3.8.10 Fire-fighting measures such as portable fire extinguishers etc. shall be arranged by the bidder.
- 3.8.11 Supply of all safety appliances/kits, gas detection equipment, gas mask etc. as required shall be provided by the bidder.

- 3.8.12 The bidder shall enforce at no extra cost, necessary safety measures for all personnel working at site. The use of helmet shall be compulsory for all workers and supervisory personnel. The use of safety belts, safety shoes and other safety appliances shall be obligatory while working at heights. The recent Safety Circular regarding penalty against safety violation will be enclosed with the tender document.
- 3.8.13 Whenever work at height is involved, the bidder must obtain height passes from Safety Department of ISP for those persons required to do the work at height without which the bidder will not be allowed to start the job.
- 3.8.14 The bidder shall be fully aware of the detail procedures to be followed for dismantling work as per sequence including safety requirement in consultation with the concerned personnel and Safety Department of ISP.
- 3.8.15 For carrying out dismantling work, no deviation from the standardized operating practices will be allowed.
- 3.8.16 Particularly while issuing job clearance and height passes, the persons shall be explained about the hazards at site and necessary remedial measures shall also be discussed with them. All information shall be monitored very meticulously.
- 3.8.17 Unauthorized person shall not be allowed to enter in the work of site. Placards notifying "Keep out" of barricades shall be provided to prohibit unauthorized persons from entering the working area.
- 3.8.18 Since the work will be carried out in a running plant amidst movement of men, machines and materials, the bidder shall be fully responsible for safety of men and machine and ensure that there is no disruption to normal production activities. Also, the bidder has to ensure that no damage is done to other installations.
- 3.8.19 The bidder shall take necessary insurance coverage including third party liability, workmen's compensation etc.

Sequence of dismantling activities shall be followed in conjunction with TS, (chapter 3.0). This is for guidance of the bidder. However, the bidder shall have to submit dismantling sequence prior to start of dismantling work for approval of ISP/CET.

## **4 EXECUTION AND PERFORMANCE GUARANTEE**

### **4.1 PRELIMINARY ACCEPTANCE**

On completion of dismantling of the Blast Furnace#2 and its associated areas, along with the clearance of site as per instruction given by the executing authority the defects and after fulfilling all the provision of **clause 24 of GCC of Standard Bidding Document (SBD)** employer shall issue Preliminary Acceptance Certificate (PAC) for the subsequent dismantling of all the facilities.

### **4.2 COMMISSIONING**

NIL

### **4.3 PERFORMANCE GUARANTEE**

NIL

#### **4.3.1 Preconditions for Performance Guarantee Tests**

NIL

#### **4.3.2 Performance Guarantee Parameters**

NIL

### **4.4 FINAL ACCEPTANCE**

Final acceptance certificate shall be issued as per **clause no. 28 of GCC of SBD**.

**TENTATIVE STEP-WISE SEQUENCE OF DISMANTLING ACTIVITIES**

1. Dismantling of Equip. /items in cast house area like mud gun, drilling m/c, runners etc.
2. Blanking of all utility pipe lines.
3. Dismantling of utility pipelines.
4. Dismantling of all equip. / items of winch /skip house.
5. Dismantling of EOT crane in cast house.
6. Dismantling of cast house steel structures.
7. Dismantling of winch house steel structures.
8. Dismantling of skip car.
9. Dismantling of top charging equipment
10. Dismantling of Skip Bridge &.
11. Dismantling of coke weighing system & coke handling system.
12. Dismantling of top structure
13. Erection of suitable platform at the top of BF for dismantling work
14. Removal of refractories inside the blast furnace.
15. Dismantle up to mantle of BF shell.
16. Clean the hearth area.
17. Dismantling of platform as mentioned in sl. 12.
18. Sealing of cone before the start of controlled blasting.
19. Controlled blasting and removal of salamander in hearth region.
20. Dismantling of top structures including uptake/down comer, crown ring platform etc.
21. Dismantling of blast furnace shell along with all other platforms.
22. Dismantling of dust catchers.
23. Dismantling of GCP primary and secondary towers.
24. Dismantling of back draught steel chimney from top.
25. Removal of refractory of bustle main, HB main, stoves, uptake/down comer.
26. Dismantling of water pipelines of cooling system.
27. Dismantling of cooling plates & other cooling equipment.
28. Dismantling of supporting structures of HBM, hearth columns etc.





29. Dismantling of elevator and its supporting column.
30. Dismantling of 4 Nos. stoves.
31. Dismantling of the approaching platform structure and staircase.
32. Dismantling & removal of RCC, PCC, Brickwork of entire area.
33. Dismantling of Flare stack for BF gas, located opposite to CHP of PBS#1.
34. Dismantling of PCM 4 & 6, open gantry, Kulti Ladle hose, New ladle house, ore handling plant etc.
35. Excavation work for removal of all debris up to  $\pm 0.00$  level.

**Note:** - A tentative step-wise list of activities for dismantling work is given for guidance for preparation of dismantling activities. However, based on the guide lines, actual activity sequence shall be assessed and submitted by the bidder after proper site inspection.

**DECLARATION OF SITE VISIT**

(To be filled up by the Bidder)

I, hereby, declare that I have visited the site to understand the site conditions, and acquainted myself with atmosphere prevalent therein. I have also understood the extent of total works involved for this package.

Seal of company

Signature of the Bidder:

Name:

Designation:

**LIST OF EXCLUSIONS**

<b>Sl. No.</b>	<b>Reference clause of TS</b>	<b>Details of Exclusions</b>	<b>Reasons</b>

Seal of company

Signature of the Bidder

Name

Designation

**LIST OF DEVIATIONS**

Sl. No.	Reference clause of TS	Details of Deviations	Reasons

Seal of company

Signature of the Bidder  
Name  
Designation

**DETAILS OF AUTHORISED PERSON OF BIDDER**  
**DURING TENDER EVALUATION**

1	NAME OF PROJECT	
2	TENDER NO.	
3	NAME & ADDRESS OF BIDDER	
	<b>BIDDER AUTHORISED PERSON DETAILS (TECHNICAL)</b>	
4	NAME OF AUTHORIZED PERSON	
5	EMAIL ADDRESS	
6	MOBILE NO	
7	NAME OF ALTERNATE PERSON	
8	EMAIL ADDRESS	
9	MOBILE NO	
	<b>BIDDER AUTHORISED PERSON DETAILS (COMMERCIAL)</b>	
10	NAME OF AUTHORIZED PERSON	
11	EMAIL ADDRESS	
12	MOBILE NO	
13	NAME OF ALTERNATE PERSON	
14	EMAIL ADDRESS	
15	MOBILE NO	

SEAL OF COMPANY

SIGNATURE OF THE BIDDER  
NAME  
DESIGNATION

**REQUIREMENT OF CONSTRUCTION WATER AND POWER**

SL NO.	DESCRIPTION	QUANTITY

SEAL OF COMPANY

SIGNATURE OF THE BIDDER  
NAME  
DESIGNATION

**SCHEDULE OF QUANTITY (INDICATIVE) FOR DISPOSABLE ITEMS**

<b>SL. NO.</b>	<b>ITEM DESCRIPTION</b>	<b>UNIT</b>	<b>QUANTITY</b>
<b>1.</b>	<b>DISMANTLED MILD STEEL SCRAP (MECHANICAL, UTILITIES, STRUCTURAL, ELECTRIC AND INSTRUMENTATION AND LOOSE ITEMS)</b> REF: ANNEXURE-2.2.13-1. ANNEXURE-2.3.9-1, ANNEXURE-2.4.16-1, ANNEXURE-2.6.4-1, ANNEXURE-2.8.2-2	<b>TON</b>	<b>10825</b>
<b>2.</b>	<b>DISMANTLED CAST IRON SCRAP (MECHANICAL, UTILITIES, STRUCTURAL ITEMS)</b> REF: ANNEXURE-2.2.13-1. ANNEXURE-2.3.9-1, ANNEXURE-2.4.16-1, ANNEXURE-2.8.2-2	<b>TON</b>	<b>1180</b>
<b>3.</b>	<b>DISMANTLED REFRACTORY SCRAP</b> REF: ANNEXURE-2.7.3-1	<b>TON</b>	<b>10283</b>
<b>4.</b>	<b>DISMANTLED PIG IRON SCRAP (SALAMANDER)</b> REF: ANNEXURE-2.8.2-1	<b>TON</b>	<b>700</b>

**SCHEDULE OF QUANTITY (INDICATIVE) FOR NON-DISPOSABLE ITEMS**

SL. NO.	ITEM DESCRIPTION	UNIT	QUANTITY
1	CONCRETE RUBBISH, INCLUDING RCC & PCC	MT	20750
2	BRICK RUBBISH & REFRACTORY RUBBISH	MT	2250



**LIST OF RETRIEVABLE ITEMS (INDICATIVE)**  
**(TO BE HANDED OVER TO ISP)**

SLNO	ITEM DESCRIPTION	UNIT	QUANTITY	REMARKS
1	POWER CABLES TO BE DISMANTLED & RETRIEVED OF DIFFERENT SIZES AS PER ANNEXURE#2.6.4-1(ITEM 8.01)	KM	25.00	MATERIAL CABLES TO BE RETRIEVED FROM BF#2, BUNDLED SIZE & TYPE WISE, TRANSPORTED AND HANDED OVER TO ISP
2	CONTROL CABLES TO BE DISMANTLED & RETRIEVED OF DIFFERENT SIZES AS PER ANNEXURE#2.6.4-1(ITEM 8.02)	KM	30.00	MATERIAL CABLES TO BE RETRIEVED FROM BF#2, BUNDLED SIZE & TYPE WISE, TRANSPORTED AND HANDED OVER TO ISP
3	COPPER ITEMS (MONKEY, INTERMEDIATE COOLER, TUYERE & COOLER) ANNEXURE#2.2.13-1 ITEM (7.19)	TON	30.00	EXTRACTION OF COPPER ITEMS AND HANDOVER TO ISP
4	ELECTRICAL MOTORS OF DIFFERENT RATINGS AS PER ANNEXURE#2.2.13-1(ITEM 14.01) / ANNEXURE#2.6.4-1(ITEM 9.01)	NOS	250.00	DISMANTLED/ DISMOUNTED AND TO BE HANDED OVER TO ISP
5	WOODEN SLEEPERS	TON	126.00	TO BE HANDED OVER TO ISP
6	RCC SLEEPERS	TON	600.00	TO BE HANDED OVER TO ISP

## ANNEXURE 2.2.13-1

**LIST OF MECHANICAL ITEMS TO BE DISMANTLED (INDICATIVE)**

SL NO	EQUIPMENT	MATERIAL	QTY	UNIT	UNIT WEIGHT (TON)	TOTAL WEIGHT (TON)
<b>1.00</b>	<b>MATERIAL HANDLING EQUIPMENT</b>					
1.01	CAST HOUSE EOT CRANE	MS	1	NOS	50	50.00
1.02	NEW LADLE HOUSE CRANE (110+30)	MS	1	NOS	200	200.00
1.03	KULTI LADLE HOUSE CRANE (110 +30)	MS	1	NOS	200	200.00
1.04	PCM NO#4 EOT OPEN GANTRY CRANE	MS	3	NOS	80	240.00
1.05	PCM NO#6 EOT OPEN GANTRY CRANE	MS	2	NOS	55	110.00
1.06	PCM NO#6 FEEDING CRANE	MS	1	NOS	25	25.00
1.07	HOIST FOR SKIP CAR OF 5T CAP	MS	1	NOS	2	2.00
1.08	OUTRIGGING 20T ELECTRIC HOIST	MS	1	NOS	5	5.00
1.09	3 T JIB CRANE AT +58159 MM FOR BLEEDER VALVE MAINTENANCE	MS	1	NOS	10	10.00
1.10	2 T JIB CRANE AT+37309 MM FOR SKIP BRIDGE DIVERSION PULLEY	MS	1	NOS	7	7.00
1.11	ELECTRIC HOIST AT STOCK HOUSE# 2T	MS	2	NOS	1.5	3.00
1.12	ELECTRIC HOIST OF CAP 30 T	MS	1	NOS	5	5.00
1.13	ELECTRIC HOIST.10T HOT BLAST V/V	MS	1	NOS	2	2.00
1.14	ELECTRIC HOIST of 10 T FOR BACK DRAGHT VALVE	MS	1	NOS	2	2.00
1.15	GEAR TROLLEY HOIST 2T AT GCP	MS	1	NOS	1	1.00
1.16	HOIST FOR SKIP WINCH OF 1T CAP	MS	1	NOS	1	1.00
1.17	HOIST FOR WINCH ROOM OF 5T CAP	MS	1	NOS	2	2.00
1.18	HOIST FOR WINCH ROOM OF 10T CAP	MS	1	NOS	2	2.00
1.19	HOIST AT CW PUMP ROOM	MS	1	NOS	1	1.00
1.20	ELECTRIC HOIST, HYDRAULIC ROOM	MS	1	NOS	1	1.00
1.21	ELECTRIC HOIST AT PCM#6 AT+6 MTR	MS	1	NOS	2	2.00
1.22	HOIST FOR LIME TANK BUILDING	MS	1	NOS	2	2.00
1.23	ELECTRIC WINCH AT DUST CATCHER WINCH ROOM OF CAP 1.5 T	MS	1	NOS	1	1.00
1.24	WINCH, DUST CUT OFF VALVE 3.5T	MS	1	NOS	2	2.00
1.25	ELECTRIC HOIST, CA FAN HOUSE 5T	MS	1	NOS	2	2.00
1.26	HOIST FOR SKIP CAR OF 5 T CAP	MS	1	NOS	2	2.00
1.27	HOIST FOR MUD GUN & DRILLER	MS	1	NOS	2	2.00
1.28	RAIL CRANE OF CAPACITY 10 TONS	MS	1	NOS	18	18.00
	<b>SUB TOTAL</b>					<b>900.00</b>

## ANNEXURE 2.2.13-1

**LIST OF MECHANICAL ITEMS TO BE DISMANTLED (INDICATIVE)**

SL NO	EQUIPMENT	MATERIAL	QTY	UNIT	UNIT WEIGHT (TON)	TOTAL WEIGHT (TON)
<b>2.00</b>	<b>CAST HOUSE</b>					
2.01	MUD GUN	MS	1	NOS	15	15.00
2.02	DRILLING MACHINE	MS	1	NOS	10	10.00
2.03	CLAY HOIST MECHANISM	MS	1	NOS	4	4.00
2.04	STEAM CYLINDER (C.I)	C.I	1	NOS	5	5.00
2.05	PULLEY ETC FOR SPLASHER PLATE	MS	1	SET	1	1.00
	<b>SUB-TOTAL</b>					<b>35.00</b>
<b>3.00</b>	<b>PIG CASTING MACHINE No. 4</b>					
3.01	PIG CASTING MACHINE WITH TWIN STRAND MOULDS AND DRIVE	MS	1	NOS	60	60.00
3.02	WINCH	MS	1	NOS	20	20.00
	<b>SUB-TOTAL</b>					<b>80.00</b>
<b>4.00</b>	<b>PIG CASTING MACHINE No. 6</b>					
4.01	TWIN STRAND WITH MOULDS, MACHIN (LINKAGES AND SPROCKETS)	MS	1	LUMP SUM	100	100.00
4.02	HAULAGE WAGON	MS	4	NOS	30	120.00
4.03	WINCH	MS	1	NOS	20	20.00
	<b>SUB-TOTAL</b>					<b>240.00</b>
<b>5.00</b>	<b>WINCH ROOM</b>					
5.01	SKIP CAR WINCH	MS	1	SET	35	35.00
5.02	BELL (SMALL AND LARGE) WINCH	MS	2	SET	15	30.00
5.03	BLEEDER VALVE OPERATION WINCH	MS	2	SET	1	2.00
5.04	ROTATING DISTRIBUTOR WINCH	MS	1	SET	10	10.00
5.05	STOCK LEVEL INDICATOR WINCH	MS	1	SET	3	3.00
	<b>SUB-TOTAL</b>					<b>80.00</b>
<b>6.00</b>	<b>SKIP BRIDGE</b>					
6.01	SKIP CAR WITH GUIDE ROLLERS, WIRE ROPES AND SKIP RAIL	MS	1	SET	70	70.00
6.02	ROPE PULLEY ASSEMBLY (GUIDE/DIVERSION)	MS	4	NOS	0.5	2.00
6.03	ROPE TENSIONING DEVICE	MS	1	SET	2	2.00
6.04	BULL WHEEL ASSEMBLY	MS	2	NOS	3	6.00
	<b>SUB-TOTAL</b>					<b>80.00</b>

**ANNEXURE 2.2.13-1**

**LIST OF MECHANICAL ITEMS TO BE DISMANTLED (INDICATIVE)**

SL NO	EQUIPMENT	MATERIAL	QTY	UNIT	UNIT WEIGHT (TON)	TOTAL WEIGHT (TON)
<b>7.00</b>	<b>FURNACE PROPER EQUIPMENT</b>					
7.01	BELL LEVER ASSEMBLIES, FULCRUM & CW	MS	1	SET	20	20.00
7.02	BIG BELL HOPPER ASSEMBLY	MS	1	NOS	25	25.00
7.03	BIG BELL ROD ASSEMBLY	MS	1	NOS	20	20.00
7.04	BIG BELL	MS	1	NOS	15	15.00
2.05	SMALL BELL HOPPER ASSEMBLY	MS	1	SET	5	5.00
7.06	SMALL BELL	MS	1	SET	2	2.00
7.07	SMALL BELL ROD ASSEMBLY	MS	1	SET	2	2.00
7.08	TENSIONING DEVICE, BELL ROPES	MS	2	SET	0.5	1.00
7.09	GAS SEAL ASSEMBLY	MS	1	SET	3	3.00
7.10	ROTATING HOPPER & DISTRIBUTOR ASSEMBLY WITH DRIVE SYSTEM	MS	1	SET	40	40.00
7.11	RECEIVING HOPPER	MS	1	SET	15	15.00
7.12	BELL EQUAL. V/V & HANGER ROD ASSLY	MS	1	SET	2	2.00
7.13	BIG BELL & SMALL BELL EQUALISING VALVE	MS	4	NOS	0.25	1.00
7.14	STOCK LEVEL INDICATOR & CHAIN DRIVE	MS	2	SET	1	2.00
7.15	SPIGOT VALVES	MS	2	NOS	0.5	1.00
7.16	TUYERES STOCK ASSEMBLY	MS	12	NOS	5	60.00
7.17	IRON NOTCH	MS	1	SET	5	5.00
7.18	SLAG NOTCH	MS	1	SET	5	5.00
7.19	HEARTH COOL PLATE & STACK COOLER	C.I	1	SET	100	100.00
7.19	TUYERES, INT COOLER & MONKEY	CU	1	SET	12	12.00
7.20	STOCK SEAL PLATE	MS	1	NOS	40	40.00
	<b>SUB-TOTAL</b>					<b>376.00</b>
<b>8.00</b>	<b>STOCK HOUSE</b>					
8.01	VIBRATING FEEDERS FOR ORES	MS	15	NOS	2	30.00
8.02	ORE WEIGH HOPPER	MS	2	NOS	0.5	1.00
8.03	VIBRATING FEEDERS FOR ADDITIVES	MS	8	NOS	1	8.00
8.04	ADDITIVE WEIGH HOPPER	MS	4	NOS	0.5	2.00
2.05	VIBRATING FEEDERS FOR COKE	MS	2	NOS	1	2.00
8.06	COKE SCREEN	MS	2	NOS	3.5	7.00
8.07	COKE WEIGH HOPPERS	MS	2	NOS	0.5	1.00
8.08	BELT CONVEYOR. G/B, (OC-1, OC-2)	MS	2	NOS	40	80.00
8.09	BUCKET ELEVATORS WITH DRIVE	MS	1	SET	15	15.00
8.10	ACTUATORS WITH GATE	MS	4	SET	0.25	1.00
8.11	RACK AND PINION GATES	MS	21	SET	1	21.00

	<b>SUB-TOTAL</b>					<b>168.00</b>
--	------------------	--	--	--	--	---------------

**ANNEXURE 2.2.13-1**

**LIST OF MECHANICAL ITEMS TO BE DISMANTLED (INDICATIVE)**

SL NO	EQUIPMENT	MATERIAL	QTY	UNIT	UNIT WEIGHT (TON)	TOTAL WEIGHT (TON)
<b>9.00</b>	<b>STOVE EQUIPMENT</b>					
9.01	COLD BLAST VALVE	MS	3	NOS	5.5	16.50
9.02	PRESSURISING VALVE	MS	3	NOS	0.5	1.50
9.03	DEPRESSURISING VALVE	MS	3	NOS	0.5	1.50
9.04	MIXER SHUT OFF VALVE	MS	1	NOS	1	1.00
2.05	MIXER CONTROL VALVES	MS	1	NOS	0.5	0.50
9.06	SNORT VALVE	MS	1	NOS	2	2.00
9.07	GAS SHUT OFF VALVE	MS	3	NOS	1	3.00
9.08	GAS SAFETY SHUT OFF VALVE	MS	3	NOS	2	6.00
9.09	HOT BLAST VALVE	MS	3	NOS	4	12.00
9.11	MOTORISED GAS BLEEDER VALVES	MS	3	NOS	0.5	1.50
9.12	MANUAL GAS BLEEDER VALVE	MS	4	NOS	0.5	2.00
9.13	GOOGLE VALVE	MS	3	NOS	2	6.00
9.14	GAS CONTROL VALVE	MS	3	NOS	0.5	1.50
9.15	CHIMNEY VALVE	MS	6	NOS	8	48.00
9.16	BACK DRAUGHT VALVE	MS	1	NOS	6	6.00
9.17	BLOW OFF VALVES	MS	6	NOS	4	12.00
9.18	COMBUSTION AIR SHUT-OFF VALVE	MS	1	NOS	0.5	1.50
9.19	COMBUSTION AIR PNEUMATIC OPERATED VALVE	MS	3	NOS	0.5	1.50
9.20	COMBUSTION AIR SHUT OFF VALVE	MS	3	NOS	0.5	1.50
9.21	COMBUSTION AIR FAN SHUT OFF VALVE	MS	2	NOS	0.5	1.00
9.22	COMBUSTION AIR BLEEDER VALVE	MS	3	NOS	0.5	1.50
	<b>SUB-TOTAL</b>					<b>128.00</b>
<b>10.0</b>	<b>DUST CATCHER UNIT</b>					
10.1	GAS BLEEDER VALVE (400 N.B DIA)	MS	1	NOS	2	2.00
10.2	GAS BLEEDER VALVE (250 N.B DIA)	MS	1	NOS	1	1.00
10.3	DUST VALVE	MS	1	NOS	5	5.00
10.4	DUST CATCHER CUT –OFF VALVE	MS	1	NOS	20	20.00
10.5	GUIDE PULLEY ASSEMBLY	MS	4	NOS	1	4.00
10.6	DIVERSION PULLEY ASSEMBLY	MS	15	NOS	1	15.00
	<b>SUB-TOTAL</b>					<b>47.00</b>
<b>11.0</b>	<b>GAS CLEANING PLANT</b>					
11.1	VENTURI SCRUBBER	MS	1	SET	150	150.00
11.2	AG UNIT	MS	1	SET	13	30.00

	<b>SUB-TOTAL</b>					<b>180.00</b>
--	------------------	--	--	--	--	---------------

#### ANNEXURE 2.2.13-1

#### LIST OF MECHANICAL ITEMS TO BE DISMANTLED (INDICATIVE)

SL NO	EQUIPMENT	MATERIAL	QTY	UNIT	UNIT WEIGHT (TON)	TOTAL WEIGHT (TON)
<b>12.00</b>	<b>DORR THICKENER &amp; SLURRY HANDLING PLANT</b>					
12.01	CLARIFIER RAKERS	MS	3	NOS	1	3.00
12.02	MOTOR, COUPLING, G/BOX & SHAFT	MS	3	NOS	1	3.00
12.03	CONE SCRAPER	MS	3	NOS	1	3.00
12.04	TURBINE AGITATOR OF MIXER	MS	2	NOS	1	2.00
12.05	MOTOR, COUPLING, G/BOX & SHAFT	MS	2	NOS	1	2.00
12.06	LIFTING DEVICE ARRANGEMENT	MS	2	NOS	2	4.00
12.07	TURBINE AGITATOR OF DOSING UNIT SHAFT	MS	2	NOS	1	2.00
12.08	GEARED MOTOR, COUPLING, & SHAFT	MS	2	NOS	1	2.00
	<b>SUB-TOTAL</b>					<b>21.00</b>
<b>13.00</b>	<b>ORE HANDLING PLANT</b>					
13.01	BELT CONVEYOR NO 1 AND DRIVES	MS	1`	SET	15	15.00
13.02	BELT CONVEYOR NO 2 AND DRIVES	MS	1	SET	5	5.00
13.03	BELT CONVEYOR NO 3 AND DRIVES	MS	1	SET	100	100.00
13.04	BELT CONVEYOR NO 4 AND DRIVES	MS	1	SET	20	20.00
13.05	SHUTTLE CONVEYOR NO 5 & 5A	MS	2	SET	20	40.00
13.06	BELT CONVEYOR NO 6 & 6A & DRIVES	MS	2	SET	20	40.00
13.07	BELT CONVEYOR NO 7 AND DRIVES	MS	1	SET	5	5.00
13.08	BELT CONVEYOR NO 8 AND DRIVES	MS	1	SET	5	5.00
13.09	SHUTTLE CONVEYOR NO 10 & DRIVES	MS	1	SET	5	5.00
	<b>SUB-TOTAL</b>					<b>235.00</b>
	<b>GRAND TOTAL</b>					<b>2570.00</b>

#### LIST OF RETRIEVABLE ITEMS (INDICATIVE)

#### (TO BE HANDED OVER TO ISP)

SL NO.	EQUIPMENT	QTY	UNIT	UNIT WEIGHT (TON)	TOTAL WEIGHT (TON)
7.19	TUYERES, INT COOLER & MONKEY (COPPER ITEM)	1	SET	12	12
<b>14.00</b>	<b>MOTORS</b>				
14.01	DIFFERENT RATINGS OF MOTOR RETRIVED WHILE DISMANTLING THE <b>MECHANICAL ITEMS OF ANNEXURE: 2.2.13-1</b>	250	NOS	(APPOX)	
<b>TUYERES, INT COOLER &amp; MONKEY (COPPER ITEM, MOTORS SHALL BE</b>					

DISMANTLED AND HANDED OVER TO ISP. (NOT FOR SALE)

**ANNEXURE 2.3.9-1**
**LIST OF UTILITIES ITEMS TO BE DISMANTLED (INDICATIVE)**

SL NO	EQUIPMENT	MATERIAL	QTY	UNIT	UNIT WEIGHT (TON)	TOTAL WEIGHT (TON)
<b>1.00</b>	<b>PIPE LINES</b>					
1.01	COOLING WATER MAIN TANK SUPPLY	MS	45.0	METER		14.70
1.02	COOLING WATER EMERGENCY DN 450	MS	55.0	METER		6.40
1.03	COOLING WATER FURNACE SUPPLY	MS	183.0	METER		14.40
1.04	COOLING WATER STOVE SUPPLY	MS	37.0	METER		1.80
1.05	COOLING WATER RETURN LINE	MS	114.0	METER		11.80
1.06	COOLING WATER SUCTION LINE	MS	880.0	METER		69.00
1.07	COOLING WATER REDUNDANT PIPES	MS	670.0	METER		57.00
1.08	COOLING WATER GCP WATER SUPPLY	MS	110.0	METER		3.60
1.09	COOLING WATER T. BLOWER HOUSE	MS	90.0	METER		18.90
1.10	COOLING WATER GCP RETURN WATER	MS	203.0	METER		8.30
1.11	COOLING WATER VARIOUS HEADER	MS	184.0	METER		4.60
1.12	COOLING WATER SLURRY LAUNDER	MS	352.0	METER		31.70
1.13	COOLING WATER COLLECTOR TROUGH	MS	1.0	LOT		3.00
1.14	COOLING WATER MANIFOLD	MS	1.0	LOT		25.00
1.15	COMBUSTION AIR (1200,1000, 850 N.B)	MS	217.0	METER		57.40
1.16	HOT AIR BLAST PIPELINE (1500,1400) NB	MS	46.8	METER		19.95
1.17	COLD AIR BLAST (1200,1000,900, 600) NB	MS	289.4	METER		71.10
1.18	GAS LINE BF#2 STOVES (33", 39" & 54")	MS	149.9	METER		32.65
1.19	BUSTLE GAS PIPE & HANGERS (1400) NB	MS	41.5	METER		18.35
1.20	BLEEDER GAS PIPELINE 150 NB	MS	64.0	METER		0.85
1.21	BACK-DRAUGHT PIPELINE 1400	MS	6.7	METER		2.80
1.22	GAS MIX PIPELINE 600 NB	MS	23.6	METER		2.76
1.23	SEMI CLEAN BF GAS LINE 2020 mm OD	MS	22.0	METER		13.20
1.24	CLEAN BF GAS AFTER GCP, 1220 OD	MS	10.0	METER		3.70
1.25	CO GAS PIPELINE size 60"	MS	50.0	METER		23.60
1.26	CO GAS PIPELINE size 50"	MS	94.0	METER		29.70
1.27	CO GAS PIPELINE size 42"	MS	33.0	METER		9.00
1.28	CO GAS PIPELINE size 60"	MS	191.0	METER		35.00
1.29	CO GAS PIPELINE size 30"	MS	222.0	METER		33.70
1.30	CO GAS PIPELINE size 12"	MS	717.0	METER		17.60



ANNEXURE 2.3.9 -1

**LIST OF UTILITIES ITEMS TO BE DISMANTLED (INDICATIVE)**

SL NO	EQUIPMENT	MATERIAL	QTY	UNIT	UNIT WEIGHT (TON)	TOTAL WEIGHT (TON)
<b>1.00</b>	<b>PIPE LINES</b>					
1.31	BF GAS PIPELINE size 96"	MS	156	METER	LUM SUM	462.38
1.32	BF GAS PIPELINE size 72"	MS	70	METER		
1.33	BF GAS PIPELINE size 66"	MS	287	METER		
1.34	BF GAS PIPELINE size 60"	MS	52	METER		
1.35	BF GAS PIPELINE size 54"	MS	168	METER		
1.36	BF GAS PIPELINE size 48"	MS	310	METER		
1.37	BF GAS PIPELINE size 45"	MS	285	METER		
1.38	BF GAS PIPELINE size 39"	MS	77	METER		
1.39	BF GAS PIPELINE size 33"	MS	277	METER		
1.40	BF GAS PIPELINE size 30"	MS	730	METER		
1.42	BF GAS PIPELINE size 27"	MS	658	METER		
1.43	BF GAS PIPELINE size 24"	MS	185	METER		
1.44	BF GAS PIPELINE size 18"	MS	154	METER		
1.45	EQUALISER PIPELINE OF DIA 300N.B	MS	32	METER		1.00
1.46	UPTAKE (1124 & 1424 MM O.D, THK 12MM	MS	77.6	METER		22.10
1.47	DOWN-COMER (12MM THK, I.D 1800 DIA)	MS	39.1	METER		48.10
1.48	COMPRESSED AIR SUPPLY PIPE DIAMETER OF SIZE DN 40 & DN25 TO CAST HOUSE AND STOVE	MS		METER		0.50
1.49	COMPRESSED AIR HEADER OF DIAMETER OF SIZE DN 50	MS		METER		0.50
1.50	OXYGEN SUPPLY TO CAST HOUSE & STOVE OF SIZE DN 50, DN40 & DN 25	MS		METER		0.50
1.51	STEAM SUPPLY LINE FOR HUMIDIFYING COLD BLAST DN80	MS		METER	LUM SUM	312.20
1.52	STEAM LINE FOR PURGING VALVES	MS		METER		
1.53	STEAM LINE FOR BELL SEALING	MS		METER		
	<b>SUB-TOTAL</b>					<b>1488.84</b>

**ANNEXURE 2.3.9-1**
**LIST OF UTILITIES ITEMS TO BE DISMANTLED (INDICATIVE)**

SL NO	EQUIPMENT	MATERIAL	QTY	UNIT	UNIT WEIGHT (TON)	TOTAL WEIGHT (TON)
<b>2.00</b>	<b>PUMPS</b>					
2.01	COOLING WATER CENTRIFUGAL PUMP	MS	2	NOS	1.50	3.00
2.02	COOLING TOWER PUMP	MS	2	NOS	1.50	3.00
2.03	SUBMERGIBLE PUMP OF STOCK HOUSE	MS	2	NOS	0.50	1.00
2.04	HOT WELL PUMPS	MS	3	NOS	0.80	2.40
2.05	SLUDGE HANDLING PUMPS (DIAPHRAGM)	MS	6	NOS	0.60	3.60
2.06	CENTRIFUGAL TYPE SLUDGE LOADING PUMP	MS	6	NOS	0.70	4.20
2.07	DEWATERING PUMP	MS	2	NOS	0.70	1.40
2.08	DIAPHRAGM TYPE METERING PUMP	MS	2	NOS	0.60	1.20
2.09	LIME SPRAY PUMP AT PCM#4	MS	1	NOS	0.20	0.20
2.10	LIME SPRAY PUMP AT PCM#6	MS	2	NOS	0.25	0.50
	<b>SUB-TOTAL</b>					<b>20.50</b>
<b>3.00</b>	<b>VALVES CLEAN BF GAS LINE VALVES</b>					
3.01	ELECTRIC OPERATED GATE VALVE	MS	1	NOS	1.00	1.00
3.02	GOGGLE VALVES	MS	1	NOS	3.00	3.00
3.03	C.I FLEX EDGE GATE VALVE	C.I	1	NOS	1.00	1.00
	<b>SUB-TOTAL</b>					<b>5.00</b>
<b>4.00</b>	<b>STEAM LINE VALVES</b>			NOS		
4.01	STEAM FLOW CONTROL VALVES	MS	3	NOS	0.02	0.06
4.02	STEAM PURGING, HUMIDIFICATION & SEALING BALL VALVES	MS	13	NOS	0.075	1.00
4.03	C.I GATE / GLOBE VALVE	C.I	25	NOS	0.020	0.50
4.04	MOISTURE TRAP (STEAM, COMPRESSED AIR)	MS	5	NOS	0.10	0.50
4.05	CAST STEEL GLOBE VALVE		5	NOS	0.02	0.10
	<b>SUB-TOTAL</b>					<b>2.16</b>
<b>5.00</b>	<b>VALVES IN COOLING WATER CIRCUIT</b>					
5.01	C.I GLOBE/GATE VALVE OF SIZE >DN 150	C.I	14	NOS	0.02	0.28
5.02	C.I GLOBE/GATE VALVE of size <DN 150	C.I	93	NOS	0.04	3.72
5.03	NON-RETURN VALVE (DN450, DN300, DN250, DN200)	C.I	6	NOS	0.20	1.20
5.04	PNEUMATIC CONTROL VALVE	MS	1	NOS	0.80	0.50
5.05	C.I 3-WAY PLUG VALVES	C.I	1	NOS	0.80	0.80
5.06	DUPLEX FILTER	MS	2	NOS	3.00	3.00

	<b>SUB-TOTAL</b>			NOS		<b>9.50</b>
--	------------------	--	--	-----	--	-------------

ANNEXURE 2.3.9-1

**LIST OF UTILITIES ITEMS TO BE DISMANTLED (INDICATIVE)**

SL NO	EQUIPMENT	MATERIAL	QTY	UNIT	UNIT WEIGH T (TON)	TOTAL WEIGHT (TON)
<b>6.00</b>	<b>VALVES IN GCP</b>					
6.01	CAST IRON GATE VALVES	C.I	17	NOS	0.5	8.5
6.02	SWING TYPE NON-RETURN VALVE	MS	6	NOS	0.8	4.8
6.03	CONTROL VALVES FOR 2ND STAGE	MS	2	NOS	0.3	0.6
6.04	DRAIN OUT VALVE	MS	2	NOS	0.05	0.1
6.05	FLOW CONTROL VALVE	MS	1	NOS	0.2	0.2
6.06	FORGED GATE / GLOBE VALVES	MS	5	NOS	0.3	1.5
6.07	CAST STEEL GATE/GLOBE VALVE	MS	12	NOS	0.33	4.0
6.08	CAST IRON TAPER PLUG VALVE(SLURRY)	C.I	6	NOS	0.5	3.0
	<b>SUB-TOTAL</b>					<b>22.9</b>
<b>7.00</b>	<b>VALVES AT THICKENER</b>					
7.01	CAST IRON GATE	C.I	6	NOS	0.5	3.0
7.02	NON-RETURN VALVES	C.I	6	NOS	0.6	3.6
7.03	KNIFE EDGE GATE VALVES	MS	4	NOS	0.4	1.6
	<b>SUB-TOTAL</b>					<b>8.2</b>
<b>8.00</b>	<b>TANKS</b>					
8.01	MAIN WATER TANK	MS	1	NOS	39.2	39.2
8.02	EMERGENCY WATER TANK	MS	1	NOS	5.7	5.7
8.03	WATER SEAL TANK	MS	1	NOS	4.3	4.3
	<b>SUB-TOTAL</b>					<b>49.2</b>
<b>9.00</b>	<b>COMBUSTION AIR SUPPLY SYSTEM</b>					
9.01	COMBUSTION AIR FAN	MS	2	NOS	2.75	5.5
9.02	DUPLEX FILTER WITH INLET GUIDE DAMPER	MS	2	NOS	3.1	6.2
9.03	<b>SUB-TOTAL</b>					<b>11.7</b>
<b>10.00</b>	<b>MISC</b>					
10.01	SLURRY LAUNDERS (UNDERGROUND, OVERGROUND, DIVERSION)	MS	6	NOS	3	18.0
10.02	PIG IRON LAUNDERS AT PCM 4	MS	1	NOS	4	4.0
10.03	PIG IRON LAUNDERS AT PCM 6	MS	1	NOS	8	8.0
	<b>SUB-TOTAL</b>					<b>30.0</b>
<b>11.00</b>	<b>RAILWAY TRACK</b>					

11.01	HOT METAL TRACK, SLAG TRACK, SLURRY TRACK & PCM TRACK	MS	12000	NOS	0.045	540.0
	<b>SUB-TOTAL</b>					<b>540.0</b>
	<b>GRAND TOTAL (1-11)</b>					<b>2184.96</b>

**ANNEXURE 2.4.16-1**
**LIST OF STRUCTURAL ITEMS TO BE DISMANTLED (INDICATIVE)**

SL NO	EQUIPMENT	MATERIAL	QTY	UNIT	UNIT WEIGHT (TON)	TOTAL WEIGHT (TON)
<b>1.00</b>	<b>TOP PLATFORM STRUCTURE</b>					
1.01	FURNACE TOP PLATFORMS AND SUPPORTING STRUCTURE	MS	1	NOS	340	340
1.02	STOVE PLATFORM	MS	1	NOS	150	150
1.03	DUST CATCHER	MS	1	NOS	60	60
1.04	GCP PLATFORM	MS	1	NOS	50	50
1.05	THICKENER CLARIFIER PLATFORM STEEL SUPER STRUCTURE	MS	3	NOS	10	30
	<b>SUB-TOTAL</b>					<b>630</b>
<b>2.00</b>	<b>TECHNOLOGICAL STRUCTURE</b>					
2.01	BF SHELL (THROAT, STACK, BELLY, BOSCH, TUYERE, HEARTH)	MS	1	NOS	350	350
2.02	DUST CATCHER	MS	1	NOS	120	120
2.03	GAS CLEANING PLANT SHELL (PRIMARY +SECONDARY)	MS	1	NOS	85	85
2.04	STOVE SHELL OF BF#2	MS	3	NOS	60	180
2.05	STOVE SHELL OF BF#3	MS	1	NOS	100	100
2.06	BACK DRAUGHT CHIMNEY SHELL	MS	1	NOS	100	100
2.07	BF GAS BLEEDER STACK CHIMNEY	MS	1	NOS	25	25
	<b>SUB-TOTAL</b>					<b>960</b>
<b>3.00</b>	<b>STRUCTURAL SHOP</b>					
3.01	WINCH ROOM	MS	1	NOS	60	60
3.02	HYDRAULIC ROOM	MS	1	NOS	25	25
3.03	ELECTRIC PANEL ROOM& FURNACE CONTROL ROOM	MS	1	NOS	70	70
3.04	CAST HOUSE	MS	1	NOS	150	250
3.05	PCM NO. 4 M/C AND WINCH SHED	MS	1	NOS	60	60
3.06	PCM NO.4 LIME TANK SUPPORT STRUCTURE& BUILDING	MS	1	NOS	3	3
3.07	PCM NO. 6 M/C AND WINCH SHED	MS	1	NOS	140	140
3.08	LIME TANK & SPRAY UNIT 1 LDG STRUCTURES AT PCM NO#6 AND ADJACENT ARC SHED	MS	1	NOS	30+70	100
3.09	PIG YARD SHED BESIDE PCM NO. 6	MS	1	TON	170	170
3.10	COOLING WATER PUMP ROOM	MS	1	TON	25	25
3.11	GCP PUMP ROOM	MS	1	TON	15	15
3.12	STOCK HOUSE	MS	1	TON	420	420

3.13	STOCK HOUSE HOPPERS AND CHUTES	MS	1	NOS	1	9
3.14	COMBUSTION AIR FAN HOUSE	MS	1	TON	15	15
3.15	NEW LADLE HOUSE	MS	1	TON	270	300

**ANNEXURE 2.4.16-1**
**LIST OF STRUCTURAL ITEMS TO BE DISMANTLED (INDICATIVE)**

SL NO	EQUIPMENT	MATERIAL	QTY	UNIT	UNIT WEIGHT (TON)	TOTAL WEIGHT (TON)
<b>3.00</b>	<b>STRUCTURAL SHOP</b>					
3.16	KULTI LADLE HOUSE		1	NOS	235	240.00
3.17	MECHANICAL REPAIR SHOP	MS	1	NOS	50	50.00
3.18	TRANSIT BUNKER HOUSE OF OHP INCLUDING STRUCTURAL HOPPER & CHUTES	MS	18	NOS	1	18.00
3.19	JUNCTION HOUSE OF BELT NO. 2, 3 AND 4 AT OHP	MS	1	NOS	60	60.00
3.20	JUNCTION HOUSE OF BELT NO. 6 & 7 AT OHP	MS	1	NOS	60	60.00
3.21	ORE SCREENING HOUSE, HOPPER & CHUTE	MS	1	NOS	90	90.00
3.22	UNDERGROUND HOPPER AT STOCKYARD	MS	1	NOS	25	25.00
	<b>SUB-TOTAL</b>					<b>2205.00</b>
<b>4.00</b>	<b>EQUIPMENT SUPPORT STRUCTURE</b>					
4.01	CONVEYOR GALLERY & TRESTLE, OC-1 AT S. HOUSE	MS	60	METER	1.5	90.00
4.02	CONVEYOR GALLERY & TRESTLE, OC-2 AT S. HOUSE	MS	100	METER	1.1	110.00
4.03	BUCKET ELEVATOR STRUCTURE AT S. HOUSE	MS	2	NOS	5	10.00
4.04	GALLERY OF BELT CONVEYOR NO.1 OF IRON OHP	MS	120	METER	0.2	60.00
4.05	GALLERY OF BELT CONVEYOR NO.2 OF IRON OHP	MS	150	METER	0.2	75.00
4.06	GALLERY OF BELT CONVEYOR NO.3 OF IRON OHP	MS	1500	METER	0.25	375.00
4.07	GALLERY OF BELT CONVEYOR NO.4 OF IRON OHP	MS	200	METER	0.2	40.00
4.08	GALLERY FOR SHUTTLE CONVEYOR NO. 5&5A	MS	150	METER	0.5	75.00
4.09	GALLERY OF BC# 6 & 6A OF IRON OHP	MS	200	METER	0.2	40.00
4.10	GALLERY OF BELT CONVEYOR NO.7 OF IRON OHP	MS	50	METER	0.2	10.00
4.11	GALLERY OF BELT CONVEYOR NO.8 OF IRON OHP	MS	50	METER	0.2	10.00
4.12	GALLERY OF BELT CONVEYOR NO.10 OF IRON OHP	MS	50	METER	0.2	10.00
4.13	SKIP BRIDGE	MS	1	TON	200	200.00
4.14	ELEVATOR SUPPORT FRAME	MS	1	TON	25	25.00
4.15	TRESTLES OF PIPELINE & EMERGENCY WATER TANK	MS	1	TON	100	100.00
4.16	CABLE BRIDGE	MS	50	METER	0.2	10.00
4.17	SLURRY LAUNDER GALLERY STRUCTURE	MS	352	METER	0.142	50.00
4.18	PCM#6 M/C GALLERY	MS	1	TON	60	60.00
4.19	PCM#4 M/C GALLERY	MS	1	TON	50	50.00
4.20	OPEN GANTRY GIRDERS AND COLUMNS AT PIG	MS	1	TON	700	700.00

	STORAGE YARD BESIDE PCM#4					
4.21	OPEN GANTRY GIRDERS AND COLUMNS AT PIG STORAGE YARD BESIDE PCM#6	MS	1	TON	120	120.00
4.22	CRANE GIRDERS AND COLUMNS AT CAST HOUSE	MS	1	TON	20	20.00
4.23	CAST IRON SLEEPERS	C.I	1800	NOS	0.25	450.00
	<b>SUB-TOTAL</b>					<b>2690.00</b>
	<b>GRAND TOTAL</b>					<b>6485.00</b>

**ANNEXURE 2.6.4-1**
**LIST OF ELECTRICAL ITEMS TO BE DISMANTLED (INDICATIVE)**

SL NO	EQUIPMENT	MATERIAL	QTY	UNIT	UNIT WEIGHT (TON)	TOTAL WEIGHT (TON)
<b>1.00</b>	<b>BF#2 CONTROL ROOM</b>					
1.01	PLC PANEL	MS	6	NOS	0.2	1.200
1.02	SLI PANEL	MS	2	NOS	0.07	0.140
1.03	SLI BRAKE PANEL	MS	2	NOS	0.04	0.080
1.04	SKIP DRIVE PANEL	MS	2	NOS	0.2	0.400
1.05	SKIP HOIST BRAKE	MS	2	NOS	0.1	0.200
1.06	BELL WINCH PANEL	MS	2	NOS	0.2	0.400
1.07	BELL WINCH BRAKE	MS	2	NOS	0.1	0.200
1.08	INSTRUMENTATIONPANEL	MS	1	NOS	0.15	0.150
1.09	HOPPER WEIGHING PANEL	MS	1	NOS	0.2	0.200
1.10	UPS UNIT	MS	1	NOS	0.4	0.400
1.11	CONTROL DESK PANEL	MS	1	NOS	0.15	0.150
1.12	OPERATOR DESK NOS.	MS	1	NOS	0.5	0.500
1.13	GCP DRIVE PANEL	MS	1	NOS	0.2	0.200
1.14	GCP INSTRUMENTATIONPANEL	MS	1	NOS	0.2	0.200
1.15	FIRE ALARM PANEL	MS	1	NOS	0.005	0.005
1.16	PDB (UPS)	MS	1	NOS	0.008	0.008
1.17	PDB (NON-UPS)	MS	1	NOS	0.008	0.008
1.18	PLC SUPPLY BOARD	MS	1	NOS	0.005	0.005
1.19	SLDB (SUB-LIGHTING DISTRIBUTION BOARD)		7	NOS	0.05	0.35
	<b>SUB-TOTAL</b>					<b>4.790</b>
<b>2.00</b>	<b>MOTOR CONTROL ROOM- CENTER ROOM</b>					
2.01	MCC-1 (PANEL UNIT & FEEDERS)	MS	44	NOS	0.05	2.200
2.02	MCC-2 (PANEL UNIT & FEEDERS)	MS	55	NOS	0.05	2.750
2.03	MCC-3 (PANEL UNIT & FEEDERS)	MS	53	NOS	0.05	2.650
2.04	AIR CONDITIONING PANEL UNIT	MS	10	NOS	0.05	0.500
2.05	AC PACKAGE SYSTEM	MS	2	NOS	0.4	0.800
2.06	UPS AC (DB)	MS	1	NOS	0.02	0.020
	<b>SUB- TOTAL</b>					<b>8.920</b>
<b>3.0</b>	<b>CAST HOUSE</b>					
3.01	BF#2 Cast House Crane	MS	1	NOS	30	30.000
3.02	HPP Operating Desk	MS	1	NOS	0.08	0.0800
	<b>SUB- TOTAL</b>					<b>30.080</b>

**ANNEXURE 2.6.4-1**

**LIST OF ELECTRICAL ITEMS TO BE DISMANTLED (INDICATIVE)**

SL NO	EQUIPMENT	MATERIAL	QTY	UNIT	UNIT WEIGHT (TON)	TOTAL WEIGHT (TON)
<b>4.00</b>	<b>POWER DISTRIBUTION ROOM</b>					
4.01	PDB BOARD (PANEL UNIT & FEEDERS)	MS	1	NOS	3	3.000
4.02	AUXILIARY PDB (PANEL UNIT, FEEDERS)	MS	1	NOS	2.5	2.500
4.03	MLDB (FEEDERS)	MS	21	NOS	0.015	0.300
4.04	DYNAMIC BRAKING PANEL (DBR)	MS	1	NOS	0.5	0.500
4.05	GCP (PMCC) PANEL UNIT & FEEDERS	MS	22	NOS	0.035	0.700
	<b>SUB- TOTAL</b>					<b>7.000</b>
<b>5.00</b>	<b>HYDRAULIC POWER PACK</b>					
5.01	HPP MCC PANEL FOR HPP	MS	1	NOS	0.5	0.500
5.02	HPP RELAY LOGIC PANEL	MS	1	NOS	0.04	0.040
5.03	MUDGUN & DRILL MACHINE PANEL	MS	1	NOS	0.05	0.050
5.04	CLS PANEL NOS.	MS	1	NOS	0.08	0.080
	<b>SUB- TOTAL</b>					<b>0.670</b>
<b>6.00</b>	<b>BF NO.2 ENGINE ROOM</b>					
6.01	JUNCTION BOX NOS.	MS	15	NOS	20	0.300
6.02	HOIST WINCH PANEL FOR SKIP, BELL & SLI MOTOR	MS	3	NOS	0.04	0.120
	<b>SUB- TOTAL</b>					<b>0.420</b>
<b>7.00</b>	<b>PIG CASTING MACHINE#6</b>					
7.01	PANEL UNIT & FEEDERS	MS	1	NOS	32	0.480
7.02	LIGHTING BOARD	MS	1	NOS	0.05	0.050
7.03	30 KW STRAND DRIVE PANEL	MS	2	NOS	0.2	0.400
7.04	CONTROL DESK PANEL	MS	1	NOS	0.3	0.300
7.05	BRAKE CONTROL PANEL	MS	1	NOS	0.15	0.150
7.06	GREASE LUBRICATION PANEL	MS	1	NOS	0.08	0.080
	<b>SUB- TOTAL</b>					<b>1.460</b>
	<b>GRAND TOTAL</b>					<b>53.340</b>
<b>8.00</b>	<b>CABLES</b>					
8.01	POWER CABLES OF DIFFERENT SIZES		25	KM		
8.02	CONTROL CABLE OF DIFFERENT SIZES		30	KM		
<b>RETRIEVED CABLES SHALL BE HAND OVER TO MRD, ISP (NOT FOR SALE)</b>						
<b>9.00</b>	<b>MOTORS</b>					
9.01	DIFFERENT RATINGS OF MOTOR		250	NOS	(APPOX)	
<b>MOTORS SHALL BE DISMANTLED AND HANDED OVER TO ISP. (NOT FOR SALE)</b>						





**ANNEXURE- 2.7.3-1**
**LIST OF REFRACTORY & SALAMANDER ITEMS TO BE DISMANTLED (INDICATIVE)**
**LIST OF REFRACTORY ITEMS TO BE DISMANTLED (INDICATIVE)**

SL NO.	EQUIPMENT	QTY	UNIT	TOTAL AVAILABLE (TON)	SALVAGEABLE (TON)
<b>1.00</b>	<b>BF#2</b>				
1.01	FURNACE PROPER UP TO MANTLE	1	NOS	400	280
1.02	FURNACE PROPER MANTLE TO TOP	1	NOS	500	350
1.03	HEARTH BASE OF HEARTH	1	NOS	720	504
1.04	HOT BLAST SYSTEM BF#2 STOVES	3	NOS	6000	4200
1.05	HOT BLAST SYSTEM BF#3 STOVES	1	NOS	2000	1400
1.06	BACK DRAFT CHIMNEY	1	NOS	2000	1400
1.07	FLUE TUNNEL	1	NOS	2500	1750
1.08	PIPELINES HOT BLAST MAIN	1	NOS	500	350
1.09	BUSTLE PIPE	1	NOS		
1.10	UPTAKE & DOWNCOMER	1	NOS		
1.11	DUST CATCHER SHELL	1	NOS		
1.12	CAST HOUSE METAL & SLAG RUNNER	4	NOS	40	28
1.13	CAST HOUSE & COLUMN ENCASING	1	NOS	30	21
	<b>GRAND TOTAL</b>			<b>14690</b>	<b>10283</b>

## ANNEXURE- 2.8.2-1

## LIST OF SALAMANDER AND OTHER ITEMS TO BE DISMANTLED (INDICATIVE)

SL NO.	EQUIPMENT	QTY	UNIT	TOTAL AVAILABLE (TON)	SALVAGEABLE (TON)
2.00	<b>FURNACE PROPER, HEARTH, STOVES</b>				
2.01	SALAMANDER OF BF#2(PIG IRON)	1	TON	700	700
	<b>GRAND TOTAL</b>				<b>700</b>

**ANNEXURE- 2.8.4-2**

**LIST OF LOOSE SPARE AND SCRAP ITEMS (INDICATIVE)**

SL NO	EQUIPMENT	MATERIAL	QTY	UNIT	UNIT WEIGHT (TON)	TOTAL WEIGHT (TON)
<b>1.00</b>	<b>LIST OF LOOSE SPARES AND SCARP ITEMS</b>	<b>MS</b>				
1.01	BF#2 SNATCH BLOCK OF CRANE	MS	50	NOS	0.5	25
1.02	BF#2 GEAR BOX	MS	20	NOS	5	100
<b>2.00</b>	<b>LIST OF LOOSE SPARES AND SCARP ITEMS</b>	<b>C.I</b>				
2.01	PCM & BF#2 CAST IRON SCRAP	C.I	1	NOS	100	100
2.02	LADLE HOUSE CAST IRON BOULDER	C.I	1	NOS	500	500

Schedule 2.1.6.2-1

**TENTATIVE IMPLEMENTATION SCHEDULE**

Sl. No.	ACTIVITY	MONTHS									
		2	4	6	8	10	12	14	16	18	
1	Removal of loose unused spares										
2	Disconnection of electrical lines & blanking of all utility pipelines										
3	Dismantling of electrical items, retrieving of cables, transportation & handing over of cables to MRD, ISP										
4	Dismantling of piping										
5	Refractory work dismantling of all equipment including chimneys										
6	Dismantling of all mechanical equipment including overhead cranes										
7	Technological structures like hopper, etc. dismantling										
8	Complete structural and selective civil dismantling										
9	Dosing, cleaning and levelling of BF#2 up to new finished ground level and transportation of debris										



**STEEL AUTHORITY OF INDIA LIMITED  
IISCO STEEL PLANT  
BURNPUR**

**Tender No. MKTG/20-21/DISP/IA-BF#2/OFA-04    Dated: 15.07.2020**

***STANDARD OPERATING PROCEDURE***

**FOR**

***DISMANTLING AND SALE OF BLAST FURNACE No. 2, ISP***

<b>OFA DOCUMENT    PART-V</b>
-------------------------------



STEEL AUTHORITY OF INDIA LIMITED  
ईस्को स्टील प्लांट  
IISCO STEEL PLANT  
BURNPUR-713325

**STANDARD OPERATING PROCEDURE  
(SOP) FOR DEMOLITION WORK**

# PROCEDURE FOR DEMOLITION WORK

## PURPOSE

The objective of this procedure is to clearly list out the critical aspects inherent in works of demolition with particular regard to safety of workmen & neighbouring structures & serve as a reference document for future demolition jobs.

## SCOPE

This standard is applicable for all demolition / dismantling work in IISCO Steel Plant, Burnpur.

## INTRODUCTION:

Demolition is more hazardous than construction or erection. It poses danger to men working on it, equipment & the adjoining structures. An accident in demolition is much more likely to be fatal than in the other construction work. The main cause of accidents is premature collapse of buildings & structures & fall from working places & access routes. A common cause is generally failure to plan the operations at an early stage, leading to site workmen having to devise their own means & methods of work, without the benefit of full information on all the dangers. Therefore, adequate attention should be paid to its planning

& execution, through various stages so as to minimize the risk of accidents & injuries to personnel engaged in it.

## TENDERING:

Demolition contractors should be provided sufficient information at the time of submission of the tender, so that a suitable method of demolition is chosen & appropriate precaution taken in the event of the presence of hazardous substances.

## SURVEY:

Contractors should be permitted access to the whole site to make an initial survey on which to base the outline method statement to cover any hazard & the preferred demolition procedure. Survey must include but not limited to the following.

1. The presence of joining or adjoining structures where noise, dust or vibrations might restrict the method of mobilization.
2. The detailed drawing / sketches must be referred to
3. The type of structure.
4. Condition of structure i.e. floors, roofs, walls etc & overall stability
5. The need for shoring.
6. Confined spaces i.e. old tanks, process vessels, overhead or underground services (pipelines, electric cables).
7. Health hazards i.e. Asbestos to lagging, lead dust or paint, residue from previous process or contaminated land.
8. Suitable access for the proposed method of demolition & vehicle access for removal of debris / waste.
9. The effect on environment along with mitigation measures to be considered.

## PREFERRED METHOD OF WORK:

Demolition work where possible should minimize working at height. The use of heavy duty shovel, cranes, pusher arms, fork lift, excavators etc shall help avoiding work at height, provided there is sufficient area for their safe use. Otherwise working platforms must be provided. Safety nets, safety harnesses should be used. The method statement must include details of appropriate measures to ensure safe working at height. Work should be executed under “**Permit to Work**” system.



**ONCE THE DEMOLITION CONTRACT HAS BEEN AWARDED,  
THE FOLLOWING STEPS SHOULD BE TAKEN**

**A. STEPS BEFORE START OF WORK / WORK PLAN**

The contractor shall officially identify one leader who is competent enough to carry out demolition / dismantling work and inform ISP Authorities by a letter. The leader must have adequate knowledge & experience in demolition / dismantling of structures and shall be responsible for safety of men & equipment's working at site.

- I. Ensure that the structural to be dismantled are not supporting any other structures. In case, it is supporting, the other structures should be suitably supported before dismantling work is taken up.
- II. Notification of the intended demolition to all concerned & necessary approvals.
- III. All water, steam, electric, gas, telephone & other similar supply lines are put off suitably & local authority is informed & necessary permission obtained.
- IV. Disposal plan of specified wastes under the control of pollution if Asbestos, Lead, or radioactive material is involved.
- V. Request to seal the drains, sewers to prevent vermin gaining access to the site.
- VI. Danger signals should be conspicuously posted around the structure.
- VII. During night time, red lights should be placed on & around all barricades.
- VIII. Watch man should be posted at entry points.
- IX. Personal protective equipment's should be supplied to all workmen & their use enforced.
- X. Protected walkways & passageways should be provided for the use of workmen & others.
- XI. Ensure that all glass or similar material or article in exterior openings is removed before commencing the demolition work.
- XII. Protection of adjacent structures to be ensured by measures like sheet piling, shoring, bracing to ensure stability from collapsing.
- XIII. Cranes, used for dismantling, should have necessary fitness certificate. The driver shall also have necessary health and eye test certificate.
- XIV. All lifting machines, chains, ropes and lifting tackles used for dismantling should be in sound condition and adequately strong. Lifting tools and tackles used should have test certificate, issued by competent authority.
- XV. The condition of structural intended to be dismantled shall be inspected for corrosion, to ensure that it does not collapse while dismantling.
- XVI. While working at height, safety belt should be used. While climbing up or down, snatch ropes or fall arrestor should be used. A wire rope may be tied at two rigid points to fasten the life line of safety belt, where other tying members are not available.
- XVII. Safety Training to all workers engaged in dismantling work and the use of safety appliances must be ensured by the contractor.

**B. SAFETY RISK ASSESSMENT OF THE WORK TO BE DONE - WHAT / WHO ARE THE:**

<b>RISK TO PEOPLE:</b> Contractor's employee, Site Visitors.	
<b>RESPONSIBILITY:</b> The person in charge of the contractor is responsible for ensuring that all controls are in place well in time)	
<b>HAZARDS</b>	<b>CONTROLS TO BE USED</b>
Slips, Trips & Falls	Employ good housekeeping; remove materials from the work place progressively. At the end of the shift remove all tools etc. and inspect all areas to ensure they are left in a safe condition.
Cuts, grazes & Abrasions	Ensure a safe system of work is in place and is explained to all operatives and carry out tool box talks on any hazardous areas etc.
Falling material	Flagmen and workers of the executing contractor are to be positioned a safe distance away during demolition
Services	All known live services are to be identified and protected during the demolition. After Access to be maintained to the gas valve at the front of the main building in the event of an emergency.
Manual Handling	Should manual handling be required minimum of two persons needed for heavier items, adopt correct handling techniques. Only lift what can easily be managed. Assess each item prior to lift and clear transit route to ensure safe passage
Abrasive wheels	Wheel disc cutters/grinders are used. All operatives are needed to be competent and trained in their use they should work under direct supervision.
Fire	As soon as is reasonably practicable, remove waste from site to prevent a build-up of combustible material.
Foot penetration Injuries	Safety boots as specified in safety standard of PPEs are to be used.
Obstruction of assigned emergency access/ egress routes	The site supervisor should coordinate on site vehicle/ plant movement including ensuring that the access to site is unblocked.
Clothing	Loose clothing must not be worn.
Traffic movements	Traffic movements in and out of the barricaded area to be co- ordinate by the safety stewards. Flagmen to be in place during traffic movements to ensure that traffic is not affected.
Injury to operatives	Avoid lone working Ensure suitable first aid facility on site. PPE to include, Safety Boots, Safety Helmet, Gloves, Safety goggles etc.
Hazardous Materials	There shall be no known hazardous materials within the site boundary; however, should any material / substance be on site, the Site Supervisors must immediately be informed.
Flying particles, Dust, Noise	Standard safety goggles to be worn. Dust will be minimized as far as possible by wetting down during the demolition. Workers working with the noisy equipment must wear ear plug.

Uncontrolled collapse	<p>Workers are to be briefed about the sequence of demolition prior to commencement, by the job and site supervisors.</p> <p>The machine operator shall be fully conversant with the sequence of removal of any support members.</p> <p>No structure/s to be left partially collapsed or in an unsafe condition</p>
Unsafe Structure	<p>The plant's operator is to be briefed on the method of demolition by the supervisor prior to commencement.</p> <p>Progressive demolition by controlled methods. No structure is to be left in an unsafe condition overnight.</p>

PRACTICE FOR SEQUENTIAL DISMANTLING OF STEEL STRUCTURE

TABLE OF CONTENTS

1	SECTION - 1	GENERAL SEQUENCE OF DISMANTLING OF STRUCTURAL BUILDING
2	SECTION - 2	GENERAL SEQUENCE OF DISMANTLING OF OPEN GANTRY
3	SECTION - 3	GENERAL SEQUENCE OF DISMANTLING OF CONVEYOR GALLERY
4	SECTION - 4	SAFETY PRECAUTION WHILE WORKING WITH GAS LINE DURING DEMOLITION WORK
5	SECTION - 5	SAFETY PRECAUTION DURING DEMOLITION WORK FOR UTILITIES SERVICES

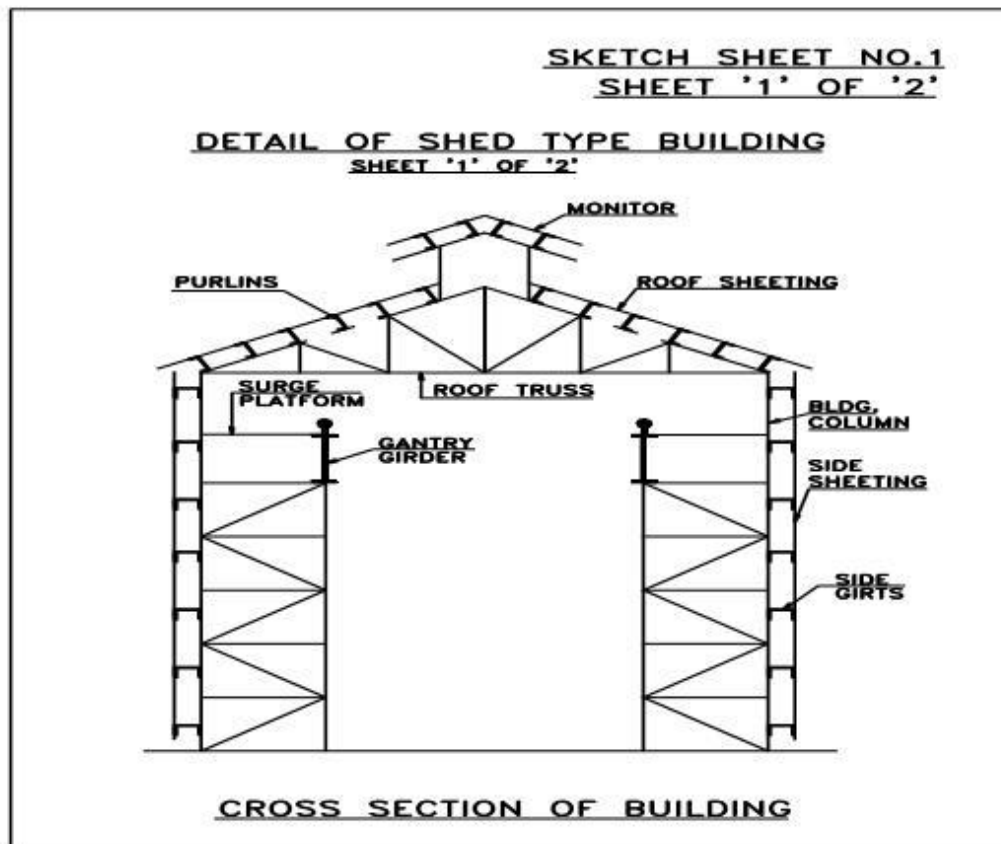
## **SECTION – 1 GENERAL SEQUENCE OF DISMANTLING OF STRUCTURAL BUILDING**

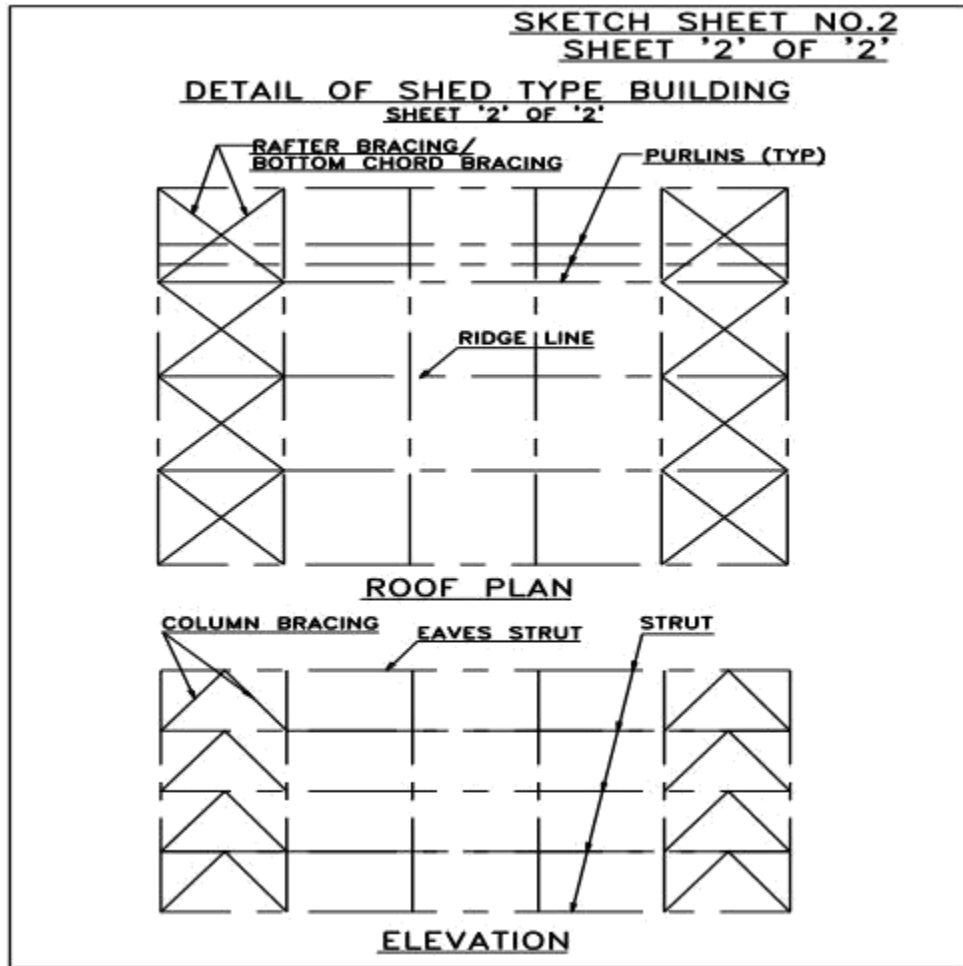
The sequence of dismantling should be such that the structure does not lose its stability at any time.

1. Ensure that all precautions, as indicated in Work Plan and Demolition Safety Plan are taken.
2. Remove all roof and side sheeting. Purlins should not be dismantled at this stage, but side girts can be dismantled.
3. If necessary, all purlins between monitor trusses can be removed and monitor truss dismantled without damaging the roof truss.
4. Start dismantling from gable end, and work towards any intermediate braced bay. This braced bay is to be dismantled last.
5. Remove gable steel work except roof truss.
6. Remove alternate purlins between end roof truss and adjacent truss.
7. Hold the roof truss to be dismantled with crane or derrick and remove balance purlins, rafter bracings, bottom chord bracings and struts, if any, between this truss and adjacent truss.
8. Gas cut the truss members along the face of column on both sides, and lower the roof truss.
9. Sequence 6 to 8 to be repeated for dismantling subsequent roof truss.
10. While removing the last two trusses, both the trusses should be held with crane before repeating sequence 7 & 8.
11. Dismantle gantry girder, surge platform, surge girder and outrigger girder between end column intended to be dismantled and adjacent column.
12. Remove longitudinal bracings and struts if any, between end column and adjacent column. Also remove any other structural or platform. Dismantle end column.
13. Repeat sequence 11 and 12 for subsequent columns on both lines.
14. For multi storied building dismantle all floor beams and floor plates except the beams connecting the building column. These framing beams and parts of columns shall be dismantled floor wise, starting from top, maintaining the stability of structures at all time.
15. For bin house, dismantle all bin plates except the girder or bin plates connecting the building columns.
16. Dismantle longitudinal bracings, struts, floor beams, bin plates etc., between end columns and adjacent columns on both rows. Also dismantle beam, bin plates etc. across the building for end column.
17. Dismantle end columns. For long columns, columns can be dismantled in pieces starting from top.
18. Repeat sequence 16 and 17 for subsequent columns on both sides.

19. Refer to sketch sheet no. 1 for identification of shed type building components.
20. If during dismantling, a situation is faced, where the remaining component to be removed is likely to lose its stability due to removal of other connecting members, the component must be stabilized with guy ropes.
21. While dismantling using crane, precaution shall be taken that the weight of the material dismantled by gas cutting does not give a jerk load on the crane boom.
22. Training on safety standard on demolition shall be taken by the contractors' supervisors and line managers / Consultant, before taking up dismantling work.

Based on the above sequence of dismantling, for hazardous jobs, the components like columns, bracings, girder etc. may be given identifying marking at site to avoid wrong member cutting.

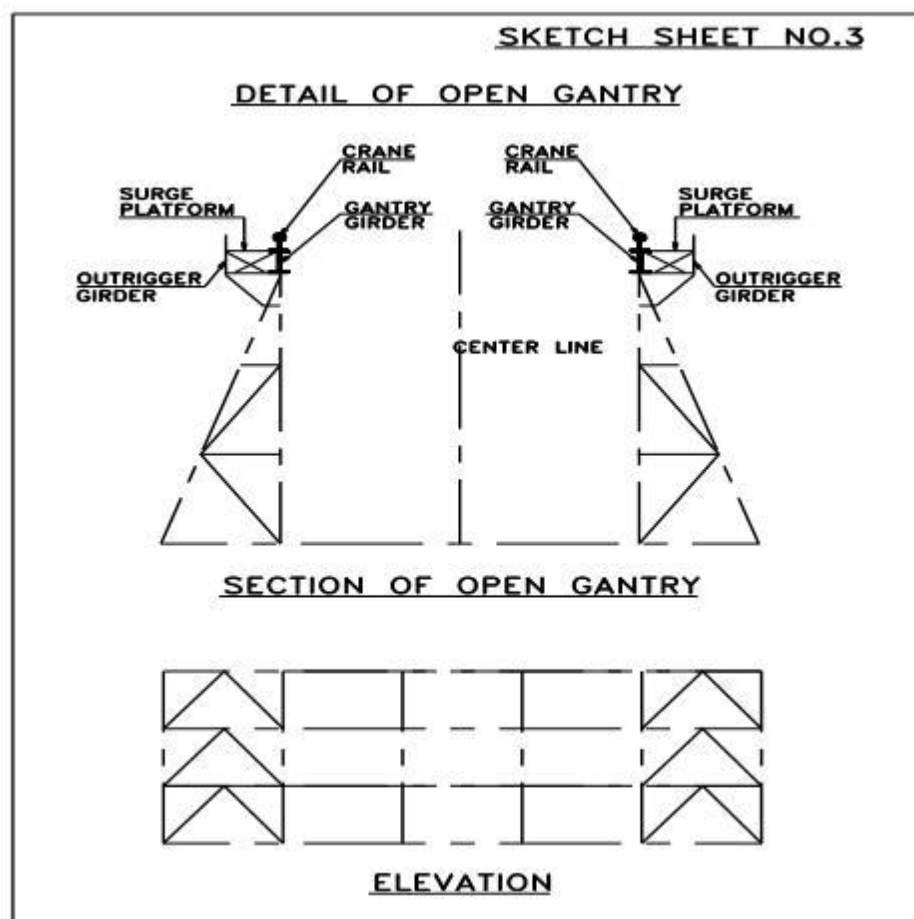




## SECTION – 2 GENERAL SEQUENCE OF DISMANTLING OPEN GANTRY

1. Ensure that all precautions, as indicated in Work Plan and Demolition Safety Plan are taken.
2. Start dismantling from the end, where column bracing is not provided.
3. Hold the top of end column / A-frame using a crane / derrick.
4. Remove gantry girder, surge girder / platform, outrigger girder and any other structural between end column / frame and adjoining column / frame.
5. Dismantle end frame / column.
6. Start dismantling from the end, where column bracing is not provided.
7. Hold the top of end column / A-frame using a crane / derrick.
8. Remove gantry girder, surge girder / platform, outrigger girder and any other structural between end column / frame and adjoining column / frame.
9. Dismantle end frame / column.

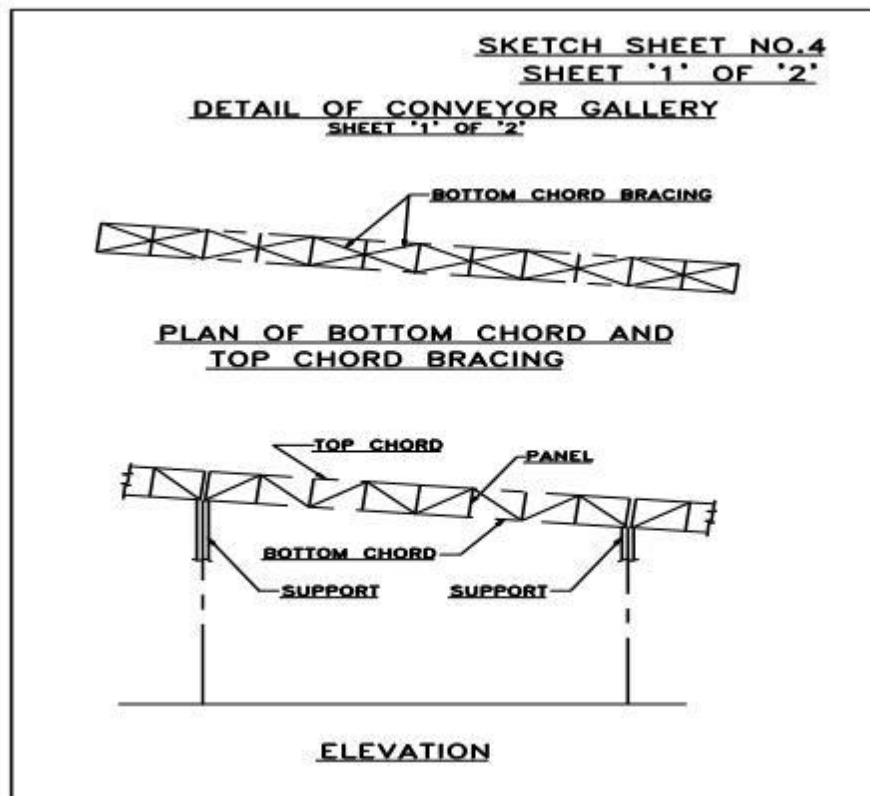
10. Repeat sequence 3 to 5 for all other frames / columns except for last two braced columns / frames.
11. For last two braced columns / frames, cut and remove all structural except bracing between the columns / frames.
12. Cut and remove top portion of bracing strut and diagonals along with top portion of columns / frames.
13. Repeat sequence 8 for next lower portion of bracings and columns / frames, till complete column / frame is removed.
14. Refer to Sketch sheet No. 3 for identification of structural parts of open gantry.



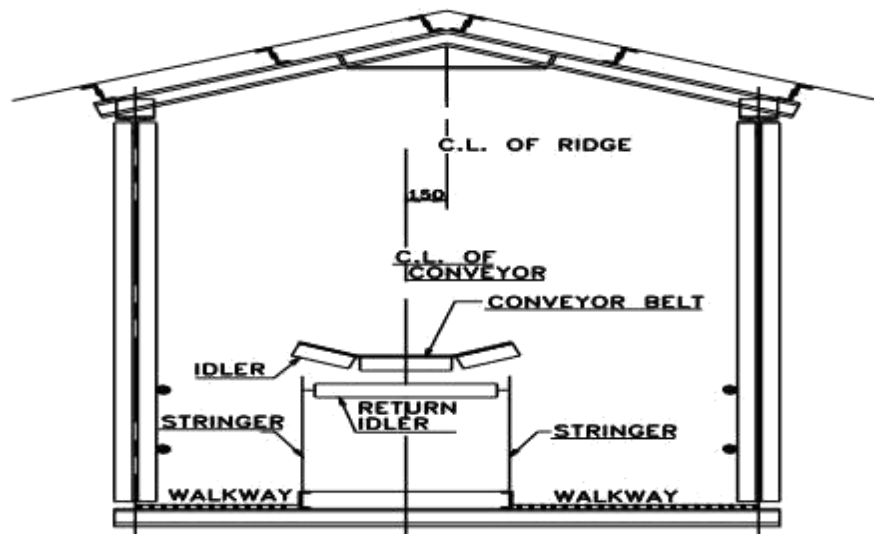


### SECTION – 3 GENERAL SEQUENCE OF DISMANTLING OF CONVEYOR GALLERY

1. Ensure that all precautions as indicated in Work Plan and Demolition Safety Plan are taken.
2. Remove all mechanical parts like conveyor belt, idlers, deck plates, stringers etc., before removing the gallery structural. Remove all cables, pipes and cable trays.
3. Remove all roof and side sheeting including purlins and side runners.
4. Hold the portion of conveyor gallery between two supports with crane / derrick. Depending on situation, slinging positions, crane position etc., must be planned and documented. Slings should be tied only at node points.
5. Gas cut the end connections without damaging the supports and conveyor gallery. Top end connections to be gas cut first and bottom connections should be gas cut.
6. Lower the conveyor gallery to ground.
7. After lowering on ground, the structures can be removed in small pieces by gas cutting.
8. Refer Sketch Sheet No. 4 and 5 for identification of structural components of conveyor gallery.



SKETCH SHEET NO.5  
SHEET '2' OF '2'



TYPICAL CROSS SECTION OF CONVEYOR GALLERY

## ATTACHMENT -2

### SEQUENCE OF DEMOLITION OF MASONARY & RCC BUILDINGS OR ITS PARTS

1. Ensure that all precautions as indicated in Work Plan and Demolition Safety Plan are taken are taken.
2. Before demolishing work is started, glazed doors and windows, etc shall be removed. All fragile and loose fixtures shall be removed. All loose plaster shall be stripped off throughout the entire building.
3. All exterior wall openings, which extend down to floor level shall be barricaded to a height of not less than one meter above the floor level.
4. All floor openings and shafts not used for material chutes shall be closed and be enclosed with guard rails and toe boards.
5. The demolition shall always proceed systematically story by story in descending order and the work on the upper floor shall be completely over before any of the supporting members or other important portion on the lower floor is disturbed (These requirements shall not prohibit the demolition of structures in sections, if means are taken to prevent injuries to persons or damage to property). Stability of the remaining part of structure must be checked, before dismantling of any parts to be taken up.

### REMOVAL OF MATERIALS / DEBRIS

1. Debris shall not be allowed to be thrown from height. Remove all debris promptly, using chutes or by using bags
2. Metal chutes may be provided for removal of materials. The chutes shall preferably be provided as per site requirement for efficient & safe disposal of debris.
3. Chutes, if provided at an angle of more than 45 degree from the horizontal shall be entirely enclosed on all the four sides, except for opening at or above the floor level for receiving the materials.
4. Opening for the chutes shall not exceed 1.2 m in height measured along the wall of the chute and in all storeys below the top floor such opening shall be kept closed when not in use.
5. To prevent the descending material attaining a dangerous speed, chute shall not be extended to an
6. unbroken line for more than two storeys. A gate or stop shall be provided with suitable means for closing the bottom of each chute to stop the flow of material.
7. Chutes at an angle of less than 45 degree with the horizontal may be left open on the upper side provided that at the point where such a chute discharges into a chute steeper than 45 degree to the horizontal. The top of the steeper chute shall be boarded over to prevent the escape of materials.
8. Any opening into which workmen dump debris at the top of a chute shall be guarded by a substantial guard rail extending at least one meter above the level of the floor or other surface on which men stand to dump the material into the chute.

9. A wooden toe board or bumper not less than 50 mm thick and 150 mm high shall be provided at each chute opening, if the material is dumped from the wheel barrows. Any space between the chute and the edge of the opening in the floor through which it passes shall be solidly planked over.

#### **DEMOLITION OF WALLS**

1. When walls or sections of masonry are being demolished, it shall be ensured that they do not fall as single mass upon the floors of the building that are being demolished, so as to exceed the safe carrying capacity of the floors.
2. Overloading of floors shall be prevented by removing the accumulated debris through chutes or by other means immediately.
3. Walls shall be removed part by part. Stages shall be provided for the men to work in, if the walls are very thin and dangerous to work by standing over them.
4. No section of wall whose height is more than 8 (eight) times of thickness shall be permitted to stand without lateral bracing unless such wall is in good condition and was originally designed to stand without such lateral bracing or support.
5. Structural or load supporting members on any floor shall not be cut or removed until all the storeys above that floor have been demolished and removed.
6. In framed structures, the steel frame may be left in place during demolition of masonry work. Where this is done, all steel beams, girders, etc, shall be cleared off loose materials as the demolition of masonry work progress downward.
7. Walkways shall be provided to enable workmen to reach or leave their work on any scaffold or wall. Such walkways shall not be less than 0.75 m in width.
- 8.
9. At the completion of each day's work all installations shall be left stable to avoid any danger of getting overturned.
- 10.
11. Foundation walls which serve as retaining walls to support earth or adjoining structure, shall not be demolished until such an adjoining structure has been underpinned or braced and the earth removed by sheet piling or sheeting.

#### **DEMOLITION OF FLOORS**

1. In cutting holes in floor which spans in one direction, a slit of width not exceeding 300 mm shall be cut at the first stage for the entire length of slab along which it spans. The opening shall thereafter be increased to the desired width by suitable instalments.
2. Plans of sufficient strength, not less than 50 mm thick and 250 mm wide, shall be provided at spacing not greater than 0,4 m for the workmen to work. The length of planks shall not be less than 2 m. These planks shall be placed as to give workmen firm support to guard against any unexpected floor collapse.
3. Stringers of ample strength shall be installed to support the planks where necessary and

the ends of such stringers shall be supported by floor beams, girders and not by floor slab alone.

4. When floors are being removed, no workman shall be allowed to work in the area, directly underneath and such area shall be barricaded to prevent access to it.
5. The demolition of floor shall be started only after the floor in question and the surrounding floor area for a distance of 6 m have been entirely cleared of persons, and the debris and other unnecessary materials removed.

#### **DEMOLITION OF STRUCTURES**

1. When a derrick is used, care shall be taken to see that the floor on which it is supported is amply strong for the loading so imposed, if necessary heavy planking shall be used to distribute the load to floor beams and girders.
2. Overloading of equipment shall not be allowed.
3. Tag lines shall be used on all materials being lowered or hoisted up and standard signal system shall be used. The workmen shall be instructed on the signals.
4. No person shall be permitted to ride the load line.
5. No beams shall be cut until precautions have been taken to prevent it from swinging freely and possibly striking any worker or equipment or any part of the structure being demolished.
6. All structural steel members shall be lowered from the building and shall not be allowed to drop.

#### **CATCH PLATFORMS**

1. In demolition of exterior wall of multi storied structure, it is advisable to provide catch platform of heavy planking to prevent injuries to the worker working below and to the public, when the external walls are more than 20 mtrs. in height.
2. Such catch platform shall be constructed and maintained not more than 3 storeys below the storey from which exterior walls are being demolished. When demolition has progressed to within 3 stories of ground level, catch platform will not be considered necessary.
3. Catch platforms shall not be less than 1.5 m in width, measured in a horizontal direction from the face of the structure and shall consist of outriggers and planks/steel decks. These shall be laid tight together without openings between them and the walls. Catch platform shall be provided with a continuous solid parapet along its outer edge of at least 1 m height. The parapet shall be constructed of the same specifications as the platform.
4. Catch platforms can be constructed of material other than wood also, provided such material is of equal strength.
5. Catch platform shall be capable of sustaining a live load of not less than 610 kg per square mtrs.
6. The outriggers shall be of ample strength and shall not be spaced more than 3 mtrs. apart.

7. Materials shall not be dumped on catch platform nor shall such catch platform be used for the storage of materials.

#### **REMOVAL OF WALLS, FLOOR AND MATERIAL WITH EQUIPMENT**

1. Mechanical equipment shall not be used on floors or working surfaces unless such floor or surfaces are of sufficient strength to support the imposed load.
2. Floor openings shall have strong curbs to prevent equipment from falling over the edge.

#### **REMOVING AC SHEET ROOFING**

1. Before attempting the actual removal, a careful study should be made to find out the strength of the sheet. In any case, workmen should not be allowed to walk and stand on AC sheets.
2. A firm ladder should be provided for workmen to climb to the roof.
3. A cat ladder which can be kept on the sloping roof (supported from the ridge) should be used for the workmen to stand and remove the sheets.
4. Only experienced workmen should be engaged. They will never step on the unsupported portion of the sheets.
5. Caution boards should be fixed at the ladders leading to the roof top, **DANGER: DO NOT GO ON THE ROOF TOP WITHOUT PERMISSION.**

#### **MECHANICAL DEMOLITION**

1. When demolition is to be performed by mechanical devices, such as weight ball and power shovels, the following additional precautions may be observed.
2. The building height should not exceed 25 m.
3. The area shall be barricaded for a minimum distance of 1.5 times the height of the wall. In all cases, precaution is to be taken to prevent entry of people in the barricaded area.
4. While the mechanical device is in operation, no workman shall be allowed to enter the building being demolished.
5. The device shall be so located as to avoid falling debris.
6. The mechanical device when being used shall not cause any damage to adjacent structure, power line, etc

#### **RECOMMENDATION FOR DEMOLITION OF CERTAIN SPECIAL TYPES AND ELEMENTS OF STRUCTURES ROOF TRUSSES**

1. If a building has a pitched roof, the roof structure should be removed to wall top level by hand methods. Sufficient purlin and bracing should be retained to ensure stability of the remaining roof trusses while each individual truss is removed progressively.
2. Temporary bracing should be added, where necessary, to maintain stability. The end frame opposite to the end where dismantling is commenced, or a convenient intermediate frame should be independently and securely gaged in both directions before work starts.

3. On no account should the bottom tie of roof trusses be cut until the principal rafters are prevented from making outward movement.

#### **HEAVY FLOOR BEAMS**

1. Heavy blocks of timber and steel beams should be supported before cutting at the extremities and should then be lowered to a safe working place.

#### **IN-SITU REINFORCED CONCRETE**

1. Before commencing demolition, the nature and condition of the concrete, the condition and position of reinforcement and the possibility of lack of continuity of reinforcement should be ascertained.
2. Attention should be paid to the principles of the structural design to determine which parts of the structure depend on each other to maintain overall stability.
3. Demolition should be commenced by removing partitions and external non-load bearing cladding. It should be noted that in some buildings the frame may rely on the panel walls for stability. Where hand demolition methods are to be used, the following procedures should be used.

#### **REINFORCED CONCRETE BEAMS**

1. For beams, a supporting rope should be attached to the beam. Then the concrete should be removed from both ends by pneumatic drill and the reinforcement exposed. The reinforcement should then be cut in such a way as to allow the beam to be lowered under control to the floor.

#### **REINFORCED CONCRETE COLUMNS**

1. For columns, the reinforcement should be exposed at the base after restraining wire guy ropes have been placed round the member at the top. The reinforcement should then be cut in such a way as to allow the column to be pulled down to the floor under control.

#### **REINFORCED CONCRETE WALLS**

1. Reinforced concrete walls should be cut into strips and demolished in the same way as columns.

#### **PRECAST REINFORCED CONCRETE**

1. Precast reinforced concrete units used in a structure are normally held in position by the strength of the joints made in-situ or on supporting walls, etc. As such, before starting demolition, the joint structures and/or the supporting mechanisms shall be studied and understood.
2. In devising and following the demolition sequences due precaution shall be taken to avoid toppling over of prefabricated units or any other part of the structure and wherever necessary temporary supports shall be provided.
3. Before commencing of the demolition work involving such structures advice of an expert in such demolition shall be obtained and followed. Chimney and Spires Before commencing

the demolition work, involving such structures, advice of an expert in such demolition shall be obtained and followed.

#### **SECTION – 4**

##### **SAFETY PRECAUTION WHILE WORKING WITH GAS LINE DURING DEMOLITION WORK.**

1. Relevant Drawings of gas pipe line should be available at site and prior information to be collected about type of gas, flow direction, sources of gas and other necessary information.
2. Work procedure, hazard associated and safety measures to be explained to the all workmen working at site and record to be maintained by the contractor or his representative.
3. All necessary and suitable PPE's must be provided to all workmen working in gas pipe line area by the contractor.
4. Before working on gas line, positive isolation must be ensured from the directions of gas flow and work permit should be obtained from concern agencies before starting the job.
5. Before any hot work or spark generating work on gas line or near to gas line, purging of gas line must be ensured by the contractor.
6. Clearance from EMD department must be obtained before starting any hot work or spark generating work on gas line or near gas line.
7. Suitable arrangement of Fire Fighting equipment on site.
8. Suitable gas monitor must be available at site.
9. Adequate numbers of BA set with trained personnel should be available at site while working on gas line to meet emergencies.

#### **SECTION – 5**

##### **SAFETY PRECAUTION DURING DEMOLITION WORK FOR UTILITIES SERVICES.**

1. Before starting the demolition, work clearance must be obtained from Electrical department, water management department, and other agencies related to utility services.
2. Before working on any electrical line, it must be ensured that power supply has been disconnected from the electrical line and P.T.W is issued by the concerned Electrical In-charge.
3. Suitable PPE's must be provided to all workmen while working by the contractor.
4. Work procedure, hazard associated with particular work and safety arrangement must be explained to all the workmen engaged at site and record should be maintained.
5. All the suitable and safety measure must be taken by the contractor while working near overhead electrical line.
6. Safe distance should be maintained while working near overhead electrical lines.



However, for any specific demolition sequences for steel and Masonry / RCC structures, approval is to be taken from a competent Engineer / Consultants before proceeding for demolition.

**REFERENCES:**

- i. Buildings & Other Construction Workers (Regulation of Employment & Conditions of Service) Act 1996 with West Bengal Rules, 2004.
- ii. IS:4130: 1991
- iii. BS 5228, 5607, 6187, 7121 on noise control, safe use of explosives, demolition practices, safe use of cranes respectively & mechanical construction manual
- iv. Safety practices in buildings & structures - NICMAR guidelines

## **CHECK LIST**

<b>SL</b>	<b>POINTS</b>	<b>YES</b>	<b>NO</b>	<b>NA</b>
1	Work Permit is available			
2	Work Plan as specified in the standard complied			
3	Approved demolition Plan & Sequences available			
4	Scheme for lifting & lowering of dismantled material with the help of adequate equipment prepared.			
5	Demolition safety plan complied			
6	Load carrying capacity of slings, ropes, chain blocks ascertained			
7	A competent Job supervisor is available			
8	A fire watcher is available			
9	At least two flag man for controlling traffic movement, mobile equipment is available.			
10	Dangerous notices have been erected, and access to the site by the public barred			
11	There are sufficient fire extinguishers or other firefighting equipment on site, sand buckets, water buckets available at site			
12	Equipment checks: All ladders, cranes, cables and other equipment being used are in good orders and test certificates are available			
13	Temporary bracings are erected			
14	Necessary arrangements have been made for scaffolds, props, fencing, screens, notices, etc.			
15	Hazardous materials: Building has been inspected for areas containing asbestos, lead coatings and other toxic substances			
16	First Aid box contains no expiry material and items are available			
17	Workers are using safety helmets, boots and other protective clothing and equipment as necessary.			
	<b>DAILY CHECKS- END OF DAYS' WORK</b>			
1	Stabilized partially completed work			
2	Removable materials removed			
3	Fires and embers extinguished			
4	Emergency access clear and well-marked			
5	No live electrical wires kept naked			

## **SAIL GTC-SA: 2017**

### **General Terms & Conditions for Sale and Auction** **from Plants / Units of SAIL**

#### **1.0 Definitions:**

A reference herein to different expressions / abbreviation used shall mean the following:

- 1.1 “SAIL” shall mean “M/s Steel Authority of India Ltd.,” incorporated under the Companies Act, 1956 and having their registered office at Ispat Bhawan, Lodhi Road, New Delhi – 110003, India and their plant / unit, which term or expression unless excluded by or repugnant to the context shall include their successors and permitted assigns.
- 1.2 AN - Auction Notice
- 1.3 NIT - Notice inviting Tender
- 1.4 EMD – Earnest Money Deposit
- 1.5 DD – Demand Draft
- 1.6 PO – Pay Order
- 1.7 BC – Banker’s Cheque
- 1.8 RTGS – Real Time Gross Settlement (an online mode of payment)
- 1.9 NEFT – National Electronic Fund Transfer (an online mode of payment)
- 1.10 FA – Forward Auction  
*(This refers to an online auction conducted through the internet wherein different bidders bid simultaneously from one or more locations for buying the item(s) given in an Auction Notice. In other words, the venue for the auction is an Internet web site / platform which is assigned by the Service Provider engaged by SAIL for the purpose of online bidding)*
- 1.11 Lot – Physical accumulation of similar or other specified materials put up for sale. Sometimes the word “LOT” is also used as an accounting unit.
- 1.12 SO – Sale Offer
- 1.13 DO – Delivery Order
- 1.14 SD – Security Deposit
- 1.15 DA – Dispatch Advice
- 1.16 FOT – Free on Truck / Trailer
- 1.17 FOR – Free on Rail
- 1.18 AIWIB – As is where is basis
- 1.19 Bidder – An individual / business entity intending to buy the item(s) from SAIL by participating in an online auction. A bidder needs to secure prior approval of SAIL for participation in an auction by fulfilling the specified requirements in an Auction Notice issued by SAIL.
- 1.20 Tenderer - An individual / business entity intending to buy the item(s) from SAIL by submitting their offer as per the terms & conditions of Notice inviting Tender (NIT) issued by SAIL.

- 1.21 Permanent Customer – A customer who would like to keep a specified EMD amount as decided by SAIL plant / unit to enable them to participate in all auctions or tenders for sale of material by SAIL.
- 1.22 Temporary Customer – A customer who would submit EMD separately for each lot(s) in an auction or tender to participate in that particular auction or tender for sale of material by SAIL plant / unit.
- 1.23 “The Contract” shall mean and include the following:
- ✓ SAIL AS1: General Terms & Conditions of Sale from Plants & Units of SAIL
  - ✓ Auction Notice (AN) including General Rules & Regulations governing conduct of Online Forward Auction **OR** Notice inviting Tender (NIT) as applicable
  - ✓ Acceptance Offer / Sale Order / Offer letter issued by SAIL
  - ✓ Delivery Order / Release Order issued by SAIL and amendments, if any.
  - ✓ Any other documents issued by SAIL pertaining to the referred sale.

## **2.0 Inspection of Material (for material available on ground):**

- 2.1 The bidders / tenderers are advised to inspect the materials before offering their price bids. Interested parties will be permitted to inspect the materials as per dates / duration mentioned in the Auction Notice (AN) / Notice inviting Tender (NIT) as applicable. Necessary entry pass / permission can be obtained from concerned Authority at Plant / Unit.
- 2.2 The bidders / tenderers shall be deemed to have inspected the materials they are bidding for, whether they have inspected the materials or not and that the principle of „Caveat Emptor“ shall apply. The materials offered for sale are on “AS IS WHERE IS” (AIWIB) and “NO COMPLAINT” basis. The material will be lifted from the site of storage with all faults and errors in description or otherwise, if any. Quantity, quality, size measurement, marks and number stated in the Auction Notice (AN) / Notice inviting Tender (NIT) are approximate and merely indicative. No claim for compensation and warranty or guarantee shall be implied.
- 2.3 If the material under sale is from arising during in the process of production, it may be provided either from the stock or future arising subject to availability.

## **3.0 Earnest Money Deposit (EMD):**

- 3.1 The customers shall be required to deposit a non- interest bearing EMD for the amount prescribed in a u c t i o n notice / t e n d e r d o c u m e n t .
- 3.2 It will not be possible to adjust earnest money from any other sum of money due from the plant / unit, on account of pending bill, security deposit or earnest money paid towards another auction / tender.

- 3.3 Public Sector Undertakings / Govt. Departments may be exempted from submission of earnest money as per prevailing SAIL / Govt. policy.
- 3.4 EMD will be returned to the unsuccessful temporary bidders / tenderers within seven working days of finalization of H-1 bidder / tenderer. No interest shall accrue on the amount of Earnest Money Deposit.
- 3.5 It must be ensured that the earnest money deposit is not less than the amount required against each lot / item / auction event, as indicated in Auction Notice (AN) / Notice inviting Tender (NIT). In case the earnest money is found to be less than the total amount required against total offered lots / items, the bidder / tenderer shall confirm the lots / items for which he intends to participate. The bidder / tenderer shall not be allowed to participate in the absence of such confirmation.

#### **4.0 Submission of requisite documents (Participation in tender or auction):**

- 4.1 Participation of a bidder / tenderer shall be based on submission of requisite documents as per the Auction Notice (AN) / Notice inviting Tender (NIT) to the satisfaction of SAIL.
- 4.2 In case of online forward auctions, the intending customers need to duly sign and stamp each page of:
- ✓ Auction Notice (AN)
  - ✓ SAIL AS 1: General Terms & Conditions of Sale from Plants/ Units of SAIL
  - ✓ General Rules & Regulations governing conduct of Forward Auction
  - ✓ Definition of key terms,
  - ✓ Letter of interest cum undertaking

The intending customers shall submit them to the Service Provider or to the designated branch sales offices of SAIL plant/unit as specified in the Auction Notice along with the proof of online (RTGS/NEFT) remittance of requisite amount of EMD to the SAIL plant/unit as stated in the Auction Notice. Thereupon, the Service Provider will issue a user ID and a password to the customer.

Bidders are also requested to change the passwords allocated to them by the Service Provider to keep their confidentiality. However it would be bidder's sole responsibility to ensure the security and privacy of the same and he / they would not hold the Client / Service Provider responsible in any manner whatsoever for any misuse of these User IDs and / or password.

- 4.3 Before actual participation, the customers should obtain necessary training from the Service Provider so as to enable them to participate in the online forward auction process, without any difficulty.
- 4.4 In case of tenders, the intending customers need to sign and stamp each and every page of the tender documents, terms and conditions of sale, schedule etc. forming part of the terms as token of acceptance thereof. Offers are to be submitted in the prescribed form / format as detailed in the Notice inviting Tender (NIT). The signature on the tender documents shall be deemed to be acceptance of all terms & conditions of sale & schedule and other documents forming parts of the tender. *Tender without earnest money deposit will be summarily rejected.*
- 4.5 Any bidder / tenderer giving false information / particulars may be debarred from any future dealings with SAIL as per prevailing procedures of Plants/Units and EMD shall be forfeited rejecting the bids, if already submitted.
- 4.6 The bidder / tenderer shall not be liable to claim any costs, charges, expenses of and incidental to or occurred by him through or in connection with his submission of bids / offers.
- 4.7 Joint participation in bidding / tender by two or more firms shall not be accepted.
- 4.8 Each intending bidder / tenderer shall submit his declaration as to whether the proprietor or any partner of the firm or Director of their Company, as the case may be, has any relation with any employee working in SAIL; and if so, give the name of the employee and the relationship. Information shall also be provided whether any of them has a relationship within the meaning of Section – 6 of the Companies Act 1956 with any of the Directors of SAIL; if so, give details.

## **5.0 Submission of Price-bids:**

Bidders / tenderers shall submit price-bids in online auction / tender strictly in line with the terms & conditions given in the Auction Notice (AN) / Notice inviting Tender (NIT). The price-bids shall be legally binding on the bidders / tenderers. In case of tender, price indicated by a tenderer in words shall override the price quoted in figures in case there is any mismatch between the two.

## **6.0 Award of Contract:**

Online auction will normally be conducted in a single winner format and only one bidder who puts the highest price bid will normally be awarded the item subject to approval of the H-1 price by the Competent Authority. Similarly, in case of tender, the tenderer who quotes the highest price will normally be awarded the item subject to approval of H-1 price by the Competent Authority. However, in exceptional situations of a tie, decision of SAIL shall be final and binding on all customers.

## **7.0 Validity of bids:**

The price bid / quoted by a bidder / tenderer should remain valid for acceptance by SAIL within the specified number of days from the date of conduct of auction / price-discovery as stipulated in the Auction Notice (AN) / Notice inviting Tender (NIT).

## **8.0 Withdrawal of Offers:**

Bidders / tenderers must be very careful to submit bids / offers. After submitting bids / offers, they shall not withdraw their bids / offers or modify any terms and conditions thereof, without being asked to do so. Should the bidders / tenderers fail to observe the foregoing stipulation, their earnest money deposit shall be forfeited.

## **9.0 Acceptance / rejection of bids/offers:**

9.1 SAIL reserves the right to re-schedule the date for online auction / opening of price bids at its sole discretion.

9.2 SAIL reserves the right to accept or reject any or all the bids / offers and this decision shall be final. Conditional bids / offers will not be considered.

9.3 *SAIL also reserves the right to call the H-1 bidder / tenderer for negotiation post price-discovery either through online auction or by opening sealed price-bids if there is a view that the H-1 price submitted/offered by the H-1 bidder is not reflective of the prevailing market rate for similar items/lots.*

## **10.0 Sale Offer (SO):**

10.1 The successful bidder shall be notified by S A I L t h r o u g h a "Sale Offer" as an acceptance of price-bid. Such sale offer letter will indicate relevant details viz. description of goods, quantity, accepted rates, sale value along with break-up of various taxes & duties applicable on date, amount of Security Deposit (if applicable) to be submitted, etc. Sale offer letter shall mention clear timelines for depositing the value of goods, security deposit (if applicable) and completing other commercial formalities.

10.2 *The sale offer letter will be e-mailed / faxed / dispatched to the customer or handed over to the authorized representative of customer. Sale offer letter may also be downloaded by a Customer from an internet portal, if available and specified by SAIL, by using his Log-in and Password.*

**11.0 Payment of Security Deposit / Sale Value:**

11.1 The customer shall pay the security deposit and the amount against value of materials including taxes & duties applicable within the stipulated time as per details indicated in the Acceptance of offer / Sale order / Offer letter well.

11.2 The customer shall make full payment of security deposit within the stipulated time as per Sale Offer (SO) letter issued by SAIL. There shall be no adjustment of EMD for the purpose of payment of Security Deposit (SD).

11.3 In the event of failure on the part of temporary customer to make full payment of security deposit as per Sale Offer (SO) letter, SAIL shall cancel the Sale Offer (SO) letter and forfeit the EMD without issuing any prior notice to the customer or assigning any reason thereof. In the event of failure on the part of permanent customer to make full payment of security deposit as per Sale Offer (SO) letter, an amount equal and in addition to security deposit shall be payable as default fee.

11.4 The customer will make full payment of sale value of the material within the stipulated time in the Sale Offer (SO) letter. For making full payment of sale value to SAIL, a customer may be allowed extension of time, maximum up to 2 (two) weeks, if specified in the Auction Notice (AN) / Notice inviting Tender (NIT). However, in such cases, an additional percentage amount per week or part thereof shall be payable by the customer over and above the original amount. The period of delay on any remaining amount due for payment by the customer, will be reckoned from the original date of payment. A customer shall have no claim for such time extension if such a provision is not specified in the Auction Notice (AN) / Notice inviting Tender (NIT).

11.5 EMD of the temporary customer shall be adjusted with the last instalment of Sale Value.

11.6 In the event of failure on the part of any customer to make full payment towards Sale Value of materials, suitable action as deemed fit shall be taken by SAIL plant / unit. Based on merit of the case, SAIL at its sole option may provide another time extension of maximum one week to the customer for which a further additional percentage amount would be payable by the customer over and above the amount already due for payment to SAIL. SAIL shall summarily cancel the Sale Offer (SO) letter and forfeiting the EMD & SD in case of non-payment within the extended time.

11.7 The refund of Security deposit is subject to the satisfactory execution of the sale contract. The security deposit will be refunded within 15 days of completion of lifting and claim by the party.



**12.0 Mode of Payment:** Unless specified otherwise all the payments to SAIL whether against EMD and / or Security Deposit (SD) and / or value of materials as advance, shall be made in any of the following forms :

- ✓ Online remittance through RTGS / NEFT to the specified Bank A/c of SAIL
- ✓ Demand Draft (DD)
- ✓ Pay Order (PO)
- ✓ Banker's Cheque (BC)

✓ *Cheque\* from the Customer on a Nationalized / Scheduled bank drawn in favour of "SAIL, concerned Plant / Unit" payable at concerned Plant / Unit branch as mentioned in the auction notice / tender document.*

*(\*This facility can be extended at the option of SAIL and cannot be claimed by a participating customer. The intending customers therefore in their own interest shall check their eligibility from SAIL before submitting their own cheque towards any payment.)*

*Payment will not be accepted in cash. Electronic mode of payment is allowed.*

**13.0 Release Order / Delivery Order:**

On receipt of full payment from the customer, SAIL will issue a "Release Order / Delivery Order" indicating the last dates within which the goods have to be removed, to enable the customer to take delivery of the goods. *The "Release Order / Delivery Order" will be e-mailed / faxed / dispatched to the customer or handed over to the authorized representative of customer with due verification.* The customers in their own interest, therefore, must intimate SAIL their mail-ID / fax no. / postal address which is valid & in working condition. *If available, Release Order / Delivery Order may also be downloaded by a Customer from an internet portal specified by SAIL by using his Log-in and Password.*

**14.0 Re-sale:**

Re-sale will not be recognized by SAIL. Acceptance of offers / Sale orders / Offer letters and Release orders / Delivery orders will be made out only in the name of customer.

**15.0 Taxes and Duties:**

15.1 All taxes and duties whether local, state, central or any other shall be payable by the customer in addition to the sale value as applicable for each item at the prevailing rates as on the date of delivery. For all purposes, the date of invoice shall be deemed to be date of delivery. In case the customer wish to avail of concessional rate of Sales Tax as may be applicable as per statute, then the customer shall have to produce declaration in statutory forms as per rules to avail concessional rate of Sales Tax. Otherwise sales tax at full rate will be charged.

- 15.2 In the event of dispute in regard to Excise Duty and Central Excise authorities levying additional charges for any reasons whatsoever, such duty / charge shall be payable by the customer.
- 15.3 The penalty imposed by the Excise authorities for non-observance of Excise procedure by the customer shall be borne by the customer.

#### **16.0 Delivery:**

- 16.1 The goods sold will have to be removed by the customer from the site within the date specified in the release order / delivery order. The delivery of the materials will be effected „in situ“ and as per the actual quantity lifted by the customer, Dispatch Advice (DA) will be issued by the SAIL plant/unit for removal of materials from the site.
- 16.2 Delivery of materials will be made during working hours on all working days on presentation of the release order / delivery order by the customer to the concerned officer in-charge, who may suspend the release order / delivery order for a particular period of time for want of any clarification or other technical / operational reasons.
- 16.3 The customer will make their own arrangement for collection / removal and transportation of items / lots purchased and will not be entitled to claim any facilities or assistance for the transport / removal of the goods / lots from the plant / unit premises.
- 16.4 Subject to availability, SAIL may extend, at its discretion, certain facilities such as cranes etc. on chargeable basis to customer for handling the lot(s).
- 16.5 No picking, sorting, cutting, cleaning or breaking up of goods or materials sold will be permitted except in certain special circumstances where prior permissions have been accorded by the management in writing. Such permission will only be accorded on the quantity for which payment has been made.
- 16.6 Where the material will be sold on „FOT“ basis, the material will be loaded by the company, if required by the use of crane, into trucks to be brought by the customer.
- 16.7 Delivery through proxy will be at the sole risk and responsibility of the customer and no claim shall lie against SAIL on this account, whatsoever, if delivery is effected to wrong persons.
- 16.8 Where goods are sold by weight, delivery will be given on actual weighment. The weight of the empty and full truck / trailer / wagon will be taken on the weighbridge installed in the SAIL Plant / Unit (or in any of the designated weighbridge at the discretion of concerned SAIL Plant / Unit) and the net weight so recorded shall be acceptable and binding on the customer. Complaints regarding the difference in scale weight will not be entertained.

- 16.9 The customer shall arrange for bailing the loose goods into compact units wherever necessary for facilitating weighment and safe transportation. The customer shall not lift or remove any material, which is not conforming to the Release Order / Delivery Order. The customer shall remove the goods / lots only from the area earmarked / specified in the Release Order / Delivery Order and SAIL's decision shall be final and binding on the customer in this regard.
- 16.10 Customer should get acquainted with system and procedure of loading, weighment and dispatch of materials. They should also get conversant with approved route to be followed by trucks / trailers inside the plant.
- 16.11 All loading by customer must only be done in presence of authorized representative of department and plant / unit security personnel.

**17.0 Extension of delivery date:**

- 17.1 In case, the customer fails to effect complete removal of goods from SAIL premises within the period mentioned in the Release Order / Delivery Order, SAIL, on consideration of the merit of the case and payment of ground rent charges, as applicable, may allow suitable extension of delivery period as per special terms & conditions of the concerned Plant / Unit.
- 17.2 Post Release Order / Delivery Order issued by SAIL, if lot(s) could not be delivered to the customer within the stipulated time, due to reasons attributable to SAIL, the date for removal of the goods may be re-fixed by SAIL without payment of ground rent charges by the customer. Alternatively, SAIL may cancel the Sale Offer (SO) letter without any financial implication.

**18.0 Shortage of goods:**

- 18.1 In certain cases when "LOT" is used as accounting unit of sale for the physical Lot(s), any reference to the quantity, quality, size, measurement number and weight against the physical Lot(s) given in the Auction Notice (AN) / Notice inviting Tender (NIT) shall be indicative only and the customer shall have no claim against SAIL for refund of whole or any part of the customer's money or for loss of profit, interest, damage or otherwise. SAIL reserves the right to restrict the delivery of such physical Lot(s) only to the estimated weight or number as indicated in the Auction Notice (AN) / Notice inviting Tender (NIT) and there shall be no claim on the excess material.
- 18.2 In some special cases when physical Lot(s) given in the Auction Notice (AN) / Notice inviting Tender (NIT) are sold by SAIL on arising basis by weight or number, directly from a Shop / Dept., the customer shall be entitled to make a claim for the proportionate refund to the sale value of the undelivered quantity in case SAIL fails to deliver the requisite quantity within the time schedule stipulated in the Sale Offer (SO) letter.

18.3 In all other cases when physical Lot(s) given in the Auction Notice (AN) / Notice inviting Tender (NIT) are sold by SAIL by weight or number, the customer shall be entitled to make a claim for the proportionate refund to the sale value of the undelivered quantity in case delivery of whole or a portion of the goods is not effected by SAIL for any reason. In such cases, however, request made by the customer for refund shall be processed by SAIL after due examination of case and the customer shall not be entitled to claim any damages, loss, profit, interest or compensation on any account due to such short delivery.

18.4 SAIL reserves the right to reject any request for refund if:

- a) Such request is not made immediately to SAIL within one month of completion of delivery as per Delivery Order / Release Order.
- b) The customer violates any contractual provisions while lifting of the material e.g. picking, sorting, cutting, cleaning or breaking up of goods or materials sold when the same is not permitted /specified in the Delivery Order / Release Order.
- c) There is any instance of unauthorized / wrongful removal of goods or breach of safety / security rules or misuse of Admit / Area / Gate passes by the customer.

#### **19.0 Withdrawal of goods from sale:**

19.1 SAIL reserves the right to withdraw from the sale after advertising or after issue of Sale Offer (SO) letter for any item of any quantity of the materials by number or weight without assigning any reasons thereof to the customer. SAIL will not be responsible for any damages / loss whatsoever to the customer on account of such withdrawal.

19.2 SAIL reserves the right to dispose-off any item by any other means even after inviting bids / offers for sale of such materials by auction / tender.

#### **20.0 Abandoned goods:**

20.1 The customer must effect complete removal of the goods from the site within the date specified in the release order / delivery order or as per time extension issued by SAIL. In case goods are not removed in full to the satisfaction of SAIL within the stipulated time, release order / delivery order for the left over quantity will be treated as cancelled. The goods so left over may be treated as abandoned goods at the risk and cost of the customer.

20.2 SAIL will have full right on such abandoned goods and will be entitled to release or dispose-off the same in any manner it deems fit without any reference to the customer. The customer will have no claim on goods treated as abandoned goods. In addition to forfeiting such abandoned goods, the Security Deposit (SD) will also be forfeited. Penal action shall be taken as per special terms & conditions. The customer shall further be held liable for all

commission and other charges and losses suffered by SAIL, which may be recovered from the Security deposit or any other sum due to the customer.

**21.0 Quantity Tolerance:**

In the event, goods are found in excess of the quantity specified in the release order / delivery order, SAIL may at its sole discretion offer the surplus quantity to the customer on the same rate, terms and conditions. The customer will be allowed to deposit the cost only after an amendment to that effect has been issued by SAIL. SAIL also has the right either to adjust the additional sale value from the Security Deposit or demand the customer to remit the additional amount due and obtain a valid receipt before removing the excess quantity.

**22.0 Recovery of due:**

In exceptional circumstances, based on merit of case and recorded reasons, SAIL may appropriate any sum of money due and payable to the customer including security deposit (returnable to him under any Sale Contract of SAIL) and/or adjust against any claim / dues recoverable from the customer arising out of or under any other contract auction / tender made by customer with SAIL or any unit of SAIL.

**23.0 Payment of Interest:**

23.1 No interest shall be payable against any deposit whatsoever whether the same is as EMD or Security Deposit or Advance value of materials, regardless of whether the contract is wholly or partially executed or remain unexecuted.

23.2 No interest will be paid on the amount paid by the customer and subsequently found refundable under any of the condition mentioned herein.

**24.0 Damage to plant / unit properties:**

The customer shall be fully responsible for any loss / damage that may be caused to the premises, equipment, machinery, and other installations of that plant / unit in the course of removing the lot / lots bought by him, and the customer is fully liable to reimburse to SAIL the cost of such damages. SAIL fully reserves the right to recover the cost of such damages including recovery from any sum due to the customer.

**25.0 Entry passes to plant / unit:**

25.1 Admit passes / Area passes / Gate passes / Permission in case of Central Marketing Organisation (CMO) will be issued only to the authorized representative of the customer and equipment / handling machinery to be used by the customer by the DIG, CISF / Competent authority of respective plant / unit, on the recommendation of the officer-in-charge, concerned department. The customer and their workers following shortest official route should go to the authorised place of their work. Free movement of customer

and their handling machinery like trucks, cranes etc., and their workers on the strength of the admit pass / area pass / gate pass / permission in case of CMO issued for particular area / place is against security act. Customers are advised to enforce this requirement strictly and restrict their movement to the place / area specified in the admit passes / area passes / gate passes / permission in case of CMO. Strict observance of precautions under the Public Security Act may please be noted and also notified to the staff of the customer and workers. In case of necessity to proceed to an area, other than the one noted in the admit passes / area passes / gate passes / permission in case of CMO, it is invariably necessary to get new area added in the admit passes / area passes / gate passes / permission in case of CMO by the officer of the issue. The equipment / handling machinery will be taken out of SAIL premises by the customer or their representative at his cost either on expiry of Admit / Area / Gate passes / permission in case of CMO or completion of work whichever is earlier. These equipment / handling machinery should not be used for any other purpose except as mentioned in the Admit / Area / Gate passes / Permission in case of CMO for the same. Any breach in the enforcement of safe custody and improper use of the passes / permission in case of CMO would entail termination of the sale at any stage at the risk and cost of the customer.

- 25.2 In case the customer or his representative is found involved in any unlawful activity and unauthorized or wrongful removal of materials not sold or in case of any attempt for such removal, this shall amount to breach of contract and SAIL shall be entitled to cancel the contract and forfeit the entire Security Deposit. They shall be further liable for all the losses that might be caused to SAIL on account of such unlawful activity and unauthorized / wrongful removal. In such cases SAIL may initiate proceedings for banning of business dealing with such customer as per procedure prevailing in the Plant / Unit.

## **26.0 Compliance of Labour Laws and Safety Rules:**

- 26.1 During the contract period the customer's workers deputed within the plant / unit premises, will be governed by the labour laws and rules, Factory Act and rules and SAIL Plant / Unit's Security rules and safety rules as applicable and it shall be the responsibility of the customer to ensure that the statutory provisions are complied with fully.
- 26.2 The customer shall provide and ensure proper use of safety appliances by his personnel. He shall be liable for any damages or compensation payable in respect of or in consequence of any accident or injury to any of the personnel employed by the customer or his sub-contractor. The customer shall at all times indemnify SAIL against all claims, or compensation under the provision of Workman's Compensation Act, 1923 or any other law for the time being in force.



26.3 Customer shall take full responsibility and include in his price - bids all costs of ensuring compliance of the safety norms right from the initial stage as well as providing safe working conditions to his workmen and / or any other persons employed by him at site i.e. either inside the plant / unit or outside SAIL"s premises within the quoted price. He shall also ensure that the safety and health of the employees, plant / unit and any other property of the company, as well as other contractors working in the vicinity are not affected by his activities. He will also ensure that all equipment and other materials / supply etc. brought by him at site i.e. either inside the plant / unit or outside SAIL"s premises as per the terms of the contract are safe to the workmen in accordance with the relevant Act ( including its latest amendments).

26.4 SAIL has to be indemnified against any accident / injury to the workmen deployed by customer or engaged by SAIL and damage to plant / unit & machinery that may occur in course of loading of materials and customer shall provide safety appliances as required to the workforce at his cost.

26.5 Safety Appliances, Training, Precautions: The customer shall supply all types of safety appliances and maintain the same in good working conditions. The customer shall appraise the site personnel in regard to various risk and hazards associated with their job. In addition, customer shall also include safety consciousness amongst his personnel and provide necessary training.

26.6 The customer shall take full responsibility for accidents caused due to his / her or his agent"s or employee"s negligence or carelessness in regard to observance of the safety requirement and pay compensation for injuries / loss of life as per statutory rules promptly.

26.7 The customer shall be fully responsible for the safety of his workmen and employees. The customer shall follow all instructions and direction that the Safety Engineering Department of the concerned Plant / Unit may issue from time to time in regard to safety measures and shall be responsible for reporting without delay all accidents, however and where ever occurring in the works to the Safety Engineering Department of the concerned Plant / Unit. The customer shall also assist the said department in regard to the enquiry and implementation of safety measures.

26.8 The customer must abide by the security as well as Safety / Fire rules of the Company as may be advised by the competent authority of SAIL plant/unit from time to time.

## **27.0 Violation of Safety requirements:**

27.1 In the event of violation of safety requirements, company may direct stoppage of work and direct the customer to remedy the defects or supply the facility / equipment as the case may be. The customer shall not proceed with the work until he has complied with such directions to the satisfactions of the

Concerned Authority / Safety Dept. The above provisions are also without prejudice to any other right that the company may have against the customer for contribution or any other action including recovery of any damage that may be caused to or suffered by the company either under relevant statute or any other law of India as may be applicable, in the facts and circumstances of an individual case in the event of any injury to any person who may be either an employee of the company or a contract labour or any other person within the premises of the company's factory / mines for any act of omission by or on behalf of the customer in relation to the discharge of obligation for the customer under the contract.

27.2 Where applicable and loading / dismantling / processing of the lot is allowed, the customer shall be responsible for security / safety of the workmen like the lifters, labourers, drivers of trucks, loaders etc., engaged by him, for which customer shall have to observe all safety rules inside the company premises and Plant / Unit shall in accordance with this condition accepted by customer, stand indemnified against any accident / injury to the workmen deployed by him, that may occur in course of processing, dismantling, handling, loading, transportation etc. of the material. Customer shall provide safety appliances to the workforce at his cost.

#### **28.0 Third party insurance / Indemnity Bond:**

28.1 It shall be the responsibility of the customer for arranging necessary insurance under the Indian Workmen's Compensation Act, Third Party Liability Insurance or any other insurance in accordance with the relevant laws and regulations, at his own cost.

28.2 SAIL shall not be responsible for any damage to the trucks / trailers / other handling equipment etc. suffered by the customer while executing the contract. The customer in his own interest shall obtain suitable and sufficient cover from underwriters and no claim / correspondence on this account shall be entertained by SAIL.

28.3 The customer shall conform in all respects with the provisions of any statute, ordinance or laws and the rules, regulations, bye-laws of any local or other duly constituted authority which may be applicable in carrying out the contract. The customer shall assume responsibility for and shall indemnify and save SAIL of all liabilities, claims, costs, expenses, attorney's fees and Court costs which are or may be required with respect to any breach of any such statute, ordinance, law, rules, regulations or for which the customer has assumed responsibility under the contract.

28.4 The customer must take a third party insurance covering losses / damage to premises, equipment, machinery and other installation of the SAIL Plant / Unit, wherever applicable, as well as any accidents / deaths of either the SAIL Plant / Unit employees or to the customer's workmen. The sum insured / indemnified will depend on cost of equipment, machinery and other installations at the site wherefrom material is to be lifted and / or after



dismantling etc. wherever applicable, the number of employees etc. and will be specified in the acceptance of offer / sale order.

## **29.0 Communication:**

29.1 All important communication with customer shall be through e-mail / / faxes / post / courier as feasible. If available, a letter of communication may also be downloaded by the customer from an internet portal specified by SAIL by using his Log-in and Password. The customers in their own interest, therefore, must intimate SAIL their e-mail ID / fax no. / postal address which is valid & in working condition.

29.2 SAIL plant/unit may post the hard copies of such communication to the given postal address of customer. However, any postal delays in receiving a letter from SAIL shall not be a basis to seek any waiver of delay in payment or action by the customer.

## **30.0 Illegal gratification:**

Any bribes, commission, gifts or advantage given, promised or offered by or on behalf of the bidder / customer or his partner, agent, or servant to any officer, servant, representative, or agent of the company in relation to the obtaining or to the execution of this or any other contract with the company for showing or for bearing to show favour or disfavour to any person shall be resulting into the cancellation of this contract.

## **31.0 Death, Bankruptcy etc.:**

If the customer shall die, dissolve or become bankrupt or insolvent or cause or suffer any receiver to be appointed on his business or any assets thereof or compound with his creditors, or being a corporation commence to be wound up not being a members" voluntary winding up for the purpose of amalgamation or reconstructions, or carry on its business under a receiver for the benefits of its creditors or any of them, the legal successor shall intimate SAIL in writing of such happening within one week from the date of such event and SAIL shall be at liberty to cancel or terminate the contract of sale forthwith upon coming to know of the happening of any such event as aforesaid by notice in writing to the customer or to the receiver, liquidator or any person, in whom the contract may become vested or to give such receiver, liquidator or other person the option of carrying out the contract of sale subject to his providing a guarantee for the due and faithful performance of the contract of sale.

## **32.0 Conciliation:**

All questions, claims, disputes and or differences of any kind whatsoever arising out of or in connection with or concerning a Sale Contract, at any time, whether before or after determination of the contract, shall be

referred by the parties hereto for Conciliation before a Conciliatory Forum / Body:

The Conciliatory Forum / Body will be composed of the following members:

- ✓ Nominee of the Steel Plant / Unit – Independent of officer handling the contract.  
(to be nominated by the head of the concerned department)
- ✓ Nominee of the Contractor / Customer

The parties in dispute would place their facts in writing before the Body / Forum and the process of conciliation would be completed within the period of three months from the date of reference to the Conciliatory Forum / Body.

On failure of the conciliation, the aforesaid questions, claims, disputes and or differences shall be referred by the parties here to for the decision by a Sole Arbitrator to be appointed as herein after mentioned.

### **33.0 Arbitration:**

Matters in question, claims, dispute and or difference in respect of the contract to be submitted to arbitration as aforesaid shall be referred for decision to a Sole Arbitrator to be appointed by CE of Steel Plant / Head of unit, (SAIL). Before appointing the Sole Arbitrator, CE of Steel Plant / Head of unit, (SAIL) shall nominate three names out of which the contractor / customer shall give his consent for one of them for appointment as Sole Arbitrator, failing which after 30 days of the issuance of the letter informing three names CE of Steel Plant / Head of unit, (SAIL) shall have the power to appoint one of the three notified persons as the Sole Arbitrator.

In case the designation of the Chief Executive of Steel Plant / Unit (SAIL) is changed or his office abolished, the officer who for the time being is entrusted with the functions of the Chief Executive of Steel Plant / Unit (SAIL), by whatever designation such officer is called, shall be the person designated to appoint the Sole Arbitrator. The arbitrator so appointed shall adjudicate upon the disputes between the parties hereto.

The Sole Arbitrator appointed as stated above, shall from the time of his appointment and throughout the arbitration proceedings, without any delay, disclose to the parties in writing any circumstances likely to give rise to justifiable doubts as to his independence or impartiality provided that the mere fact that such Sole Arbitrator is an employee of SAIL or its subsidiary shall not be regarded as such circumstances. The arbitrator shall decide the questions, claims, disputes or differences submitted to him by the parties in accordance with the substantive law for the time being in force in India.

The arbitrator shall hear the cases independently and impartially and shall not represent the interest of any party. Any arbitrator having personal interest in the case at the time of his appointment and at any time subsequently

thereafter must withdraw from his office himself and the parties shall also have the right to ask him to do so. The venue of arbitration shall be \_\_\_\_\_ (for domestic tenders, the place where Plant / Unit is located; and for global tenders Delhi).

Procedure for conduct of the arbitration proceeding shall be decided by the arbitrator, in consultation with the parties before proceeding with reference. The arbitrator may hold preparatory meeting(s) for this purpose. In the preparatory meeting(s) as aforesaid, the arbitrator/s as the case may be in consultation with the parties shall also determine the manner of taking evidence, the summoning of expert evidence, and all such matters as are necessary for the expeditious disposal of the arbitration proceedings.

The provision of the Arbitration and Conciliation Act, 1996 and the rules framed there under, if any and all modifications / amendments thereto shall deem to apply and / or be incorporated in this contract and when such modifications / amendments to the Act / Rules are carried out.

Work under the contract shall be continued by the contractor / customer, under the contract, during the arbitration proceedings and recourse to arbitration shall not be a bar to continuance for the work unless otherwise directed in writing by the Plant / Unit.

#### **34.0 Legal Jurisdiction:**

All suits and legal proceedings by or against SAIL Plant / Unit in any matter arising out of the sale of materials shall be subjected to the exclusive jurisdiction of the court closest to the individual Plant / Unit of SAIL and will be governed in accordance with the laws of India.

#### **35.0 Force Majeure conditions:**

35.1 If in the event either or both the parties to the contract is / are prevented from discharging its / their obligation(s) under the contract by reason of one or more of the events such as arrest(s), restraint(s) by Government of people, blockade(s), revolution(s), insurrection(s), mobilization(s), strike(s), civil commotion(s), riot(s), accident(s), Act(s) of God or other natural calamities or on account of any other act(s) beyond the control of the parties to the contract, the time of delivery shall be extended by the period equal to the period of delay / constraints occasioned by one or more of the aforesaid Force Majeure conditions. However in the event of customer invoking the Force Majeure condition(s), SAIL shall have the option to cancel the contract for reasons of any or all of the Force Majeure conditions notified by the customer without being able to pay any compensation whatsoever to the seller.

35.2 On the occurrence of any of the above Force Majeure conditions, the party concerned shall notify the other party in writing of such occurrence(s) within 7 days of occurrence(s) stating therein-

✓ the date of occurrence(s) of Force Majeure disability; and

✓ a certificate from the appropriate Statutory Authority and / or Chamber of Commerce of the concerned state certifying the fact and nature of the Force Majeure condition during the relevant period.

**36.0 Contract closing:**

The customer shall ensure removal of workmen, tools, tackles etc. on completion / expiry of the contract at his cost immediately thereafter wherever applicable.

**37.0** In case there are Special Terms & Conditions attached to any Auction Notice (AN) or Notice inviting Tender (NIT), the Special Terms & Conditions will have overriding effect over SAIL GTC-SA-2017.



**STEEL AUTHORITY OF INDIA LIMITED  
IISCO STEEL PLANT  
BURNPUR**

**Tender No. MKTG/20-21/DISP/IA-BF#2/OFA-04 Dated: 15.07.2020**

**INTEGRITY PACT**

**FOR**

**DISMANTLING AND SALE OF STRUCTURES OF BLOOMING & BILLET MILL**

<b>OFA DOCUMENT PART-VII</b>
------------------------------

Ref: Tender Specification prepared by CET, SAIL **CET/03/BU/4482/TS/SE/01/R=2**

## **INTEGRITY PACT**

Between

**IISCO, Steel Plant – A unit of: Steel Authority of India Limited (SAIL)-hereinafter referred to as “The Principal”,**

and

..... hereinafter referred to as **“The Bidder/Contractor”**

### **PREAMBLE**

The Principal intends to award, under laid down organizational procedures, contract/s for ***DISMANTLING AND SALE OF BLAST FURNACE No. 2***. The Principal values full compliance with all relevant laws of the land, rules, regulations, economic use of resources and of fairness /transparency in its relations with its Bidder(s) and / or Contractor(s).

In order to achieve these goals, the Principal will appoint an Independent External Monitor (IEM), 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 for, or the execution of a contract, demand, take a promise for or accept, for self or third person, any material or immaterial benefit which the person is not legally entitled to.
  - b) The Principal will, during the tender process treat all Bidder(s) with equity and reason. The Principal will in particular, before and during the tender process, provide to all Bidder(s) the same information and will not provide to any Bidder(s) confidential / additional information through which the Bidder(s) could obtain an advantage in relation to the tender process or the contract execution.
  - c) The Principal will exclude from the process all known prejudiced persons.
- 2 If the Principal obtains information on the conduct of any of its employees which is a criminal offense under the IPC/PC Act, or if there be a substantive suspicion in this regard, the Principal will inform the Chief Vigilance Officer and in addition can initiate disciplinary actions.

### **Section 2 – Commitments of the Bidder(s)/ contractor(s)**

- 1 The Bidder(s)/ Contractor(s) commit themselves 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(s)/ Contractor(s) 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 other 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(s)/ Contractor(s) will not enter with other Bidders into any undisclosed agreement or understanding, whether formal or informal. 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 cartelisation in the bidding process.
  - c) The Bidder(s)/ Contractor(s) will not commit any offence under the relevant IPC/PC Act; further the Bidder(s)/ Contractor(s) 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(s)/Contractors(s) of foreign origin shall disclose the name and address of the Agents/ representatives in India, if any. Similarly, the Bidder(s)/Contractors(s) of Indian Nationality shall furnish the name and address of the foreign principals, if any. Further details as mentioned in the "Guidelines on Indian Agents of Foreign Suppliers" shall be disclosed by the Bidder(s)/Contractor(s). Further, as mentioned in the Guidelines all the payments made to the Indian agent/representative have to be in Indian Rupees only. **Copy of the "Guidelines on Indian Agents of Foreign Suppliers" is placed at (Page nos. 7)**
  - e) The Bidder(s)/ Contractor(s) 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.
  - f) The Bidder(s)/ Contractor(s) who has signed the Integrity Pact shall not approach Courts while representing the matter to IEMs and shall wait for their decision in the matter.
- 2 The Bidder(s)/ Contractor(s) will not instigate third persons to commit offenses outlined above or be an accessory to such offenses.

### **Section 3- Disqualification from tender process and exclusion from future contracts**

If the Bidder(s)/Contractor(s), before award or during execution has committed a transgression through a violation of Section 2, above or in any other form such as to put his reliability or credibility in question, the Principal is entitled to disqualify the Bidder(s)/Contractor(s) from the tender process or take action as per the procedure mentioned in the "Guidelines on Banning of business dealings". **Copy of the "Guidelines on Banning of business dealings" is placed at (page nos.8-14).**

### **Section 4 – Compensation for Damages.**

- 1 If the Principal has disqualified the Bidder(s) from the tender process prior to the award according to Section 3, the Principal is entitled to demand and recover the 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 liquidated damages of the Contract value or the amount equivalent to Performance Bank Guarantee.

#### **Section 5 – Previous transgression**

- 1 The Bidder declares that no previous transgressions occurred in the last three years with any other Company in any country conforming to the anti-corruption approach or with any 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 action can be taken as per the procedure mentioned in “Guidelines on Banning of business dealings”.

#### **Section 6 – Equal treatment of all Bidders / Contractors / Subcontractors**

- 1 The Bidder(s)/ Contractor(s) undertake(s) to demand from all subcontractors a commitment in conformity with this Integrity Pact, and to submit it to the Principal before contract signing.
- 2 The Principal will enter into agreements with identical conditions as this one with all Bidders, Contractors and Subcontractors.
- 3 The Principal will disqualify from the tender process all bidders who do not sign this Pact or violate its provisions.

#### **Section 7 – Criminal charges against violating Bidder(s) / Contractor(s) / Subcontractor(s)**

If the Principal obtains knowledge of conduct of a Bidder, Contractor or Subcontractor, or of an employee or a representative or an associate of a Bidder, Contractor or Subcontractor which constitutes corruption, or if the Principal has substantive suspicion in this regard, the Principal will inform the same to the Chief Vigilance Officer.

#### **Section 8 – Independent External Monitor / Monitors**

1. The Principal appoints competent and credible Independent External Monitor for this Pact. 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.

The following three person has been appointed as Independent External Monitor (IEM) of SAIL

- A. Ms. Alka Sirohi, IAS(Retired) & former Secretary, Ministry of Personal
- B. Shri Rajiv, IPS(Retired) with & former Vigilance Commissioner, CVC
- C. Shri Madhusudan Prasad, IAS(Retired) & former Secretary, Ministry of Urban Development

IEMs may be contacted, if required, through Integrity Pact Secretariat (email: [sailip.secretariat@gmail.com](mailto:sailip.secretariat@gmail.com) ), 16<sup>th</sup> Floor, SCOPE Minar, Laxmi Nagar District Centre, Delhi — 110092.



2. The Monitor is not subject to instructions by the representatives of the parties and performs his functions neutrally and independently. It will be obligatory for him to treat the information and documents of the Bidders/Contractors as confidential. He reports to the Chairman, SAIL.
3. The Bidder(s)/Contractor(s) accepts that the Monitor has the right to access without restriction to all Project documentation of the Principal including that provided by the Contractor. The Contractor will also grant the Monitor, upon his request and demonstration of a valid interest, unrestricted and unconditional access to his project documentation. The same is applicable to Subcontractors.
4. The Monitor is under contractual obligation to treat the information and documents of the Bidder(s)/ Contractor(s)/ Subcontractor(s) with confidentiality. The monitor also shall sign declaration on “Non-Disclosure of Confidential Information” and of “Absence of conflict of interest”. In case of any conflict of interest arising at later date, the IEM shall inform Chairman, SAIL and rescues himself/ herself from that case.
5. 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 contractual relations between the Principal and the Contractor. The parties offer to the Monitor the option to participate in such meetings.
6. 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 take corrective action, or to take other relevant action. The monitor can in this regard submit non-binding recommendations. 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.
7. The Monitor will submit a written report to the Chairman, SAIL 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.
8. If the Monitor has reported to the Chairman SAIL, a substantiated suspicion of an offense under relevant IPC/ PC Act, and the Chairman SAIL has not, within the reasonable time taken visible action to proceed against such offense or reported it to the Chief Vigilance Officer, the Monitor may also transmit this information directly to the Central Vigilance Commissioner.
9. The word ‘Monitor’ would include both singular and plural.

## **Section 9 – Pact Duration**


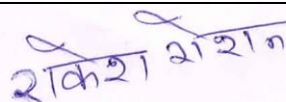
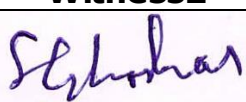
This Pact begins when both parties have legally signed it. It expires for the Contractor 12 months after the last payment under the contract, and for all other Bidders 6 months after the contract has been awarded.

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 Chairman of SAIL.

## **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. New Delhi.

2. This agreement is subject to Indian Law. Place of performance and jurisdiction is the Registered Office of the Principal, i.e. New Delhi.
3. Changes and supplements as well as termination notices need to be made in writing. Side agreements have not been made.
4. If the Contractor is a partnership or a consortium, this agreement must be signed by all partners or consortium members.
5. 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.
6. Issues like Warranty/ Guarantee etc, shall be outside the preview of IEMs.
7. In the event of any contradiction between the Integrity pack and its Annexure, the Clause in the Integrity pact will prevail.

<b>EMPLOYER</b>	<b>BIDDER</b>
	
For and on behalf of the Principal Name of the Officer: KBS Singh Designation: Chief General Manager (Marketing) IISCO Steel Plant, Burnpur-713325	For and on behalf of the Bidder (Name of Authorised Person) Designation:
Place: Burnpur-713325, WB	Place
Date: 25/10/2019	Date
<b>Witness1</b>	<b>Witness1</b>
	
Name: Rakesh Roshan Designation: Sr. Manager (Marketing) IISCO Steel Plant, Burnpur-713325	(Name and address)
<b>Witness2</b>	<b>Witness2</b>
	
Name: S. Ghoshal Designation: Sr. Manager (Marketing), IISCO Steel Plant, Burnpur-713325	(Name and address)

8. Changes and supplements as well as termination notices need to be made in writing. Side agreements have not been made.
9. If the Contractor is a partnership or a consortium, this agreement must be signed by all partners or consortium members.
10. 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.
11. Issues like Warranty/ Guarantee etc, shall be outside the preview of IEMs.
12. In the event of any contradiction between the Integrity pack and its Annexure, the Clause in the Integrity pact will prevail.

## **GUIDELINES FOR INDIAN AGENTS OF FOREIGN SUPPLIERS**

- 1.1 There shall be compulsory registration of agents for all Global (Open) Tender and Limited Tender. An agent who is not registered with SAIL Plants/Units shall apply for registration in the prescribed Application –Form.
- 1.2 Registered agents will 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 order by SAIL Plants/Units.
- 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 on the basis of salary or as retainer, a written declaration to this effect should be submitted by the party (i.e. Principal) before finalizing the order.

### **2 DISCLOSURE OF PARTICULARS OF AGENTS/REPRESENTATIVES IN INDIA. IF ANY.**

- 2.1 Tenderers 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 authorization and authority given to commit the Principals. In case the agent/representative be a foreign Company, it shall be confirmed whether it is real substantial 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 Tenderer that the commission/ remuneration if any, payable to his agents/ representatives in India, may be paid by SAIL in Indian Rupees only.
- 2.2 Tenderers 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 authorizing 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 Tenderer for himself.
  - 2.2.3 Confirmation of the foreign principals of the Tenderer that the commission/remuneration, if any, reserved for the Tenderer in the quoted price (s), may be paid by SAIL 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 contract materializing, the terms of payment will 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 will render the concerned tender liable to rejection or in the event of a contract materializing, the same liable to termination by SAIL. Besides this there would be a penalty of banning business dealings with SAIL or damage or payment of a named sum.

# **GUIDELINES ON BANNING OF BUSINESS DEALINGS**

## **CONTENTS**

<b>Sl. No.</b>	<b>DESCRIPTION</b>
<b>1.</b>	<b>Introduction</b>
<b>2.</b>	<b>Scope</b>
<b>3.</b>	<b>Definitions</b>
<b>4.</b>	<b>Initiation of Banning / Suspension</b>
<b>5.</b>	<b>Suspension of Business Dealings</b>
<b>6.</b>	<b>Ground on which Banning of Business Dealing can be initiated</b>
<b>7.</b>	<b>Banning of Business Dealings</b>
<b>8.</b>	<b>Removal from List of Approved Agencies-Suppliers/Contractors etc.</b>
<b>9.</b>	<b>Procedure for issuing Show-cause Notice</b>
<b>10.</b>	<b>Appeal against the Decision of the Competent Authority</b>
<b>11.</b>	<b>Review of the Decision by the Competent Authority</b>
<b>12.</b>	<b>Circulation of the names of Agencies with whom Business Dealing shave been banned</b>

## Introduction

- 1.1 Steel Authority of India Limited (SAIL), being a Public Sector Enterprise and 'State', within the meaning of Article 12 of Constitution of India, has to ensure preservation of rights enshrined in Chapter III of the Constitution. SAIL has also to safeguard its commercial interests. SAIL deals with *Agencies*, who have a very high degree of integrity, commitments and sincerity towards the work undertaken. It is not in the interest of SAIL to deal with Agencies who commit deception, fraud or other misconduct in the execution of contracts awarded / orders issued to them. In order to ensure compliance with the constitutional mandate, it is incumbent on SAIL to observe principles of natural justice before banning the business dealings with any Agency.
- 1.2 Since banning of business dealings involves civil consequences for an Agency concerned, 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.

## 2 Scope

- 2.1 The General Conditions of Contract (GCC) of SAIL generally provide that SAIL reserves its rights to remove from list of approved suppliers / contractors or to ban business dealings if any Agency has been found to have committed misconduct and also to suspend business dealings pending investigation. If such provision does not exist in any GCC, the same may be incorporated.
- 2.2 Similarly, in case of sale of material there is a clause to deal with the Agencies / customers / buyers, who indulge in lifting of material in unauthorized manner. If such a stipulation does not exist in any Sale Order, the same may be incorporated.
- 2.3 However, absence of such a clause does not in any way restrict the right of Company (SAIL) to take action / decision under these guidelines in appropriate cases.
- 2.4 The procedure of (i) Removal of Agency from the List of approved suppliers / contractors; (ii) Suspension and (iii) Banning of Business Dealing with Agencies, has been laid down in these guidelines.
- 2.5 These guidelines apply to all the Plants / Units and subsidiaries of SAIL.
- 2.6 It is clarified that these guidelines do not deal with the decision of the Management not to entertain any particular Agency due to its poor / inadequate performance or for any other reason.
- 2.7 The banning shall be with prospective effect, i.e., future business dealings.

## 3 Definitions: In these Guidelines, unless the context otherwise requires:

- i) '*Party / Contractor / Supplier / Purchaser / Customer*' shall mean and include a public limited company or a private limited company, a firm whether registered or not, an individual, a cooperative society or an association or a group of persons engaged in any commerce, trade, industry, etc. '*Party / Contractor / Supplier / Purchaser / Customer*' in the context of these guidelines is indicated as '*Agency*'.
- ii) '*Inter-connected Agency*' shall mean two or more companies having any of the following features:
  - a) If one is a subsidiary of the other.
  - b) If the Director(s), Partner(s), Manager(s) or Representative(s) are common;
  - c) If management is common;
  - d) If one owns or controls the other in any manner;
- iii) '*Competent Authority*' and '*Appellate Authority*' shall mean the following:
  - a) For Company (entire SAIL) Wide Banning, The Director (Technical) shall be the 'Competent Authority' for the purpose of these guidelines. Chairman, SAIL shall be the 'Appellate Authority' in

respect of such cases except banning of business dealings with Foreign Suppliers of imported coal/coke.

- b) For banning of business dealings with Foreign Suppliers of imported coal/coke, SAIL Directors' Committee (SDC) shall be the 'Competent Authority'. The Appeal against the Order passed by SDC, shall lie with Chairman, as First Appellate Authority.
- c) In case the foreign supplier is not satisfied by the decision of the First Appellate Authority, it may approach SAIL Board as Second Appellate Authority.
- d) For Plants / Units only Any officer not below the rank of General Manager / Additional Director appointed or nominated by the Chief Executive of concerned Plant / Unit shall be the '*Competent Authority*' for the purpose of these guidelines. The Chief Executives of the concerned Plants / Unit shall be the '*Appellate Authority*' in all such cases.
- e) For Corporate Office only for procurement of items / award of contracts, to meet the requirement of Corporate Office only, Head of CMMG shall be the "Competent Authority" and Director (Technical) shall be the "Appellate Authority".
- f) Chairman, SAIL shall have overall power to take suo-moto action on any information available or received by him and pass such order(s) as he may think appropriate, including modifying the order(s) passed by any authority under these guidelines.
- i) '*Investigating Department*' shall mean any Department or Unit investigating into the conduct of the Agency and shall include the Vigilance Department, Central Bureau of Investigation, the State Police or any other department set up by the Central or State Government having powers to investigate.
- ii) '*List of approved Agencies - Parties / Contractors / Suppliers / Purchasers / Customers*' shall mean and include list of approved / registered Agencies - Parties/ Contractors / Suppliers / Purchasers / Customers, etc.

#### **4 Initiation of Banning / Suspension**

Action for banning / suspension business dealings with any Agency should be initiated by the department having business dealings with them after noticing the irregularities or misconduct on their part. Besides the concerned department, Vigilance Department of each Plant / Unit /Corporate Vigilance may also be competent to initiate such action.

#### **5 Suspension of Business Dealings**

- 5.1 If the conduct of any Agency dealing with SAIL is under investigation by any department (except Foreign Suppliers of imported coal/coke), the Competent Authority may consider whether the allegations under investigation are of a serious nature and whether pending investigation, it would be advisable to continue business dealing with the Agency. If the Competent Authority, after consideration of the matter including the recommendation of the Investigating Department, if any, decides that it would not be in the interest to continue business dealings pending investigation, it may suspend business dealings with the Agency. The order to this effect may indicate a brief of the charges under investigation. If it is decided that inter-connected Agencies would also come within the ambit of the order of suspension, the same should be specifically stated in the order. The order of suspension would operate for a period not more than six months and may be communicated to the Agency as also to the Investigating Department. The Investigating Department may ensure that their investigation is completed and whole process of final order is over within such period.

- 5.2 The order of suspension shall be communicated to all Departmental Heads within the Plants / Units. During the period of suspension, no business dealing may be held with the Agency.
- 5.3 As far as possible, the existing contract(s) with the Agency may continue unless the Competent Authority, having regard to the circumstances of the case, decides otherwise.
- 5.4 If the gravity of the misconduct under investigation is very serious and it would not be in the interest of SAIL, as a whole, to deal with such an Agency pending investigation, the Competent Authority may send his recommendation to Chief Vigilance Officer (CVO), SAIL Corporate Office along with the material available. If Corporate Office considers that depending upon the gravity of the misconduct, it would not be desirable for all the Plants / Units and Subsidiaries of SAIL to have any dealings with the Agency concerned, an order suspending business dealings may be issued to all the Plants / Units by the Competent Authority of the Corporate Office, copy of which may be endorsed to the Agency concerned. Such an order would operate for a period of six months from the date of issue.
- 5.5 For suspension of business dealings with Foreign Suppliers of imported coal/coke, following shall be the procedure:
  - i) Suspension of the foreign suppliers shall apply throughout the Company including Subsidiaries.
  - ii) Based on the complaint forwarded by ED (CIG) or received directly by Corporate Vigilance, if gravity of the misconduct under investigation is found serious and it is felt that it would not be in the interest of SAIL to continue to deal with such agency, pending investigation, Corporate Vigilance may send such recommendation on the matter to Executive Director, Coal Import Group (ED, CIG) to place it before a Committee consisting of the following :
    1. ED (F&A)/Head of Corporate Finance,
    2. ED, CIG/Head of CIG – Convener of the Committee
    3. ED, CMMG/Head of CMMG, Corporate Office
    4. ED (Law)/Head of Corporate Law

The committee shall expeditiously examine the report, give its comments/recommendations within twenty-one days of receipt of the reference by ED, CIG.

- i) The comments / recommendations of the Committee shall then be placed by ED, CIG before SAIL Directors' Committee (SDC) constituted for import of Coal. If SDC opines that it is a fit case for suspension, SDC may pass necessary orders which shall be communicated to the foreign supplier by ED, CIG.
- 5.6 If the Agency concerned asks for detailed reasons of suspension, the Agency may be informed that its conduct is under investigation. It is not necessary to enter into correspondence or argument with the Agency at this stage.
- 5.7 It is not necessary to give any show-cause notice or personal hearing to the Agency before issuing the order of suspension. However, if investigations are not complete in six months' time, the Competent Authority may extend the period of suspension by another three months, during which period the investigations must be completed.

## **6 Ground on which Banning of Business Dealings can be initiated**

- 6.1 If the security consideration, including questions of loyalty of the Agency to the State, so warrants;
- 6.2 If the Director / Owner of the Agency, proprietor or partner of the firm, is convicted by a Court of Law for offenses involving moral turpitude in relation to its business dealings with the Government or any other public sector enterprises or SAIL, during the last five years;



- 6.3 If there is strong justification for believing that the Directors, Proprietors, Partners, owner of the Agency have been guilty of malpractices such as bribery, corruption, fraud, substitution of tenders, interpolations, etc;
- 6.4 If the Agency continuously refuses to return / refund the dues of SAIL without showing adequate reason and this is not due to any reasonable dispute which would attract proceedings in arbitration or Court of Law;
- 6.5 If the Agency employs a public servant dismissed / removed or employs a person convicted for an offense involving corruption or abetment of such offense;
- 6.6 If business dealings with the Agency have been banned by the Govt. or any other public sector enterprise;
- 6.7 If the Agency has resorted to Corrupt, fraudulent practices including misrepresentation of facts;
- 6.8 If the Agency uses intimidation / threatening or brings undue outside pressure on the Company (SAIL) or its official in acceptance / performances of the job under the contract;
- 6.9 If the Agency indulges in repeated and / or deliberate use of delay tactics in complying with contractual stipulations;
- 6.10 Wilful indulgence by the Agency in supplying sub-standard material irrespective of whether pre-dispatch inspection was carried out by Company (SAIL) or not;
- 6.11 Based on the findings of the investigation report of CBI / Police against the Agency for malafide / unlawful acts or improper conduct on his part in matters relating to the Company (SAIL) or even otherwise;
- 6.12 Established litigant nature of the Agency to derive undue benefit;
- 6.13 Continued poor performance of the Agency in several contracts;
- 6.14 If the Agency misuses the premises or facilities of the Company (SAIL), forcefully occupies tampers or damages the Company's properties including land, water resources, forests / trees, etc.

(Note: The examples given above are only illustrative and not exhaustive. The Competent Authority may decide to ban business dealing for any good and sufficient reason).

## **7 Banning of Business Dealings**

- 7.1 Normally, a decision to ban business dealings with any Agency should apply throughout the Company including Subsidiaries. However, the Competent Authority of the Plant / Unit except Corporate Office can impose such ban unit-wise only if in the particular case banning of business dealings by respective Plant / Unit will serve the purpose and achieve its objective and banning throughout the Company is not required in view of the local conditions and impact of the misconduct / default to beyond the Plant / Unit. Any ban imposed by Corporate Office shall be applicable across all Plants / Units of the Company including Subsidiaries.
- 7.2 For Company-wide banning, the proposal should be sent by ACVO of the Plant / Unit to the CVO through the Chief Executive of the Plant / Unit setting out the facts of the case and the justification of the action proposed along with all the relevant papers and documents except for banning of business dealings with Foreign Suppliers of imported coal/coke.

The Corporate Vigilance shall process the proposal of the Plant / Unit for a prima-facie view in the matter by the Competent Authority nominated for Company-wide banning.

The CVO shall get feedback about that agency from all other Plants / Units. Based on this feedback, a prima-facie decision for banning / or otherwise shall be taken by the Competent Authority.

If the prima -facie decision for Company-wide banning has been taken, the Corporate Vigilance shall issue a show-cause notice to the agency conveying why it should not be banned throughout SAIL.

After considering the reply of the Agency and other circumstances and facts of the case, a final decision for Company-wide banning shall be taken by the Competent Authority.

7.3 There will be a Standing Committee in each Plant / Unit to be appointed by Chief Executive for processing the cases of “Banning of Business Dealings” except for banning of business dealings with foreign suppliers of coal/coke. However, for procurement of items / award of contracts, to meet the requirement of Corporate Office only, the committee shall be consisting of General Manager / Dy. General Manager each from Operations, Finance, Law & CMMG. Member from CMMG shall be the convener of the committee. The functions of the committee shall, inter-alia include:

- i) To study the report of the Investigating Agency and decide if a prima-facie case for Company-wide / Local unit wise banning exists, if not, send back the case to the Competent Authority.
- ii) To recommend for issue of show-cause notice to the Agency by the concerned department.
- i) To examine the reply to show-cause notice and call the Agency for personal hearing, if required.
- ii) To submit final recommendation to the Competent Authority for banning or otherwise.

7.4 If the Competent Authority is prima-facie of view that action for banning business dealings with the Agency is called for, a show-cause notice may be issued to the Agency as per paragraph 9.1 and an enquiry held accordingly.

7.5 Procedure for Banning of Business Dealings with Foreign Suppliers of imported coal/coke.

- i) Banning of the agencies shall apply throughout the Company including Subsidiaries.
- ii) Based on the complaint forwarded by ED (CIG) or received directly by Corporate Vigilance, an investigation shall be carried out by Corporate Vigilance. After investigation depending upon the gravity of the misconduct, Corporate Vigilance may send their report to Executive Director, Coal Import Group to be placed before a Committee consisting of the following:
  - 1. ED, (F&A)/Head of Corporate Finance,
  - 2. ED, CIG/Head of CIG – Convenor of the Committee
  - 3. ED, CMMG/Head of CMMG, Corporate Office
  - 4. ED, (Law)/Head of Corporate Law

The Committee shall examine the report and give its comments / recommendations within 21 days of receipt of the reference by ED, CIG.

- i) The comments / recommendations of the Committee shall be placed by ED, CIG before SAIL Directors’ Committee (SDC) constituted for import of Coal. If SDC opines that it is a fit case for initiating banning action, it will direct ED (CIG) to issue show-cause notice to the agency for replying within a reasonable period.
- ii) On receipt of the reply or on expiry of the stipulated period, the case shall be submitted by ED (CIG) to SDC for consideration & decision.
- iii) The decision of the SDC shall be communicated to the agency by ED (CIG).

## **8 Removal from List of Approved Agencies - Suppliers / Contractors, etc.**

8.1 If the Competent Authority decides that the charge against the Agency is of a minor nature, it may issue a show-cause notice as to why the name of the Agency should not be removed from the list of approved Agencies - Suppliers / Contractors, etc.

8.2 The effect of such an order would be that the Agency would not be disqualified from competing in Open Tender Enquiries but LTE may not be given to the Agency concerned.

8.3 Past performance of the Agency may be taken into account while processing for approval of the Competent Authority for awarding the contract.

## **9 Show-cause Notice**

- 9.1 In case where the Competent Authority decides that action against an Agency is called for, a show-cause notice has to be issued to the Agency. Statement containing the imputation of misconduct or mis-behaviour may be appended to the show-cause notice and the Agency should be asked to submit within 15 days a written statement in its defence.
- 9.2 If the Agency requests for inspection of any relevant document in possession of SAIL, necessary facility for inspection of documents may be provided.
- 9.3 The Competent Authority may consider and pass an appropriate speaking order:
- a) For exonerating the Agency if the charges are not established;
  - b) For removing the Agency from the list of approved Suppliers/Contractors, etc.
  - c) For banning the business dealing with the Agency.
- 9.4 If it decides to ban business dealings, the period for which the ban would be operative may be mentioned. The order may also mention that the ban would extend to the interconnected Agencies of the Agency.

## **10 Appeal against the Decision of the Competent Authority**

- 10.1 The Agency may file an appeal against the order of the Competent Authority banning business dealing, etc. The appeal shall lie to Appellate Authority. Such an appeal shall be preferred within one month from the date of receipt of the order banning business dealing, etc.
- 10.2 Appellate Authority would consider the appeal and pass appropriate order which shall be communicated to the Agency as well as the Competent Authority.

## **11 Review of the Decision by the Competent Authority**

Any petition / application filed by the Agency concerning the review of the banning order passed originally by Chief Executive / Competent Authority under the existing guidelines either before or after filing of appeal before the Appellate Authority or after disposal of appeal by the Appellate Authority, the review petition can be decided by the Chief Executive / Competent Authority upon disclosure of new facts / circumstances or subsequent development necessitating such review. The Competent Authority may refer the same petition to the Standing Committee for examination and recommendation.

## **12 Circulation of the names of Agencies with whom Business Dealings have been banned**

- 12.1 Depending upon the gravity of misconduct established, the Competent Authority of the Corporate Office may circulate the names of Agency with whom business dealings have been banned, to the Government Departments, other Public Sector Enterprises, etc. for such action as they deem appropriate.
- 12.2 If Government Departments or a Public Sector Enterprise request for more information about the Agency with whom business dealings have been banned, a copy of the report of Inquiring Authority together with a copy of the order of the Competent Authority / Appellate Authority may be supplied.
- 12.3 If business dealings with any Agency have been banned by the Central or State Government or any other Public Sector Enterprise, SAIL may, without any further enquiry or investigation, issue an order banning business dealing with the Agency and its inter-connected Agencies.
- 12.4 Based on the above, Plants / Units may formulate their own procedure for implementation of the Guidelines.

\*\*\*\*\*