GOVERNMENT OF INDIA
MINISTRY OF ENVIRONMENT, FOREST AND CLIMATE CHANGE
(IA DIVISION-INDUSTRY-1 SECTOR)

*****

Dated: 18.09.2023

Date of Zero Draft MoM sent to EAC: 14.09.2023
Approval by Chairman: 18.09.2023
Uploading on PARIVESH:18.09.2023

MINUTES OF THE 43RD EXPERT APPRAISAL COMMITTEE (INDUSTRY-1 SECTOR) MEETING HELD ON 4TH– 5TH SEPTEMBER, 2023

Venue: **Ministry of Environment, Forest and Climate Change, Indira Paryavaran Bhawan, Jor Bagh Road, New Delhi - 110003 through Video Conferencing**

Time: **10:30 AM onwards**

DAY-1: SEPTEMBER 4, 2023 [MONDAY]

(i) Opening Remarks by the Chairman, EAC

Shri. Rajive Kumar, Chairman EAC welcomed the Committee members and opened the EAC meeting for further deliberations.

Shri. Rajive Kumar also appreciated the efforts of the Ministry's Team (Industry 1 Sector) for preparation and uploading the agenda of the EAC meetings and draft record of discussion very scientifically, systematically and timely on Parivesh Portal.

(ii) Details of Proposals and Agenda by the Member Secretary

Dr. R. B. Lal, Scientist 'F' & Member Secretary, EAC (Industry-1 Sector) appraised to the Committee about the details of Agenda items to be discussed during this EAC meeting.

(iii) Confirmation of the Minutes of the 42nd meeting of the EAC for Industry-I sector held on 17th - 18th August, 2023 at MoEF&CC through VC.

The EAC, having taken note that final minutes were issued after incorporating comments offered by the EAC (Industry-1 Sector) members on the minutes of its **42nd meeting of the EAC for Industry-I sector held on 17th - 18th August, 2023** conducted through VC Mode, and noted that there are modifications/factual correction reported by the PP, in the minutes of the 42nd EAC meeting for the project/activities.

A. Agenda No. 42.5: Expansion project to produce MS Billets 3,20,000 TPA, Rerolled Steel Products 3,38,000 TPA (through Hot Charging 1,88,000 TPA; and through Reheating Furnace from existing 30,000 TPA to 1,50,000 TPA) ; MS Black Pipe (30,000 TPA to 2,10,000 TPA); Galvanizing Plant (51,000 TPA to 1,00,000 TPA) with addition of SAF - 3.6 MVA (to produce SiMn/FeMn/FeSi/Pig Iron) by M/s Blackrock Steel & Power Pvt. Ltd., located at Village Raikheda, Tehsil Kharora, District Raipur, Chhattisgarh - Consideration of TOR.

[Proposal No.: IA/CG/IND1/435159/2023; F. No. IA-J-11011/255/2023-IA-II(IND-I)]
[Consultant: Anacon Laboratories Pvt. Ltd.; Valid upto 03.05.2025]

The aforementioned proposal was considered and recommended by EAC in its 42nd meeting of the held on 17-18th August, 2023. PP vide letter dated 31.08.2023 sent through email dated 31.08.2023 requested minor correction in MoM of 42nd EAC w.r.t configuration of induction furnace as given below.

MoM ref point no.	Details given in MoM of 42nd EAC Meeting dated 17-18th August, 2023 (Agenda No. 42.5)	Corrections suggested	Remarks/ Justification
Page No. 41 Para 42.5.7 Table	Proposed configuration of the plant - 1. Induction Furnace (20 Tons X **3 Nos.**)	Proposed configuration of the plant - 1. Induction Furnace (20 Tons X **5 Nos.)**	PP clarified that this was a clerical mistake from their in the submitted brief and correct configuration of induction furnace is 20 Tons X 5 Nos. PP has further submitted that there is no change in final production capacity.

Deliberations by the EAC:

It was informed to the Committee members that PP has requested modifications in the MoM of 42nd meeting of the EAC for Industry-I sector held on 17-18th August, 2023 pertaining to proposal agenda no. 42.5 as referred above.

The EAC deliberated and noted that the request of the PP may be accepted and recommended for the incorporation of the above-mentioned corrections/modifications in the minutes of the meeting. Accordingly, aforementioned configuration of induction furnace in table for configuration and capacity of proposed project at para 42.5.7 stands modified in the minutes of 42nd EAC (Industry-1) meeting as detailed in table above. The other information mentioned will remain the same.

***

B. Agenda No. 42.13: Expansion of existing Sponge iron/DRI From 90,000 to 1,25,000 TPA, Induction Furnace and Billet Caster from 2 x 12 T (300 TPD) to 1 x 12 T, 1 x 15 T (416 TPD), Captive Power Plant from 12 to 12.5 MW, addition of Hot Rolling Mill including galvanizing 425 TPD and Fly Ash Brick Manufacturing Unit 30 TPD to 40 TPD (i.e., 35000 Bricks/day, 7000 Blocks/day) by M/s Goa Sponge & Power Limited, located at EY NOS. 58/1, 59/1, 60/1 (Part) of Santona Village, Sanguem Taluka, South Goa District, Goa- Consideration of Environmental Clearance under SOP dated 07.07.2021 [Violation case].

[Proposal No. IA/GA/IND1/435814/2023, File No. IA-J-11011/246/2018-IA.II(I)]
[Consultant: TEAM Labs and Consultants; Valid up to 09.12.2025]

The aforementioned proposal was considered and recommended by EAC in its 42nd meeting of the held on 17-18th August, 2023. PP vide email dated 31/08/2023 requested minor correction in MoM of 42nd EAC w.r.t name of Schools & Colleges in study area as given below. Further it is noted that in Specific Condition iv and v there are typographical errors as listed below. The matter has been examined in the Ministry and it is observed that there is typographical error in the minutes of the meeting w.r.t. the above-mentioned proposal, as detailed below:

MoM ref point no.	Details given in MoM of 42nd EAC Meeting dated 17-18th August, 2023 (Agenda No. 42.13)	Corrections suggested	Remarks/ Justification
Page No. 111 Para 42.13.5	Manovikas Engineering and Medical School-16.70- W Bengal Education College-8.2-NE	Manovikas English Medium School-16.70- W Government High School Shigao-8.2-NE	The EAC noted that this is Typo error and recommended for the correction in the minutes.
Page No. 135 Para 42.13.24 Specific Condition: **iv**	iv. Project proponent shall be required to submit a bank guarantee for an amount of Rs. 60 Lakhs to the **SPCB** prior to the grant of EC. The plan shall be completed in three years whereas the bank guarantee shall be for five years. The bank guarantee shall be released by the **SPCB** after successful implementation of Remediation plan, Natural Resource Augmentation Plan and Community Resource Augmentation plan.	iv. Project proponent shall be required to submit a bank guarantee for an amount of Rs. 60 Lakhs to the **CPCB** prior to the grant of EC. The plan shall be completed in three years whereas the bank guarantee shall be for five years. The bank guarantee shall be released by the **CPCB** after successful implementation of Remediation plan, Natural Resource Augmentation Plan and Community Resource Augmentation plan.	The EAC noted that this is Typo error and recommended for the correction in the minutes.
Page No. 135 Para 42.13.24	v. Project proponent shall be required to submit Rs. 3.86 Lakhs towards penalty provisions i.e., 1% of	v. Project proponent shall be required to submit Rs. 3.86 Lakhs towards penalty provisions i.e., 1% of project cost attributable to	The EAC noted that this is Typo error and recommended

MoM ref point no.	Details given in MoM of 42nd EAC Meeting dated 17-18th August, 2023 (Agenda No. 42.13)	Corrections suggested	Remarks/ Justification
Specific Condition: **iv**	project cost attributable to the expansion, as per SOP dated 07.07.2021 to the **CPCB** prior to the grant of EC.	the expansion, as per SOP dated 07.07.2021 to the **SPCB** prior to the grant of EC.	for the correction in the minutes

Deliberations by the EAC:

It was informed to the Committee members that PP has requested modifications in the MoM of 42nd meeting of the EAC for Industry-I sector held on 17-18th August, 2023 pertaining to proposal agenda no. 42.13 as referred above.

The EAC deliberated and noted that the request of the PP may be accepted and recommended for the incorporation of the above-mentioned corrections/modifications in the minutes of the meeting. Accordingly, aforementioned para 42.13.5 and 42.13.24 stands modified in the minutes of 42nd EAC (Industry-1) meeting as detailed in table above.

***

C. Corrections in the Minutes of the 41st meeting of the EAC for Industry-I sector held on 2nd & 4th & 8th August, 2023 at MoEF&CC through VC.

Agenda No. 41.8 Proposed Cement Plant With Clinker Production Capacity of 12.0 MTPA, Calcined Clay Production Capacity-1.5 MTPA, Cement Production Capacity 5.0 MTPA (OPC/PPC/PSC/Composite Cement/LC3/PLC), WHRB based Power Plant - 54 MW, DG Sets of 6000 KVA, Oxygen Plant of capacity 160 m3/hr, AFR Pre-Processing/Co-processing Facility and Railway siding with wagon tippler by M/s JSW Cement Limited, located at Village-Bhadana & Jindas, Teh-Nagaur , Dist-Nagaur, Rajasthan- Consideration of EC

[Proposal No. IA/RJ/IND1/432291/2023, File No. J-11011/355/2022-IA.II(Ind1)]
[Consultant: J. M. Environet Pvt. Ltd.]

The aforementioned proposal was considered and recommended by EAC in its 41st meeting of the held during on 2nd & 4th August, 2023. PP vide email dated 30/08/2023 requested minor correction in MoM of 41st EAC w.r.t Specific Condition vii and Standard Condition under 'Water Quality Monitoring & Preservation" Condition No. 4 &5. The matter has been examined in the Ministry and it is observed that there is typographical error in the minutes of the meeting w.r.t. the above-mentioned proposal, as detailed below:

Condition Ref. No.	Details as per minutes of Meeting	To be corrected as	Remarks
41.8.18	The water requirement of 4180 m3 /day be met from	As committed, the Company shall not use	During the EAC meeting, we had

Condition Ref. No.	Details as per minutes of Meeting	To be corrected as	Remarks
Specific Condition No. 7, page No. 137 of the Minutes of meeting	saline ground water (3960 m3 /day) after prior approval from competent authorities and through treated waste water (220 m3 /day). As committed, the Company shall not use any groundwater in its premises except for drinking. Also, the Company shall not take drinking water from the Indira Gandhi Canal. PP shall implement the plan for sourcing treated sewage water from the STP of Nagaur Municipality in place of groundwater for industrial purposes.	any groundwater in its premises except for drinking. Also, the Company shall not take drinking water from the Indira Gandhi Canal. PP shall implement the plan for sourcing treated sewage water from the STP of Nagaur Municipality in place of groundwater for industrial purposes.	submitted the revised proposal of sourcing treated sewage water from Nagaur Municipality which was deliberated and accepted by the EAC. Plan for sourcing of treated sewage water as well as assurance letter from Nagaur municipality have also been submitted. PP herewith reiterate that JSW Cement will not use any groundwater at the project premises except for drinking and nor will it take water from Indira Gandhi Canal as committed by us.
3.3.6.2(in online MoM) Standard Condition under 'Water Quality Monitoring & Preservation" Condition No. 4, page No. 182 of the Minutes of meeting	Water meters shall be provided at the inlets to all unit processes in the **steel** plant	Water meters shall be provided at the inlets to all unit processes in the **cement** plant	Typographic error
3.3.6.2(in online MoM) Standard Condition under 'Water	The project proponent shall make efforts to minimize water consumption in	The project proponent shall make efforts to minimize water consumption in the **cement** plant	Typographic error

Condition Ref. No.	Details as per minutes of Meeting	To be corrected as	Remarks
Quality Monitoring & Preservation" Condition No. 5, page No. 182 of the Minutes of meeting	the **steel** plant complex by segregation of used water, practicing cascade use and by recycling treated water.	complex by segregation of used water, practicing cascade use and by recycling treated water.	

Deliberations by the EAC:

It was informed to the Committee members that PP has requested modifications in the MoM of 41st meeting of the EAC for Industry-I sector held on 17-18th August, 2023 pertaining to proposal agenda no. 41.8 as referred above.

The EAC deliberated and noted that the request of the PP may be accepted and recommended for the incorporation of the above-mentioned corrections/modifications in the minutes of the meeting. Accordingly, aforementioned para 41.8.18 stands modified in the minutes of 41st EAC (Industry-1) meeting as detailed in table above.

***

Details of the proposals considered during the 43rd meeting **conducted** through **Video Conferencing**, deliberations made and the recommendations of the Committee are explained in the respective agenda items as under:

Consideration in Environmental Clearance Proposals

Agenda No. 43.1

43.1 Establishment of 3,600 TPA Low Carbon Ferro Manganese Plant and 350,000 TPA Cold Rolling Mill Complex having HCl acid Pickling Line, Cold Rolling Mills, Galvalume Line, Galvanizing Line, Color Coating Line and other Finishing facilities (Greenfield Project) by M/s Gaurang Profiles India Ltd., located at Village Chhasara, Taluka Mundra, District Kachchh, Gujarat- Consideration of Environmental Clearance.

[Proposal No. IA/GJ/IND1/429595/2023, File No. IA-J-11011/173/2022-IA-II(IND-I)]
[Consultant: Vardan Environet; Valid upto 04.05.2026]

43.1.1 M/s Gaurang Profiles India Ltd has made an online application vide proposal no. IA/GJ/IND1/429595/2023 dated 31.05.2023 along with copy of EIA report, Forms (Part A, B and C) and certified compliance report seeking Environment Clearance (EC) under the provisions of the EIA Notification, 2006 for the project mentioned above. The proposed project activity is listed at S. No. 3(a) Metallurgical Industries (ferrous & non-ferrous) under Category "A" of the schedule of the EIA Notification, 2006 and being appraised at Central Level.

43.1.2 Name of the EIA consultant: M/s. Vardan Environet [List of ACOs with their Certificate / Extension Letter no. NABET/EIA/2326/RA 0284; valid upto 04.05.2026, as on September 6, 2023].

Details submitted by Project proponent

43.1.3 The details of the ToR are furnished as below:

Date of Application	Consideration	Details	Date of Accord	ToR Validity
24.06.2022	Meeting of EAC held on 14.07.2022	Terms of Reference	01.08.2022	31.07.2026
10.04.2023	--	Name change in Terms of Reference from Gaurang Profile India Pvt. Ltd. to Gaurang Profiles India Ltd.	27.04.2023	

43.1.4 The project of Gaurang Profiles India Pvt Ltd proposed to be located at Village – Chasara, Taluka-Mundra, District Kachchh, Gujarat is for setting-up of new plant for production of 3600 TPA Low carbon Ferro manganese and 350,000 TPA Cold Rolling Mill Complex involving HR Slitting line, Pickling Line, Cold Rolling Mills, Galvalume line, Galvanizing Line, Color Coating Line, Bell Annealing, Skin Pass Mill and BP Sheet Annealing.

43.1.5 Environmental Site Settings:

<table>
<tr><th>S. No.</th><th>Particulars</th><th>Details</th><th>Remarks</th></tr>
<tr><td>1</td><td>Total land</td><td>5.27 Ha (13 Acres)
[Private land: 5.27 Ha]</td><td>Land use:
4.0874 ha. is Industrial Conversion to remaining 1.l82 ha. is under process.</td></tr>
<tr><td>2</td><td>Land acquisition details as per MoEF&CC O.M. dated 7/10/2014</td><td>Entire 5.27 Ha. Land has already been acquired.</td><td>The land details are provided in online application and in the EIA report</td></tr>
<tr><td>3</td><td>Existence of habitation & involvement of R&R, if any.</td><td>Existence of Habitation
Project Site – Nil
Study Area
<table>
<tr><th>Nearest Habitation</th><th>Distance</th><th>Direction</th></tr>
<tr><td>Chhasara</td><td>0.3 km</td><td>SW</td></tr>
</table></td><td>R&R is not involved</td></tr>
</table>

<table>
<tr><th>S. No.</th><th>Particulars</th><th>Details</th><th>Remarks</th></tr>
<tr><td>4</td><td>Latitude and Longitude of all corners of the project site.</td><td>
<table>
<tr><th>Point</th><th>Latitude</th><th>Longitude</th></tr>
<tr><td>A</td><td>22º 57' 42.01" N</td><td>69º 49' 24.85" E</td></tr>
<tr><td>B</td><td>22º 57' 40.80" N</td><td>69º 49' 25.08" E</td></tr>
<tr><td>C</td><td>22º 57' 33.75" N</td><td>69º 49' 20.20" E</td></tr>
<tr><td>D</td><td>22º 57' 32.17" N</td><td>69º 49' 11.32" E</td></tr>
<tr><td>E</td><td>22º 57' 33.34" N</td><td>69º 49' 11.12" E</td></tr>
<tr><td>F</td><td>22º 57' 36.69" N</td><td>69º 49' 12.53" E</td></tr>
</table>
</td><td>--</td></tr>
<tr><td>5</td><td>Elevation of the project site</td><td>40 m above mean sea level</td><td>--</td></tr>
<tr><td>6</td><td>Involvement of Forest land, if any</td><td>No involvement of Forest Land</td><td>--</td></tr>
<tr><td>7</td><td>Water body (Rivers, Lakes, Pond, Nala, Natural Drainage, Canal etc.) exists within the project site as well as study area</td><td>Project Site: No water bodies within the project site
Study area
<table>
<tr><th>Water Body</th><th>Distance (km)</th><th>Direction</th></tr>
<tr><td>Babia Nadi</td><td>0.73</td><td>WNW</td></tr>
<tr><td>Rupare Nadi</td><td>6.19</td><td>NNE</td></tr>
<tr><td>Chhasara pond</td><td>0.01</td><td>W</td></tr>
</table>
</td><td>--</td></tr>
<tr><td>8</td><td>Existence of ESZ/ ESA/ national park/ wildlife sanctuary/ biosphere reserve/ tiger reserve/ elephant reserve etc. if any within the study area</td><td>ESA/ESZ etc. - None within 10 km radius study area
List of Reserve & Protected Forest:
Bhadreshwar RF is at 8.8 km in SSE from project site</td><td>--</td></tr>
</table>

43.1.6 The unit configuration and capacity of proposed project is given as below:

Sl. No.	Plant Equipment / Facility	Proposed Units	
		Configuration	Capacity TPA
1	Low Carbon Ferro-Manganese Plant	Alumino- Thermite Reactor Furnace	3,600
Cold Rolling Mill Complex			
2	HR Slitting Line	1no.	400,000
3	Pickling Line	2 nos.	350,000
4	Cold Rolling Mill	6HI (1500mm)	200,000
5	Cold Rolling Mill	6HI (1050mm)	150,000
6	Galvanizing Line	NON-OX	200,000
7	Galvalume Line	NON-OX	60,000

Sl. No.	Plant Equipment / Facility	Proposed Units	
		Configuration	Capacity TPA
8	Colour Coating Line	Commercial grade	200,000
9	BP Furnace	6 Nos. Bases	30,000
10	Bell Annealing Furnace	Two Bases/ One Furnace	30,000
11	Skin Pass Mill	4HI	30,000

43.1.7 The details of the raw material requirement for the proposed project along with its source and mode of transportation is given as below:

Sl. No.	Raw Materials	Quantity TPA	Source	Distance from Site (kms.)	Mode of Transportation
Ferro Alloys - Ferro Manganese (Proposed – 3600 TPA)					
1	Mn - ore	6,228	MOIL, Nagpur	500	Road
2	Aluminum	1,854	Mumbai	500	Road
3	MS Scrap	425	In-house	--	
4	Fluorspar	414	Local Market	100	Road
Cold Rolling Mill complex					
1	HR Coils	400,000	Bokaro/Tata Angul/ JSW Bellary/ AMNS, Imported (Mundra Port)	1867	Rail (30 km. by road)
2	Al-Si alloy	1,683	Hindalco/ Imported (Mundra Port)	30	Road from Port
3	Zinc	11,377	HZL, Udaipur	564	Road
4	Paints	1,850	Akzo Nobel (Kolkata)/ JSW Paint (Vasind)	540	Road

43.1.8 Total water requirement for the plant will be 697 KLD, out of which the fresh water requirement (makeup water) for industrial and domestic purposes will be 467 KLD, will be obtained from Gujarat Water Infrastructure Limited (GWIL) and remaining 230 KLD is recycled water after treatment in RO Plant #3 and MEE& ATFD. Permission for the 720 KLD quantity is applied to Gujarat Water Infrastructure Limited (GWIL) vide application id 10001317778-2396604 dated 24.08.2022 and is under process.

43.1.9 The total power requirement for all units shall be 34.8 MW, but since all units will not run simultaneously, therefore maximum average power demand shall be 20 MW. The power is proposed to be drawn from the Paschim Gujarat Vij Company Ltd (PGVCL).

43.1.10 Baseline Environmental Studies:

<table>
<tr><th>Period</th><th>March 2022 to May 2022</th></tr>
<tr><td>AAQ parameters at 8 Locations (min and max)</td><td>• $PM_{2.5}$: 24.0 μg/m^3 to 37.9 μg/m^3
• PM_{10}: 62.1 μg/m^3 to 77.9 μg/m^3
• SO_2: 23.0 μg/m^3 to 31.6 μg/m^3
• NO_2: 11.0 μg/m^3 to 20.8 μg/m^3
• CO: 0.60 mg/m^3 to 1.80 mg/m^3</td></tr>
<tr><td>Incremental GLC level</td><td>• PM_{10} – 0.712 μg/m^3
• $PM_{2.5}$ – 0.426 μg/m^3
• SO_2 – 0.435 μg/m^3
• NOx – 1.339 μg/m^3
• CO – 0.000463 mg/m^3
(All maximum incremental values are at Project site)</td></tr>
<tr><td>Ground water quality at 8 locations</td><td>pH -7.54 to 8.35, Total Hardness -296 to 412 mg/l, Total Dissolved Solids - 2654 to 3684 mg/l, Chlorides - 816 to 1098 mg/l, Fluoride- 0.89 to 1.21 mg/l,
Heavy Metals – Zinc – 1.19 to 1.56 mg/l, Copper – 0.05 to 0.07 mg/l</td></tr>
<tr><td>Surface water quality at 8 locations</td><td>pH - 7.41 to 7.75, Dissolved Oxygen – 5.6 to 6.3 mg/l, BOD varies -2.0 to 6.0 mg/l, COD -12.0 to 24.0 mg/l.</td></tr>
<tr><td>Noise levels Leq (Day and Night)</td><td>43.16 to 53.28 dB(A) for day time and 34.73 to 43.36 dB(A) for night time</td></tr>
<tr><td>Traffic assessment study findings</td><td>• Traffic study has been conducted at NH-41 which is adjacent to the plant site.
• Transportation of Raw material, Fuel and Finished product will be done by 48% by Road
• Existing PCU is 2568.5 PCU/day on NH-41 and existing level of service (LOS) is A
<table>
<tr><th>Road</th><th>V (Volume in PCU/day)</th><th>C (Capacity in PCU/day)</th><th>Existing V/C Ratio</th><th>LOS</th></tr>
<tr><td>NH-41</td><td>2568.5</td><td>15000</td><td>0.17</td><td>A</td></tr>
</table>
• PCU load after proposed project will be 2922.5 PCU/day (Existing 2568.5 + Addl. 354) for NH-41 and level of service (LOS) will be;
<table>
<tr><th>Road</th><th>V (Volume in PCU/day)</th><th>C (Capacity in PCU/day)</th><th>Existing V/C Ratio</th><th>LOS</th></tr>
<tr><td>NH-41</td><td>2922.5</td><td>15000</td><td>0.19</td><td>A</td></tr>
</table>
**Note: Capacity as per IRC 64: 1990 is 15000 PCU/day, Guide line for capacity for roads in Rural Areas*</td></tr>
</table>

Period	March 2022 to May 2022
	Level of Service will remain "A" i.e. excellent for NH-41 including additional traffic due to the proposed project.
Flora and fauna	Floral Diversity There is no Schedule-1 Species of Flora and Fauna in the Study area

43.1.11 The details of solid waste generation along with its mode of treatment/disposal is furnished as below:

Type of Waste	Source	Quantity generated (TPA)	Disposal
Fe-Mn Slag	Alumino Thermite Process	4,986	Will be used for relining of reactor vessel and rest sold
Bag Filter dust	Alumino Thermite Process	180	Recycle and reutilize in the manufacturing process
Steel Scrap from HR/CR trimming, CR/GI/GL/ PPGI/PPGL sheets/ cut end/ Coil ends	Cold Rolling Complex	31,485	Will be sold in the market
Zinc Dross	Cold Rolling Complex	800	Will be sold to the registered recyclers
Zn-Al-Si Dross	Cold Rolling Complex	480	Will be sold to the registered recyclers
ETP Sludge	ETP	900	Will be sent to GPCB authorized TSDF
Dry Powder	MEE & ATFD	165	Will be sent to GPCB authorized TSDF
Used Oil	All Plant	60 kl	Will be sold to the registered recyclers
Sewage Sludge	STP	800	Will be used as manure

43.1.12 Public Consultation:

Details of advertisement given	19.11.2022
Date of public consultation	23.12.2022
Venue	Project site, Survey No. 127, 127A, 128, village Chhasara, Taluk Mundra, district Kucchch, Gujarat
Presiding Officer	Sub Divisional Magistrate and Deputy Collector, Mundra
Major issues raised	• Employment to the locals and training for increasing the employment opportunities • Measures to be undertaken for control of Pollution (Air, Water, Noise, Hazardous waste, Odour, Vibration etc • Development of surrounding villages like water, Sewage, roads, agriculture, health and education

Table: Action plan as per MoEF&CC O.M. dated 30/09/2020

S. No	Activities	Physical Targets	Year of Implementation (Budget in INR)			Total Expenditure (Rs.)
			1st Year	2nd Year	3rd Year	
1	Purchase of one Ambulance with Medical Instruments for providing Ambulance Facility in Chhasara, Vovar and Mokha villages	Purchase of Ambulance and necessary medical equipment (Defibrillator, Ventilation device, Nebulizer, Oxygen cylinder, Wheelchair, First aid kit, Stretcher)	**15,00,000**	--	--	**15,00,000**
2	Plantation along the periphery of Chhasara village	Plantation work of 1200 m length and 15 m wide along the boundary of Chhasara village along with fencing	--	--	**1000000**	**10,00,000**
3	Construction of Metaled Road for Local Commute from NH41 to Mokha village	Land Development and Construction work for laying of road of 500 m length and 3 m width connecting Mokha village to NH41	**15,00,000**	--	--	**15,00,000**
4	Renovation of Cow Sheds	Renovation of Cow Sheds, Providing Water Trough and fodder storage yard at Gaushala of Ratadiya and Chandroda villages	--	**5,00,000**	--	**5,00,000**
5	Drinking Water facilities	Providing two Handpumps with Water cooler cum purifier at Hinglaj Mata Temple Chhasara and Nilkanth Mahadev Temple, Mokha	**500,000**	--	--	**5,00,000**
6	Agriculture Development	Providing two sets of Bund maker, Ridger & plough for agriculture purpose to Nagar panchayat of Chhasara	--	--	**10,00,000**	**10,00,000**

S. No	Activities	Physical Targets	Year of Implementation (Budget in INR)			Total Expenditure (Rs.)
			1st Year	2nd Year	3rd Year	
7	Education Facilities at Chhasara Village	Establishment of Smart Class (65 Sq.m, Seating capacity - 50) in Sa Sa Chhasara High School, Chhasara. Provision of 15 computers, UPS, WiFi, Projector, 18 Tables & 60 chairs etc. in smart class.	--	**20,00,000**	--	**20,00,000**
8	Drainage Management	The company will renovate Drainage system (Strengthening & covered drains) in Chhasara and Mokha villages and will also provide Septic tank and soak pit at both the villages	**10,00,000**	--	--	**10,00,000**
9	Establishment of Industrial Training Centre	Land Development and construction work of training center (area 55 sq.m) at Vovar village	--	**1000000**	--	**20,00,000**
		Relevant Equipment, Furniture etc. to be provided at Center	--	--	**1000000**	
10	Plantation along the periphery of Chhasara Pond	Plantation of 2000 trees along the perimeter of Chhasara village	**1000000**	--	--	**1000000**
11	Renovation of Chhasara Pond	Renovation of Chhasara Pond with wall lining and wharf construction	**3000000**	--	--	**3000000**
Grand Total in Rs.			**85,00,000**	**35,00,000**	**30,00,000**	**150,00,000**

43.1.13 The capital cost of the proposed project is Rs. 105.25 Crores and the capital cost for environmental protection measures is proposed as Rs. 5.32 Crores. The annual recurring cost towards the environmental protection measures is proposed as Rs 0.6182 Crores. The employment generation from the proposed project is 450. The details of cost for environmental protection measures are as follows:

Sl. No.	Environmental Protection Measures	Capital Cost Rs. In lakhs	Recurring Cost Rs. In lakhs/year
1	Air Pollution Control & Noise Management	85.0	9.3
2	Water Pollution Control	135.0	11.5
3	Storage and Solid Waste Management	20.0	2.5
4.	Environment Monitoring Program	70.5	11.97
5.	Occupational Health & Safety	52.0	24.5
6.	Greenbelt Development	20.46	2.05
Sub-total		**382.96**	**61.82**
7.	Addressal of Public Consultation Concern (including cost for adoption of Chhasara Village)	150	-
Total		**532.96**	**61.82**

43.1.14 Proposed greenbelt will be developed in 1.78 Ha which is about 34% of the project area of 5.27 Ha. A 9 m wide greenbelt, considering of at least 3 tier around the plant boundary will be developed as greenbelt and green cover as per CPCB/ MoEFCC, New Delhi guidelines. Local and native species will be planted with a tree density of 2500 trees per hectare. Total number of 4,450 saplings will be planted and nurtured in 1.78 Ha in 4 years. The budget of Rs. 20.46 Lakhs (Approx.) has been kept for Green Belt development.

43.1.15 It is reported that there is no violation under EIA, 2006/court case/show cause/direction related to the project under consideration.

43.1.16 The proposal was initially considered during 38th meeting of the EAC for Industry-I sector held on 27th June, 2023 wherein Committee deferred the proposal due to technical shortcomings. The deliberations and recommendations of EAC are as follows:

Deliberations by the Committee

The Committee noted the following:

1. The PP reported that the total area of project is 5.27 Ha, out of which 4.0874 ha. is coverted from agricultural to Industrial land and conversion of remaining 1.l82 ha is under process. The EAC is of the opinion that PP shall complete the conversion of land for industrial purpose for the remaining land area also and accordingly submit the revised application for consideration.
2. There is no proper Engineering drawing of a layout. It is missing area statement, index etc. The PP shall prepare 3 separate drawings as a layout details. In Drg 1 PP shall cover Road networking, Plan Layout, Parking along with area statement showing % of all ingredients i.e. roads, Buildings, Parking, with indexing, scale of drawing etc. In no case road shall be abruptly terminated at any point. It shall have proper looping. PP also to show traffic flow in the drawing along road with entry and exit. In drg 2 PP shall show a layout indicating road networking, Existing Green belt and proposed Green Belt with its % against plot area

including no of species WRT 2500 density per ha. In drg3 PP shall show contour map with Bench mark, Road network and drainage network along road side with drainage flow, disposal of drainage flow at lowest point with invert level etc. Further PP to show RWH details in the same drawing with calculations.

3. The EAC deliberated on the greenbelt layout plan and is of the opinion that the plan needs to be revised considering dense greenbelt development along the periphery of project boundary specifically towards the highway.

4. The EAC observed that there is water body almost equivalent to the project area in the form of pond adjacent to the project site. PP shall adopt the same for conservation and development and prepare a Management Plan as per Ministry's Guidelines and submit the same.

5. As the process involves galvanization and the effluent generated out of the same may leach the soil, PP shall carry out leaching test.

6. It is reported that Chhasara village is at a distance of 0.3 km in the SW of the project site. Project Proponent shall prepare and submit an action plan for environmental safeguard measures to minimise the impact on the habitation of the locals.

7. The EAC deliberated on the unit configuration and capacity of proposed project and observed that there are some changes in the table as compared to the permissions granted in ToR. For Eg. Skin Pass Mill was granted permission for production of CRCA Coils for a capacity of 30000 TPA in ToR, whereas PP has submitted a capacity of 60000 TPA in the instant EC application. Also, PP has added facility of 'Cut to Length' in the instant application. PP shall compare the permissions granted in TOR, Configuration/Capacity presented during PH and Configuration/Capacity in the EIA/EMP report and submit the same with clarification for changes, if any.

8. The EAC deliberated on the baseline data and observed that TDS and Chlorides are recorded too high in the ground water. PP shall submit the clarification along with the mitigation measures to minimise the same.

9. The Committee deliberated on the public hearing issues along with action plan submitted by the proponent to address the issues raised during the public hearing and is of the view that the submitted action is not sufficient to address all the issues. The EAC advised PP to revise the action plan as per Ministry's O.M. dated 30.09.2020.

10. The PP shall prepare a Village Adoption program consisting of need - based community development activities and submit an undertaking for adoption of villages including the name of villages.

11. Thus, EAC is of the view that PP/Consultant shall revise the whole proposal and submit the same for further consideration.

12. In view of above, the PP requested the Committee to allow to reappear with the revised information/ clarification to the points deliberated during appraisal.

Recommendations of the Committee:

In view of the foregoing and after detailed deliberations, the committee recommended to **defer the proposal** due to certain deficiencies in the proposal and sought requisite information on the points referred above. The proposal shall be considered after submission of requisite information and updating the Report on Parivesh Portal.

43.1.17 The proponent submitted the ADS reply vide letter dated 09.08.2023 uploaded on PARIVESH on 11.08.2023. Point-wise reply of ADS is given as below:

Sl. No.	ADS Details	Reply by PP
1.	The PP reported that the total area of project is 5.27 Ha, out of which 4.0874 ha. is converted from agricultural to Industrial land and conversion of remaining 1.182 ha is under process. The EAC is of the opinion that PP shall complete the conversion of land for industrial purpose for the remaining land area also and accordingly submit the revised application for consideration.	The land conversion of Remaining 1.182 Ha. will be completed by end of the year 2023. The project Authorities will start construction and operation of the proposed plant only after converting the entire land area of 5.27 Ha. The undertaking regarding the same is submitted.
2	There is no proper Engineering drawing of a layout. It is missing area statement, index etc. The PP shall prepare 3 separate drawings as a layout details. In Drg 1 PP shall cover Road networking, Plan Layout, Parking along with area statement showing % of all ingredients i.e. roads, Buildings, Parking, with indexing, scale of drawing etc. In no case road shall be abruptly terminated at any point. It shall have proper looping. PP also to show traffic flow in the drawing along road with entry and exit. In drg 2 PP shall show a layout indicating road networking, Existing Green belt and proposed Green Belt with its % against plot area including no of species WRT 2500 density per ha. In drg3 PP shall show contour map with Bench mark, Road network and drainage network along road side with drainage flow, disposal of drainage flow at lowest point with invert level etc. Further PP to show RWH details in the same drawing with calculations.	Layouts as per the requirement is prepared and submitted.
3	The EAC deliberated on the greenbelt layout plan and is of the opinion that the plan needs	The revised layout map with dense greenbelt all around the plant boundary is submitted.

Sl. No.	ADS Details	Reply by PP
	to be revised considering dense greenbelt development along the periphery of project boundary specifically towards the highway.	
4	The EAC observed that there is water body almost equivalent to the project area in the form of pond adjacent to the project site. PP shall adopt the same for conservation and development and prepare a Management Plan as per Ministry's Guidelines and submit the same	Pond conservation and Management Plan, as per the Ministry's Guidelines has been prepared submitted M/s Gaurang Profile India Limited will adopt the Pond. Undertaking for adoption of the Pond by Project Authorities is submitted.
5	As the process involves galvanization and the effluent generated out of the same may leach the soil, PP shall carry out leaching test.	The leaching test will be carried out once in a year around the ETP and hazardous waste storage area after the plant is put into operation and shall be submitted with Six Monthly EC Compliance Report. Hazardous waste shall be temporary stored at plant site on RCC flooring with bund wall all around under covered shed to avoid leaching on Soil, before disposing to TSDF / Registered Recyclers.
6	It is reported that Chhasara village is at a distance of 0.3 km in the SW of the project site. Project Proponent shall prepare and submit an action plan for environmental safeguard measures to minimise the impact on the habitation of the locals	The Environmental Safeguard measures to minimise the impact on habitation of Chhasara village are proposed, as follows: • The project envisaged usage of clean fuel like LPG and Electricity in the process for various heating operations, as follows: – LPG shall be used in Non-Ox Furnaces of Galvanizing / Galvalume line, Radiant Tube Furnaces of Galvanizing and Galvalume Units and in Boilers – Electricity shall be used for Galvanizing and Galvalume pot heating, • Bag filters, Low NOx burners, Wet Scrubbers, Oil Demisters shall be installed to control stack emissions and fugitive emissions. • Further, 10 nos. of Sprinklers will be installed at plant boundary on the village side (from South-to-South West direction) to minimise the impact

Sl. No.	ADS Details	Reply by PP
		• Dense greenbelt will be developed around the boundary of Chhasara village which will further minimize the air and noise levels • No Effluent shall be discharged outside the plant boundary. Zero Liquid Discharge shall be maintained within the plant premises for which ETP with RO plant, MEE and ATFD have been proposed.
7	The EAC deliberated on the unit configuration and capacity of proposed project and observed that there are some changes in the table as compared to the permissions granted in ToR. For Eg. Skin Pass Mill was granted permission for production of CRCA Coils for a capacity of 30000 TPA in ToR, whereas PP has submitted a capacity of 60000 TPA in the instant EC application. Also, PP has added facility of 'Cut to Length' in the instant application. PP shall compare the permissions granted in TOR, Configuration/Capacity presented during PH and Configuration/Capacity in the EIA/EMP report and submit the same with clarification for changes, if any.	The comparison of configuration and capacity granted in ToR, presented during Public Hearing and provided in EIA report.
8	The EAC deliberated on the baseline data and observed that TDS and Chlorides are recorded too high in the ground water. PP shall submit the clarification along with the mitigation measures to minimise the same.	During baseline study, Chloride level was found in the range of 912 to 1098 mg/l and TDS in the range of 2654 to 3210 mg/l. The proposed project lies in Kachchh district of Gujarat. The project site is 13 km away from the sea coast of Gulf of Kutch. The high values of Chlorides and TDS in this area is due to the downward seepage of Sea water which increases ground water salinity. The mineral composition of this area aquifer has predominant ions like calcium, magnesium, chloride, sulphate and nitrate which affects the quality of the groundwater and leads to high TDS, hardness, Salts and alkalinity in the ground water of the region.

Sl. No.	ADS Details	Reply by PP
		These monitored values when compared with the CGWA Ground water quality values of Kachchh district for Chlorides and TDS, were found fairly consistent. Chloride (1134 mg/l) and TDS (2700 to 3000 mg/l). **Mitigation measures** • Awareness camps for local farmers regarding water conservation through judicious use of water and adoption of efficient irrigation techniques like drip/sprinkler irrigation shall be organised • By providing new salt tolerant variants of crops for improving agricultural practices as a part of CSR activities. • Water purification system will be provided in nearby village (Chhasara) to remove TDS and other salts.
9	The Committee deliberated on the public hearing issues along with action plan submitted by the proponent to address the issues raised during the public hearing and is of the view that the submitted action is not sufficient to address all the issues. The EAC advised PP to revise the action plan as per Ministry's O.M. dated 30.09.2020.	The budget for implementation of activities to address Public Hearing issues has been increased from Rs. 102.80 lakhs to Rs. 150 lakhs. Revised PH Action Plan with physical targets and budget is submitted.
10	The PP shall prepare a Village Adoption program consisting of need - based community development activities and submit an undertaking for adoption of villages including the name of villages	M/s Gaurang Profile Pvt. Ltd. will adopt Chhasara Village. Activities like medical assistance, education, drinking water, agriculture development, plantation, drainage management etc. are envisaged with total budget of Rs. 102.5 lakhs under the Rs. 150 lakhs envisaged for PH Action Plan. Details are submitted. Undertaking for Adoption of village by Project Authorities is also submitted.

43.1.18 Based on the submission of PP, the proposal has been re-considered during the 43rd meeting of the EAC for Industry-I sector held on 4th - 5th September, 2023. The deliberations and recommendations of EAC are as follows:

Deliberations by the Committee

43.1.19 The Committee noted the following:

1. The instant proposal is for setting-up of new plant for production of 3,600 TPA Low Carbon Fe-Mn Alloys and 350,000 TPA Cold Rolling Mill Complex involving HR Slitting line, Pickling Line, Cold Rolling Mills, Galvalume line, Galvanizing Line, Color Coating Line, Bell Annealing, Skin Pass Mill and BP Sheet Annealing.

2. The EAC, constituted under the provision of the EIA Notification, 2006 comprising Expert Members/domain experts in various fields, examined the proposal submitted by the Project Proponent in desired format along with EIA/EMP reports prepared and submitted by the Consultant accredited by the QCI/ NABET on behalf of the Project Proponent.

3. The EAC noted that the Project Proponent has given an undertaking that the data and information given in the application and enclosures are true to the best of his knowledge and belief and no information has been suppressed in the EIA/EMP reports. If any part of data/information submitted is found to be false/ misleading at any stage, the project will be rejected and Environmental Clearance given, if any, will be revoked at the risk and cost of the project proponent.

4. The Committee noted that the EIA reports are in compliance of the ToR issued for the project, reflecting the present environmental status and the projected scenario for all the environmental components. The Committee deliberated on the proposed mitigation measure towards Air, Water, Noise and Soil pollutions. The Committee suggested that the storage of toxic/explosive raw materials/products shall be undertaken with utmost precautions and following the safety norms and best practices.

5. The total revised project area is 5.27 ha [Private land]. This land is under the possession of the company. 4.0874 ha. is Industrial land and conversion to remaining 1.l82 ha. is under process. PP has reported that the land conversion of Remaining 1.182 Ha. will be completed by end of the year 2023. The project Authorities will start construction and operation of the proposed plant only after converting the entire land area of 5.27 Ha. The undertaking regarding the same is submitted. The EAC advised that total project land shall be acquired and converted for industrial purpose prior to commencement of project.

6. The nearest habitations is Chhasara village which is at a distance of 0.3 km in the SW of the project site. The EAC is of the opinion that PP shall strictly implement the environmental safeguard measures proposed to minimise the impact on the habitation of the locals.

7. Chhasara Pond is adjacent to the project site in the West direction and Babia Nadi is at a distance of 0.73 km in WNW direction of the project site. The EAC is of the opinion that water bodies shall not be disturbed. Mitigation measures w.r.t. safeguarding the water bodies shall be strictly implemented.

8. The water requirement for the project is estimated as 697 KLD, out of which the fresh water requirement (makeup water) for industrial and domestic purposes will be 467 KLD, and will be obtained from Gujarat Water Infrastructure Limited (GWIL) and remaining 230 KLD is recycled water after treatment in RO Plant #3 and MEE& ATFD. The EAC deliberated on the water requirement and found is satisfactory.

9. The Committee has deliberated on the baseline data and incremental GLC due to the proposed project and is of the opinion that PP shall strictly implement the mitigation measures as per the submitted action plans to minimise the pollution.

10. The PP has submitted that existing greenbelt will be developed in 1.78 Ha which is about 34% of the project area of 5.27 Ha. Total number of 4,450 saplings will be planted and nurtured in 1.78 Ha in 4 years. The budget of Rs. 20.46 Lakhs (Approx.) has been kept for Green Belt development. The EAC deliberated on the revised greenbelt layout plan along with action plan and the budget earmarked and is of the opinion that PP shall complete the proposed greenbelt development in a period of 1 year.

11. The committee deliberated details of carbon foot prints and carbon sequestration study w.r.t. proposed project and found them to be satisfactory.

12. The Committee also deliberated on the public hearing issues along with revised action plan submitted by the proponent to address the issues raised during the public hearing and found it satisfactory.

13. The EAC also deliberated on the ADS reply of the project proponent and found it satisfactory.

14. The EAC deliberated on the proposal with due diligence in the process as notified under the provisions of the EIA Notification, 2006, as amended from time to time and accordingly made the recommendations to the proposal. The Experts Members of the EAC found the proposal in order and recommended for grant of environmental clearance.

15. The environmental clearance recommended to the project/activity is strictly under the provisions of the EIA Notification 2006 and its subsequent amendments. It does not tantamount/construe to approvals/consent/permissions etc. required to be obtained or standards/conditions to be followed under any other Acts/ Rules/ Subordinate legislations, etc., as may be applicable to the project. The project proponent shall obtain necessary permission as mandated under the Water (Prevention and Control of Pollution) Act, 1974 and the Air (Prevention and Control of Pollution) Act, 1981, as applicable from time to time, from the State Pollution Control Board, prior to construction & operation of the project.

16. The EAC also reviewed the EC conditions (specific and general) pertaining to Industry-I projects and observed that some of the specific conditions stipulated so far in the previously recommended EC projects are common and applicable to most of the projects in general. In view of the same, the General Conditions (in case of EC projects) have been revised through reallocation of these common conditions from specific to General Conditions (in case of EC projects). Accordingly, the instant project is also being stipulated with the modified General conditions.

Recommendations of the Committee:

43.1.20 In view of the foregoing and after detailed deliberations, the committee **recommended** the instant proposal for grant of Environment Clearance under the provisions of EIA Notification, 2006 subject to the stipulation of following specific conditions and general conditions as per the

Ministry's Office Memorandum No. 22-34/2018-III dated 9/8/2018 based on project specific requirements:

A. Specific Condition:

i. The project proponent shall comply with all the environmental protection measures and safeguards proposed in the documents submitted to the Ministry. All the recommendations made in the EIA/EMP in respect of environmental management, and risk mitigation measures relating to the project shall be implemented.

ii. The project proponent shall utilize modern technologies for capturing of carbon emitted and shall also develop carbon sink/carbon sequestration resources capable of capturing more than emitted. The implementation report shall be submitted to the IRO, MoEF&CC in this regard.

iii. Total project land acquisition shall be completed and converted for industrial purpose prior to commencement of project.

iv. The nearest habitations is Chhasara village which is at a distance of 0.3 km in the SW of the project site. Proponent shall take appropriate environmental safeguard measures to minimise the impact on the habitation of the locals. PP needs to strengthen green belt all around the plant area to reduce the dust pollution. The PP shall also include this location in its environmental monitoring programme.

v. Chhasara Pond is adjacent to the project site in the West direction and Babia Nadi is at a distance of 0.73 km in WNW direction of the project site. A robust and full proof Drainage Conservation scheme to protect the natural drainage and its flow parameters; along with Soil conservation scheme and multiple Erosion control measures shall be implemented.

vi. The water requirement of 697 KLD shall be obtained from Gujarat Water Infrastructure Limited (467 KLD) and remaining 230 KLD is recycled water after treatment in RO Plant #3 and MEE& ATFD only after obtaining necessary permission from the Competent Authority.

vii. Three tier Green Belt shall be developed in at least 33% of the project area in a period of 1 year all along the project site of adequate width and tree density shall not be less than 2500 per ha. Survival rate of green belt developed shall be monitored on periodic basis to ensure that damaged plants are replaced with new plants in the subsequent years. PP shall also develop greenbelt in the form of shelter belt comprising of total of 6 rows of 2x2 m plantation with tall trees & broad leaves with thick canopy along with windshield inside the plant premises to act as green barrier for air pollution & noise levels towards Chhasara Village. Compliance status in this regard, shall be submitted to concerned Regional Office of the MoEF&CC.

viii. All the commitments made towards socio-economic development of the nearby villages shall be satisfactorily implemented. The action plan based on the social impact assessment study of the project as per the EMP in accordance to the Ministry's OM dated 30.09.2020 amounting to Rs. 1.50 Crores shall be strictly implemented and progress shall be submitted to the Regional Office of MoEF&CC.

ix. As committed, PP shall adopt Chhasara Village and prepare and implement the action plan to develop it into a model village.

x. The leaching test will shall be carried out once in a year around the ETP and hazardous waste storage area after the plant is put into operation and shall be reported with half yearly EC Compliance Report.

xi. Waste effluent generated out of galvanisation process shall be properly disposed-off through authorised recyclers.

xii. A sound plan of action must be prepared and implemented for arresting and disposing of dust generated during the aluminothermic process.

B. General Conditions

I. Statutory compliance:

i. The Environment Clearance (EC) granted to the project/ activity is strictly under the provisions of the EIA Notification, 2006 and its amendments issued from time to time. It does not tantamount/ construe to approvals/ consent/ permissions etc., required to be obtained or standards/conditions to be followed under any other Acts/Rules/Subordinate legislations, etc., as may be applicable to the project.

ii. This Environmental clearance is granted subject to final outcome of Hon'ble Supreme Court of India, Hon'ble High Court, Hon'ble NGT and any other Court of Law, if any, as may be applicable to this project.

II. Air quality monitoring and preservation

i. The project proponent shall install 24x7 continuous emission monitoring system at process stacks to monitor stack emission as well as 02 Nos. Continuous Ambient Air Quality Station (CAAQMS) for monitoring AAQ parameters with respect to standards prescribed in Environment (Protection) Rules 1986 as amended from time to time. The CEMS and CAAQMS shall be connected to SPCB and CPCB online servers and calibrate these systems from time to time according to equipment supplier specification through labs recognized under Environment (Protection) Act, 1986 or NABL accredited laboratories.

ii. The project proponent shall carryout Continuous Ambient Air Quality monitoring for common/criterion parameters relevant to the main pollutants released (e.g. PM_{10} and $PM_{2.5}$ in reference to PM emission, and SO_2 and NOx in reference to SO_2 and NOx emissions) within and outside the plant area covering upwind and downwind directions.

iii. The project proponent shall monitor fugitive emissions in the plant premises at least once in every quarter through laboratories recognized under Environment (Protection) Act, 1986 or NABL accredited laboratories.

iv. Sampling facility at process stacks shall be provided as per CPCB guidelines for manual monitoring of emissions.

v. Appropriate Air Pollution Control (APC) system shall be provided for all the dust generating points including fugitive dust from all vulnerable sources, so as to comply prescribed stack emission and fugitive emission standards.

vi. The project proponent shall provide leakage detection and mechanized bag cleaning facilities for better maintenance of bags.

vii. Sufficient number of mobile or stationery vacuum cleaners shall be provided to clean plant roads, shop floors, roofs, regularly.

viii. Ensure covered transportation and conveying of raw material to prevent spillage and dust generation. The project proponent use leak proof trucks/dumpers carrying coal and other raw materials and cover them with tarpaulin.

ix. The project proponent shall provide primary and secondary fume extraction system at all heat treatment furnaces.

x. Wind shelter fence and chemical spraying shall be provided on the raw material stock piles.

xi. Design the ventilation system for adequate air changes as per prevailing norms for all tunnels, motor houses, Oil Cellars.

xii. Pollution control system in the plant shall be provided as per the CREP Guidelines of CPCB.

xiii. The project proponent shall adopt the Clean Air practices like mechanical collectors, wet scrubbers, fabric filters (bag houses), electrostatic precipitators, combustion systems (thermal oxidizers), condensers, absorbers, adsorbers, and biological degradation. Controlling emissions related to transportation shall include emission controls on vehicles as well as use of cleaner fuels. Sufficient numbers of additional truck mounted Fog/Mist water cannons shall be procured and operated regularly inside the project premises and also in the surrounding villages to arrest suspended dust in the atmosphere.

xiv. Bag filters shall be cleaned regularly and efficiency of bag filter system shall be monitored at regular intervals.

xv. Water Sprinklers/Water mist system shall be installed near raw material yards, operational units and other strategic locations to control fugitive emissions from the plant.

xvi. The particulate matter emissions from the process stacks shall be less than 30 mg/Nm^3 and measures shall be undertaken as per the submitted action plan. Efficient Air monitoring equipment shall be installed.

xvii. Sensors for CO gas with alarms must be installed at suitable locations.

xviii. Following additional arrangements to control fugitive dust shall be provided:

a. Fog / Mist Sprinklers at all on bulk raw material storage area (at the transfer points) like Iron Ore, Coal and for Fly Ash and similar solid waste storage areas.
b. Proper covered vehicle shall be used while transport of materials.
c. Wheel washing mechanism shall be provided in entry and exit gates with complete recirculation system.

III. Water quality monitoring and preservation

i. The project proponent shall install 24x7 continuous effluent monitoring system with respect to standards prescribed in Environment (Protection) Rules 1986 as amended from time to time and connected to SPCB and CPCB online servers and calibrate these system from time to time according to equipment supplier specification through labs recognized under Environment (Protection) Act, 1986 or NABL accredited laboratories.

ii. The project proponent shall monitor regularly ground water quality at least twice a year (pre- and post-monsoon) at sufficient numbers of piezometers/sampling wells in the plant and adjacent areas through labs recognized under Environment (Protection) Act, 1986 and NABL accredited laboratories.

iii. Garland drains and collection pits shall be provided for each stock pile to arrest the run-off in the event of heavy rains and to check the water pollution due to surface run off.
iv. Water meters shall be provided at the inlet to all unit processes in the plants.
v. The project proponent shall make efforts to minimise water consumption in the plant complex by segregation of used water, practicing cascade use and by recycling treated water.
vi. The proposed project shall be designed as "Zero Liquid Discharge" Plant. ETP shall be installed and there shall be no discharge of effluent from the plant. Domestic effluent shall be treated in Sewage Treatment Plant. Suitable measures shall be adopted for sewage water handling to ensure no contamination of any kind of water body.
vii. All stockyards shall have impervious flooring and shall be equipped with water spray system for dust suppression. Stock yards shall also have garland drains and catch pits to trap the run off material and shall be implemented as per the action plan submitted in EIA/EMP report.
viii. Rain water harvesting shall be implemented to recharge/harvest water as per the action plan submitted in the EIA/EMP report.
ix. Cold Rolling Mill (CRM), color coating and galvanizing plants shall have CETP to treat and recycle the treated water from CRM complex. Sludge generated at CRM ETP shall be sent to TSDF.

IV. Noise monitoring and prevention

i. Noise pollution shall be monitored as per the prescribed Noise Pollution (Regulation and Control) Rules, 2000 and amendments thereof, and report in this regard shall be submitted to Regional Officer of the Ministry as a part of six-monthly compliance report.
ii. The ambient noise levels should conform to the standards prescribed under E(P)A Rules, 1986 viz. 75 dB(A) during day time and 70 dB(A) during night time.

V. Energy Conservation measures

i. Provide solar power generation on roof tops of buildings, for solar light system for all common areas, street lights, parking around project area and maintain the same regularly;
ii. Provide LED lights in their offices and residential areas.

VI. Waste management

i. Oil Collection pits shall be provided in oil cellars to collect and reuse/recycle spilled oil. Oil collection trays shall be provided under coils on saddles in cold rolled coil storage area.
ii. Kitchen waste shall be composted or converted to biogas for further use.
iii. 100% utilization of fly ash shall be ensured. All the fly ash shall be provided to cement and brick manufacturers for further utilization and Memorandum of Understanding in this regard shall be submitted to the Ministry's Regional Office.
iv. The Plastic Waste Management Rules 2016, inter-alia, mandated banning of identified Single Use Plastic (SUP) items with effect from 01/07/2022. In this regard, CPCB has issued a direction to all the State Pollution Control Boards (SPCBs)/Pollution Control Committees (PCCs) on 30/06/2022 to ensure the compliance of Notification published by Ministry on 12/08/2021. The technical guidelines issued by the CPCB in this regard is

available at https://cpcb.nic.in/technical-guidelines-3/. All the project proponents are hereby requested to sensitize and create awareness among people working within the Project area as well as its surrounding area on the ban of SUP in order to ensure the compliance of Notification published by this Ministry on 12/08/2021. A report, along with photographs, on the measures taken shall also be included in the six monthly compliance report being submitted by the project proponents.

v. The PP shall test the soil in the vicinity of the industry, radius of 5 km for Mn, Zn, Al once in two years and report to be submitted to IRO MoEFCC.

vi. A proper action plan must be implemented to dispose of the electronic waste generated in the industry.

VII. Green Belt

i. The project proponent shall prepare GHG emissions inventory for the plant and shall submit the programme for reduction of the same including carbon sequestration by trees.

ii. Project proponent shall submit a study report on Decarbonisation program, which would essentially consist of company's carbon emissions, carbon budgeting/ balancing, carbon sequestration activities and carbon capture, use and storage and offsetting strategies. Further, the report shall also contain time bound action plan to reduce its carbon intensity of its operations and supply chains, energy transition pathway from fossil fuels to Renewable energy etc. All these activities/ assessments should be measurable and monitor able with defined time frames.

iii. The industry should draw up and implement and action plan for achieving carbon neutrality consistent with India's commitment to achieving carbon neutrality. The action plan should contain milestones with targets to be achieved in suitable periods.

iv. Greening and Paving shall be implemented in the plant area to arrest soil erosion and dust pollution from exposed soil surface.

VIII. Public hearing and Human health issues

i. Emergency preparedness plan based on the Hazard identification and Risk Assessment (HIRA) and Disaster Management Plan shall be implemented.

ii. The project proponent shall carry out heat stress analysis for the workmen who work in high temperature work zone and provide Personal Protection Equipment (PPE) as per the norms.

iii. Provision shall be made for the housing of construction labour within the site with all necessary infrastructure and facilities such as fuel for cooking, mobile toilets, mobile STP. Safe drinking water, medical health care, creche etc. The housing may be in the form of temporary structures to be removed after the completion of the project.

iv. Occupational health surveillance of the workers shall be done on a regular basis and records maintained.

IX. Environment Management

i. The project proponent shall comply with the provisions contained in this Ministry's OM vide F.No. 22-65/2017-IA.III dated 30/09/2020. As part of Corporate Environment Responsibility (CER) activity, company shall adopt nearby villages based on the socio-

economic survey and undertake community developmental activities in consultation with the village Panchayat and the District Administration as committed.

ii. The company shall have a well laid down environmental policy duly approve by the Board of Directors. The environmental policy should prescribe for standard operating procedures to have proper checks and balances and to bring into focus any infringements/deviation/violation of the environmental / forest / wildlife norms / conditions. The company shall have defined system of reporting infringements / deviation / violation of the environmental / forest / wildlife norms / conditions and / or shareholders / stake holders. The copy of the board resolution in this regard shall be submitted to the MoEF&CC as a part of six-monthly report.

iii. A separate Environmental Cell both at the project and company head quarter level, with qualified personnel shall be set up under the control of senior Executive, who will directly to the head of the organization.

iv. Performance test shall be conducted on all pollution control systems every year and report shall be submitted to Integrated Regional Office of the MoEF&CC.

X. Miscellaneous

i. The project proponent shall make public the environmental clearance granted for their project along with the environmental conditions and safeguards at their cost by prominently advertising it at least in two local newspapers of the District or State, of which one shall be in the vernacular language within seven days and in addition this shall also be displayed in the project proponent's website permanently.

ii. The copies of the environmental clearance shall be submitted by the project proponents to the Heads of local bodies, Panchayats and Municipal Bodies in addition to the relevant offices of the Government who in turn has to display the same for 30 days from the date of receipt.

iii. The project proponent shall upload the status of compliance of the stipulated environment clearance conditions, including results of monitored data on their website and update the same on half-yearly basis.

iv. The project proponent shall monitor the criteria pollutants level namely; PM10, SO2, NOx (ambient levels as well as stack emissions) or critical sectoral parameters, indicated for the projects and display the same at a convenient location for disclosure to the public and put on the website of the company.

v. Action plan for developing connecting and internal road in terms of MSA as per IRC guidelines shall be implemented

vi. The project proponent shall submit six-monthly reports on the status of the compliance of the stipulated environmental conditions on the website of the ministry of Environment, Forest and Climate Change at environment clearance portal.

vii. The project proponent shall submit the environmental statement for each financial year in Form-V to the concerned State Pollution Control Board as prescribed under the Environment (Protection) Rules, 1986, as amended subsequently and put on the website of the company.

viii. The project proponent shall inform the Regional Office as well as the Ministry, the date of financial closure and final approval of the project by the concerned authorities, commencing the land development work and start of production operation by the project.

ix. The project proponent shall abide by all the commitments and recommendations made in the EIA/EMP report, commitment made during Public Hearing and also that during their presentation to the Expert Appraisal Committee.

x. The recommendations of the approved Site-Specific Wildlife Management Plan (in case of involvement of Schedule-I species) shall be implemented in consultation with the State Forest Department. The implementation report shall be furnished along with the six-monthly compliance report to the concerned Regional Office of the MoEF&CC.

xi. The PP shall put all the environment related expenditure, expenditure related to Action Plan on the PH issues, and other commitments made in the EIA/EMP Report etc. in the company web site for the information to public/public domain. The PP shall also put the information on the left over funds allocated to EMP and PH as committed in the earlier ECs and shall be carried out and spent in next three years, in the company web site for the information to public/public domain.

xii. No further expansion or modifications in the plant shall be carried out without prior approval of the Ministry of Environment, Forests and Climate Change (MoEF&CC).

xiii. Concealing factual data or submission of false/fabricated data may result in revocation of this environmental clearance and attract action under the provisions of Environment (Protection) Act, 1986.

xiv. The Ministry may revoke or suspend the clearance, if implementation of any of the above conditions is not satisfactory.

xv. The Ministry reserves the right to stipulate additional conditions if found necessary. The Company in a time bound manner shall implement these conditions.

xvi. The Regional Office of this Ministry shall monitor compliance of the stipulated conditions. The project authorities should extend full cooperation to the officer (s) of the Regional Office by furnishing the requisite data / information/monitoring reports.

xvii. Any appeal against this EC shall lie with the National Green Tribunal, if preferred, within a period of 30 days as prescribed under Section 16 of the National Green Tribunal Act, 2010.

****

Agenda No. 43.2

43.2 Proposed expansion of existing steel plant to Integrated Steel Plant through installation of 1800 TPD (3x600 TPD) DRI kilns along with Beneficiation Plant for Iron ore (1X0.6 MTPA), Pellet Plant (1x0.6 MTPA), Steel Melting Shop (2x25 T + 4x15 T Induction Furnaces) with matching LRF & CCM, Rolling Mill (0.35 MTPA), Ferro alloy Plant (4x16.5 MVA),Briquette plant for Chrome Ore (1x30 TPH), Oxygen plant (100 TPD) and 82 MW (57 MW WHRB based + 25 MW AFBC based) Captive Power Plant by M/s Nilachal Iron and Power Ltd. located Ratanpur-Kandra Village, Gamharia Block, District Saraikela-Kharsawan, Jharkhand- Consideration of Environmental Clearance proposal as per provisions of SOP dated 07.07.2021 [Violation case].

[Proposal No. IA/JH/IND1/439143/2023, File No. F. No. 11011/662/2008-IA-II(I)]
[Consultant : Envirotech East Pvt. Ltd.; Valid upto 12.09.2025]

43.2.1 M/s. Nilachal Iron & Power Limited has made an online application vide proposal no. IA/JH/IND1/439143/2023 dated 17.08.2023 along with copy of EIA report, Forms (Part A, B and C) and certified compliance report seeking Environment Clearance (EC) under the provisions of the EIA Notification, 2006 for the project mentioned above. The proposed project activity is listed at S. No. 3(a) Metallurgical Industries (ferrous & non-ferrous) and 1(d) Thermal Power Plants under Category "A" of the schedule of the EIA Notification, 2006 and being appraised at Central Level.

43.2.2 Name of the EIA consultant: M/s. Envirotech East Pvt. Ltd. [List of ACOs with their Certificate / Extension Letter no. NABET/EIA/2225/RA 0279; valid upto 12.09.2025, as on September 6, 2023].

Details submitted by Project proponent

43.2.3 The details of the ToR are furnished as below:

Date of Application	Consideration	Details	Date of Accord	ToR Validity
06.08.2020	22nd meeting of REAC held on 26-28th August, 2020	Terms of Reference	06.09.2020	05.10.2024
04.01.2021	28nd meeting of REAC held on 18-21st January, 2021	Amendment in ToR (Change of capacity of WHRB based Captive Power Plant from 35 MW to 45 MW	12.02.2021	
29.05.2023	35th meeting of EAC held on 6th June, 2023	Amendment of TOR (under violation category)	21.07.2023	

43.2.4 The project of M/s. Nilachal Iron & Power Limited located at Ratanpur-Kandra Village, Gamharia Block, District Saraikela-Kharsawan in the state of Jharkhand is for expansion of existing sponge iron plant through installation of 2 X 600 TPD DRI kilns along with installation of Steel Melting Shop (3 X 10 T & 4 X 15 T Induction Furnaces with matching LRF & CCM and Metal Recovery Plant), Rolling Mill (2,30,000 TPA) and 49 MW (37 MW WHRB based + 12 MW AFBC based) capacity Captive Power Plant – under violation.

43.2.5 The proposal was considered during the 43rd meeting of the EAC for Industry-I sector held on 4th - 5th September, 2023. The deliberations and recommendations of EAC are as follows:

Deliberations by the Committee

43.2.6 The Committee noted the following:

1. The EAC was appraised that "an application vide Application No. 426 of 2021 was filed before the Hon'ble National Green Tribunal, Principal Bench, New Delhi against the Nilachal Iron and Power Ltd. Ratanpur stating that the company is operating Saraikela plant for the last many years in violation of the environmental norms. Toxic emission from the industry is causing serious health hazards to the local residents and damage to the crops as well as environment. It is alleged by the applicant that the construction work of 600 TPD Sponge kiln and 15 MTX3 Crucible Steel melting shop and CCM is about to start in the above plant without any EC or CTE. Accordingly, Hon'ble Tribunal notified the Joint Committee in this regard. The Joint Committee visited the Unit and submitted the Report to the Hon'ble NGT in September 2022. Further based on the request of Ministry dated 17.01.2023, the IRO, MoEF&CC, Ranchi conducted the site visit and forwarded the certified compliance report of earlier EC on 10.04.2023 to MoEF&CC along with details of action taken by the SPCB in this regard." The EAC is of the opinion that PP shall submit the complete details of the case with each directions [Tabular Form], along with the latest status and clarification on the allegations made by the applicant in the aforementioned application to Hon'ble National Green Tribunal, Principal Bench, New Delhi. PP shall also submit the compliance of the Joint Committee report.
2. The EAC noted that there are multiple court cases/ directions from statutory bodies against the project. PP shall submit brief of each case / direction along with the updated status and compliance of the court orders and directions [Tabular Form].
3. The EAC deliberated on the remediation plan and the natural and community resource augmentation plan prepared against the violation and is of the opinion that the plan is not appropriate and quantitative assessment needs to be revisited and revised remediation plan and the natural and community resource augmentation plan shall be submitted.
4. The EAC observed that there is no proper Engineering drawing of a layout. It is missing area statement, index etc. The PP shall prepare 3 separate drawings as a layout details. In Drg 1 PP shall cover Road networking, Plan Layout, Parking along with area statement showing % of all ingredients i.e. roads, Buildings, Parking, with indexing, scale of drawing etc. In no case road shall be abruptly terminated at any point. It shall have proper looping.

PP also to show traffic flow in the drawing along road with entry and exit. In drg 2 PP shall show a layout indicating road networking, Existing Green belt and proposed Green Belt with its % against plot area including no of species WRT 2500 density per ha. In drg3 PP shall show contour map with Bench mark, Road network and drainage network along road side with drainage flow, disposal of drainage flow at lowest point with invert level etc. Further PP to show RWH details in the same drawing with calculations.

5. The Committee deliberated on the public hearing issues along with action plan submitted by the proponent to address the issues raised during the public hearing and is of the view that the submitted action is not sufficient to address all the issues. The EAC advised PP to revise the action plan as per Ministry's O.M. dated 30.09.2020.

6. The EAC deliberated on the existing greenbelt and observed that existing EC was granted in 2009 and still proper greenbelt has not been developed. The EAC is of the opinion that PP shall complete the greenbelt development and then apply for expansion.

7. The Consultant presented the drone video of the project site. The EAC observed that the housekeeping of the project site is not adequate. PP needs to undertake housekeeping very seriously and needs to submit a housekeeping plan involving appropriate measures to be implemented on regular basis.

8. The nearest habitation is Ratanpur Village at a distance of 0.5 km in the West direction, Raghunathpur Village at a distance 0.7 km in West of the project site. Also there are other villages in the study area. The EAC opined that Project Proponent shall prepare environmental safeguard measures to minimise the impact on the habitation of the locals and these sensitive areas. PP needs to strengthen green belt all around the plant area to reduce the dust pollution.

9. The EAC deliberated on the certified compliance report of IRO and observed that IRO has observed partial / non-compliance of conditions. PP shall submit the copy of ATR submitted to IRO along with closure report on the non-compliances obtained from IRO, MoEFCC.

10. The PP shall prepare a Village Adoption program consisting of need - based community development activities and submit an undertaking for adoption of villages including the name of villages.

11. The EAC warned the Consultant and advised that Consultant to guide the PP properly for compliance of EC conditions etc.

12. The PP/Consultant agreed to the suggestions of EAC and requested EAC to allow reappear after the revision of the application incorporating the desired information.

Recommendations of the Committee:

43.2.7 In view of the foregoing and after detailed deliberations, the committee recommended to **defer the proposal** to address the shortcomings enumerated at para no. 43.2.6 above. The proposal may be considered after submission of the requisite information.

****

Agenda No. 43.3

43.3 Expansion of Sponge Iron (97,500 TPA to 140,000 TPA); MS Billet (90,000 TPA to 192,500 TPA); Rerolled Steel Products (90,000 TPA to 180,000 TPA -: Through Hot Charging 126000 TPA and through Reheating Furnace 54,000 TPA); Existing Captive Power 8 MW (through WHRB); and Pipe Mill 175,000 TPA (new) within existing plant premises by M/s Niros Ispat Private Limited, located at Plot No: 14-A, Heavy Industrial Area, Hathkhoj, Bhilai, District Durg, Chhattisgarh – Consideration of Environmental Clearance.

[Proposal No.: IA/CG/IND1/437149/2023; File No.: IA-J-11011/401/2018-IA-II(IND-I)]
[Consultant: M/s Anacon Laboratories Pvt. Ltd.; Valid upto; 05.03.2025]

43.3.1 M/s. Niros Ispat Private Limited has made an online application vide proposal no. IA/CG/IND1/437149/2023 dated 19.08.2023 along with copy of EIA report and Forms (Part A, B and C) and certified compliance report seeking Environment Clearance (EC) under the provisions of the EIA Notification, 2006 for the project mentioned above. The proposed project activity is listed at S. No. 3(a) Metallurgical industries (ferrous & non-ferrous) under Category "A" of the schedule of the EIA Notification, 2006 and appraised at Central Level.

43.3.2 Name of the EIA consultant: M/s. Anacon Laboratories Pvt. Ltd. [List of ACOs with their Certificate / Extension Letter no. QCI/NABET/ENV/ACO/23/2788; valid upto 27.09.2023, as on September 6, 2023].

Details submitted by Project proponent

43.3.3 The details of the ToR are furnished as below:

Date of Application	Consideration	Details	Date of Accord	ToR Validity
09.04.2022	Standard Terms of Reference issued	Terms of Reference	20.04.2022	19.04.2026

43.3.4 The proposed project M/s. Niros Ispat Private Limited located in Plot No: 14-A, Heavy Industrial Area, Hathkhoj Village, Bhilai Tehsil, Durg District, Chhattisgarh is for enhancement of production of Sponge Iron (97,500 TPA to 140,000 TPA); Mild Steel Billet (90,000 TPA to 192,500 TPA); Rerolled Steel Products (90,000 TPA to 180000 TPA) (through Hot Charging 90,000 TPA to 126000 TPA and through Reheating Furnace 54,000 TPA); and Pipe Mill 175000 TPA (New addition).

43.3.5 Environmental Site Settings:

Sl.	Particulars	Details	Remarks
1.	Total land	Total land – 8.903 Ha (Private land)	Free hold already diverted for industrial use.
2.	Land acquisition details as per	The land is existing industrial land; total involved land is 8.903 Ha. No additional land proposed to be acquired.	The project area is 8.903 Hectare industrial land located at Industrial Area

<table>
<tr><th>Sl.</th><th>Particulars</th><th>Details</th><th>Remarks</th></tr>
<tr><td></td><td>MoEF&CC O.M. dated 7/10/2014</td><td></td><td>developed by Industries Department of CG Govt., which is already acquired by the company through lease deed.</td></tr>
<tr><td>3.</td><td>Existence of habitation & involvement of R&R, if any.</td><td>Project Site: No
Study Area:<table><tr><th>Habitation</th><th>Distance</th><th>Direction</th></tr><tr><td>1. Akrodih</td><td>0.2 km</td><td>ENE</td></tr><tr><td>2. Jarway Bhilai</td><td>1.5 Km</td><td>NE</td></tr></table></td><td>R&R - Not applicable.</td></tr>
<tr><td>4.</td><td>Latitude and Longitude of all corners of the project site.</td><td><table><tr><th>Points</th><th>Latitude</th><th>Longitude</th></tr><tr><td>01</td><td>21°14'8.41"N</td><td>81°24'47.28"E</td></tr><tr><td>02</td><td>21°14'7.95"N</td><td>81°24'49.44"E</td></tr><tr><td>03</td><td>21°14'1.08"N</td><td>81°24'55.06"E</td></tr><tr><td>04</td><td>21°13'57.21"N</td><td>81°24'46.47"E</td></tr><tr><td>05</td><td>21°13'58.51"N</td><td>81°24'43.47"E</td></tr><tr><td>06</td><td>21°13'57.88"N</td><td>81°24'42.45"E</td></tr><tr><td>07</td><td>21°13'56.42"N</td><td>81°24'43.81"E</td></tr><tr><td>08</td><td>21°13'55.36"N</td><td>81°24'41.45"E</td></tr><tr><td>09</td><td>21°14'0.39"N</td><td>81°24'36.74"E</td></tr><tr><td>10</td><td>21°14'0.89"N</td><td>81°24'38.64"E</td></tr><tr><td>11</td><td>21°13'59.31"N</td><td>81°24'41.07"E</td></tr><tr><td>12</td><td>21°14'0.40" N</td><td>81°24'42.25"E</td></tr><tr><td>13</td><td>21°14'1.73"N</td><td>81°24'40.59"E</td></tr><tr><td>14</td><td>21°14'6.45"N</td><td>81°24'44.47"E</td></tr></table></td><td>-</td></tr>
<tr><td>5.</td><td>Elevation of the project site</td><td>264-351 M above mean sea level</td><td>The entire area is almost flat with moderate gradient</td></tr>
<tr><td>6.</td><td>Involvement of Forest land if any.</td><td>No forest land is involved in the project area.</td><td>-</td></tr>
<tr><td>7.</td><td>Water body (Rivers, Lakes, Pond, Nala, Natural Drainage, Canal etc.) exists within the project site as well as study area</td><td>Project Site: Nil
Study area:<table><tr><th>Water Body</th><th>Distance in Km</th><th>Direction</th></tr><tr><td>Maroda 1 Tank</td><td>7.0</td><td>WSW</td></tr><tr><td>Maroda - 2 Reservoir (BSP)</td><td>7.4</td><td>SW</td></tr><tr><td>Randhawa Talab</td><td>0.9</td><td>WSW</td></tr><tr><td>Morid Tank</td><td>8.0</td><td>S</td></tr><tr><td>Morid Tank</td><td>2.6</td><td>SSE</td></tr><tr><td>Camp 1 Talab</td><td>5.2</td><td>WSW</td></tr><tr><td>Camp 2 Talab</td><td>4.4</td><td>WSW</td></tr><tr><td>Gaon Talab</td><td>0.6</td><td>WSW</td></tr></table></td><td>No natural water body is involved in the proposed plant site</td></tr>
<tr><td>8.</td><td>Existence of ESZ/ESA / national park/</td><td>Nil</td><td>-</td></tr>
</table>

Sl.	Particulars	Details	Remarks
	wildlife sanctuary/ biosphere reserve/tiger reserve/ elephant reserve etc. if any within the study area		

43.3.6 The existing project was accorded first Consent to establish cum operate by the CECB vide letter no. 489/TS/W/PNB/DURG dated 12/07/2001 for its Sponge Iron Plant (1x25 TPD DRI Kiln) Capacity – 7,500 TPA. Wherein, environmental clearance for setting up additional induction furnaces to increase the (capacity from 30000 TPA to 90000 TPA and 90000 TPA Rolling mill based on 8750 m^3/hr Coal gasifier.) was granted from SEIAA, Chhattisgarh vide lr. No. 791/SEIAA/CG/EC/ROLLING/DURG/1696 dt.10.08.2016. Company has obtained combined CTO and renewed Consent from CECB vide Board letter no. 611/TS/CECB/2021 Raipur, dated: 25/05/2021 which is valid till 31/05/2024.

43.3.7 Implementation status of the existing EC and Consent:

S. No.	Facilities	Units	As per EC/CTO	Implementation Status as on 25.08.2023	Production as per CTO
1	DRI Kilns for Sponge Iron	Sponge Iron Unit (1x25 TPD DRI Kiln)	Combined CTE and CTO 12/07/2001	Implemented	7500 TPA*
2	DRI Kilns for Sponge Iron	Sponge Iron Unit (1x300 TPD DRI Kiln)	CTE dtd. 15.02.2006 CTO dtd. 21.12.2010	Implemented	90,000TPA
3	MS Billets through Induction Furnace with CCM	90,000(10 ton x 2 Nos. + 5 ton x 2 Nos.)	EC from SEIAA, Chhattisgarh vide letter no 791/SEIAA/CG/EC/ ROLLING/DURG/1696 dtd. 10.08.2016 8750 m^3/Hr Coal Gassifier is permitted in EC but as not implemented so far thus not mentioned in CTO.	Implemented	90,000
4	Rerolled Steel Rolling Mill (Refer Note 1)	90,000		Implemented	90,000
	(i) Hot Charging based	90,000		Implemented	90,000
	(ii) Reheating Furnace based on Coal Gasifier	8750 m^3/Hr.		Gassifier 8750 m^3/Hr with reheating furnace is not implanted so far	Gassifier 8750 m^3/Hr with reheating furnace is not implanted so far

S. No.	Facilities	Units	As per EC/CTO	Implementation Status as on 25.08.2023	Production as per CTO
4	WHRB from Sponge Iron	Sponge Iron based WHRB unit 8 MW	CTO - 17.05.2013	Implemented	8 MW
5.	Pipe Mill	fabrication 150,000 TPA MS Pipes	CTE dated 06/05/2022 and CTO has been applied by the company	Implemented	150,000
***Note:** The unit was obtained CTE cum CTO for 25TPD x 2 Nos kilns from which 15000 TPA Sponge Iron Production was granted, but as the unit was able to set up only 1 Nos of 25 TPD kiln thus later on the Capacity in CTO was corrected as 7500 TPA from 1 Nos 25 TPD kiln.*					

43.3.8 The unit configuration and capacity of proposed project is given as below:

Sr. No.	Details	Existing Permitted Capacity	Proposed Capacity addition	Final Capacity after Expansion
1	DRI Kilns for Sponge Iron	97,500 (300 TPD x 1no) and (25 TPD x 1 no)	42,500	140,000 (370 TPD x 1 No) and (30 TPD x 1 No)
2	MS Billets through Induction Furnace with CCM	90,000 (10 ton x 2 Nos. + 5 ton x 2 Nos.)	102,500	192,500 (10 ton x 5 Nos.)
3	Rerolled Steel Rolling Mill (Refer Note 1)	90,000	90,000	180,000
	(i) Hot Charging based	90,000	36,000	126,000
	(ii) Reheating Furnace based on Coal Gasifier		54,000	54,000
4	Captive Power plant	8 MW	-	8 MW
	(i) WHRB from Sponge Iron	8 MW	-	8 MW
5	Pipe Mill	150,000	175,000	175,000
Note: *1. Coal Gasifier of 8750 m^3/hr will be implemented along with the Rerolling mill (Reheating Furnace) to reheat Cold billets to produce 54000 TPA rerolled steel products from the permitted capacity of 90000 TPA.* *2. Pipe mill implemented as per CTE dated 06/05/2022 and CTO received on 28.11.2022 from CECB, Chhattisgarh*				

43.3.9 The details of the raw material requirement for the proposed project along with its source and mode of transportation is given as below:

Name of Raw Material	Qty. Required (in TPA)	Source	Distance (In Km)	Mode of Transportation
For Sponge Iron Plant				

Name of Raw Material	Qty. Required (in TPA)	Source	Distance (In Km)	Mode of Transportation
Iron Ore	217000	Odisha Iron Ore Mines and NMDC Iron Ore Mines	Within 500 Km	Iron Ore and Coal will be transported by rail head upto nearest Railway sidings and then by Road through covered vehicles
Coal	168000	SECL Coal mines/ Open market/ Local Market	Within 500 Km	
Limestone/ Dolomite	5600	Open Market	Within 100 Kms	By Road through covered vehicles
Refractory Material	200	Open Market	Within 100Kms	
Total	390800			
For Induction Furnace (SMS)				
Sponge Iron	192500.00	Captive production/ Local market	Captive/ Within 100 Kms	Internally available/ By Road through covered vehicles
Pig Iron / CI Scrap	23814.00	Captive production/ Local market	Within 100 Kms	By Road through covered vehicles
Melting Scrap	4000.00	Captive generation/ Local market	Captive/ Within 100 Kms	Internally available/ By Road through covered vehicles
Ferro Alloys	1925.00	Local market	Within 100 Kms	By Road through covered vehicles
Aluminum	192.50	Open Market/BALCO	Within 100 Kms	By Road through covered vehicles
Ramming Mass	482.00	Open Market	Within 100 Kms	By Road through covered vehicles
Steel Sheet Former	49.00			
LDO for Laddle Preheating	373.45			
Calcined lime for refining of liquid steel	9625.00			
Flurospar and other additive for de phos	1925.00			
Electrodes	385.00			
Total	235270.95			
For Hot Charging Rerolling mill				

Name of Raw Material	Qty. Required (in TPA)	Source	Distance (In Km)	Mode of Transportation
Hot Billets	132570.00	Captive Prod. in Steel Melting shop	Captive	Internal Transfer
Total	132570.00			
For Reheating Furnace based Rerolling mill				
Cold Billets Internally available	56800.00	Captive production/ Local market as per requirement	Captive/ Within 100 Kms	Internal Transfer/ By Road through covered vehicles
Coal	5400.00	SECL Coal mines/ Open market/Local Market	Within 500 Kms	Coal will be transported by rail head upto nearest Railway sidings and then by Road through covered vehicles
Total	62200			
For Pipe Mill				
MS Strip through Reheating furnace and outside market	180000	Captive generation /local market	Captive/ Within 100 Kms	Internally available and through Covered trucks from nearby steel plants.

43.3.10 Existing water requirement is 295 m^3/day, water requirement is obtained from ground water and permission for the same has been obtained from CGWA vides letter no. 4/434/CT/IND/2017 (NOC No.: CGWA/NOC/IND/REN/1/2021/6528) dated 10/10/2020. The water requirement of proposed expansion project is estimated 546 m^3/day (295 m^3/day existing + 251 proposed m^3/day), out of which total 546 m^3/day will be met from the ground water. The permission for drawl of ground water will be obtained from CGWA Vide lr. No. 21-4/434/CT/IND/2017 dated 06/06/2023.

43.3.11 Total power requirement will be 22 MW out of which 8 MW will be met through captive power plant and 14 MW will be sourced through State Grid (CSPDCL). In addition, existing plant already has 2 nos. of 1010 kVA and 1 no of 600 kVA DG sets which will be continued to be used as emergency backup.

43.3.12 Baseline Environmental Studies:

Period	March 2022 –May 2022
AAQ parameters at 8 Locations (min. and max)	• PM_{10} = 53.7 – 85.2 µg/m^3 • $PM_{2.5}$ = 22.4 – 45.2 µg/m^3 • SO_2 = 8.5 – 21.7 µg/m^3 • NO_2 = 15.5 – 27.9 µg/m^3 • CO = 0.373 - 0.736 mg/m^3 • Ozone = 5.5 – 14.5 µg/m^3

<table>
<tr><td>Incremental GLC level</td><td>

PM = 2.3 µg/m^3 (Level at 0.2 km in ENE Direction)
$PM_{2.5}$= 0.69 µg/m^3 (Level at 0.2 km ENE Direction)
SO_2 = 8.74 µg/m^3 (Level at 0.2 km in ENE Direction)
NO_x = 9.41 µg/m^3 (Level at 0.4 km WSW Direction)
CO = 1.35 µg/m^3 due to transportation
CO = 0.22 µg/m^3 due to DG Set operation

</td></tr>
<tr><td>Ground water quality at 8 locations</td><td>pH: 6.72 to 8.16. TDS 324 to 410 mg/l. Total hardness: 168.53 to 192.44 mg/l. Fluoride 0.16 to 0.24 mg/l. Nitrate: 6.97 – 12.81 mg/l Sulphate: 15.92 – 21.51 mg/l respectively.</td></tr>
<tr><td>Surface water quality at 8 locations</td><td>pH: 6.73-8.16. TDS 402 to 632 mg/l. Total hardness: 160.28 to 298.14 mg/l. Chloride: 26.19 – 46.29 mg/l. Sulphate: 17.32 – 72.81 mg/l.
DO: of 5.6-6.1 mg/l. PO_4: 0.47-0.63 mg/l.
COD: 12.59 mg/l – 22.64 mg/l and BOD ranges from 3.82 – 7.24 mg/l.</td></tr>
<tr><td>Noise levels Leq. (Day and Night)</td><td>Noise levels at every station were within CECB standards.

Residential Area – 51.6 to 53.1 dBA for day time and 41.4 to 42.8 dBA for night time.
Commercial Area – 56.8 to 59.2 dBA for day time and 44.5 to 46.1 dBA for night time.
Silence Zone – 46.9 dBA to 48.3 dBA for day time and 37.7 dBA to 38.1 dBA for night time.
Industrial area - 61.8 to 64.2 dBA for day time and 53.7 to 56.5 dBA for night time.

</td></tr>
<tr><td>Traffic assessment study findings</td><td>

Traffic study has been conducted at NH 6 and Road connecting to project site which is approximately 3.20 km in South direction from the plant site.
Transportation of raw materials, fuel & furnished product will be done 100% by road.
Existing PCU of NH-6 is 17561.5/day and Road Connecting project site with NH-6 is 1947/day.
PCU load after expansion will be for NH-6: 18701.5 (17561.5+1140 Proposed Plant) and for Road Connecting project site with NH-6: 3087 (1947 +1140 Proposed Plant). Existing and changed level of service on NH – 6 and Road connecting project site will be:

<table>
<tr><th>ROAD</th><th>INCREASED PCU'S-STATE/ NATIONAL HIGHWAY</th><th>V (VOLUME IN PCU/DAY)</th><th>C (CAPACITY IN PCU/DAY)</th><th>MODIFIED V/C RATIO</th><th>LOS</th></tr>
<tr><td>NH-6</td><td>17561.5 + 1140 = 18701.5</td><td>18701.5</td><td>40000</td><td>0.4675</td><td>C (Good/ Avg /Fair)</td></tr>
<tr><td>Road Connecting project site with NH-6</td><td>1947 + 1140 = 3087</td><td>3087</td><td>6000</td><td>0.5145</td><td>C (Good/ Avg /Fair)</td></tr>
</table>
*Note: Capacity as per IRC: 64-1990 Guide *line for capacity for roads.*
Conclusion: The level of service will be C after including additional traffic due to proposed expansion project.
</td></tr>
<tr><td>Flora and fauna</td><td>No schedule I fauna and endangered flora were observed in the study area.</td></tr>
</table>

43.3.13 The details of solid and hazardous waste generation along with its mode of treatment/disposal is furnished as below:

Name of Waste generated	Quantity (TPA)	Proposed Disposal Plan
Char/Dolochar	28,000	Sold to nearby Power plants within 100 KMs range. Currently, Plants like Sambhv Sponge Power (P) Ltd. and ACC cements purchase the entire generated Dolochar quantity.
Bottom Flue Dust Ash	16,800	Will be sold to nearby Brick making units or cement plants nearby within 100KMs.
Kiln Accretion and Refractory waste	1,260	Sold to authorized recyclers within 100Kms
Defective Billets	1,925	Used as melting/Re Rolling scrap in own plant/Sold outside to Rerolling mills within 100Kms
Mill Scale	3,343	Sold to Ferro Alloys / Pellet Plants.
Slag from Induction Furnace	34,891	Given/ Sold to nearby metal recovery units within 100Kms
Refractory & Ramming Mass waste	241	Sold to authorized recyclers within 100Kms
Defective and Miss Roll	7,020	Used as melting/Re-rolling scrap in own plant/Sold outside to Rerolling mills within 100Kms
Coal Ash from Rolling Mill	1,890	Sold to Brick making units or cement plants nearby within 100Kms
MS scrap from Pipe mill	5,000	Used as melting/Re Rolling scrap in own plant/Sold outside to Rerolling mills within 100Kms
Total =	**100370**	

HAZARDOUS WASTE GENERATION

Type of Hazardous Waste	H. W. Category	Quantity	Disposal
Waste Oil/Used Oil	5.1(as per HWM Schedule I)	4 KL/Annum	Will be given to authorized recycler having authorization from competent authority.
Used Lead Acid batteries	17 (as per HWM Schedule IV)	___	

43.3.14 Public Consultation:

Details of advertisement given	• The Pioneer Date - 14.12.2022 • Haribhumi Date – 14.12.2022
Date of public consultation	16.01.2023 Time- 12.00 Noon
Venue	Venue – Vacant Land, located C.S.I.D.C. Commercial Zone, Engineering Park, Hathkhoj, Tehsil – Bhilai-3, Dist. – Durg (C.G.).

Presiding Officer	Additional Collector, Durg
Major issues raised	• Concern about the employment for local people • Issue regarding the Pollute drain at Akordih Village • Query regarding the Environmental Pllution Management • Concern about the Medical/ Health facilities to be provided in the nearby villages • Concern about Drinking water facilities (RO water) to be provided in the schools • Suggestions made by local people regarding infrastructure development in the vicinity.

Action plan as per MoEF&CC O.M. dated 30.09.2020:

Sr. no	Physical activity and action plan		Target of Implementation of Action Plan (With Time Line)			Total Expenditure (In Rs.)
	Name of the Activity	Places	1st Year	2nd Year	3rd Year	
1	10 Nos of Rain Water Harvesting Structures to be implemented	Schools of Hathkhoj, umda, Aklordih, Jarway and chhawani Bhilai	150000	150000	150000	450000
2	Chowk Construction with Solar pennel and High Mask Light	Umda Chowk		950000		950000
3	R. O. Drinking water to be provided	Schools of Hathkhoj,umda,Aklordih, Jarway and chhawani Bhilai	150000	150000	100000	400000
4	Solar Panels with LED lights to be provided	Schools of Hathkhoj,umda,Aklordih, Jarway and chhawani Bhilai	150000	150000	300000	600000
5	Plantation to be done on Road side	Heavy Industrial Area Beside of Road from Railway Crossing to Umda Chowk permitted by DTIC	-	250000	250000	500000
6	Providing an Ambulance to District Hospital	Durg	-	-	1100000	1100000

Sr. no	Physical activity and action plan		Target of Implementation of Action Plan (With Time Line)			Total Expenditure (In Rs.)
	Name of the Activity	Places	1st Year	2nd Year	3rd Year	
7	Community hall with exercise and physio equipment.	Nearest gram	-	-	1000000	1000000
					Sub Total	**5000000**

43.3.15 Existing capital cost of project was Rs. 157.09 Crores. The capital cost of the proposed project is Rs. 25 Crores and the Capital cost for environmental protection measures is proposed as Rs. 16.43 Crores (Existing) & Rs. 4.43 Crores (Expansion). The annual recurring cost towards environmental protection measures is proposed as Rs. 0.33 Crores. The employment generation from the proposed expansion is 990 (810 existing + 180 additional). The details of cost for environmental protection measures is as follows:

S. No.	Particulars	No. Existing	Existing cost	No. Proposed	Proposed addition cost	Total cost after expansion	Operation & Maintenance cost
	Plant and Machinery proposed for EMP						
1	Dry ESP Ash Handling and Bag filter for DRI Kilns (2 Kiln)	1	6.50	-	-	6.50	0.0400
2	Bag Houses for the Sponge Iron Plant	7	2.80	-	-	2.80	0.0150
3	Cost of Bag Houses for Induction Furnaces	2	0.80	1	1.00	1.80	0.0100
4	Proposed Bag House for Reheating Furnace	-	0.00	1	0.75	0.75	0.0100
	Building and Civil works used for EMP						
1	Cost of a Chimney in Sponge Iron Plant and WHRB (2 Nos.)	2	1.00	-	0.00	1.00	0.0050
2	Cost of a Common Chimney in Induction Furnace Plant	1	0.25	-	-	0.25	0.0050
3	Cost of Chimney in Billet Reheating Furnace	-	0.00	1	0.25	0.25	0.0050
4	Cost of Industrial ETP	1	0.15	1	0.20	0.35	0.0300
5	Oil Trap in the drains system	2	0.02	2	0.03	0.05	0.0015

S. No.	Particulars	No. Existing	Existing cost	No. Proposed	Proposed addition cost	Total cost after expansion	Operation & Maintenance cost
6	Silt Arrestation Pit in Storm Water Drains	2	0.30	-	0.00	0.30	0.0045
7	Internal Road Black topping and other construction works for Paving the Floors	-	1.25	-	0.00	1.25	0.0150
8	Drainage system	-	0.60	-	0.00	0.60	0.0050
	Exclusive cost of Works for EMP						
1	Cost of STP for Domestic Waste	1	0.06	1	0.06	0.12	0.01
2	Green Belt Plantation along with Irrigation System and Pipe Line	-	0.20	-	0.05	0.25	0.02
3	Fugitive dust Control Spray system in Plant (Proposed – Fogging Machine two fixed one mobile)	3	0.15	3	0.20	0.35	0.0030
4	Mechanised Road sweeping Machine	1	0.80	-	0.00	0.80	0.0060
5	Wheel Washing System in Security area	-	-	-	0.05	0.05	0.0015
6	On Line stack Monitoring in all stacks DRI with Power; Induction Furnace and in Rolling mill	4	0.10	1	0.03	0.13	0.0050
7	On Line AAQ monitoring station	1	0.30	1	0.30	0.60	0.0200
8	Respirable dust sampler, Noise meter and Stack Monitoring Kits	4	0.05		0.05	0.10	0.0015
9	Weather Monitoring Station	-	0.00	1	0.05	0.05	0.0030
10	Ground water Monitoring Piezo Meters	1	0.01	-	-	0.01	0.0006
11	On Line Effluent Quality Monitoring System (EQMS)	1	0.09	-	-	0.09	0.0045
12	Environment Monitoring Laboratory Testing	-	0.50	-	0.15	0.65	0.070

S. No.	Particulars	No. Existing	Existing cost	No. Proposed	Proposed addition cost	Total cost after expansion	Operation & Maintenance cost
	Equipment and Chemicals and Furniture and computer systems etc						
13	Rain Water Harvesting and Recharge system with Roof Harvesting and Rain Water Collection Tank	1 (Pond)+ 6 Nos. RWH str.	0.40	11	0.11	0.51	0.015
14	Noise Reduction enclosure/ anti vibration pad and development of Noise barrier along boundary wall towards ENE direction, etc.		0.05		0.40	0.45	0.0030
16	Solar Power System	-	-	-	0.80	0.80	0.02
17	CER works for improvement of surrounding Environment	-	-	-	-	0.50	-
	Total Expenses in Crores Rs.		**16.43**		**4.43**	**21.36**	**0.33**

43.3.16 Green belt has already been developed in 2.938 ha area which is about 33% of the total project area of 8.903 ha with total sapling of 7450 Trees. The existing plantation are physically verified and certified by Rtd. Dy. CF (SFS) Consultant (Environment & Forest) Raipur vide letter no. RPR/18/2023 dtd. 18.08.2023.

43.3.17 It is reported that there is no violation under EIA, 2006/court case/show cause/direction related to the project under consideration.

Certified Compliance Report from SPCB:

43.3.18 The status of the compliance of earlier EC was obtained from the Integrated Regional Office (IRO), Raipur vide letter no. EC-792/RON/2018/1364 dtd. 24.04.2023 (Site inspection conducted on March 16, 2023) in the name of M/s. Niros Ispat Private Limited. The action taken report regarding the partially/non-complied condition was submitted to IRO, Raipur. Action Taken Report dated on dt. 26.04.2023. MoEFCC (IRO, Raipur) evaluated the same and has issued letter dated EC-792/RON/2018/1371 dtd. 01.05.2023. In response to which we have further submitted our compliance completion letter vide ref no HSPL/2023-24/044'; dt. May 5, 2023 as per which all the pending compliance have also been complied. The details of the

observations made by IRO, Raipur in the report dated 17.03.2023 along with its present status as furnished by the project proponent is given as below:

Sl.	Non-Compliance details	Observation of RO (abridged)	EC Condition no.			Re-assessment by IRO, MoEFCC / Response by PP
			EC date	Specific	General	
1	Specific Condition - I.	Project authorities are directed to construct the ETP as per the stipulated condition and submit latest Effluent monitoring reports to this office.	10.08.2016	Specific Condition - I.	-	It was informed by PP that they have installed Neutralization -Pit cum ETP of 50 KLD capacity at power plant division and treated water is being recycled in the plant for various uses. PP has submitted water flow chart for closed circuit cooling system to this office and PP informed that Sponge Iron and MS Billet and Not Charging Rerolled Steel production, the water is required for cooling purpose for which closed circuit cooling system is adopted. PP has submitted Effluent Monitoring reports to this office. The same was analyzed and the parameters were found within prescribed limits.
2	Specific Condition – II	PP didn't submit Effluent Monitoring reports to his office, in addition to that PA has been asked to construct the EPT as per the stipulated condition (i) and install the PTZ camera to ensue zero liquid condition except the during monsoon season and ATR of the same shall be submitted to this office	10.08.2016	Specific Condition – II	-	PP has submitted Effluent monitoring reports to this office. The same was analyzed and the parameters were found within prescribed limits. It was informed by PP that they have installed Neutralization -Pit cum ETP of 50 KLD capacity at power plant division and treated water is being recycled in the plant for slag quenching and such other uses. PP has submitted water flow chart for closed circuit cooling system to this office and PP informed that Sponge Iron and MS Billet and Hot Charging Rerolled Steel production, the water is required for cooling purpose for which closed circuit cooling system is adopted.

Sl.	Non-Compliance details	Observation of RO (abridged)	EC Condition no.			Re-assessment by IRO, MoEFCC / Response by PP
			EC date	Specific	General	
						It was informed by PP that they have ordered the PTZ camera and will be implemented by September 2023. PP has submitted Purchase order copy of PTZ camera to this office.
3	Specific Condition IV	Project authorities are directed to expedite the process install Closed cycle cooling system as per the stipulated condition and ATR in this regard shall be submitted to this office.	10.08.2016	Specific Condition IV	-	PP has submitted water flow chart for closed circuit cooling system to this office and PP informed that the closed-circuit cooling system has been implemented.
4	Specific Condition V &VI	Project authorities are directed to submit latest Stack Emission Monitoring reports to this office.	10.08.2016	Specific Condition V &VI	-	It was informed by PP that they have installed on line stack monitoring system attached to CPCB and CECB Server. PP has submitted Stack Emission Monitoring reports this office. The same was analyzed and the parameters were found within prescribed limits.
5	Specific Condition-VIII & XIV	On the day of monitoring, it has been observed that fugitive emissions were observed at sponge iron unit, coal handling area. In addition to that Coal dust was accumulated in drains. PA has been asked to take the corrective measures to control the fugitive emissions	10.08.2016	Specific Condition-VIII & XIV	-	It was informed by PP that the on the day of monitoring there was speedy wind flow occurred with un forecasted rain due low-pressure system developed. PP assured to improve the fugitive dust control system and informed that they have provided additional sprinklers in coal handling and raw material handling area and roads. It was informed by PP that they have also provided mechanical sweeping machine

Sl.	Non-Compliance details	Observation of RO (abridged)	EC Condition no.			Re-assessment by IRO, MoEFCC / Response by PP
			EC date	Specific	General	
		and drains shale regularly cleaned and maintained				
6	Specific Condition – XXI	Project authorities are directed to submit the same as per the stipulated condition to this office.	10.08.2016	Specific Condition – XXI	-	It was informed by PP that they have installed 6 nos. of Recharge well structure and entire Roof Water & surface water Inlet joins to the Recharge Pond/ Recharge well/ Recharge Pit. PP has submitted the details of Rain Water Harvesting structures to this office.
7	Specific Condition - XXVIII	Project authorities are directed to submit the comprehensive details of employment generated in the local areas as per the stipulated condition to this office.	10.08.2016	Specific Condition - XXVIII	-	It was informed by PP that local people are being preferred in employment and 449 out of 536 are local, thus approx. 84% employees are local. PP has submitted the details of employees to this office.
8	Specific Condition – XXXII.	Project authorities are directed to submit financial closure and final approval of the project to this office.	10.08.2016	Specific Condition – XXXII.	-	PP submitted that the financial closure of the existing industry has been completed on 30.06.2019.
9	(Public hearing and Human health issues - III).	Project authorities are directed to expedite the process and submit the analysis repott to this office	-	-	-	PP has submitted the summary and sample of occupation health checking analysis to this office.

Written submission by the PP:

43.3.19 During the meeting, based on the deliberations made by the EAC, the project proponent vide letter dated 04.09.2023 through email dated 04.09.2023 submitted the following information:

Sl. No.	Observation by EAC	Reply by PP and Consultant
1	a) Water Quality specially BOD-COD information b) Inclusion of Iron Ore Pellets along with iron ore in raw material.	• Surface water quality evaluation was carried at 4 four different locations within study area and the results are given in ElA-EMP report in Ch. 3, Table 3.4.3 on Pg. no. 3-23. It is observed that CoD ranges from 12.59 - 22.64 mg/I and BOD ranges from 3.82 - 7.24 mg/1). • As desired by the EAC PP herewith has submitted revised brief note with incorporation of COD & BOD range. PP has also mentioned Iron Ore/Iron Ore Pellets and its source in raw material section of Sponge Iron Plant. Revised brief summary is submitted.
2	Clarification regarding RO Permeate and reject.	• Permeate 75% and Reject 25% shall be maintained through Disc Type Reverse Osmosis (DTRO). DT membrane technology is the disc tube membrane technology, divided into DTRO (Disc Tube Reverse Osmosis Membrane Module) and D T F (Disc Tube Nano Filtration Membrane Module). • The filter membrane consists of two concentric annular reverse osmosis membranes with a layer of filiform scaffold in between, allowing the purified water passing through the membrane to flow quickly to the outlet. • Industrial waste water generation will be 27.5 KLD which will be treated in ETP (Cap. 50 KLD). ETP treated will be 25 KLD. Out of which 15 KLD will be sent to DTRO Plant for further treatment and finally 1 KLD permeate water will be generated and used in process as recycle water. Whereas, 04 KLD Reject water from DTRO Plant and 10 KLD ETP treated (i.e 14 KLD) will be used for Dust suppression and Ash/Slag quenching. Water balance diagram is submitted. Zero discharge will be maintained.

Deliberations by the Committee

43.3.20 The Committee noted the following:

1. The instant proposal is for enhancement of production of Sponge Iron (97,500 TPA to 140,000 TPA); Mild Steel Billet (90,000 TPA to 192,500 TPA); Rerolled Steel Products (90,000 TPA to 180000 TPA) (through Hot Charging 90,000 TPA to 126000 TPA and through Reheating Furnace 54,000 TPA); and Pipe Mill 175000 TPA (New addition).

2. The existing project was initially accorded Consent to establish cum operate by the CECB vide letter no. 489/TS/W/PNB/DURG dt. 12/07/2001 for its Sponge Iron Plant (1x25 TPD DRI Kiln) Capacity – 7,500 TPA. Environmental clearance for setting up additional induction furnaces to increase the (capacity from 30000 TPA to 90000 TPA and 90000 TPA Rolling mill based on 8750 m^3/hr Coal gasifier.) was granted by SEIAA, Chhattisgarh vide lr. No. 791/SEIAA/CG/EC/ROLLING/DURG/1696 dated 10.08.2016. Company has

obtained combined CTO and renewed Consent from CECB vide Board letter no. 611/TS/CECB/2021 Raipur, dated: 25/05/2021 which is valid till 31/05/2024.

3. The EAC, constituted under the provision of the EIA Notification, 2006 comprising Expert Members/domain experts in various fields, examined the proposal submitted by the Project Proponent in desired format along with EIA/EMP reports prepared and submitted by the Consultant accredited by the QCI/ NABET on behalf of the Project Proponent.

4. The EAC noted that the Project Proponent has given an undertaking that the data and information given in the application and enclosures are true to the best of his knowledge and belief and no information has been suppressed in the EIA/EMP reports. If any part of data/information submitted is found to be false/ misleading at any stage, the project will be rejected and Environmental Clearance given, if any, will be revoked at the risk and cost of the project proponent.

5. The Committee noted that the EIA reports are in compliance of the ToR issued for the project, reflecting the present environmental status and the projected scenario for all the environmental components. The Committee deliberated on the proposed mitigation measure towards Air, Water, Noise and Soil pollutions. The Committee suggested that the storage of toxic/explosive raw materials/products shall be undertaken with utmost precautions and following the safety norms and best practices.

6. The total project area is 8.903 Ha (Private land). The said land is developed by Industries Department of CG Govt., which is acquired by the company through lease deed. Free hold already diverted for industrial use. The expansion is proposed land in existing industrial land and no additional land proposed to be acquired.

7. The nearest habitations are Akrodih Village at a distance of 0.2 km in ENE direction and Jarway Bhilai at 1.5 km in NE direction of the project site. The EAC is of the opinion that PP shall strictly implement the environmental safeguard measures proposed to minimise the impact on the habitation of the locals.

8. Gaon Talab (0.6 km, WSW), Randhawa Talab (0.9 km, WSW) and other water bodies such has reservoir and ponds exists within the study area of the project site. The EAC is of the opinion that water bodies shall not be disturbed. Mitigation measures w.r.t. safeguarding the water bodies shall be implemented.

9. The water requirement for the project is estimated as 295 m^3/day, which is sourced from the ground water. The water requirement of proposed expansion project is estimated 546 m^3/day (295 m^3/day existing + 251 proposed m^3/day), out of which total 546 m^3/day will be met from the ground water. The EAC deliberated on the water requirement and source and is of the opinion that PP shall also explore the possibility to switch to alternate source of water to reduce its dependency on ground water.

10. The Committee has deliberated on the baseline data and incremental GLC due to the proposed project and is of the opinion that PP shall strictly implement the mitigation measures as per the submitted action plans to minimise the pollution.

11. The PP has submitted that existing green belt has already been developed in 2.938 ha area which is about 33% of the total project area of 8.903 ha with total sapling of 7450 Trees.

The existing plantation are physically verified and certified by Rtd. Dy. CF (SFS) Consultant (Environment & Forest) Raipur vide letter no. RPR/18/2023 dtd. 18.08.2023. The EAC deliberated on the existing greenbelt and found it satisfactory.

12. The committee deliberated details of carbon foot prints and carbon sequestration study w.r.t. proposed project and found them to be satisfactory.
13. The Committee also deliberated on the public hearing issues along with revised action plan submitted by the proponent to address the issues raised during the public hearing and found it satisfactory.
14. The Committee also deliberated the CCR of IRO, MoEFCC along with the ATR and review report of IRO and is of the opinion that PP shall strictly comply with the conditions as per the submitted ATR.
15. The EAC also deliberated on the submitted written submission of project proponent and found it satisfactory.
16. The EAC deliberated on the proposal with due diligence in the process as notified under the provisions of the EIA Notification, 2006, as amended from time to time and accordingly made the recommendations to the proposal. The Experts Members of the EAC found the proposal in order and recommended for grant of environmental clearance.
17. The environmental clearance recommended to the project/activity is strictly under the provisions of the EIA Notification 2006 and its subsequent amendments. It does not tantamount/construe to approvals/consent/permissions etc. required to be obtained or standards/conditions to be followed under any other Acts/ Rules/ Subordinate legislations, etc., as may be applicable to the project. The project proponent shall obtain necessary permission as mandated under the Water (Prevention and Control of Pollution) Act, 1974 and the Air (Prevention and Control of Pollution) Act, 1981, as applicable from time to time, from the State Pollution Control Board, prior to construction & operation of the project.
18. The EAC also reviewed the EC conditions (specific and general) pertaining to Industry-I projects and observed that some of the specific conditions stipulated so far in the previously recommended EC projects are common and applicable to most of the projects in general. In view of the same, the General Conditions (in case of EC projects) have been revised through reallocation of these common conditions from specific to General Conditions (in case of EC projects). Accordingly, the instant project is also being stipulated with the modified General conditions.

Recommendations of the Committee:

43.3.21 In view of the foregoing and after detailed deliberations, the committee **recommended** the instant proposal for grant of Environment Clearance **subject to uploading the written submission on portal** under the provisions of EIA Notification, 2006 subject to the stipulation of following specific conditions and general conditions as per the Ministry's Office Memorandum No. 22-34/2018-III dated 9/8/2018 based on project specific requirements:

A. Specific Condition:

i. The project proponent shall comply with all the environmental protection measures and safeguards proposed in the documents submitted to the Ministry. All the recommendations made in the EIA/EMP in respect of environmental management, and risk mitigation measures relating to the project shall be implemented.

ii. The project proponent shall utilize modern technologies for capturing of carbon emitted and shall also develop carbon sink/carbon sequestration resources capable of capturing more than emitted. The implementation report shall be submitted to the IRO, MoEF&CC in this regard.

iii. The nearest habitations are Akrodih Village at a distance of 0.2 km in ENE direction and Jarway Bhilai at 1.5 km in NE direction of the project site. Proponent shall take appropriate environmental safeguard measures to minimise the impact on the habitation of the locals. PP needs to strengthen green belt all around the plant area to reduce the dust pollution. The PP shall also include these locations in its environmental monitoring programme.

iv. Gaon Talab (0.6 km, WSW), Randhawa Talab (0.9 km, WSW) and other water bodies such has reservoir and ponds exists within the study area of the project site. A robust and full proof Drainage Conservation scheme to protect the natural drainage and its flow parameters; along with Soil conservation scheme and multiple Erosion control measures shall be implemented.

v. The water requirement after expansion of 546 m^3/day as proposed to be obtained from ground water only after obtaining necessary permission from the Competent Authority. PP shall also explore the possibility to switch to alternate source of water to reduce its dependency on ground water.

vi. Three tier Green Belt shall be developed in at least 33% of the project area in a period of 1 year all along the project site of adequate width and tree density shall not be less than 2500 per ha. Survival rate of green belt developed shall be monitored on periodic basis to ensure that damaged plants are replaced with new plants in the subsequent years. PP shall also develop greenbelt in the form of shelter belt comprising of total of 6 rows of 2x2 m plantation with tall trees & broad leaves with thick canopy along with windshield inside the plant premises to act as green barrier for air pollution & noise levels towards Akrodih Village. Compliance status in this regard, shall be submitted to concerned Regional Office of the MoEF&CC.

vii. All the commitments made towards socio-economic development of the nearby villages shall be satisfactorily implemented. The action plan based on the social impact assessment study of the project as per the EMP in accordance to the Ministry's OM dated 30.09.2020 amounting to Rs. 0.5 Crores shall be strictly implemented and progress shall be submitted to the Regional Office of MoEF&CC.

viii. The PP shall undertake village adoption programme, prepare and implement the action plan to develop them into model villages.

B. General Conditions

I. Statutory compliance:

i. The Environment Clearance (EC) granted to the project/ activity is strictly under the provisions of the EIA Notification, 2006 and its amendments issued from time to time. It does not tantamount/ construe to approvals/ consent/ permissions etc., required to be

obtained or standards/conditions to be followed under any other Acts/Rules/Subordinate legislations, etc., as may be applicable to the project.

ii. This Environmental clearance is granted subject to final outcome of Hon'ble Supreme Court of India, Hon'ble High Court, Hon'ble NGT and any other Court of Law, if any, as may be applicable to this project.

II. Air quality monitoring and preservation

i. The project proponent shall install 24x7 continuous emission monitoring system at process stacks to monitor stack emission as well as 04 Nos. Continuous Ambient Air Quality Station (CAAQMS) for monitoring AAQ parameters with respect to standards prescribed in Environment (Protection) Rules 1986 as amended from time to time. The CEMS and CAAQMS shall be connected to SPCB and CPCB online servers and calibrate these systems from time to time according to equipment supplier specification through labs recognized under Environment (Protection) Act, 1986 or NABL accredited laboratories.

ii. The project proponent shall carryout Continuous Ambient Air Quality monitoring for common/criterion parameters relevant to the main pollutants released (e.g. PM_{10} and $PM_{2.5}$ in reference to PM emission, and SO_2 and NOx in reference to SO_2 and NOx emissions) within and outside the plant area (at least at four locations one within and three outside the plant area at an angle of 120° each), covering upwind and downwind directions.

iii. The project proponent shall monitor fugitive emissions in the plant premises at least once in every quarter through laboratories recognized under Environment (Protection) Act, 1986 or NABL accredited laboratories.

iv. Sampling facility at process stacks shall be provided as per CPCB guidelines for manual monitoring of emissions.

v. Appropriate Air Pollution Control (APC) system shall be provided for all the dust generating points including fugitive dust from all vulnerable sources, so as to comply prescribed stack emission and fugitive emission standards.

vi. The project proponent shall provide leakage detection and mechanized bag cleaning facilities for better maintenance of bags.

vii. Sufficient number of mobile or stationery vacuum cleaners shall be provided to clean plant roads, shop floors, roofs, regularly.

viii. Ensure covered transportation and conveying of raw material to prevent spillage and dust generation. The project proponent use leak proof trucks/dumpers carrying coal and other raw materials and cover them with tarpaulin.

ix. Recycle and reuse iron ore fines, coal and coke fines, lime fines and such other fines collected in the pollution control devices and vacuum cleaning devices in the process after briquetting/ agglomeration.

x. The project proponent shall provide primary and secondary fume extraction system at all heat treatment furnaces.

xi. Wind shelter fence and chemical spraying shall be provided on the raw material stock piles.

xii. Design the ventilation system for adequate air changes as per prevailing norms for all tunnels, motor houses, Oil Cellars.

xiii. Pollution control system in the plant shall be provided as per the CREP Guidelines of CPCB.

xiv. The project proponent shall adopt the Clean Air practices like mechanical collectors, wet scrubbers, fabric filters (bag houses), electrostatic precipitators, combustion systems (thermal oxidizers), condensers, absorbers, adsorbers, and biological degradation. Controlling emissions related to transportation shall include emission controls on vehicles as well as use of cleaner fuels. Sufficient numbers of additional truck mounted Fog/Mist water cannons shall be procured and operated regularly inside the project premises and also in the surrounding villages to arrest suspended dust in the atmosphere.

xv. Bag filters shall be cleaned regularly and efficiency of bag filter system shall be monitored at regular intervals.

xvi. Water Sprinklers/Water mist system shall be installed near raw material yards, operational units and other strategic locations to control fugitive emissions from the plant.

xvii. The particulate matter emissions from the process stacks shall be less than 30 mg/Nm^3 and measures shall be undertaken as per the submitted action plan. Efficient Air monitoring equipment shall be installed.

xviii. Following additional arrangements to control fugitive dust shall be provided:

a. Fog / Mist Sprinklers at all on bulk raw material storage area (at the transfer points) like Iron Ore, Coal and for Fly Ash and similar solid waste storage areas.
b. Proper covered vehicle shall be used while transport of materials.
c. Wheel washing mechanism shall be provided in entry and exit gates with complete recirculation system.

xix. Online stack monitoring system for IF and RHF shall be installed and monitoring report shall be submitted to the concerned Regional Office of the MoEF&CC along with the six monthly compliance report.

xx. Low NOx Burners will be installed at Reheating Furnace for control of Gaseous emissions generated while using PNG.

xxi. Sensors for detection of CO, with alarms, must be installed at suitable locations inside the Plant.

III. Water quality monitoring and preservation

i. The project proponent shall install 24x7 continuous effluent monitoring system with respect to standards prescribed in Environment (Protection) Rules 1986 as amended from time to time and connected to SPCB and CPCB online servers and calibrate these system from time to time according to equipment supplier specification through labs recognized under Environment (Protection) Act, 1986 or NABL accredited laboratories.

ii. The project proponent shall monitor regularly ground water quality at least twice a year (pre- and post-monsoon) at sufficient numbers of piezometers/sampling wells in the plant and adjacent areas through labs recognized under Environment (Protection) Act, 1986 and NABL accredited laboratories.

iii. Garland drains and collection pits shall be provided for each stock pile to arrest the run-off in the event of heavy rains and to check the water pollution due to surface run off.

iv. Water meters shall be provided at the inlet to all unit processes in the plants.

v. The project proponent shall make efforts to minimise water consumption in the plant complex by segregation of used water, practicing cascade use and by recycling treated water.
vi. The proposed project shall be designed as "Zero Liquid Discharge" Plant. ETP shall be installed and there shall be no discharge of effluent from the plant. Domestic effluent shall be treated in Sewage Treatment Plant. Suitable measures shall be adopted for sewage water handling to ensure no contamination of any kind of water body.
vii. All stockyards shall have impervious flooring and shall be equipped with water spray system for dust suppression. Stock yards shall also have garland drains and catch pits to trap the run off material and shall be implemented as per the action plan submitted in EIA/EMP report.
viii. Rain water harvesting shall be implemented to recharge/harvest water as per the action plan submitted in the EIA/EMP report.
ix. The project proponent should explore the cause of pollution in the drain in Akordih and implement an action plan to control it, as the issue rasied in the Public Hearing.
x. The project proponent shall provide the ETP for effluents of rolling mills to meet the standards prescribed in G.S.R 277 (E) 31st March 2012 (applicable to IF/EAF) as amended from time to time.

IV. Noise monitoring and prevention

i. Noise pollution shall be monitored as per the prescribed Noise Pollution (Regulation and Control) Rules, 2000 and amendments thereof, and report in this regard shall be submitted to Regional Officer of the Ministry as a part of six-monthly compliance report.
ii. The ambient noise levels should conform to the standards prescribed under E(P)A Rules, 1986 viz. 75 dB(A) during day time and 70 dB(A) during night time.

V. Energy Conservation measures

i. Provide solar power generation on roof tops of buildings, for solar light system for all common areas, street lights, parking around project area and maintain the same regularly;
ii. Provide LED lights in their offices and residential areas.
iii. The project proponent shall provide waste heat recovery system (pre-heating of combustion air) at the flue gases of reheating furnaces.
iv. Practice hot charging of slabs and billets/blooms as far as possible.
v. Ensure installation of regenerative type burners on all reheating furnaces.
vi. The project proponent shall provide waste heat recovery system on the DRI Kilns.
vii. The dolochar generated shall be used for power generation.
viii. Tar shall be recovered from producer gas and shall be sold to registered processors and phenolic water shall be incinerated in After Burn Chamber (ABC) of DRI kilns.
ix. The PP shall implement the guidelines on sponge iron plants issued by the CPCB/SPCB in this regard.

VI. Waste management

i. Oil Collection pits shall be provided in oil cellars to collect and reuse/recycle spilled oil.
ii. Kitchen waste shall be composted or converted to biogas for further use.

iii. 100% utilization of fly ash shall be ensured. All the fly ash shall be provided to cement and brick manufacturers for further utilization and Memorandum of Understanding in this regard shall be submitted to the Ministry's Regional Office.

iv. The Plastic Waste Management Rules 2016, inter-alia, mandated banning of identified Single Use Plastic (SUP) items with effect from 01/07/2022. In this regard, CPCB has issued a direction to all the State Pollution Control Boards (SPCBs)/Pollution Control Committees (PCCs) on 30/06/2022 to ensure the compliance of Notification published by Ministry on 12/08/2021. The technical guidelines issued by the CPCB in this regard is available at https://cpcb.nic.in/technical-guidelines-3/. All the project proponents are hereby requested to sensitize and create awareness among people working within the Project area as well as its surrounding area on the ban of SUP in order to ensure the compliance of Notification published by this Ministry on 12/08/2021. A report, along with photographs, on the measures taken shall also be included in the six monthly compliance report being submitted by the project proponents.

v. A proper action plan must be implemented to dispose of the electronic waste generated in the industry.

vi. Solid waste utilization
   a. PP shall install a slag crusher to convert steel slag into aggregate for use in construction industry, fine sand for use as flux in steel plant, sand in brick making and as lime in cement making.
   b. PP shall recycle/reuse solid waste generated in the plant as far as possible.
   c. Used refractories shall be recycled as far as possible.

VII. Green Belt

i. The project proponent shall prepare GHG emissions inventory for the plant and shall submit the programme for reduction of the same including carbon sequestration by trees.

ii. Project proponent shall submit a study report on Decarbonisation program, which would essentially consist of company's carbon emissions, carbon budgeting/ balancing, carbon sequestration activities and carbon capture, use and storage and offsetting strategies. Further, the report shall also contain time bound action plan to reduce its carbon intensity of its operations and supply chains, energy transition pathway from fossil fuels to Renewable energy etc. All these activities/ assessments should be measurable and monitor able with defined time frames.

iii. The industry should draw up and implement and action plan for achieving carbon neutrality consistent with India's commitment to achieving carbon neutrality. The action plan should contain milestones with targets to be achieved in suitable periods.

iv. Greening and Paving shall be implemented in the plant area to arrest soil erosion and dust pollution from exposed soil surface.

VIII. Public hearing and Human health issues

i. Emergency preparedness plan based on the Hazard identification and Risk Assessment (HIRA) and Disaster Management Plan shall be implemented.

ii. The project proponent shall carry out heat stress analysis for the workmen who work in high temperature work zone and provide Personal Protection Equipment (PPE) as per the norms.

iii. Provision shall be made for the housing of construction labour within the site with all necessary infrastructure and facilities such as fuel for cooking, mobile toilets, mobile STP. Safe drinking water, medical health care, creche etc. The housing may be in the form of temporary structures to be removed after the completion of the project.

iv. Occupational health surveillance of the workers shall be done on a regular basis and records maintained.

IX. Environment Management

i. The project proponent shall comply with the provisions contained in this Ministry's OM vide F.No. 22-65/2017-IA.III dated 30/09/2020. As part of Corporate Environment Responsibility (CER) activity, company shall adopt nearby villages based on the socio-economic survey and undertake community developmental activities in consultation with the village Panchayat and the District Administration as committed.

ii. The company shall have a well laid down environmental policy duly approve by the Board of Directors. The environmental policy should prescribe for standard operating procedures to have proper checks and balances and to bring into focus any infringements/deviation/violation of the environmental / forest / wildlife norms / conditions. The company shall have defined system of reporting infringements / deviation / violation of the environmental / forest / wildlife norms / conditions and / or shareholders / stake holders. The copy of the board resolution in this regard shall be submitted to the MoEF&CC as a part of six-monthly report.

iii. A separate Environmental Cell both at the project and company head quarter level, with qualified personnel shall be set up under the control of senior Executive, who will directly to the head of the organization.

iv. Performance test shall be conducted on all pollution control systems every year and report shall be submitted to Integrated Regional Office of the MoEF&CC.

X. Miscellaneous

i. The project proponent shall make public the environmental clearance granted for their project along with the environmental conditions and safeguards at their cost by prominently advertising it at least in two local newspapers of the District or State, of which one shall be in the vernacular language within seven days and in addition this shall also be displayed in the project proponent's website permanently.

ii. The copies of the environmental clearance shall be submitted by the project proponents to the Heads of local bodies, Panchayats and Municipal Bodies in addition to the relevant offices of the Government who in turn has to display the same for 30 days from the date of receipt.

iii. The project proponent shall upload the status of compliance of the stipulated environment clearance conditions, including results of monitored data on their website and update the same on half-yearly basis.

iv. The project proponent shall monitor the criteria pollutants level namely; PM10, SO2, NOx (ambient levels as well as stack emissions) or critical sectoral parameters, indicated for the

projects and display the same at a convenient location for disclosure to the public and put on the website of the company.

v. Action plan for developing connecting and internal road in terms of MSA as per IRC guidelines shall be implemented

vi. The project proponent shall submit six-monthly reports on the status of the compliance of the stipulated environmental conditions on the website of the ministry of Environment, Forest and Climate Change at environment clearance portal.

vii. The project proponent shall submit the environmental statement for each financial year in Form-V to the concerned State Pollution Control Board as prescribed under the Environment (Protection) Rules, 1986, as amended subsequently and put on the website of the company.

viii. The project proponent shall inform the Regional Office as well as the Ministry, the date of financial closure and final approval of the project by the concerned authorities, commencing the land development work and start of production operation by the project.

ix. The project proponent shall abide by all the commitments and recommendations made in the EIA/EMP report, commitment made during Public Hearing and also that during their presentation to the Expert Appraisal Committee.

x. The recommendations of the approved Site-Specific Wildlife Management Plan (in case of involvement of Schedule-I species) shall be implemented in consultation with the State Forest Department. The implementation report shall be furnished along with the six-monthly compliance report to the concerned Regional Office of the MoEF&CC.

xi. The PP shall put all the environment related expenditure, expenditure related to Action Plan on the PH issues, and other commitments made in the EIA/EMP Report etc. in the company web site for the information to public/public domain. The PP shall also put the information on the left over funds allocated to EMP and PH as committed in the earlier ECs and shall be carried out and spent in next three years, in the company web site for the information to public/public domain.

xii. No further expansion or modifications in the plant shall be carried out without prior approval of the Ministry of Environment, Forests and Climate Change (MoEF&CC).

xiii. Concealing factual data or submission of false/fabricated data may result in revocation of this environmental clearance and attract action under the provisions of Environment (Protection) Act, 1986.

xiv. The Ministry may revoke or suspend the clearance, if implementation of any of the above conditions is not satisfactory.

xv. The Ministry reserves the right to stipulate additional conditions if found necessary. The Company in a time bound manner shall implement these conditions.

xvi. The Regional Office of this Ministry shall monitor compliance of the stipulated conditions. The project authorities should extend full cooperation to the officer (s) of the Regional Office by furnishing the requisite data / information/monitoring reports.

xvii. Any appeal against this EC shall lie with the National Green Tribunal, if preferred, within a period of 30 days as prescribed under Section 16 of the National Green Tribunal Act, 2010.

****

Agenda No. 43.4

43.4 Existing Rolling Mill having capacity of M.S. CTD/TMT/Flat/Square & Round Bars of 167.0 TPD, Re-Heating Furnace having capacity of 7.50 Ton/Hr" by M/s Shree Balaji Rolling Mills, located at Plot No. SP-1192 H-A, RIICO Industrial Area, Bhiwadi, Alwar, Rajasthan- Consideration of Environmental Clearance as per provisions of Notification dated 20.07.2022 [Rolling Mills].

[Proposal No.: IA/RJ/IND1/436176/2023; File No.: IA-J-11011/209/2022-IA-II(IND-I)]
[Consultant: Enkay Enviro Services Pvt. Ltd.; Valid upto: 12.12.2023]

43.4.1 Shree Balaji Rolling Mills has made an application online vide proposal no. IA/RJ/IND1/436176/2023 dated 02.08.2023 along with copy of EIA report, Forms (Part A, B and C) and certified compliance report seeking Environment Clearance (EC) under the provisions of the EIA Notification, 2006 for the project mentioned above. The proposed project activity is listed at S. No. 3(a) Metallurgical Industries (ferrous & non-ferrous) under Category "A" of the schedule of the EIA Notification, 2006 and attracts general condition due to Inter-state boundary of Rajasthan & Haryana lies at a distance 2.11 Km, NNE and project lies in critically polluted area (CPA) and therefore, being appraised at Central Level.

43.4.2 Name of the EIA consultant: M/s. Enkay Enviro Services Pvt. Ltd. [List of ACOs with their Certificate / Extension Letter no. NABET/EIA/2023/RA 0183; valid upto 12.12.2023, as on September 6, 2023].

Details submitted by Project proponent

43.4.3 The details of the ToR are furnished as below:

Date of Application	Consideration	Details	Date of Accord	ToR Validity
16.06.2022	Standard Terms of Reference	Terms of Reference	19.08.2022	18.08.2026

43.4.4 The project of M/s Shree Balaji Rolling Mills located in RIICO Industrial Area, Bhiwadi, Tehsil-Tijara, District-Alwar, Rajasthan. is for Regularization of the existing Rolling Mill having capacity of M.S. CTD/TMT/Flat/Square & Round Bars of 167.0 TPD, Re-Heating Furnace with LSHS fired having capacity of 7.5 Ton/hr as per the provisions under EIA Notification No. S. O. 3250 (E) dated 20th July 2022.

43.4.5 Environmental Site Settings:

S. No.	Particulars	Details	Remarks
1.	Total land	Total plot Area is 4,000 Sq.m. (0.4Ha) -RIICO Industrial land.	Industrial land. There is no change is land use.

	S.No.	Land Use	Area (Sq.m)			Percentage (%)
			Existing Area	Proposed Area	Total area	

<table>
<tr><th>S. No.</th><th>Particulars</th><th colspan="4">Details</th><th>Remarks</th></tr>
<tr><td></td><td>1.</td><td>Plant Area</td><td>2618</td><td>None</td><td>2618</td><td>65.45</td></tr>
<tr><td></td><td>2.</td><td>Paved Area (Road, Corridor,)</td><td>1128</td><td>none</td><td>1128</td><td>28.20</td></tr>
<tr><td></td><td>3.</td><td>Plantation Area</td><td>254</td><td>None</td><td>254</td><td>6.35</td></tr>
<tr><td></td><td>4.</td><td>Open area</td><td>None</td><td>None</td><td>none</td><td>0.0</td></tr>
<tr><td></td><td></td><td>Total</td><td>4000.00</td><td>--</td><td>4000.00</td><td>100.0</td></tr>
<tr><td></td><td colspan="6">Note*: *Note: As per suggested by Hon’ble EAC , plantation development @2500/ha.is considered:-
The total area required for the 40% plantation is 0.16 Ha. (1000 Nos. Plants) Out of which:
❖ The existing plantation area inside the premises is 254Sq.m (0.0254 Ha.) (6.35% & 155 Plants) & proposed Plantation in Container (1.5 ft x1.5ft) of 14 numbers will be developed as Green area.
❖ The deficit green area 33.65 %(1346 Sq.m (0.1346 Ha. @57 plants.) area is already planted in the RIICO Park at a distance of 0.84 km toward NW direction from the project site vide letter no. U(5)I/2022-23/3057 dated 14.09.2022. at near Ajanta Chowk I/A Bhiwadi. Rest 496 No. of Plants are proposed to be planted.
❖ Avenue plantation on approach road one side 1605 Sq.m. @178 plants is proposed.</td></tr>
<tr><td>2.</td><td>Land acquisition details as per MoEF&CC O.M. dated 7/10/2014</td><td colspan="4">Not Applicable as land is already converted for industrial use by RIICO. (RIICO Industrial Area)</td><td>Existing project is already situated RIICO Industrial Area, Bhiwadi.</td></tr>
<tr><td>3.</td><td>Existence of habitation & involvement of R&R, if any.</td><td colspan="4">Project site: RIICO Industrial Area, Kaharani
<table><tr><th>Habitation</th><th>Distance(km)</th><th>Direction</th></tr><tr><td colspan="3">Not Applicable as this is industrial land and project is already existing.</td></tr></table>Status of R&R :Not applicable</td><td>Status of R&R: Not applicable as land is already converted for industrial use. (RIICO Industrial Area) there is no habitation in the existing area, therefore rehabilitation & resettlement plan is not required/ applicable.</td></tr>
<tr><td>4.</td><td>Latitude and Longitude of all corners of the Project site.</td><td colspan="4"><table><tr><th>Pillar</th><th>Latitude</th><th>Longitude</th></tr><tr><td>A.</td><td>28°11'30.61"N</td><td>76°51'21.28"E</td></tr><tr><td>B.</td><td>28°11'31.98"N</td><td>76°51'21.28"E</td></tr><tr><td>C.</td><td>28°11'31.82"N</td><td>76°51'25.11"E</td></tr><tr><td>D.</td><td>28°11'30.53"N</td><td>76°51'25.13"E</td></tr></table></td><td>--</td></tr>
<tr><td>5.</td><td>Elevation of the project site</td><td colspan="4">The Highest elevation– 273 MSL; Lowest elevation– 270MSL.</td><td>--</td></tr>
<tr><td>6.</td><td>Involvement of Forest land if any.</td><td colspan="4">The proposed project does not involved/fall in any forest land.</td><td>The land lies in RIICO Industrial area.</td></tr>
<tr><td>7.</td><td>Water body (Rivers,Lakes, Pond,Nala,Natural Drainage,Canal etc.) exists within the project site as well as study area</td><td colspan="4">Project site: No natural water bodies exist within the project site.
Study Area:<table><tr><th>S. No.</th><th>Particulars</th><th>Distance (Km)
(From Project Boundary)</th><th>Direction</th></tr></table></td><td>--</td></tr>
</table>

S. No.	Particulars	Details	Remarks

Water Bodies			
1.	Sare Khurd Nala (non perennial)	5.56	SE
2.	Indori Nala(non perennial)	5.76	E
3.	Pond N/V Sare Khurd	9.57	SE
4.	Sahibi River(non perennial)	10.12	W

8.	Existence of ESZ/ ESA/ national park/wildlife sanctuary/biosphere reserve/tiger reserve/ elephant reserve etc. if any within the study area	Nil	

S. No.	Distance (Km)	Direction
	(From Project Boundary)	
1.	Gondhan Protected Forest	1.13	S
2.	Banvan Protected Forest	3.56	SSE
3.	Rangala Reserved Forest	3.59	NNE
4.	Chaupanki Protected Forest	6.08	SE
5.	Sarekalan Protected Forest	7.49	SE
6.	Indaur Reserved Forest	8.33	SSE
7.	Khorikalan Protected Forest	7.39	S
8.	Guwalda Protected Forest	9.14	S

43.4.6 The existing project was initially accorded Consent to Establish vide letter no. F(Tech)/Alwar(Tijara)/5024(1)/2017-2018/394-395 dated 12.10.2017. The proposal is applied first time for obtaining Environmental Clearance as previously the project of Rolling Mill was not covered under the purview of Environmental Clearance under EIA Notification 2006. (Secondary metallurgical processing industries with Production ≤60,000 TPA). Consent to Operate (Latest) for the existing unit was accorded by Rajasthan State Pollution Control Board vide letter no F(Tech)/Alwar(Tijara)/5024(1)/2017-2018/5520-5522 dated 06.01.2023 The validity of CTO is up to 31.10.2027.

43.4.7 Implementation status of CTE/CTO:

Parameters	Document No.	Date	Validity	Implementation Status
CONSENT TO ESTABLISH	F(Tech)/Alwar(Tijara)/5024(1)/2017-2018/394-395	12.10.2017	Valid from 09.08.2017 to 31.07.2022	CTE for Flat round &Square (Hot rolling

			for 5 Years Or Upto The Actual Date Of Production commissioning of the project or activities whichever is earlier.	only), and Reheating Furnace(7.5TPH)
	F(Tech)/Alwar(Tijara)/5024(1)/2017-2018/273-274	15.05.2019	Valid from 01.11.2017 to 31.10.2020 for 3 Years Or Upto The Actual Date of Production	CTE for Coal Pulverizer (1 No.)
CONSENT TO OPERATE	F(Tech)/Alwar(Tijara)/5024(1)/2017-2018/275-276	15.05.2019	15/05/2019 to 31/10/2022.	CT0 for Flat round &Square (hot rolling only), And Reheating Furnace(7.5TPH)
	F(Tech)/Alwar(Tijara)/5024(1)/2017-2018/5520-5522	06.01.2023	01/11/2022 to 31/10/2027.	CTO for MS/CTD/TMT/ Flat Bars and Rounds (Hot Rolling Only

43.4.8 The unit configuration and capacity of existing project is given as below:

S. No.	Product	Existing Capacity(TPD)
1.	M.S. CTD/TMT/Flat/Square & Round Bars	167.00 TPD
2.	Re-Heating Furnace (LSHS fired)	7.50 Ton/Hr

43.4.9 The details of the raw material requirement for the proposed project along with its source and mode of transportation is given as below:

S. No.	Raw Material	Existing Consumption	Total Consumption	Source	Mode of transport
1	MS Ingot/Billet	175.7 T/Day	175.7 T/Day	Local Market	Transported by Trucks
2.	LSHS	5000-6000Lit/day	5000-6000Lit/day	Local Market from Nearest IOCL	Through Pipeline

43.4.10 Existing one time water demand is 69 KLD. Out of which 25 KLD is supplied from RIICO Water (25.0 KLD is drawn from RIICO water Supply with permission from RIICO water supply) and 44 KLD is recycled water.

43.4.11 Existing power requirement of 1500 kVA (2000KW Sanctioned capacity) is obtained from JVVNL, Alwar from nearest GSS Ajanta Chowk Bhiwadi-220KV from the project site.

43.4.12 Baseline Environmental Studies:

<table>
<tr><th>PERIOD</th><th>March-May-2022</th></tr>
<tr><td>AAQ parameters at 9 locations</td><td>• PM_{10}- 74.1 to 150.2µg/m^3
• $PM_{2.5}$- 45.0 to 116.7 µg/m^3
• SO_2-8.1 to 40.5 µg/m^3
• NO_2-14.1 to 75.3 µg/m^3
• CO-802 to 1833 µg/m^3</td></tr>
<tr><td>Incremental GLC level</td><td>• PM-0.10 to 3.93 µg/m3 (Level at 3.29Km in NNE Direction)
• SO_2-0.004 to 0.337 µg/m3 (Level at 3.29Km in NNE Direction)
• NOx-0.11 to 6.64 µg/m3 (Level at 3.29Km in NNE Direction)
• CO-0.06 to 5.76 µg/m3 (Level at 3.29Km in NNE Direction)</td></tr>
<tr><td>Ground Water Quality at 11 locations</td><td>• pH: 6.84-7.75;
• Total Hardness: 136 to 716mg/l,
• Chlorides: 39.99 to 627.81 mg/l,
• Fluoride: 0.11 to 0.72 mg/l.
• Heavy metals <0.001mg/l.</td></tr>
<tr><td>Surface Water Quality at 1 locations</td><td>Surface water was found in the study area
pH: 7.78, Turbidity-0.41 NTU, Total hardness-160 mg/l; Calcium-32 mg/l; Total Dissolved Solids-1068 mg/l</td></tr>
<tr><td>Noise Levels at 11locations</td><td>50.0 to 69.2 dB(A) for day time and
42.3 to 58.1dBA for night time</td></tr>
<tr><td>Traffic assessment study findings</td><td>• Traffic study has been conducted at SH-25 which is approximately 3.56 Km, WSW from the plant site.
• Transportation of raw material, fuel & finished product will be done 100% by road.
• Existing PCU is 808.25PCU/hr on SH-25 and existing level of service (LOS) is Good/Average/Fair (V/C=0.538).
<table>
<tr><th>Road</th><th>(V)
Volume in PCU/Hr</th><th>C
Capacity in PCU/Hr</th><th>V/C*</th><th>LOS</th></tr>
<tr><td>SH-25</td><td>808.25</td><td>1500</td><td>0.538</td><td>C</td></tr>
</table>
• PCU load after proposed project will be 808.25+ 11(Additional due to existing) PCU/hr and level of service (LOS) will be: Good/Average/Fair (V/C=0.546)
<table>
<tr><th>Road</th><th>(V)
Volume in PCU/Hr</th><th>C
Capacity in PCU/Hr</th><th>V/C*</th><th>LOS</th></tr>
<tr><td>SH-25</td><td>819.25</td><td>1500</td><td>0.546</td><td>C</td></tr>
</table></td></tr>
<tr><td>Flora and fauna</td><td>No Schedule – I Species was found within the study area.</td></tr>
</table>

43.4.13 The details of solid and hazardous waste generation along with its mode of treatment/disposal is furnished as below:

Particulars	Waste Quantity in TPD			Treatment/ disposal
	Type of Waste	Source	Quantity	
Sludge TPD	STP Sludge	From STP	0.5	Used as manure for plantation for plantation
Municipal SolidWaste (@0.125 Kg/ day	Biodegradable	Domestic	12.5 Kg/day	Sent to Municipal Council Bhiwadi, Rajasthan.
Mill Scale	Solid Waste	Production	3.5	Sold to authorized vendor within the Local Market.
Scrap (Miss Roll & End cutting)	Scrap waste	Production	5.2	Sold to authorized vendor within the Local Market.

43.4.14 Public Consultation: The Public Hearing is exempted as per MoEF&CC Notification S.O. 3250(E), dated 20th July, 2022.

Action plan to address Socio-Economic Issues:

Activity under CER	Location	Total Capital Cost to be invested (in Lacs)	Action Plan with Budget (Capital Cost-in Lakhs)			Recurring (In Lakh)
			I st year	II nd Year	III rd Year	
Plantation & Tree Guard nearby villages	Matila, Bhoodli, Sewka	5.4	1.8	1.8	1.8	0.5
Medical checkup camps	Matila, Bhoodli, Sewka	3.0	1.0	1.0	1.0	0.5
RO with Water cooler	Matila, Bhoodli, Sewka	3.0	1.0	1.0	1.0	0.5
Awareness program regarding organic manure use for agriculture, hygiene, sanitation	Sarpanch Office Panchayat office, Khajuriwas, Khori Kalan	1.5	0.5	0.5	0.5	0.5
Woman skill development Programme.	Matila, Bhoodli, Sewka	2.25	0.75	0.75	0.75	0.5
TOTAL COST		15.15	5.05	5.05	5.05	2.5

43.4.15 The capital cost of the existing project is Rs 1010 Lacs and the capital cost for environmental protection measures is proposed as Rs. 146.15 lacs. The annual recurring cost towards the environmental protection measures is proposed as Rs. 6.8 Lacs. The employment generation from the proposed project is 100.The details of cost for environmental protection measures is as follows:

S. No.	Description of Item	Existing Capital Cost (In Lacs)	Recurring Cost (In Lacs)	Proposed Cost (In Lacs)	Proposed Recurring Cost (In Lacs)	Total Existing +proposed Capital Cost	Total Existing +proposed Recurring Cost (In Lacs)	Remarks
1	Air Pollution Control/ Noise	10	1.0	100	2.0	110	3.00	Proposed dry fogger
2	Water Pollution Control	5.00	--	10	1.0	15.00	1.00	Modular STP proposed
3	Plantation Development	1.00	0.1	1.0	0.1	2.0	0.2	--
4	RWH (Flow meter etc.) (Maintenance)	4.00	0.10	-	-	4.00	0.10	--
5	CER Activity	--	--	15.15	2.5	15.15	2.5	--
Total		**20**	**1.2**	**126.15**	**5.6**	**146.15**	**6.8**	--

43.4.16 Existing green area has been developed in 0.0254 Ha (Existing) area which is about 6.35% of the total project area of 0.4 Ha with total sapling of 155 plants and 0.1346 Ha (57 Plants)developed within the RIICO Park Rest 496 No. of Plants are proposed to be planted. Thus total of 0.16 Ha area (40% of total project area) will be developed as plantation. Proposed Plantation in Container (1.5 ft x1.5ft) of 14 numbers will be developed as Green area. Avenue plantation on approach road one side 1605 sq.m. @178 plants is proposed. A 1m wide one row plantation, co is being developed as plantation at plant boundary and green cover as per CPCB/MoEF&CC, New Delhi guidelines. Local and native species will be planted with a density of 2500 trees per hectare.

43.4.17 It is reported that there is no violation under EIA, 2006/court case/show cause/direction related to the project under consideration.

43.4.18 **Certified Compliance Report from SPCB:**

The verification cum compliance report of CTO is received from Regional Office of RSPCB, Bhiwadi vide letter no RPCB/RO/BWD-2574/1368 dated 21.04.2023.

43.4.19 **Action Plan to mitigate pollution in the CPA**

A. Action Plan as per National Air Monitoring Programmes (NAMP)

Guideline for very poor (ambient PM2.5 or PM 10 value is between 121-250µg/m3 or 351-430µg/m3 respectively)	Implementation Plan by Industry	Action undertaken/Planned
Stop use of Diesel Generator sets	There is no use of DG Set by the Industry	There is no use of DG Set by the Industry.

Guideline for very poor (ambient PM2.5 or PM 10 value is between 121-250µg/m3 or 351-430µg/m3 respectively)	Implementation Plan by Industry	Action undertaken/Planned
Enhance Parking Fee by 3-4 times	To reduce traffic, Vehicle Pooling will be implemented	The same is encouraged in the unit.
Stop use of Coal	Coal usage is already discontinued.	Industry is currently using LSHS.
Stringently enforce/ stop garbage Burning	Domestic solid waste is already sent to Municipal Council, Bhiwadi, Rajasthan.	The same practice is/will be adopted in the unit.
Fugitive Dust	Efforts are being made to keep good housekeeping to reduce the dust generation. The roads and unpaved areas is being/will be moistened frequently.	The same is being/will be constantly maintained by the unit
Greenbelt/ Plantation Development	40% plantation development is envisaged with proper action plan within unit and outside along avenue plantation on all approach roads with min. 2 rows is being planted.	The plantation area inside the premises is only 254Sq.m. (6.35% & 155 Plants) & proposed Plantation in Container (1.5 ft x1.5ft) of 14 numbers will be developed as Green area. The deficit green area 33.65 %(1346 sq.m @57 plants.) area is /will be planted to achieve the total 40% green area plantation in the RIICO Park at a distance of 0.84 km toward NW direction from the project site vide letter no. U(5)I/2022-23/3057 dated 14.09.2022. at near Ajanta Chowk I/A Bhiwadi. Avenue plantation on approach road one side 1605 sq.m. @178 plants is proposed.

B. Action Plan as per OM dated 28th January 2021

Environmental Attributes	Mitigation Measure
Air	❖ The coal usage is already discontinued and industry is already switch over to LSHS as per issued guidelines. ❖ Stack monitoring is being carried out and quarterly submission is being done to RSPCB ❖ CEMS will be installed within 3 months & connected to SPCB & CPCB Server. ❖ All the material transfer point will be covered and storage on cooling beds. ❖ Best available technology is being used for Re-Heating Furnace ❖ 40% plantation is being/will be done inside and outside the premises. Plantation outside the project premises such as avenue plantation, plantation in vacant areas, social forestry etc. ❖ Strength internal roads such as widening, pavement etc.
Water	❖ Use of treated water from CETP to reduce the stress on ground water. The Shree Balaji

	Rolling Mills was applied for CETP Treated water for plantation on dated 11.03.2023. ❖ Continuous monitoring of effluent quality will be done. ❖ One No. of Rain Water harvesting storage and recharge the bore well is already exists in the plant premises. ❖ No waste water is being/ will be discharged outside the plant premises. ❖ Industry is proposed to install STP of 5KLD for the treatment of domestic waste water.
Land	❖ Strengthen the plantation is being/will be done to at plant premises. ❖ Plantation developed at plant premises to reduce the carbon emission and contain the emission at plant site.
Other Condition (additional)	❖ Monitoring of compliance of EC conditions will be submitted with third party audit every year ❖ 1.5 % of the CER times for CPA.

C. Action Plan and Compliance with regards to CEPI Guidelines

S. No.	Objective	Environmental Benefits	Suggested Action	Remark	Action Plan
1.	Separation of industrial effluent, domestic effluent and storm water	The provision will have low-cost treatment and segregation will add to better recovery of treated w/w.	Separate ETP/STP and RWH network is done at site	ETP based on physicochemical treatment (Settling Tank/ Neutralization Tank) capacity of 15 KLD is in function and STP of 5KLD is proposed. The RWH is as per norm of CGWA is installed.	The cost incurred on the Settling Tank/ Neutralization Tank / RWH is 9.0 Lacs. Modular STP is proposed cost is 10Lacs. Settling Tank/ Neutralization Tank / RWH is already executed.
2.	Treated effluent from CETP in Bhiwadi to be used by Industries.	Main environmental benefit is the reduction in groundwater extraction.	The Application for CETP Treated water for plantation was applied on dated 11.03.2023 from CETP Bhiwadi with the permission from Bhiwadi Jal Pradushan Nivaran Association for 8KLD. Fresh water requirement	Thus, the reduction in fresh water consumption will be implemented.	The expenditure on the same will be implemented

S. No.	Objective	Environmental Benefits	Suggested Action	Remark	Action Plan
			is/will be minimized by taking water from CETP Bhiwadi with the permission from Bhiwadi Jal Pradushan Nivaran Association		
3.	Regulation/ restriction on groundwater abstraction by the industries Bhiwadi.	Prevent over-exploitation of groundwater resources. Main Environmental benefit is to encourage water conservation, water reuse/ recycling.	More than 100% of treated CETP water will be used for plantation	More provision will be made to use treated w/w from CETP. About more than 100% of treated w/w from CETP will be used gradually.	As soon as the consistent quality of CETP treated w/w will be obtained we shall use more than 100% of the demand.
4	Monitoring of groundwater quality in Bhiwadi	The ground water quality will be monitored regularly as per CGWA.	The nearby wells within 5.0km will be monitored	As part of compliance of CGWA NOC, the same will be followed.	Approved NABL/MOEF&CC approved lab is/will be engaged to conduct the water analysis every quarter.
S. No.	Objective	Environmental Benefits	Suggested Action	Remark	Action Plan
5	Groundwater recharge in Bhiwadi	Main environmental benefit is to prevent depletion of groundwater resources.	Provision of 1573.86 m3/Annum of rain water is being/will be collected and recharged.	About 20.98% of the fresh water will be recharged.	One Rain water Harvesting pits of having sizes of 15 ft (length)* 4 ft(width) with 15 ft (depth)respectively to collect the storm water.
6	Establishment of zero liquid discharge (ZLD)	Main environmental benefit is the prevention of land and groundwater pollution.	The unit has ZLD already maintained.	ETP based on physicochemical treatment. The Settling Tank/ Neutralization Tank of is being 68.75% of treated/w recycled back for quenching	Already implemented with ETP based on physicochemical treatment Settling Tank/ Neutralization Tank and STP is proposed to install.

S. No.	Objective	Environmental Benefits	Suggested Action	Remark	Action Plan
				and cooling. The STP will be installed and will have 70 % of treated w/w used for plantation purposes. Thus, the status of ZLD will be maintained.	In existing condition the domestic waste water is treated in septic Tank followed by Soak Pit.
7	Controlling emissions from industries using furnaces	Main environmental benefits shall be the improvement of ambient air quality	Fuel used has been changed to LSHS. Also, the emissions are routed through Wet Scrubber for controlling particulate emissions. The emissions from stack attached is ranging up to 60mg/Nm3	The emission standards laid down by RSPCB are adhered from time to time.	Already implemented. The emissions from stack attached is ranging up to 60 mg/Nm3
8	Reduction emissions from induction furnaces	Main environmental benefits will be in occupational safety and the improvement of ambient air quality	Wet scrubber is installed and it reduces the Particulate matter emission due to fuel change (LSHS is used) (60 mg/Nm3)	The control equipment's are being monitored from time to time.	CEMS will be installed within 3 months.
9	Reduction of fugitive emissions from industrial premises	Main environmental benefits will be the improvement of ambient air quality.	The interval roads are already paved and will be spread on bare land within industrial premises. Planting of vegetation on bare land within industrial premises.	Provisions of paved area in the movement and transportation will be done	Already Implemented
10	Controlling emissions of road dust in the industrial area	Volunteered measures will be adopted by indulging in	Covered shed storage of industrial waste	Action of campaign of clean and green area will be done in	Action with corrective measures will be done.

S. No.	Objective	Environmental Benefits	Suggested Action	Remark	Action Plan
		mass campaign of clean and green	within industrial premises. Covered storage of loose debris and construction material within industrial premises as applicable will be done.	association with Industrial Association and monitored every six monthly for effectiveness.	
11	Strict surveillance to monitor all illegal activities contributing to air pollution in the industrial area	Strictly open burning of wood or other fuel will be avoided.	Regular monitoring will be done by the supervisor.	Random check will be done	No open burning signage will be displayed.

Deliberations by the Committee

43.4.20 The Committee noted the following:

1. The instant proposal is for Regularization of the existing Rolling Mill having capacity of M.S. CTD/TMT/Flat/Square & Round Bars of 167.0 TPD, Re-Heating Furnace with LSHS fired having capacity of 7.5 Ton/hr as per the provisions under EIA Notification No. S. O. 3250 (E) dated 20th July 2022.

2. The existing project was initially accorded Consent to Establish vide letter no. F(Tech)/Alwar(Tijara)/5024(1)/2017-2018/394-395 dated 12.10.2017. The proposal is applied first time for obtaining Environmental Clearance as previously the project of Rolling Mill was not covered under the purview of Environmental Clearance under EIA Notification 2006. (Secondary metallurgical processing industries with Production ≤60,000 TPA). Consent to Operate (Latest) for the existing unit was accorded by Rajasthan State Pollution Control Board vide letter no F(Tech)/Alwar(Tijara)/5024(1)/2017-2018/5520-5522 dated 06.01.2023 The validity of CTO is up to 31.10.2027.

3. The EAC, constituted under the provision of the EIA Notification, 2006 comprising Expert Members/domain experts in various fields, examined the proposal submitted by the Project Proponent in desired format along with EIA/EMP reports prepared and submitted by the Consultant accredited by the QCI/ NABET on behalf of the Project Proponent.

4. The EAC noted that the Project Proponent has given an undertaking that the data and information given in the application and enclosures are true to the best of his knowledge and belief and no information has been suppressed in the EIA/EMP reports. If any part of data/information submitted is found to be false/ misleading at any stage, the project will be

rejected and Environmental Clearance given, if any, will be revoked at the risk and cost of the project proponent.

5. The Committee noted that the EIA reports are in compliance of the ToR issued for the project, reflecting the present environmental status and the projected scenario for all the environmental components. The Committee deliberated on the proposed mitigation measure towards Air, Water, Noise and Soil pollutions. The Committee suggested that the storage of toxic/explosive raw materials/products shall be undertaken with utmost precautions and following the safety norms and best practices.

6. The total revised project area is 4,000 Sq.m. (0.4Ha) [RIICO Industrial land]. This land is under possession of the Company. The said land is already converted for industrial use.

7. The EAC noted that the instant project comes under Critically Polluted area (SPA). PP has committed the proposed mitigation measures and also submitted detailed action plan as detailed in para 43.4.19 above. The EAC is of the opinion that the mitigation plans shall be strictly implemented.

8. There is some habitations within the study area of 10 km radius around the project site. Also there are some PF/RF nearby. The EAC is of the opinion that PP shall strictly implement the environmental safeguard measures proposed to minimise the impact on the habitation of the locals and nearby PF/RF.

9. Some water bodies exists within the study area of the project site. The EAC is of the opinion that water bodies shall not be disturbed. Mitigation measures w.r.t. safeguarding the water bodies shall be implemented.

10. The existing water requirement for the project is 69 KLD. Out of which 25 KLD is supplied from RIICO Water (25.0 KLD is drawn from RIICO water Supply with permission from RIICO water supply) and 44 KLD is recycled water. The EAC deliberated on the water requirement and found is satisfactory.

11. The Committee has deliberated on the baseline data and incremental GLC due to the proposed project and is of the opinion that PP shall strictly implement the mitigation measures as per the submitted action plans to minimise the pollution.

12. The PP has submitted that existing green area has been developed in 0.0254 Ha area which is about 6.35% of the total project area of 0.4 Ha with total sapling of 155 plants and 0.1346 Ha (57 Plants) developed within the RIICO Park Rest. 496 No. of Plants are proposed to be planted. Thus total of 0.16 Ha area (40% of total project area) will be developed as plantation. Proposed Plantation in Container (1.5 ft x1.5ft) of 14 numbers will be developed as Green area. Avenue plantation on approach road one side 1605 sq.m. @178 plants is proposed. The EAC deliberated on the greenbelt action plan along with the budget earmarked and is of the opinion that PP shall complete the proposed greenbelt development in a period of 1 year.

13. The committee deliberated details of carbon foot prints and carbon sequestration study w.r.t. proposed project and found them to be satisfactory.

14. The Committee also deliberated on the action plan submitted by the proponent to address the issues as per socio economic survey for development of nearby area and found it satisfactory.

15. The Committee also deliberated the CCR cum inspection report of RO, SPCB and found it satisfactory.

16. The EAC deliberated on the proposal with due diligence in the process as notified under the provisions of the EIA Notification, 2006, as amended from time to time and accordingly made the recommendations to the proposal. The Experts Members of the EAC found the proposal in order and recommended for grant of environmental clearance.

17. The environmental clearance recommended to the project/activity is strictly under the provisions of the EIA Notification 2006 and its subsequent amendments. It does not tantamount/construe to approvals/consent/permissions etc. required to be obtained or standards/conditions to be followed under any other Acts/ Rules/ Subordinate legislations, etc., as may be applicable to the project. The project proponent shall obtain necessary permission as mandated under the Water (Prevention and Control of Pollution) Act, 1974 and the Air (Prevention and Control of Pollution) Act, 1981, as applicable from time to time, from the State Pollution Control Board, prior to construction & operation of the project.

18. The EAC also reviewed the EC conditions (specific and general) pertaining to Industry-I projects and observed that some of the specific conditions stipulated so far in the previously recommended EC projects are common and applicable to most of the projects in general. In view of the same, the General Conditions (in case of EC projects) have been revised through reallocation of these common conditions from specific to General Conditions (in case of EC projects). Accordingly, the instant project is also being stipulated with the modified General conditions.

Recommendations of the Committee:

43.4.21 In view of the foregoing and after detailed deliberations, the committee **recommended** the instant proposal for grant of Environment Clearance under the provisions of EIA Notification, 2006 subject to the stipulation of following specific conditions and general conditions as per the Ministry's Office Memorandum No. 22-34/2018-III dated 9/8/2018 based on project specific requirements:

A. Specific Condition:

i. This Environmental clearance is granted subject to final outcome of Hon'ble Supreme Court of India, Hon'ble High Court, Hon'ble NGT and any other Court of Law, if any, as may be applicable to this project.

ii. The project proponent shall comply with all the environmental protection measures and safeguards proposed in the documents submitted to the Ministry. All the recommendations made in the EIA/EMP in respect of environmental management, and risk mitigation measures relating to the project shall be implemented.

iii. The project proponent shall utilize modern technologies for capturing of carbon emitted and shall also develop carbon sink/carbon sequestration resources capable of capturing

more than emitted. The implementation report shall be submitted to the IRO, MoEF&CC in this regard.

iv. PP shall strictly implement the Action Plan/Mitigation measures as prescribed for the CPA, as the Unit is located in CPA.

v. There is some habitations within the study area of 10 km radius around the project site. Also there are some PF/RF nearby. Proponent shall take appropriate environmental safeguard measures to minimise the impact on the habitation of the locals. PP needs to strengthen green belt all around the plant area to reduce the dust pollution. The PP shall also include some of these locations in its environmental monitoring programme.

vi. Some water bodies exist within the study area of the project site. The EAC is of the opinion that water bodies shall not be disturbed. A robust and full proof Drainage Conservation scheme to protect the natural drainage and its flow parameters; along with Soil conservation scheme and multiple Erosion control measures shall be implemented.

vii. The water requirement of 69 m^3/day shall be obtained from RIICO water Supply (25 KLD) and remaining from recycled water (44 KLD) only after obtaining necessary permission from the Competent Authority.

viii. Three tier Green Belt shall be developed in at least 40% of the project area in a period of 1 year all along the project site of adequate width and tree density shall not be less than 2500 per ha. Survival rate of green belt developed shall be monitored on periodic basis to ensure that damaged plants are replaced with new plants in the subsequent years. PP shall also develop greenbelt in the form of shelter belt comprising of total of 6 rows of 2x2 m plantation with tall trees & broad leaves with thick canopy along with windshield inside the plant premises to act as green barrier for air pollution & noise levels towards nearby Village and PF/RF. Compliance status in this regard, shall be submitted to concerned Regional Office of the MoEF&CC.

ix. All the commitments made towards socio-economic development of the nearby villages shall be satisfactorily implemented. The action plan based on the social impact assessment study of the project as per the EMP in accordance to the Ministry's OM dated 30.09.2020 amounting to Rs. 0.1515 Crores shall be strictly implemented and progress shall be submitted to the Regional Office of MoEF&CC.

x. The PP shall undertake village adoption programme, prepare and implement the action plan to develop them into model villages.

xi. The PP shall strictly implement the mitigation measures as per the submitted action plans to minimise the pollution.

B. General Conditions:

I. Statutory compliance:

i. The Environment Clearance (EC) granted to the project/ activity is strictly under the provisions of the EIA Notification, 2006 and its amendments issued from time to time. It does not tantamount/ construe to approvals/ consent/ permissions etc., required to be obtained or standards/conditions to be followed under any other Acts/Rules/Subordinate legislations, etc., as may be applicable to the project.

II. Air quality monitoring and preservation

i. The project proponent shall install 24x7 continuous emission monitoring system at process stacks to monitor stack emission as well as Continuous Ambient Air Quality Station (CAAQMS) for monitoring AAQ parameters with respect to standards prescribed in Environment (Protection) Rules 1986 as amended from time to time. The CEMS and CAAQMS shall be connected to SPCB and CPCB online servers and calibrate these systems from time to time according to equipment supplier specification through labs recognized under Environment (Protection) Act, 1986 or NABL accredited laboratories.

ii. The project proponent shall carryout Continuous Ambient Air Quality monitoring for common/criterion parameters relevant to the main pollutants released (e.g. PM_{10} and $PM_{2.5}$ in reference to PM emission, and SO_2 and NOx in reference to SO_2 and NOx emissions) within and outside the plant area covering upwind and downwind directions.

iii. The project proponent shall monitor fugitive emissions in the plant premises at least once in every quarter through laboratories recognized under Environment (Protection) Act, 1986 or NABL accredited laboratories.

iv. Sampling facility at process stacks shall be provided as per CPCB guidelines for manual monitoring of emissions.

v. Appropriate Air Pollution Control (APC) system shall be provided for all the dust generating points including fugitive dust from all vulnerable sources, so as to comply prescribed stack emission and fugitive emission standards.

vi. The project proponent shall provide leakage detection and mechanized bag cleaning facilities for better maintenance of bags.

vii. Sufficient number of mobile or stationery vacuum cleaners shall be provided to clean plant roads, shop floors, roofs, regularly.

viii. Ensure covered transportation and conveying of raw material to prevent spillage and dust generation. The project proponent use leak proof trucks/dumpers carrying coal and other raw materials and cover them with tarpaulin.

ix. The project proponent shall provide primary and secondary fume extraction system at all heat treatment furnaces.

x. Wind shelter fence and chemical spraying shall be provided on the raw material stock piles.

xi. Design the ventilation system for adequate air changes as per prevailing norms for all tunnels, motor houses, Oil Cellars.

xii. Pollution control system in the plant shall be provided as per the CREP Guidelines of CPCB.

xiii. The project proponent shall adopt the Clean Air practices like mechanical collectors, wet scrubbers, fabric filters (bag houses), electrostatic precipitators, combustion systems (thermal oxidizers), condensers, absorbers, adsorbers, and biological degradation. Controlling emissions related to transportation shall include emission controls on vehicles as well as use of cleaner fuels. Sufficient numbers of additional truck mounted Fog/Mist water cannons shall be procured and operated regularly inside the project premises and also in the surrounding villages to arrest suspended dust in the atmosphere.

xiv. Bag filters shall be cleaned regularly and efficiency of bag filter system shall be monitored at regular intervals.

xv. Water Sprinklers/Water mist system shall be installed near raw material yards, operational units and other strategic locations to control fugitive emissions from the plant.

xvi. The particulate matter emissions from the process stacks shall be less than 30 mg/Nm^3 and measures shall be undertaken as per the submitted action plan. Efficient Air monitoring equipment shall be installed.

xvii. Following additional arrangements to control fugitive dust shall be provided:
   a. Fog / Mist Sprinklers at all on bulk raw material storage area (at the transfer points) like Iron Ore, Coal and for Fly Ash and similar solid waste storage areas.
   b. Proper covered vehicle shall be used while transport of materials.
   c. Wheel washing mechanism shall be provided in entry and exit gates with complete recirculation system.

xviii. Online stack monitoring system for RHF shall be installed and monitoring report shall be submitted to the concerned Regional Office of the MoEF&CC along with the six monthly compliance report.

xix. Low NOx Burners will be installed at Reheating Furnace for control of Gaseous emissions generated while using PNG.

III. Water quality monitoring and preservation

i. The project proponent shall install 24x7 continuous effluent monitoring system with respect to standards prescribed in Environment (Protection) Rules 1986 as amended from time to time and connected to SPCB and CPCB online servers and calibrate these system from time to time according to equipment supplier specification through labs recognized under Environment (Protection) Act, 1986 or NABL accredited laboratories.

ii. The project proponent shall monitor regularly ground water quality at least twice a year (pre- and post-monsoon) at sufficient numbers of piezometers/sampling wells in the plant and adjacent areas through labs recognized under Environment (Protection) Act, 1986 and NABL accredited laboratories.

iii. Garland drains and collection pits shall be provided for each stock pile to arrest the run-off in the event of heavy rains and to check the water pollution due to surface run off.

iv. Water meters shall be provided at the inlet to all unit processes in the plants.

v. The project proponent shall make efforts to minimise water consumption in the plant complex by segregation of used water, practicing cascade use and by recycling treated water.

vi. The proposed project shall be designed as "Zero Liquid Discharge" Plant. ETP shall be installed and there shall be no discharge of effluent from the plant. Domestic effluent shall be treated in Sewage Treatment Plant. Suitable measures shall be adopted for sewage water handling to ensure no contamination of any kind of water body.

vii. All stockyards shall have impervious flooring and shall be equipped with water spray system for dust suppression. Stock yards shall also have garland drains and catch pits to trap the run off material and shall be implemented as per the action plan submitted in EIA/EMP report.

viii. Rain water harvesting shall be implemented to recharge/harvest water as per the action plan submitted in the EIA/EMP report.

ix. The project proponent shall provide the ETP for effluents of rolling mills to meet the standards prescribed in G.S.R 277 (E) 31st March 2012 (applicable to IF/EAF) as amended from time to time.

IV. Noise monitoring and prevention

i. Noise pollution shall be monitored as per the prescribed Noise Pollution (Regulation and Control) Rules, 2000 and amendments thereof, and report in this regard shall be submitted to Regional Officer of the Ministry as a part of six-monthly compliance report.
ii. The ambient noise levels should conform to the standards prescribed under E(P)A Rules, 1986 viz. 75 dB(A) during day time and 70 dB(A) during night time.

V. Energy Conservation measures

i. Provide solar power generation on roof tops of buildings, for solar light system for all common areas, street lights, parking around project area and maintain the same regularly;
ii. Provide LED lights in their offices and residential areas.
iii. The project proponent shall provide waste heat recovery system (pre-heating of combustion air) at the flue gases of reheating furnaces.
iv. Practice hot charging of slabs and billets/blooms as far as possible.
v. Ensure installation of regenerative type burners on all reheating furnaces.

VI. Waste management

i. Oil Collection pits shall be provided in oil cellars to collect and reuse/recycle spilled oil.
ii. Kitchen waste shall be composted or converted to biogas for further use.
iii. 100% utilization of fly ash shall be ensured. All the fly ash shall be provided to cement and brick manufacturers for further utilization and Memorandum of Understanding in this regard shall be submitted to the Ministry's Regional Office.
iv. The Plastic Waste Management Rules 2016, inter-alia, mandated banning of identified Single Use Plastic (SUP) items with effect from 01/07/2022. In this regard, CPCB has issued a direction to all the State Pollution Control Boards (SPCBs)/Pollution Control Committees (PCCs) on 30/06/2022 to ensure the compliance of Notification published by Ministry on 12/08/2021. The technical guidelines issued by the CPCB in this regard is available at https://cpcb.nic.in/technical-guidelines-3/. All the project proponents are hereby requested to sensitize and create awareness among people working within the Project area as well as its surrounding area on the ban of SUP in order to ensure the compliance of Notification published by this Ministry on 12/08/2021. A report, along with photographs, on the measures taken shall also be included in the six monthly compliance report being submitted by the project proponents.
v. A proper action plan must be implemented to dispose of the electronic waste generated in the industry.

VII. Green Belt

i. The project proponent shall prepare GHG emissions inventory for the plant and shall submit the programme for reduction of the same including carbon sequestration by trees.
ii. Project proponent shall submit a study report on Decarbonisation program, which would

essentially consist of company's carbon emissions, carbon budgeting/ balancing, carbon sequestration activities and carbon capture, use and storage and offsetting strategies. Further, the report shall also contain time bound action plan to reduce its carbon intensity of its operations and supply chains, energy transition pathway from fossil fuels to Renewable energy etc. All these activities/ assessments should be measurable and monitor able with defined time frames.

iii. The industry should draw up and implement and action plan for achieving carbon neutrality consistent with India's commitment to achieving carbon neutrality. The action plan should contain milestones with targets to be achieved in suitable periods.

iv. Greening and Paving shall be implemented in the plant area to arrest soil erosion and dust pollution from exposed soil surface.

VIII. Public hearing and Human health issues

i. Emergency preparedness plan based on the Hazard identification and Risk Assessment (HIRA) and Disaster Management Plan shall be implemented.

ii. The project proponent shall carry out heat stress analysis for the workmen who work in high temperature work zone and provide Personal Protection Equipment (PPE) as per the norms.

iii. Provision shall be made for the housing of construction labour within the site with all necessary infrastructure and facilities such as fuel for cooking, mobile toilets, mobile STP. Safe drinking water, medical health care, creche etc. The housing may be in the form of temporary structures to be removed after the completion of the project.

iv. Occupational health surveillance of the workers shall be done on a regular basis and records maintained.

IX. Environment Management

i. The project proponent shall comply with the provisions contained in this Ministry's OM vide F.No. 22-65/2017-IA.III dated 30/09/2020. As part of Corporate Environment Responsibility (CER) activity, company shall adopt nearby villages based on the socio-economic survey and undertake community developmental activities in consultation with the village Panchayat and the District Administration as committed.

ii. The company shall have a well laid down environmental policy duly approve by the Board of Directors. The environmental policy should prescribe for standard operating procedures to have proper checks and balances and to bring into focus any infringements/deviation/violation of the environmental / forest / wildlife norms / conditions. The company shall have defined system of reporting infringements / deviation / violation of the environmental / forest / wildlife norms / conditions and / or shareholders / stake holders. The copy of the board resolution in this regard shall be submitted to the MoEF&CC as a part of six-monthly report.

iii. A separate Environmental Cell both at the project and company head quarter level, with qualified personnel shall be set up under the control of senior Executive, who will directly to the head of the organization.

iv. Performance test shall be conducted on all pollution control systems every year and report shall be submitted to Integrated Regional Office of the MoEF&CC.

X. Miscellaneous

i. The project proponent shall make public the environmental clearance granted for their project along with the environmental conditions and safeguards at their cost by prominently advertising it at least in two local newspapers of the District or State, of which one shall be in the vernacular language within seven days and in addition this shall also be displayed in the project proponent's website permanently.

ii. The copies of the environmental clearance shall be submitted by the project proponents to the Heads of local bodies, Panchayats and Municipal Bodies in addition to the relevant offices of the Government who in turn has to display the same for 30 days from the date of receipt.

iii. The project proponent shall upload the status of compliance of the stipulated environment clearance conditions, including results of monitored data on their website and update the same on half-yearly basis.

iv. The project proponent shall monitor the criteria pollutants level namely; PM10, SO2, NOx (ambient levels as well as stack emissions) or critical sectoral parameters, indicated for the projects and display the same at a convenient location for disclosure to the public and put on the website of the company.

v. Action plan for developing connecting and internal road in terms of MSA as per IRC guidelines shall be implemented

vi. The project proponent shall submit six-monthly reports on the status of the compliance of the stipulated environmental conditions on the website of the ministry of Environment, Forest and Climate Change at environment clearance portal.

vii. The project proponent shall submit the environmental statement for each financial year in Form-V to the concerned State Pollution Control Board as prescribed under the Environment (Protection) Rules, 1986, as amended subsequently and put on the website of the company.

viii. The project proponent shall inform the Regional Office as well as the Ministry, the date of financial closure and final approval of the project by the concerned authorities, commencing the land development work and start of production operation by the project.

ix. The project proponent shall abide by all the commitments and recommendations made in the EIA/EMP report, commitment made during Public Hearing and also that during their presentation to the Expert Appraisal Committee.

x. The recommendations of the approved Site-Specific Wildlife Management Plan (in case of involvement of Schedule-I species) shall be implemented in consultation with the State Forest Department. The implementation report shall be furnished along with the six-monthly compliance report to the concerned Regional Office of the MoEF&CC.

xi. The PP shall put all the environment related expenditure, expenditure related to Action Plan on the PH issues, and other commitments made in the EIA/EMP Report etc. in the company web site for the information to public/public domain. The PP shall also put the information on the left over funds allocated to EMP and PH as committed in the earlier ECs and shall be carried out and spent in next three years, in the company web site for the information to public/public domain.

xii. No further expansion or modifications in the plant shall be carried out without prior approval of the Ministry of Environment, Forests and Climate Change (MoEF&CC).

xiii. Concealing factual data or submission of false/fabricated data may result in revocation of this environmental clearance and attract action under the provisions of Environment (Protection) Act, 1986.

xiv. The Ministry may revoke or suspend the clearance, if implementation of any of the above conditions is not satisfactory.

xv. The Ministry reserves the right to stipulate additional conditions if found necessary. The Company in a time bound manner shall implement these conditions.

xvi. The Regional Office of this Ministry shall monitor compliance of the stipulated conditions. The project authorities should extend full cooperation to the officer (s) of the Regional Office by furnishing the requisite data / information/monitoring reports.

xvii. Any appeal against this EC shall lie with the National Green Tribunal, if preferred, within a period of 30 days as prescribed under Section 16 of the National Green Tribunal Act, 2010.

****

Re-Consideration of Environmental Clearance Proposal

Agenda No. 43.5

43.5 Integrated Steel Plant of capacity 0.9 Million Ton per Annum (Finished Steel) along with 137 MW (92 MW WHRB based & 45 MW Coal and Dolochar mix based) Captive Power Plant by M/s Orissa Alloy Steel Pvt. Ltd., located at Mouza - Chakganesh (J.L. No. 225), Malipur (J.L. No. 226) &Baradiha (J.L. No. 227), P.O. – Jakpur BO, P.S.- Kharagpur (Local), Dist. – Paschim Medinipur, West Bengal – Re-Consideration of Environmental Clearance.

[Proposal No. IA/WB/IND1/409595/2022, File No. IA-J-11011/518/2021-IA-II(IND-I)]
[Consultant: Centre for Envotech and Management Consultancy Private Limited; Valid upto 18.03.2024]

43.5.1 M/s Orissa Alloy Steel Private Limited has made an application vide proposalno. IA/WB/IND1/409595/2022 dated 19.05.2023 along with copy of EIA/EMP report, Form-2 seeking Environment clearance (EC) under the provision of the EIA Notification, 2006 for the project mentioned above. The proposed project activity is listed at schedule no. '1(d)' Captive Power Plant, '2(a)' Coal Washery, '2(b)' Mineral beneficiation, '3(a)' Metallurgical industries (ferrous & non-ferrous) and '4(b) Coke Oven Plant Under Category "A" of the schedule of the EIA Notification, 2006 and appraised at Central Level.

43.5.2 Name of the EIA consultant: M/s. Centre for Envotech & Management Consultancy Pvt. Ltd. [List of ACOs with their Certificate / Extension Letter no. NABET/EIA/2124/RA/ 0243; valid upto 18.03.2024, as on September 6, 2023].

Details submitted by Project proponent

43.5.3 The details of the ToR are furnished as below:

Date of Application	Consideration	Details	Date of Accord	ToR Validity
21.12.2021	51st meeting of the Re-constituted EAC (Industry-I) held on 11-12th January 2022.	Terms of Reference	27.01.2022	26.01.2026

43.5.4 The project of M/s Orissa Alloy Steel Private Limited located at Mouza – Chakganesh (J.L. No. 225), Malipur (J.L. No. 226) &Baradiha (J.L. No. 227), P.O. – Jakpur BO, P.S. – Kharagpur (Local), Dist. - Paschim Medinipur, West Bengal state is for setting up of a greenfield Integrated Steel Plant of production capacity 0.9 million Ton per Annum (Finished Steel) along with 137 MW (92 MW WHRB based & 45 MW Coal and Dolochar mix based) Captive Power Plant.

43.5.5 Environmental Site Settings:

<table>
<tr><th>S. No.</th><th>Particulars</th><th>Details</th><th>Remarks</th></tr>
<tr><td>i.</td><td>Total land</td><td>102.39 ha [Private: 60.10 ha; Govt.: 42.29 ha (Industrial); Agriculture: ha; Grazing Land: NIL ha; Other Land: ha]</td><td>Land use:
<table>
<tr><th>S. No.</th><th>Particulars</th><th>Area (Ha)</th><th>%</th></tr>
<tr><td>1</td><td>Main Plant</td><td>37.42</td><td>36.54</td></tr>
<tr><td>2</td><td>Water Reservoir & rainwater harvesting pond</td><td>5.07</td><td>4.95</td></tr>
<tr><td>3</td><td>Built up Area & Internal Road</td><td>9.37</td><td>9.15</td></tr>
<tr><td>4</td><td>Green Belt</td><td>33.79</td><td>33.00</td></tr>
<tr><td>5</td><td>Tailing/Middling Area</td><td>1.40</td><td>1.37</td></tr>
<tr><td>6</td><td>Open space & raw material storage</td><td>11.45</td><td>11.18</td></tr>
<tr><td>7</td><td>Railway Siding</td><td>3.90</td><td>3.81</td></tr>
<tr><td colspan="2">TOTAL PROJECT AREA</td><td>102.39</td><td>100.0</td></tr>
</table></td></tr>
<tr><td>ii</td><td>Land acquisition details as per MoEF&CC O.M. dated 7/10/2014</td><td>Out of the 102.39 hectare (253 acres) of land, 44.80 hectare (110.715 acres) of land (42.29 ha. Industrial land at Vidyasagar Industrial Park, Kharagpur + 2.51 ha. Private land) is already in possession and for rest of land (57.59 hectare) consent from private rayat obtained.</td><td>--</td></tr>
<tr><td>iii.</td><td>Existence of habitation & involvement of R&R, if any.</td><td>Project Site:
No habitation in the proposed site.

Study Area:
<table>
<tr><th>Habitation</th><th>Distance</th><th>Direction</th></tr>
<tr><td>Chakganesh</td><td>0.25 km</td><td>EES</td></tr>
<tr><td>Baradiha</td><td>0.80 km</td><td>SW</td></tr>
<tr><td>Rupnarayanpur</td><td>1.10 km</td><td>NW</td></tr>
</table></td><td>No rehabilitation and resettlement is involved for the subject project. Land acquisition is carried out under Land Acquisition Act of West Bengal. Land is purchased through private negotiations from private rayat. Apart from Govt. valuation of the land, Additional One time Welfare Fund is</td></tr>
</table>

<table>
<tr><th>S. No.</th><th>Particulars</th><th>Details</th><th>Remarks</th></tr>
<tr><td></td><td></td><td><table><tr><td>Jakpur</td><td>1.10 km</td><td>NE</td></tr></table></td><td>given to the land looser in addition to the land cost.</td></tr>
<tr><td>iv.</td><td>Latitude and Longitude of the project site</td><td><table><tr><th>Site</th><th>Latitude</th><th>Longitude</th></tr><tr><td>Point A</td><td>22°22'27.12"N</td><td>87°22'07.88"E</td></tr><tr><td>Point B</td><td>22°22'40.48"N</td><td>87°22'25.04"E</td></tr><tr><td>Point C</td><td>22°22'11.64"N</td><td>87°22'41.46"E</td></tr><tr><td>Point D</td><td>22°21'44.18"N</td><td>87°22'52.59"E</td></tr><tr><td>Point E</td><td>22°21'38.81"N</td><td>87°22'40.05"E</td></tr></table></td><td>--</td></tr>
<tr><td>v.</td><td>Elevation of the project site</td><td>Elevation of the project site varies from 26 m to 30 m AMSL.</td><td>--</td></tr>
<tr><td>vi.</td><td>Involvement of Forest land if any.</td><td>No forest land involved.</td><td>DFO, Kharagpur, Govt. of West Bengal vide memo no-591/13-38(A)/OASPL/2023 dated 06.03.2023 has issued NOC.</td></tr>
<tr><td>vii.</td><td>Water body (Rivers, Lakes, Pond, Nala, Natural Drainage, Canal etc.) exists within the project site as well as study area</td><td>Project site:
02 Nos. rain water harvesting pond.

Study area:<table><tr><th>Water body</th><th>Distance</th><th>Direction</th></tr><tr><td>Jakala Nala</td><td>0.03 Km</td><td>South</td></tr><tr><td>Kangsabati River</td><td>3.0 Km</td><td>North</td></tr><tr><td>Medinipur Canal</td><td>2.1 Km</td><td>North</td></tr><tr><td>Walipur Pond</td><td>5.50 Km</td><td>WNW</td></tr><tr><td>Purtonbazar Pond</td><td>4.50 Km</td><td>SSW</td></tr><tr><td>Chakmakrampur Pond</td><td>8.50 Km</td><td>SSE</td></tr><tr><td>Uttarshimla Pond</td><td>1.50 Km</td><td>NNE</td></tr><tr><td>Rameshwarup Pond</td><td>6.00 Km</td><td>North</td></tr></table></td><td>--</td></tr>
<tr><td>viii.</td><td>Existence of ESZ/ ESA/ national park/ wildlife sanctuary/ biosphere reserve / tiger reserve/ elephant reserve etc. if any within the study area</td><td>Study area
No National Parks, Wildlife Sanctuaries, Biosphere Reserves, Reserve Forest lies within 10 km radius.

Three protected forest is present within 10 Km area of the project.

• ~ 8.0 km in South West direction
• ~ 9.5 km in North West direction
• ~ 10.0 km in South West direction</td><td>--</td></tr>
</table>

43.5.6 The unit configuration and capacity of proposed project is given as below:

S. No.	Particulars of Facilities	Working days per annum	Configuration	Capacity	Product
1.	Blast Furnace	350	1 x 550 m^3	0.64 million TPA	Molten Liquid Metal
	PCM		2 X 800 TPD		Pig Iron
	LD Converter /BOF		1 x 50 T		High Quality Liquid Steel
2.	Sinter	330	1 x 75 Sq. m	0.90 million TPA	Sinter
3.	DRI with dryer	330	4 x 700 TPD	0.93 million TPA	Sized Sponge Iron
4.	SMS with Matching LRF/AOD, CCM and oxygen optimized furnace	330	8 x 30 T	0.72 million TPA	Billet, Slab
5.	SMS Slag Crusher	330	2 x 200 TPD	0.132 million TPA	Metal recovery
6.	Ferro Alloy Plant with Jigging plant and matching Briquette plant	330	3 x 12 MVA	0.075 million TPA	FeMn, FeSi, SiMn & FeCr
7.	Non-recovery type Coke Oven Plant	365	2 x 0.235 MTPA	0.47 million TPA	Metallurgical Coke
8.	Coal Washery	300	1 x 500 TPH	0.75 million TPA	Washed Coal
9.	Lime Dolomite Plant	330	1 x 300 TPD	0.099 million TPA	Calcined lime/Dolo
10.	Oxygen Plant	350	2 x 200 TPD	0.14 million TPA	Oxygen
11.	Bar/ Wire Rod Mill and Wire drawing with stand by reheating furnace	330	0.39 million TPA		TMT Bar, Wire Rod & Wire
	Annealing, Pickling & Galvanizing Line	330			Galvanized product
12.	Strip Mill/ CRM	330	0.67 million TPA		H.R. Plate, Flat products, Coils

S. No.	Particulars of Facilities	Working days per annum	Configuration	Capacity	Product
13.	Captive Power Plant	330	92 MW- WHRB Based (60 MW from DRI Plant + 30 MW from Coke Oven Plant, 2 MW TRT BF) 45 MW CFBC (Coal & Dolochar Mix based)	137 MW	Power
14.	Pellet Plant with matching beneficiation	330	2 X 1.65 MTPA	3.3 million TPA	Iron Ore Pellet
15.	Producer Gas Plant	330	6 x 12,500 Nm^3/hr	75,000 Nm^3/hr	Producer Gas
16.	Railway Siding	365	01 No.	01 No.	---

43.5.7 The details of the raw material requirement for the proposed project along with its source and mode of transportation is given as below:

S. No.	Name of the Raw Materials	Quantity (TPA)	Source	Distance of source from	Mode of Transportation
1	Iron Ore Fines & Lump	53,59,103	Purchased from Barbil-Joda, Orissa	270-300	Rail/Road
2	Non-coking coal	23,89,876	CCL, MCL & Imported Coal.	300-500	Rail/Road
3	Coking Coal	6,29,800	E-Auction, Purchased from BCCL, Dhanbad or Imported	300-500	Rail/Road
4	Dolomite	1,50,300	From Birmitrapur, Orissa/ Bilaspur, CG	270-350	Rail/Road
5	Limestone	3,15,900	From Birmitrapur, Orissa/ Bilaspur, Raipur CG/ Katni MP	270-350	Rail Road
6	Manganese Ore / Chrome Ore	1,97,500	From Balaghat, MP & Orissa	1000	Rail/Road
7	Quartzite	2,95,000	From Belpahar Orissa/ Bilaspur, Raipur CG	500	Rail/Road
8	Pyroxenite	19,200	Fromm Jharkhand, Orissa	500	Rail/Road
9	Bentonite	66,000	From Kutch, Gujrat	2500-3000	Road
Total (TPA)*		**93,83,079**			

Note: - Raw material demand stated in Sl. No –6 of TOR issued by ministry vide File No. -J-11011/518/2021-IA-II (IND-I) dated 27.01.2022 is against the plant configuration & capacity mentioned in original Proposal No. IA/WB/IND/244109/2021 submitted on parivesh portal (i.e.

S. No.	Name of the Raw Materials	Quantity (TPA)	Source	Distance of source from	Mode of Transportation
Form-I, PFR). During detail deliberation honourable committee member asked to submit the revised unit configuration and capacity of proposed project considering 300-365 annual working days rather than 300 annual working days. Accordingly, the revised unit configuration & capacity and revised brief write up (mentioning revised raw material demand, power demand) is submitted to ministry and also circulated to honourable EAC member vide letter no – OASPL/TOR/21-22/03 dated 12.01.2022 sent vide mail 12.01.2022. Deviation in raw material demand from the figure stated in Sl. No –6 of TOR is because of increase in capacity of the unit considering 300-365 maximum annual working days as mentioned in Sl No.-5 of TOR issued by ministry vide File No. File No. J-11011/518/2021-IA-II (IND-I) dated 27.01.2022.					

43.5.8 The water requirement for the proposed project is estimated as 5,184 m^3/day, out of which 5,000 m^3/day of fresh water requirement will be obtained from the Irrigation & Water Department, West Bengal from Kansai River Bed (215 days) and the remaining requirement of 184 m^3/day will be met from rainwater harvesting pond. During monsoon & lean season (150 days) entire water requirement of 5,184 m^3/day shall be met from rainwater harvesting pond. The permission for drawl of surface water (5,000 m^3/day from Kasai River bed for 7 months) is obtained from Irrigation & Water Department, West Bengal Vide no. 530 dated 22.04.2022.

43.5.9 The power requirement for the proposed project is estimated as 229 MW, out of which 137 MW will be obtained from the Captive Power Plant and balance 92 MW from WBSEDCL. Further the management will have 10 x 720 KVA DG sets to meet the emergency power requirement.

43.5.10 Baseline Environmental Studies:

Period	**October 1st 2021 – December 31st 2021**	**Additional Study- One month from January 20th 2022 to February 19th 2022 for 02 locations as recommended by REAC**
AAQ parameters at 10 Locations (min and max)	• $PM_{2.5}$ = 26.67 to 47.08 µg/m^3 • PM_{10} = 56.12 to 78.11 µg/m_3 • SO_2 = 4.02 to 12.05 µg/m^3 • NO_X = 9.51 to 24.60 µg/m^3 • CO = <0.1 to 0.40 mg/m^3	• $PM_{2.5}$= 28.33 to 39.58 µg/m^3 • PM_{10} = 57.22 to 72.52 µg/m^3 • SO_2 = 4.69 to 8.70 µg/m^3 • NO_X = 12.30 to 23.49 µg/m^3 • CO = <0.1 to 0.30 mg/m^3
Cumulative Incremental GLC level	• Cumulative impact assessment • PM_{10} – 9.39 µg/m^3 (Level at 1.2 km in South of Southeast Direction) • SO_2 - 10.02 µg/m^3 (Level at 1.0 km in South of Southeast Direction) • NO_X - 9.69 µg/m^3 (Level at 1.0 km in South of Southeast Direction) • CO - 1.17 mg/m^3 (Level at 2.4 km in South Direction)	

<table>
<tr><td>Ground water quality at 8 Locations</td><td>pH: 7.1 to 7.8;
Total Hardness: 119 to 225 mg/l; Chlorides: 21.58 mg/l to 71.63 mg/l; Fluoride: < 0.05 mg/l
Heavy metals (Mercury, Lead, Cadmium & Arsenic): BDL</td><td>--</td></tr>
<tr><td>Surface water quality at 9 Locations</td><td>pH: 6.9 to 7.2;
DO: 4.6 to 5.8 mg/l,
BOD: 2.6 to 9.4 mg/l
COD: 11.0 to 32.0 mg/l.</td><td>--</td></tr>
<tr><td>Noise levels Leq (Day and Night)</td><td>Noise Level During Day Time - 45.7 to 65.9 dB(A)
Noise Level During Nighttime – 35.9 to 54.1 dB(A)</td><td>--</td></tr>
<tr><td>Traffic assessment study findings</td><td>Traffic study has been conducted at the junction of NH 16 (Formerly known as NH 60) & NH 49 (Formerly known as NH 6) near proposed site which is approximately 500 m (NW direction) from the plant site.
Transportation of raw material, fuel & finished product will be done 15% by road and 85% by dedicated railway siding.
Existing PCU is 933.46 PCU/hr on NH-16 (Formerly NH-60) and existing level of service (LOS) is:
<table>
<tr><th>Road</th><th>V (Volume in PCU/hr)</th><th>C (Capacity in PCU/Hr)</th><th>Existing (V/C Ratio</th><th>LOS</th></tr>
<tr><td>NH-16</td><td>22,403/24 = 933.46</td><td>3600*</td><td>0.26</td><td>B</td></tr>
</table>
PCU load after proposed project will be:
<table>
<tr><th>Road</th><th>V (Volume in PCU/hr)</th><th>C (Capacity in PCU/Hr)</th><th>Existing (V/C Ratio</th><th>LOS</th></tr>
<tr><td>NH-16</td><td>33,817/24= 1,409.04</td><td>3600*</td><td>0.39</td><td>B</td></tr>
</table>
*Note: Capacity as per IRC-106:1990 Guide line for capacity for roads.

Conclusion: The level of service will “B” after including additional traffic due to proposed project. Thus, it can be concluded that the present road network is good enough to bear the minor increased traffic load.</td><td>--</td></tr>
<tr><td>Flora and fauna</td><td>No schedule-I species & endangered fauna were recorded in the core & buffer zone of plant area.</td><td></td></tr>
</table>

43.5.11 The details of solid waste generation along with its mode of treatment/disposal is furnished as below:

S. No.	Type of waste	Source	Quantity generated (TPA)	Mode of Treatment	Disposal	Remarks
1	Slag	MBF	2,24,000	Granulation	Used for Cement making & in Sinter plant	--
	Sludge		64,000	Not Applicable		--
2	Dolo Char	DRI Plant	1,76,7000	Not Applicable	100% used in CFBC Boilers	--
3	Slag and Scale	SMS (IF)	2,55,200	Recovery of metal & flux from Slag Crushing unit	Used for Road construction/ Land levelling purpose, Paver Block Making after recovering metal from Slag Crushing unit;	--
4	Slag	Ferro Alloys Plant	67,500	Not Applicable	Slag generated during Ferro Manganese production will be used as a raw material for Silico Manganese production.	--
			82,500		After maximum recovery of Mn (8,200 TPA) Slag generated during Silico Manganese production will be used for road construction /land filling.	--
			90,000		After maximum recovery of Chrome (6,000 TPA), Ferro chrome slag after undergoing TCPL Test will be used for green concreting.	--
			9,000		Ferro Silico slag will be used for road construction /land levelling.	--
5	Miss Roll/End Cuts	Rolling Mill	29,000	Not Applicable	Used as raw material in SMS Plant.	--
6	Bottom Ash	CPP	1,04,138	Not Applicable	Used for Road construction/ Land levelling purpose.	--
7	Dust	APC Devices of DRI, SMS & ferro Plant	2,18,070	Not Applicable	Used in Sinter Plant and Brick Manufacturing, Pelletisation mix.	--
8	Kiln Accretion	DRI Plant	14,880	Not Applicable	Road Construction	--
9	Tar Sludge & Coal Tar	Producer gas plant	576	Not Applicable	Sold to WBPCB authorized vendor	--
10	Fly Ash	CPP	3,44,456	Not Applicable	Used for Brick making and also in Cement Plant.	Agreement with associate companies.

S. No.	Type of waste	Source	Quantity generated (TPA)	Mode of Treatment	Disposal	Remarks
11	Middling from Coal Washery	Coal Washery	6,00,000	Not Applicable	To be used in proposed CFBC Boilers and in associate company boiler (OMPL-I, OASPL), Kharagpur.	--
12	Rejects		1,50,000	Not Applicable	To be used for Road construction / Land levelling.	--
13	Low Grade Fe/ Tailing	I/O Beneficiation plant	2,27,906	Not Applicable	Use in Sinter plant, for Brick manufacturing/ Paver block making, as sand substitute in infrastructure/ fine concrete aggregate.	--
14	Iron oxide Powder from ARP	Rolling Mill	365	Not Applicable	To be sold to Tape & Paint manufacture.	--
15	Sludge	ETP of Galvanizing & Pickling Line	78	Not Applicable	Sent to CHWTSDF or Oily scum and metallic sludge recovered from rolling mills ETP shall be mixed, dried and briquetted and reused in Furnaces.	--
16	Dust	APC Devices of Pellet Plant	70,620	Not Applicable	To be 100% reuse in process.	--

Hazardous Waste

S. No.	Type of waste (Hazardous)	Quantity generated (TPA)	Mode of Treatment	Disposal	Remarks
1	Damaged Bag Filters	700 Nos.	Not Applicable	Sent to WBPCB Authorized CHWTSDF.	Will be Sent to CHWTSDF, Haldia W.B.
2	Cotton Waste	1.0 MT	Not Applicable	Sent to WBPCB Authorized CHWTSDF.	
3	Process Residue FeCr Plant	90,000 TPA	Not Applicable	After TCLP test sent to WBPCB Authorized CHWTSDF	
4	Used Oil	13 KLA	Not Applicable	Sold to WBPCB Authorized Vendors.	Sold to WBPCB authorised vendor as per HWM ,2016.
5	Zinc Dross	205 TPA	Not Applicable	Sold to WBPCB Authorized Vendors.	
6	Sludge from ETP	485 TPA	Not Applicable	Sent to WBPCB Authorized CHWTSDF.	Will be Sent to CHWTSDF, Haldia W.B.
7	Tar Sludge	576 TPA	Not Applicable	Sold to WBPCB Authorized Vendors	Sold to WBPCB authorised vendor

					as per HWM ,2016.
8	Phenolic Water	Variable	Not Applicable	Phenolic water of PGP used in ABC of DRI Plant.	Not Applicable

43.5.12 Public Consultation:

Details of advertisement	• "Millennium Post" (in English) dated 25th August, 2022. • "Aajkaal" (in Bengali) dated 25th August, 2022. • "Sanmarg" (in Hindi) dated 25th August, 2022.
Date/ Time of Public Hearing	29th September, 2022 at 12:00 Hours.
Venue	Mahasakti Mahasangha, Satkui, P.O. Matkatpur (near BDO Office Kharagpur-I), Dist. - Paschim Medinipur, West Bengal
Presiding Officer	Additional District Magistrate (LR) and DL&LRO, Paschim Medinipur
Major Issues Raised	1. Environment – APCD, Pollution Control, Housekeeping 2. Employment 3. Socio-economic development 4. CSR Activities related etc.

Action plan as per MoEF&CC O.M. dated 30/09/2020

S. No.	Physical activity and action plan		Year of implementation (Budget in ₹)			Total Expenditure (₹ in Crores)
	Name of the activity	Physical Targets	1st (2023-24)	2nd (2024-25)	3rd (2025-26)	
PUBLIC HEARING BASED ACTIVITIES						
1.	Local employment	Maximum employment will be given to the Local youth as per State Government norms based on their knowledge and skill. In addition, vocational training will be given for the employment to local. Total 160 persons will receive stipend of Rs. 12,500 per month for three months training.	₹ 0.20 Crores	₹ 0.20 Crores	₹ 0.20 Crores	0.60
		Skill development to unemployed local youth through National Skill Development Corporation, Govt. of India Scheme (Contribution to DM, Kharagpur and Financial Support to the technical schools Midnapore I.T.I) ₹ 5 Lakhs) each for all three year	₹ 0.15 Crores	₹ 0.15 Crores	₹ 0.15 Crores	0.45

<table>
<tr><th rowspan="2">S. No.</th><th colspan="2">Physical activity and action plan</th><th colspan="3">Year of implementation (Budget in ₹)</th><th rowspan="2">Total Expenditure (₹ in Crores)</th></tr>
<tr><th>Name of the activity</th><th>Physical Targets</th><th>1st (2023-24)</th><th>2nd (2024-25)</th><th>3rd (2025-26)</th></tr>
<tr><td></td><td></td><td>for development of lab & infrastructure. Free lectures / classes at least 144 classes annually from experienced industrial experts in consultation with school administration will be provided at the cost of ₹ 5 Lakhs annually.

Industrial/ Vocational training will be provided to 100 local youths per year based on their academic qualification for better education and practical experiences and also eligible candidates will be engage by the unit in near future.</td><td></td><td></td><td></td><td></td></tr>
<tr><td>2.</td><td>Proper action to control pollution.</td><td>Most effective and advanced stage technology having techno-economic viability for air pollution control devices of adequate capacity will be installed in parallel with implementation of the proposed plant and it will be regularly monitored by dedicated team.

Also, third party audit/ monitoring will be conducted by approved lab / agency on quarterly basis.

Performance test shall be conducted on all pollution control systems every year and report shall be submitted to Integrated Regional Office of the MoEFCC/ WBPCB with EC compliance report.

Plant will be design as Zero Liquid Discharge plant and entire waste water after treatment used in plant. For</td><td colspan="3"><table>
<tr><th>S. No.</th><th>Item</th><th>Capital Cost (in Crores)</th><th>Recurring Cost (in Crores)</th></tr>
<tr><td>1</td><td>Cost of Air Pollution Control Devices/ System</td><td>137.50</td><td>14.00</td></tr>
<tr><td>2</td><td>Cost of Water conservation & Pollution Control</td><td>8.90</td><td>1.90</td></tr>
<tr><td>3</td><td>Cost of Solid Waste Management System</td><td>9.50</td><td>1.00</td></tr>
<tr><td>4</td><td>Green belt development</td><td>17.40</td><td>0.73</td></tr>
<tr><td>5</td><td>Noise Reduction Systems</td><td>3.40</td><td>0.60</td></tr>
<tr><td>6</td><td>Occupational Health Management</td><td>2.80</td><td>0.27</td></tr>
<tr><td>7</td><td>Risk Mitigation & Safety Plan</td><td>4.00</td><td>0.40</td></tr>
<tr><td>8</td><td>Environmental Monitoring Surveillance System</td><td>5.81</td><td>0.80</td></tr>
<tr><td>9</td><td>Implementation of Controlling measures to minimise impacts</td><td>2.46</td><td>0.60</td></tr>
</table></td><td></td></tr>
</table>

S. No.	Physical activity and action plan		Year of implementation (Budget in ₹)			Total Expenditure (₹ in Crores)
	Name of the activity	Physical Targets	1st (2023-24)	2nd (2024-25)	3rd (2025-26)	
		the proposed project 01 x 130 KLD STP and 1 x 700 KLD + 1 x 300 KLD ETP will be installed. The various waste materials arising out of the technological processes would be re-utilised to the extent possible. Hazardous waste will be disposed through the WBPCB approved agencies are sent to CHWTSDF, Haldia, W.B.	due to transportation and traffic			
		10	Setting Environmental Laboratory with necessary setup and manpower		1.23	0.70
			Total		**193.0**	**21.0**
PUBLIC HEARING-CSR RELATED & NEED BASED ACTIVITIES *(Adopting 07 nos. of villages – Malipur, Chakganesh, Baradiha, Jakpur, Gholageria, Uttarshimla and Kantageria in nearby project area*)						
3.	Provision for health care facility	Free ambulance service for meeting emergency demand.	₹ 0.30 Crores	-	-	0.30
		Free Eye checkup, blood donation camp	₹ 0.10 Crores	₹ 0.10 Crores	₹ 0.10 Crores	0.30
		Financial support to existing health center [Chakganesh Upswasth Kendra (1st & 2nd year) and Uttar Shimla (3rd year)] with specialist doctor, compounder & assistant etc.	₹ 0.35 Crores	₹ 0.35 Crores	₹ 0.35 Crores	1.05
4.	Financial Support to the Local School for better education facility and development of infrastructure (toilets, boundary wall), free bench distribution	Kantageria Primary School in 1st year, Gholagerya Prathamik Vidyalaya, in 2nd year and Jakpur Vidyasagar Madhyamik Shiksha Kendra in 3rd year with 02 nos. toilets at each school. *(01 no. toilet @ 1.50 lac)*	₹ 0.20 Crores	₹ 0.20 Crores	₹ 0.20 Crores	0.60
5.	Avenue plantation	Avenue plantation will be done in nearby villages by planting more or less approx. 2,00, 000 nos. of trees. (Chakganesh area-1st year, Jakpur & Baradiha Area -2nd	₹ 1.00 Crores	₹ 2.00 Crores	₹ 1.00 Crores	4.00

S. No.	Physical activity and action plan		Year of implementation (Budget in ₹)			Total Expenditure (₹ in Crores)
	Name of the activity	Physical Targets	1st (2023-24)	2nd (2024-25)	3rd (2025-26)	
		year and Rupnaryan village - 3rd year) 50,000 trees in each village *(01 no. sapling plantation @ 200 rupees)*				
6.	Installation of Street Lighting (Solar/Led) provision at suitable public places	Installation of LED solar Street Lights with pole 60 nos. in Malipur Village-1st year (20 nos.), Baradihad Village -2nd year (20 nos.) and in Jakpur Village-3rd year (20 nos.) *(01 no. LED solar Street Lights with pole @ 1.00 lac)*	₹ 0.20 Crores	₹ 0.20 Crores	₹ 0.20 Crores	0.60
7.	Providing Drinking water facility	Bore well/hand pump (40 Nos.) in villages. Jakpur –10 Nos.), Chakganesh-(10 Nos.), Malipur (10 Nos.) & Baradiha (10 Nos.) – 1st Year (Jakpur & Chakganesh); 2nd year (Malipur) & 3rd year (Baradiha). *(01 no. Bore well/hand pump @ 1.00 lacs)*	₹ 0.20 Crores	₹ 0.10 Crores	₹ 0.10 Crores	0.40
		Restoration of 04 nos. pond (Uttar Shimla-01 no Chakganesh-01 no., Gholageria-02 nos.) 1st Year- Uttar Shimla & Kantageria and); 2nd year Gholageria. *(01 no. pond restoration cost @ 2.5 Lakh)*	₹ 0.05 Crores	₹ 0.05 Crores	-	0.10
8.	Providing collection bins/ dustbin	60 nos. of collection bins with stand each in Kantageria-20 nos. (1st year), Chakganesh-20 nos. (2nd year) and Gholageria-20 nos. (3rd year) villages. *(01 no. bin cost with stand@ 0.25 Lakh)*	₹ 0.05 Crores	₹ 0.05 Crores	₹ 0.05 Crores	0.15

S. No.	Physical activity and action plan		Year of implementation (Budget in ₹)			Total Expenditure (₹ in Crores)
	Name of the activity	Physical Targets	1st (2023-24)	2nd (2024-25)	3rd (2025-26)	
9.	Maintenance, Development & Construction of road in nearby villages	Maintenance / Construction & development of 2.0 km road. (From Gholageria Village to Jakpur Station) in 1st and 2nd year and 3rd year 4.0 km road from Chakganesh to Jakpur station in respectively. *(1.0 Km @ cost of 1.25 Cr.)*	₹ 2.50 Crores	₹ 2.50 Crores	₹ 2.50 Crores	7.50
10	Infrastructure Development	Construction of 02 nos. community hall- Jakpur (01 No.)– 1st Year; & Chakganesh (01 no)-3rd year with 02 nos. public toilets at each community hall.	₹ 0.40 Crores	-	₹ 0.40 Crores	0.80
11	Awareness Campaign for Single Use Plastic & installation of plastic waste shredder machine in community hall	Awareness program/ Campaign for Single Use Plastic in Lachmapur Gram Panchayat (1st Year) Installation of 04 nos. plastic waste shredder machine (01 no. in each community hall of corresponding village in 2nd Year – Jakpur, Chakganesh & 3rd year Baradiha & Gholageria village. *(Awareness campaign @ 5.0 Lakhs & Shredder machine @ 2.5 Lakhs each.)*	₹ 0.05 Crores	₹ 0.05 Crores	₹ 0.05 Crores	0.15
12.	Utilization paddy straw & other biomass for bio pelletization	Collection/ segregation of paddy straw & other crop residue from nearby villages for bio pelletizing & feeding in bio pellet plant of associate company of the Group for utilizing bio-pellet /co-firing in proposed boiler (blending with coal 5-10%) as per MOEFCC guidelines dated 22.10.2022.	0.80	0.80	0.80	2.40
13.	Development /landscaping of Jakala Nalla	Development / land- scaping of Jakala Nalla in Gholageria Village in 2nd year.	₹ 0.20 Crores	₹ 0.20 Crores	₹ 0.20 Crores	0.60

S. No.	Physical activity and action plan		Year of implementation (Budget in ₹)			Total Expenditure (₹ in Crores)
	Name of the activity	Physical Targets	1st (2023-24)	2nd (2024-25)	3rd (2025-26)	
TOTAL			**6.75 Crores**	**6.95 Crores**	**6.30 Crores**	**20.00 Crores**

43.5.13 The capital cost of the proposed project is ₹ 1,300.0 Crores and the capital cost for environmental protection measures is proposed as ₹ 213.0 Crores. The annual recurring cost towards the environmental protection measures is proposed as ₹ 21.0 Crores. The employment generation from the proposed project is 3,000 Direct employment (Regular & Contractual) and 1,000 indirect. The details of cost for environmental protection measures is as follows:

S. No.	Item	Capital Cost (₹ in Crores)	Recurring Cost (₹ in Crores)
1	Cost of Air Pollution Control Devices/ System	137.50	14.00
2	Cost of Water conservation & Pollution Control	8.90	1.90
3	Cost of Solid Waste Management System	9.50	1.00
4	Green belt development	17.40	0.73
5	Noise Reduction Systems	3.40	0.60
6	Occupational Health Management	2.80	0.27
7	Risk Mitigation & Safety Plan	4.00	0.40
8	Environmental Monitoring Surveillance System	5.81	0.80
9	Implementation of Controlling measures to minimise impacts due to transportation and traffic	2.46	0.60
10	Setting Environmental Laboratory with necessary setup and manpower	1.23	0.70
11	EMP for Social and Infrastructure Development: - Addressal of public consultation concerns. - Need base assessment (Adopting 07 nos. of villages – Malipur, Chakganesh, Baradiha, Jakpur, Gholageria, Uttarshimla and Kantageria) in nearby project area	20.00	--
Total		**213.0**	**21.0**

43.5.14 Proposed greenbelt will be developed in 33.79 ha which is about 33.0% of the total project area. Thus, total of 33.79 ha area (33% of total project area) will be developed as greenbelt. A 30 m wide greenbelt, consisting of at least 3 tiers around plant boundary will be developed as greenbelt and green cover as per CPCB/MoEF&CC, New Delhi guidelines. Local and native species will be planted with a density of 2,500 trees per hectare. Total no. of 84,475 saplings will be planted and nurtured in 33.79 hectares in three years.

43.5.15 It is reported that there is no violation under EIA, 2006/court case/show cause/direction related to the project under consideration.

43.5.16 The proposal was initially considered during 40th meeting of the EAC for Industry-I sector held during 19th-21st July, 2023 wherein Committee deferred the proposal due to technical shortcomings. The deliberations and recommendations of EAC are as follows:

Deliberations by the Committee (EAC during 19th – 21st July, 2023)

The Committee noted the following:

1. The EAC noted that there is a habitation in the proposed site. EAC further deliberated on the layout plan and the greenbelt shown and is of the opinion and green belt is not proposed uniform all around the plant, a 30m green belt all around the plant shall be proposed. Accordingly a revised layout plan needs to be submitted. Further, Project proponent shall prepare layout plan showing all internal roads minimum 6m width and 9m turning radius with proper looping for smooth traffic flow, including fire tender as per NBC. Road network shall connect all service areas in layout. This drawing shall include area statement showing plot area, area under roads, parking, green belt with calculations and % with respect to plot area of project site and proper indexing. The PP shall prepare 3 different drawings. Drawing No 1 should include a layout with Road Networking, Traffic chanalization, All Plant structures, Parking with a detailed area statement for each element, Indexing with proper color code and Naming at Bottom right corner. Drawing No 2 include a layout with road networking, Existing and proposed Green belt with calculations and indexing with proper color code along with nos of trees in existence and proposed trees. Drawing No 3 includes a layout with road networking, contour drawing and drainage disposal system and rain water harvesting system with calculations, Further the disposal of storm drain point with invert level. Drawing include indexing with color code for drainage pipe lines.
2. The committee noted that water balance diagram needs to be revisited for proper distribution facility wise including greenbelt.
3. The Committee observed the list of affected land loser in the proposed project and the need to give priority in job opportunity in plant. In this regard, PP needs to submit a plan along with an undertaking that priority in job opportunity shall be provided to such affected persons.
4. Secondary baseline data of one year needs to be used to study the probable plume distribution, wind rose diagram showing one year wind distribution need to be presented.
5. The EAC is of the view that full input details of air modelling need to be included in the EIA report, and incremental GLC of CO need to be considered while modelling.
6. Revised Action Plan on the issues raised during PH needs to be submitted.
7. In view of above facts, EAC advised that PP to submit all the above mentioned information for further consideration.
8. The PP/Consultant agreed to the suggestions of EAC and requested EAC to allow reappear after the revision of the application incorporating the desired information.

Recommendations of the Committee (EAC during 19th – 21st July, 2023):

In view of the foregoing and after detailed deliberations, the committee recommended to defer the proposal to address the shortcomings enumerated at para above. The proposal may be considered after submission of the requisite information.

43.5.17 The proponent submitted the ADS reply vide letter No. OASPL/EC_New/23-24/04 dated 14.08.2023 uploaded on PARIVESH on 14.08.2023. Point-wise reply of ADS is given as below:

S. No.	ADS point	Reply/response of PP
1	The EAC noted that there is a habitation in the proposed site. EAC further deliberated on the layout plan and the greenbelt shown and is of the opinion and green belt is not proposed uniform all around the plant, a 30 m green belt all around the plant shall be proposed. Accordingly, a revised layout plan needs to be submitted. Further, Project proponent shall prepare layout plan showing all internal roads minimum 6 m width and 9 m turning radius with proper looping for smooth traffic flow, including fire tender as per NBC. Road network shall connect all service areas in layout. This drawing shall include area statement showing plot area, area under roads, parking, green belt with calculations and % with respect to plot area of project site and proper indexing. The PP shall prepare 3 different drawings. Drawing No 1 should include a layout with Road Networking, Traffic chanalization, All Plant structures, Parking with a detailed area statement for each element, Indexing with proper color code and Naming at Bottom right corner. Drawing No 2 include a layout with road networking, Existing and proposed greenbelt with calculations and indexing with proper color code along with nos of trees in existence and proposed trees. Drawing No 3 includes a layout with road networking, contour drawing and drainage disposal system and rain water harvesting system with calculations, Further the disposal of storm drain point with invert level. Drawing include indexing with color code for drainage pipe lines.	As suggested by the hon'ble committee members, plant layout for three different aspects have been prepared and submitted as appendix of ADS reply: a) Composite engineering plant layout- with Road Networking, Traffic chanalization, all Plant structures, Parking with a detailed area statement for each element, Indexing with proper color code. b) Plant layout showing road networking, a 30 m green belt all around the plant with calculations and indexing with proper color code along with nos. of trees. c) Plant layout with road networking, contour drawing and drainage disposal system and rain water harvesting system with calculations and disposal of storm drain point with invert level.

S. No.	ADS point	Reply/response of PP
2	The committee noted that water balance diagram needs to be revisited for proper distribution facility wise including greenbelt.	Water demand is reassessed and accordingly water balance diagram is revised. Now average water requirement per trees per day considered is 6.0 litres for green belt development. The species that are selected for green belt development is as per CPCB guideline considering the geological & hydrogeological features of the area. Also, the annual average rainfall in that area is 1659 mm (as per past IMD 1981-2017 data) which is sufficient enough for maintaining the soil moisture content of soil. With our past experience for green belt development in nearby plant of associate company the average water requirement per trees per day is 3.5 to 4.0 liters. Also, as per research paper the general rule of thumb for determining the irrigation needs of a system is that 1 square meter of bench top, covered with leaves, will use 4.0-6.0 litres of water a day. New plants, or where the square meter is not totally covered with leaves, will use an average of about 3.0-3.5 litres a day. Generally, plantation is done in monsoon season for better survival rate and lower water demand in initial period. Total trees to be planted are 84,475 nos. The greenbelt will be developed in 02 years span of time. In 1st year-42,238 nos. & in 2nd year-42,237 nos. Revised Water balance diagram has been submitted.
3	The Committee observed the list of affected land loser in the proposed project and the need to give priority in job opportunity in plant. In this regard, PP needs to submit a plan along with an undertaking that priority in job opportunity shall be provided to such affected persons.	The project will create direct employment 3000 nos. (Regular & Contractual). Top most priority will be given to the affected land loser based on their academic qualification, skill & experience and company requirement and as per the extent of Government norms (State or GoI norms) in parallel with implementation of the plant to the maximum extent possible. Skill development to unemployed local youth from affected land loser family through National Skill Development Corporation, Govt. of India Scheme (Automobile Repair, Welding, Electrical, Computer, Soft skills programming etc.) will be provided. Free lectures/classes at least 144 classes annually from experienced industrial experts in consultation with school administration will be provided. Industrial/Vocational training will be provided to affected land loser per year based on their academic qualification for better education and practical experiences and also

S. No.	ADS point	Reply/response of PP
		eligible candidates will be engage by the unit in near future. An affidavit signed by the Director of the company stating top most priority will be given to the affected land loser based on their academic qualification, company requirement and as per the extent of Government norms (State or GoI norms) in parallel with implementation of the plant has been submitted.
4	Secondary baseline data of one year needs to be used to study the probable plume distribution, wind rose diagram showing one year wind distribution need to be presented.	Secondary baseline data of one year for the period of January 1st 2022 to December 31st 2022 recorded at the nearest IMD station has been collected from IMD data supply portal to establish the present environmental scenario, to study wind frequency & distribution and the probable plume distribution. The results of the cumulative impact on air from the model indicate that the predicted baseline concentration after implementation of the entire project of the associate companies with respect to the PM_{10}, SO_2, NO_X and CO are 62.43-88.44 µg/m^3, 7.79-25.35 µg/m^3, 13.86-35.37 µg/m^3 and 1.63-0.07 mg/m^3 respectively. The GLC predicted at all receptor locations are well within the PM_{10}, SO_2, NO_X & CO limit prescribed in NAAQS. (Standards for PM_{10} is 100 µg/m^3, SO_2 is 80 µg/m^3, NO_2 is 80 µg/m^3 and CO is 2 mg/m^3 as per CPCB). Simulation model for prediction of ground level concentrations due to cumulative stack emissions, fugitive emissions and traffic emission is calculated along with proposed EMP plan has been submitted.
5	The EAC is of the view that full input details of air modelling need to be included in the EIA report, and incremental GLC of CO need to be considered while modelling.	In order to predict the impact of the project, air quality prediction modelling has been carried out using numerical simulation model & software packages, namely ISC-AERMOD View (version 6.2.0) which is an interface for the U.S. EPA ISCST3, ISC-PRIME and AERMOD. This package was developed by Lakes Environmental, Canada. AERMOD is the next generation air dispersion model which can be considered as a comprehensive approach for computation of the ground level concentrations (GLCs) of a pollutant. The project is not located on hilly terrain. Input details of air modelling that are considered are: i. Stack emission norms for PM for Proposed Project as 30 mg/Nm^3. ii. Stack emission of existing and upcoming industries in study area. iii. Traffic emission of all the units of the study area.

S. No.	ADS point	Reply/response of PP
		iv. SO_2 emissions based on fuel consumption with control measures or prescribed limits, where available. v. NOx emission based on prescribed limits or industry norms, where limits not available. vi. CO emission from Point Source & Line Source. vii. Air quality prediction modelling by incorporating terrain features of the study area- Elevation of receptors from Google earth/Bhuvan-NRSC. viii. Meteorological data as monitored at site using automatic weather station. ix. Latitude and longitude of the place under consideration. x. Wash out due to rain is not considered. xi. The stack tip down wash is not considered. xii. Base map of the study area prepared using Open Series Map. xiii. Software used for the current study is standard model i.e. AERMOD VIEW. xiv. GLCs are obtained in $\mu g/m^3$ for pollutants. xv. Output of modelling gives concentration at uniform Cartesian receptors to get the resultant concentration with reference to baseline data. The detail is already incorporated in EIA/EMP report in Section 4.5.1.4, Page No-C4-18 of Chapter-4. T he impact of all the sources of emissions (including transportation) on the AAQ of the area was assessed. Incremental GLC of CO along with Isopleths showing air quality contours plotted on location map have also been incorporated in this EIA/EMP Report in section 4.5.1.4, Table no- C4-8 & C4-10, Fig. No. C4-4 of Chapter-4. Also, secondary baseline data of one year for the period of January 1st 2022 to December 31st 2022 recorded at the nearest IMD station has been collected from IMD data supply portal to establish the present environmental scenario, to study wind frequency & distribution and the probable plume distribution and submitted.
6	Revised Action Plan on the issues raised during PH needs to be submitted.	To address the issues raised during the public hearing in the instant proposal and socio-economic development of the nearby villages the budget is revised. M/s. Orissa Alloy Steel Private Limited is also proposing to adopt the below mentioned 07 nos. of Villages as a part of social welfare development based on need base assessment carried. The detail of villages are: 1. Malipur, 2. Chakganesh,

S. No.	ADS point	Reply/response of PP
		3. Baradihad, 4. Jakpur, 5. Gholageria, 6. Uttarshimla and 7. Kantageria Rs. 20.0 crores under the head of EMP for Social & Infrastructure development activities for implementation of the commitments made during Public Hearing & fulfilling the Need based activities as per MoEF&CC OM dated 30.09.2020 is being earmarked which will be spent in 03 years. The activities/ area under which the fund earmarked will be spent are as follows: a) **Creation of local employment-** *Fund earmarked Rs. 1.05 Crores.* b) **Proper Action to Control Pollution-** *Fund earmarked* CAPEX-*Rs. 193 Crores and OPEX-Rs 21.0 Crores.* c) **Maintenance, Development & Construction of road in nearby villages-** *Fund earmarked Rs. 7.50 Crores.* d) **Development of Drinking water facility-** *Fund earmarked Rs. 0.50 Crores.* e) **Installation of solar street lights-** *Fund earmarked Rs. 0.60 Crores.* f) **Providing collection bins/ dustbin** - *Fund earmarked Rs. 0.15 Crores.* g) **Financial Support to the Local School for better education facility, development of infrastructure toilets, boundary wall), free bench distribution.** - *Fund earmarked Rs. 0.60 Crores.* h) **Provision for health care facility**- *Fund earmarked Rs. 1.65 Crores.* i) **Social infrastructure development (Community Hall with public toilet)**- *Fund earmarked Rs. 0.80 Crores* j) **Avenue plantation-** *Fund earmarked Rs. 4.00 Crores.* k) **Development/ landscaping of Jakala Nalla** -*Fund earmarked Rs. 0.60 Crores.* l) **Utilization paddy straw & straw & another biomass for bio pelletization** - *Fund earmarked Rs. 2.40 Crores.* m) **Awareness Campaign for Single Use Plastic & installation of plastic waste shredder machine in community hall** - *Fund earmarked Rs. 0.15 Crores.* Revised budget with quantified targets to full fill the commitment on public hearing issues & need based activities has been submitted as Appendix-VII of ADS reply.

S. No.	ADS point	Reply/response of PP
7	In view of above facts, EAC advised that PP to submit all the above-mentioned information for further consideration.	Above-mentioned information has been submitted on Parivesh portal on 14.08.2023.
8	The PP/Consultant agreed to the suggestions of EAC and requested EAC to allow re-appear after the revision of the application incorporating the desired information.	Revision of the application incorporating the desired information is made on Parivesh portal.

43.5.18 Based on the submission of PP, the proposal has been re-considered during the 43rd meeting of the EAC for Industry-I sector held on 4th - 5th September, 2023. The deliberations and recommendations of EAC are as follows:

Deliberations by the Committee

43.5.19 The Committee noted the following:

1. The instant proposal is for setting up of a greenfield Integrated Steel Plant of production capacity 0.9 million Ton per Annum (Finished Steel) along with 137 MW (92 MW WHRB based & 45 MW Coal and Dolochar mix based) Captive Power Plant.
2. The EAC, constituted under the provision of the EIA Notification, 2006 comprising Expert Members/domain experts in various fields, examined the proposal submitted by the Project Proponent in desired format along with EIA/EMP reports prepared and submitted by the Consultant accredited by the QCI/ NABET on behalf of the Project Proponent.
3. The EAC noted that the Project Proponent has given an undertaking that the data and information given in the application and enclosures are true to the best of his knowledge and belief and no information has been suppressed in the EIA/EMP reports. If any part of data/information submitted is found to be false/ misleading at any stage, the project will be rejected and Environmental Clearance given, if any, will be revoked at the risk and cost of the project proponent.
4. The Committee noted that the EIA reports are in compliance of the ToR issued for the project, reflecting the present environmental status and the projected scenario for all the environmental components. The Committee deliberated on the proposed mitigation measure towards Air, Water, Noise and Soil pollutions. The Committee suggested that the storage of toxic/explosive raw materials/products shall be undertaken with utmost precautions and following the safety norms and best practices.
5. The total project area is 102.39 ha [Private: 60.10 ha; Govt.: 42.29 ha (Industrial)]. Out of the 102.39 hectare (253 acres) of land, 44.80 hectare (110.715 acres) of land (42.29 ha. Industrial land at Vidyasagar Industrial Park, Kharagpur + 2.51 ha. Private land) is already in possession and for rest of land (57.59 hectare) consent from private rayat obtained. The EAC advised that total project land shall be acquired and converted for industrial purpose prior to commencement of project.

6. The nearest habitations is Chakganesh (0.25 km, EES), Baradiha (0.80 km, SW), Rupnarayanpur (1.10 km, NW) and Jakpur (1.10 km, NE) from the project site. The EAC is of the opinion that PP shall strictly implement the environmental safeguard measures proposed to minimise the impact on the habitation of the locals.

7. Jakala Nala is at a distance of 0.03 km in the South direction along with other water bodies within the study area of the project site. The EAC is of the opinion that water bodies shall not be disturbed. Mitigation measures w.r.t. safeguarding the water bodies shall be strictly implemented.

8. The water requirement for the project is estimated as 5,184 m^3/day, out of which 5,000 m^3/day of fresh water requirement is proposed to be obtained from the Irrigation & Water Department, West Bengal from Kansai River Bed (215 days) and the remaining requirement of 184 m^3/day will be met from rainwater harvesting pond. During monsoon & lean season (150 days) entire water requirement of 5,184 m^3/day shall be met from rainwater harvesting pond. The EAC deliberated on the water requirement and found is satisfactory.

9. The Committee has deliberated on the baseline data and incremental GLC due to the proposed project and found it satisfactory.

10. The PP has submitted that greenbelt will be developed in 33.79 ha which is about 33.0% of the total project area. Thus, total of 33.79 ha area (33% of total project area) will be developed as greenbelt. Total no. of 84,475 saplings will be planted and nurtured in 33.79 hectares in three years. The EAC deliberated on the greenbelt layout plan along with action plan and the budget earmarked and is of the opinion that PP shall complete the proposed greenbelt development in a period of 1 year.

11. The committee deliberated details of carbon foot prints and carbon sequestration study w.r.t. proposed project and found them to be satisfactory.

12. The Committee also deliberated on the public hearing issues along with revised action plan submitted by the proponent to address the issues raised during the public hearing and found it satisfactory.

13. The EAC also deliberated on the ADS reply of the project proponent and found it satisfactory.

14. The PP/Consultant informed the Committee that they have engaged IIT Kharagpur for tailing management study. The EAC is of the opinion that PP shall submit the status of the implementation of the recommendations made by IIT Kharagpur in that particular study. to the Regional office with the half yearly compliance report.

15. The EAC deliberated on the proposal with due diligence in the process as notified under the provisions of the EIA Notification, 2006, as amended from time to time and accordingly made the recommendations to the proposal. The Experts Members of the EAC found the proposal in order and recommended for grant of environmental clearance.

16. The environmental clearance recommended to the project/activity is strictly under the provisions of the EIA Notification 2006 and its subsequent amendments. It does not tantamount/construe to approvals/consent/permissions etc. required to be obtained or standards/conditions to be followed under any other Acts/ Rules/ Subordinate legislations,

etc., as may be applicable to the project. The project proponent shall obtain necessary permission as mandated under the Water (Prevention and Control of Pollution) Act, 1974 and the Air (Prevention and Control of Pollution) Act, 1981, as applicable from time to time, from the State Pollution Control Board, prior to construction & operation of the project.

17. The EAC also reviewed the EC conditions (specific and general) pertaining to Industry-I projects and observed that some of the specific conditions stipulated so far in the previously recommended EC projects are common and applicable to most of the projects in general. In view of the same, the General Conditions (in case of EC projects) have been revised through reallocation of these common conditions from specific to General Conditions (in case of EC projects). Accordingly, the instant project is also being stipulated with the modified General conditions.

Recommendations of the Committee:

43.5.20 In view of the foregoing and after detailed deliberations, the committee **recommended** the instant proposal for grant of Environment Clearance under the provisions of EIA Notification, 2006 subject to the stipulation of following specific conditions and general conditions as per the Ministry's Office Memorandum No. 22-34/2018-III dated 9/8/2018 based on project specific requirements:

A. Specific Condition:

i. This Environmental clearance is granted subject to final outcome of Hon'ble Supreme Court of India, Hon'ble High Court, Hon'ble NGT and any other Court of Law, if any, as may be applicable to this project.

ii. The project proponent shall comply with all the environmental protection measures and safeguards proposed in the documents submitted to the Ministry. All the recommendations made in the EIA/EMP in respect of environmental management, and risk mitigation measures relating to the project shall be implemented.

iii. The project proponent shall utilize modern technologies for capturing of carbon emitted and shall also develop carbon sink/carbon sequestration resources capable of capturing more than emitted. The implementation report shall be submitted to the IRO, MoEF&CC in this regard.

iv. Total project land acquisition shall be completed and converted for industrial purpose prior to commencement of project.

v. As committed, PP shall implement the plan to provide priority in job opportunity shall be provided to affected land loser in the proposed project.

vi. The nearest habitations is Chakganesh (0.25 km, EES), Baradiha (0.80 km, SW), Rupnarayanpur (1.10 km, NW) and Jakpur (1.10 km, NE) from the project site. Proponent shall take appropriate environmental safeguard measures to minimise the impact on the habitation of the locals. PP needs to strengthen green belt all around the plant area to reduce the dust pollution. The PP shall also include some of these locations in its environmental monitoring programme.

vii. Jakala Nala is at a distance of 0.03 km in the South direction along with other water bodies within the study area of the project site. A robust and full proof Drainage Conservation

scheme to protect the natural drainage and its flow parameters; along with Soil conservation scheme and multiple Erosion control measures shall be implemented.

viii. The water requirement of 5,184 m^3/day shall be obtained from from Kansai River Bed (5,000 m^3/day) after obtaining necessary permission and remaining 184 m^3/day from rainwater harvesting pond. As committed, during monsoon & lean season (150 days) entire water requirement of 5,184 m^3/day shall be met from rainwater harvesting pond.

ix. Three tier Green Belt shall be developed in at least 33% of the project area in a period of 1 year all along the project site of adequate width and tree density shall not be less than 2500 per ha. A 30 m green belt all around the plant shall be developed. Survival rate of green belt developed shall be monitored on periodic basis to ensure that damaged plants are replaced with new plants in the subsequent years. PP shall also develop greenbelt in the form of shelter belt comprising of total of 6 rows of 2x2 m plantation with tall trees & broad leaves with thick canopy along with windshield inside the plant premises to act as green barrier for air pollution & noise levels towards Chakganesh, Baradiha, Rupnarayanpur and Jakpur Villages. Compliance status in this regard, shall be submitted to concerned Regional Office of the MoEF&CC.

x. All the commitments made towards socio-economic development of the nearby villages shall be satisfactorily implemented. The action plan based on the social impact assessment study of the project as per the EMP in accordance to the Ministry's OM dated 30.09.2020 amounting to Rs. 20 Crores shall be strictly implemented and progress shall be submitted to the Regional Office of MoEF&CC.

xi. As committed, PP shall adopt 07 nos. of Villages namely Malipur, Chakganesh, Baradihad, Jakpur, Gholageria, Uttarshimla and Kantageria. PP shall prepare and implement an action plan to develop these villages into model villages.

xii.

xiii. The PP should implement the MOU with potential buyers of the tailings. The industry should adopt the best suitable technology for the disposal of the tailings.

xiv. The PP shall implement the recommendations made by IIT Kharagpur in tailing management study report. Compliance status in this regard, shall be submitted to concerned Regional Office of the MoEF&CC.

B. General Conditions

I. Statutory compliance:

i. The Environment Clearance (EC) granted to the project/ activity is strictly under the provisions of the EIA Notification, 2006 and its amendments issued from time to time. It does not tantamount/ construe to approvals/ consent/ permissions etc., required to be obtained or standards/conditions to be followed under any other Acts/Rules/Subordinate legislations, etc., as may be applicable to the project.

II. Air quality monitoring and preservation

i. The project proponent shall install 24x7 continuous emission monitoring system at process stacks to monitor stack emission as well as 06 Nos. Continuous Ambient Air Quality Station (CAAQMS) for monitoring AAQ parameters with respect to standards prescribed in Environment (Protection) Rules 1986 as amended from time to time. The CEMS and

CAAQMS shall be connected to SPCB and CPCB online servers and calibrate these systems from time to time according to equipment supplier specification through labs recognized under Environment (Protection) Act, 1986 or NABL accredited laboratories.

ii. The project proponent shall carryout Continuous Ambient Air Quality monitoring for common/criterion parameters relevant to the main pollutants released (e.g. PM_{10} and $PM_{2.5}$ in reference to PM emission, and SO_2 and NOx in reference to SO_2 and NOx emissions) within and outside the plant area, covering upwind and downwind directions.

iii. The project proponent shall monitor fugitive emissions in the plant premises at least once in every quarter through laboratories recognized under Environment (Protection) Act, 1986 or NABL accredited laboratories.

iv. Sampling facility at process stacks shall be provided as per CPCB guidelines for manual monitoring of emissions.

v. Appropriate Air Pollution Control (APC) system shall be provided for all the dust generating points including fugitive dust from all vulnerable sources, so as to comply prescribed stack emission and fugitive emission standards.

vi. The project proponent shall provide leakage detection and mechanized bag cleaning facilities for better maintenance of bags.

vii. Sufficient number of mobile or stationery vacuum cleaners shall be provided to clean plant roads, shop floors, roofs, regularly.

viii. Ensure covered transportation and conveying of raw material to prevent spillage and dust generation. The project proponent use leak proof trucks/dumpers carrying coal and other raw materials and cover them with tarpaulin.

ix. Recycle and reuse iron ore fines, coal and coke fines, lime fines and such other fines collected in the pollution control devices and vacuum cleaning devices in the process after briquetting/ agglomeration.

x. The project proponent shall provide primary and secondary fume extraction system at all heat treatment furnaces.

xi. Wind shelter fence and chemical spraying shall be provided on the raw material stock piles.

xii. Design the ventilation system for adequate air changes as per prevailing norms for all tunnels, motor houses, Oil Cellars.

xiii. Pollution control system in the plant shall be provided as per the CREP Guidelines of CPCB.

xiv. The project proponent shall adopt the Clean Air practices like mechanical collectors, wet scrubbers, fabric filters (bag houses), electrostatic precipitators, combustion systems (thermal oxidizers), condensers, absorbers, adsorbers, and biological degradation. Controlling emissions related to transportation shall include emission controls on vehicles as well as use of cleaner fuels. Sufficient numbers of additional truck mounted Fog/Mist water cannons shall be procured and operated regularly inside the project premises and also in the surrounding villages to arrest suspended dust in the atmosphere.

xv. Bag filters shall be cleaned regularly and efficiency of bag filter system shall be monitored at regular intervals.

xvi. Water Sprinklers/Water mist system shall be installed near raw material yards, operational units and other strategic locations to control fugitive emissions from the plant.

xvii. The particulate matter emissions from the process stacks shall be less than 30 mg/Nm^3 and measures shall be undertaken as per the submitted action plan. Efficient Air monitoring equipment shall be installed.

xviii. Following additional arrangements to control fugitive dust shall be provided:
   a. Fog / Mist Sprinklers at all on bulk raw material storage area (at the transfer points) like Iron Ore, Coal and for Fly Ash and similar solid waste storage areas.
   b. Proper covered vehicle shall be used while transport of materials.
   c. Wheel washing mechanism shall be provided in entry and exit gates with complete recirculation system.

xix. Briquetting and Jigging plant shall be installed in Ferro Alloys Plant.

xx. The PP shall minimize the evaporation losses in jigging operation to less than 10% using suitable advanced process.

xxi. The 4^{th} hole extraction system shall be provided in the Sub Merged Arc Furnaces and EAF.

xxii. Industry is going to use silica quartz in large quantities and going to produce Silico Manganese and Ferro Silicon alloy steel. Therefore, it is necessary to control silica/quartz exposures at production Departments, not only emission norms as per Indian Factories Act. The permissible limit for silica/quartz should be within 10 mg/m3 for total dust as per Indian Factories Act. Therefore, it is recommended to monitor personal and area exposures for silica quartz dust in the process plants.

xxiii. Dry quenching (CDQ) system shall be installed along with power generation facility from waste heat recovery from hot coke

xxiv. Facilities for spillage collection shall be provided for coal and coke on wharf of coke oven batteries (Chain conveyors, land based industrial vacuum cleaning facility). Land-based APC system shall be installed to control coke pushing emissions.

xxv. Monitor CO, HC and O_2 in flue gases of the coke oven battery to detect combustion efficiency and cross leakages in the combustion chamber.

xxvi. Vapor absorption system shall be provided in place of vapour compression system for cooling of coke oven gas in case of recovery type coke ovens.

xxvii. The coke oven gas shall be subjected to desulphurization if the sulphur content in the coal exceeds 1%.

xxviii. Hoppers of the coal crushing unit and other washery units shall be fitted with high efficiency bag filters/mist spray water sprinkling system shall be installed and operated effectively at all times of operation to check fugitive emissions from crushing operations, transfer points of closed belt conveyor systems and from transportation roads.

xxix. The raw coal, washed coal and coal wastes (rejects) shall be stacked properly at earmarked site (s) within stockyards fitted with wind breakers/shields. Adequate measures shall be taken to ensure that the stored mineral does not catch fire.

xxx. The temporary reject sites should appropriate planned and designed to avoid air and water pollution from such sites.

xxxi. During operational phase at Captive Power Plant, Action Plan to monitor coke/coal dust exposures in different process plants using personal and area air samplers and to compare with permissible limits as per Indian Factories Act, 1948 shall be implemented.

xxxii. The coal dust should be monitored at coal unloading, crushing, furnace areas and should be within 2 mg/m3, respirable dust fraction containing less than 5% quartz as per Indian Factories Act, 1948.

xxxiii. Basic Oxygen Furnace (BOF) gas shall be cleaned dry.

xxxiv. Online stack monitoring system for IF and RHF shall be installed and monitoring report shall be submitted to the concerned Regional Office of the MoEF&CC along with the six monthly compliance report.

xxxv. Low NOx Burners will be installed at Reheating Furnace for control of Gaseous emissions generated while using PNG.

xxxvi. Sensors for CO, with alarm systems, should be installed inside the industry premises at suitable locations.

III. Water quality monitoring and preservation

i. The project proponent shall install 24x7 continuous effluent monitoring system with respect to standards prescribed in Environment (Protection) Rules 1986 as amended from time to time and connected to SPCB and CPCB online servers and calibrate these system from time to time according to equipment supplier specification through labs recognized under Environment (Protection) Act, 1986 or NABL accredited laboratories.

ii. The project proponent shall monitor regularly ground water quality at least twice a year (pre- and post-monsoon) at sufficient numbers of piezometers/sampling wells in the plant and adjacent areas through labs recognized under Environment (Protection) Act, 1986 and NABL accredited laboratories.

iii. Garland drains and collection pits shall be provided for each stock pile to arrest the run-off in the event of heavy rains and to check the water pollution due to surface run off.

iv. Water meters shall be provided at the inlet to all unit processes in the plants.

v. The project proponent shall make efforts to minimise water consumption in the plant complex by segregation of used water, practicing cascade use and by recycling treated water.

vi. The proposed project shall be designed as "Zero Liquid Discharge" Plant. ETP shall be installed and there shall be no discharge of effluent from the plant. Domestic effluent shall be treated in Sewage Treatment Plant. Suitable measures shall be adopted for sewage water handling to ensure no contamination of any kind of water body.

vii. All stockyards shall have impervious flooring and shall be equipped with water spray system for dust suppression. Stock yards shall also have garland drains and catch pits to trap the run off material and shall be implemented as per the action plan submitted in EIA/EMP report.

viii. Rain water harvesting shall be implemented to recharge/harvest water as per the action plan submitted in the EIA/EMP report.

ix. The project proponent shall provide the ETP for effluents of rolling mills to meet the standards prescribed in G.S.R 277 (E) 31st March 2012 (applicable to IF/EAF) as amended from time to time.

x. The project proponent shall provide appropriate ETP for effluents discharged from coke oven and by-product to meet the standards prescribed in G.S.R 277 (E) 31st March 2012 (applicable to Coke oven plants) as amended from time to time.

xi. Treated water from ETP of COBP shall not be used for coke quenching.

xii. The effluent discharge (mine waste water, workshop effluent) shall be monitored in terms of the parameters notified under the Water Act, 1974 Coal Industry Standards vide GSR 742 (E) dated 25.9.2000 and as amended from time to time by the Central Pollution Control Board.

xiii. Heavy metal content in raw coal and washed coal shall be analysed once in a year and records maintained thereof.

xiv. The rejects should preferably be utilized in FBC power plant or disposed off through sale for its gainful utilization. If the coal washery rejects are to be disposed off, it should be done in a safe and sustainable manner with adequate compaction and post closure arrangement to avoid water pollution due to leachate from rejects and surface run of from reject dumping sites.

xv. An Integrated Surface Water Management Plan for the washery area up to its buffer zone considering the presence of any river/rivulet/pond/lake etc. with impact of coal washing activities on it, shall be prepared, submitted to MoEFCC and implemented.

xvi. Waste Water shall be effectively treated and recycled completely either for washery operations or maintenance of green belt around the plant.

xvii. Rainwater harvesting in the washery premises shall be implemented for conservation and augmentation of ground water resources in consultation with Central Ground Water Board.

xviii. No ground water shall be used for coal washing unless otherwise permitted in writing by competent authority (CGWA) or MoEFCC. The make-up water requirement of washery should not exceed 1.5 m^3/tonne of raw coal.

xix. Regular monitoring of ground water level and quality shall be carried out in and around the mine lease area by establishing a network of existing wells and constructing new piezometers during the mining operations. The monitoring of ground water levels shall be carried out four times a year i.e. pre-monsoon, monsoon, post-monsoon and winter. The ground water quality shall be monitored once a year, and the data thus collected shall be sent regularly to MOEFCC/RO.

xx. The project proponent shall take all precautionary measures to ensure riverine/ riparian ecosystem in and around the coal mine up to a distance of 5 km. A riverine/riparian ecosystem conservation and management plan should be prepared and implemented in consultation with the irrigation / water resource department in the state government

xxi. Air Cooled condensers shall be used in the captive power plant.

xxii. Tailing management plan shall be implemented as included in EIA report.

xxiii. Tailings from Iron Ore beneficiation plant shall be dewatered in filter press and no slime /tailing pond shall be permitted.

IV. Noise monitoring and prevention

i. Noise pollution shall be monitored as per the prescribed Noise Pollution (Regulation and Control) Rules, 2000 and amendments thereof, and report in this regard shall be submitted to Regional Officer of the Ministry as a part of six-monthly compliance report.

ii. The ambient noise levels should conform to the standards prescribed under E(P)A Rules, 1986 viz. 75 dB(A) during day time and 70 dB(A) during night time.

iii. PP shall identify extreme hot areas through heat stress survey as well as noise monitoring within process plants to ensure that workers not exposed above 90 dBA levels as per Factories Act, 1948.

V. Energy Conservation measures

i. Use torpedo ladle for hot metal transfer as far as possible. If ladles not used, provide covers for open top ladles.
ii. Restrict Gas flaring to < 1%.
iii. Provide solar power generation on roof tops of buildings, for solar light system for all common areas, street lights, parking around project area and maintain the same regularly;
iv. Provide LED lights in their offices and residential areas.
v. The project proponent shall provide waste heat recovery system (pre-heating of combustion air) at the flue gases of reheating furnaces.
vi. Practice hot charging of slabs and billets/blooms as far as possible.
vii. Ensure installation of regenerative type burners on all reheating furnaces.
viii. Blast Furnaces shall be equipped with Top Recovery Turbine, dry gas cleaning plant, stove waste heat recovery, cast house and stock house ventilation system and slag granulation facility.
ix. Coke Dry Quenching (CDQ) shall be provided for coke quenching for both recovery and non-recovery type coke ovens.
x. The project proponent shall provide waste heat recovery system on the DRI Kilns.
xi. The dolochar generated shall be used for power generation.
xii. Tar shall be recovered from producer gas and shall be sold to registered processors and phenolic water shall be incinerated in After Burn Chamber (ABC) of DRI kilns.
xiii. The PP shall implement the guidelines on sponge iron plants issued by the CPCB/SPCB in this regard.

VI. Waste management

i. Oil Collection pits shall be provided in oil cellars to collect and reuse/recycle spilled oil.
ii. Kitchen waste shall be composted or converted to biogas for further use.
iii. 100% utilization of fly ash shall be ensured. All the fly ash shall be provided to cement and brick manufacturers for further utilization and Memorandum of Understanding in this regard shall be submitted to the Ministry's Regional Office.
iv. The Plastic Waste Management Rules 2016, inter-alia, mandated banning of identified Single Use Plastic (SUP) items with effect from 01/07/2022. In this regard, CPCB has issued a direction to all the State Pollution Control Boards (SPCBs)/Pollution Control Committees (PCCs) on 30/06/2022 to ensure the compliance of Notification published by Ministry on 12/08/2021. The technical guidelines issued by the CPCB in this regard is available at https://cpcb.nic.in/technical-guidelines-3/. All the project proponents are hereby requested to sensitize and create awareness among people working within the Project area as well as its surrounding area on the ban of SUP in order to ensure the compliance of Notification published by this Ministry on 12/08/2021. A report, along with photographs, on the measures taken shall also be included in the six monthly compliance report being submitted by the project proponents.

v. A proper action plan must be implemented to dispose of the electronic waste generated in the industry.
vi. Solid waste utilization
    a. PP shall install a slag crusher to convert steel slag into aggregate for use in construction industry, fine sand for use as flux in steel plant, sand in brick making and as lime in cement making.
    b. PP shall recycle/reuse solid waste generated in the plant as far as possible.
    c. Used refractories shall be recycled as far as possible.
vii. SMS slag after metal recovery in waste recycling facility shall be conditioned and used for road making, railway track ballast and other applications. The project proponent shall install a waste recycling facility to recover metallic and flux for recycle to sinter plant. The project proponent shall establish linkage for 100% reuse of rejects from Waste Recycling Plant.
viii. Carbon recovery plant to recover the elemental carbon present in GCP slurries for use in Sinter plant shall be installed.
ix. Waste recycling Plant shall be installed to recover scrap, metallic and flux for recycling to sinter plant and SMS.
x. In case of Non-Recovery coke ovens, the gas main carrying hot flue gases to the boiler, shall be insulated to conserve heat and to maximise heat recovery.
xi. Tar Sludge and waste oil shall be blended with coal charged in coke ovens (applicable only to recovery type coke ovens).
xii. Rejects from coal washery shall only be used either in the captive power plant (or) in the Thermal Power Plants meeting emission standards.

VII. Green Belt

i. The project proponent shall prepare GHG emissions inventory for the plant and shall submit the programme for reduction of the same including carbon sequestration by trees.
ii. Project proponent shall submit a study report on Decarbonisation program, which would essentially consist of company's carbon emissions, carbon budgeting/ balancing, carbon sequestration activities and carbon capture, use and storage and offsetting strategies. Further, the report shall also contain time bound action plan to reduce its carbon intensity of its operations and supply chains, energy transition pathway from fossil fuels to Renewable energy etc. All these activities/ assessments should be measurable and monitor able with defined time frames.
iii. The industry should draw up and implement and action plan for achieving carbon neutrality consistent with India's commitment to achieving carbon neutrality. The action plan should contain milestones with targets to be achieved in suitable periods.
iv. Greening and Paving shall be implemented in the plant area to arrest soil erosion and dust pollution from exposed soil surface.

VIII. Public hearing and Human health issues

i. Emergency preparedness plan based on the Hazard identification and Risk Assessment (HIRA) and Disaster Management Plan shall be implemented.

ii. The project proponent shall carry out heat stress analysis for the workmen who work in high temperature work zone and provide Personal Protection Equipment (PPE) as per the norms.

iii. Provision shall be made for the housing of construction labour within the site with all necessary infrastructure and facilities such as fuel for cooking, mobile toilets, mobile STP. Safe drinking water, medical health care, creche etc. The housing may be in the form of temporary structures to be removed after the completion of the project.

iv. Occupational health surveillance of the workers shall be done on a regular basis and records maintained.

IX. Environment Management

i. The project proponent shall comply with the provisions contained in this Ministry's OM vide F.No. 22-65/2017-IA.III dated 30/09/2020. As part of Corporate Environment Responsibility (CER) activity, company shall adopt nearby villages based on the socio-economic survey and undertake community developmental activities in consultation with the village Panchayat and the District Administration as committed.

ii. The company shall have a well laid down environmental policy duly approve by the Board of Directors. The environmental policy should prescribe for standard operating procedures to have proper checks and balances and to bring into focus any infringements/deviation/violation of the environmental / forest / wildlife norms / conditions. The company shall have defined system of reporting infringements / deviation / violation of the environmental / forest / wildlife norms / conditions and / or shareholders / stake holders. The copy of the board resolution in this regard shall be submitted to the MoEF&CC as a part of six-monthly report.

iii. A separate Environmental Cell both at the project and company head quarter level, with qualified personnel shall be set up under the control of senior Executive, who will directly to the head of the organization.

iv. Performance test shall be conducted on all pollution control systems every year and report shall be submitted to Integrated Regional Office of the MoEF&CC.

X. Miscellaneous

i. The project proponent shall make public the environmental clearance granted for their project along with the environmental conditions and safeguards at their cost by prominently advertising it at least in two local newspapers of the District or State, of which one shall be in the vernacular language within seven days and in addition this shall also be displayed in the project proponent's website permanently.

ii. The copies of the environmental clearance shall be submitted by the project proponents to the Heads of local bodies, Panchayats and Municipal Bodies in addition to the relevant offices of the Government who in turn has to display the same for 30 days from the date of receipt.

iii. The project proponent shall upload the status of compliance of the stipulated environment clearance conditions, including results of monitored data on their website and update the same on half-yearly basis.

iv. The project proponent shall monitor the criteria pollutants level namely; PM10, SO2, NOx (ambient levels as well as stack emissions) or critical sectoral parameters, indicated for the

projects and display the same at a convenient location for disclosure to the public and put on the website of the company.

v. Action plan for developing connecting and internal road in terms of MSA as per IRC guidelines shall be implemented

vi. The project proponent shall submit six-monthly reports on the status of the compliance of the stipulated environmental conditions on the website of the ministry of Environment, Forest and Climate Change at environment clearance portal.

vii. The project proponent shall submit the environmental statement for each financial year in Form-V to the concerned State Pollution Control Board as prescribed under the Environment (Protection) Rules, 1986, as amended subsequently and put on the website of the company.

viii. The project proponent shall inform the Regional Office as well as the Ministry, the date of financial closure and final approval of the project by the concerned authorities, commencing the land development work and start of production operation by the project.

ix. The project proponent shall abide by all the commitments and recommendations made in the EIA/EMP report, commitment made during Public Hearing and also that during their presentation to the Expert Appraisal Committee.

x. The recommendations of the approved Site-Specific Wildlife Management Plan (in case of involvement of Schedule-I species) shall be implemented in consultation with the State Forest Department. The implementation report shall be furnished along with the six-monthly compliance report to the concerned Regional Office of the MoEF&CC.

xi. The PP shall put all the environment related expenditure, expenditure related to Action Plan on the PH issues, and other commitments made in the EIA/EMP Report etc. in the company web site for the information to public/public domain. The PP shall also put the information on the left over funds allocated to EMP and PH as committed in the earlier ECs and shall be carried out and spent in next three years, in the company web site for the information to public/public domain.

xii. No further expansion or modifications in the plant shall be carried out without prior approval of the Ministry of Environment, Forests and Climate Change (MoEF&CC).

xiii. Concealing factual data or submission of false/fabricated data may result in revocation of this environmental clearance and attract action under the provisions of Environment (Protection) Act, 1986.

xiv. The Ministry may revoke or suspend the clearance, if implementation of any of the above conditions is not satisfactory.

xv. The Ministry reserves the right to stipulate additional conditions if found necessary. The Company in a time bound manner shall implement these conditions.

xvi. The Regional Office of this Ministry shall monitor compliance of the stipulated conditions. The project authorities should extend full cooperation to the officer (s) of the Regional Office by furnishing the requisite data / information/monitoring reports.

xvii. Any appeal against this EC shall lie with the National Green Tribunal, if preferred, within a period of 30 days as prescribed under Section 16 of the National Green Tribunal Act, 2010.

***

Consideration in Modification/Amendment in Environmental Clearance Proposal

Agenda No. 43.6

43.6 Expansion of White Cement Production Capacity from 0.56 MTPA to 1.4 MTPA & Captive Power Plant capacity from 7.5 MW to 33.5 MW at Rajashree Nagar, Village: Khariakhangar, Tehsil: Bhopalgarh, District: Jodhpur, Rajasthan by M/s. UltraTech Cement Limited (Unit: Birla White) -Consideration of Amendment in Environmental Clearance.

[Proposal No. IA/RJ/IND1/429564/2023; File No. J-11011/170/2012-IA-II-(IND-I)]
[Consultant : JM EnviroNet Pvt. Ltd. valid up to 31.10.2023]

43.6.1 M/s. UltraTech Cement Limited (Unit: Birla White) has made an online application vide proposal no.: IA/RJ/IND1/429564/2023 dated 25th May, 2023 seeking Amendment in Existing Environment Clearance (EC) under the provisions of the EIA Notification, 2006 for the project mentioned above. The project activity is listed at schedule no. 3(b) - Cement Plant under Category "A" of the schedule of the EIA Notification, 2006 and does not attracts any general condition.

43.6.2 The project of M/s. UltraTech Cement Limited (Unit: Birla White) located at Rajashree Nagar, Village Khariakhangar, Tehsil Bhopalgarh, District Jodhpur, Rajasthan State is for obtaining Amendment in Environmental Clearance letter issued for Expansion of White Cement Production Capacity from 0.56 MTPA to 1.4 MTPA & Captive Power Plant capacity from 7.5 MW to 33.5 MW.

43.6.3 Environment Clearance for Expansion of White Cement Production Capacity from 0.56 to 1.40 MTPA and Captive Power Plant Capacity from 7.5 to 33.5 MW at Rajashree Nagar, Village: Kharia Khangar, Tehsil: Bhopalgarh, District: Jodhpur, Rajasthan by M/s. UltraTech Cement Ltd. (Unit: Birla White) was granted on 5th March, 2014; amended on 11th May, 2017 (w.r.t specific condition no. viii) & further validity extended on 18th November, 2020 (valid upto 4th March, 2024).

43.6.4 The project proposal as per granted EC is given in table below:

Particulars	Existing Production	Proposed production		Total Production after proposed Expansion
		In Existing Lines	From New Line	
White Cement (MTPA)	0.56	0.12	0.72	1.4
Captive Power Plant (MW)	7.5	1.0	25	33.5

43.6.5 The implementation status of the project as per granted capacities in EC Letter issued dated 05th March, 2014 is given in table below:

Particulars	Existing	Proposed production as per granted EC		

	Production as per granted EC	In Existing Lines	Implementation status as on date	From New Line	Implementation status as on date	Total Production after proposed Expansion as per granted EC	Total implemented Capacities as on date
White Cement (MTPA)	0.56	0.12	Implemented	0.72	Not Implemented	1.4	0.68
Captive Power Plant (MW)	7.5	1.0	Implemented	25	Not Implemented	33.5	8.5

43.6.6 Now, the company has investigated certain debottlenecking and scope for engineering modifications, which evolves the possibility of cement production capacity enhancement of 0.04 MTPA in existing lines and as per the company's opinion the total production capacity of existing cement plant (Line - I & II) may be increased from 0.68 to 0.72 MTPA then it is proposed to reduce the production capacity of line- III from 0.72 to 0.68 MTPA after installing kilns of capacity 0.62 Million TPA instead 0.66 MTPA **with no change in total granted EC capacity.**

Unit	Granted capacity as per EC dated 05th March, 2014	Present Installed Capacity	Proposed amendment		Total capacity after amendment		
			Existing Line - I & II	New Line - III	Existing Line - I & II	New Line - III	Total
White Cement (MTPA)	1.4 (Existing lines- 0.68 &new line 0.72)	0.68 (Existing lines only)	0.68 + 0.04	0.72 - 0.04	0.72	0.68	1.4
CPP (MW)	33.5	8.5	25		33.5		

43.6.7 Therefore, the company is proposing an amendment in Environmental Clearance letter issued for the Expansion of White Cement production capacity from 0.56 to 1.4 MTPA & Captive Power Plant from 7.5 to 33.5 MW at Rajashree Nagar, Village: Khariakhangar, Tehsil: Bhopalgarh, District: Jodhpur, Rajasthan. The proposal for the proposed amendment is given below:

S. No.	Amendment proposal	Reference of EC's	Existing Proposal	Proposed Amendment	Reason
1.	Cement Production Configuration	Point no.-3 in the EC issued on	Total Cement production will be 1.4	Total Cement production will be 1.4	Company intends to change the production configuration in existing line & new line and

S. No.	Amendment proposal	Reference of EC's	Existing Proposal	Proposed Amendment	Reason
		5th March, 2014	MTPA from existing line 0.68 MTPA & from new line 0.72 MTPA	MTPA from existing line 0.72 MTPA & from new line 0.68 MTPA	proposing Amendment in EC.
2.	Total Plant Area	Point no.-2 in the EC issued on 5th March, 2014	Total Plant area 115 ha	Total Plant area 110.32 ha	The applicant company couldn't purchase 4.68 ha area out of the total plant area. And, as of now the total land area of 110.32 ha which is under possession of company is sufficient for the proposed amendment instead of 115 ha and the un-acquired i.e. 4.68 ha will not be used for plant installation.

43.6.8 In addition to the above, the company intends to implement the modifications in existing lines first and thereafter, will install new Line-III. Since, the existing EC is valid upto 04th March, 2024; therefore, the company is also proposing extension of validity of EC for another one year considering Ministry of Environment, Forest and Climate Change (MoEFCC) vide Notification no. S.O. No. 1807(E) dated 12/04/2022 amended the provisions of EIA Notification, 2006 & Office Memorandum issued for the same vide letter no. 1A3-22/28/2022-1A.111[E181584] dated 13th Dec., 2022 regarding validity extension.

43.6.9 It is reported that there is no violation under EIA, 2006/court/show cause/direction is involved in this project.

43.6.10 The proposal was initially considered during 40th Meeting of Expert Appraisal Committee (Industry - 1 Sector) held on 19th July, 2023 wherein proposal was deferred for want of additional information. The deliberation and recommendations of the EAC are as follows:

Deliberations by the Committee (EAC during 19th July, 2023):

The Committee noted the following:

1. The EAC noted that M/s. UltraTech Cement Limited (Unit: Birla White) was granted Environment Clearance for Expansion of White Cement Production Capacity from 0.56 to 1.40 MTPA and Captive Power Plant Capacity from 7.5 to 33.5 MW at Rajashree Nagar, Village: Kharia Khangar, Tehsil: Bhopalgarh, District: Jodhpur, Rajasthan by M/s. UltraTech Cement Ltd. (Unit: Birla White) on 5th March, 2014; amended on 11th May, 2017 (w.r.t specific condition no. viii) & further validity extended on 18th November, 2020 (valid upto 4th March, 2024). The EAC is of the view that PP shall submit the revised

implementation status in a tabular form clearly mentioning the status of the facilities envisaged in the EC dated 5th March, 2014 with subsequent amendment dated 11th May, 2017 and validity extension dated 18th November, 2020 along with proper justification for delay in implementation of the said facilities and the timelines for completion of the said project.

2. The EAC observed that status of compliance of earlier EC has not been obtained from Regional Office of MoEF&CC. In this regard the EAC is of the opinion that certified compliance report from IRO of earlier EC along with the ATR for any non-compliance and final closure report of IRO shall be obtained and presented before the EAC for further consideration of the instant proposal.
3. The PP shall submit the implementation status of Action Plan on the public hearing issues reported during the appraisal of previous EC along with expenditure incurred to fulfil the action plan.
4. In view of above, the PP requested the Committee to allow to reappear with the revised information/ clarification to the points deliberated during appraisal.

Recommendations of the Committee (EAC during 19th July, 2023):

In view of the foregoing and after detailed deliberations, the committee recommended to defer the proposal due to certain deficiencies in the proposal and sought requisite information on the points referred at para above. The proposal shall be considered after submission of requisite information and updating the Report on Parivesh Portal.

43.6.11 The proponent submitted the ADS reply vide letter dated 10.08.2023 uploaded on PARIVESH portal on 10.08.2023. Point-wise reply of ADS is given as below:

<table>
<tr><th>S. No.</th><th>ADS Point</th><th>Reply / Response of PP</th></tr>
<tr><td>1.</td><td>The EAC is of the view that PP shall submit the revised implementation status in a tabular form clearly mentioning the status of the facilities envisaged in the EC dated 5th March, 2014 with subsequent amendment dated 11th May, 2017 and validity extension dated 18th November, 2020 along with proper justification for delay in implementation of the said facilities and the timelines for completion of the said project.</td><td>As per the Environmental Clearance obtained on 05th March, 2014, the company has implemented the production capacities in existing lines by modernization and new line is not implemented yet. The detailed implementation status of the project as per granted capacities in EC Letter dated 05th March, 2014, with subsequent amendment dated 11th May, 2017 & extension of validity of EC dated 18th Nov., 2020 is given in table below:</td></tr>
<tr><td></td><td colspan="2">
<table>
<tr><th rowspan="2">Particulars</th><th rowspan="2">Existing Production as per granted EC dated 05th Oct.,2007</th><th colspan="4">Production capacity as per granted EC dated 05th March,2014</th><th rowspan="2">Total Capacity after proposed Expansion as per EC dated 05th March, 2014</th><th rowspan="2">Total implemented Capacities as on date</th></tr>
<tr><th>In Existing Lines</th><th>Implementation status as on date</th><th>From New Line</th><th>Implementation status as on date</th></tr>
<tr><td>White Cement (MTPA)</td><td>0.56</td><td>0.12</td><td>Implemented</td><td>0.72</td><td>Not Implemented</td><td>1.4</td><td>0.68</td></tr>
</table>
</td><td></td></tr>
</table>

S. No.	ADS Point	Reply / Response of PP
	<table><tr><td>Captive Power Plant (MW)</td><td>7.5</td><td>1.0</td><td>Implemented</td><td>25</td><td>Not Implemented</td><td>33.5</td><td>8.5</td></tr></table> The copy of the Justification for the delay in implementation of the facilities as per EC granted dated 05th March, 2014 & further timeline for the completion of the said project is submitted with the ADS reply.	
2.	The EAC observed that status of compliance of earlier EC has not been obtained from Regional Office of MoEF&CC. In this regard the EAC is of the opinion that certified compliance report from IRO of earlier EC along with the ATR for any non-compliance and final closure report of IRO shall be obtained and presented before the EAC for further consideration of the instant proposal.	The Certified Compliance Report has been obtained from the IRO, Jaipur on dated 09th Aug., 2023 for the conditions stipulated in the existing Environmental Clearance. As per the certified compliance report issued by the IRO, Jaipur all the EC conditions are compiled or agreed to complied. The copy of the certified compliance report is submitted with ADS reply.
3.	The PP shall submit the implementation status of Action Plan on the public hearing issues reported during the appraisal of previous EC along with expenditure incurred to fulfil the action plan.	The implementation status of Action Plan on earlier public hearing issues are being done & approx. Rs. 70 Crores have been expended so far to address the Public Hearing issues. The implementation status along with activities done so far with photographs has already been submitted with ADS reply.
4.	In view of above, the PP requested the Committee to allow to reappear with the revised information/ clarification to the points deliberated during appraisal. In view of the foregoing and after detailed deliberations, the committee recommended to defer the proposal due to certain deficiencies in the proposal and sought requisite information on the points referred at para no. 40.2.11 above. The proposal shall be considered after submission of requisite information and updating the Report on PARIVESH Portal.	Noted.

Deliberation by the Committee

43.6.12 The Committee noted the following:

i. M/s. UltraTech Cement Ltd. (Unit: Birla White) was granted Environment Clearance for Expansion of White Cement Production Capacity from 0.56 to 1.40 MTPA and Captive Power Plant Capacity from 7.5 to 33.5 MW vide letter No. J-11011/170/2012-IA-II-(IND-I) dated 5th March, 2014; with amendment dated 11th May, 2017 (w.r.t specific condition no. viii) & further validity extension on 18th November, 2020 (valid upto 4th March, 2024).

ii. The instant proposal is for seeking amendment in EC dated 05.03.2014; with amendment dated 11.05.2017 and extension dated 18.11.2020 w.r.t. amendment in Cement Production Configuration and total plant area along with extension of validity of EC for another one year considering Ministry of Environment, Forest and Climate Change (MoEFCC) vide Notification no. S.O. No. 1807(E) dated 12/04/2022 amended the provisions of EIA

Notification, 2006 & Office Memorandum issued for the same vide letter no. 1A3-22/28/2022-1A.111[E181584] dated 13th Dec., 2022 regarding validity extension as detailed in para 43.6.8 and 43.6.9 above.

iii. The EAC deliberated on the justification provided by the project proponent and found it satisfactory in the instant case.

iv. The EAC noted that there is no change in capacity of units in granted EC.

v. The EAC deliberated on the CCR obtained from the IRO, Jaipur on dated 09th Aug., 2023 and found it satisfactory.

vi. The EAC deliberated on the implementation status of Action Plan on the public hearing issues reported during the appraisal of previous EC along with expenditure incurred to fulfil the action plan and found it satisfactory.

vii. The EAC deliberated on the ADS reply of the project proponent and found it satisfactory.

Recommendations of the Committee

43.6.13 After deliberations, the Committee **recommended** the proposal for amendment in EC granted vide letter F. No. J-11011/170/2012-IA-II-(IND-I) dated 05.03.2014; with amendment dated 11.05.2017 and validity extension dated 18.11.2020 w.r.t. amendment in Cement Production Configuration and total plant area along with extension of validity of EC for another one year as detailed in para 43.6.8 and 43.6.9 above. The other terms and conditions of the EC letter dated 05.03.2014; with amendment dated 11.05.2017 and validity extension dated 18.11.2020 shall remain the same.

After deliberations, the Committee also **recommended** to add the following EC condition:

Project proponent shall submit a study report on Decarbonisation program, which would essentially consist of company's carbon emissions, carbon budgeting/ balancing, carbon sequestration activities and carbon capture, use and storage and offsetting strategies. Further, the report shall also contain time bound action plan to reduce its carbon intensity of its operations and supply chains, energy transition pathway from fossil fuels to Renewable energy etc. All these activities/ assessments should be measurable and monitor able with defined time frames.

***

Consideration of Terms of Reference

Agenda No. 43.7

43.7 Expansion of Steel Plant consisting of I/O Benef&Pelletization plant from 3,00,000 TPA to 5,00,000 TPA, Sponge Iron From 90,000 TPA to2,40,000 TPA, IF with Concast From 90,000 TPA to 1,80,000 TPA, RM From 90,000 TPA to 1,80,000 TPA, CPP-WHRB from 6 MW to 18 MW, AFBC From 6 MW to 24 MW, Fly ash Brick plant of 15 Million bricks /annum (50,000 Bricks/day) along with existing Ferro Alloy plant of 2 x 9 MVA to manufacture FeSi – 12,650 TPA (or)SiMn – 28,500 TPA (Or) FeMn-37,000 TPA by M/s Raipur Power and Steel Limited, located At Plot nos. 75 & 76 of Borai Industrial Growth Centre ada Village, Durg Tehsil & District Chhattisgarh - Consideration of TOR.

[Proposal No. IA/CG/IND/438442/2023; File No. IA-J-11011/545/2010-IA-II(IND-I)]
[Consultant: Pioneer Enviro Laboratories & Consultants Pvt. Ltd; Valid upto 09.09.2026]

43.7.1 M/s. Raipur Power and Steel Limited has made an online application vide proposal no. IA/CG/IND1/438442/2023 dated 18.08.2023 along with the application in prescribed format (CAF, Form – I Part A & B), copy of pre-feasibility report and proposed ToRs for undertaking detailed EIA study as per the EIA Notification, 2006 for the project mentioned above. The proposed project activity is listed at S. No. 3(a) Metallurgical Industries (Ferrous & Nonferrous), 2(b) Mineral Beneficiation and 1(d) Thermal Power Plants under Category 'A' of the schedule of the EIA Notification, 2006 and being appraised at the Central Level.

43.7.2 Name of the EIA consultant: M/s. Pioneer Enviro Consultants Private Limited [List of ACOs with their Certificate / Extension Letter No: NABET/EIA/2225/RA 0282 valid till 21.09.2025, as on September 6, 2023].

Details submitted by Project proponent

43.7.3 The project of M/s Raipur Power and Steel Ltd. located at Plot nos. 75 & 76 of Borai Industrial Growth Centre, Rasmada Village, Durg Tehsil & District, Chhattisgarh is for enhancement of production from Iron Ore Beneficiation & Pelletization plant from 3,00,000 TPA to 5,00,000 TPA, Sponge Iron From 90,000 TPA to2,40,000 TPA, Induction Furnace with LRF & CCM from 90,000 TPA to 1,80,000 TPA, Rolling Mill From 90,000 TPA to 1,80,000 TPA along with Power plant WHRB from 6 MW to 18 MW, AFBC From 6 MW to 24 MW, Fly ash Brick plant of 15 Million bricks /annum (50,000 Bricks/day) along with existing Ferro Alloy plant of2 x 9 MVA to manufacture FeSi – 12,650 TPA (or)SiMn – 28,500 TPA (or)FeMn – 37,000 TPA.

43.7.4 Environmental site settings:

S.No.	Particulars	Details	Remarks
i.	Total land	26.506 Ha. (65.498 Acres) [Industrial Land - 26.506 Ha.]	Land use: Industrial Land
ii.	Land acquisition details as per MoEF&CC O.M dated 7/10/2014	Land is situated in Borai Industrial Growth Centre Industrial Land – 26.506 Ha. (65.498 Acres)	

<table>
<tr><td></td><td></td><td>Land taken on lease for 99 years from CSIDC of 26.506 Ha. (65.498 Ac.) in the name of Raipur Power and Steel Limited
for 18.511 Ha. (valid upto 14-02-2107) &
for 7.995 Ha. (valid upto 01-09-2107)</td><td></td></tr>
<tr><td>iii.</td><td>Existence of habitation & involvement of R & R, if any.</td><td><u>Plant site:</u>
No habitation exists in plant site; Hence no R & R is involved.
<u>Study area:</u>
Nearest habitation:<table><tr><th>Name</th><th>Distance</th></tr><tr><td>Rasmada Village</td><td>0.1 Kms.</td></tr></table></td><td>---</td></tr>
<tr><td>iv.</td><td>Latitude and Longitude of the plant site</td><td>Latitude and Longitude of the plantsite:<table><tr><th>S.No</th><th>Latitude</th><th>Longitude</th></tr><tr><td>1.</td><td>21°11'59.80"N</td><td>81°12'24.46"E</td></tr><tr><td>2.</td><td>21°12'2.33"N</td><td>81°12'39.98"E</td></tr><tr><td>3.</td><td>21°12'4.52"N</td><td>81°12'54.10"E</td></tr><tr><td>4.</td><td>21°12'1.32"N</td><td>81°12'54.67"E</td></tr><tr><td>5.</td><td>21°11'57.98"N</td><td>81°12'54.78"E</td></tr><tr><td>6.</td><td>21°11'54.81"N</td><td>81°12'54.49"E</td></tr><tr><td>7.</td><td>21°11'53.45"N</td><td>81°12'54.74"E</td></tr><tr><td>8.</td><td>21°11'53.93"N</td><td>81°12'51.67"E</td></tr><tr><td>9.</td><td>21°11'53.98"N</td><td>81°12'49.15"E</td></tr><tr><td>10.</td><td>21°11'53.29"N</td><td>81°12'46.94"E</td></tr><tr><td>11.</td><td>21°11'52.63"N</td><td>81°12'45.61"E</td></tr><tr><td>12.</td><td>21°11'51.30"N</td><td>81°12'36.16"E</td></tr><tr><td>13.</td><td>21°11'50.04"N</td><td>81°12'27.85"E</td></tr><tr><td>14.</td><td>21°11'55.23"N</td><td>81°12'25.99"E</td></tr><tr><td>15.</td><td>21°11'59.25"N</td><td>81°12'24.55"E</td></tr></table></td><td>---</td></tr>
<tr><td>v.</td><td>Elevation of the plant site</td><td>MSL of the plant area – 91.5 m to 102.5 m</td><td>---</td></tr>
<tr><td>vi.</td><td>Involvement of
Forest land if any.</td><td>No Forest land is involved in the plant site.</td><td>---</td></tr>
<tr><td>vii.</td><td>Water body exists within the project site as well as study area</td><td>Project site: Nil

Study area:<table><tr><th>Water Body</th><th>Distance</th><th>Direction</th></tr><tr><td>Seonath River</td><td>2.1 kms.</td><td>E</td></tr><tr><td>Pulgaon Nala</td><td>4.9 kms</td><td>SE</td></tr><tr><td>other unnamed small ponds</td><td>-</td><td>-</td></tr></table></td><td>---</td></tr>
<tr><td>viii.</td><td>Existence of ESZ / ESA / National Park / Wildlife sanctuary / Biosphere reserve / Tiger reserve / Elephant reserve, etc. if any within the study area</td><td>Nil

List of Reserved and protected forests:<table><tr><th>Name</th><th>Distance</th><th>Direction</th></tr><tr><td>Mangata RF</td><td>3.2 Kms.</td><td>W</td></tr></table></td><td>There are no notified National Park / Wild life sanctuary / Biosphere reserve /Tiger reserve with in 10 Km. radius of the project site.</td></tr>
</table>

43.7.5 The existing project was accorded environmental clearance vide lr. No. J-11011/545/2010-IA II(I) dated 23.12.2011. Consent to Operate for the existing unit was accorded by Chhattisgarh State Pollution Control Board vide Vide No.10253/TS/CECB/2021 dated 22.02.2021. The validity of CTO is upto 28.03.2024.

43.7.6 Implementation status of the existing EC:

S. No.	EC/CTE /EC Extension Permissions	Units permitted	Date of permission	Units implemented (CTO)	Date of 1st CTO obtained	Remarks
1	**EC** [Vide No. J-11011/1304/2007-IA II(I)]	DRI Kilns – 3 x 150 TPD Induction Furnace–2x15 MT (90,000 TPA) Rolling Mill – 1 x 300 TPD (90,000 TPA) WHRB –6.0 MW FBC -6.0 MW	26.03.2008	**1st CTO:** 2x 100 TPD –1st & 2nd DRI Kilns (60,000 TPA) Vide No. 828 & 830 **2nd CTO:** 1 x 100 TPD – 3rd DRI Kiln (30,000 TPA) Vide No. 6401 & 6403 **3rd CTO:** WHRB-6.0 MW FBC – 6.0 MW Vide No. 3682 & 3684	08.05.2009 10.02.2011 23.09.2011	Permission obtained for DRI kilns of 3x150 TPD However implemented only 3x100 TPD (All units implemented within EC validity period
	CTE [Vide No. 2917/TS/ CECB/2008	----	04.06.2008	**1stCTO** 2x 100 TPD –1st & 2ndDRI Kiln (60,000 TPA) Vide No. 828 & 830 **2ndCTO** 100 TPD – 3rd DRI Kiln (30,000 TPA) Vide No. 6401 & 6403 **3rdCTO** WHRB-6.0 MW FBC – 6.0 MW Vide No. 3682 & 3684	08.05.2009 10.02.2011 23.09.2011	Permission obtained for 3x150 TPD. However implemented only 3x100 TPD
3	**EC Amendment** [Vide No. J-		17.04.2008	---	---	Correction is made : Total requirem

	11011/1304/2007-IA II(I)]					ent of water from CSIDC instead of Delari Jharna
4	**E.C. (expansion)** [vide order No. J-11011/545/2010 - IA II (I)]	for Expansion I/O Benficiation & Pelletization – 3,00,000 TPA DRI Klin-90,000 to 1,80,000 TPA Induction Furnace-90,000 TPA Rolling Mill-90,000 TPA SEAF 2x12 MVA + 2x9 MVA FBC-6.0 to 36 MW WHRB-6 to12 MW	23.12.2011	**1st CTO :**2 X 9 MVA – SEAF Vide No. 4366 & 4368 **2nd CTO:** Rolling mill – 90000 TPA Vide no. 5562 & 5564 **3rd CTO:** Induction furnace – 90,000 TPA Vide no. 1192 &1194 **4th CTO:** I/O Benificiation & Pelletization – 3,00,000 TPA Vide no.1545 & 1547	20.11.2012 01.03.2014 16.06.2017 30.06.2017	All units implemented within EC validity period
5	**CTE** [Vide No.7976/ TS/CECB/2012]	----	24.03.2012	**1st CTO** 2 X 9 MVA – SEAF Vide No. 4366 & 4368 **2nd CTO** Rolling mill – 90000 TPA Vide no. 5562 & 5564 **3rdCTO** Induction furnace – 90,000 TPA Vide no. 1192 &1194 **4th CTO**	20.11.2012 01.03.2014 16.06.2017	

				I/O Benficiation & Pelletization – 3,00,000 TPA Vide no.1545 & 1547	30.06.2017	
6.	---	---	---	**Current CTO** 3 X 100 TPD – DRI Kilns, WHRB – 6 MW, FBC – 6 MW, Rolling mill – 90000 TPA, Induction furnace – 90,000 TPA, Ferro Alloys (2 x 9 MVA) Iron ore Benficiation & Pelletization – 3,00,000 TPA Vide no. 10253/TS/CECB/2021	22.02.2021	which is valid upto 28-03-2024

43.7.7 The unit configuration and capacity of existing and proposed project is given as below:

S. No.	Unit (Product)	Total Permitted Capacity as per the EC dated 23.12.2011	Implementation status as per the current CTO dated 22/02/2021	Proposed Expansion	Total production capacity After Present Expansion
1.	Iron Ore Beneficiation & pelletization plant	3,00,000 TPA	3,00,000 TPA*	2,00,000 TPA	5,00,000 TPA
2.	DRI Kiln (Sponge Iron)	1,80,000 TPA (6 x 100 TPD)	90,000 TPA (3 x 100 TPD)	1,50,000 TPA (1X500 TPD)	2,40,000 TPA (3x100 TPD + 1x500 TPD)
3.	Induction furnace with LRF & CCM (Hot Billets / MS Billets)	90,000 TPA (2 x 15 MT)	90,000 TPA (2 x 15 MT)	90,000 TPA (2 x 15 MT)	1,80,000 TPA (4 x 15 MT)
4.	Rolling Mill (Wire Rods/ TMT bars/ Structural Steel) (85 % Hot charging with Hot Billets and remaining 15% through RHF with LDO as fuel)	90,000 TPA (1 x 300 TPD)	90,000 TPA (1 X 300 TPD)	90,000 TPA (1 X 300 TPD)	1,80,000 TPA (2 X 300 TPD)
5.	Ferro Alloy unit (through SEAF)	2x12 MVA & 2x9 MVA	2 x 9 MVA	-----	2 X 9 MVA

S. No.	Unit (Product)	Total Permitted Capacity as per the EC dated 23.12.2011	Implementation status as per the current CTO dated 22/02/2021	Proposed Expansion	Total production capacity After Present Expansion
	(FeSi / SiMn / Fe Mn)	(FeSi-29,568 TPA / SiMn-66,486 TPA / FeMn-86,333 TPA)	FeSi – 12,650 TPA /SiMn – 28,500 TPA /FeMn – 37,000 TPA		FeSi – 12,650 TPA /SiMn – 28,500 TPA /FeMn – 37,000 TPA
6.	Power generation through WHRB of DRI	12 MW	3 X 2 = 6.0 MW	12 MW	18 MW
7.	Power Plant through AFBC Boiler	36 MW	6.0 MW	18 MW	24 MW
8.	Fly Ash brick plant	-----	----	15 Million bricks /annum (50,000 Bricks/day)	15 Million bricks /annum (50,000 Bricks/day)

43.7.8 The details of the raw material requirement for the proposed project along with its source and mode of transportation is given as below:

S. No.	Raw Material	Quantity (TPA)			Sources	Distance (in Kms.)	Mode of Transport
		Existing	Expansion	Total			
1.	**For Iron Ore Beneficiation & Pelletization – 2,00,000 TPA**						
a)	Iron Ore Fines	4,50,000	3,00,000	7,50,000	Odisha, Jharkhand & Chhattisgarh	~ 500	By rail & road (covered trucks)
b)	Coal Fines	12000	8,000	20,000	Jharkhand, Odisha, WB, Chhattisgarh	~ 500	By rail & road (covered trucks)
c)	Bentonite	2400	1,600	4,000	Gujarat	~ 500	By rail & road (covered trucks)
d)	Limestone	4500	3,000	7,500	Odisha & M.P.	~ 500	By rail & road (covered trucks)
e)	LDO / LSHS	750 KL	500 KL	1250 KL	Nearby IOCL, BPCL & HPCL Depot	~ 100	By road (Through tankers)

2.	**For DRI Kilns (Sponge Iron) – 1,50,000 TPA**							
a)	Pellets (100 %)		1,30,500	2,17,500	3,48,000	Own generation	---	covered conveyers
	or							
	Iron ore (100%)		1,44,000	2,40,000	3,84,000	Odisha, MP, Chhattisgarh,Jharkhand	~ 500	By rail & road (covered trucks)
b)	Coal	Indian	1,17,000	1,95,000	3,12,000	Jharkhand, Odisha, WB, Chhattisgarh	~ 500	By rail & road covered trucks)
					(or)			
		Imported	74880	1,24,800	1,99,680	Indonesia / South Africa / Australia	~ 600 (from Vizag Port)	Through sea route, rail route & by road (covered trucks)
c)	Dolomite		4500	7,500	12,000	Chhattisgarh, MP, Maharashtra	~ 100	By road (covered trucks)
3.	**For Steel Melting Shop (Billets/ Ingots/Hot Billets) – 90,000 TPA**							
a)	Sponge Iron		91,000	91,000	1,82,000	Own generation	---	Through covered conveyers
b)	Pig Iron / MS scrap / end cuttings		14,000	14,000	28,000	Own generation	~ 100	By road (covered trucks)
c)	Ferro alloys		5,000	5,000	10,000	Own generation	---	By road (covered trucks)
4.	**For Rolling Mill through Hot charging (Rolled Products) – 90,000TPA**							
a)	Hot Billets / MS Billets		90,000	90,000	1,80,000	Inhouse Generation	---	---
	MS Billets / ingots		4,410	4,410	8,820	External purchase	~ 50	By rail & road (covered trucks)
b)	LDO / LSHS		765 KL/annum	765 KL/annum	1,530	Nearby IOCL Depot	~ 100	By road (through Tankers)
5.	**For AFBC Boiler [Power Generation 18 MW]**							
a)	Dolochar +	Dolloch	9,000	27,000	36,000	Own generation	---	through covered

	Indian Coal	ar						conveyors
		Indian Coal	27,900	83,700	1,11,600	Odisha, Jharkhand & WB	~ 500	By rail & road (covered trucks)
	OR							
b)	Dolochar + Imported Coal	Dolochar	9,000	27,000	36,000	Inhouse Generation	---	through covered conveyors
		Imported Coal	17,856	53,568	71,424	Indonesia / South Africa / Australia	~ 600 (from Vizag Port)	Through sea route, rail route & by road (covered trucks)

43.7.9 The total water requirement for existing plant is 800 KLD and was sourced from CSIDC. The total water requirement for the expansion project is estimated as 1094 KLD, which will be sourced from CSIDC. Water drawl permission for 1000 KLD was already obtained from CSIDC, Govt. of Chhattisgarh for existing plant. Water permission for remaining water quantity will also be obtained after receipt of TOR letter for proposed expansion project.

43.7.10 Total power consumption after expansion will be 50.2 MW, out of which 42 MW from Captive power plant & remaining 8.2 MW will be sourced from state grid.

43.7.11 The capital cost of the project is Rs. 267.5 Crores. Employment generation from proposed project will be 200 nos. through direct employment and 300 nos. through indirect employment.

43.7.12 It is reported that there is no violation under EIA, 2006/court case/show cause/direction if any, related to the project under consideration.

43.7.13 Proposed Terms of Reference:

Attributes	**Sampling**		**Remarks**
	No. of Stations	**Frequency**	
1) Air			
i) Meteorological parameters	1	On hourly basis for one season	• Wind Speed • Wind Direction • Temperature • Relative Humidity • Rainfall

Attributes	Sampling		Remarks
	No. of Stations	Frequency	
ii) AAQ parameters	8	24 hourly Twice a week for 3 months (One Season)	Parameters to be Monitored: • $PM_{2.5}$, • PM_{10}, • SO_2, • NOx, • CO,
2) Noise	8	On hourly basis for 24 Hrs. at each station	Parameters to be Monitored: • Day equivalent • Night equivalent
3) Water			
i) Ground Water	8	One sample at each of the locations	Parameters will be Monitored: as per IS: 10500
ii) Surface Water	6	One sample at each of the locations	Parameters will be Monitored: as per BIS: 2296
4) Land			
i) Soil quality	8	One sample at each of the locations	Parameters will be Monitored: Texture, infiltration rate, SAR bulk density, CEC, pH, Ca, Mg, Na, K, Zn, Mn
ii) Land use	--	--	LU map will be prepared by concerned FAE for study area
5) Biological			
i) Aquatic	--	Once in Season	---
ii) Terrestrial	--	Once in Season	---
6) Socio economic parameters	--	Once in Season	Social Impact Assessment will be carried out by concerned FAE for study area

Written submission by the PP:

43.7.14 During the meeting, based on the deliberations made by the EAC, the project proponent vide letter dated 04.09.2023 through email dated 04.09.2023 submitted the following information:

1. PP assures that 10,000 nos. of plants will be planted by the end of October 2023. So that the total nos. of plantation will become 22,250 nos. (inclusive of existing 12,150 nos.). Hence the total greenbelt will become 8.90 Ha. (22 Ac.) i.e. 33.57% of land is envisaged for greenbelt Out of total 26.506Ha. (65.498 Ac.) of land.
2. Copy of the Invoice for sale of I/O Tailings to other Industries is submitted**.**
3. PP reported that in the existing plant the Tailings generated from existing I/O beneficiation plant are being given to Jindal Transport & Logistics, Vishakhapatnam. PP is also proposing to explore the possibility of giving Tailings to brick manufacturers, Cement plants, Road contractors, can be used as replacement of fine aggregate in concrete blocks, etc.
4. Measures which are being / will be undertaken to minimize the impact on Rasmada Village

- Rasmada Village is 0.1 Km. to Plant in East direction.
- 30 to 40 m wide green belt will be maintained inside the plant premises towards the Rasmada Village which is in Eastern direction.
- All required environmental protection measures such as ESPs (with high efficiency Rigid discharge electrodes with transformer), Bagfilters, covered conveyers, dust suppression systems, pucca internal roads (designed as per IRC - 37), mechanical dust sweepers are being / will be provided and operated duly ensuring compliance with the particulate emission norms of 30 mg/Nm^3.
- Interlocking system will be provided in expansion project to ESPs and whenever the particulate emission exceeds the emission norm, the raw material feed to the unit will stop. Consequently, there will be no production in the unit till the ESP is rectified.
- Automated Lime dosing system will be provided to bring down the SOx emission to within 100 mg/Nm^3.
- Low NOx burners with 3-stage combustion, flue gas recirculation and auto combustion system will be provided to ensure NOx emission within 100 mg/Nm^3.
- Ash is being / will be stored in silos only and there will not be any open storage of ash.
- All transport vehicles will be with PUC certification.
- Wheel washing facility will be provided at entry and exit gates.

Deliberation by the Committee

43.7.15 The Committee noted the following:

i. The instant proposal is for enhancement of production from Iron Ore Beneficiation & Pelletization plant from 3,00,000 TPA to 5,00,000 TPA, Sponge Iron From 90,000 TPA to2,40,000 TPA, Induction Furnace with LRF & CCM from 90,000 TPA to 1,80,000 TPA, Rolling Mill From 90,000 TPA to 1,80,000 TPA along with Power plant WHRB from 6 MW to 18 MW, AFBC From 6 MW to 24 MW, Fly ash Brick plant of 15 Million bricks /annum (50,000 Bricks/day) along with existing Ferro Alloy plant of2 x 9 MVA to manufacture FeSi – 12,650 TPA (or)SiMn – 28,500 TPA (or)FeMn – 37,000 TPA.

ii. The existing project was accorded environmental clearance vide lr. No. J-11011/545/2010-IA II(I) dated 23.12.2011. Consent to Operate for the existing unit was accorded by Chhattisgarh State Pollution Control Board vide Vide No.10253/TS/CECB/2021 dated 22.02.2021. The validity of CTO is upto 28.03.2024.

iii. PP submitted that total land for the project is 26.506 ha (65.498 Acres) [Industrial Land] which has been acquired and under the possession of the company. The land is already diverted for industrial use. Land taken on lease for 99 years from CSIDC of 26.506 Ha. (65.498 Ac.) in the name of Raipur Power and Steel Limited for 18.511 Ha. (valid upto 14-02-2107) & for 7.995 Ha. (valid upto 01-09-2107).

iv. The nearest habitation is Rasmada village at a distance of 0.1 km from the project site. The EAC is of the opinion that PP shall include in the EIA/EMP report, the proposed environmental safeguard measures to minimise the impact on the habitation of the locals.

v. As reported, Seonath River is at a distance of 2.1 km in East direction of the project site. Also, there are other water bodies within the study area of 10 km of the project site. The

EAC is of the opinion that water bodies shall not be disturbed. Mitigation measures w.r.t. safeguarding the water bodies shall be prepared and submitted.

vi. The total water requirement for existing plant is 800 KLD and was sourced from CSIDC. The total water requirement for the expansion project is estimated as 1094 KLD, which will be sourced from CSIDC.

vii. The EAC also deliberated on the submitted written representation of project proponent pertaining to greenbelt development and found it satisfactory.

Recommendations of the Committee

43.7.16 After deliberations, the Committee **recommended** the project proposal **subject to uploading the written submission on portal** for prescribing following specific ToRs for undertaking detailed EIA and EMP study alongwith Public Hearing in addition to the generic ToRs enclosed at **Annexure-1** read with additional ToRs at **Annexure-2**:

(i) The nearest habitation is Rasmada village at a distance of 0.1 km from the project site. Project Proponent shall take appropriate environmental safeguard measures to minimise the impact on the habitation of the locals. PP needs to strengthen green belt all around the plant area to reduce the dust pollution. The PP shall also include this location in its environmental monitoring programme.

(ii) As reported, Seonath River is at a distance of 2.1 km in East direction of the project site. Also, there are other water bodies within the study area of 10 km of the project site. The PP shall include in the EIA/EMP report suitable steps /conservation plan along with contouring (close intervals), Run -off calculations, disposal etc. A robust and full proof Drainage Conservation scheme to protect the natural drainage and its flow parameters; along with Soil conservation scheme and multiple Erosion control measures shall be prepared and included in EIA/EMP Report.

(iii) Water requirement of 1094 KLD as proposed to be sourced from CSIDC. PP shall obtain necessary permission from the Competent Authority.

(iv) As committed, PP shall ensure that 10,000 nos. of plants will be planted by the end of October 2023. So that the total nos. of plantation will become 22,250 nos. (inclusive of existing 12,150 nos.). Hence the total greenbelt will become 8.90 Ha. (22 Ac.) i.e. 33.57% of land is envisaged for greenbelt Out of total 26.506Ha. (65.498 Ac.) of land.

(v) Tailings management plan shall be included in the EIA/EMP Report.

***

DAY-2: SEPTEMBER 5, 2023 [TUESDAY]

Consideration of Environmental Clearance Proposals

Agenda No. 43.8

43.8 Proposed expansion of Cement plant – (1). Ordinary Portland, Portland Pozzolona, Portland Slag, Sulphate Resisting Portland, Composite Cement White Cement, White Putty Cement, GGBS Cement (Alccofine Cement)-(Total capacity- 55,000 MT/Month to 2,64,000 MT/month), (2). Clinker – 2,16,153 MT/Month) by M/s. Hi-Bond Cement (India) Pvt. Ltd., located at Survey No. 315/P1, 315/P2, 315/P3, 315/P3/P1, 315/P4, 316, 317/1/P2, 317/1/P3, 317/1/P4, 319/P2, 319/P3, 332/P2, and 332/P4, Gondal - Jungadh Road, Patidad, Tal. - Gondal, Dist. - Rajkot, Gujarat– Consideration of Environmental Clearance.

[Proposal No.: IA/GJ/IND1/431642/2023; File No.: IA-J-11011/346/2021-IA-II(IND-I)]
[Consultant: Anand Environmental Consultants (P) Ltd.; Valid upto 08.03.2025]

43.8.1 M/s. Hi - Bond Cement (India) Pvt. Ltd. has made an online application vide proposal no. IA/GJ/IND1/431642/2023 dated 04.08.2023 along with copy of EIA report, Forms (Part A, B and C) and certified compliance report seeking Environment Clearance (EC) under the provisions of the EIA Notification, 2006 for the project mentioned above. The proposed project activity is listed at S. No. 3(b) Cement Plants under Category "A" of the schedule of the EIA Notification, 2006 and being appraised at Central Level.

43.8.2 Name of the EIA consultant: M/s. Anand Environmental Consultants (P) Ltd. [List of ACOs with their Certificate / Extension Letter no. NABET/EIA/2124/SA 0173; valid upto 20.03.2024, as on September 6, 2023].

Details submitted by Project proponent

43.8.3 The details of the ToR are furnished as below:

Date of Application	Consideration	Details	Date of Accord	ToR Validity
01.03.2022	Standard Terms of Reference	Terms of Reference	03.03.2022	02.03.2025

43.8.4 The project of M/s. Hi - Bond Cement (India) Pvt. Ltd. located at Survey No. 315/P1, 315/P2, 315/P3, 315/P3/P1, 315/P4, 316, 317/1/P2, 317/1/P3, 317/1/P4, 319/P2, 319/P3, 332/P2, and 332/P4, Gondal - Junagadh Road, Patidad, Taluka - Gondal, District - Rajkot, Gujarat is for setting up of proposed expansion in the cement manufacturing capacity as well as addition of clinker production unit. Total Production Capacity of Cement: 31,68,000 Metric ton/Annum & Clinker: 25,93,836 Metric ton/Annum.

43.8.5 The proposal was considered during the 43rd meeting of the EAC for Industry-I sector held on 4th - 5th September, 2023. The deliberations and recommendations of EAC are as follows:

Deliberations by the Committee

43.8.6 The Committee noted the following:

1. The EAC observed that PP /Consultant has not prepared and presented the Drone survey of the project site during the appraisal of the project although the same has been clearly mentioned in the agenda of the meeting. In view of the same, the EAC advised Project proponent/Consultant to present the drone survey during appraisal of the proposal. The EAC advised the Project proponent/Consultant to read the instructions/guidelines given in the Agenda before coming to the EAC meeting.

2. The EAC noted that GPCB has issued SCN /Directions to the project proponent.. PP shall submit brief of each case / direction along with the compliance of the SCN/directions and their closure status.

3. The Member Secretary appraised the Committee that during April, 2022, an accident took place in the premises of the Hi - Bond Cement (India) Pvt. Ltd. In this regard the EAC is of the opinion that PP shall submit a brief report of the accident along with the details of SCN/ directions issued by various Statutory Authorities including MoEF&CC, if any and the action taken by the project proponent.

4. The PP reported that total land envisaged for the proposed expansion project is 23.42 ha, out of which 17.51 ha is registered in name of company and remaining 5.91 ha of land agreement have been entered with land owners. Taking into consideration Ministry's O.M. vide F.No. 22-76/2014-IA-III dated 07.10.2014 which reads as "*While full acquisition of land may not be a prerequisite for the consideration of the case for EC, there should be some credible document to show the status of land acquisition w.r.t project site when the case is brought before the concerned EAC/SEAC for appraisal.....*," EAC is of the opinion that, credible document showing the status of land acquisition shall be required at the time of appraisal in pursuance to the said O.M.

5. The EAC observed that there is no proper Engineering drawing of a layout. It is missing area statement, index etc. The PP shall prepare 3 separate drawings as a layout details. In Drg 1 PP shall cover Road networking, Plan Layout, Parking along with area statement showing % of all ingredients i.e. roads, Buildings, Parking, with indexing, scale of drawing etc. In no case road shall be abruptly terminated at any point. It shall have proper looping. PP also to show traffic flow in the drawing along road with entry and exit. In drg 2 PP shall show a layout indicating road networking, Existing Green belt and proposed Green Belt with its % against plot area including no of species WRT 2500 density per ha. In drg3 PP shall show contour map with Bench mark, Road network and drainage network along road side with drainage flow, disposal of drainage flow at lowest point with invert level etc. Further PP to show RWH details in the same drawing with calculations.

6. The Committee deliberated on the public hearing issues along with action plan submitted by the proponent to address the issues raised during the public hearing and is of the view that the submitted action is not sufficient to address all the issues. The EAC advised PP to revise the action plan as per Ministry's O.M. dated 30.09.2020.

7. The EAC deliberated on the proposed plan for solid and hazardous waste management and is of the view that PP needs to rework on the hazardous waste management and disposal and submit the revised plan for the same.

8. The EAC noted that existing greenbelt has been developed in 3.12 ha area which is about 24 % of the total existing land area with total sapling of 4797 Trees. The EAC deliberated on the existing greenbelt and observed that existing EC was granted in 2011 and still proper greenbelt has not been developed. The EAC is of the opinion that PP shall complete the greenbelt development and then apply for expansion.

9. There is a water body near the project site within the study area. PP shall include in the EIA/EMP report suitable steps /conservation plan along with contouring (close intervals), Run -off calculations, disposal etc. A robust and full proof Drainage Conservation scheme to protect the natural drainage and its flow parameters; along with Soil conservation scheme and multiple Erosion control measures shall be prepared and included in EIA/EMP Report.

10. Total water requirement after proposed expansion will be 390.3 m^3/day which is proposed to be obtained from open well / bore well and recycled. PP shall explore the possibility of alternate source of water to meet its water requirement to reduce its dependency on ground water.

11. The EAC is further of the view that proposal presentation needs to be revised and the facts shall be more quantitative in nature.

12. The EAC deliberated on the certified compliance report of IRO and observed that IRO has observed partial / non-compliance of conditions. PP has also submitted a ATR, however, closure report after site verification by IRO has not been obtained by the project proponent. The EAC advised PP/Consultant needs to obtain the closure report on the non-complied / partially complied conditions from IRO after site verification.

13. The PP shall prepare a Village Adoption program consisting of need - based community development activities and submit an undertaking for adoption of villages including the name of villages.

14. The PP/Consultant agreed to the suggestions of EAC and requested EAC to allow reappear after the revision of the application incorporating the desired information.

Recommendations of the Committee:

43.8.7 In view of the foregoing and after detailed deliberations, the committee recommended to **defer the proposal** to address the shortcomings enumerated at para no. 43.8.6 above. The proposal may be considered after submission of the requisite information.

***

Agenda No. 43.9

43.9 Proposed 0.6 MTPA Iron Ore Pellet Plant & 5 Nos. (4W+1S) Producer Gas Plant of Capacity 5000 Nm^3/hr each by M/s Kashvi International Private Limited, located at Champadihi, Keonjhar District, Odisha – Consideration of Environmental Clearance.

[Proposal No.: IA/OR/IND1/426642/2023; File No.: IA-J-11011/73/2019-IA-II(IND-I)]
[Consultant: Visiontek Consultancy Services Pvt. Ltd.; Valid upto 16.12.2023]

43.9.1 M/s. Kashvi International Private Limited has made an online application vide proposal no. IA/OR/IND1/426642/2023 dated 17.08.2023 along with copy of EIA/EMP report, Forms (Part A, B and C) and certified compliance report seeking Environment Clearance (EC) under the provisions of the EIA Notification, 2006 for the project mentioned above. The proposed project activity is listed at S. No. 3(a) Metallurgical Industries (Ferrous and Non-ferrous) under Category "A" of the schedule of the EIA Notification, 2006 and being appraised at Central Level.

43.9.2 Name of the EIA consultant: M/s. Visiontek Consultancy Services Pvt. Ltd. [List of ACOs with their Certificate / Extension Letter no. NABET/EIA/2023/RA 0209; valid upto 16.12.2023, as on September 6, 2023].

Details submitted by Project proponent

43.9.3 The details of the ToR are furnished as below:

Date of Application	Consideration	Details	Date of Accord	ToR Validity
28.02.2019	5th meeting of EAC held on 27-29th March, 2019	Terms of Reference	01.05.2019	30.04.2023
As per MoEF&CC Gazette Notification no. S.O.221(E), dated 18.01.2021, the TOR is valid till 30.04.2024.				

43.9.4 The project of M/s. Kashvi International Private Limited is located in Champadihi-Village, Jhumpura -Tehsil, Keonjhar -District, Odisha for proposed greenfield project 0.6 MTPA Iron Ore Pellet Plant & 5 Nos. (4 Working +1 Standby) Producer Gas Plant of Capacity 5000 Nm^3/hr each.

43.9.5 Environmental Site Settings:

Sr. No.	Particulars	Details	Remarks
1.	Total land	Total land required – 7.94 ha. (19.62 Ac) Private land - 1.02 Ha. (2.52 Acre), Govt. Land - 6.92 Ha. (17.1 Acre) [IDCO Land].	Total Land: 7.94 Ha. (19.62 Acre) is IDCO & Private land. Land use: Industrial Land provided by IDCO
2.	Land acquisition details as per	Acquired Land: 5.75 ha. (14.19 Acre)	Acquisition for 2.19 ha. is under process.

<table>
<tr><th>Sr. No.</th><th>Particulars</th><th>Details</th><th>Remarks</th></tr>
<tr><td></td><td>MoEF&CC O.M. dated 7/10/2014</td><td>Land Yet to be acquired: 2.19 ha. (5.43 Acre)</td><td></td></tr>
<tr><td>3.</td><td>Existence of habitation & involvement of R&R, if any.</td><td>There is no existence of habitants identified within the plant boundary.
Nearest habitation is Village Champadihi- 1.8 Km (S)</td><td>R&R is not applicable.</td></tr>
<tr><td>4.</td><td>Latitude and Longitude of the project site</td><td><table><tr><th>Pillar No.(s)</th><th>Latitude</th><th>Longitude</th></tr><tr><td>A</td><td>21°53'28.38"N</td><td>85°28'46.29"E</td></tr><tr><td>B</td><td>21°53'23.26"N</td><td>85°28'54.93"E</td></tr><tr><td>C</td><td>21°53'16.62"N</td><td>85°28'50.55"E</td></tr><tr><td>D</td><td>21°53'23.28"N</td><td>85°28'41.42"E</td></tr></table></td><td>-</td></tr>
<tr><td>5.</td><td>Elevation of the project site</td><td>419.5m to 422m AMSL</td><td>HFL is 378.95 m AMSL certified from Baitarani Irrigation Division vide letter no.4941/W.E, dated 28.09.2022</td></tr>
<tr><td>6.</td><td>Involvement of Forest land if any</td><td>There is no forest land involved within the plant boundary.</td><td>Applied to forest dept. dated 06.12.2022 for confirmation regarding no involvement of forest land. However, as per land schedule of the site, there is no forest land.</td></tr>
<tr><td>7.</td><td>Water body exists within the project site as well as study area</td><td><u>Project Site:</u>
Champadihi Nala (Seasonal) located in the South eastern part of the plot.
<u>Study Area:</u><table><tr><th>Water body</th><th>Distance</th><th>Direction</th></tr><tr><td>Baitarani River</td><td>55 m</td><td>W</td></tr><tr><td>Kashi Nala</td><td>2.5 Km</td><td>W</td></tr><tr><td>Jalpa Nadi</td><td>5.4 Km</td><td>SW</td></tr><tr><td>Kanjipani Water Reservoir</td><td>6.3 Km</td><td>ENE</td></tr><tr><td>Balipada nala</td><td>6.9 Km</td><td>SSW</td></tr><tr><td>Dalko Nala</td><td>7.8 Km</td><td>NNW</td></tr><tr><td>Aradei River</td><td>8.4 Km</td><td>SE</td></tr><tr><td>Kasia Nadi</td><td>9.1 Km</td><td>ENE</td></tr><tr><td>Jagadala Resevoir</td><td>9.3 Km</td><td>S</td></tr></table></td><td>NOC obtained from Irrigation Division, Govt. of Odisha vide letter no.137 dated 07.08.2023 for presence of Champadihi Nala in the project site & Baitarani River passing at 55m from the project site.</td></tr>
</table>

Sr. No.	Particulars	Details	Remarks
8.	Existence of ESZ /ESA /national park/ wildlife sanctuary / biosphere reserve/ tiger/ elephant reserve etc. if any within the study area	No ESZ /ESA /national park/ wildlife sanctuary within 10 km radius. Study Area: • Chamakpur R.F – 0.5 km, NE • Patabila R.F – 7.0 km, E • Baliband R.F – 7.5 km, E	-

43.9.6 The unit configuration and capacity of proposed project is given as below:

Sl. No.	Plant Equipment/ Facility	Proposed Units		Final	
		Config.	Capacity	Config.	Capacity
1	Pellet Plant	1x0.6 MTPA	0.6 MTPA	1x0.6 MTPA	0.6 MTPA
2	Producer Gas Plant	5 (4 Working +1 Standby) x 5000 Nm^3/hr	25000 Nm^3/hr	5 (4 Working +1 Standby) x 5000 Nm^3/hr	25000 Nm^3/hr

43.9.7 The details of the raw material requirement for the proposed project along with its source and mode of transportation is given as below:

Sr. No	Raw material	Quantity required per annum	Source	Distance from site (Kms)	Mode of Transportation
1.	Iron Ore Fine	6,60,000 Tons/year	Jaribahal Iron Ore Mine of Kashvi International Pvt. Ltd. & Other iron ore mines in Odisha and outside	10 – 100 Km	By Road
	Coke	6,000 Tons/year	Rourkela Steel Plant, Rourkela, Odisha & other steel plants in Odisha	150 - 200 Km	By Road
	Bentonite	7,200 Tons/year	Rajasthan/ Gujarat	1500 – 2500 Km	By Rail
	Limestone	9,000 Tons/year	Sundergarh, Odisha	200 - 300 Km	By Road
	FO/LDO	6,000 KL/year	Local IOCL, Paradeep	250 Km	By Road
2.	Steam Coal	50,000 Tons/year	Open Auction MCL, Odisha & ECL, Jharkhand, However, consent letter received for supply of Imported coal by KAI International Pvt. Ltd. (Coal Trader) & by	120 - 550 Km	By Road

Sr. No	Raw material	Quantity required per annum	Source	Distance from site (Kms)	Mode of Transportation
			Aditya Birla through port.		

43.9.8 Proposed Water requirement is 360 m^3/day, to be sourced from Baitarini River and allocation for the same has been obtained from IPICOL vide letter no. SJ/KIPL/762(II) dtd. 14.05.2020. No Ground water will be used for this project.

43.9.9 Proposed Power requirement of 9.0 MW will be sourced from 132/33 KV Sub-station of OPTCL (TPNODL) at Palaspanga. Permission for construction purpose 40 KW G.P load has already approved vide Letter No. Tech 459/71 dtd. 19.07.2022. Whereas operational phase power permission will be applied after obtaining statutory Clearances. Further DG sets of 3 Nos. X 1000 KVA each will be kept to meet the emergency power requirement.

43.9.10 Baseline Environmental Studies:

Period	March to May 2021
AAQ parameters at 9 locations (min. & Max.)	• PM_{10}= 40.5 to 82.7 µg/m^3 • $PM_{2.5}$= 22.4 to 46.7 µg/m^3 • SO_2= BDL (<4) to 19.3 µg/m^3 • NOx= BDL (<6.0) to 25.9 µg/m^3 • CO= BDL (<0.1) to 0.34 mg/m^3
Incremental GLC level	• PM_{10}= 2.06 µg/m^3 at Project Site • (Max. GLC- 4.9 µg/m^3, Village Naupani at 1.3 Km, NE) • $PM_{2.5}$= 1.37 µg/m^3 at Project Site • (Max. GLC- 3.3 µg/m^3, Village Naupani at 1.3 Km, NE) • SO_2= 1.54 µg/m3 (Level at of the Project Site) • (Max. GLC- 4.5 µg/m^3, Village Deojhar at 2.4 Km, NE) • NOx= 0.85 µg/m3 (Level at of the Project Site) • (Max. GLC- 2.5 µg/m^3, Village Deojhar at 2.4 Km, NE) • CO= 0.1 mg/m3 (Level at of the Project Site) • (Max. GLC- 0.6 mg/m^3, Village Deojhar at 2.4 Km, NE)
Ground Water quality at 8 locations	pH: 6.54 to 7.32, Total Hardness: 70 to 144 mg/l, Chlorides: 10 to 22 mg/l, Fluoride: 0.11 to 0.21 mg/l. Heavy metals such as Lead, Arsenic etc. are BDL at all the locations.
Surface water quality at 8 locations	pH: 6.91 to 7.26; DO: 5.2 to 6.5 mg/l and BOD:0.8 to 2.0 mg/l. COD from 5 to 36 mg/l
Noise levels Leq (Day & Night) at 8 locations	Ambient noise reaches 50.3 to 52.8 dB(A) during day time and 38.2 to 43.2 dB(A) during night time.
Traffic assessment study findings	Traffic study has been conducted at 3 locations. Near entry gate of project site adjacent to plant boundary, Jamirita Junction at a distance of 0.2 km from the project site & Gurutuan Junction at a distance of 0.2 KM from project site. Transportation of raw material, fuel & finished product will be done 50 % by road & 50% rail. Existing PCU details is given below-

Sl No.	Study Location	Details	Volume (PCU/hr)	*Capacity (PCU/hr)	Existing V/C ratio	**Level of Service (LOS)
1.	Near entry gate of project site	Average Hour Load	65	1500	0.04	A
		Peak Hourly Load	104 (average) **110** maximum	1500	0.06	A
2.	Jamirita Junction	Average Hour Load	103	1500	0.06	A
		Peak Hourly Load	139 (average) **142** Maximum	1500	0.09	A
3	Gurutuan Junction	Average Hour Load	95	1500	0.06	A
		Peak Hourly Load	136 (average) **143** maximum	1500	0.09	A

IRC 106:1990

Additional PCU load after proposed project will be 56 PCU/hr.

Sl No.	Study Location	#Volume after Proposed project (PCU/hr)	*Capacity (PCU/hr)	V/C ratio after Proposed project	**Level of Service (LOS)
1	Near entry gate of project site	166	1500	0.11	A
2	Jamirita Junction	198	1500	0.13	A
3	Gurutuan Junction	199	1500	0.13	A

Considering peak hour traffic at the three locations.

Conclusion: The level of service (LOS) will remain same (Class A) even after including additional traffic due to proposed project.

Flora & Fauna	Conservation Plan has been prepared for the Schedule-I fauna like Elephant, Sloth bear etc. with a budgetary allocation of Rs. 0.81 crore for 5 years and submitted to DFO Keonjhar division on dtd. 22.02.23 for approval.

43.9.11 The details of solid waste generation along with its mode of treatment/disposal is furnished as below:

Sl. No.	Facility	Type of Waste	Quantity generated (TPA)	Mode of Treatment	Disposal	Remark
	Solid Waste					

Sl. No.	Facility	Type of Waste	Quantity generated (TPA)	Mode of Treatment	Disposal	Remark
1.	Pellet Plant	Fines collected from ESP/Bag filters	72,000 TPA	Recycled	Will be recycled in pellet plant	-
2.	PGP Plant	Tar	1750 TPA	Reused/ disposed	Will be reused as fuel in the pellet plant/ Sold to Authorized Coal tar processing units.	-
3.		Ash	20,000 TPA	-	Will be supplied to own ash brick manufacturing plant of M/s. Kashvi International Pvt. Ltd. in Keonjhar area.	-
	Hazardous Waste					
4.	Used oil	Schedule- I Cat. 5.1	3 KLPA		Storage in containers over the concrete floor under-ventilated covered shed followed by sale to actual users/Recyclers/Re-processors having valid authorization from SPCB, Odisha or disposed to TSDF.	-
5.	The residue of the oil Storage tank	Schedule- I Cat. 5.2	2 KLPA	Recycling/Re-processes sing		-
6.	Phenolic Sludge from ETP	Schedule- I Cat. 19.1	6.1 KLPA	-	Fired in Producer Gas Plant (PGP)	-

43.9.12 Public Consultation:

Details of advertisement given	Newspapers– The Prameya (Local Odiya newspaper) and The Times of India on 6.04.2022.
Date of public consultation	10.05.2022
Venue	Village Champadihi, Khata No. 49, Plot No. 22, Kissam-Sarbasadarana under Tehsil- Jhumpura in Keonjhar District.
Presiding Officer	Shri Jadumani Mahala, Additional District Magistrate (Revenue), Keonjhar.
Major issues raised	Education, Basic amenities, Drinking water facility, Rainwater harvesting, Plantation & Solar Panel Installation.

Action plan as per MoEF&CC O.M. dated 30/09/2020

S. No.	Major Activities	Description of Physical Target	Total Physical Targets	Physical Target along with CER Budget (Rs.in Lakhs)			Total Amount (Rs. In Lakhs)
				1st Year	2nd Year	3rd Year	
A.	**Education**						
1.	High School Transformational Project (smart class, science lab, etc.) partnering with Govt. of Odisha flagship	Each School Shall be provided with the following- a) 8 nos. of Computers with Table & Chair @ Rs. 50,000/- b) 2 nos of AC with inverters @ Rs. 60,000/- c) 2 nos. of Digital Classroom	3 Govt. High School	Rs. 6.45 (At Village School- Bhandaridiha)	Rs. 6.45 (At Village School Chipinda)	Rs. 6.45 (At Village School Nahabeda)	Rs.19.35

S. No.	Major Activities	Description of Physical Target	Total Physical Targets	Physical Target along with CER Budget (Rs.in Lakhs)			Total Amount (Rs. In Lakhs)
				1st Year	2nd Year	3rd Year	
	project under Mo School Abhiyaan or Madhyamik Shikshya Abhiyan	with Projector, digital interactive whiteboard systems, and its teaching software building blocks for digitally connected classroom. and facilities @Rs.1,25,000/-. The 3 schools are Bhandaridiha, Chipinda & Nahabeda					
2.	Retrofitting of Classrooms and Digital Classroom	Each year, 2 additional classrooms is proposed for retrofitting in each Govt. Middle school with furnitures (1 nos. of Digital Classroom with Projector, digital interactive whiteboard systems, and its teaching software building blocks for digitally connected classroom. and facilities @ Rs. 1,25,000/-). The 2 schools are Belda & Gurutuan UP School	2 Govt. Middle Schools	Rs.0.00	Rs. 4.25 (At Village School Belda)	Rs. 4.25 (At Gurutan U.P School	Rs.8.5
3.	Improvement in basic amenities & teaching learning materials in Anganwadi center (AWC)	Each year 02 AWCs shall be supported per year. Each AWC shall be provided with - a) Abacus with Teaching Learning Material and Furnitures @ Rs.50,000/- b) Painiting and infrastruture Development with Drinking Water facility or Toilet facility and Utensils @ Rs. 50,000/- The List of AWCs are Nuapani, Jamirita, Jaipur, Champadihi, Jamunaposi, Belda & Gurutuan	7 AWCs	Rs. 2.00 (AWCs in Champadihi & Jamirita Village)	Rs. 2.00 (AWCs in Jaipur & Nupani)	Rs.3.00 (AWCs in Jamunaposi, Belda & Gurutuan Village)	Rs.7.0
4.	Appointment of Private Teachers in Schools	Teachers in 7 Schools (5 Primary & 2 Secondary school)	5 Primary & 2 Secondary school	Rs. 4.20 (3 primary schools)	Rs. 4.20 (2 primary schools)	Rs. 4.20 (2 secondary schools)	Rs.12.6
5.	School Bus	3 School Bus for Village school Belda, Nahabeda High School and Gurutan U.P School. However, District Education Officer shall be consulted for finalizing the School.	3 School Bus	Rs. 10.00 Village School Belda	Rs. 10.00 Nahabeda High School	Rs. 10.00 Gurutan U.P School	Rs.30.0
	Sub Total (Education)			**Rs.22.65**	**Rs. 26.9**	**Rs.27.9**	**Rs.77.45**

S. No.	Major Activities	Description of Physical Target	Total Physical Targets	Physical Target along with CER Budget (Rs.in Lakhs)			Total Amount (Rs. In Lakhs)
				1st Year	2nd Year	3rd Year	
B.	**Health**						
1	Ambulance	1 Ambulance serving the peripheral villages to be positioned at Kashvi's Plant, 1 Ambulance each at PMC	3 Nos	Rs.15.0	Rs.15.0	Rs.15.0	Rs.45.0
2	Health Camp	2 Health Camps per year with a focus on Kotagaon, Palasha & Jajagnga GP.	6 health Camps	Rs. 2.00 2 Health Camps Under Kotagaon G.P.	Rs. 2.00 2 Health Camps Under Palasha G.P.	Rs. 2.00 2 Health Camps Under Jajagnga G.P.	Rs.6.0
3	Setting-up a Dispensary	Setting up a Dispensary serving Plant workers and local Community	1 Nos.	Rs. 35.00 Near by Champadihi Village area	0.00	0.00	Rs.35.0
	Sub Total (Health)			**Rs.52.00**	**Rs.17.0**	**Rs.17.0**	**Rs.86.0**
C.	**Drinking Water**						
1.	Purified Drinking Water Facility at Public Places	In total 3 nos of Purified Drinking Water shall be installed at strategic public locations. Each Facility shall have a purifier machine of Rs. 2,00,000/- and Civil Works cost shall be Rs. 3,50,000/-. The locations are Nahabeda Sub Centre, Chipinda Sub Centre, Champadihi Village, Belda & Gurutuan Village. This location may change considering the number of floating population.	5 Nos.	Rs. 11.0 (Nahabeda, Champadihi, Chipinda Sub Center)	Rs. 11.00 (Belda & Gurutuan Village Sub Center)	Rs. 5.50 (Under Jajagnga G.P)	Rs.27.50
	Sub Total (Drinking Water)			**Rs.11.00**	**Rs.11.0**	**Rs.5.5**	**Rs.27.5**
D.	**Environment**						
1.	Rain Water Harvesting in Govt. Schools and Govt. Institutions	Rain Water Harvesting shall be taken-up in 30 schools/Govt Offices/Govt Institutions @ Rs. 35,000/-	30 Schools/ Institution/ Offices	Rs. 3.50 (10 Nos of schools/Govt Offices/Govt Institutions)	Rs.3.50 (10 Nos of schools/ Govt Offices/ Govt Institutions)	Rs. 3.50 (10 Nos of schools/Govt Offices/Govt Institutions)	Rs. 10.50
2.	Plantation/Afforestation Drive (including sampling and	30 Schools or Govt. offices or Govt. Institution shall be covered within 3 years with approximately 1500 Sampling (50 Saplings with	30 Schools/ Institution/ Offices	Rs. 3.0 (10 Nos of schools/Govt	3.0 (10 Nos of schools/ Govt	3.0 (10 Nos of schools/Govt Offices/G	Rs. 9.00

S. No.	Major Activities	Description of Physical Target	Total Physical Targets	Physical Target along with CER Budget (Rs.in Lakhs)			Total Amount (Rs. In Lakhs)
				1st Year	2nd Year	3rd Year	
	protection like tree guard etc)	Tree Guard @ Rs. 600/- shall be planted in each school/institution).		Offices/Govt Institutions)	Offices/ Govt Institutions)	ovt Institutions)	
	Sub Total (Environment)			**Rs. 6.50**	**Rs. 6.50**	**Rs. 6.50**	**Rs. 19.50**
E.	**Livelihood**						
1.	Promotion of Income Generation Activities- Tailoring & embroidery etc.	100 interested women beneficiaries within 10 SHG members of neighboring GP shall be trained within 2 years i.e. 5 Group with 10 member in each group shall be trained every year	100 Women	0.0	Rs. 7.5 (50 Nos. of Under Kotagaon G.P)	Rs. 7.5 (50 Nos. Under Palasha G.P)	Rs. 15.0
2.	Farmers input support for improving the yield for better return	150 interested and selective farmers shall be provided with inputs for 3 years	150 Farmers	Rs. 5.0	Rs. 5.0	Rs. 5.0	Rs. 15.0
	Sub Total (Livelihood)			**Rs. 5.0**	**Rs.12.5**	**Rs. 12.5**	**Rs. 30.0**
F.	**Infrastructure**						
1.	Installation of Roof-top Solar Off grid at CHC & ESI Hospital	PHC- Malda & PHC-Kalimati, (7.5 KW roof top solar grid shall be installed and each KW @ Rs. 125,000/-).	2 PHC	0.00	Rs. 9.38 At PHC-Malda	Rs. 9.38 At PHC-Kalimati	Rs. 18.76
2.	Village Solar Street Lights	360 Solar Street lights from Plant to HP Petrol Pump, Bamberi road, from plant towards village Champadihi	360 Solar Streetlights	Rs. 30.0	Rs. 30.0	Rs. 30.0	Rs. 90.00
	Sub Total (Infrastructure)			**30.0**	**39.38**	**39.38**	**Rs.108.76**
	GRAND TOTAL			**127.15**	**113.28**	**108.78**	**349.21**

Note-

1. The Construction of Roads/repair & revamping of Road may be taken up post consultation with appropriate Government Promotion of Sports shall be taken up from the CSR funds
2. Village Adoption - Peripheral development will be carried out in the nearby villages like Champadihi, Belda.

43.9.13 The capital cost of the proposed project is Rs. 223.0 Crores. The capital cost for environmental protection measures is proposed as Rs. 12.20 Crores. The annual recurring cost towards the environmental protection measures is proposed as Rs. 3.26 Crores. The employment generation from the proposed project is 343. The details of cost for environmental protection measures is as follows:

S. No	Unit	Detail	Capital Cost (Rs. In Crore)	Operating Cost (Rs. In Crore)	Maintenance Cost (Rs. In Crore)	Total Recurring Cost (Rs. In Crore)
1.	Waste Water Maangement	ETP + STP and maintenance	3.2	0.7	0.02	0.72
2.	Air Pollution Management	APCD	5.1	0.5	0.3	0.8
3.	Hazardous Management	Proper collection, Safe Handling, Storage within premises and disposal of waste at approved TSDF, recyclers, etc. as applicable	1.3	0.1	0.01	0.11
4.	Fire & Safety	Fire Extinguishers, Fire hydrant system	1.4	0.1	0.05	0.15
5.	Env. Monitoring	AAQ, Stacks, Water, Noise, Soil	0.76	0.2	1	1.2
6.	Green Belt Development	Plantation	0.1	0.03	0.01	0.04
7.	Occupational Health	Medical Health checkup, PPE	0.34	0.2	0.05	0.24
	Total EMP Budget		**12.20**	**1.83**	**1.44**	**3.26**
	Details of adoption of villages if any	Peripheral development will be carried out in the nearby villages like Champadihi, Belda.				

43.9.14 Proposed Green belt will be developed in 2.63 Ha. Which is about 33.1% of the total project are of 7.94 Ha. With total sapling of 6575 nos. trees. A 2X2 m wide greenbelt, consisting of at least 3 tier around plant boundary will be developed as greenbelt and green cover as CPCB/ MoEF&CC, New Delhi guidelines. Local and native species will be planted with a density of 2500 trees per hectare. These saplings will be planted and nurtured in 2.63 hectares in 3 years.

43.9.15 It is reported that there is no violation under EIA, 2006/court case/show cause/direction related to the project under consideration.

Written submission by the PP:

43.9.16 During the meeting, based on the deliberations made by the EAC, the project proponent vide letter dated 05.09.2023 through email dated 05.09.2023 submitted the following information:

S. No.	Observation of EAC	Reply of PP
1.	Revised Layout plan & contour with drainage map	Contour plan showing road, drainage pattern along with greenbelt & revised layout plan with indexing is submitted.
2.	Revised budget w.r.t. PH issues	The revised budget w.r.t. PH issues are Rs. 349.21 Lakhs. The detailed break-up of budget is submitted and updated at para 43.9.12 above.

Deliberations by the Committee

43.9.17 The Committee noted the following:

1. The instant proposal is for proposed greenfield project 0.6 MTPA Iron Ore Pellet Plant & 5 Nos. (4 Working +1 Standby) Producer Gas Plant of Capacity 5000 Nm^3/hr each.
2. The EAC, constituted under the provision of the EIA Notification, 2006 comprising Expert Members/domain experts in various fields, examined the proposal submitted by the Project Proponent in desired format along with EIA/EMP reports prepared and submitted by the Consultant accredited by the QCI/ NABET on behalf of the Project Proponent.
3. The EAC noted that the Project Proponent has given an undertaking that the data and information given in the application and enclosures are true to the best of his knowledge and belief and no information has been suppressed in the EIA/EMP reports. If any part of data/information submitted is found to be false/ misleading at any stage, the project will be rejected and Environmental Clearance given, if any, will be revoked at the risk and cost of the project proponent.
4. The Committee noted that the EIA reports are in compliance of the ToR issued for the project, reflecting the present environmental status and the projected scenario for all the environmental components. The Committee deliberated on the proposed mitigation measure towards Air, Water, Noise and Soil pollutions. The Committee suggested that the storage of toxic/explosive raw materials/products shall be undertaken with utmost precautions and following the safety norms and best practices.
5. The total revised project area is 7.94 ha [Private land - 1.02 Ha. (2.52 Acre), Govt. Land - 6.92 Ha. (17.1 Acre) - IDCO Land]. 5.75 ha. (14.19 Acre) land is under the possession of the company. PP has reported that acquisition for 2.19 ha. is under process. The EAC advised that total project land shall be acquired and converted for industrial purpose prior to commencement of project.
6. The nearest habitations are Champadih village which is at a distance of 1.8 km in the South of the project site. Chamakpur Reserve Forest is at a distance of 0.5 km in NE of the project site. The EAC is of the opinion that PP shall strictly implement the environmental safeguard measures proposed to minimise the impact on the habitation of the locals and the adjacent RF.
7. Champadihi Nala (Seasonal) is located in the South eastern part of the plot. Baitarani River is at a distance of 0.55 km in West direction and other water bodies within the study area

of the project site. The EAC is of the opinion that water bodies shall not be disturbed. Mitigation measures w.r.t. safeguarding the water bodies shall be strictly implemented.

8. The water requirement for the project is estimated as 360 m^3/day, to be sourced from Baitarini River. No Ground water will be used for this project. The EAC deliberated on the water requirement and found is satisfactory.

9. The Committee has deliberated on the baseline data and incremental GLC due to the proposed project and is of the opinion that PP shall strictly implement the mitigation measures as per the submitted action plans to minimise the pollution.

10. Conservation Plan has been prepared for the Schedule-I fauna like Elephant, Sloth bear etc. with a budgetary allocation of Rs. 0.81 crore for 5 years and submitted to DFO Keonjhar division on 22.02.23 for approval.

11. The PP has submitted that proposed green belt will be developed in 2.63 Ha. which is about 33.1% of the total project with total sapling of 6575 nos. trees. These saplings will be planted and nurtured in 3 years. The EAC deliberated on the greenbelt layout plan along with action plan and the budget earmarked and is of the opinion that PP shall complete the proposed greenbelt development in a period of 1 year.

12. The committee deliberated details of carbon foot prints and carbon sequestration study w.r.t. proposed project and found them to be satisfactory.

13. The Committee also deliberated on the public hearing issues along with revised action plan submitted by the proponent to address the issues raised during the public hearing and found it satisfactory.

14. The EAC also deliberated on the written submission of the project proponent and found it satisfactory.

15. The EAC deliberated on the proposal with due diligence in the process as notified under the provisions of the EIA Notification, 2006, as amended from time to time and accordingly made the recommendations to the proposal. The Experts Members of the EAC found the proposal in order and recommended for grant of environmental clearance.

16. The environmental clearance recommended to the project/activity is strictly under the provisions of the EIA Notification 2006 and its subsequent amendments. It does not tantamount/construe to approvals/consent/permissions etc. required to be obtained or standards/conditions to be followed under any other Acts/ Rules/ Subordinate legislations, etc., as may be applicable to the project. The project proponent shall obtain necessary permission as mandated under the Water (Prevention and Control of Pollution) Act, 1974 and the Air (Prevention and Control of Pollution) Act, 1981, as applicable from time to time, from the State Pollution Control Board, prior to construction & operation of the project.

17. The EAC also reviewed the EC conditions (specific and general) pertaining to Industry-I projects and observed that some of the specific conditions stipulated so far in the previously recommended EC projects are common and applicable to most of the projects in general. In view of the same, the General Conditions (in case of EC projects) have been revised through reallocation of these common conditions from specific to General Conditions (in case of EC

projects). Accordingly, the instant project is also being stipulated with the modified General conditions.

Recommendations of the Committee:

43.9.18 In view of the foregoing and after detailed deliberations, the committee **recommended** the instant proposal **subject to uploading the written submission on portal** for grant of Environment Clearance under the provisions of EIA Notification, 2006 subject to the stipulation of following specific conditions and general conditions as per the Ministry's Office Memorandum No. 22-34/2018-III dated 9/8/2018 based on project specific requirements:

A. Specific Condition:

i. The project proponent shall comply with all the environmental protection measures and safeguards proposed in the documents submitted to the Ministry. All the recommendations made in the EIA/EMP in respect of environmental management, and risk mitigation measures relating to the project shall be implemented.

ii. The project proponent shall utilize modern technologies for capturing of carbon emitted and shall also develop carbon sink/carbon sequestration resources capable of capturing more than emitted. The implementation report shall be submitted to the IRO, MoEF&CC in this regard.

iii. Total project land acquisition shall be completed and converted for industrial purpose prior to commencement of project.

iv. The nearest habitations is Champadih village which is at a distance of 1.8 km in the South of the project site. Chamakpur Reserve Forest is at a distance of 0.5 km in NE of the project site. Proponent shall take appropriate environmental safeguard measures to minimise the impact on the habitation of the locals and impact on Reserve Forest. PP needs to strengthen green belt all around the plant area to reduce the dust pollution. The PP shall also include this location in its environmental monitoring programme.

v. Champadihi Nala (Seasonal) is located in the South eastern part of the plot. Baitarani River is at a distance of 0.55 km in West direction and other water bodies within the study area of the project site. A robust and full proof Drainage Conservation scheme to protect the natural drainage and its flow parameters; along with Soil conservation scheme and multiple Erosion control measures shall be implemented.

vi. The water requirement of 360 m^3/day, to be sourced from Baitarini River after obtaining necessary permission from the Competent Authority. No Ground water abstraction is permitted.

vii. Three tier Green Belt shall be developed in at least 33% of the project area in a period of 1 year all along the project site of adequate width and tree density shall not be less than 2500 per ha. Survival rate of green belt developed shall be monitored on periodic basis to ensure that damaged plants are replaced with new plants in the subsequent years. PP shall also develop greenbelt in the form of shelter belt comprising of total of 6 rows of 2x2 m plantation with tall trees & broad leaves with thick canopy along with windshield inside the plant premises to act as green barrier for air pollution & noise levels towards

Champadih village and Chamakpur Reserve Forest. Compliance status in this regard, shall be submitted to concerned Regional Office of the MoEF&CC.

viii. All the commitments made towards socio-economic development of the nearby villages shall be satisfactorily implemented. The action plan based on the social impact assessment study of the project as per the EMP in accordance to the Ministry's OM dated 30.09.2020 amounting to approx. Rs. 3.50 Crores shall be strictly implemented and progress shall be submitted to the Regional Office of MoEF&CC.

ix. As committed, PP shall adopt villages namely Champadihi and Belda and prepare and implement the action plan to develop them into a model villages.

x. The PP shall undertake strict mitigative measures in nearby areas for reduction in pollution level.

xi. Closed loop system shall be adopted in the producer gas plant.

xii. The recommendations of the approved Site-Specific Wildlife Management Plan shall be implemented in consultation with the State Forest Department. The implementation report shall be furnished along with the six-monthly compliance report to the concerned Regional Office of the MoEF&CC.

B. General Conditions

I. Statutory compliance:

i. The Environment Clearance (EC) granted to the project/ activity is strictly under the provisions of the EIA Notification, 2006 and its amendments issued from time to time. It does not tantamount/ construe to approvals/ consent/ permissions etc., required to be obtained or standards/conditions to be followed under any other Acts/Rules/Subordinate legislations, etc., as may be applicable to the project.

ii. This Environmental clearance is granted subject to final outcome of Hon'ble Supreme Court of India, Hon'ble High Court, Hon'ble NGT and any other Court of Law, if any, as may be applicable to this project.

II. Air quality monitoring and preservation

i. The project proponent shall install 24x7 continuous emission monitoring system at process stacks to monitor stack emission as well as 04 Nos. Continuous Ambient Air Quality Station (CAAQMS) for monitoring AAQ parameters with respect to standards prescribed in Environment (Protection) Rules 1986 as amended from time to time. The CEMS and CAAQMS shall be connected to SPCB and CPCB online servers and calibrate these systems from time to time according to equipment supplier specification through labs recognized under Environment (Protection) Act, 1986 or NABL accredited laboratories.

ii. The project proponent shall carryout Continuous Ambient Air Quality monitoring for common/criterion parameters relevant to the main pollutants released (e.g. PM_{10} and $PM_{2.5}$ in reference to PM emission, and SO_2 and NOx in reference to SO_2 and NOx emissions) within and outside the plant area (at least at four locations one within and three outside the plant area at an angle of 120° each), covering upwind and downwind directions.

iii. The project proponent shall monitor fugitive emissions in the plant premises at least once in every quarter through laboratories recognized under Environment (Protection) Act, 1986 or NABL accredited laboratories.

iv. Sampling facility at process stacks shall be provided as per CPCB guidelines for manual monitoring of emissions.
v. Appropriate Air Pollution Control (APC) system shall be provided for all the dust generating points including fugitive dust from all vulnerable sources, so as to comply prescribed stack emission and fugitive emission standards.
vi. The project proponent shall provide leakage detection and mechanized bag cleaning facilities for better maintenance of bags.
vii. Sufficient number of mobile or stationery vacuum cleaners shall be provided to clean plant roads, shop floors, roofs, regularly.
viii. Ensure covered transportation and conveying of raw material to prevent spillage and dust generation. The project proponent use leak proof trucks/dumpers carrying coal and other raw materials and cover them with tarpaulin.
ix. The project proponent shall provide primary and secondary fume extraction system at all heat treatment furnaces.
x. Wind shelter fence and chemical spraying shall be provided on the raw material stock piles.
xi. Design the ventilation system for adequate air changes as per prevailing norms for all tunnels, motor houses, Oil Cellars.
xii. Pollution control system in the plant shall be provided as per the CREP Guidelines of CPCB.
xiii. The project proponent shall adopt the Clean Air practices like mechanical collectors, wet scrubbers, fabric filters (bag houses), electrostatic precipitators, combustion systems (thermal oxidizers), condensers, absorbers, adsorbers, and biological degradation. Controlling emissions related to transportation shall include emission controls on vehicles as well as use of cleaner fuels. Sufficient numbers of additional truck mounted Fog/Mist water cannons shall be procured and operated regularly inside the project premises and also in the surrounding villages to arrest suspended dust in the atmosphere.
xiv. Bag filters shall be cleaned regularly and efficiency of bag filter system shall be monitored at regular intervals.
xv. Water Sprinklers/Water mist system shall be installed near raw material yards, operational units and other strategic locations to control fugitive emissions from the plant.
xvi. The particulate matter emissions from the process stacks shall be less than 30 mg/Nm^3 and measures shall be undertaken as per the submitted action plan. Efficient Air monitoring equipment shall be installed.
xvii. Following additional arrangements to control fugitive dust shall be provided:
    a. Fog / Mist Sprinklers at all on bulk raw material storage area (at the transfer points) like Iron Ore, Coal and for Fly Ash and similar solid waste storage areas.
    b. Proper covered vehicle shall be used while transport of materials.
    c. Wheel washing mechanism shall be provided in entry and exit gates with complete recirculation system.

III. Water quality monitoring and preservation

i. The project proponent shall install 24x7 continuous effluent monitoring system with respect to standards prescribed in Environment (Protection) Rules 1986 as amended from

time to time and connected to SPCB and CPCB online servers and calibrate these system from time to time according to equipment supplier specification through labs recognized under Environment (Protection) Act, 1986 or NABL accredited laboratories.

ii. The project proponent shall monitor regularly ground water quality at least twice a year (pre- and post-monsoon) at sufficient numbers of piezometers/sampling wells in the plant and adjacent areas through labs recognized under Environment (Protection) Act, 1986 and NABL accredited laboratories.

iii. Garland drains and collection pits shall be provided for each stock pile to arrest the run-off in the event of heavy rains and to check the water pollution due to surface run off.

iv. Water meters shall be provided at the inlet to all unit processes in the plants.

v. The project proponent shall make efforts to minimise water consumption in the plant complex by segregation of used water, practicing cascade use and by recycling treated water.

vi. The proposed project shall be designed as "Zero Liquid Discharge" Plant. ETP shall be installed and there shall be no discharge of effluent from the plant. Domestic effluent shall be treated in Sewage Treatment Plant. Suitable measures shall be adopted for sewage water handling to ensure no contamination of any kind of water body.

vii. All stockyards shall have impervious flooring and shall be equipped with water spray system for dust suppression. Stock yards shall also have garland drains and catch pits to trap the run off material and shall be implemented as per the action plan submitted in EIA/EMP report.

viii. Rain water harvesting shall be implemented to recharge/harvest water as per the action plan submitted in the EIA/EMP report.

IV. Noise monitoring and prevention

i. Noise pollution shall be monitored as per the prescribed Noise Pollution (Regulation and Control) Rules, 2000 and amendments thereof, and report in this regard shall be submitted to Regional Officer of the Ministry as a part of six-monthly compliance report.

ii. The ambient noise levels should conform to the standards prescribed under E(P)A Rules, 1986 viz. 75 dB(A) during day time and 70 dB(A) during night time.

V. Energy Conservation measures

i. Provide solar power generation on roof tops of buildings, for solar light system for all common areas, street lights, parking around project area and maintain the same regularly;

ii. Provide LED lights in their offices and residential areas.

VI. Waste management

i. Oil Collection pits shall be provided in oil cellars to collect and reuse/recycle spilled oil.

ii. Kitchen waste shall be composted or converted to biogas for further use.

iii. 100% utilization of fly ash shall be ensured. All the fly ash shall be provided to cement and brick manufacturers for further utilization and Memorandum of Understanding in this regard shall be submitted to the Ministry's Regional Office.

iv. The Plastic Waste Management Rules 2016, inter-alia, mandated banning of identified Single Use Plastic (SUP) items with effect from 01/07/2022. In this regard, CPCB has

issued a direction to all the State Pollution Control Boards (SPCBs)/Pollution Control Committees (PCCs) on 30/06/2022 to ensure the compliance of Notification published by Ministry on 12/08/2021. The technical guidelines issued by the CPCB in this regard is available at https://cpcb.nic.in/technical-guidelines-3/. All the project proponents are hereby requested to sensitize and create awareness among people working within the Project area as well as its surrounding area on the ban of SUP in order to ensure the compliance of Notification published by this Ministry on 12/08/2021. A report, along with photographs, on the measures taken shall also be included in the six monthly compliance report being submitted by the project proponents.

v. A proper action plan must be implemented to dispose of the electronic waste generated in the industry.

VII. Green Belt

i. The project proponent shall prepare GHG emissions inventory for the plant and shall submit the programme for reduction of the same including carbon sequestration by trees.

ii. Project proponent shall submit a study report on Decarbonisation program, which would essentially consist of company's carbon emissions, carbon budgeting/ balancing, carbon sequestration activities and carbon capture, use and storage and offsetting strategies. Further, the report shall also contain time bound action plan to reduce its carbon intensity of its operations and supply chains, energy transition pathway from fossil fuels to Renewable energy etc. All these activities/ assessments should be measurable and monitor able with defined time frames.

iii. The industry should draw up and implement and action plan for achieving carbon neutrality consistent with India's commitment to achieving carbon neutrality. The action plan should contain milestones with targets to be achieved in suitable periods.

iv. Greening and Paving shall be implemented in the plant area to arrest soil erosion and dust pollution from exposed soil surface.

VIII. Public hearing and Human health issues

i. Emergency preparedness plan based on the Hazard identification and Risk Assessment (HIRA) and Disaster Management Plan shall be implemented.

ii. The project proponent shall carry out heat stress analysis for the workmen who work in high temperature work zone and provide Personal Protection Equipment (PPE) as per the norms.

iii. Provision shall be made for the housing of construction labour within the site with all necessary infrastructure and facilities such as fuel for cooking, mobile toilets, mobile STP. Safe drinking water, medical health care, creche etc. The housing may be in the form of temporary structures to be removed after the completion of the project.

iv. Occupational health surveillance of the workers shall be done on a regular basis and records maintained.

IX. Environment Management

i. The project proponent shall comply with the provisions contained in this Ministry's OM vide F.No. 22-65/2017-IA.III dated 30/09/2020. As part of Corporate Environment

Responsibility (CER) activity, company shall adopt nearby villages based on the socio-economic survey and undertake community developmental activities in consultation with the village Panchayat and the District Administration as committed.

ii. The company shall have a well laid down environmental policy duly approve by the Board of Directors. The environmental policy should prescribe for standard operating procedures to have proper checks and balances and to bring into focus any infringements/deviation/violation of the environmental / forest / wildlife norms / conditions. The company shall have defined system of reporting infringements / deviation / violation of the environmental / forest / wildlife norms / conditions and / or shareholders / stake holders. The copy of the board resolution in this regard shall be submitted to the MoEF&CC as a part of six-monthly report.

iii. A separate Environmental Cell both at the project and company head quarter level, with qualified personnel shall be set up under the control of senior Executive, who will directly to the head of the organization.

iv. Performance test shall be conducted on all pollution control systems every year and report shall be submitted to Integrated Regional Office of the MoEF&CC.

X. Miscellaneous

i. The project proponent shall make public the environmental clearance granted for their project along with the environmental conditions and safeguards at their cost by prominently advertising it at least in two local newspapers of the District or State, of which one shall be in the vernacular language within seven days and in addition this shall also be displayed in the project proponent's website permanently.

ii. The copies of the environmental clearance shall be submitted by the project proponents to the Heads of local bodies, Panchayats and Municipal Bodies in addition to the relevant offices of the Government who in turn has to display the same for 30 days from the date of receipt.

iii. The project proponent shall upload the status of compliance of the stipulated environment clearance conditions, including results of monitored data on their website and update the same on half-yearly basis.

iv. The project proponent shall monitor the criteria pollutants level namely; PM10, SO2, NOx (ambient levels as well as stack emissions) or critical sectoral parameters, indicated for the projects and display the same at a convenient location for disclosure to the public and put on the website of the company.

v. Action plan for developing connecting and internal road in terms of MSA as per IRC guidelines shall be implemented

vi. The project proponent shall submit six-monthly reports on the status of the compliance of the stipulated environmental conditions on the website of the ministry of Environment, Forest and Climate Change at environment clearance portal.

vii. The project proponent shall submit the environmental statement for each financial year in Form-V to the concerned State Pollution Control Board as prescribed under the Environment (Protection) Rules, 1986, as amended subsequently and put on the website of the company.

viii. The project proponent shall inform the Regional Office as well as the Ministry, the date of financial closure and final approval of the project by the concerned authorities, commencing the land development work and start of production operation by the project.

ix. The project proponent shall abide by all the commitments and recommendations made in the EIA/EMP report, commitment made during Public Hearing and also that during their presentation to the Expert Appraisal Committee.

x. The recommendations of the approved Site-Specific Wildlife Management Plan (in case of involvement of Schedule-I species) shall be implemented in consultation with the State Forest Department. The implementation report shall be furnished along with the six-monthly compliance report to the concerned Regional Office of the MoEF&CC.

xi. The PP shall put all the environment related expenditure, expenditure related to Action Plan on the PH issues, and other commitments made in the EIA/EMP Report etc. in the company web site for the information to public/public domain. The PP shall also put the information on the left over funds allocated to EMP and PH as committed in the earlier ECs and shall be carried out and spent in next three years, in the company web site for the information to public/public domain.

xii. No further expansion or modifications in the plant shall be carried out without prior approval of the Ministry of Environment, Forests and Climate Change (MoEF&CC).

xiii. Concealing factual data or submission of false/fabricated data may result in revocation of this environmental clearance and attract action under the provisions of Environment (Protection) Act, 1986.

xiv. The Ministry may revoke or suspend the clearance, if implementation of any of the above conditions is not satisfactory.

xv. The Ministry reserves the right to stipulate additional conditions if found necessary. The Company in a time bound manner shall implement these conditions.

xvi. The Regional Office of this Ministry shall monitor compliance of the stipulated conditions. The project authorities should extend full cooperation to the officer (s) of the Regional Office by furnishing the requisite data / information/monitoring reports.

xvii. Any appeal against this EC shall lie with the National Green Tribunal, if preferred, within a period of 30 days as prescribed under Section 16 of the National Green Tribunal Act, 2010.

***

Agenda No. 42.10

43.10 Proposed Change in Configuration of Ferro Alloys Production Unit by M/s Hira Electro Smelters Limited, located at Plot No. 364-367, APIIC Growth Centre, Bobbili, District-Viziangaram, Andhra Pradesh- Consideration of Environmental Clearance under Para 7(ii) of the EIA Notification 2006 & OM dated 11.04.2022. Regarding

[Proposal No.: IA/AP/IND1/432164/2023; File No.: IA-J-11011/1039/2007-IA-II-(IND-I)]
[Consultant: Shree Green Consultants; Valid upto 12.02.2025]

43.10.1 M/s Hira Electro Smelters Limited has made an online application vide proposal no IA/AP/IND1/432164/2023 dated 15.08.2023 along with copy of the EIA/EMP report, in prescribed format (CAF, Form – I Part A, B &C) and certified compliance report seeking Environment Clearance (EC) under the provisions of para 7(ii) of the EIA Notification, 2006 for the project mentioned above. The proposed project activity is listed at S. No. 3(a) Metallurgical industries (ferrous & non-ferrous) under Category "A" of the schedule of the EIA Notification, 2006 and appraised at Central Level.

43.10.2 Name of the EIA consultant: M/s. Shree Green Consultants [List of ACOs with their Certificate / Extension Letter no. NABET/EIA/2124/IA 0072; Valid up to 24.02.2024, as on September 6, 2023].

Details submitted by Project proponent

43.10.3 The project of M/s Hira Electro Smelters Ltd. located in Mettavalasa, Panukuvalasa Village, Bobbili Tehsil, Viziangaram District, Andhra Pradesh is for Change in Configuration of Ferro Alloys Production and Furnace capacity from 100877 TPA to 83682 TPA and 57 MVA to 30 MVA, respectively under the provisions of para 7(ii) of the EIA Notification, 2006.

43.10.4 Environmental site settings:

<table>
<tr><th>S. No.</th><th>Particulars</th><th>Details</th><th>Remarks</th></tr>
<tr><td>1</td><td>Total Land</td><td>23.72 Acres</td><td>Land Use: Industrial</td></tr>
<tr><td>2</td><td>Land acquisition details as per MoEF&CC O.M. dated 7/10/2014</td><td>Land already acquired
The proposed project is planned within the existing unit which is spread over an area of 23.72 acres. The land has been allotted by Andhra Pradesh Industrial Infrastructure Corporation Limited vide allotment Letter no. 2137/RVR/GC/bbl/06 dated 11.07.2007 for establishment of industry.</td><td></td></tr>
<tr><td>3</td><td>Existence of habitation & involvement of R&R, if any.</td><td><u>Project Site:</u> Nil
<u>Study Area:</u>
<table><tr><th>Habitation</th><th>Distance</th><th>Direction</th></tr></table></td><td></td></tr>
</table>

<table>
<tr><th>S. No.</th><th>Particulars</th><th>Details</th><th>Remarks</th></tr>
<tr><td></td><td></td><td>
<table>
<tr><td>Gorla Seetharampuram</td><td>0.5 Km</td><td>W</td></tr>
<tr><td>Pankuvalasa</td><td>0.75 Km</td><td>SE</td></tr>
<tr><td>Bobbili</td><td>4.5 Km</td><td>NE</td></tr>
</table>
</td><td></td></tr>
<tr><td>4</td><td>Latitude and Longitude of all four corners of the project site</td><td>
<table>
<tr><th>Point</th><th>Latitude</th><th>Longitude</th></tr>
<tr><td>A</td><td>18°32'28.18"N</td><td>83°20'31.66"E</td></tr>
<tr><td>B</td><td>18°32'21.41"N</td><td>83°20'31.25"E</td></tr>
<tr><td>C</td><td>18°32'22.31"N</td><td>83°20'14.75"E</td></tr>
<tr><td>D</td><td>18°32'29.05"N</td><td>83°20'15.19"E</td></tr>
</table>
</td><td></td></tr>
<tr><td>5</td><td>Elevation of the project site</td><td>135 m above mean sea level</td><td></td></tr>
<tr><td>6</td><td>Involvement of Forest land if any.</td><td>Not Applicable</td><td></td></tr>
<tr><td>7</td><td>Water body (Rivers, Lakes, Pond, Nala, Natural Drainage, Canal etc.) exists within the project</td><td><u>Project Site:</u> None

<u>Study Area:</u>
<table>
<tr><th>Water Body</th><th>Distance (Km)</th><th>Direction</th></tr>
<tr><td>Season Pond</td><td>0.3</td><td>SE</td></tr>
<tr><td>Pond</td><td>0.65</td><td>NE</td></tr>
<tr><td>Pond</td><td>1.30</td><td>NW</td></tr>
<tr><td>Canal</td><td>1.35</td><td>SE</td></tr>
<tr><td>Vegavati River</td><td>1.60</td><td>S</td></tr>
<tr><td>Pond</td><td>2.60</td><td>NE</td></tr>
<tr><td>Pond</td><td>4.05</td><td>NE</td></tr>
<tr><td>Appalanaidu Cheruvu</td><td>4.60</td><td>SE</td></tr>
<tr><td>Tallendra Cheruvu</td><td>4.60</td><td>SE</td></tr>
<tr><td>Chuttu Cheruvu</td><td>5.55</td><td>NE</td></tr>
</table>
</td><td></td></tr>
<tr><td>8</td><td>Existence of ESZ/ESA/national Park/Wildlife Sanctuary /biosphere reserve/ tiger reserve/ elephant reserve etc. if any within the study area</td><td>None</td><td></td></tr>
<tr><td>9</td><td>Forest</td><td><u>Study Area:</u>
<table>
<tr><th>Forest</th><th>Distance (Km)</th><th>Direction</th></tr>
<tr><td>Bobbili P.F</td><td>3.85</td><td>NW</td></tr>
<tr><td>Vemrudum R.F</td><td>9.98</td><td>N</td></tr>
</table>
</td><td></td></tr>
</table>

43.10.5 Details of Permissions obtained:

<table>
<tr><th>S. No.</th><th>File Details</th><th>Dated</th><th>Production Details</th><th>Remarks/ Attachments</th></tr>
<tr><td>1.</td><td>J-11011/1039/2007-IA(II)- EC</td><td>28th February 2008</td><td>Submerged Arc Furnace (1 x6 MVA) , (2 x 9 MVA) and (2 x 16.5 MVA)
<table><tr><th>Product Mix</th><th>After Phase – I</th><th>After Phase-II</th><th>After Phase-III</th></tr><tr><td>Fe-Mn</td><td>4547</td><td>18188</td><td>18188</td></tr><tr><td>SiMn</td><td>6461</td><td>25844</td><td>25844</td></tr><tr><td>FeCr</td><td></td><td></td><td>56845</td></tr><tr><td>Total</td><td>11008</td><td>44032</td><td>100877</td></tr></table></td><td>EC was granted to M/s RVR Smelters Pvt Ltd for setting up new plant.</td></tr>
<tr><td>2.</td><td>J-11011/1039/2007-IA(II)- Amendment in EC</td><td>22nd March 2012</td><td>Submerged Arc Furnace (1 x6 MVA) , (2 x 9 MVA) and (2 x 6 MVA & 1 x 21 MVA)
<table><tr><th>Product Mix</th><th>After Phase – I</th><th>After Phase-II</th><th>After Phase-III</th></tr><tr><td>Fe-Mn</td><td>4547</td><td>18188</td><td>18188</td></tr><tr><td>SiMn</td><td>6461</td><td>25844</td><td>25844</td></tr><tr><td>FeCr</td><td></td><td></td><td>56845</td></tr><tr><td></td><td></td><td></td><td></td></tr><tr><td>Total</td><td>11008</td><td>44032</td><td>100877</td></tr></table></td><td>M/s RVR was taken amendment in EC for substitution of (2 x 16.5 MVA) furnace with (2 x 6 MVA) and (1 x21 MVA) furnace.</td></tr>
<tr><td>3.</td><td>J-11011/1039/2007-IA(II)- Change of Company Name</td><td>04th February, 2015</td><td>Same as above configuration</td><td>The company name changes from M/s RVR Smelters Pvt Ltd to M/s Hira Electro Smelters Pvt Ltd.</td></tr>
<tr><td>4.</td><td>J-11011/1039/2007-IA(II)- Amendment in EC</td><td>30th September 2015</td><td>Submerged Arc Furnace (3 x6 MVA) , (2 x 9 MVA) and (1 x 21 MVA)
<table><tr><th>S. No</th><th>Fe-Mn</th><th>Si-Mn</th><th>Fe-Cr</th><th>Total Quantity (TPA)</th></tr><tr><td>1</td><td>100877</td><td>Nil</td><td>Nil</td><td>100877</td></tr><tr><td>2</td><td>Nil</td><td>100877</td><td>Nil</td><td>100877</td></tr><tr><td>3</td><td>44032</td><td>Nil</td><td>56845</td><td>100877</td></tr><tr><td>4</td><td>Nil</td><td>44032</td><td>56845</td><td>100877</td></tr><tr><td></td><td>44032</td><td></td><td>56845</td><td>100877</td></tr></table></td><td>Amendment in environment clearance was done for the change of product configuration.</td></tr>
<tr><td>5.</td><td>J-11011/1039/2007-IA II (I) Transfer of EC</td><td>18th July 2023</td><td>Same as above configuration</td><td>Transfer of Environment clearance from M/s Hira Electro Smelters Private Limited to M/s Hira Electro Smelters Limited</td></tr>
</table>

S. No.	File Details	Dated	Production Details	Remarks/ Attachments
Plant has valid Consent to Operate for the existing unit issued by APPCB vide order no. APPCB/VSP/VZN/ 156/HO/CFO/2021 dated 16.09.2021 valid till 31.12.2025.				

43.10.6 Implementation status of the existing EC:

Particular		As per EC dated 28.02.2008					As per Latest CFO					Existing
Production	Fe-Mn	100877	Nil	44032	Nil	44032	100877	Nil	44032	Nil	44032	33472.8
	Si-Mn	Nil	100877	Nil	44032		Nil	100877	Nil	44032		
	Fe-Cr	Nil	Nil	56845	56845	56845	Nil	Nil	56845	56845	56845	
	Total Quantity	100877	100877	100877	100877	100877	100877	100877	100877	100877	100877	33472.8
Furnace (MVA)	Individual Capacity	1x6 MVA, 2x9 MVA & 2x16.5 MVA					2 x 6 MVA					2 x 6 MVA
	Total Capacity	57 MVA					12 MVA					12 MVA

43.10.7 The unit configuration and capacity of proposed project is given as below:

Particular	Production				CLU (TPA) Including 83682 (TPA)	Thermit (TPA)	Boiler (TPH)	Furnace (MVA)	
	Fe-Mn	Si-Mn	Fe-Cr	Total Quantity In TPA	Total Capacity	Total Capacity	Total Capacity	Individual Capacity	Total Capacity
As per EC dated 28.02.2008	100877	Nil	Nil	100877	NIL	NIL	NIL	1x6 MVA, 2x9 MVA & 2x16.5 MVA	57 MVA
	Nil	100877	Nil	100877					
	44032	Nil	56845	100877					
	Nil	44032	56845	100877					
	44032		56845	100877					
As per Latest CFO	100877	Nil	Nil	100877	NIL	NIL	NIL	2 x 6 MVA	12 MVA
	Nil	100877	Nil	100877					
	44032	Nil	56845	100877					
	Nil	44032	56845	100877					
	44032		56845	100877					
Existing As per current manufacturing	33472.8	Nil	Nil	33472.8	NIL	NIL	NIL	2 x 6 MVA	12 MVA
	83682	Nil	Nil	83682	60000	1800	2.5	5 x 6 MVA	30 MVA

Particular	Production				CLU (TPA) Including 83682 (TPA)	Thermit (TPA)	Boiler (TPH)	Furnace (MVA)	
	Fe-Mn	Si-Mn	Fe-Cr	Total Quantity In TPA	Total Capacity	Total Capacity	Total Capacity	Individual Capacity	Total Capacity
After Proposed Change in Configuration	Nil	83682	Nil	83682					
	83682		Nil	83682					

43.10.8 The details of the raw material requirement for the proposed project along with its source and mode of transportation is given as below:

Sr. No	Product	As per EC (MTPA)	After Proposed Change in Configuration (TPA)	Source	Max. travelled Distance (Km)	Mode of Transportation
Ferro Manganese or Silico Manganese or Ferro Chrome						
1	Manganese Ore	2,72,368	2,25,941	Vishakhapatnam	130	Road
2	Coal and coke	80,702	66,946	Indigenous	900	Road
3	Dolomite	25219.25	20920.5	Indigenous	500	Road
4	Carbon/Electrode Paste	3026.31	2510.46	Indigenous	700	Road
5	Ferro Slag	60526.2	50209.2	Own/Indigenous	25	Road
6	Quartz	30263.1	25104.6	Indigenous	450	Road
7	Chrome Ore	136428	0	Indigenous	-	-
8	Magnesite	25580.25	0	Indigenous	-	-
CLU Convertor						
9	High Carbon Ferro Alloy	0	59580	In-house	0	-
10	Calcined Lime	0	3840	Indigenous	1800	Road
11	Calcined Dolomite	0	2160	Indigenous	700	Road
12	Si Mn Fines	0	9000	Indigenous	700	Road
13	Fe Si Fines	0	3000	Indigenous	510	Road

43.10.9 As per the existing EC granted for the project, the water requirement is 80 KLD which is much less than the actual requirement of water for the plant configuration. However, plant production is limited to 80 KLD water requirement. Now, with the new configuration, the water requirement will be 300 KLD which will be sourced from APIIC supply and ground water. Permission for withdrawal of 350 KLD water from ground has already been obtained from CGWA vide NOC. No. AP03002012022-23 dated 31.05.2022 and also have an agreement with APIIC for withdrawal of 50 KLD water.

43.10.10 The power requirement for existing facilities including 57 MVA Furnace is 40,000 KVA. However, the power requirement for existing facilities is only 11,400 KVA due to lower operation levels, which is being drawn from APEPDCL (Andhra Pradesh Eastern Power Distribution Company Limited). Total power requirement after the proposed change in configuration will be 27,000 KVA. Same shall be sourced through existing power supplier (APEPDCL). One additional DG set of 500 KVA will be installed in the plant along with the existing DG set of 125 KVA to meet the emergency power requirements.

43.10.11 Baseline Environmental Studies

Period	December 2022 to February 2023
AAQ parameters at	• PM2.5 = 17 µg/m^3 to 52 µg/m^3 • PM10 = 46 µg/m^3 to 90 µg/m^3 • SO2 = 6.1 µg/m^3 to 10.7 µg/m^3

<table>
<tr><td>8 Locations (min and max)</td><td>• Nox = 7.1 µg/m^3 to 17.4 µg/m^3
• CO = 0.10 mg/m^3 to 0.2 mg/m^3</td></tr>
<tr><td>Incremental GLC level</td><td>• PM10 = 3.08 µg/m^3 (Max GLC falling within site)
• SO2 = 11.2 µg/m^3 (Max GLC falling within site)
• Nox = 4.22 µg/m^3 (Max GLC falling within site)</td></tr>
<tr><td>Ground water quality at 8 locations</td><td>• pH: 6.65 to 7.51,
• Total Hardness: 271 to 760 mg/l,
• Chlorides: 101 to 502 mg/l,
• Fluoride: 0.3 to 0.7 mg/l</td></tr>
<tr><td>Surface water quality at 4 locations</td><td>• pH: 7.14 to 7.36
• DO: 5.4 mg/l to 7.2 mg/l
• BOD: 2.2 mg/l to 7.0 mg/l
• COD: 8 mg/l to 36 mg/l</td></tr>
<tr><td>Noise levels Leq (Day and Night) at 8 Locations</td><td>49.8 to 63.4 dB(A) for the day time and 38.7 to 52.7 dB(A) for the Night time.</td></tr>
<tr><td>Traffic assessment study findings</td><td>• Traffic study has been conducted at MDR which is connected to plant site.
• Transportation of raw material, fuel & finished product will be done 100% by road.
• Existing PCU is 286 PCU/hr on MDR and the existing level of service (LOS) is B.
<table>
<tr><th>Road</th><th>V (Volume in PCU/hr.)</th><th>C (Capacity in PCU/hr.)</th><th>Existing V/C Ratio</th><th>LOS</th></tr>
<tr><td>Connecting Road</td><td>286</td><td>1050</td><td>0.27</td><td>B</td></tr>
</table>
• PCU load after proposed project will be 286 PCU/hr + 35 (Additional) PCU/hr and level of service (LOS) will be B.
<table>
<tr><th>Road</th><th>V (Volume in PCU/hr.)</th><th>C (Capacity in PCU/hr.)</th><th>Proposed V/C Ratio</th><th>LOS</th></tr>
<tr><td>Connecting Road</td><td>321</td><td>1050</td><td>0.30</td><td>B</td></tr>
</table>
Note: Capacity as per IRC 106-1990 guideline for capacity of Roads.</td></tr>
<tr><td>Flora and Fauna</td><td>Schedule-I Species such as Indian Fox (Vulpes bengalensis), Indian Crested Porcupine (Hystrix indica), Rat Snake (Ptyas muscous), Russel Viper (Vipers russelii) are found within the study area. PP has prepared and submitted Wildlife Conservation Plan vide letter dated 02.05.2023 to The Chief Wildlife Warden, Andhra Pradesh for approval.</td></tr>
</table>

43.10.12 The details of solid and hazardous waste generation along with its mode of treatment/disposal is furnished as below:

Sr. No	Type of waste	Cat.	Quantity (MTPA)		Disposal Method
			As per EC	After Change in Configuration	
1	Si-Mn Slag	-	100877	83682	Used for filling of low lying area/land filling/construction purpose/ sell to Cement plant.

Sr. No	Type of waste	Cat.	Quantity (MTPA)		Disposal Method
			As per EC	After Change in Configuration	
2	Fe-Mn Slag	-	90790	75314	Reused as raw material in manufacturing of Silico Manganese.
3	Fe-Cr Slag	-	51160.5	0	Discontinued
4	Bag Filter dust	-	3263	2707	Sent to Cement plants
5	Used/spent oil	5.1	500 litre/A	850 litre/A	To authorized recycler.
6	Ash from coal Based boiler	-	-	2000	To brick/cement manufacturer

43.10.13 **Public Consultation:**

Public hearing has been exempted from this project in pursuance to the Ministry's O.M. dated 11.04.2022 for appraisal of instant proposal under para 7(ii) of EIA Notification, 2006.

43.10.14 The existing capital cost of project was Rs 17.26 crores The capital cost of the proposed project is Rs 158.48 Crores and the capital cost for environmental protection measures is proposed as Rs 5.915 Crores. The annual recurring cost towards the environmental protection measures is proposed as Rs 0.36 Crores. The employment generation from the proposed project is 150. The details of cost for environmental protection measures is as follows:

ENVIRONMENT MANAGEMENT COST							
S. No.	Particular	Existing		Additional		After Change in Configuration	
		Capital Cost (Rs.)	Recurring Cost (Rs.)	Capital Cost (Rs.)	Recurring Cost (Rs.)	Capital Cost (Rs.)	Recurring Cost (Rs.)
1	**Emission Management**						
	Fume Extraction System with Bag filters and Chimney	2,23,83,880	15,00,000	5,15,00,000	25,00,000	7,38,83,880	40,00,000
	Water sprinklers	5,00,000	50,000	10,00,000	1,00,000	15,00,000	1,50,000
2	Greenbelt, Noise Management & RWH etc.	10,00,000	1,00,000	20,00,000	2,00,000	30,00,000	3,00,000
3	**Environment Monitoring**						
	CEMS	8,00,000	1,00,000	18,85,735.00	2,00,000	26,85,735	3,00,000
	CAAQMS	-		11,14,265.00		11,14,265	
4	Occupational Health & Safety	15,00,000	5,00,000	16,50,000.00	6,00,000	31,50,000	11,00,000
	TOTAL	**2,61,83,880**	**22,50,000**	**5,91,50,000**	**36,00,000**	**8,53,33,880**	**58,50,000**

43.10.15 Existing green belt has been developed in 3.1953 ha area which is about 33% of the total project area of 9.59 ha. Total 7990 nos. of trees and shrubs has been planted under the existing greenbelt. The density of plantation is more than 2200 trees per Ha. The common

tree species planted under existing greenbelt are Arjun, Gulmohar, Badam, Karanj, Alstonia, Ashok, Jamun, Neem, kaner, etc. the shrubs like Bougainvillea, kaner, Areca Palm, etc.

43.10.16 It has been reported that following will be resource consumption after the proposed change:

Particulars	**As per EC dated 28.02.2008**	**After Proposed Change under Para 7(ii)**	**% Increase**
Land	23.72 acres	23.72 acres	0
Greenbelt	7.82 acres	7.82 acres	0%
Water	80	300	275%
Power	40,000 KVA	27000 KVA	(-) 32.5% reduction
Raw Materials	6,34,113 MTPA	4,69,212 MTPA	(-) 26 % reduction
Products	100877 MTPA	83682 MTPA	(-) 17.04 % reduction

43.10.17 Pollution Load Assessment

Particulars	**As per EC dated 28.02.2008**	**After Proposed Change under Para 7(ii)**	**% Increase**
Industrial Wastewater generation	18 KLD	43 KLD	138%
Domestic wastewater generation	16 KLD	16 KLD	0
Emission Load (PM)	235.09 Tons/yr	173.53 Tons/yr	(-) 26.1% Reduction
Traffic Load	802 PCU/day	603 PCU/day	(-) 24.8% Reduction

43.10.18 It is reported that there is no violation under EIA, 2006/court case/show cause/direction if any, related to the project under consideration.

Certified compliance report from IRO, MoEFCC

43.10.19 The Status of compliance of earlier EC was obtained from Regional Office, Vijayawada vide letter no. IRO/VIJ/EPA/EC-A/101/11-13/2022, dated 07.08.2023 in the name of M/s. Hira Electro Smelters Limited. IRO has reported that the PP have complied or are in process of complying the conditions stipulated by the Ministry.

Written submission by the PP:

43.10.20 During the meeting, based on the deliberations made by the EAC, the project proponent vide letter dated 05.09.2023 through email dated 05.09.2023 submitted the following information:

S. No.	**Observation of EAC**	**Reply of PP**
1.	Undertaking for increasing green belt and maintaining good housekeeping.	PP has submitted an undertaking dated 05.09.2023 stating that: • The industry shall improvise the housekeeping practices

<table>
<tr><th>S. No.</th><th>Observation of EAC</th><th>Reply of PP</th></tr>
<tr><td></td><td></td><td>• The industry shall enhance tree plantation to increase the density of trees within the plant area upto October, 2023.</td></tr>
<tr><td>2.</td><td>Details of earlier CER spent by the PP</td><td>PP has submitted the amount spent towards Corporate Environment Responsibility in the last 08 years.
<table>
<tr><th>Sl. No.</th><th>Year</th><th>Activities</th><th>Expenditure</th></tr>
<tr><td>1.</td><td>2015-16</td><td>Installation of RO Water Purifier system at Mettavalasa Village</td><td>19640</td></tr>
<tr><td>2.</td><td>2016-17</td><td>Plantation at Mettavalasa Village school</td><td>60000</td></tr>
<tr><td>3.</td><td>2017-18</td><td>Cremation ground boundary wall work</td><td>543837</td></tr>
<tr><td>4.</td><td>2018-19</td><td>Painting of government schools blocks at Mettavalasa Village school</td><td>1130680</td></tr>
<tr><td>5.</td><td>2019-20</td><td>Lunch room construction work in Mettavalasa Village school</td><td>64653</td></tr>
<tr><td>6.</td><td>2020-21</td><td>Covid-19 Relief activities</td><td>411142</td></tr>
<tr><td>7.</td><td>2021-22</td><td>Construction of Community hall at ITI Colony Bobilli</td><td>1658079</td></tr>
<tr><td>8.</td><td>2022-23</td><td>Central Chinmay Mission</td><td>6182627</td></tr>
<tr><td colspan="3">Total Expenditure in Rs.</td><td>1,00,70,650</td></tr>
</table></td></tr>
<tr><td>3.</td><td>Reason for increase in water requirement</td><td>The PP has submitted the following:

• Substantially water will be used for furnace body cooling.
• Due to poor water quality more raw water will be used to generate usable water for process.
• It is proposed to enhance substantially number of sprinklers and also adding fogging system for suppression of fugitive emissions completely in conveying system, raw material yards, in raw materials bins, transfer houses, internal roads etc.
• Due to high temperature of the area during summer season, make-up water consumption will increase substantially.
• Water consumption is also enhanced for cooling down of metal and slag cakes which is instantly used for delivered to different vendors.
• To recover manganese from the mix slag dust, wet jigging method is used where raw waters is being used in the process. Jigging process also requires make up, water to make up the process water losses</td></tr>
</table>

Deliberations by the Committee

43.10.21 The Committee noted the following:

1. The instant proposal is Change in Configuration of Ferro Alloys Production and Furnace capacity from 100877 TPA to 83682 TPA and 57 MVA to 30 MVA, respectively under the provisions of para 7(ii) of the EIA Notification, 2006.

2. The EAC, constituted under the provision of the EIA Notification, 2006 comprising Expert Members/domain experts in various fields, examined the proposal submitted by the Project Proponent in desired format along with addendum to the EIA/EMP reports prepared and submitted by the Consultant accredited by the QCI/ NABET on behalf of the Project Proponent.

3. The EAC noted that the Project Proponent has given an undertaking that the data and information given in the application and enclosures are true to the best of his knowledge and belief and no information has been suppressed in the reports. If any part of data/information submitted is found to be false/ misleading at any stage, the project will be rejected and Environmental Clearance given, if any, will be revoked at the risk and cost of the project proponent.

4. The EAC deliberated on the justification provided by the Project Proponent for appraisal of instant proposal under para 7(ii) of EIA Notification, 2006 in pursuance to the Ministry's O.M. dated 11.04.2022 and found it satisfactory. EAC is of the view that the instant project is qualifying the criteria mentioned in the Ministry's OM dated 11.04.2022 and accordingly appraise the project under modernisation category.

5. The existing project was initially accorded environmental clearance vide No. J-11011/1039/2007-IA II (I) dated 28.02.2008 with amendments dated 22.03.2012 and 30.09.2015. Thereafter, Transfer of Environmental clearance from M/s Hira Electro Smelters Pvt. Ltd. to M/s Hira Electro Smelters Ltd. dated 18.07.2023. Plant has valid Consent to Operate for the existing unit issued by APPCB vide order no. APPCB/VSP/VZN/ 156/HO/CFO/2021 dated 16.09.2021 valid till 31.12.2025. The details of the permissions are provided in para 43.10.5 above.

6. The proposed project is planned within the existing unit which is spread over an area of 23.72 acres. The land has been allotted by Andhra Pradesh Industrial Infrastructure Corporation Limited vide allotment Letter no. 2137/RVR/GC/bbl/06 dated 11.07.2007 for establishment of industry.

7. The nearest habitation to plant is Gorla Seetharampuram Village (0.5 km, W) and Pankuvalasa Village (0.75 km, SE) within the study area of the project site. The EAC is of the opinion that PP shall strictly implement the environmental safeguard measures proposed to minimise the impact on the habitation of the locals.

8. There are number of water bodies including ponds, canal and Vegavati river within study area of the project site. The EAC is of the opinion that water bodies shall not be disturbed. Mitigation measures w.r.t. safeguarding the water bodies shall be implemented.

9. The total water requirement of the project is estimated to increase to 300 KLD which is proposed to be sourced from APIIC supply and ground water. The EAC deliberated on the water requirement and the reasons submitted by the project proponent through written submission and found it satisfactory.

10. The Committee has deliberated on the baseline data and incremental GLC due to the proposed project and is of the opinion that PP shall strictly implement the mitigation measures as per the submitted action plans to minimise the pollution.

11. The Committee deliberated on the baseline data along with pollution load assessment reported and observed that emission load is decreasing after the proposed modification. However, the waste water generation will increase and Accordingly, the EAC found it satisfactory to appraise the instant proposal under para 7(ii) of EIA Notification, 2023.

12. The EAC noted that the existing green belt has been developed in 3.1953 ha area which is about 33% of the total project area of 9.59 ha. Total 7990 nos. of trees and shrubs has been planted under the existing greenbelt. Further PP has submitted an undertaking that the industry will enhance tree plantation to increase the density of trees within the plant area upto October, 2023. The EAC deliberated on the greenbelt development plan and found it satisfactory.

13. The committee deliberated details of carbon foot prints and carbon sequestration study w.r.t. proposed project and found them to be satisfactory.

14. Schedule-I Species such as Indian Fox (Vulpes bengalensis), Indian Crested Porcupine (Hystrix indica), Rat Snake (Ptyas muscous), Russel Viper (Vipers russelii) are found in the study area. PP has prepared and submitted Wildlife Conservation Plan vide letter dated 02.05.2023 to The Chief Wildlife Warden, Andhra Pradesh for approval.

15. The Committee deliberated upon the certified compliance report of IRO, MoEF&CC and found it satisfactory.

16. The Committee also deliberated on the earlier public hearing issues along with status of compliance of action plan submitted by the proponent to address the issues raised during the public hearing and found it satisfactory.

17. The EAC deliberated on the proposal with due diligence in the process as notified under the provisions of the EIA Notification, 2006, as amended from time to time and accordingly made the recommendations to the proposal. The Experts Members of the EAC found the proposal in order and recommended for grant of environmental clearance.

18. The environmental clearance recommended to the project/activity is strictly under the provisions of the EIA Notification 2006 and its subsequent amendments. It does not tantamount/construe to approvals/consent/permissions etc. required to be obtained or standards/conditions to be followed under any other Acts/ Rules/ Subordinate legislations, etc., as may be applicable to the project. The project proponent shall obtain necessary permission as mandated under the Water (Prevention and Control of Pollution) Act, 1974 and the Air (Prevention and Control of Pollution) Act, 1981, as applicable from time to time, from the State Pollution Control Board, prior to construction & operation of the project.

19. The EAC also reviewed the EC conditions (specific and general) pertaining to Industry-I projects and observed that some of the specific conditions stipulated so far in the previously recommended EC projects are common and applicable to most of the projects in general. In view of the same, the General Conditions (in case of EC projects) have been

revised through reallocation of these common conditions from specific to General Conditions (in case of EC projects). Accordingly, the instant project is also being stipulated with the modified General conditions.

Recommendations of the Committee:

43.10.22 In view of the foregoing and after detailed deliberations, the committee **recommended** the instant proposal for grant of Environment Clearance **subject to uploading the written submission on portal** under the para 7(ii) of EIA Notification, 2006 and subject to the stipulation of following specific conditions and general conditions:

A. Specific Condition:

i. The project proponent shall comply with all the environmental protection measures and safeguards proposed in the documents submitted to the Ministry. All the recommendations made in the EIA/EMP in respect of environmental management, and risk mitigation measures relating to the project shall be implemented.
ii. The project proponent shall utilize modern technologies for capturing of carbon emitted and shall also develop carbon sink/carbon sequestration resources capable of capturing more than emitted. The implementation report shall be submitted to the IRO, MoEF&CC in this regard.
iii. The nearest habitation to plant is Gorla Seetharampuram Village (0.5 km, W) and Pankuvalasa Village (0.75 km, SE) within the study area of the project site. Project Proponent shall take appropriate environmental safeguard measures to minimise the impact on the habitation of the locals. PP needs to strengthen green belt all around the plant area to reduce the dust pollution. The PP shall also include these locations in its environmental monitoring programme.
iv. There are number of water bodies including ponds, canal and Vegavati river within study area of the project site. A robust and full proof Drainage Conservation scheme to protect the natural drainage and its flow parameters; along with Soil conservation scheme and multiple Erosion control measures shall be implemented.
v. The water requirement of 96 m^3/day shall be sourced from 300 KLD shall be sourced from APIIC supply and ground water after obtaining necessary permission from the Competent Authority. PP shall explore the possibility to shift to alternate source of water to reduce its dependency on ground water.
vi. Three tier Green Belt shall be developed and maintained in at least 33% of the project area with native species all along the periphery of the project site of adequate width and tree density shall not be less than 2500 per ha. As committed, industry will enhance tree plantation to increase the density of trees within the plant area upto October, 2023. Survival rate of green belt developed shall be monitored on periodic basis to ensure that damaged plants are replaced with new plants in the subsequent years. PP shall also develop greenbelt in the form of shelter belt comprising of total of 6 rows of 2x2 m plantation with tall trees & broad leaves with thick canopy along with windshield inside the plant premises to act as green barrier for air pollution & noise levels towards Gorla

Seetharampuram and Pankuvalasa Village. Compliance status in this regard, shall be submitted to concerned Regional Office of the MoEF&CC.

vii. All the commitments made towards socio-economic development of the nearby villages shall be satisfactorily implemented. The action plan based on the social impact assessment study of the project as per the EMP in accordance to the Ministry's OM dated 30.09.2020 shall be strictly implemented and progress shall be submitted to the Regional Office of MoEF&CC.

viii. PP shall adopt undertake village adoption programme, prepare and implement the action plan to develop them into model villages.

ix. PP shall improvise the housekeeping and adopt best practices.

x. The recommendations of the approved Site-Specific Wildlife Management Plan shall be implemented in consultation with the State Forest Department. The implementation report shall be furnished along with the six-monthly compliance report to the concerned Regional Office of the MoEF&CC.

B. General conditions:

I. Statutory compliance:

i. The Environment Clearance (EC) granted to the project/ activity is strictly under the provisions of the EIA Notification, 2006 and its amendments issued from time to time. It does not tantamount/ construe to approvals/ consent/ permissions etc., required to be obtained or standards/conditions to be followed under any other Acts/Rules/Subordinate legislations, etc., as may be applicable to the project.

ii. This Environmental clearance is granted subject to final outcome of Hon'ble Supreme Court of India, Hon'ble High Court, Hon'ble NGT and any other Court of Law, if any, as may be applicable to this project.

II. Air quality monitoring and preservation

i. The project proponent shall install 24x7 continuous emission monitoring system at process stacks to monitor stack emission as well as 04 Nos. Continuous Ambient Air Quality Station (CAAQMS) for monitoring AAQ parameters with respect to standards prescribed in Environment (Protection) Rules 1986 as amended from time to time. The CEMS and CAAQMS shall be connected to SPCB and CPCB online servers and calibrate these systems from time to time according to equipment supplier specification through labs recognized under Environment (Protection) Act, 1986 or NABL accredited laboratories.

ii. The project proponent shall carryout Continuous Ambient Air Quality monitoring for common/criterion parameters relevant to the main pollutants released (e.g. PM_{10} and $PM_{2.5}$ in reference to PM emission, and SO_2 and NOx in reference to SO_2 and NOx emissions) within and outside the plant area covering upwind and downwind directions.

iii. The project proponent shall monitor fugitive emissions in the plant premises at least once in every quarter through laboratories recognized under Environment (Protection) Act, 1986 or NABL accredited laboratories.

iv. Sampling facility at process stacks shall be provided as per CPCB guidelines for manual monitoring of emissions.

v. Appropriate Air Pollution Control (APC) system shall be provided for all the dust generating points including fugitive dust from all vulnerable sources, so as to comply prescribed stack emission and fugitive emission standards.

vi. The project proponent shall provide leakage detection and mechanized bag cleaning facilities for better maintenance of bags.

vii. Sufficient number of mobile or stationery vacuum cleaners shall be provided to clean plant roads, shop floors, roofs, regularly.

viii. Ensure covered transportation and conveying of raw material to prevent spillage and dust generation. The project proponent use leak proof trucks/dumpers carrying coal and other raw materials and cover them with tarpaulin.

ix. The project proponent shall provide primary and secondary fume extraction system at all heat treatment furnaces.

x. Wind shelter fence and chemical spraying shall be provided on the raw material stock piles.

xi. Design the ventilation system for adequate air changes as per prevailing norms for all tunnels, motor houses, Oil Cellars.

xii. Pollution control system in the plant shall be provided as per the CREP Guidelines of CPCB.

xiii. The project proponent shall adopt the Clean Air practices like mechanical collectors, wet scrubbers, fabric filters (bag houses), electrostatic precipitators, combustion systems (thermal oxidizers), condensers, absorbers, adsorbers, and biological degradation. Controlling emissions related to transportation shall include emission controls on vehicles as well as use of cleaner fuels. Sufficient numbers of additional truck mounted Fog/Mist water cannons shall be procured and operated regularly inside the project premises and also in the surrounding villages to arrest suspended dust in the atmosphere.

xiv. Bag filters shall be cleaned regularly and efficiency of bag filter system shall be monitored at regular intervals.

xv. Water Sprinklers/Water mist system shall be installed near raw material yards, operational units and other strategic locations to control fugitive emissions from the plant.

xvi. The particulate matter emissions from the process stacks shall be less than 30 mg/Nm^3 and measures shall be undertaken as per the submitted action plan. Efficient Air monitoring equipment shall be installed.

xvii. Following additional arrangements to control fugitive dust shall be provided:
   a. Fog / Mist Sprinklers at all on bulk raw material storage area (at the transfer points) like Iron Ore, Coal and for Fly Ash and similar solid waste storage areas.
   b. Proper covered vehicle shall be used while transport of materials.
   c. Wheel washing mechanism shall be provided in entry and exit gates with complete recirculation system.

xviii. Briquetting and Jigging plant shall be installed in Ferro Alloys Plant.

xix. The PP shall minimize the evaporation losses in jigging operation to less than 10% using suitable advanced process.

xx. The 4^{th} hole extraction system shall be provided in the Sub Merged Arc Furnaces and EAF.

xxi. Industry is going to use silica quartz in large quantities and going to produce Silico Manganese and Ferro Silicon alloy steel. Therefore, it is necessary to control silica/quartz

exposures at production Departments, not only emission norms as per Indian Factories Act. The permissible limit for silica/quartz should be within 10 mg/m3 for total dust as per Indian Factories Act. Therefore, it is recommended to monitor personal and area exposures for silica quartz dust in the process plants.

III. Water quality monitoring and preservation

i. The project proponent shall install 24x7 continuous effluent monitoring system with respect to standards prescribed in Environment (Protection) Rules 1986 as amended from time to time and connected to SPCB and CPCB online servers and calibrate these system from time to time according to equipment supplier specification through labs recognized under Environment (Protection) Act, 1986 or NABL accredited laboratories.

ii. The project proponent shall monitor regularly ground water quality at least twice a year (pre- and post-monsoon) at sufficient numbers of piezometers/sampling wells in the plant and adjacent areas through labs recognized under Environment (Protection) Act, 1986 and NABL accredited laboratories.

iii. Garland drains and collection pits shall be provided for each stock pile to arrest the run-off in the event of heavy rains and to check the water pollution due to surface run off.

iv. Water meters shall be provided at the inlet to all unit processes in the plants.

v. The project proponent shall make efforts to minimise water consumption in the plant complex by segregation of used water, practicing cascade use and by recycling treated water.

vi. The proposed project shall be designed as "Zero Liquid Discharge" Plant. ETP shall be installed and there shall be no discharge of effluent from the plant. Domestic effluent shall be treated in Sewage Treatment Plant. Suitable measures shall be adopted for sewage water handling to ensure no contamination of any kind of water body.

vii. All stockyards shall have impervious flooring and shall be equipped with water spray system for dust suppression. Stock yards shall also have garland drains and catch pits to trap the run off material and shall be implemented as per the action plan submitted in EIA/EMP report.

viii. Rain water harvesting shall be implemented to recharge/harvest water as per the action plan submitted in the EIA/EMP report.

IV. Noise monitoring and prevention

i. Noise pollution shall be monitored as per the prescribed Noise Pollution (Regulation and Control) Rules, 2000 and amendments thereof, and report in this regard shall be submitted to Regional Officer of the Ministry as a part of six-monthly compliance report.

ii. The ambient noise levels should conform to the standards prescribed under E(P)A Rules, 1986 viz. 75 dB(A) during day time and 70 dB(A) during night time.

V. Energy Conservation measures

i. Provide solar power generation on roof tops of buildings, for solar light system for all common areas, street lights, parking around project area and maintain the same regularly;

ii. Provide LED lights in their offices and residential areas.

VI. Waste management

i. Oil Collection pits shall be provided in oil cellars to collect and reuse/recycle spilled oil.
ii. Kitchen waste shall be composted or converted to biogas for further use.
iii. 100% utilization of fly ash shall be ensured. All the fly ash shall be provided to cement and brick manufacturers for further utilization and Memorandum of Understanding in this regard shall be submitted to the Ministry's Regional Office.
iv. The Plastic Waste Management Rules 2016, inter-alia, mandated banning of identified Single Use Plastic (SUP) items with effect from 01/07/2022. In this regard, CPCB has issued a direction to all the State Pollution Control Boards (SPCBs)/Pollution Control Committees (PCCs) on 30/06/2022 to ensure the compliance of Notification published by Ministry on 12/08/2021. The technical guidelines issued by the CPCB in this regard is available at https://cpcb.nic.in/technical-guidelines-3/. All the project proponents are hereby requested to sensitize and create awareness among people working within the Project area as well as its surrounding area on the ban of SUP in order to ensure the compliance of Notification published by this Ministry on 12/08/2021. A report, along with photographs, on the measures taken shall also be included in the six monthly compliance report being submitted by the project proponents.
v. A proper action plan must be implemented to dispose of the electronic waste generated in the industry.
vi. Solid waste utilization
    a. PP shall recycle/reuse solid waste generated in the plant as far as possible.
    b. Used refractories shall be recycled as far as possible.

VII. Green Belt

i. The project proponent shall prepare GHG emissions inventory for the plant and shall submit the programme for reduction of the same including carbon sequestration by trees.
ii. Project proponent shall submit a study report on Decarbonisation program, which would essentially consist of company's carbon emissions, carbon budgeting/ balancing, carbon sequestration activities and carbon capture, use and storage and offsetting strategies. Further, the report shall also contain time bound action plan to reduce its carbon intensity of its operations and supply chains, energy transition pathway from fossil fuels to Renewable energy etc. All these activities/ assessments should be measurable and monitor able with defined time frames.
iii. The industry should draw up and implement and action plan for achieving carbon neutrality consistent with India's commitment to achieving carbon neutrality. The action plan should contain milestones with targets to be achieved in suitable periods.
iv. Greening and Paving shall be implemented in the plant area to arrest soil erosion and dust pollution from exposed soil surface.

VIII. Public hearing and Human health issues

i. Emergency preparedness plan based on the Hazard identification and Risk Assessment (HIRA) and Disaster Management Plan shall be implemented.

ii. The project proponent shall carry out heat stress analysis for the workmen who work in high temperature work zone and provide Personal Protection Equipment (PPE) as per the norms.

iii. Provision shall be made for the housing of construction labour within the site with all necessary infrastructure and facilities such as fuel for cooking, mobile toilets, mobile STP. Safe drinking water, medical health care, creche etc. The housing may be in the form of temporary structures to be removed after the completion of the project.

iv. Occupational health surveillance of the workers shall be done on a regular basis and records maintained.

IX. Environment Management

i. The project proponent shall comply with the provisions contained in this Ministry's OM vide F.No. 22-65/2017-IA.III dated 30/09/2020. As part of Corporate Environment Responsibility (CER) activity, company shall adopt nearby villages based on the socio-economic survey and undertake community developmental activities in consultation with the village Panchayat and the District Administration as committed.

ii. The company shall have a well laid down environmental policy duly approve by the Board of Directors. The environmental policy should prescribe for standard operating procedures to have proper checks and balances and to bring into focus any infringements/deviation/violation of the environmental / forest / wildlife norms / conditions. The company shall have defined system of reporting infringements / deviation / violation of the environmental / forest / wildlife norms / conditions and / or shareholders / stake holders. The copy of the board resolution in this regard shall be submitted to the MoEF&CC as a part of six-monthly report.

iii. A separate Environmental Cell both at the project and company head quarter level, with qualified personnel shall be set up under the control of senior Executive, who will directly to the head of the organization.

iv. Performance test shall be conducted on all pollution control systems every year and report shall be submitted to Integrated Regional Office of the MoEF&CC.

X. Miscellaneous

i. The project proponent shall make public the environmental clearance granted for their project along with the environmental conditions and safeguards at their cost by prominently advertising it at least in two local newspapers of the District or State, of which one shall be in the vernacular language within seven days and in addition this shall also be displayed in the project proponent's website permanently.

ii. The copies of the environmental clearance shall be submitted by the project proponents to the Heads of local bodies, Panchayats and Municipal Bodies in addition to the relevant offices of the Government who in turn has to display the same for 30 days from the date of receipt.

iii. The project proponent shall upload the status of compliance of the stipulated environment clearance conditions, including results of monitored data on their website and update the same on half-yearly basis.

iv. The project proponent shall monitor the criteria pollutants level namely; PM10, SO2, NOx (ambient levels as well as stack emissions) or critical sectoral parameters, indicated for the projects and display the same at a convenient location for disclosure to the public and put on the website of the company.

v. Action plan for developing connecting and internal road in terms of MSA as per IRC guidelines shall be implemented

vi. The project proponent shall submit six-monthly reports on the status of the compliance of the stipulated environmental conditions on the website of the ministry of Environment, Forest and Climate Change at environment clearance portal.

vii. The project proponent shall submit the environmental statement for each financial year in Form-V to the concerned State Pollution Control Board as prescribed under the Environment (Protection) Rules, 1986, as amended subsequently and put on the website of the company.

viii. The project proponent shall inform the Regional Office as well as the Ministry, the date of financial closure and final approval of the project by the concerned authorities, commencing the land development work and start of production operation by the project.

ix. The project proponent shall abide by all the commitments and recommendations made in the EIA/EMP report, commitment made during Public Hearing and also that during their presentation to the Expert Appraisal Committee.

x. The recommendations of the approved Site-Specific Wildlife Management Plan (in case of involvement of Schedule-I species) shall be implemented in consultation with the State Forest Department. The implementation report shall be furnished along with the six-monthly compliance report to the concerned Regional Office of the MoEF&CC.

xi. The PP shall put all the environment related expenditure, expenditure related to Action Plan on the PH issues, and other commitments made in the EIA/EMP Report etc. in the company web site for the information to public/public domain. The PP shall also put the information on the left over funds allocated to EMP and PH as committed in the earlier ECs and shall be carried out and spent in next three years, in the company web site for the information to public/public domain.

xii. No further expansion or modifications in the plant shall be carried out without prior approval of the Ministry of Environment, Forests and Climate Change (MoEF&CC).

xiii. Concealing factual data or submission of false/fabricated data may result in revocation of this environmental clearance and attract action under the provisions of Environment (Protection) Act, 1986.

xiv. The Ministry may revoke or suspend the clearance, if implementation of any of the above conditions is not satisfactory.

xv. The Ministry reserves the right to stipulate additional conditions if found necessary. The Company in a time bound manner shall implement these conditions.

xvi. The Regional Office of this Ministry shall monitor compliance of the stipulated conditions. The project authorities should extend full cooperation to the officer (s) of the Regional Office by furnishing the requisite data / information/monitoring reports.

xvii. Any appeal against this EC shall lie with the National Green Tribunal, if preferred, within a period of 30 days as prescribed under Section 16 of the National Green Tribunal Act, 2010.

***

Agenda No. 43.11

43.11 Proposed Sponge Iron Plant with Secondary Steel Plant consisting of 2 x 350 TPD DRI Kiln, 2 x 40 T & 1 X 30 T Electric Induction Furnace Billet Caster Rolling Mill & 2 x 8 MW WHRB , 16 MW CFBC Boiler Based on Dolochar to produce 300000 TPA Sponge Iron for Captive Consumption to produce 600000 TPA Billet & to Further produce 500000 TPA Rolled Products by M/s. J R Metal Chennai Limited, Located at Survey Nos. 91-93, 95, 98-103, Amirthamangalam Village Gummidipoondi Taluk Thiruvallur District Tamil Nadu- Consideration of Environmental Clearance.

[Proposal No.: IA/TN/IND1/438655/2023; File No.: IA-J-11011/107/2018-IA-II(IND-I)]
[Consultant: Chennai Testing Laboratory Private Limited; Valid upto 03.08.2024]

43.11.1 M/s. J R Metal Chennai Limited has made an online application vide proposal no. IA/TN/IND1/438655/2023 dated 17.08.2023 along with copy of EIA report, Forms (Part A, B and C) seeking Environment Clearance (EC) under the provisions of the EIA Notification, 2006 for the project mentioned above. The proposed project activity is listed at S. No. 3(a) Metallurgical Industries (Ferrous and Non-ferrous) under Category "A" of the schedule of the EIA Notification, 2006 and being appraised at Central Level.

43.11.2 Name of the EIA consultant: M/s. Chennai Testing Laboratory Private Limited [List of ACOs with their Certificate / Extension Letter; valid upto 03.08.2024, as on September 6, 2023].

Details submitted by Project proponent

43.11.3 The details of the ToR are furnished as below:

Date of Application	Consideration	Details	Date of Accord	ToR Validity
13.03.2018	12th meeting of Re-constituted EAC of Industry -I held on 23.10.2019.	Terms of Reference	20.11.2019	19.11.2023

43.11.4 The project of M/s. J R Metal Chennai Limited located at Survey Nos. 91-93, 95, 98-103, Amirthamangalam Village Gummidipoondi Taluk Thiruvallur District Tamil Nadu for proposed Sponge Iron Plant with Secondary Steel Plant consisting of 2 x 350 TPD DRI Kiln, 2 x 40 T & 1 X 30 T Electric Induction Furnace Billet Caster Rolling Mill & 2 x 8 MW WHRB , 16 MW CFBC Boiler Based on Dolochar to produce 300000 TPA Sponge Iron for Captive Consumption to produce 600000 TPA Billet & to Further produce 500000 TPA Rolled Products.

43.11.5 Environmental Site Settings:

<table>
<tr><th>Sr. No.</th><th>Particulars</th><th>Details</th><th>Remarks</th></tr>
<tr><td>1.</td><td>Total land</td><td>Total land required – 17.321 Ha
[Patta Land - 16.661 Ha; Govt. Poramboke Land – 0.66 Ha].</td><td><u>AS PER DTCP</u>
Entirely Unclassified</td></tr>
<tr><td>2.</td><td>Land acquisition details as per MoEF&CC O.M. dated 7/10/2014</td><td>The entire patta land is under ownership of the owners of M/s J R Metal Chennai Ltd.
(Copy of MOA AOA of Registrar of Companies provided in the Addendum to REIA EMP Report)</td><td>Agriculture and Farmers Welfare Department, District Town & Country Planning, Block Development Officer, Tahsildar and Water Resources Department have already recommended to the collector for alteration of wet land to use for other purposes including Industries.</td></tr>
<tr><td>3.</td><td>Existence of habitation & involvement of R&R, if any.</td><td>There is no existence of habitants identified within the plant boundary.

Study Area:
<table>
<tr><th>Village/ Town</th><th>Distance (Km)</th><th>Direction</th><th>Population</th></tr>
<tr><td>Tideer Nagar</td><td>0.7</td><td>E</td><td>350</td></tr>
<tr><td>Periyapuliyur</td><td>1.0</td><td>SW</td><td>683</td></tr>
<tr><td>Amirthamangalam</td><td>1.3</td><td>NNE</td><td>627</td></tr>
<tr><td>Chinnapuliyur</td><td>1.5</td><td>SE</td><td>291</td></tr>
<tr><td>M.N.Kandigai</td><td>1.7</td><td>WSW</td><td>200</td></tr>
<tr><td>Poovalambedu</td><td>2.0</td><td>NW</td><td>1056</td></tr>
<tr><td>Guruvaraja Kandigai</td><td>2.0</td><td>E</td><td>2085</td></tr>
<tr><td>Chittornatham</td><td>3.0</td><td>NNE</td><td>668</td></tr>
<tr><td>Kimalur</td><td>3.5</td><td>WNW</td><td>450</td></tr>
<tr><td>Amarambedu</td><td>3.5</td><td>W</td><td>600</td></tr>
<tr><td>Vaniamalli</td><td>3.5</td><td>NW</td><td>1518</td></tr>
<tr><td>Thanipoondi</td><td>4.0</td><td>NW</td><td>1316</td></tr>
<tr><td>Manali</td><td>4.0</td><td>SSE</td><td>311</td></tr>
<tr><td>Panchali</td><td>4.5</td><td>W</td><td>1505</td></tr>
<tr><td>Kollanur</td><td>4.5</td><td>SW</td><td>525</td></tr>
<tr><td>Aramani</td><td>4.5</td><td>SW</td><td>80</td></tr>
<tr><td>Kanlur</td><td>4.5</td><td>SSE</td><td>858</td></tr>
<tr><td>Sirupulapettai</td><td>4.5</td><td>E</td><td>4346</td></tr>
<tr><td>Eguvarpalayam</td><td>4.5</td><td>NNE</td><td>4052</td></tr>
<tr><td>Erukkuvoy</td><td>4.5</td><td>S</td><td>711</td></tr>
</table></td><td>Proposed Project Site is vacant land, and there are no rehabilitation and resettlement or land oustees, and hence No R & R issues involved and also as per Agriculture and Farmers Welfare Department, District Town & Country Planning, Block Development Officer, Tahsildar and Water Resources Department the proposed plant site, the land has been devoid of any agricultural Activity for last 5-YEARS & also devoid of any forest land</td></tr>
<tr><td>4.</td><td>Latitude and Longitude of the project site</td><td>
<table>
<tr><th>Pillar No.(s)</th><th>Latitude</th><th>Longitude</th></tr>
<tr><td>A</td><td>13°23'54.18"N</td><td>80° 2'53.09"E</td></tr>
<tr><td>B</td><td>13°23'46.58"N</td><td>80° 2'35.98"E</td></tr>
<tr><td>C</td><td>13°23'34.48"N</td><td>80° 2'37.09"E</td></tr>
<tr><td>D</td><td>13°23'33.36"N</td><td>80° 2'51.96"E</td></tr>
</table></td><td>-</td></tr>
<tr><td>5.</td><td>Elevation of the project site</td><td>30-32 m above mean sea level</td><td></td></tr>
</table>

<table>
<tr><th>Sr. No.</th><th>Particulars</th><th>Details</th><th>Remarks</th></tr>
<tr><td>6.</td><td>Involvement of Forest land if any</td><td>There is no forest land involved within the plant boundary.</td><td></td></tr>
<tr><td>7.</td><td>Water body exists within the project site as well as study area</td><td><u>Project Site:</u>
Nil

<u>Study Area:</u>
<table>
<tr><th>Name of Waterbody</th><th>Distance (in kms)</th><th>Direction (from Plant Site)</th></tr>
<tr><td colspan="3">WITHIN 5 KM RADIUS</td></tr>
<tr><td>LAKE</td><td></td><td></td></tr>
<tr><td>Kattan Lake</td><td>0.0</td><td>S</td></tr>
<tr><td>Amirthamangalam Chinna Lake</td><td>0.35</td><td>W</td></tr>
<tr><td>Amirthamangalam Periya Lake</td><td>0.8</td><td>NW</td></tr>
<tr><td>Poovalambedu</td><td>1.3</td><td>W</td></tr>
<tr><td>Periyapuliyur</td><td>1.5</td><td>SW</td></tr>
<tr><td>Sitturnatham</td><td>2.5</td><td>N</td></tr>
<tr><td>Vaniyamalli</td><td>3.5</td><td>NW</td></tr>
<tr><td>Kimalur</td><td>3.5</td><td>NW</td></tr>
<tr><td>Amarambedu</td><td>4.0</td><td>W</td></tr>
<tr><td>Panchali</td><td>4.5</td><td>W</td></tr>
<tr><td>Kollanur</td><td>4.5</td><td>SW</td></tr>
<tr><td>Erukkuvoy</td><td>4.5</td><td>S</td></tr>
<tr><td>Kanalur</td><td>5.0</td><td>SSE</td></tr>
<tr><td>POND</td><td></td><td></td></tr>
<tr><td>Periyapuliyur</td><td>1.0</td><td>SW</td></tr>
<tr><td colspan="3">BETWEEN 5 - 10 KM RADIUS</td></tr>
<tr><td>RIVER</td><td></td><td></td></tr>
<tr><td>Araniyar</td><td>6.0</td><td>SE</td></tr>
<tr><td>LAKE</td><td></td><td></td></tr>
<tr><td>Ramanayak kankandigai</td><td>6.0</td><td>SE</td></tr>
<tr><td>Thervoykandigai</td><td>7.0</td><td>WSW</td></tr>
<tr><td>Gopalareddy kandigai</td><td>7.5</td><td>WSW</td></tr>
<tr><td>Mel Mudalambedu</td><td>7.5</td><td>SW</td></tr>
<tr><td>Kannankottai</td><td>8.5</td><td>W</td></tr>
<tr><td>Nelvoy</td><td>8.0</td><td>SSW</td></tr>
<tr><td>Manallur</td><td>8.5</td><td>NNW</td></tr>
<tr><td>Madarpakkam</td><td>8.5</td><td>NW</td></tr>
<tr><td>Attupakkam</td><td>9.0</td><td>SSW</td></tr>
<tr><td>Gummidipoondi</td><td>9.0</td><td>E</td></tr>
<tr><td>Sengarai</td><td>9.5</td><td>SW</td></tr>
<tr><td>POND</td><td></td><td></td></tr>
<tr><td>Sanaputthur</td><td>6.5</td><td>N</td></tr>
<tr><td>Periya Obulapuram</td><td>7.5</td><td>NE</td></tr>
<tr><td>Sindalakuppam</td><td>8.0</td><td>NE</td></tr>
<tr><td>Edur</td><td>8.5</td><td>NNE</td></tr>
</table></td><td>-</td></tr>
</table>

<table>
<tr><th>Sr. No.</th><th>Particulars</th><th>Details</th><th>Remarks</th></tr>
<tr><td>8.</td><td>Existence of ESZ /ESA /national park/ wildlife sanctuary / biosphere reserve/ tiger/ elephant reserve etc. if any within the study area</td><td>Nil

List of Reserve Forest in the study area:
<table>
<tr><th>Sl. No.</th><th>Name of R.F</th><th>Distance (Km)</th><th>Direction from Project Site</th></tr>
<tr><td>1.</td><td>Puliyur</td><td>1.5</td><td>SE</td></tr>
<tr><td>2.</td><td>Thervoy</td><td>2.0</td><td>SW</td></tr>
<tr><td>3.</td><td>Panchali</td><td>4.0</td><td>W</td></tr>
<tr><td>4.</td><td>Siruvada</td><td>5.0</td><td>W</td></tr>
<tr><td>5.</td><td>Nemalur</td><td>5.0</td><td>NW</td></tr>
<tr><td>6.</td><td>Palavakkam</td><td>4.5</td><td>S</td></tr>
<tr><td>7.</td><td>Periyapuliyur</td><td>5.5</td><td>SW</td></tr>
</table></td><td>-</td></tr>
</table>

43.11.6 The unit configuration and capacity of proposed project is given as below:

Sl. No.	Plant Equipment/ Facility	Configuration	Proposed Unit / Capacity [TPA]			
			Phase-I	Phase-II	Phase-III	Total
1	Sponge Iron (Rotary Kiln [DRI])	2 x 350 T	1,50,000	1,50,000	--	3,00,000
2	Intermediate Product – M.S. Billets (Induction Furnace with Billet Caster & LRF)	2 x 40 T & 1 x 30 T	--	4,50,000	1,50,000	6,00,000
3	Re-Rolled Steel Products (M.S. Rounds, Flats, Angles, etc.,)	1 x 40 T Reheating Furnace *	--	5,00,000	--	5,00,000
4	Power Plant (CFBC)	65 TPH	--	16 MW	--	16 MW
5	Power Plant (WHRB)		8 MW	8 MW	--	16 MW
Note: * Reheating Furnace will be sparsely used, because, hot billet from Billet Caster will be directly fed into Rolling Mill.						

43.11.7 The details of the raw material requirement for the proposed project along with its source and mode of transportation is given as below:

Sponge Iron (Based on Iron-Ore Pellet)

RAW MATERIAL	QUANTITY (TPA)	SOURCE	TRANSPORT MODE
Iron Ore Pellet	4,26,000	Indigenous	Road/Ship
Coal	2,70,000	Imported	
Dolomite/Limestone/ Quartz	15,000	Indigenous	

Sponge Iron (Based on Iron Ore Lumps/Fines)

RAW MATERIAL	QUANTITY (TPA)	SOURCE	TRANSPORT MODE
Iron Ore Coal Dolomite/Limestone/ Quartz	3,50,000 2,19,990 10,000	Indigenous Imported Indigenous	Road/Ship

Steel Melting Shop/Rolling Mill

Raw Material	Quantity (TPA)	Source	TRANSPORT MODE
Sponge Iron	3,00,000	Captive – In House	-
Melting Scrap Ferro Alloy	3,70,000 6,000	Indigenous/Imported Indigenous	Road/Ship

Re Rolling Mill

The Billet produced by the Steel Melt Shop will be the Raw Material for Re-Rolling Mill

Sl. No.	Raw Material (Re-Heating Furnace)*	Quantity	Source	TRANSPORT MODE
1. 2.	Coal Furnace Oil	23,000 TPA 4 KL/day	Imported/Indigenous Indigenous	Road/Ship

*Billet from CCM will be Directly Fed into Rolling Mill, & Re-Heating Furnace will not be used, & is only a Standby in case of the instances when there is break down in the plant, and raw billets gets accumulated & thus requiring reheating, which however is very rare

Power Plant

Dolochar from sponge iron plant will be the main raw material that will be used in the CFBC Boiler for power generation of 16 MW, wherein about 14-30% fuel will be coal blended to obtain necessary calorific value & heat for generation of steam

Sl. No.	Raw Material	Quantity
1.	Imported Coal (South Africa)	106 TPD
2.	Dolochar	247 TPD

The Coal used will be with Sulphur Content < 1%.

43.11.8 The raw water requirement will be 500 KLD which will be met by recycling 178 KLD of treated waste water and 322 KLD of ground water, in which, 125 KLD is exclusively drawn for green belt, and hence net water drawn for process will be only 197 KLD drawn from ground water. The area falls under Poovalembedu firka of Gummidipoondi taluk of Tiruvallur District, which as per G O MS No. 15 Dated 28.03.2023 is categorised as safe zone by Water Resources Department, PWD, Government of Tamil Nadu, and hence withdrawal of water is a permitted activity for industrial use, and ground water clearance for withdrawal of water has also been obtained from the WRD, PWD, GOTn vide Lr.No.DD(G)/OT 9/G-3/Fresh

NOC/Chennai/2022/dated 24.06.2022 for drawl upto 500 KLD, whereas the actual requirement will only be 322KLD of fresh ground water daily.

43.11.9 About 88.5% of the entire Power requirement of 63.2 MW including auxiliary power requirement will be met by "Green Energy". DG Sets 1 x 750 KVA & 1 x 625 KVA, will be sparsely used only during break-down or emergency.

43.11.10 Baseline Environmental Studies:

<table>
<tr><th>Period</th><th>December 2019 to March 2020</th><th>April – June , 2023</th></tr>
<tr><td>AAQ parameters at 8 locations (min. & Max.)</td><td>• PM_{10}= 30 to 87 µg/m^3
• $PM_{2.5}$= 9 to 29 µg/m^3
• SO_2= 7.1 to 21.8 µg/m^3
• NOx= 11.2 to 26.7 µg/m^3</td><td>• PM_{10}= 28 to 85 µg/m^3
• $PM_{2.5}$= 12 to 27 µg/m^3
• SO_2= 8.7 to 25.3 µg/m^3
• NOx= 13.1 to 32.6 µg/m^3</td></tr>
<tr><td>Incremental GLC level</td><td>• PM_{10}= 0.9 µg/m^3
• SO_2= 1.0 µg/m^3
• NOx= 1.0 µg/m^3</td><td>• PM_{10}= 1.0 µg/m^3
• SO_2= 1.0 µg/m^3
• NOx= 1.0 µg/m^3</td></tr>
<tr><td>Ground Water quality</td><td>pH: 6.9-8.1, Total Hardness: 29-532 mg/l, Chlorides: 17-228 mg/l, Fluoride: 0.1-0.9 mg/l. Heavy metals such as Lead, Arsenic etc. are BDL at all the locations.</td><td>pH: 7.5-8.3, Total Hardness: 125-501 mg/l, Chlorides: 33-335 mg/l, Fluoride: BDL – 0.34 mg/l. Heavy metals such as Lead, Arsenic etc. are BDL at all the locations.</td></tr>
<tr><td>Surface water quality</td><td>pH: 8.0-8.1, TDS: 126-204 mg/l, Total Hardness: 51-55 mg/l, Chlorides: 20-21 mg/l, Fluoride: BDL-0.26 mg/l. Heavy metals such as Lead, Arsenic etc. are BDL at all the locations.</td><td>pH: 7.5-8.3, TDS: 126-652 mg/l, Total Hardness: 51-55 mg/l, Chlorides: 58-223 mg/l, Fluoride: 24-174 mg/l. Heavy metals such as Lead, Arsenic etc. are BDL at all the locations.</td></tr>
<tr><td>Noise levels Leq (Day & Night)</td><td colspan="2"><table>
<tr><th colspan="2">Particular</th><th>Actual Study Period</th><th>Additional Study Period</th></tr>
<tr><td rowspan="2">Day Time</td><td>Core Zone</td><td>56.3-61.3 dB(A)</td><td>47.6-57.6 dB(A)</td></tr>
<tr><td>Buffer Zone</td><td>42.8-61.7 dB(A)</td><td>44.7-58.1 dB(A)</td></tr>
<tr><td rowspan="2">Night Time</td><td>Core Zone</td><td>49.3-56.2 dB(A)</td><td>41.7-51.7 dB(A)</td></tr>
<tr><td>Buffer Zone</td><td>40.3-56.8 dB(A)</td><td>39.7-53.9 dB(A)</td></tr>
</table></td></tr>
<tr><td>Traffic assessment study findings</td><td colspan="2">• Traffic study has been conducted at NH-16 which is at 7.5 KM east of the proposed plant and is a Six-lane divided highway.
• Traffic study was also conducted at SH-52 at Satyavedu Junction which is 8.45 Km west of the proposed plant and is a Four-lane divided highway.
• Transportation of raw material, fuel & Finished products will be done 100% by road.
• Existing PCU is 3029 PCU/hr on NH-16 and 374 PCU/hr on SH-52 and existing Level of Service (LOS) is as given in the following table
<table>
<tr><th>Road</th><th>V (Volume in PCU/hr.)</th><th>C (Capacity in PCU/hr.)</th><th>V/C Ratio</th><th>LOS</th></tr>
<tr><td>Kavarapettai Junction
NH 16</td><td>3029</td><td>5400 (6 lane – Two Way)</td><td>0.57</td><td>C</td></tr>
</table></td></tr>
</table>

	Satyavedu Junction SH-52	374	3600 (4 lane – Two Way)	0.10	A

- PCU load after proposed project will be 3029 (Existing) + 21 (Additional) on NH-16. Hence, modified traffic scenario & LOS &
- PCU load after proposed project will be 374 (Existing) + 21 (Additional) on SH-52. Hence, modified traffic scenario & LOS will be

Road	V (Volume in PCU/hr.)	C (Capacity in PCU/hr.)	V/C Ratio	LOS
Kavarapettai Junction NH 16	3029 + 21 = 3050	5400 (6 lane– Two Way)	0.57	C
Satyavedu Junction SH-52	374 + 21 = 395	3600 (4 lane – Two Way)	0.11	A

Note : Capacity as per IR-106-1990 Guideline for capacity for roads.

Conclusion : The level of service will remain "C" ie Good in NH-16 and "A" ie Excellent in SH-52 after including additional traffic due to proposed project.

Flora & Fauna	No Schedule – I species found in the study area.

43.11.11 The details of solid waste generation along with its mode of treatment/disposal is furnished as below:

S. No	WASTE CATEGORY	WASTE SOURCE	WASTE DESCRIPTION	QUANITY (TPA)
	HAZARDOUS WASTE			
1	5.1	Lubrication/Maintenance	Used or Spent Oil	2.0
2	5.2	Lubrication/Maintenance	Waste Containing Oil	2.0
	SOLID WASTE			
3	-	Sponge Iron Kiln	Dolochar	90000
4		Kiln Accretion + ESP + Process	Dust	100000
5	-	Melting Furnace	Slag	66000
6	-	CFBC Boiler	Fly-Ash	60000
7	-	CFBC Boiler	Bottom-Ash	15000

All the solid waste generated find useful application in many upstream/downstream industries, whereas, hazardous waste is disposed to Authorized Agencies.

WASTE DESCRIPTION	END USE/DISPOSAL
HAZARDOUS WASTE	
Used or Spent Oil	Authorised Waste Oil Recyclers
Waste Containing Oil	Preprocessing by Authorised Pre-Processor for Co-Processing

WASTE DESCRIPTION	END USE/DISPOSAL
SOLID WASTE	
Dolochar	CFBC Boiler Within Plant for Power Generation
Dust (Kiln Accretion + ESP+Process)	Brick Manufacturing
Slag	Cement Manufacturers/Concrete Road Making
Fly-Ash/Bottom-Ash	Cement/Brick Manufacturers

43.11.12 **Public Consultation:**

Details of advertisement given	Published in Times of India & Dinakaran on 05.03.2022
Date of public consultation	08.04.2022
Venue	Proposed Project Site at Survey No. 91-93, 95, 98-103, Amirthamangalam Village, Gummidipoondi Taluk, Thiruvallur District, Tamil Nadu.
Presiding Officer	District Revenue Officer, Thiruvallur District, Tamil Nadu.
Major issues raised	Depletion of Ground Water, Air, Water & Solid Waste pollution affecting the surrounding environment including people, & agriculture, and had also indicated presence of wet land in the proposed plant site.

Action plan as per MoEF&CC O.M. dated 30/09/2020

Sl. No.	PUBLIC HEARING ISSUE	RESPONSE	ALLOCATION (Rs. Lakhs) & Or Nos.					TOTAL
			YEARS					
			1	2	3	4	5	
1	**EMPLOYMENT (Local People)**	The proposed project will provide the employment opportunity entirely in the unskilled & semi skilled category to the local people, and further based on their qualification and skill levels, and if anyone in the local village is with higher skill level, they will also be considered and provided opportunity at higher levels.	20	20	20	20	20	**100-Nos**
		Skill Development Centres	-	-	30.0	30.0	12	**72.0**
2	**CARBON SEQUESTRATION**	Aiding plantation by providing 2000-Nos Sapling's each year to villages around to thus promote carbon sequestration and green cover	2.5	2.5	2.5	2.5	2.5	**12.5**

Sl. No.	PUBLIC HEARING ISSUE	RESPONSE	ALLOCATION (Rs. Lakhs) & Or Nos. YEARS					TOTAL
			1	2	3	4	5	
3	**ASSISTANCE TO FARMERS**	Poor farmers who will be affected will be aided by way of corpus each year to enable them procure seeds, fertilizers, ploughing equipments, and also establish drip irrigation systems	10.0	10.0	10.0	10.0	10.0	**50.0**
4	**HEALTH CHECK UPS**	All the people in the villages around the plant site will be provided the facility of undertaking regular monthly health check up	5.0	5.0	5.0	5.0	5.0	**25.0**
5	**HEALTH INSURANCE**	All the people in the villages around the plant site will be provided the facility to have Health Insurance	20.0	20.0	20.0	20.0	20.0	**100.0**
6	**CONSTRUCTION OF MEDICAL CENTERS**	Construction and Upkeep of Primary Health Centers in all the settlements within 5-Kms including Maternity/Child/Geriartic Care, and on call ambulance fully equipped	50.0	50.0	50.0	50.0	50.0	**250.0**
7	**INFRASTRUCTURAL FACILITY TO SCHOOLS**	Construction of Middle Schools in 3- Major Settlements in the 5-Km Radius, upkeep of primary schools existing now, and providing for transportation of students for Higher education	25.0	25.0	25.0	12.0	12.0	**99.0**
8	**INFRASTRUCTURAL FACILITY TO VILLAGES**	Provision of water supply, Laying & Repair of Roads, Building for PDS, Assistance to People by way of financial aid, Desilting of Ponds, Community Programmes etc	10.0	10.0	10.0	10.0	10	**50.0**
		TOTAL	**122.5**	**122.5**	**152.5**	**139.5**	**121.5**	**658.5**

43.11.13 The total project cost envisaged is Rs 350-Crores., and the capital cost for environmental protection measures is proposed as Rs. 31.00 Crores. The annual recurring cost towards the environmental protection measures proposed is Rs. 0.74 Crores. The employment generation from the proposed project will be 300-nos direct apart from innumerable indirect employment. The details of cost for environmental protection measures are as follows:

Environmental Management	**Pollution Control Cost (Rs. In Crores)**	
	CAPITAL COST	**RECURRING COST**
Construction Phase		
Site Sanitation Facilities	-	0.15
Air Pollution Control Measures	-	0.10
Operation Phase		
Air Pollution Control Equipments	25.0	0.20
Waste Water Management	2.0	0.10
Solid Waste Management	2.0	0.10
Personal Protective Equipment	0.35	0.15
Post Project Monitoring	1.5	0.15
Greenbelt Development	0.15	0.04
TOTAL	**31.00**	**0.74**

43.11.14 Proposed greenbelt will be developed in 5.71 Hectares with total sapling of 14275, and all-round the plant consisting of at least 5 tiers to a width of 20 Metres on the periphery of boundary as greenbelt and green cover as per CPCB/MoEF&CC, New Delhi guidelines. Local and native species will be planted with a density of 2500 trees per hectare.

43.11.15 It is reported that there is no violation under EIA, 2006/court case/show cause/direction related to the project under consideration.

Deliberations by the Committee

43.11.16 The Committee noted the following:

1. The instant proposal is for proposed Sponge Iron Plant with Secondary Steel Plant consisting of 2 x 350 TPD DRI Kiln, 2 x 40 T & 1 X 30 T Electric Induction Furnace Billet Caster Rolling Mill & 2 x 8 MW WHRB , 16 MW CFBC Boiler Based on Dolochar to produce 300000 TPA Sponge Iron for Captive Consumption to produce 600000 TPA Billet & to Further produce 500000 TPA Rolled Products.
2. The EAC, constituted under the provision of the EIA Notification, 2006 comprising Expert Members/domain experts in various fields, examined the proposal submitted by the Project Proponent in desired format along with EIA/EMP reports prepared and submitted by the Consultant accredited by the QCI/ NABET on behalf of the Project Proponent.
3. The EAC noted that the Project Proponent has given an undertaking that the data and information given in the application and enclosures are true to the best of his knowledge and belief and no information has been suppressed in the EIA/EMP reports. If any part of data/information submitted is found to be false/ misleading at any stage, the project will be

rejected and Environmental Clearance given, if any, will be revoked at the risk and cost of the project proponent.

4. The Committee noted that the EIA reports are in compliance of the ToR issued for the project, reflecting the present environmental status and the projected scenario for all the environmental components. The Committee deliberated on the proposed mitigation measure towards Air, Water, Noise and Soil pollutions. The Committee suggested that the storage of toxic/explosive raw materials/products shall be undertaken with utmost precautions and following the safety norms and best practices.

5. The total project area is 17.321 Ha [Patta Land - 16.661 Ha; Govt. Poramboke Land – 0.66 Ha]. The entire patta land is under ownership of the owners of M/s J R Metal Chennai Ltd. PP has reported that Agriculture and Farmers Welfare Department, District Town & Country Planning, Block Development Officer, Tahsildar and Water Resources Department have already recommended to the collector for alteration of wet land to use for other purposes including Industries. The EAC advised that total project land shall be acquired and converted for industrial purpose prior to commencement of project.

6. The nearest habitations is Tideer Nagar (0.7 km, E), Periyapuliyur (1 km, SW) and 18 other villages within the study area of the project site. The EAC is of the opinion that PP shall strictly implement the environmental safeguard measures proposed to minimise the impact on the habitation of the locals.

7. Kattan Lake is present adjacent to the project site in the South, Amirthamangalam Chinna Lake at 0.35 km in West and Amirthamangalam Periya Lake at 0.8 km in NW of the project site along with numerous water bodies including ponds, lakes and rivers within the within the study area of the project site. The EAC is of the opinion that water bodies shall not be disturbed. Mitigation measures w.r.t. safeguarding the water bodies shall be strictly implemented.

8. The water requirement for the project is estimated as 500 KLD which will be met by recycling 178 KLD of treated waste water and 322 KLD of ground water, in which, 125 KLD is exclusively drawn for green belt, and hence net water drawn for process will be only 197 KLD drawn from ground water. The EAC deliberated on the water requirement and found is satisfactory.

9. The Committee has deliberated on the previous and the latest baseline data and incremental GLC due to the proposed project and is of the opinion that PP shall strictly implement the mitigation measures as per the action plans to minimise the pollution.

10. The PP has submitted that Proposed greenbelt will be developed in 5.71 Hectares with total sapling of 14275, and all-round the plant consisting of at least 5 tiers to a width of 20 Metres on the periphery of boundary as greenbelt and green cover as per CPCB/MoEF&CC, New Delhi guidelines. The EAC deliberated on the greenbelt layout plan along with action plan and the budget earmarked and is of the opinion that PP shall complete the proposed greenbelt development in a period of 1 year.

11. The committee deliberated details of carbon foot prints and carbon sequestration study w.r.t. proposed project and found them to be satisfactory.

12. The Committee also deliberated on the public hearing issues along with action plan submitted by the proponent to address the issues raised during the public hearing and found it satisfactory.

13. The EAC also deliberated on the written submission of the project proponent and found it satisfactory.

14. The EAC deliberated on the proposal with due diligence in the process as notified under the provisions of the EIA Notification, 2006, as amended from time to time and accordingly made the recommendations to the proposal. The Experts Members of the EAC found the proposal in order and recommended for grant of environmental clearance.

15. The environmental clearance recommended to the project/activity is strictly under the provisions of the EIA Notification 2006 and its subsequent amendments. It does not tantamount/construe to approvals/consent/permissions etc. required to be obtained or standards/conditions to be followed under any other Acts/ Rules/ Subordinate legislations, etc., as may be applicable to the project. The project proponent shall obtain necessary permission as mandated under the Water (Prevention and Control of Pollution) Act, 1974 and the Air (Prevention and Control of Pollution) Act, 1981, as applicable from time to time, from the State Pollution Control Board, prior to construction & operation of the project.

16. The EAC also reviewed the EC conditions (specific and general) pertaining to Industry-I projects and observed that some of the specific conditions stipulated so far in the previously recommended EC projects are common and applicable to most of the projects in general. In view of the same, the General Conditions (in case of EC projects) have been revised through reallocation of these common conditions from specific to General Conditions (in case of EC projects). Accordingly, the instant project is also being stipulated with the modified General conditions.

Recommendations of the Committee:

43.11.17 In view of the foregoing and after detailed deliberations, the committee **recommended** the instant proposal for grant of Environment Clearance under the provisions of EIA Notification, 2006 subject to the stipulation of following specific conditions and general conditions as per the Ministry's Office Memorandum No. 22-34/2018-III dated 9/8/2018 based on project specific requirements:

A. Specific Condition:

i. The project proponent shall comply with all the environmental protection measures and safeguards proposed in the documents submitted to the Ministry. All the recommendations made in the EIA/EMP in respect of environmental management, and risk mitigation measures relating to the project shall be implemented.

ii. The project proponent shall utilize modern technologies for capturing of carbon emitted and shall also develop carbon sink/carbon sequestration resources capable of capturing more than emitted. The implementation report shall be submitted to the IRO, MoEF&CC in this regard.

iii. Total project land acquisition shall be completed and converted for industrial purpose prior to commencement of project.

iv. The nearest habitations is Tideer Nagar (0.7 km, E), Periyapuliyur (1 km, SW) and 18 other villages within the study area of the project site. Proponent shall take appropriate environmental safeguard measures to minimise the impact on the habitation of the locals. PP needs to strengthen green belt all around the plant area to reduce the dust pollution. The PP shall also include some of these locations in its environmental monitoring programme.

v. Kattan Lake is present adjacent to the project site in the South, Amirthamangalam Chinna Lake at 0.35 km in West and Amirthamangalam Periya Lake at 0.8 km in NW of the project site along with numerous water bodies including ponds, lakes and rivers within the within the study area of the project site. A robust and full proof Drainage Conservation scheme to protect the natural drainage and its flow parameters; along with Soil conservation scheme and multiple Erosion control measures shall be implemented.

vi. The water requirement of 500 KLD, to be sourced from recycled water (178 KLD) and ground water (322 KLD) after obtaining necessary permission from the Competent Authority. PP shall explore the possibility to minimise the usage of ground water.

vii. Three tier Green Belt shall be developed in at least 33% of the project area in a period of 1 year all along the project site of adequate width and tree density shall not be less than 2500 per ha. Survival rate of green belt developed shall be monitored on periodic basis to ensure that damaged plants are replaced with new plants in the subsequent years. PP shall also develop greenbelt in the form of shelter belt comprising of total of 6 rows of 2x2 m plantation with tall trees & broad leaves with thick canopy along with windshield inside the plant premises to act as green barrier for air pollution & noise levels towards Tideer Nagar, Periyapuliyur and other villages in the vicinity. Compliance status in this regard, shall be submitted to concerned Regional Office of the MoEF&CC.

viii. All the commitments made towards socio-economic development of the nearby villages shall be satisfactorily implemented. The action plan based on the social impact assessment study of the project as per the EMP in accordance to the Ministry's OM dated 30.09.2020 amounting to approx. Rs. 6.585 Crores shall be strictly implemented and progress shall be submitted to the Regional Office of MoEF&CC.

ix. PP shall undertake village adoption programme and prepare and implement the action plan to develop the villages into model villages.

x. The PP shall undertake strict mitigative measures in nearby areas for reduction in pollution level.

B. General Conditions

I. Statutory compliance:

i. The Environment Clearance (EC) granted to the project/ activity is strictly under the provisions of the EIA Notification, 2006 and its amendments issued from time to time. It does not tantamount/ construe to approvals/ consent/ permissions etc., required to be obtained or standards/conditions to be followed under any other Acts/Rules/Subordinate legislations, etc., as may be applicable to the project.

ii. This Environmental clearance is granted subject to final outcome of Hon'ble Supreme Court of India, Hon'ble High Court, Hon'ble NGT and any other Court of Law, if any, as may be applicable to this project.

II. Air quality monitoring and preservation

i. The project proponent shall install 24x7 continuous emission monitoring system at process stacks to monitor stack emission as well as 06 Nos. Continuous Ambient Air Quality Station (CAAQMS) for monitoring AAQ parameters with respect to standards prescribed in Environment (Protection) Rules 1986 as amended from time to time. The CEMS and CAAQMS shall be connected to SPCB and CPCB online servers and calibrate these systems from time to time according to equipment supplier specification through labs recognized under Environment (Protection) Act, 1986 or NABL accredited laboratories.

ii. The project proponent shall carryout Continuous Ambient Air Quality monitoring for common/criterion parameters relevant to the main pollutants released (e.g. PM_{10} and $PM_{2.5}$ in reference to PM emission, and SO_2 and NOx in reference to SO_2 and NOx emissions) within and outside the plant area (at least at four locations one within and three outside the plant area at an angle of 120° each), covering upwind and downwind directions.

iii. The project proponent shall monitor fugitive emissions in the plant premises at least once in every quarter through laboratories recognized under Environment (Protection) Act, 1986 or NABL accredited laboratories.

iv. Sampling facility at process stacks shall be provided as per CPCB guidelines for manual monitoring of emissions.

v. Appropriate Air Pollution Control (APC) system shall be provided for all the dust generating points including fugitive dust from all vulnerable sources, so as to comply prescribed stack emission and fugitive emission standards.

vi. The project proponent shall provide leakage detection and mechanized bag cleaning facilities for better maintenance of bags.

vii. Sufficient number of mobile or stationery vacuum cleaners shall be provided to clean plant roads, shop floors, roofs, regularly.

viii. Ensure covered transportation and conveying of raw material to prevent spillage and dust generation. The project proponent use leak proof trucks/dumpers carrying coal and other raw materials and cover them with tarpaulin.

ix. Recycle and reuse iron ore fines, coal and coke fines, lime fines and such other fines collected in the pollution control devices and vacuum cleaning devices in the process after briquetting/ agglomeration.

x. The project proponent shall provide primary and secondary fume extraction system at all heat treatment furnaces.

xi. Wind shelter fence and chemical spraying shall be provided on the raw material stock piles.

xii. Design the ventilation system for adequate air changes as per prevailing norms for all tunnels, motor houses, Oil Cellars.

xiii. Pollution control system in the plant shall be provided as per the CREP Guidelines of CPCB.

xiv. The project proponent shall adopt the Clean Air practices like mechanical collectors, wet scrubbers, fabric filters (bag houses), electrostatic precipitators, combustion systems (thermal oxidizers), condensers, absorbers, adsorbers, and biological degradation. Controlling emissions related to transportation shall include emission controls on vehicles

as well as use of cleaner fuels. Sufficient numbers of additional truck mounted Fog/Mist water cannons shall be procured and operated regularly inside the project premises and also in the surrounding villages to arrest suspended dust in the atmosphere.

xv. Bag filters shall be cleaned regularly and efficiency of bag filter system shall be monitored at regular intervals.

xvi. Water Sprinklers/Water mist system shall be installed near raw material yards, operational units and other strategic locations to control fugitive emissions from the plant.

xvii. The particulate matter emissions from the process stacks shall be less than 30 mg/Nm^3 and measures shall be undertaken as per the submitted action plan. Efficient Air monitoring equipment shall be installed.

xviii. Following additional arrangements to control fugitive dust shall be provided:
   a. Fog / Mist Sprinklers at all on bulk raw material storage area (at the transfer points) like Iron Ore, Coal and for Fly Ash and similar solid waste storage areas.
   b. Proper covered vehicle shall be used while transport of materials.
   c. Wheel washing mechanism shall be provided in entry and exit gates with complete recirculation system.

xix. During operational phase at Captive Power Plant, Action Plan to monitor coke/coal dust exposures in different process plants using personal and area air samplers and to compare with permissible limits as per Indian Factories Act, 1948 shall be implemented.

xx. The coal dust should be monitored at coal unloading, crushing, furnace areas and should be within 2 mg/m^3, respirable dust fraction containing less than 5% quartz as per Indian Factories Act, 1948.

xxi. Online stack monitoring system for IF and RHF shall be installed and monitoring report shall be submitted to the concerned Regional Office of the MoEF&CC along with the six monthly compliance report.

xxii. Low NOx Burners will be installed at Reheating Furnace for control of Gaseous emissions generated while using PNG.

III. Water quality monitoring and preservation

i. The project proponent shall install 24x7 continuous effluent monitoring system with respect to standards prescribed in Environment (Protection) Rules 1986 as amended from time to time and connected to SPCB and CPCB online servers and calibrate these system from time to time according to equipment supplier specification through labs recognized under Environment (Protection) Act, 1986 or NABL accredited laboratories.

ii. The project proponent shall monitor regularly ground water quality at least twice a year (pre- and post-monsoon) at sufficient numbers of piezometers/sampling wells in the plant and adjacent areas through labs recognized under Environment (Protection) Act, 1986 and NABL accredited laboratories.

iii. Garland drains and collection pits shall be provided for each stock pile to arrest the run-off in the event of heavy rains and to check the water pollution due to surface run off.

iv. Water meters shall be provided at the inlet to all unit processes in the plants.

v. The project proponent shall make efforts to minimise water consumption in the plant complex by segregation of used water, practicing cascade use and by recycling treated water.

vi. The proposed project shall be designed as "Zero Liquid Discharge" Plant. ETP shall be installed and there shall be no discharge of effluent from the plant. Domestic effluent shall be treated in Sewage Treatment Plant. Suitable measures shall be adopted for sewage water handling to ensure no contamination of any kind of water body.

vii. All stockyards shall have impervious flooring and shall be equipped with water spray system for dust suppression. Stock yards shall also have garland drains and catch pits to trap the run off material and shall be implemented as per the action plan submitted in EIA/EMP report.

viii. Rain water harvesting shall be implemented to recharge/harvest water as per the action plan submitted in the EIA/EMP report.

ix. The project proponent shall provide the ETP for effluents of rolling mills to meet the standards prescribed in G.S.R 277 (E) 31st March 2012 (applicable to IF/EAF) as amended from time to time.

x. Air Cooled condensers shall be used in the captive power plant.

IV. Noise monitoring and prevention

i. Noise pollution shall be monitored as per the prescribed Noise Pollution (Regulation and Control) Rules, 2000 and amendments thereof, and report in this regard shall be submitted to Regional Officer of the Ministry as a part of six-monthly compliance report.

ii. The ambient noise levels should conform to the standards prescribed under E(P)A Rules, 1986 viz. 75 dB(A) during day time and 70 dB(A) during night time.

iii. PP shall identify extreme hot areas through heat stress survey as well as noise monitoring within process plants to ensure that workers not exposed above 90 dBA levels as per Factories Act, 1948.

V. Energy Conservation measures

i. Provide solar power generation on roof tops of buildings, for solar light system for all common areas, street lights, parking around project area and maintain the same regularly;

ii. Provide LED lights in their offices and residential areas.

iii. The project proponent shall provide waste heat recovery system (pre-heating of combustion air) at the flue gases of reheating furnaces.

iv. Practice hot charging of slabs and billets/blooms as far as possible.

v. Ensure installation of regenerative type burners on all reheating furnaces.

vi. The project proponent shall provide waste heat recovery system on the DRI Kilns.

vii. The dolochar generated shall be used for power generation.

viii. Tar shall be recovered from producer gas and shall be sold to registered processors and phenolic water shall be incinerated in After Burn Chamber (ABC) of DRI kilns.

ix. The PP shall implement the guidelines on sponge iron plants issued by the CPCB/SPCB in this regard.

VI. Waste management

i. Oil Collection pits shall be provided in oil cellars to collect and reuse/recycle spilled oil.

ii. Kitchen waste shall be composted or converted to biogas for further use.

iii. 100% utilization of fly ash shall be ensured. All the fly ash shall be provided to cement and brick manufacturers for further utilization and Memorandum of Understanding in this regard shall be submitted to the Ministry's Regional Office.

iv. The Plastic Waste Management Rules 2016, inter-alia, mandated banning of identified Single Use Plastic (SUP) items with effect from 01/07/2022. In this regard, CPCB has issued a direction to all the State Pollution Control Boards (SPCBs)/Pollution Control Committees (PCCs) on 30/06/2022 to ensure the compliance of Notification published by Ministry on 12/08/2021. The technical guidelines issued by the CPCB in this regard is available at https://cpcb.nic.in/technical-guidelines-3/. All the project proponents are hereby requested to sensitize and create awareness among people working within the Project area as well as its surrounding area on the ban of SUP in order to ensure the compliance of Notification published by this Ministry on 12/08/2021. A report, along with photographs, on the measures taken shall also be included in the six monthly compliance report being submitted by the project proponents.

v. A proper action plan must be implemented to dispose of the electronic waste generated in the industry.

vi. Solid waste utilization
   a. PP shall install a slag crusher to convert steel slag into aggregate for use in construction industry, fine sand for use as flux in steel plant, sand in brick making and as lime in cement making.
   b. PP shall recycle/reuse solid waste generated in the plant as far as possible.
   c. Used refractories shall be recycled as far as possible.

VII. Green Belt

i. The project proponent shall prepare GHG emissions inventory for the plant and shall submit the programme for reduction of the same including carbon sequestration by trees.

ii. Project proponent shall submit a study report on Decarbonisation program, which would essentially consist of company's carbon emissions, carbon budgeting/ balancing, carbon sequestration activities and carbon capture, use and storage and offsetting strategies. Further, the report shall also contain time bound action plan to reduce its carbon intensity of its operations and supply chains, energy transition pathway from fossil fuels to Renewable energy etc. All these activities/ assessments should be measurable and monitor able with defined time frames.

iii. The industry should draw up and implement and action plan for achieving carbon neutrality consistent with India's commitment to achieving carbon neutrality. The action plan should contain milestones with targets to be achieved in suitable periods.

iv. Greening and Paving shall be implemented in the plant area to arrest soil erosion and dust pollution from exposed soil surface.

VIII. Public hearing and Human health issues

i. Emergency preparedness plan based on the Hazard identification and Risk Assessment (HIRA) and Disaster Management Plan shall be implemented.

ii. The project proponent shall carry out heat stress analysis for the workmen who work in high temperature work zone and provide Personal Protection Equipment (PPE) as per the norms.

iii. Provision shall be made for the housing of construction labour within the site with all necessary infrastructure and facilities such as fuel for cooking, mobile toilets, mobile STP. Safe drinking water, medical health care, creche etc. The housing may be in the form of temporary structures to be removed after the completion of the project.

iv. Occupational health surveillance of the workers shall be done on a regular basis and records maintained.

IX. Environment Management

i. The project proponent shall comply with the provisions contained in this Ministry's OM vide F.No. 22-65/2017-IA.III dated 30/09/2020. As part of Corporate Environment Responsibility (CER) activity, company shall adopt nearby villages based on the socio-economic survey and undertake community developmental activities in consultation with the village Panchayat and the District Administration as committed.

ii. The company shall have a well laid down environmental policy duly approve by the Board of Directors. The environmental policy should prescribe for standard operating procedures to have proper checks and balances and to bring into focus any infringements/deviation/violation of the environmental / forest / wildlife norms / conditions. The company shall have defined system of reporting infringements / deviation / violation of the environmental / forest / wildlife norms / conditions and / or shareholders / stake holders. The copy of the board resolution in this regard shall be submitted to the MoEF&CC as a part of six-monthly report.

iii. A separate Environmental Cell both at the project and company head quarter level, with qualified personnel shall be set up under the control of senior Executive, who will directly to the head of the organization.

iv. Performance test shall be conducted on all pollution control systems every year and report shall be submitted to Integrated Regional Office of the MoEF&CC.

X. Miscellaneous

i. The project proponent shall make public the environmental clearance granted for their project along with the environmental conditions and safeguards at their cost by prominently advertising it at least in two local newspapers of the District or State, of which one shall be in the vernacular language within seven days and in addition this shall also be displayed in the project proponent's website permanently.

ii. The copies of the environmental clearance shall be submitted by the project proponents to the Heads of local bodies, Panchayats and Municipal Bodies in addition to the relevant offices of the Government who in turn has to display the same for 30 days from the date of receipt.

iii. The project proponent shall upload the status of compliance of the stipulated environment clearance conditions, including results of monitored data on their website and update the same on half-yearly basis.

iv. The project proponent shall monitor the criteria pollutants level namely; PM10, SO2, NOx (ambient levels as well as stack emissions) or critical sectoral parameters, indicated for the

projects and display the same at a convenient location for disclosure to the public and put on the website of the company.

v. Action plan for developing connecting and internal road in terms of MSA as per IRC guidelines shall be implemented

vi. The project proponent shall submit six-monthly reports on the status of the compliance of the stipulated environmental conditions on the website of the ministry of Environment, Forest and Climate Change at environment clearance portal.

vii. The project proponent shall submit the environmental statement for each financial year in Form-V to the concerned State Pollution Control Board as prescribed under the Environment (Protection) Rules, 1986, as amended subsequently and put on the website of the company.

viii. The project proponent shall inform the Regional Office as well as the Ministry, the date of financial closure and final approval of the project by the concerned authorities, commencing the land development work and start of production operation by the project.

ix. The project proponent shall abide by all the commitments and recommendations made in the EIA/EMP report, commitment made during Public Hearing and also that during their presentation to the Expert Appraisal Committee.

x. The recommendations of the approved Site-Specific Wildlife Management Plan (in case of involvement of Schedule-I species) shall be implemented in consultation with the State Forest Department. The implementation report shall be furnished along with the six-monthly compliance report to the concerned Regional Office of the MoEF&CC.

xi. The PP shall put all the environment related expenditure, expenditure related to Action Plan on the PH issues, and other commitments made in the EIA/EMP Report etc. in the company web site for the information to public/public domain. The PP shall also put the information on the left over funds allocated to EMP and PH as committed in the earlier ECs and shall be carried out and spent in next three years, in the company web site for the information to public/public domain.

xii. No further expansion or modifications in the plant shall be carried out without prior approval of the Ministry of Environment, Forests and Climate Change (MoEF&CC).

xiii. Concealing factual data or submission of false/fabricated data may result in revocation of this environmental clearance and attract action under the provisions of Environment (Protection) Act, 1986.

xiv. The Ministry may revoke or suspend the clearance, if implementation of any of the above conditions is not satisfactory.

xv. The Ministry reserves the right to stipulate additional conditions if found necessary. The Company in a time bound manner shall implement these conditions.

xvi. The Regional Office of this Ministry shall monitor compliance of the stipulated conditions. The project authorities should extend full cooperation to the officer (s) of the Regional Office by furnishing the requisite data / information/monitoring reports.

xvii. Any appeal against this EC shall lie with the National Green Tribunal, if preferred, within a period of 30 days as prescribed under Section 16 of the National Green Tribunal Act, 2010.

****

Consideration in Terms of Reference Proposal

Agenda No. 43.12

43.12 Establishment of Greenfield Steel comprising of Beneficiation Plant of 6,60,000 TPA (Throughput), Pellet Plant of 4,95,000 TPA, Gasifier for Pellet plant 21000 Nm3 /Hr, DRI Kilns to produce Sponge Iron of (4 x 250 TPD) 3,30,000 TPA, Induction Furnaces along with LRF & CCM to produce Hot Billets /MS Billets /Ingots of 2,97,000 TPA, Rolling Mill along with reheating furnace to produce TMT bars / Structural Steel of 3,30,000 TPA (through 85 % Hot charging with Hot Billets and remaining 15% through RHF with LDO), Gasifier for Reheating Furnace 2970 Nm3 /Hr, Oxygen Plant -4 TPD, Ferro Alloys Unit (2x 9 MVA - (FeSi - 14,000 TPA / FeMn - 40,000 TPA / SiMn -28,000 TPA / FeCr - 30,000 TPA / Pig Iron - 48,000 TPA) , Brick Manufacturing Unit – 60,000 Bricks/Day, Briquetting Plant 200 Kg./Hr., Power generation through WHRB of (4x7.5MW), 30 MW and through FBC based Power Plant of (1 x 10 MW)- 10 MW by M/s L N Steel & Alloys Pvt. Ltd., located at Badiadih & Lamti Villages, Patharia Tehsil, Mungeli District, Chhattisgarh- Consideration of TOR.

[Proposal No. IA/CG/IND1/438567/2023; File No. IA-J-11011/311/2023-IA-II(IND-I)]
[Consultant: Pioneer Enviro Laboratories & Consultants Pvt. Ltd; Valid upto 09.09.2026]

43.12.1 M/s. LN Steel and Alloys Pvt. Ltd. has made an application online vide proposal no. IA/CG/IND1/438567/2023 dated 18.08.2023 along with the application in prescribed format (CAF, Form – I Part A & B), copy of pre-feasibility report and proposed ToRs for undertaking detailed EIA study as per the EIA Notification, 2006 for the project mentioned above. The proposed project activity is listed at S. No. 3(a) Metallurgical Industries (Ferrous & Nonferrous) and 1(d) Thermal Power Plants under Category 'A' of the schedule of the EIA Notification, 2006 and being appraised at the Central Level.

43.12.2 Name of the EIA consultant: M/s. Pioneer Enviro Consultants Private Limited [List of ACOs with their Certificate / Extension Letter No: NABET/EIA/2225/RA 0282 valid till 21.09.2025, as on September 6, 2023].

Details submitted by Project proponent

43.12.3 The project of 2.0 M/s. LN Steel and Alloys Pvt. Ltd. located at Badiadih & Lamti Villages, Patharia Teshil, Mungeli District, Chhattisgarh is for setting up a Beneficiation Plant of 6,60,000 TPA(Throughput), Pellet Plant of 4,95,000TPA, Gasifier for Pellet plant 1 x 21000 Nm3/Hr, DRI Kilns to produce Sponge Iron of (4 x 250 TPD) 3,30,000 TPA, Induction Furnaces along with LRF & CCM to produce Hot Billets /M S Ingots/Ingots of 2,97,000 TPA, Rolling Mill along with reheating furnace to produce TMT bars / Structural Steel of 3,30,000 TPA (through 85 % Hot charging with Hot Billets and remaining 15% through RHF with LDO), Gasifier for Reheating Furnace 1 x 2970 Nm3/Hr, Oxygen Plant -4 TPD, Ferro Alloys Unit (2 x 9 MVA - (FeSi - 14,000 TPA / FeMn - 40,000 TPA / SiMn -28,000 TPA / FeCr - 30,000 TPA / Pig Iron - 48,000 TPA), Brick Manufacturing Unit – 60,000 Bricks/Day, Briquetting Plant 200 Kg./Hr.,

Power generation through WHRB of (4 x 7.5 MW), 30 MW and through FBC based Power Plant of (1 x 10 MW)- 10 MW.

43.12.4 The proposal has been considered during the 43rd meeting of the EAC for Industry-I sector held on 4th - 5th September, 2023. The deliberations and recommendations of EAC are as follows:

Deliberation by the Committee

43.12.5 The Committee noted the following:

1. The PP/Consultant presented the drone video of the project site and the EAC is of the opinion that drone videography does not give complete picture of the site. The PP/Consultant is advised to provide the complete drone survey of the proposed project site.
2. On persual of kml file, the EAC observed that there are habitations adjacent to the project site. Also there is a school and other sensitive areas nearby. PP has reported that nearest habitation Badiadih Village present in South East direction at a distance of 0.31 Kms from the project site. Also, schools i.e; Govt. Secondary School at Badiadih is present in South direction at a distance of 0.36 kms and Govt. Higher Secondary School, Madku is present in South direction at a distance of 0.87 Kms kms from the project site. Further, The Leprosy Mission Hospital, Baitalpur is present in the West direction at a distance of 2.2 kms from the project site.
3. The EAC also noted that Linjua Nala is adjacent to the proposed project site in the West and Shivnath River is at a distance of 0.7 km in SE of the project site. PP needs to obtain NOC from the irrigation department for setting up the project in the vicinity of the river in pursuance to Ministry's O.M.
4. The EAC noted that project proponent has not undertaken alternate site analysis with proper spirit. Although the PP came with three alternate site analysis but proper study has not been carried out by PP. The EAC opined that the alternative site analysis is aimed to select the best site in terms of having least adverse social & environmental impacts due to the project apart from other parameters such as technical feasibility and economic & financially viability. Thus, the EAC advised PP/Consultant to undertake alternate site analysis Properly and submit the revised application fulfilling all the criteria of the application in pursuance to the provisions of EIA Notification, 2006.
5. The EAC noted that total land envisaged for the proposed project area is 25.757 ha (63.645 Acres) out of which, 22.862 Ha. is registered in the name of company and agreement has been entered with land owners for remaining 2.895 Ha. of land. Taking into consideration Ministry's O.M. vide F.No. 22-76/2014-IA-III dated 07.10.2014 which reads as *"While full acquisition of land may not be a prerequisite for the consideration of the case for EC, there should be some credible document to show the status of land acquisition w.r.t project site when the case is brought before the concerned EAC/SEAC for appraisal....."* EAC is of the opinion that, credible document showing the status of land acquisition shall be required at the time of appraisal in pursuance to the said O.M. The PP shall also submit consent of the land owners ready to give their land for the said project.

6. In view of the same, the Committee is of the view that the instant proposal is incomplete and needs to be revised.

Recommendations of the Committee

43.12.6 In view of the foregoing and after deliberations, the Committee recommended that **proposal to be returned in its present form** to address the shortcomings enumerated at para no. 43.12.6 above.

***

Re-Consideration of Environmental Clearance Proposal [Parivesh 1.0]

Agenda No. 43.13

43.13 Establishment of 1 x 9 MVA Ferro Alloys plant (Silicon Manganese–14400 TPA or Ferro Manganese–25200 TPA or Ferro Chrome–15000 TPA or Ferro Silicon–7000 TPA or Pig Iron –25200 TPA) in existing 7.5 MW Biomass based Power Plant premises (Forward Integration) in existing plant premises by M/s Real Power Private Limited, located at Khamhardih Village, Pathariya Tehsil, Mungeli District, Chhattisgarh –Consideration of Environmental Clearance.

[Proposal No. IA/CG/IND/142231/2017; File No. J-11011/347/2017-IA.II(I)]
[Consultant: Pioneer Enviro Laboratories and Consultants Pvt. Ltd.; Valid upto 16.12.2022]

43.13.1 M/s. Real Power Private Limited has made online application vide proposal no. IA/CG/IND/142231/2017 dated 02/09/2020 along with copy of EIA/EMP report and Form 2 seeking Environment Clearance (EC) under the provisions of the EIA Notification, 2006 for the project mentioned above. The proposed project activity is listed at Sl. No. 3(a) Metallurgical industries (ferrous & non-ferrous) under Category "A" of the schedule of the EIA Notification, 2006 and appraised at Central Level.

43.13.1 Name of the EIA consultant: M/s. Pioneer Enviro Consultants Private Limited [List of ACOs with their Certificate / Extension Letter No: NABET/EIA/2225/RA 0282 valid till 21.09.2025, as on September 6, 2023].

Details submitted by Project proponent

43.13.2 The details of the ToR are furnished as below:

Date of application	Consideration	Details	Date of accord	ToR Validity
22/06/2017	20th meeting held on 10-12th July, 2017	Terms of Reference	20/07/2017	19/07/2022

43.13.3 The proposed expansion of Steel Plant of M/s. Real Power Private Limited is located at Khamhardih Village, Pathariya Tehsil, Mungeli District, Chhattisgarh. Presently, the project proponent is operating 7.5 MW Biomass based power plant. It is proposed to establish 1 x 9 MVA Ferro Alloys plant (Silicon Manganese–14400 TPA or Ferro Manganese–25200 TPA or Ferro Chrome–15000 TPA or Ferro Silicon–7000 TPA or Pig Iron –25200 TPA) in existing 7.5 MW Biomass based Power Plant premises (Forward Integration) in existing plant premises.

43.13.4 Environmental Site Settings:

<table>
<tr><th>S.No.</th><th>Particulars</th><th>Details</th><th>Remarks</th></tr>
<tr><td>i.</td><td>Total land</td><td>26.82 acres of land (10.85 ha)</td><td>Land use: Industrial land;</td></tr>
<tr><td>ii.</td><td>Land acquisition details as per MoEF&CC O.M. dated 7/10/2014</td><td>The land is in possession of the management.</td><td>-</td></tr>
<tr><td>iii.</td><td>Existence of habitation & involvement of R&R, if any.</td><td>Project site: No habitation exists in the plant site
Study Area
<table>
<tr><th>Habitation</th><th>Distance</th><th>Direction</th></tr>
<tr><td>Atarra Village</td><td>0.65 kms.</td><td>E</td></tr>
</table></td><td>-</td></tr>
<tr><td>iv.</td><td>Latitude and Longitude of all corners of the project site.</td><td>
<table>
<tr><th>S.No.</th><th>Point</th><th>Coordinates</th></tr>
<tr><td>1.</td><td>Point # 1</td><td>21°56'27.19"N 81°59'13.16"E</td></tr>
<tr><td>2.</td><td>Point # 2</td><td>21°56'29.46"N 81°59'22.92"E</td></tr>
<tr><td>3.</td><td>Point # 3</td><td>21°56'22.91"N 81°59'23.16"E</td></tr>
<tr><td>4.</td><td>Point # 4</td><td>21°56'25.41"N 81°59'28.16"E</td></tr>
<tr><td>5.</td><td>Point # 5</td><td>21°56'22.79"N 81°59'29.11"E</td></tr>
<tr><td>6.</td><td>Point # 6</td><td>21°56'22.79"N 81°59'31.37"E</td></tr>
<tr><td>7.</td><td>Point # 7</td><td>21°56'25.41"N 81°59'30.42"E</td></tr>
<tr><td>8.</td><td>Point # 8</td><td>21°56'24.10"N 81°59'33.63"E</td></tr>
<tr><td>9.</td><td>Point # 9</td><td>21°56'28.62"N 81°59'35.29"E</td></tr>
<tr><td>10.</td><td>Point # 10</td><td>21°56'32.55"N 81°59'31.49"E</td></tr>
<tr><td>11.</td><td>Point # 11</td><td>21°56'34.81"N 81°59'33.03"E</td></tr>
<tr><td>12.</td><td>Point # 12</td><td>21°56'35.29"N 81°59'30.65"E</td></tr>
<tr><td>13.</td><td>Point # 13</td><td>21°56'34.45"N 81°59'24.82"E</td></tr>
<tr><td>14.</td><td>Point # 14</td><td>21°56'31.83"N 81°59'22.09"E</td></tr>
<tr><td>15.</td><td>Point # 15</td><td>21°56'29.10"N 81°59'18.40"E</td></tr>
<tr><td>16.</td><td>Point # 16</td><td>21°56'28.03"N 81°59'12.93"E</td></tr>
</table>
</td><td>-</td></tr>
</table>

S.No.	Particulars	Details	Remarks
v.	Elevation of the project site	245 m above mean sea level	-
vi.	Involvement of Forest land if any.	No forestland is involved.	-
vii.	Water body (Rivers, Lakes, Pond, Nala, Natural Drainage, Canal etc.) exists within the project site as well as study area	**Project site:** No **Study area** : Maniyari River – 0.05 Kms., Agar River – 5.5 Kms., Shivnath river – 8.0 Kms. exists within 10 Km. radius of the plant site. Copy of the letter issued by Executive Engineer, Maniyari Water Resources Division, Mungeli district, Chhattisgarh vide dated 20th June 2022 is submitted. The letter confirms the following: • Plant site of M/s. Real Power Pvt. Ltd. is not falling within the flood plain of Maniyari River (In accordance with O.M. issued by MoEF&CC vide dated 14th February 2022). • Map showing spread of 5 years, 10 years, 15 years, 20 years duly depicting the highest flood along with scale. • HFL of Maniyari river near to the plant based on last 20 years data is 242.00 M. • Elevation of the plant site is 245 M. Hence there will be no flood water entering into the plant site of Real Power Pvt.Ltd. **Mitigation measures:** • Compound wall of 1.5 m already exists on the Maniyari river side. Photograph showing the same is submitted. • Ferro Alloy plant is situated at a distance of 340 m from the Maniyari river. • Greenbelt of 30 m width will be developed towards Maniyari river side (Eastern direction).	
viii.	Existence of ESZ/ ESA/ national park/ wildlife sanctuary/ biosphere reserve/ tiger reserve/ elephant reserve etc. if any within the study area	Nil	-

43.13.5 It is reported that existing plant doesn't have Environment Clearance. CTE has been obtained from CECB for existing 7.5 MW Biomass based Power Plant vide order No. 4874/TS/CECB/2004 Raipur dated 27/11/2004. CTE has been obtained prior to EIA Notification dated 14th September, 2006. As per EIA notification, 1994 greenfield project does not require Environment Clearance if the capital investment is less than Rs. 100 Crores. Hence, EC was not applicable for the existing plant as per EIA Notifications 1994& 2006. It has been reported that the Existing plant is having CTO valid 30.11.2024.

43.13.6 Implementation status of the existing CTE

S.No.	Unit (Product)	CTE permitted	Implementation Status
1.	Biomass based Power Plant	7.5 MW	In operation

43.13.7 The unit configuration and capacity of proposed project is given as below:

S. No.	Unit	Existing	Proposed expansion	After expansion
1	Biomass based Power Plant	7.5 MW	-	7.5 MW
2	Ferro Alloys Plant (1 x 9 mVA)	---	Silicon Manganese (SiMn) – 14400 TPA or Ferro Manganese (FeMn) – 25200 TPA or Ferro Chrome (FeCr) – 15000 TPA or Ferro Silicon (FeSi) –7000 TPA or Pig Iron – 25200 TPA	Silicon Manganese (SiMn) – 14400 TPA or Ferro Manganese (FeMn) – 25200 TPA or Ferro Chrome (FeCr) – 15000 TPA or Ferro Silicon (FeSi) – 7000 TPA or Pig Iron – 25200 TPA
Note: 100 Kg/Hr. Capacity Briquetting plant will be established for effective dust management.				

43.13.8 The details of the raw material requirement for the proposed project along with its source and mode of transportation is given as below:

S.No.	RAW MATERIAL	QUANTITY (TPA)	SOURCE	DISTANCE (w.r.t Plant)	MODE OF TRANSPORT
For Ferro Silicon					
1	Quartz	8450	Chhattisgarh / Andhra Pradesh	100 – 300 Kms.	By Road (Covered trucks)
2	LAM coke	2800	Chhattisgarh / Bihar Imported from Australia, China	~ 100 Kms. ~ 480 Kms. (from Vizag Port)	By Road (Covered trucks) From Vizag Port by Road (Covered Trucks)
3	MS Scrap	175	Raipur	~ 100 Kms.	By Road (Covered trucks)
4	Electrode paste	420	Maharashtra / West Bengal	650 – 950 Kms.	By Road (Covered trucks)
For Ferro Manganese					
1	Manganese Ore	46260	Balaghat (M.P.) Imported from South Africa	~ 500 Kms. ~ 480 Kms. (from Vizag Port)	By Road (Covered Trucks) From Vizag Port by Road (Covered Trucks)
2	LAM coke	26480	Chhattisgarh / Bihar Imported from Australia, China	~ 100 Kms. ~ 480 Kms. (from Vizag Port)	By Road (Covered trucks) From Vizag Port by Road (Covered Trucks)

S.No.	RAW MATERIAL	QUANTITY (TPA)	SOURCE	DISTANCE (w.r.t Plant)	MODE OF TRANSPORT
3	MS Scrap	1790	Raipur	~ 100 Kms.	By Road (Covered trucks)
4	Electrode Paste	5240	Maharashtra / West Bengal	600 – 900 Kms.	By Road (Covered trucks)
For Silico Manganese					
1	Manganese Ore	15,850	Balaghat (M.P.) Imported from South Africa	~ 500 Kms. ~ 480 Kms. (from Vizag Port)	By Road (Covered Trucks) From Vizag Port by Road (Covered Trucks)
2	Mn. Slag	9,000	In house generation	---	By Conveyers
3	Quartz	3,900	Chhattisgarh / Andhra Pradesh	100 – 300 Kms.	By Road (Covered trucks)
4	LAM coke	1,600	Chhattisgarh / Bihar Imported from Australia, China	~ 100 Kms. ~ 480 Kms. (from Vizag Port)	By Road (Covered trucks) From Vizag Port by Road (Covered Trucks)
For Ferro Chrome					
1	Chrome ore	40,000	Sukinda (Odisha) Import (Indonesia)	~ 400 Kms. ~ 480 Kms. (from Vizag Port)	By Road (Covered Trucks) From Port by Road (Covered Trucks)
2	LAM coke	15,750	Chhattisgarh / Bihar Imported from Australia, China	~ 100 Kms. ~ 480 Kms. (from Vizag Port)	By Road (Covered trucks) From Vizag Port by Road (Covered Trucks)
For Pig Iron					
1	Iron Ore / Sinter	46,000	Barbil, Odisha NMDC, Chhattisgarh	~ 500 Kms.	By Road (Covered trucks)
2	LAM Coke	21,500	Chhattisgarh / Bihar Imported from Australia, China	~ 100 Kms. ~ 480 Kms. (from Vizag Port)	By Road (Covered trucks) From Vizag Port by Road (Covered Trucks)
3	Limestone	3,000	Chhattisgarh	~ 300 Kms.	By Road (Covered trucks)
4	Quartz	1,500	Chhattisgarh / Andhra Pradesh	100 – 300 Kms.	By Road (Covered trucks)

43.13.9 Water required in the existing plant is 490 KLD and is being sourced from Khamhardih anicut of Maniyari river. Water required for the proposed expansion project will be 30 KLD and same will also be sourced from Khamhardih anicut of Maniyari river. Total water requirement after expansion will be 520 KLD. This includes Make-up water for Power Plant, Ferro Alloys plant and Domestic water. Existing plant has already obtained Water drawl permission to draw 0.182 MCM (551 KLD) of water from Khamhardih anicut of Maniyari River from Water Resource

Department, Raipur, Chhattisgarh, vide letter no. 7070/354/ WR/TS/05/IWS/D-4, Raipur Dt. 13/09/2011.

43.13.10 Total power required for the existing unit & for the proposed expansion units will be 11.75 MW which will be partly met from the existing 7.5 MW biomass-based power (net 6.75 MW will be available from power plant after deducting Aux. consumption) Balance power of 5 MW will be sourced from Chhattisgarh State Power Generation Company Limited (CSPGCL).

43.13.11 Baseline Environmental Studies:

Baseline data collected during 1st October 2017 to 31st December 2017 and further collected (Revalidation) from 1st October 2022 to 31st December 2022 as the data is 5 years old. The present baseline data collected is compared with the earlier baseline data.

<table>
<tr><td>Period</td><td colspan="5">1st October 2017 to 31st December 2017 & 1st October 2022 to 31st December 2022(Revalidation).</td></tr>
<tr><td>AAQ parameters at 8 locations</td><td colspan="5"><table>
<tr><th>S.No.</th><th>Parameter</th><th></th><th>Concentration (1st Oct 2017 to 31st Dec 2017)</th><th>Concentration (1st Oct 2022 to 31st Dec 2022)</th></tr>
<tr><td>1</td><td>PM2.5</td><td>:</td><td>19.7 to 37.4 µg/m^3</td><td>22.1 to 41.6 µg/m^3</td></tr>
<tr><td>2</td><td>PM10</td><td>:</td><td>32.9 to 63.2 µg/m^3</td><td>35.3 to 66.5 µg/m^3</td></tr>
<tr><td>3</td><td>SO2</td><td>:</td><td>8.3 to 19.6 µg/m^3</td><td>9.2 to 20.8 µg/m^3</td></tr>
<tr><td>4</td><td>NOX</td><td>:</td><td>9.5 to 28.3 µg/m^3</td><td>10.3 to 29.4 µg/m^3</td></tr>
<tr><td>5</td><td>CO</td><td>:</td><td>525 to 1150 µg/m^3</td><td>542 to 1225 µg/m^3</td></tr>
</table></td></tr>
<tr><td>AAQ modelling</td><td colspan="5"><u>AAQ modelling data for 1st October 2023 to 31st December 2023 data</u>
$PM_{2.5}$ = 0.24 µg/m^3 (due to plant) (1400 m in SW)
$PM_{2.5}$ = 0.20 µg/m^3 (due to vehicular)
PM_{10} = 0.41 µg/m^3 (due to plant) (1200 m in SW)
PM_{10} = 0.50 µg/m^3 (due to vehicular)
SO_2 = Nil
NOx = 2.1 µg/m^3 (due to plant) (1500 m in SW)
NOx = 3.1 µg/m^3 (due to vehicular)
CO = 1.31 µg/m^3 (due to plant)
CO = 2.3 µg/m^3 (due to vehicular)</td></tr>
<tr><td>Ground water quality at 8 locations</td><td colspan="5"><table>
<tr><th>S.No.</th><th>Parameter</th><th></th><th>Range of Concentration (1st Oct 2017 to 31st Dec 2017)</th><th>Range of Concentration (1st Oct 2022 to 31st Dec 2022)</th></tr>
<tr><td>1.</td><td>pH</td><td>:</td><td>7.1 to 7.9</td><td>7.0 to 7.8</td></tr>
<tr><td>2.</td><td>TSS (in mg/l)</td><td>:</td><td>1.1 to 2.5</td><td>0.46 to 1.04</td></tr>
<tr><td>3.</td><td>TDS (in mg/l)</td><td>:</td><td>264 to 471</td><td>249 to 501</td></tr>
<tr><td>4.</td><td>Total Hardness (in mg/l)</td><td>:</td><td>187 to 356</td><td>171 to 322</td></tr>
<tr><td>5.</td><td>Chlorides (in mg/l)</td><td>:</td><td>118 to 210</td><td>125 to 194</td></tr>
<tr><td>6.</td><td>Fluoride (in mg/l)</td><td>:</td><td>0.25 to 0.42</td><td>0.31 to 0.48</td></tr>
<tr><td>7.</td><td>Iron (in mg/l)</td><td>:</td><td>0.020 to 0.032</td><td>0.016 to 0.029</td></tr>
</table></td></tr>
</table>

Surface water quality at 5 locations

S.No.	Parameter	:	Range of concentration (1st Oct 2017 to 31st Dec 2017)	Range of concentration (1st Oct 2022 to 31st Dec 2022)
1	pH	:	7.3 to 7.9	7.5 to 8.0
2	DO (in mg/l)	:	4.2 to 5.5	4.4 to 6.0
3	BOD (in mg/l)	:	1.5 to 2.9	1.8 to 2.8
4	COD (in mg/l)	:	10 to 19	12 to 18
5	TDS (in mg/l)	:	131 to 207	149 to 222
6	Sulphates (in mg/l)	:	46 to 78	55 to 89
7	Chlorides (in mg/l)	:	65 to 98	73 to 114
All the parameters in the water samples collected are in conformity with BIS: 2296				

Noise levels

The equivalent day-night noise levels in the study zone are ranging from **45.4 dBA to 59.6 dBA** during 1st October 2017 to 31st December 2017.
The equivalent day-night noise levels in the study zone are ranging from **46.4 dBA to 60.6 dBA** during 1st October 2022 to 31st December 2022.

Traffic assessment study findings

Traffic study has been conducted at National Highway # 200 which is 3.6 Kms. (by road) from the plant site.
Transportation of raw material, fuel & finished product will be done 100 % by road.
Existing PCU is 15130 PCU/day on NH # 200 and existing Level of Service (LOS) is :

Road	V (Volume in PCU/day)	C (Capacity in PCU/day)	Proposed V/C Ratio	LOS
NH # 200	15,130	20,000	0.75	D

PCU load after proposed project will be 15,130 PCU/day + 276 PCU/day and Level of Service (LOS) will be

Road	V(Volume in PCU/day)	C(Capacity in PCU/day)	Proposed V/C Ratio	LOS
NH # 200	15,406	20,000	0.77	D

Level of Service (LOS) of the Road as per IRC 73: 1980

V/C	LOS	Performance
0.0 – 0.2	A	Excellent
0.2 – 0.4	B	Very Good
0.4 – 0.6	C	Good

		0.6 – 0.8	D	Fair/ Average
		0.8 – 1.0	E	Poor
		1.0 & Above	F	Very Poor
	Note: The NH # 200 has been expanded to 4 lane road with divider, accordingly the capacity of NH will be 30,000 PCU/day. Accordingly, V/C ratio will be 15,406 / 30,000 = 0.51. **LOC will be 'C', which implies GOOD.**			
Flora and fauna	No Schedule I species within study area			

43.13.12 The details of solid and hazardous waste generation along with its mode of treatment/disposal is furnished as below:

S. No.	Waste	Quantity (TPA)		Method of disposal
		Existing	Proposed	
1	Ash from Biomass Power Plant	13,200	---	Ash generated from the existing Biomass Power Plant is being utilized in the existing Brick Manufacturing unit, given to other brick manufacturing units and also is being given to M/s. Laxman Cement Pvt. Ltd.
2	Slag from Ferro Manganese Manufacturing Process	---	20,000	will be reused in manufacture of SiMn as it contains high SiO_2 and Silicon.
3	Slag from Ferro Silicon Manufacturing Process	---	980	will be given to Cast iron foundries
4	Slag from Silico Manganese Manufacturing Process	---	14,000	will be given to M/s. Shreeji Infrastructure India Pvt. Ltd. for Road construction / will be given to M/s. Ambuja Cement for slag cement manufacturing.
5	Slag from Ferro Chrome Manufacturing Process	---	13,500	Will be processed in Zigging plant for Chrome recovery. After Chrome recovery, the left-over slag will be analysed for Chrome content through TCLP test, if the Chrome content in the slag is within the permissible limits, then it will be utilised for Road laying /brick manufacturing. It will be given to M/s. Steel Trading Corporation. If Chrome content exceeds the permissible limits, it will be sent to nearest TSDF.
6	Slag from Pig Iron manufacturing process	---	14,400	will be given to M/s. Ambuja Cement for slag cement manufacturing.
7	Dust from Bagfilters of SEAF and during tapping	---	6,720	It will be used in Briquetting Plant (Proposed now)

43.13.13Public Consultation:

Date of advertisement	6th October 2019
Name of newspapers	Local newspaper (Hindi) "NAVBHARAT" Bilaspur

	National newspaper (English) "THE TIMES OF INDIA" New Delhi
Date on which Public Hearing conducted	8th November 2019
Venue	Premises of Government Primary School, Khamhardih Village, Pathariya Tehsil, Mungeli District, Chhattisgarh
Attended by	Additional Collector
Issues are	• Construction of entrance gate and renovation of Mahamaya Temple at Village Rambod • RO plant for drinking water, • Road widening & repairing, • Employment • Pollution • Support will be given to sports activities

Action Plan as per Ministry's O.M. dated 30/09/2020

S.NO.	MAJOR ACTIVITY HEADS		YEAR OF IMPLEMENTATION			TOTAL EXPENDITURE (Rs. in Lakhs)
			1st Year (Rs. in Lakhs)	2nd Year (Rs. in Lakhs)	3rd Year (Rs. in Lakhs)	
Based on Public Hearing issues						
1						
	i) Construction of entrance gate and renovation of Mahamaya Temple	Physical No. & village	1 no. in Rambod	---	---	13
		Budget in Lakhs	13.0	---	--	
	ii) Mineral water plants	Physical Nos. & village	2 nos. in Rambod (v)	1 no. Khamhardih (v)	---	9.0
		Budget in Lakhs	6.0	3.0	---	
	iii) Support for sports activities	Physical Nos. & village	---	Rambod (v)	---	2.0
		Budget in Lakhs	---	2.0	---	
	iv) Avenue plantation along both sides of approach road from Rambod village and Plant site	Physical Nos. & village	---	Rambod (v)	---	2.0
		Budget in Lakhs	---	2.0	---	
	Total					**26.0**

43.13.14 The capital cost of the expansion project is Rs. 13.0 Crores and the capital cost for environmental protection measures is proposed as Rs. 2.0 Crores. The annual recurring cost towards the environmental protection measures is proposed as Rs. 0.316 Crores. The employment generation

from the proposed expansion project is 40 direct & 135 Indirect. The details of cost for environmental protection measures is as follows:

S.No.	Item	Capital Cost (Rs.in Lakhs)	Recurring Cost / Annum (Rs.in Lakhs)
1	Air Emission Management		
	• 4th hole Extraction systems with Bag filters	65.0	10.0
	• Chimney	25.0	---
	• Water Sprinklers	5.0	0.1
2	Wastewater Management • ETP (General)	5.0	1.0
3	Solid waste Management		
	• Slag Disposal	10.0	---
	• Fe-Cr recovery & its disposal	10.0	5.0
	• Municipal solid waste storage & disposal	--	2.0
	• Briquetting Plant	20.0	---
4	Greenbelt development, RWH etc.	5.0	2.5
5	Environmental Monitoring		6.0
	• AAQMS	40.0	
	• CEMS	5.0	
6	Occupational Health & Safety	10.0	5.0
TOTAL		**200.0**	**31.6**

43.13.15 3.83 ha (9.46 acres) of Greenbelt is being maintained in existing plant premises which is about 33% of the total area. Till date total no. of plants planted are 9350 no. and with survival rate of 90%, 8490 nos. of plant exist in the plant premises. 2500 nos. of plant/hectare will be maintained in the existing plant premises, hence additionally 1500 nos. of plant will be planted within 1 year from the date of accord of EC. 10 to 20 m wide greenbelt will be developed all around the plant**.** Local DFO will be consulted in developing the green belt. The tree species to be selected for the plantation are pollutant tolerant, fast growing, wind firm, deep rooted. A three-tier plantation is proposed comprising of an outer most belt of taller trees which will act as barrier, middle core acting as air cleaner and the innermost core which may be termed as absorptive layer consisting of trees which are known to be particularly tolerant to pollutants.

43.13.16 It has been reported by PP that, there is no violation under EIA Notification, 2006/court case/show cause/direction related to the project under consideration.

Certified Compliance report from SPCB

43.13.17 The status of the compliance report of conditions in earlier CTO was issued by Chhattisgarh Environment Conservation Board (CECB), Chhattisgarh vide letter No. 1804/RO/CECB/2019 dt. 11.09.2019. The Regional Office, CECB has visited the Plant site on 07.09.2019. As per the report all conditions have been complied.

43.13.18 The proposal was initially considered in the 23rd meeting of the Re-constituted EAC (Industry-I) held during 28-30th September, 2020 wherein the Committee deferred the proposal on account of technical shortcomings. The deliberations and recommendations of the EAC are as follows:

Deliberations by the Committee (EAC during 28-30th September, 2020)

43.13.19 The Committee noted the following:

1. Unit is located only 50 meters away from Maniyari River bank. However, the impact on the riverine ecology and its mitigation measures has not been enumerated in the EIA report.
2. Committee also noted the provisions of River flood plain zones and other related articles and was of considered view that in any circumstances flood plain of the river should not be allowed to be encroached upon.
3. No information has been furnished with respect to the High Flood Line of Maniyari River.
4. Pet-coke is proposed to be used in the furnace.
5. Time bound action plan for green belt development in 3.83 ha with a density of 2500/ha has not been submitted.

Recommendations of the Committee (EAC during 28-30th September, 2020)

43.13.20 In view of the foregoing and after deliberations, the Committee deferred the consideration of the proposal cited above and sought the following additional information.

- Impact of air pollution on riverine ecology shall be submitted.
- Highest Flood, 5 year & 10 year flood discharge along with flood level of the river Maniyari and its impact on the unit along with its mitigation measures shall be submitted. Spread of 5 year, 10 year and highest flood may be depicted on a map of legible scale.
- Undertaking shall be submitted stating that no pet coke shall be used in the furnace.
- Time bound action plan for green belt development in 3.83 ha with a density of 2500/ha shall be submitted.

43.13.21 The proponent submitted the ADS reply vide letter dated 8th September 2022 uploaded on PARIVESH on 8th September 2022. Point-wise reply of ADS is given as below.

S. No.	Information sought	Reply by PP
i.	Impact of air pollution on riverine ecology shall be submitted	• Maniyari river is situated at a distance of 50 m from the existing plant boundary. • Ferro Alloys plant will be located at 340 m from Maniyari river. PP will be adopting the following air emission control systems/ measures in the proposed Ferro Alloy manufacturing unit: • Dust suppression system will be provided at the unloading areas.

S. No.	Information sought	Reply by PP
		• Conveyers will be covered. • The emissions within the Submerged Electric Arc Furnace will be extracted through 4th hole fume extraction system and will be treated in bagfilters to bring down the particulate emission to within 30 mg/Nm^3. • The above flue gases after treatment in bagfilters will be discharged into the atmosphere through a stack of 30m height. • Pucca internal roads to prevent fly off due to vehicular movement. • Water sprinklers will be provided on both sides of the internal road. • Wheel washing facility will be provided at entry and exit gates. • The Ferro Alloy unit will be located at a distance of 340 mfrom the Maniyari river. • Width of the greenbelt on Maniyari river side (Eastern direction) is 30 m. Plant layout showing the width of greenbelt as 30 m towards Maniyari river is submitted. • Interlocking system will be provided to APCS and whenever emission exceeds the stipulated standard, raw material feed to the unit will be stopped and there will be no production till APCS is rectified.
ii.	Highest Flood, 5 year &10-year flood discharge along with flood level of the river Maniyari and its impact on the unit along with its mitigation measures shall be submitted. Spread of 5-year, 10 year and highest flood may be depicted on a map of legible scale.	Copy of the letter issued by Executive Engineer, Maniyari Water Resources Division, Mungeli district, Chhattisgarh vide dated 20th June 2022 is submitted. The letter confirms the following: • Plant site of M/s. Real Power Pvt. Ltd. is not falling within the flood plain of Maniyari River (In accordance with O.M. issued by MoEF&CC vide dated 14th February 2022). • Map showing spread of 5 years, 10 years, 15 years, 20 years duly depicting the highest flood along with scale. • HFL of Maniyari river near to the plant based on last 20 years data is 242.00 M. • Elevation of the plant site is 245 M. Hence there will be no flood water entering into the plant site of Real Power Pvt. Ltd. *Mitigation measures:* • Compound wall of 1.5 m already exists on the Maniyari river side. Photograph showing the same is submitted. • Ferro Alloy plant is situated at a distance of 340 m from the Maniyari river. • Greenbelt of 30 m width will be developed towards Maniyari river side (Eastern direction).
iii.	Undertaking shall be submitted stating that no pet coke shall be used in the furnace	PP confirms that they will not use Pet coke in Submerged Electric Arc Furnace to produce Ferro Alloys.

S. No.	Information sought	Reply by PP
iv.	Time bound action plan for green belt development in 3.83 ha with a density of 2500/ha shall be submitted.	• Total plant area is 10.86 Ha. (26.82 acres). • 1/3rd of total area i.e. 3.83 Ha. (9.46 Acres) of Greenbelt will be maintained in the plant premises. • 9.46 Acres of greenbelt is already been developed. 10 m wide greenbelt is being maintained all around the plant. • In the existing plant 8500 nos. of plants are existing now. • Additional 1500 nos. of plants will be planted within one year of implementation of expansion. • Total plantation after expansion will be 10,000 nos. @ 2500 per Ha.

43.13.22 Based on the above information, the proposal was re-considered in the 14th meeting of the EAC for Industry-I sector held on 29-30th September, 2022 wherein the EAC deferred the proposal due to technical shortcomings. The deliberations and recommendations made by the EAC are as follows:

Deliberations by the Committee (EAC during 29-30th September, 2022)

The Committee noted the following:

1. M/s. Real Power Private Limited obtained ToR on 20.07.2017 and baseline data was collected during 1st October 2017 to 31st December 2017. The EAC noted that PP applied for EC on 02.09.2020. The proposal was initially considered in the EAC meeting held during 28-30th September, 2020 wherein the Committee deferred the proposal on account of technical shortcomings. However, PP has submitted the ADS reply after almost two years i.e. on 8th September 2022. As per the Ministry's O.M. vide F. No. IA3-22/10/2022-IA.III [E 177258] dated 08.06.2022, para 6 (iii) states that the baseline data shall not be more than three years old at the time of submission of application for consideration of EC. Since, in this case though at the time of submission of EC application, the baseline data was valid, however, PP has consciously delayed the proposal by delayed submission of ADS reply by Two Years. The EAC opined that baseline data is almost 5 years old at present, and during this period the baseline scenario at the project site might have changed. Thus, EAC is of the view that for validation of the old baseline data, fresh baseline data of 3 months shall be collected and compared with the old data and accordingly revise the Report.
2. The project proponent informed during the meeting that due to change in management of the company there was a delay in submission of ADS reply. However, the project proponent did not report the same to the Ministry at the time when change in management of the company took place. In this context, PP shall upload/submit the documents in this regard.
3. The nearest habitation to plant is Atarra Village which is at distance of 0.65 km in East direction. Project Proponent shall submit environmental safeguard measures that will be undertaken to minimise the impact on the habitation on the inhabitants.

4. Maniyari River is very close to the project site at distance of 50 m. Also, Agar River – 5.5 km and Shivnath river – 8.0 km also exists within 10 km radius of the plant site. A robust and full proof Drainage Conservation scheme to protect the natural drainage and its flow parameters; along with Soil conservation scheme and multiple Erosion control measures shall be prepared and submitted. PP is advised to plant locally grown tress along the banks of Maniyari river for 1-2 kms which is just 50 meters away from the plant side. This may be helpful to prevent soil erosion and increase soil fertility and also helps in flood control.

5. PP shall undertake village adoption and formulate Village Adoption program consisting of need-based community development activities, shall be prepared to develop them into model villages. PP shall submit commitment alongwith name of the villages to be adopted. Action plan submitted to address the PH issues and socio-economic development of the nearby villages shall also be revised and submitted.

Recommendations of the Committee (EAC during 29-30th September, 2022):

In view of the foregoing and after detailed deliberations, the committee recommended to defer the proposal due to certain deficiencies in the proposal and sought requisite information on the points referred at para above. The proposal shall be considered after submission of requisite information.

43.13.2 The proponent submitted the ADS reply vide letter dated 03.08.2023 uploaded on Parivesh on 03.08.2023. Point wise reply of ADS is given as below:

<table>
<tr><th>S.No.</th><th>ADS Point</th><th>Reply by the PP</th></tr>
<tr><td>1.</td><td>As per the Ministry's O.M. vide F. No. IA3-22/10/2022-IA.III [E 177258] dated 08.06.2022, para 6 (iii) states that the baseline data shall not be more than three years old at the time of submission of application for consideration of EC. Since, in this case though at the time of submission of EC application, the baseline data was valid, however, PP has consciously delayed the proposal by delayed submission of ADS reply by Two Years. The EAC opined that baseline data is almost 5 years old at present, and during this period the baseline scenario at the project site might have changed. Thus, EAC is of the</td><td>Baseline data collected (Revalidation) from 1st October 2022 to 31st December 2022. The present baseline data collected is compared with the earlier baseline data and the same is incorporated in Chapter - 3 of Revised EIA report. The following is the comparison of Ambient Air Quality for the period 1st October 2022 to 31st December 2022 with 1st October 2017 to 31st December 2017.
<table>
<tr><th>S.No.</th><th>Parameter</th><th></th><th>Concentration (1st Oct 2017 to 31st Dec 2017)</th><th>Concentration (1st Oct 2022 to 31st Dec 2022)</th></tr>
<tr><td>1.</td><td>$PM_{2.5}$</td><td>:</td><td>19.7 to 37.4 $\mu g/m^3$</td><td>22.1 to 41.6 $\mu g/m^3$</td></tr>
<tr><td>2.</td><td>PM_{10}</td><td>:</td><td>32.9 to 63.2 $\mu g/m^3$</td><td>35.3 to 66.5 $\mu g/m^3$</td></tr>
<tr><td>3.</td><td>SO_2</td><td>:</td><td>8.3 to 19.6 $\mu g/m^3$</td><td>9.2 to 20.8 $\mu g/m^3$</td></tr>
<tr><td>4.</td><td>NO_X</td><td>:</td><td>9.5 to 28.3 $\mu g/m^3$</td><td>10.3 to 29.4 $\mu g/m^3$</td></tr>
<tr><td>5.</td><td>CO</td><td>:</td><td>525 to 1150 $\mu g/m^3$</td><td>542 to 1225 $\mu g/m^3$</td></tr>
</table>
</td></tr>
</table>

S.No.	ADS Point	Reply by the PP
	view that for validation of the old baseline data, fresh baseline data of 3 months shall be collected and compared with the old data and accordingly revise the Report.	The revalidated baseline data for ambient air is also within the National Ambient Air Quality Standards.
2.	The project proponent informed during the meeting that due to change in management of the company there was a delay in submission of ADS reply. However, the project proponent did not report the same to the Ministry at the time when change in management of the company took place. In this context, PP shall upload/submit the documents in this regard.	M/s. Real Power Private Limited has been taken over by M/s. Seeta Energen Private Limited. Copy of Share Purchase Agreement is submitted.
3.	The nearest habitation to plant is Atarra Village which is at distance of 0.65 km in East direction. Project Proponent shall submit environmental safeguard measures that will be undertaken to minimise the impact on the habitation on the inhabitants.	**Mitigation measures proposed to be undertaken to minimise the impact on habitation** Atarra habitation is at a distance of 0.65 Kms. in East direction from the plant. • Winds are predominantly blowing from NE to SW. • The emissions within the Submerged Electric Arc Furnace will be extracted through 4th hole fume extraction system and will be treated in bagfilters to bring down the particulate emission to within 30 mg/Nm^3. • The above flue gases after treatment in bagfilters will be discharged into the atmosphere through a stack of 30m height as per CPCB norms. • Pucca internal roads • Water sprinklers will be provided on both sides of the internal roads. • Net resultant GLCs after implementation of present proposal will be within the NAAQS. • All transport vehicles will be with PUC certification. • No effluent will be discharged outside and ZLD will be followed even after implementation of proposed forward integration. • Solid waste will be disposed off as per norms. • Greenbelt width Towards Atarra habitation is 30 to 50 m. • Plantation (500 nos.) will be planted in Atarra village in 2023-24. • 650 Nos. of plants will be planted along the banks of Maniyari river to prevent the soil erosion

S.No.	ADS Point	Reply by the PP
		With the implementation and operation of the aforementioned environment protection measures
4.	Maniyari River is very close to the project site at distance of 50 m. Also, Agar River – 5.5 km and Shivnath river – 8.0 km also exists within 10 km radius of the plant site. A robust and full proof Drainage Conservation scheme to protect the natural drainage and its flow parameters; along with Soil conservation scheme and multiple Erosion control measures shall be prepared and submitted. PP is advised to plant locally grown tress along the banks of Maniyari river for 1-2 kms which is just 50 meters away from the plant side. This may be helpful to prevent soil erosion and increase soil fertility and also helps in flood control	Copy of the letter issued by Executive Engineer, Maniyari Water Resources Division, Mungeli district, Chhattisgarh vide dated 20th June 2022 is submitted. The letter confirms the following: • Plant site of M/s. Real Power Pvt. Ltd. is not falling within the flood plain of Maniyari River (In accordance with O.M. issued by MoEF&CC vide dated 14th February 2022). • Map showing spread of 5 years, 10 years, 15 years, 20 years duly depicting the highest flood along with scale. • HFL of Maniyari river near to the plant based on last 20 years data is 242.00 M. • Elevation of the plant site is 245 M. Hence there will be no flood water entering into the plant site of Real Power Pvt. Ltd Mitigation measures: • Compound wall of 1.5 m already exists on the Maniyari river side. Photograph showing the same is submitted. • Ferro Alloy plant is situated at a distance of 340 m from the Maniyari river. • Greenbelt of 30 m width will be developed towards Maniyari river side (Eastern direction). • As advised by the Hon'ble EAC of MOEF&CC it is assured to provide plantation on the banks of Maniyari river to an extent of 1 km. from the plant. This helps in prevention of soil erosion, helps in flood control. • Run-off calculations and drain size calculations are submitted.
5.	PP shall undertake village adoption and formulate Village Adoption program consisting of need-based community development activities, shall be prepared to develop them into model villages. PP shall submit commitment along with name of the villages to be adopted. Action plan submitted to address the PH issues and socio-economic development of the nearby villages shall also be revised and submitted.	• PP will undertake social & infrastructural developmental activities in Khamhardih Village & Rambod with a budget of Rs. 26 lakhs. • Action plan as per MoEF&CC O.M. dated 30/09/2020 submitted to address the PH issues.

43.13.3 Based on the submission of PP, the proposal has been re-considered during the 43rd meeting of the EAC for Industry-I sector held on 4th - 5th September, 2023. The deliberations and recommendations of EAC are as follows:

Deliberations by the Committee

43.13.4 The Committee noted the following:

1. The instant proposal is proposed to establish 1 x 9 MVA Ferro Alloys plant (Silicon Manganese–14400 TPA or Ferro Manganese–25200 TPA or Ferro Chrome–15000 TPA or Ferro Silicon–7000 TPA or Pig Iron –25200 TPA) in existing 7.5 MW Biomass based Power Plant premises (Forward Integration) in existing plant premises.
2. The EAC, constituted under the provision of the EIA Notification, 2006 comprising Expert Members/domain experts in various fields, examined the proposal submitted by the Project Proponent in desired format along with EIA/EMP reports prepared and submitted by the Consultant accredited by the QCI/ NABET on behalf of the Project Proponent.
3. The EAC noted that the Project Proponent has given an undertaking that the data and information given in the application and enclosures are true to the best of his knowledge and belief and no information has been suppressed in the EIA/EMP reports. If any part of data/information submitted is found to be false/ misleading at any stage, the project will be rejected and Environmental Clearance given, if any, will be revoked at the risk and cost of the project proponent.
4. The Committee noted that the EIA reports are in compliance of the ToR issued for the project, reflecting the present environmental status and the projected scenario for all the environmental components. The Committee deliberated on the proposed mitigation measure towards Air, Water, Noise and Soil pollutions. The Committee suggested that the storage of toxic/explosive raw materials/products shall be undertaken with utmost precautions and following the safety norms and best practices.
5. The total project area is 10.85 ha. This land is under the possession of the company and is industrial in nature.
6. The nearest habitation to plant is Atarra Village which is at distance of 0.65 km in East direction. The EAC is of the opinion that PP shall strictly implement the environmental safeguard measures proposed to minimise the impact on the habitation of the locals.
7. Maniyari River is very close to the project site at distance of 50 m. Also, Agar River – 5.5 km and Shivnath river – 8.0 km also exists within 10 km radius of the plant site. The EAC is of the opinion that water bodies shall not be disturbed. Mitigation measures w.r.t. safeguarding the water bodies shall be strictly implemented.
8. Total water requirement after expansion will be 520 KLD. This includes Make-up water for Power Plant, Ferro Alloys plant and Domestic water. Existing plant has already obtained Water drawl permission to draw 0.182 MCM (551 KLD) of water from Khamhardih anicut of Maniyari River from Water Resource Department, Raipur, Chhattisgarh. The EAC deliberated on the water requirement and found is satisfactory.

9. The Committee has deliberated on the baseline data along with revalidated data and incremental GLC due to the proposed project and found it satisfactory.

10. The PP has submitted that existing greenbelt is in 3.83 ha (9.46 acres) which is about 33% of the total area and is being maintained in existing plant premises. Till date total no. of plants planted are 9350 no. and with survival rate of 90%. 8490 nos. of plant exist in the plant premises. 2500 nos. of plant/hectare will be maintained in the existing plant premises, hence additionally 1500 nos. of plant will be planted within 1 year from the date of accord of EC. The EAC deliberated on the revised greenbelt layout plan along with action plan and the budget earmarked and is of the opinion that PP shall complete the proposed greenbelt development in a period of 1 year.

11. The committee deliberated details of carbon foot prints and carbon sequestration study w.r.t. proposed project and found them to be satisfactory.

12. The Committee also deliberated on the public hearing issues along with revised action plan submitted by the proponent to address the issues raised during the public hearing and found it satisfactory.

13. The EAC also deliberated on the ADS reply of the project proponent and found it satisfactory.

14. The EAC deliberated on the proposal with due diligence in the process as notified under the provisions of the EIA Notification, 2006, as amended from time to time and accordingly made the recommendations to the proposal. The Experts Members of the EAC found the proposal in order and recommended for grant of environmental clearance.

15. The environmental clearance recommended to the project/activity is strictly under the provisions of the EIA Notification 2006 and its subsequent amendments. It does not tantamount/construe to approvals/consent/permissions etc. required to be obtained or standards/conditions to be followed under any other Acts/ Rules/ Subordinate legislations, etc., as may be applicable to the project. The project proponent shall obtain necessary permission as mandated under the Water (Prevention and Control of Pollution) Act, 1974 and the Air (Prevention and Control of Pollution) Act, 1981, as applicable from time to time, from the State Pollution Control Board, prior to construction & operation of the project.

16. The EAC also reviewed the EC conditions (specific and general) pertaining to Industry-I projects and observed that some of the specific conditions stipulated so far in the previously recommended EC projects are common and applicable to most of the projects in general. In view of the same, the General Conditions (in case of EC projects) have been revised through reallocation of these common conditions from specific to General Conditions (in case of EC projects). Accordingly, the instant project is also being stipulated with the modified General conditions.

Recommendations of the Committee:

43.13.5 In view of the foregoing and after detailed deliberations, the committee **recommended** the instant proposal for grant of Environment Clearance under the provisions of EIA Notification,

2006 subject to the stipulation of following specific conditions and general conditions as per the Ministry's Office Memorandum No. 22-34/2018-III dated 9/8/2018 based on project specific requirements:

A. Specific Condition:

i. This Environmental clearance is granted subject to final outcome of Hon'ble Supreme Court of India, Hon'ble High Court, Hon'ble NGT and any other Court of Law, if any, as may be applicable to this project.

ii. The project proponent shall comply with all the environmental protection measures and safeguards proposed in the documents submitted to the Ministry. All the recommendations made in the EIA/EMP in respect of environmental management, and risk mitigation measures relating to the project shall be implemented.

iii. The project proponent shall utilize modern technologies for capturing of carbon emitted and shall also develop carbon sink/carbon sequestration resources capable of capturing more than emitted. The implementation report shall be submitted to the IRO, MoEF&CC in this regard.

iv. The nearest habitation to plant is Atarra Village which is at distance of 0.65 km in East direction. Proponent shall take appropriate environmental safeguard measures to minimise the impact on the habitation of the locals. PP needs to strengthen green belt all around the plant area to reduce the dust pollution. The PP shall also include this location in its environmental monitoring programme.

v. Maniyari River is very close to the project site at distance of 50 m. Also, Agar River – 5.5 km and Shivnath river – 8.0 km also exists within 10 km radius of the plant site. A robust and full proof Drainage Conservation scheme to protect the natural drainage and its flow parameters; along with Soil conservation scheme and multiple Erosion control measures shall be implemented.

vi. The water requirement of 520 KLD shall be obtained from Khamhardih anicut of Maniyari River only after obtaining necessary permission from the Competent Authority.

vii. Three tier Green Belt shall be developed in at least 33% of the project area in a period of 1 year all along the project site of adequate width and tree density shall not be less than 2500 per ha. Survival rate of green belt developed shall be monitored on periodic basis to ensure that damaged plants are replaced with new plants in the subsequent years. PP shall also develop greenbelt in the form of shelter belt comprising of total of 6 rows of 2x2 m plantation with tall trees & broad leaves with thick canopy along with windshield inside the plant premises to act as green barrier for air pollution & noise levels towards Atarra Village. Compliance status in this regard, shall be submitted to concerned Regional Office of the MoEF&CC.

viii. All the commitments made towards socio-economic development of the nearby villages shall be satisfactorily implemented. The action plan based on the social impact assessment study of the project as per the EMP in accordance to the Ministry's OM dated 30.09.2020 amounting to Rs. 0.26 Crores shall be strictly implemented and progress shall be submitted to the Regional Office of MoEF&CC.

ix. As committed, PP shall adopt Khamhardih Village & Rambod and prepare and implement the action plan to develop them into a model villages.

x. As committed, Pet coke shall not be used in Submerged Electric Arc Furnace to produce Ferro Alloys.

B. General Conditions

I. Statutory compliance:

i. The Environment Clearance (EC) granted to the project/ activity is strictly under the provisions of the EIA Notification, 2006 and its amendments issued from time to time. It does not tantamount/ construe to approvals/ consent/ permissions etc., required to be obtained or standards/conditions to be followed under any other Acts/Rules/Subordinate legislations, etc., as may be applicable to the project.

II. Air quality monitoring and preservation

i. The project proponent shall install 24x7 continuous emission monitoring system at process stacks to monitor stack emission as well as Continuous Ambient Air Quality Station (CAAQMS) for monitoring AAQ parameters with respect to standards prescribed in Environment (Protection) Rules 1986 as amended from time to time. The CEMS and CAAQMS shall be connected to SPCB and CPCB online servers and calibrate these systems from time to time according to equipment supplier specification through labs recognized under Environment (Protection) Act, 1986 or NABL accredited laboratories.

ii. The project proponent shall carryout Continuous Ambient Air Quality monitoring for common/criterion parameters relevant to the main pollutants released (e.g. PM_{10} and $PM_{2.5}$ in reference to PM emission, and SO_2 and NOx in reference to SO_2 and NOx emissions) within and outside the plant area covering upwind and downwind directions.

iii. The project proponent shall monitor fugitive emissions in the plant premises at least once in every quarter through laboratories recognized under Environment (Protection) Act, 1986 or NABL accredited laboratories.

iv. Sampling facility at process stacks shall be provided as per CPCB guidelines for manual monitoring of emissions.

v. Appropriate Air Pollution Control (APC) system shall be provided for all the dust generating points including fugitive dust from all vulnerable sources, so as to comply prescribed stack emission and fugitive emission standards.

vi. The project proponent shall provide leakage detection and mechanized bag cleaning facilities for better maintenance of bags.

vii. Sufficient number of mobile or stationery vacuum cleaners shall be provided to clean plant roads, shop floors, roofs, regularly.

viii. Ensure covered transportation and conveying of raw material to prevent spillage and dust generation. The project proponent use leak proof trucks/dumpers carrying coal and other raw materials and cover them with tarpaulin.

ix. The project proponent shall provide primary and secondary fume extraction system at all heat treatment furnaces.

x. Wind shelter fence and chemical spraying shall be provided on the raw material stock piles.

xi. Design the ventilation system for adequate air changes as per prevailing norms for all tunnels, motor houses, Oil Cellars.

xii. Pollution control system in the plant shall be provided as per the CREP Guidelines of CPCB.

xiii. The project proponent shall adopt the Clean Air practices like mechanical collectors, wet scrubbers, fabric filters (bag houses), electrostatic precipitators, combustion systems (thermal oxidizers), condensers, absorbers, adsorbers, and biological degradation. Controlling emissions related to transportation shall include emission controls on vehicles as well as use of cleaner fuels. Sufficient numbers of additional truck mounted Fog/Mist water cannons shall be procured and operated regularly inside the project premises and also in the surrounding villages to arrest suspended dust in the atmosphere.

xiv. Bag filters shall be cleaned regularly and efficiency of bag filter system shall be monitored at regular intervals.

xv. Water Sprinklers/Water mist system shall be installed near raw material yards, operational units and other strategic locations to control fugitive emissions from the plant.

xvi. The particulate matter emissions from the process stacks shall be less than 30 mg/Nm^3 and measures shall be undertaken as per the submitted action plan. Efficient Air monitoring equipment shall be installed.

xvii. Following additional arrangements to control fugitive dust shall be provided:
   a. Fog / Mist Sprinklers at all on bulk raw material storage area (at the transfer points) like Iron Ore, Coal and for Fly Ash and similar solid waste storage areas.
   b. Proper covered vehicle shall be used while transport of materials.
   c. Wheel washing mechanism shall be provided in entry and exit gates with complete recirculation system.

xviii. Briquetting and Jigging plant shall be installed in Ferro Alloys Plant.

xix. The PP shall minimize the evaporation losses in jigging operation to less than 10% using suitable advanced process.

xx. The 4^{th} hole extraction system shall be provided in the Sub Merged Arc Furnaces and EAF.

xxi. Industry is going to use silica quartz in large quantities and going to produce Silico Manganese and Ferro Silicon alloy steel. Therefore, it is necessary to control silica/quartz exposures at production Departments, not only emission norms as per Indian Factories Act. The permissible limit for silica/quartz should be within 10 mg/m3 for total dust as per Indian Factories Act. Therefore, it is recommended to monitor personal and area exposures for silica quartz dust in the process plants.

III. Water quality monitoring and preservation

i. The project proponent shall install 24x7 continuous effluent monitoring system with respect to standards prescribed in Environment (Protection) Rules 1986 as amended from time to time and connected to SPCB and CPCB online servers and calibrate these system from time to time according to equipment supplier specification through labs recognized under Environment (Protection) Act, 1986 or NABL accredited laboratories.

ii. The project proponent shall monitor regularly ground water quality at least twice a year (pre- and post-monsoon) at sufficient numbers of piezometers/sampling wells in the plant and adjacent areas through labs recognized under Environment (Protection) Act, 1986 and NABL accredited laboratories.

iii. Garland drains and collection pits shall be provided for each stock pile to arrest the run-off in the event of heavy rains and to check the water pollution due to surface run off.
iv. Water meters shall be provided at the inlet to all unit processes in the plants.
v. The project proponent shall make efforts to minimise water consumption in the plant complex by segregation of used water, practicing cascade use and by recycling treated water.
vi. The proposed project shall be designed as "Zero Liquid Discharge" Plant. ETP shall be installed and there shall be no discharge of effluent from the plant. Domestic effluent shall be treated in Sewage Treatment Plant. Suitable measures shall be adopted for sewage water handling to ensure no contamination of any kind of water body.
vii. All stockyards shall have impervious flooring and shall be equipped with water spray system for dust suppression. Stock yards shall also have garland drains and catch pits to trap the run off material and shall be implemented as per the action plan submitted in EIA/EMP report.
viii. Rain water harvesting shall be implemented to recharge/harvest water as per the action plan submitted in the EIA/EMP report.

IV. Noise monitoring and prevention

i. Noise pollution shall be monitored as per the prescribed Noise Pollution (Regulation and Control) Rules, 2000 and amendments thereof, and report in this regard shall be submitted to Regional Officer of the Ministry as a part of six-monthly compliance report.
ii. The ambient noise levels should conform to the standards prescribed under E(P)A Rules, 1986 viz. 75 dB(A) during day time and 70 dB(A) during night time.

V. Energy Conservation measures

i. Provide solar power generation on roof tops of buildings, for solar light system for all common areas, street lights, parking around project area and maintain the same regularly;
ii. Provide LED lights in their offices and residential areas.

VI. Waste management

i. Oil Collection pits shall be provided in oil cellars to collect and reuse/recycle spilled oil.
ii. Kitchen waste shall be composted or converted to biogas for further use.
iii. 100% utilization of fly ash shall be ensured. All the fly ash shall be provided to cement and brick manufacturers for further utilization and Memorandum of Understanding in this regard shall be submitted to the Ministry's Regional Office.
iv. The Plastic Waste Management Rules 2016, inter-alia, mandated banning of identified Single Use Plastic (SUP) items with effect from 01/07/2022. In this regard, CPCB has issued a direction to all the State Pollution Control Boards (SPCBs)/Pollution Control Committees (PCCs) on 30/06/2022 to ensure the compliance of Notification published by Ministry on 12/08/2021. The technical guidelines issued by the CPCB in this regard is available at https://cpcb.nic.in/technical-guidelines-3/. All the project proponents are hereby requested to sensitize and create awareness among people working within the Project area as well as its surrounding area on the ban of SUP in order to ensure the compliance of Notification published by this Ministry on 12/08/2021. A report, along with

photographs, on the measures taken shall also be included in the six monthly compliance report being submitted by the project proponents.

v. A proper action plan must be implemented to dispose of the electronic waste generated in the industry.

VII. Green Belt

i. The project proponent shall prepare GHG emissions inventory for the plant and shall submit the programme for reduction of the same including carbon sequestration by trees.

ii. Project proponent shall submit a study report on Decarbonisation program, which would essentially consist of company's carbon emissions, carbon budgeting/ balancing, carbon sequestration activities and carbon capture, use and storage and offsetting strategies. Further, the report shall also contain time bound action plan to reduce its carbon intensity of its operations and supply chains, energy transition pathway from fossil fuels to Renewable energy etc. All these activities/ assessments should be measurable and monitor able with defined time frames.

iii. The industry should draw up and implement and action plan for achieving carbon neutrality consistent with India's commitment to achieving carbon neutrality. The action plan should contain milestones with targets to be achieved in suitable periods.

iv. Greening and Paving shall be implemented in the plant area to arrest soil erosion and dust pollution from exposed soil surface.

VIII. Public hearing and Human health issues

i. Emergency preparedness plan based on the Hazard identification and Risk Assessment (HIRA) and Disaster Management Plan shall be implemented.

ii. The project proponent shall carry out heat stress analysis for the workmen who work in high temperature work zone and provide Personal Protection Equipment (PPE) as per the norms.

iii. Provision shall be made for the housing of construction labour within the site with all necessary infrastructure and facilities such as fuel for cooking, mobile toilets, mobile STP. Safe drinking water, medical health care, creche etc. The housing may be in the form of temporary structures to be removed after the completion of the project.

iv. Occupational health surveillance of the workers shall be done on a regular basis and records maintained.

IX. Environment Management

i. The project proponent shall comply with the provisions contained in this Ministry's OM vide F.No. 22-65/2017-IA.III dated 30/09/2020. As part of Corporate Environment Responsibility (CER) activity, company shall adopt nearby villages based on the socio-economic survey and undertake community developmental activities in consultation with the village Panchayat and the District Administration as committed.

ii. The company shall have a well laid down environmental policy duly approve by the Board of Directors. The environmental policy should prescribe for standard operating procedures to have proper checks and balances and to bring into focus any infringements/deviation/violation of the environmental / forest / wildlife norms /

conditions. The company shall have defined system of reporting infringements / deviation / violation of the environmental / forest / wildlife norms / conditions and / or shareholders / stake holders. The copy of the board resolution in this regard shall be submitted to the MoEF&CC as a part of six-monthly report.

iii. A separate Environmental Cell both at the project and company head quarter level, with qualified personnel shall be set up under the control of senior Executive, who will directly to the head of the organization.

iv. Performance test shall be conducted on all pollution control systems every year and report shall be submitted to Integrated Regional Office of the MoEF&CC.

X. Miscellaneous

i. The project proponent shall make public the environmental clearance granted for their project along with the environmental conditions and safeguards at their cost by prominently advertising it at least in two local newspapers of the District or State, of which one shall be in the vernacular language within seven days and in addition this shall also be displayed in the project proponent's website permanently.

ii. The copies of the environmental clearance shall be submitted by the project proponents to the Heads of local bodies, Panchayats and Municipal Bodies in addition to the relevant offices of the Government who in turn has to display the same for 30 days from the date of receipt.

iii. The project proponent shall upload the status of compliance of the stipulated environment clearance conditions, including results of monitored data on their website and update the same on half-yearly basis.

iv. The project proponent shall monitor the criteria pollutants level namely; PM10, SO2, NOx (ambient levels as well as stack emissions) or critical sectoral parameters, indicated for the projects and display the same at a convenient location for disclosure to the public and put on the website of the company.

v. Action plan for developing connecting and internal road in terms of MSA as per IRC guidelines shall be implemented

vi. The project proponent shall submit six-monthly reports on the status of the compliance of the stipulated environmental conditions on the website of the ministry of Environment, Forest and Climate Change at environment clearance portal.

vii. The project proponent shall submit the environmental statement for each financial year in Form-V to the concerned State Pollution Control Board as prescribed under the Environment (Protection) Rules, 1986, as amended subsequently and put on the website of the company.

viii. The project proponent shall inform the Regional Office as well as the Ministry, the date of financial closure and final approval of the project by the concerned authorities, commencing the land development work and start of production operation by the project.

ix. The project proponent shall abide by all the commitments and recommendations made in the EIA/EMP report, commitment made during Public Hearing and also that during their presentation to the Expert Appraisal Committee.

x. The recommendations of the approved Site-Specific Wildlife Management Plan (in case of involvement of Schedule-I species) shall be implemented in consultation with the State

Forest Department. The implementation report shall be furnished along with the six-monthly compliance report to the concerned Regional Office of the MoEF&CC.

xi. The PP shall put all the environment related expenditure, expenditure related to Action Plan on the PH issues, and other commitments made in the EIA/EMP Report etc. in the company web site for the information to public/public domain. The PP shall also put the information on the left over funds allocated to EMP and PH as committed in the earlier ECs and shall be carried out and spent in next three years, in the company web site for the information to public/public domain.

xii. No further expansion or modifications in the plant shall be carried out without prior approval of the Ministry of Environment, Forests and Climate Change (MoEF&CC).

xiii. Concealing factual data or submission of false/fabricated data may result in revocation of this environmental clearance and attract action under the provisions of Environment (Protection) Act, 1986.

xiv. The Ministry may revoke or suspend the clearance, if implementation of any of the above conditions is not satisfactory.

xv. The Ministry reserves the right to stipulate additional conditions if found necessary. The Company in a time bound manner shall implement these conditions.

xvi. The Regional Office of this Ministry shall monitor compliance of the stipulated conditions. The project authorities should extend full cooperation to the officer (s) of the Regional Office by furnishing the requisite data / information/monitoring reports.

xvii. Any appeal against this EC shall lie with the National Green Tribunal, if preferred, within a period of 30 days as prescribed under Section 16 of the National Green Tribunal Act, 2010.

Warning to Consultant M/s Pioneer Enviro Laboratories and Consultants Pvt. Ltd.:

The EAC has observed that the Consultant could submit the ADS information in Januray 2023; However, the Consultant has submitted the information very late hence the project is delayed due to late submission of information by the Conultant on Portal. In view of the above, the EAC has warned **M/s Pioneer Enviro Laboratories and Consultants Pvt. Ltd** to submit the information in time bound manner so that project may not get delayed.

****

Consideration of Amendments/ Corrigendum in Environmental Clearance Proposal

Agenda No. 43.14

43.14 Amalgamation of M/s. Singhal Energy Pvt. Ltd. located at Taraimal Village, Tamnar Tehsil, Raigarh District, Chhattisgarh with M/s. Singhal Enterprises Pvt. Ltd., located at Taraimal Village, Tamnar Tehsil, Raigarh District, Chhattisgarh - Amendment in Environmental Clearance.

[Proposal No. IA/CG/IND/296875/2023; File No. J-11011/195/2007-IA.II(I)]

43.14.1 M/s. Singhal Enterprises Pvt. Ltd. has made an online application vide proposal no. IA/CG/IND1/296875/2023 dated 16th August 2023 along with along with copy of Addendum EIA report seeking seeking amalgamation of EC's as per the EIA Notification, 2006. The proposed project activity is listed at S. No. 3(a) Metallurgical Industries (Ferrous & Nonferrous) under Category 'A' of the schedule of the EIA Notification, 2006 and being appraised at the Central Level.

43.14.2 Name of the EIA consultant: M/s. Pioneer Enviro Consultants Private Limited [List of ACOs with their Certificate / Extension Letter No: NABET/EIA/2225/RA 0282 valid till 21.09.2025, as on September 6, 2023].

Details submitted by Project proponent

43.14.3 Singhal Enterprises Pvt. Ltd. (Transferee) has obtained Environment Clearance vide no. J-11011/195/2007-IA.II (I) dt. 23.07.2018, 06.03.2019 & 17.02.2022 for expansion of steel plant at Taraimal Village, Tamnar Tehsil, Raigarh District, Chhattisgarh.

43.14.4 Singhal Energy Pvt. Ltd. (Transferor) has obtained Environment Clearance vide no. J-11011/785/2008-IA II(I) dt. 15.09.2009, 23.09.2011 & 10.11.2016 for expansion of steel plant at Taraimal Village, Tamnar Tehsil, Raigarh District, Chhattisgarh.

43.14.5 The instant proposal is for seeking amalgamation of aforementioned Environment Clearances obtained for M/s. Singhal Energy Pvt. Ltd. with M/s. Singhal Enterprises Pvt. Ltd.

43.14.6 **Reasons for Amalgamation of EC:**

- Both the companies have interests in the same line of business and have been looking at suitable proposals for restructuring and carrying on their business more competitively and beneficially. As such the business of Transferor Company and the Transferee Company can be combined conveniently and carried on in conjunction more advantageously.
- The amalgamation will enable appropriate consolidation of the undertaking of the Transfer or company and the Transferee Company. The business of the amalgamated entity will be carried on more efficiently and economically as a result, inter alia of pooling and more effective utilization of the combined resources of the said companies, economies of scale,

elimination of duplication of work and reduction in overheads, cost and expenses which will be facilitated by and follow the amalgamation.

- Amalgamation will result in the formation of a larger company with larger capital and asses base, having greater capacity raise and access fund for growth and expansion of its business and conducting trade on more favorable terms.

43.14.7 The proposal has been considered during the 43rd meeting of the EAC for Industry-I sector held on 4th - 5th September, 2023. The deliberations and recommendations of EAC are as follows:

Deliberation by the Committee

43.14.8 The Committee noted the following:

1. The EAC noted that the proposal is incomplete as of now and PP/Consultant shall submit a detailed report w.r.t. M/s. Singhal Energy Pvt. Ltd. and M/s. Singhal Enterprises Pvt. Ltd. comprising of the following:
   a) Kml file and plant layouts clearly depicting the existing project boundaries of both companies and composite project boundaries after proposed amalgamation in different colour codes.
   b) Implementation status of the facilities in a tabular form showing the details of facilties granted in the EC vis-à-vis capacity granted in CTEs and CTO to check the violation, if any. The implementation status of EC's of both the companies shall be submitted separately.
   c) Summary of issues raised during the earlier Public Consultation and its implementation status for both the companies.
   d) Matrix for M/s. Singhal Energy Pvt. Ltd. and M/s. Singhal Enterprises Pvt. Ltd. covering location, lat/long, area, raw materials, utilities etc. along with composite resource requirement after proposed amalgamation in a tabular form.
   e) Matrix of EC conditions stipulated in the ECs of M/s. Singhal Energy Pvt. Ltd. and M/s. Singhal Enterprises Pvt. Ltd. along with composite EC conditions after proposed amalgamation in a tabular form.
2. The EAC is also of the opinion that CCR for the ECs under consideration for amalgamation shall be obtained from the IRO, MOEF&CC for consideration of the proposal.
3. PP/Consultant shall submit the copy of Board Resolution / other credible documents in support of the proposed EC amalgamation proposal.
4. The EAC is also of the opinion that PP shall submit the details of all the court case, directions issued by SPCB, if any, related to the projects under consideration for amalgamation and shall submit undertakings from M/s. Singhal Energy Pvt. Ltd. and M/s. Singhal Enterprises Pvt. Ltd. regarding the same.
5. In view of the same, the Committee is of the view that the instant proposal is incomplete and needs to be revised.

Recommendations of the Committee

43.14.9 In view of the foregoing and after deliberations, the Committee recommended that **proposal to be returned in its present form** to address the shortcomings enumerated at para no. 43.14.8 above.

****

Agenda No. 43.15

43.15 Proposed Production of Low Carbon Ferro Manganese (100 TPM) or Low Carbon Silico Manganese (100 TPM) or Low Carbon Ferro Chrome (100 TPM) by M/s Sri Santhi Industries, located at Plot No - 16, APIIC Growth Center, Phase - 1, Bobbili Mandalam, Vizianagaram District, Andhra Pradesh- Corrigendum in Environmental Clearance.

[Proposal No. IA/AP/IND1/423576/2023; File No. IA-J-11011/97/2021-IA-II(I)]
[Consultant: Grass Roots Research & Creations; Valid upto : 15.02.2024]

43.15.1 The aforementioned proposal was considered and recommended by EAC in its 28th meeting of the held on 28th April, 2023. The Ministry has granted EC vide letter dated 18/07/2023. The matter has been examined in the Ministry and it is observed that there is typographical error in the EC letter, as detailed below.

The annexure II of page 9 of the EC should be

EC vide letter dated 18/07/2023	Details given in EC vide letter dated 18/07/2023	Corrections suggested	Remarks/ Justification
Page No. 9 Annexure II	DRI Plant - 350 TPD Kiln - 1,15,000 TPA Ferro Alloy Plant - 9 MVA SAF Si-Mn 16929 TPA or Fe-Mn 21092 TPA or Fe-Si 9191 TPA Captive Power Plant (WHRB) - 36 TPH 8 MW	Low Carbon Ferro Manganese 100 TPM Low Carbon Silico Manganese 100 TPM Low Carbon Ferro Chrome 100 TPM	The EAC noted that this is Typo error and recommended for the correction in the EC.

Deliberations & Recommendations by the EAC:

43.15.2 It was informed to the Committee members that PP has requested modifications in the EC issued vide letter dated 18/07/2023. It was also mentioned by Project Proponent/ consultant that all desired modifications were part of their EIA/EMP report. EAC noted that corrections are relating to factual information and there is no change in project capacity.

43.15.3 The EAC deliberated and noted that the request of the **PP may be accepted and recommended for the incorporation of the above-mentioned corrigendum in the EC dated 18/07/2023.**

****

Agenda No. 43.16

43.16 Greenfield Project for Production Facilities of Pelletization Plant (0.60 MTPA), DRI Plant (0.42 MTPA), SMS with Caster (0.25 MTPA), Captive Power Plant of 85 MW (WHRB#32 MW & Coal & Dolochar based#53 MW), Rolling Mill (0.20 MTPA), Pig Iron (0.26 MTPA), Sinter Plant (0.40 MTPA), DIP Plant (0.24 MTPA), PGP of 8000 Nm^3/hr & Coal Washery Unit (0.98 MTPA)" at Village-Kesda, Tehsil-Simga, District-Balodabazar-Bhatapara, Chhattisgarh by M/s Swadesh Metallics Pvt Ltd.- Consideration of Environmental Clearance.

[Proposal No. IA/CG/IND1/430633/2023; F. No. IA-J-11011/46/2021-lA-II(I)]
[Consultant: Grass Roots Research and Creation India (P) Ltd.; Valid upto 15.02.2024]

43.16.1 M/s. Swadesh Metallics Private Limited has made an online application vide proposal No-IA/CG/IND1/430633/2023, dated 15.06.2023 along with copy of EIA report and Forms (Part A, B and C) seeking Environment Clearance (EC) under the provisions of the EIA Notification, 2006 for the project mentioned above. The proposed project activity is listed at 3(a) Metallurgical industries (ferrous & non-ferrous), 1(d) Thermal Power Plants and 2(a) Coal Washery under Category "A" of the schedule of the EIA Notification, 2006 being appraised at Central Level.

43.16.2 Name of the EIA consultant: M/s. Grass Roots Research and Creation India (P) Ltd [List of ACOs with their Certificate / Extension Letter no. NABET/EIA/2124/RA 0213; valid upto 15.02.2024, as on June 30, 2023].

43.16.3 The proposal cited above was initially considered during the **39th meeting of the EAC for Industry-I sector held on 6-7 July, 2023**. After detailed deliberation, it was observed that:

1. The instant proposal is for setting up of a Greenfield Project for Installation of Iron Ore Pellet Plant (0.6 MTPA), DRI Plant (0.42 MTPA), SMS with Caster (0.25 MTPA), Rolling Mill (0.20 MTPA), Pig Iron Plant (0.26 MTPA), Sinter Plant (0.40 MTPA), DIP Plant (0.24 MTPA), Coal Washery Unit (0.98 MTPA) with Captive Power Plant (85 MW) for producing TMT bar, wire rods, steel bar coils and de-coiled bars and Ductile Iron Pipes with PGP of 8000 Nm^3/hr.

2. The PP reported that the total land involved in the proposed project is 58.68 ha [Private: 39.66 ha; Govt.: 4.04 ha] out of which approx. 39.66 ha land is under the possession of the company and entire land will be diverted for industrial purposes. Agreement is signed with land owners for 14.98 ha. Also signed the MoU with the state government for setting up industry. The EAC deliberated on the land acquisition status and is of the view that the land status is not very clear and still not completely transferred in the name of PP.

3. The EAC observed that a road is passing through the project site. In this regard, the EAC deliberated on the submission of PP and layout plan and is of the view that the submission of PP is not conclusive enough to understand the ground reality and permission for diversion of road is not available. The EAC is of the opinion that since this is a greenfield project, it is pertinent to understand the ground through a site visit of a sub-committee.

4. Newdha is at a distance of 0.5 km towards East direction of the project Site. There are approx. Total 56 villages and 1 town is present in 10 km radius study area of the project site. Considering the Environmental Sensitivity to the habitation in the area, the EAC opined that it is prudent to inspect the area for understanding the ground reality as the area appears to have rich habitation.

5. Jamuniya Seasonal Nala is present at a distance of 1.2 km in the East of the plant site. Other water bodies are also present are within the study area. The EAC is of the opinion that water bodies are required to be conserved. Drainage Conservation scheme to protect the natural drainage and its flow parameters; along with Soil conservation scheme and multiple Erosion control measures is not submitted. Further during preparation of drainage conservation plan, PP shall prepare a contour map showing contour interval, proper Bench Mark, Drainage disposal with design and calculations, Rain Water Harvesting Plan with design and calculation including the invert level of disposal point in order to achieve ZLD.

6. PP shall undertake village adoption and formulate Village Adoption program consisting of need-based community development activities, to develop them into model villages. PP shall submit details of the villages to be adopted.

7. The Committee deliberated on the incremental GLC due to the proposed project and observed that incremental GLC for CO has not been submitted in the brief. In this regard, the EAC is of the opinion complete information in this regard shall be submitted.

8. The water requirement for the project is estimated as 3642 m^3/day, which will be sourced from Shivnath River. The EAC noted that water permission has not been obtained and application for the same has been submitted to Competent Authority.

9. Details of railway siding permission and its status needs to be submitted.

10. The PP/Consultant has to revise the EIA/EMP Report along with all the details as per the provisions of the EIA Notification, 2006.

11. Thus, in view of the above observations the EAC is of the opinion that it is pertinent to undertake site visit of the sub-committee of the EAC to understand the ecological/environmental sensitivity of the area/ complexity of the project/ size of the project and the various other issues involved in the project as mentioned above. In view of the same, the EAC is suggested to conduct the site visit with sub-committee involving the

representatives of EAC and MoEFCC so that all the issues are addressed accordingly for this project.

43.16.4 In view of the foregoing and after deliberations, the Committee recommended to defer the proposed project and recommended for site visit of the proposed project area by a sub-committee of EAC Industry-1 members comprising of Dr. S.K. Singh, Dr. Sanjay Bist (Representative of Indian Meteorological Department & EAC member) and Representative of MoEFCC, New Delhi to conduct the site visit and submit the factual Report covering all the issues. The proposal shall be appraised based on the findings of the sub-committee and deliberation of EAC.

43.16.5 Accordingly, the EAC (Industry-1) sub-committee conducted a site visit to M/s Swadesh Metallics Pvt Ltd. located at at Kesda, Simga, Balodabazar-Bhatapara, Chhattisgarh on 12-13th August 2023 to ascertain the issues for the proposed greenfield project "Production Facilities of Pelletization Plant (0.60 MTPA), DRI Plant (0.42 MTPA), SMS with Caster (0.25 MTPA), Captive Power Plant of 85 MW (WHRB#32 MW & Coal & Dolochar based#53 MW), Rolling Mill (0.20 MTPA), Pig Iron (0.26 MTPA), Sinter Plant (0.40 MTPA), DIP Plant (0.24 MTPA), PGP of 8000 Nm3 /hr & Coal Washery Unit (0.98 MTPA)" at Kesda Village, Balodabazar-Bhatapara, Chhattisgarh."

43.16.6 At this instance, the proposal was further considered by the EAC (Industry 1) in its 43rd meeting of the EAC for Industry-I sector held on 4th – 5th September, 2023. The details of the proposed project are as follows:

Details submitted by Project proponent

43.16.7 The details of the ToR are furnished as below:

Date of Application	Consideration	Details	Date of Accord	ToR Validity
06.09.2021	45th meeting of the EAC (Industry-I) held during 27-29th September, 2021.	Terms of Reference	13.10.2021	13.10.2025
31.03.2023	26th meeting of the EAC (Industry-I) held during 12-13th and 17th April, 2023.	Amendment in ToR	18.05.2023	13.10.2025

43.16.8 The project of M/s Swadesh Metallics Private Limited, located in Village-Kesda, Tehsil-Simga, District-Balodabazar-Bhatapara-493332 (Chhattisgarh) is for setting up of a Greenfield Project for Installation of Iron Ore Pellet Plant (0.6 MTPA), DRI Plant (0.42 MTPA), SMS with Caster (0.25 MTPA), Rolling Mill (0.20 MTPA), Pig Iron Plant (0.26 MTPA), Sinter Plant (0.40 MTPA), DIP Plant (0.24 MTPA), Coal Washery Unit (0.98 MTPA) with Captive Power Plant (85 MW) for producing TMT bar, wire rods, steel bar coils and de-coiled bars and Ductile Iron Pipes with PGP of 8000 Nm^3/hr.

43.16.9 Environmental Site Settings:

<table>
<tr><th>S.No</th><th>Particulars</th><th>Details</th><th>Remarks</th></tr>
<tr><td>1</td><td>Total Land</td><td>58.68 ha [Private: 40.18 ha; Govt.: 3.86 ha; Sale Agreement Executed :- 14.64 ha]</td><td>Land use: Land will be diverted for industrial use.</td></tr>
<tr><td>2</td><td>Land acquisition details as per MoEF&CC O.M dated 7/10/2014</td><td>40.18 ha land is under the possession of the company and entire land will be diverted for industrial purposes. Government land is under allotment process. Sale Agreement is signed with land owners for 14.64 ha.</td><td></td></tr>
<tr><td>3</td><td>Existence of habitation & involvement of R&R, if any.</td><td>Nil</td><td></td></tr>
<tr><td>4</td><td>Latitude and Longitude of the project site</td><td><table><tr><th>S. No</th><th>Latitude</th><th>Longitude</th></tr><tr><td>1</td><td>21°36'34.96"N</td><td>81°49'30.17"E</td></tr><tr><td>2</td><td>21°36'29.15"N</td><td>81°49'33.65"E</td></tr><tr><td>3</td><td>21°36'26.20"N</td><td>81°49'42.23"E</td></tr><tr><td>4</td><td>21°36'16.78"N</td><td>81°49'46.55"E</td></tr><tr><td>5</td><td>21°35'59.34"N</td><td>81°49'49.54"E</td></tr><tr><td>6</td><td>21°35'58.94"N</td><td>81°49'52.28"E</td></tr><tr><td>7</td><td>21°35'55.69"N</td><td>81°49'56.84"E</td></tr><tr><td>8</td><td>21°35'56.99"N</td><td>81°49'45.60"E</td></tr><tr><td>9</td><td>21°35'56.89"N</td><td>81°49'48.67"E</td></tr><tr><td>10</td><td>21°36'0.81"N</td><td>81°49'48.62"E</td></tr><tr><td>11</td><td>21°36'2.13"N</td><td>81°49'43.12"E</td></tr><tr><td>12</td><td>21°36'5.86"N</td><td>81°49'43.52"E</td></tr><tr><td>13</td><td>21°36'6.36"N</td><td>81°49'38.99"E</td></tr><tr><td>14</td><td>21°36'3.59"N</td><td>81°49'30.91"E</td></tr><tr><td>15</td><td>21°36'9.70"N</td><td>81°49'26.59"E</td></tr><tr><td>16</td><td>21°36'12.43"N</td><td>81°49'18.31"E</td></tr><tr><td>17</td><td>21°36'17.65"N</td><td>81°49'11.14"E</td></tr><tr><td>18</td><td>21°36'23.03"N</td><td>81°49'26.88"E</td></tr><tr><td>19</td><td>21°36'29.07"N</td><td>81°49'22.40"E</td></tr></table></td><td></td></tr>
<tr><td>5</td><td>Elevation of the project site</td><td>303 meter above the mean sea level</td><td></td></tr>
<tr><td>6</td><td>Involvement of Forest land if any.</td><td>Nil</td><td></td></tr>
<tr><td>7</td><td>Water body exists within the project site as well as study area</td><td>Project Site – Nil
Study Area<table><tr><th>Water Body</th><th>Distance</th><th>Direction</th></tr><tr><td>Jamuniya Seasonal Naala</td><td>1.2 km</td><td>East</td></tr><tr><td>Ghughua Tank</td><td>5.2 km</td><td>West</td></tr><tr><td>Manpur Dam</td><td>7.0 km</td><td>SE</td></tr></table></td><td></td></tr>
<tr><td>8</td><td>Existence of ESZ / ESA/national park /wildlife sanctuary</td><td>Nil</td><td></td></tr>
</table>

S.No	Particulars	Details	Remarks
	/biosphere reserve /tiger reserve /elephant reserve etc. if any within the study area		

43.16.10 The unit configuration and capacity of proposed project is given as below:

S. No	Description	Configuration	Final Capacity (MTPA)
1	Iron Ore Pelletization Plant (With Grinding Unit)	0.60 MTPA	0.60
2	DRI Plant (Sponge Iron)	4 x 350 TPD Kiln	0.42
3	SMS with Caster (With Caster 6 x 11, 3 strands)	IF - 6 x 15 tonnes	0.25
4	Rolling Mill	0.20 MTPA	0.20
6	Blast Furnace (Pig Iron)	250 m^3	0.26
7	Sinter Plant	45 m^2	0.40
8	DIP Plant	3 x 10 ton	0.24
9	Coal Washery	0.98 MTPA	0.98
10	Captive Power Plant	32 MW (4 x 36 TPH WHRB Boiler & 53 MW CFBC based on dolochar and coal (2 x 110 TPH CFBC Boiler)	85 MW
11	Producer Gas	8000 Nm^3/hr.	8000 Nm^3/hr.

43.16.11 The details of the raw material requirement for the proposed project along with its source and mode of transportation is given as below:

S.No	Raw Material	Quantity (TPA)	Sources	Distance (w.r.t. Plant)	Mode of Transport
A.	**Pellet Plant (0.60 MTPA)**				
1	Iron ore Concentrate	6,37,500	Mines/Local Market	100-150 km	By Rail & Road (through covered trucks)
2	Bentonite	7875	Gujarat	100-150 km	By Rail & Road (through covered trucks)
3	Lime Powder	3,938	Local Market	20-30 km	By Road (through covered trucks)
4	Coal for Gasifier	23,040	CG	50-60 km	By Rail & Road (through covered trucks)
5	LDO	900 KL/A	IOCL	20-30 km	By Road through tanker
6	Anthracite Coal for Pulverized coal injection	13,200	Paradeep, Indonesia		By Rail & Road (through covered trucks)
B.	**DRI Plant (0.420 MTPA)**				

S.No	Raw Material	Quantity (TPA)	Sources	Distance (w.r.t. Plant)	Mode of Transport
1	Iron Pellet	609000	In house	--	Internal Movement
2	Coal Indian	546000	CG	20-30 km	Road through covered trucks
3	Dolomite	18,900	Local Purchase	20-30 km	Road through covered trucks
C.	**SMS Unit (0.25 MTPA)**				
1	Sponge Iron	2,40,000	In-house	--	Internal Movement
2	Pig Iron	30,000	In-house	20-30 km	Road through covered trucks
3	MS Scrap	30,000	Local Purchase	20-30 km	Road through covered trucks
4	Ferro Alloys	333	Local Purchase	--	Internal Movement
D.	**Rolling Mill (0.20 MTPA)**				
1.	MS Billets/ Hot Billets	2,10,000	In-house Production	--	Internal Movement
E.	**Blast Furnace (0.26 MTPA)**				
1	Iron Ore lump	1,09,460	In-house	--	Internal Movement
2	Sinter	2,77,160	In-house	--	Internal Movement
3	BF Coke	1,58,600	Local Market	20-30 km	Road through covered trucks
4	Coal Dust	13,000	In-house	20-30 km	Road through covered trucks
5	Dolomite	36,400	Local Market	20-30 km	Internal Movement
6	Quartz	13,520	Local Market	20-30 km	Road through covered trucks
F.	**Sinter Plant (0.40MTPA)**				
1	Iron ore Fines	3,80,000	Local Market	20-30 km	Road through covered trucks
2	Limestone Fines	52,000	Local Market	20-30 km	Road through covered trucks
3	Dolomite	52,000	Local Market	20-30 km	Road through covered trucks
4	Coke Fines	40,000	Local Market	20-30 km	Road through covered trucks
5	Pellet Fines	58,000	In-house	--	Internal Movement
6	Mill scales, flue dust, Dust from DRI etc	23,600	In-house	--	Internal Movement
7	Sludge from GCP from MBF	2000	In-house	--	Internal Movement

S.No	Raw Material	Quantity (TPA)	Sources	Distance (w.r.t. Plant)	Mode of Transport
8	Dust from MBF	1,88,000	In-house	--	Internal Movement
9	Sinter Returns fines	1,40,000	In-house	--	Internal Movement
G.	**DIP Plant (0.24 MTPA)**				
1	Hot Metal from B.F	2,57,143	In-house	--	Internal transfer
2	Mold Powder	651	Local Market	20-30 km	Road through covered trucks covered
3	Refractory (WH-A+K)	1416	Local Market	20-30 km	Road through covered trucks
4	Ferro Silicon	720	Local Market	20-30 km	Road through covered trucks
5	Inoculants	230	Local Market	20-30 km	Road through covered trucks
6	Magnesium	408	Local Market	20-30 km	Road through covered trucks
7	Runner Coat	1227	Local Market	20-30 km	Road through covered trucks
8	Slag Coagulant	333	Local Market	20-30 km	Road through covered trucks
9	Zinc	454	Local Market	20-30 km	Road through covered trucks
10	Bituminous Solution	1009 KL/Annum	Local Market	20-30 km	Road through covered trucks
H.	**Coal Washery (0.98 MTPA)**				
1	RoM Coal	9,80,000	Near-by Coal Mines	30-50 km	Road through covered trucks
I.	**Captive Power Plant (53 MW)**				
1	Indian Coal	2,23,000	Near-by Mines	30-50 km	Road through covered trucks
2	Dolochar	84,000	In-house	--	Internal transfer

43.16.12 The water requirement for the project is estimated as 3642 m^3/day and source of water will be surface water (Anicut Tulsi-Pausri Anicut on Shivnath River). Application for the same has been submitted to competent Authority.

43.16.13 The power requirement for the proposed project is estimated as 85 MW which will be obtained from in house CPP.

43.16.14 Baseline Environmental Studies:

Period	December 2020 to February 2021
AAQ parameters at 08	• $PM_{2.5}$ = 28.8-40.9 μg/m^3 • PM_{10} = 48.2 – 70.5 μg/m^3 • SO_2 = 5.1 -10.1 μg/m^3

<table>
<tr><td>Locations</td><td>• NO_2 = 11.7 – 21.7 µg/m^3
• CO = 210 – 580 µg/m^3</td></tr>
<tr><td>AAQ modelling</td><td>• Incremental GLCs due to the proposed proposal:
• PM_{10} =6.97 µg/m^3
• $PM_{2.5}$ = 2.81 µg/m^3
• SO_2 = 6.13 µg/m^3
• NO_2 = 7.51 µg/m^3</td></tr>
<tr><td>Ground water quality at 08 locations</td><td>• pH: 7.06-7.60.
• Total Hardness: 210-238 mg/l
• Chlorides: 142-189 mg/l,
• Iron: 0.71 mg/l to 0.79mg/l</td></tr>
<tr><td>Surface water quality at 8 locations</td><td>• pH: 6.98-7.95,
• DO: 3.9-6.1 mg/l.
• BOD: 4.1-8.7 mg/l
• COD : 14.9-33.0 mg/l
• TDS :- 230-385 mg/l</td></tr>
<tr><td>Noise levels</td><td>46.6 to 62.7 dB(A) - day time
33.3 To 52.6 dB(A) - Night time</td></tr>
<tr><td>Traffic assessment study findings</td><td>Traffic study has been conducted near Railway Siding and Kapri Village at Tilda-Simga Road.

Transportation of raw material, fuel & furnished product will be done maximum by road.

Existing PCU at Tilda Sigma road near railway siding is 204 PCU/hr and near Kapri village, it is 195 PCU/hr and existing level of services (LOS) is:
<table>
<tr><th>Road</th><th>V (Volume in PCU/hr.)</th><th>C (Capacity In PCU/hr.)</th><th>Existing V/C Ratio</th><th>LOS</th></tr>
<tr><td>Tilda-Simga Road Near Railway Siding</td><td>204</td><td>2000</td><td>0.102</td><td>A</td></tr>
<tr><td>Tilda-Simga Road Near Kapri Village</td><td>195</td><td>2000</td><td>0.097</td><td>A</td></tr>
</table>
PCU load after proposed Project near Railway siding will be 204 (Existing)+83 (Proposed) = 287PCU/hr and near Kapri Village, it will be 195 (Existing)+35 (Proposed) = 230 PCU/hr level of Services (LOS) will be:
<table>
<tr><th rowspan="2">Road</th><th colspan="3">V (Volume in PCU/hr.)</th><th rowspan="2">C(Capacity InPCU/hr.)</th><th rowspan="2">Proposed V/C Ratio</th><th rowspan="2">LOS</th></tr>
<tr><th>Existing</th><th>Proposed</th><th>Total</th></tr>
<tr><td>Tilda-Simga Road Near Railway Siding</td><td>204</td><td>83</td><td>287</td><td>2000</td><td>0.143</td><td>A</td></tr>
</table></td></tr>
</table>

	Tilda-Simga Road Near Kapri Village	195	35	230	2000	0.115	A
	Note: Capacity as per IRC 106:1990 guidelines for capacity for roads. **Conclusion:** The modified LOS on Tilda Simga Road both near Railway Siding and Kapri Village will be remained "A", i.e. Excellent. Therefore, there will be no change in LOS after completion of the project.						
Flora and fauna	No schedule I fauna and endangered Flora reported in study area.						

43.16.15 The details of solid and hazardous waste generation along with its mode of treatment/disposal is furnished as below:

S. No	Unit	Name	Qty, TPA	Utilization
1	Pellet Plant	Iron Ash	11,940	Re-use Process.
2	DRI Plant	DRI Char	84,000	Re-use in CFBC Power Plant.
		Ash from ESP/Bagfilter	75,600	Will be utilized in the proposed brick making unit.
		Wet Scraper sludge	18,810	Will be given to nearby Brick manufacturing
		Accretion Slag	7,560	Will be utilized in road construction /given to road contractors
3	SMS Unit	Slag	45,000	Will be used for road Filling
4	CPP	Fly Ash	1,59,895	Will be given to brick Plant
5	Rolling Mill	End cutting	5,800	Re use in induction Furnace
		Mill Scale	4,200	Will be supplied to Ferro Alloy unit
6	Blast Furnace	Granulated slag	81000	Will be given to Cement Plant
7	Sinter Plant	Sinter fines	1,40,000	Re use in process
8	DIP	Core Sand & Slag	7200	Will be used for land filling
		Cement Slurry	5022	Will be Sold to brick manufacturing
		Dust & Sludge	5762	Will be used in sinter plant
9	Coal Washery	Reject	3,90,000	Will be re-used in In-house Power Plant (CFBC Boiler)

S. No	Unit	Name	Qty, TPA	Utilization
10	PGP	Cinders (Ash)	2304 TPA	Sold to nearby brick plant
		Phenolic Water	515 KL/annum	Will be Treated and used in process. Hence no Phenolic water will be discharged
		Tar from Gasifier	691 KL/annum	Will be Treated and used in process. Hence no Phenolic water will be discharged

43.16.16 Public Consultation:

Details of advertisement given	09.10.2022
Date of public consultation	10.11.2022
Venue	Secondary School, Village-Newdha, Tehsil- Simga, Baloda Bazar, Chhattisgarh
Presiding Officer	Mr. Rajendra Kumar Gupta Additional District Magistrate Balodabazar-Bhatapara District, Chhattisgarh
Major issues raised	Steps to be taken against air & water pollution control Land Infertility and Garbage Dumping Health of local people Employment opportunities for the local peoples. Road Infrastructure of nearby villages

Table: Action plan as per MoEF&CC O.M. dated 30/09/2020:

S. No.	Issue Raised during PH	Physical activity and action plan	Budget	1st Year (2023-2024)	2nd Year (2024-2025)
1.	Development of Nearby Areas	PP will Formulate village development program for development in village **Kesda, Newdha, Ringni & Hathbandh** under consultation with local panchayat and district administration for need-based community development activities which would be in addition to the development plans being undertaken by state and central government.	A budget of **5.50 Cr.** has been proposed.	**2.75 Cr.** Budget of **0.5 Cr.** has been proposed for construction and maintainance of villageroads. **(Kesda & Newdha)** Budget of **0.75 Cr.** has been proposed for providing Drinking water facility. **(Kesda & Newdha)**	**2.75 Cr.** A budget of **0.5 Cr.** has been proposed for construction and maintainance of village roads. **(Ringni & Hathbandh)** A budget of Rs 0.5 Cr has been Proposed for providing Drinking water facility. **(Ringni & Hathbandh)**

S. No.	Issue Raised during PH	Physical activity and action plan	Budget	1st Year (2023-2024)	2nd Year (2024-2025)
				Budget of Rs. **0.75 Cr** has been proposed for installation of Solar Lights. **(Kesda & Newdha)** Community halls will be constructed in the villages of Kesda and Newdha in consultation with local authorities. Budget of **Rs. 0.75 Cr** has been proposed.	A budget of Rs. **0.75 Cr** has been proposed for installation of Solar Lights. **(Ringni & Hathbandh)** A community hall will be constructed in the village Ringni and Hathbandh in consultation with local authorities. Budget of **Rs. 0.75 Cr** has been proposed.
2.	Air Pollution Control Measures	PP will install Continuous Ambient Air Quality Monitoring system in Village Kesda, Newdha, Ringni & Hathbandh. Tree plantation drive (25000 No's with tree guard) will be done in nearby villages Kesda, Newdha, Ringni & Hathbandh. Water sprinkling on road for air dust dispersion control in nearby villages in consultation with the authority. (4 Mobile Water sprinklers)	**4.5 Cr** CAQMS = 4 x 50 Lakhs = **2 Cr** **1.5 Cr** (600 per Tree including maintenance) **1 Cr** (Mobile water sprinkler)	**2.25 Cr** **1 Cr** for CAAQMS in Kesda & Newdha Village. **0.75 Cr** (For 12,500 No's Trees in Village Kesda & Newdha) **0.50 Cr** (2 Mobile water sprinkler in village Kesda &, Newdha)	**2.25 Cr** **1 Cr** for CAAQMS in Ringni & Hathbandh **0.75 Cr** (For 12,500 No's Trees in Village Ringni & Hathbandh) **0.50 Cr** (2 Mobile water sprinkler in Ringni & Hathbandh)

S. No.	Issue Raised during PH	Physical activity and action plan	Budget	1st Year (2023-2024)	2nd Year (2024-2025)
3.	Water Pollution Control Measures	Upgradation of sanitation facility by construction of Community toilets (separate for male and female) in village Kesda, Newdha, Ringni and Hathbandh. Natural ponds (in Kesda, Newdha, Ringni and Hathbandh) will be adopted and developed & Maintenance by the proponent. Garland drains will be constructed, and drainage system will be updated in consultation with local authority.	**2.5 Cr** **1 Cr** (Construction of 50 Toilets) **1 Cr** (Development and beautification cost of four pond) **0.50 Cr** Construction of garland drain & Upgradation of existing drainage system.	**1.25 Cr** **0.5 Cr** (Construction of 25 Public Toilets & Toilets in surrounding Schools and Anganwadi in village Kesda, Newdha) **0.5 Cr** (Development and Beautification of Pond in Village Kesda, Newdha. **0.25 Cr** Construction of garland drain & Upgradation of existing drainage sysyem in in Village Kesda, Newdha	**1.25 Cr** **0.5 Cr** (Construction of 25 Public Toilets & Toilets in surrounding Schools and Anganwadi in village Ringni and Hathbandh) **0.5 Cr** (Development and Beautification of Pond in Village Ringni and Hathbandh. **0.25 Cr** Construction of garland drain & Upgradation of existing drainage system in in Village Ringni and Hathbandh.
4.	Employment for the locals	Willing and employable youths will be identified in consultation with gram panchayat of Kesda, Newdha, Ringni and Hathbandh (100 No's). They will be trained in nearby ITI for trades namely electrician, fitters, welders, painters, and civil construction work, etc. Fees will be paid by PP. After	**0.90 Cr** Stipend–0.6 Cr (5000/- stipend to 100 persons for 1 year) ITI Fee – 0.30 Lakhs (30000/- yearly fee for 100 persons)	**0.45 Cr** Training of 50 persons will be completed in 1st year	**0.45 Cr** Training of 50 persons will be completed in 2nd year

S. No.	Issue Raised during PH	Physical activity and action plan	Budget	1st Year (2023-2024)	2nd Year (2024-2025)
		successful completion of training, the youths will be offered employment in company			
5.	Road Safety Measures	PP will install traffic signal lights at Kesda, Newdha, Ringni and Hathbandh. (04 No's) A traffic Awareness programme will be conducted in villages Kesda, Newdha and Ringni. ❖ Training on traffic rules ❖ Maintenance of vehicles ❖ Supply of fluorescent jackets ❖ Speed breakers etc.	**0.60 Cr** **0.50 Cr** (12.5 lakhs per signal lights) **0.10 Cr** (Traffic Awareness programme)	**0.30 Cr** **0.25 Cr** (02 Lights in Village Kesda & Newdha) **0.05 Cr** Traffic Awareness programme will be conducted in villages Kesda & Newdha	**0.30 Cr** **0.25 Cr** (02 Lights in Village Kesda & Newdha) **0.05 Cr** Traffic Awareness programme will be conducted in villages Kesda & Newdha
6.	Concern about health of local people	Mobile health/ medical camps shall be organized in future. The frequency shall be twice in a year or as on when required and distribution of medicines in Villages Kesda, Newdha, Ringni and Hathband. Arrangement of 4 Modern Ambulance with Life Support system with necessary Medical Staff in Villages Kesda, Newdha,	**2.20 Cr** **0.20 Cr** For conducting health/medical camps in village Kesda, Newdha, Ringni and Hathband. **1 Cr** Arrangement of four ambulance in	**1.10 Cr** **0.10 Cr** Health checkup and distribution of medicines in Villages Kesda & Newdha. **0.50 Cr** Arrangement of Ambulance in Villages Kesda & Newdha.	**1.10 Cr** **0.10 Cr** Health checkup and distribution of medicines in Villages Ringni and Hathband. **0.50 Cr** Arrangement of Ambulance in Villages Ringni and Hathband.

S. No.	Issue Raised during PH	Physical activity and action plan	Budget	1st Year (2023-2024)	2nd Year (2024-2025)
		Ringni and Hathband. Provide the Medical equipment to Government Hospital / Health Centre at Tilda (Beds, Oxygen Cylinder, Oxygen Concentrator, AC, Air Purifier). Celebration of Various days / events.	village Kesda, Newdha, Ringni and Hathband. **1 Cr** Provide the medical equipment to Government Hospital / Health Centre at Tilda town (Beds, Oxygen Cylinder, Oxygen Concentrator, AC, Air Purifier)	**0.50 Cr** Provide the medical equipment to Government Hospital / Health Centre at Tilda town (Beds, Oxygen Cylinder, Oxygen Concentrator, AC, Air Purifier)	**0.50 Cr** Provide the medical equipment to Government Hospital / Health Centreat Tilda town (Beds, Oxygen Cylinder, Oxygen Concentrator, AC, Air Purifier)
7.	Ground Water Level Issue	Rainwater Harvesting structures will be constructed in Village Kesda, Newdha, Ringni & Hathband Awareness programme for conservation of water will be conducted.	**0.50 Cr** **0.34 Cr** has been proposed for construction of RWH structure. **0.16 Cr** has been proposed for awareness programme for conservation of water.	**0.25 Cr** **0.17 Cr** has been proposed for construction of RWH structure in Kesda & Newdha **0.08 Cr** has been proposed for awareness programme for conservation of water in Kesda & Newdha.	**0.25 Cr** **0.17 Cr** has been proposed for construction of RWH structure in Ringni & Hathband **0.08 Cr** has been proposed for awareness programme for conservation of water Ringni & Hathbandh.
8.	Livelihood & Women Empowerment Program	Need assessment – market assessment shall be done for nearby villages and based on the outcome of the suitable training for	**0.50 Cr**	**0.25 Cr**	**0.25 Cr**

S. No.	Issue Raised during PH	Physical activity and action plan	Budget	1st Year (2023-2024)	2nd Year (2024-2025)
		skill development and employability shall be given. The training shallbe technical training onLMV/HMV Motor driving, motor windings, electrical fittings, a/c – refrigerator repairing, two-four-wheeler servicing and repairing, meson work, plumbing, bar windings, stitching & designing course for females, computer course etc.			
9.	Concern about agricultural productivity & region.	Company will monitor Environmental performance in Kesda and Newdha village as per approved monitoring schedule. Company will provide training to farmers and local people regarding modern agriculture techniques.	**0.50 Cr**	**0.25 Cr**	**0.25 Cr**
10.	Infrastructure development of local School	PP will make pucca kitchen with fume exhaust, mid-day meals to students, provide furniture, computers, fans, tables, Upgradation of sanitation facility and colour printers in local schools at Village-Bilandi & Kapri Kalan, Newdha & Kesda	**1 Cr** 4 Kitchen – 0.10 Cr 800 Tables & Chairs – 0.10 Cr 40 Computer– 0.45 Cr 40 Colour printer – 0.10 Cr Upgradation of sanitation	**0.50 Cr** We will complete work in Village-Newdha & Kesda schools (2 schools)	**0.50 Cr** PP will complete work in school Village- Bilandi & Kapri Kalan (2 School)

S. No.	Issue Raised during PH	Physical activity and action plan	Budget	1st Year (2023-2024)	2nd Year (2024-2025)
			facility-0.25 Cr		
11.	Garbage dumping	The company will make arrangements for proper disposal of garbage. Proper Segregation of waste would be done by installing separate dustbins for separate waste. Awareness programme for color coding of dustbins and segregation of waste will be conducted.	**0.30 Cr** **0.15 Cr** 1000 dustbins of 120 lt. capacity and 500 dustbins of 240 lt. would be provided in nearby villages. **0.15 Cr** Company will conduct awareness programme proper waste disposal of municipal solid waste in nearby villages.	**0.15 Cr** 500 dustbins of 120 lt. capacity and 250 dustbin of 240 lt. would be provided in nearby villages	**0.15 Cr** 500 dustbins of 120 lt. capacity and 250 dustbin of 240 lt. would be provided in nearby villages
12.	PP has also proposed to adopt one Village namely Newdha village. Formulate village development program under consultation with local panchayat and district administration for need-based community development activities which would be in addition to the development plans being undertaken by state and central government. 1. Development of smart class, distribution of benches, Fans, RO water System, Upgradation of sanitary facility, Distribution of IT gadgets, Printers, Computers in schools present in Newdha. 2. Installation of Solar Penal 3. Installation of AAQMS. 4. Plantation in Newdha Village. 5. Upgradation of Medical facility. 6. Upgradation of existing infrastructure in village.		**1 Cr**	**0.50 Cr**	**0.50 Cr**
Total			**20 Cr**	**10 Cr**	**10 Cr**

43.16.17 The capital cost of the project is INR 1221 Crores and the capital cost for environmental protection measures is proposed as INR 24 Crores. The annual recurring cost towards the environmental protection measures is proposed as Rs 3.65 Crores. The total employment generation from the proposed project is 2150. The details of cost for environmental protection measures is as follows:

S. No	Activity	Capital Cost (In Cr)	Recurring expenses proposed/ annum (In Cr)
1	**Air Emission Management**		
	➢ Electrostatic Precipitators (ESP)	12	
	➢ Fume Extraction system with bag filters	1	
	➢ Dust catcher followed by Venturi scrubber	1	
	➢ Bag filters & others	1	
	➢ Stacks	1	2
	➢ Water Sprinklers	0.50	
2	**Wastewater Management**		
	➢ for ETP & STP	0.50	
	➢ for Garland drains	0.20	0.25
3	**Solid waste Management**		
	➢ Fly Ash Handling & disposal	1.0	
	➢ Slag Handling & Disposal	0.50	
	➢ Hazardous waste storage & disposal	0.20	
	➢ Municipal solid waste storage & disposal	0.30	
4	Greenbelt development, Land scaping, Noise Management, RWH etc.	0.50	0.50
5	**Environmental Monitoring**		
	➢ AAQMS	1	0.10
	➢ CEMS	1	0.10
	➢ Third party Monitoring	--	0.50
6	**Occupational Health & Safety**		
	➢ PHC	0.75	
	➢ PPEs	0.25	
	➢ Ambulance (additional)	0.30	
	➢ Fire Safety Systems	1	0.20
Total		**24**	**3.65**
Extended EMP (Corporate Environment Responsibility)		**20**	**Nil**

43.16.18 Proposed greenbelt will be developed in 21.12 ha which is about 36% of the total project area. 10 m wide greenbelt, consisting of at least 3 tiers around plant boundary will be developed as greenbelt and green cover as per CPCB/MoEF&CC, New Delhi guidelines. Local and native species will be planted with a density of 2500 trees per hectare. Total 53,000 nos. of saplings will be planted and nurtured in 21.12 ha.

43.16.19 It is reported that there is no violation under EIA, 2006/court case/show cause/direction if any, related to the project under consideration.

Findings of EAC (Industry-1) sub-committee:

43.16.20 The observations and recommendations of the EAC (Industry-1) sub-committee based on the site visit to M/s Swadesh Metallics Pvt Ltd. located at Kesda, Simga, Balodabazar-Bhatapara, Chhattisgarh on 12-13th August. 2023 are as follows:

Observation of Sub-committee during visit:

In the course of site visit, the sub-committee observed the following:

i. The EAC observed that a temporary road (Pagdandi) is passing through the project site, which seemed to be developed as a mark or impression left by the foot walk by the local peoples.

ii. A Seasonal drain/Nallah of about 2 m width was observed at entry point within the proposed project site.

iii. It was observed that a culvert like construction shall be needed over the Nallah to maintain its natural flow.

iv. A village Newdha is located at about 500 m from boundary of proposed project.

v. A Government Middle School is present at around 600 meter towards NW direction of the project site.

vi. The proposed lands are mainly Agricultural lands mostly for paddy cultivation.

Recommendations of the Sub-Committee:

1. A Small seasonal drain/Nalla is passing through the project site at entry point, which should not be disturbed/ diverted.
2. The PP to obtain No Objection Certificate from the State Irrigation department.
3. The PP to prepare a land use plan for land which is acquired and remaining which is not yet acquired giving boundary area with proper indexing.
4. For seasonal drain/Nalla within the project site at entry point, the PP should prepare a conservation plan with a construction of retaining wall or earthen bund of sufficient height to safeguard. Proper mitigation measures may be adopted to protect the nallah/drains. A water conservation plan for the water bodies present in the project site is essential with respect to contouring of the area and PP to ensure that no disposal of drainage inside the project area shall be letting into the natural water bodies existing within and around project site.
5. No diversion of any stream or nallah shall be permitted in the project site.

6. Proper Green belt may be developed in the vicinity of water bodies/Nallah/drain/stream. Further PP to ensure a thick Green belt all around project boundary within the project site with three tier system.
7. Considering the fact regarding the existence of a Government Middle school, Newdha (शासकीय पूर्व माध्यमिक विद्यालय, नेवधा)) at the distance of about 600 meters from the project boundary, a dense vegetation/plantation must be developed in and around the school boundary/premises and shall provide basic facilities to the nearby School as part of Corporate Social Responsibility (CSR).
8. PP shall develop green belt around the school boundary/premises and shall provide basic facilities to the nearby School as part of Corporate Social Responsibility (CSR).
9. During the operation phase, PP is advised to conduct air monitoring in the vicinity of adjoining schools and human habitations to assess environmental/ecological impact. The PP should implement a project specific AQMP (Air Quality Management Plan) with Best practices.
10. The PP should develop a control strategy and mitigation plan that incorporates the pollution control measures. The Clean Air practices shall be adopted like mechanical collectors, wet scrubbers, fabric filters (baghouses), electrostatic precipitators, etc.
11. The PP shall comply with all the aforementioned recommendations and deliberations as mentioned in the MoM of the 24th EAC (Ind-1) meeting.

43.16.21 Based on the points raised by the EAC during its 39th meeting of the EAC for Industry-I sector held on 6-7th July, 2023, and the recommendations made by the EAC (Industry-1) sub-committee, PP uploaded the ADS reply vide its letter dated 29.08.2023 uploaded on PARIVESH portal on 30.08.2023 as detailed in table below.

A. ADS Reply w.r.t M/s Swadesh Metallics Pvt. Ltd

S.No.	Queries	Reply by the PP
1	The PP reported that the total land involved in the proposed project is 58.68 ha [Private: 39.66 ha; Govt.: 4.04 ha] out of which approx. 39.66 ha land is under the possession of the company and entire land will be diverted for industrial purposes. Agreement is signed with land owners for 14.98 ha. Also signed the MoU with the state government for setting up industry. The EAC deliberated on the land acquisition status and is of the view that the land status is not very clear and still not completely transferred in the name of PP.	Current details of the project site are given below:- • Private Land = 40.18 ha • Government Land = 3.86 ha • Sale agreement executed = 14.64 ha 40.18 ha land is under the possession of the company and entire land will be diverted for industrial purposes. Government land is under allotment process. Agreement is signed with land owners for 14.64 ha. Request letter for change of land use for 36.17 ha land has been submitted to competent authority.

S.No.	Queries	Reply by the PP
2	The EAC observed that a road is passing through the project site. In this regard, the EAC deliberated on the submission of PP and layout plan and is of the view that the submission of PP is not conclusive enough to understand the ground reality and permission for diversion of road is not available. The EAC is of the opinion that since this is a greenfield project, it is pertinent to understand the ground through a site visit of a sub-committee.	The project site is located at Village-Kesda, Tehsil-Simga, District -Balodabazar - Bhatapara, State-Chhattisgarh and No road is passing through the project site. Project site is abutting to Tilda-Simga Road, which further gets connected to Raipur-Bilaspur National Highway towards NNW at approx. 10.5 km.
3	Newdha is at a distance of 0.5 km towards East direction of the project Site. There are approx. Total 56 villages and 1 town is present in 10 km radius study area of the project site. Considering the Environmental Sensitivity to the habitation in the area, the EAC opined that it is prudent to inspect the area for understanding the ground reality as the area appears to have rich habitation.	Newdha village is 500 m towards east direction (Crosswind direction). Hence no impact will be investigated on the nearest habitation from proposed project. However, to minimize the impact of project on nearest habitation, PP will develop 21.12 ha area as green belt, which is 36% of the project area and following additional measures will be followed during proposed project:- ➢ Covered trucks will be used for transport of Raw materials. ➢ Coal screen House, Crusher House, Junction houses and surge hopper, Iron ore screen house and bins, Product discharge, Junction House & SMS bins will be provided with dust extraction system with bag filters. ➢ Water sprinklers will be provided for dust suppression during unloading of raw materials. ➢ 10 mtr thick green belt along the project boundary. ➢ Mechanical dust sweepers will be provided. ➢ All internal roads will be asphalted to prevent fugitive dust due to vehicular transport.
4	Jamuniya Seasonal Nala is present at a distance of 1.2 km in the East of the plant site. Othere water bodies are also present are within the study area. The EAC is of the opinion that water bodies are required to be conserved. Drainage Conservation scheme to protect the natural drainage and its flow parameters; along with Soil conservation scheme and multiple	Seasonal Jamuniya Nalla passes at 1.2 km towards SE direction and Ghughua Tank is 5 km towards west direction and Manpur Dam is at 6.8 km towards SE direction from project site. ➢ There will be zero effluent discharge from the current project. ➢ The effluent generated from Pellet plant, DRI plant, SMS, DIP, Sinter & Rolling

S.No.	Queries	Reply by the PP
	Erosion control measures is not submitted. Further during preparation of drainage conservation plan, PP shall prepare a contour map showing contour interval, proper Bench Mark, Drainage disposal with design and calculations, Rain Water Harvesting Plan with design and calculation including the invert level of disposal point in order to achieve ZLD.	Mill units will be sent to settling tank & will be recycled through closed circuit cooling system. ➢ Effluent from Gas cleaning plant of Blast Furnace will be treated in a settling tank and after treatment it will be recycled. ➢ Effluent from power plant will be treated and after ensuring compliance with SPCB norms, it will be utilized for dust suppression, ash conditioning and for greenbelt development. ➢ Garland drains will be constructed around the storage yards to prevent any runoff from the storage yards entering into the water bodies and this will be collected in rainwater harvesting reservoirs (RWH Reservoirs). ➢ Sanitary wastewater will be treated in STP, and treated water will be used in green belt. ➢ Zero effluent discharge will be maintained. PP will construct RWH tanks for storage of runoff for fifteen days. It is expected that water inflow and outflow will be continuous to avoid overflow. The conserved water in RWH ponds will be utilized for plant water requirements till it is available. Accordingly, the net water requirement for the plant will be reduced. Internal storm water drain with natural slope around the plot will be provided.
5	PP shall undertake village adoption and formulate Village Adoption program consisting of need-based community development activities, to develop them into model villages. PP shall submit details of the villages to be adopted.	Village Newdha will be adopted for which a budget of Rs. 1 Cr is kept also as per MoEF&CC Office Memorandum vide F.No.22-65/2017-IA.III dated. 30th September 2020, INR 20 Cr has been earmarked for commitment made by Project Proponent to address the concern raised during public hearing. Village namely Newdha village will be adopted to formulate village development program under consultation with local panchayat and district administration.
6	The Committee deliberated on the incremental GLC due to the proposed	Incremental GLC due to the proposed project has been calculated using Aermod

S.No.	Queries	Reply by the PP
	project and observed that incremental GLC for CO has not been submitted in the brief. In this regard, the EAC is of the opinion complete information in this regard shall be submitted.	software. Spatial distribution of hourly average CO maximum incremental GLC (2.3 ug/m^3) @900 m, SW
7	The water requirement for the project is estimated as 3642 m^3/day, which will be sourced from Shivnath River. The EAC noted that water permission has not been obtained and application for the same has been submitted to Competent Authority.	Daily freshwater requirement for proposed project including domestic water will be 3,642 KLD. Water will be recycled through closed circuit cooling system. Industrial water will be sourced from Surface water (Anicut Tulsi-Pausri Anicut on Shivnath River). Final approval is under progress and will be granted after grant of EC. Domestic water will be sourced from Ground water supply. NOC has been obtained.
8	Details of railway siding permission and its status needs to be submitted.	Consultant has been appointed dated 03.04.2023 and Pre-feasibility report has been prepared. Same will be submitted to Raipur Division of SECR for IPA (In principle Approval). After getting the IPA, DPR and ESP will be prepared and same will be submitted to Railway for approval.
9	The PP/Consultant has to revise the EIA/EMP Report along with all the details as per the provisions of the EIA Notification, 2006.	Agreed and complied.

B. Point-wise reply to the observations raised during site visit.

S.No.	Queries	Reply by PP
1	A Small seasonal drain/Nalla is passing through the project site at entry point, which should not be disturbed/ diverted.	Agreed. Seasonal Nalla passing through the project site at entry point and will not be diverted. A Cross over bridge will be constructed over the stream for movement of vehicles.
2	The PP to obtain No Objection Certificate from the State Irrigation department.	No Objection Certificate has been granted by Executive Engineer, MRP, Disnet, Division No-3, WRD, CG dated 11.09.2023. Same has been submitted.
3	The PP to prepare a land use plan for land which is acquired and remaining	40.18 ha land is under the possession of the company and entire land will be diverted for

S.No.	Queries	Reply by PP
	which is not yet acquired giving boundary area with proper indexing.	industrial purposes. Request letter for change of land use for 36.17 ha land has been submitted to competent authority. Agreement is signed with land owners for 14.98 ha. 3.86 ha Government land is under allotment process. Also signed the MoU with the state government for setting up industry. Layout plan showing land use of acquired and remaining land with proper indexing has been submitted.
4	For seasonal drain/Nalla within the project site at entry point, the PP should prepare a conservation plan with a construction of retaining wall or earthen bund of sufficient height to safeguard. Proper mitigation measures may be adopted to protect the nallah/drains. A water conservation plan for the water bodies present in the project site is essential with respect to contouring of the area and PP to ensure that no disposal of drainage inside the project area shall be letting into the natural water bodies existing within and around project site.	To minimize the impact of the project on Seasonal Nalla at entry point, following mitigation measures has been proposed :- ➢ There will not be any effluent discharge from the current project in the Nalla. ➢ The effluent generated from Pellet plant, DRI plant, SMS, DIP, Sinter & Rolling Mill units will be sent to settling tank & will be recycled through closed circuit cooling system. ➢ Effluent from Gas cleaning plant of Blast Furnace will be treated in a settling tank and after treatment it will be recycled. ➢ PP will maintain bed rock characteristics and stream profile by post monsoon drazing for entire stream. ➢ Wire mesh netting will be installed to prevent entering of solid waste and plastic waste in stream at entry & exit points. ➢ To prevent contamination in stream passing through project site, one meter retaining wall will be constructed. ➢ Effluent from power plant will be treated and after ensuring compliance with SPCB norms, it will be utilized for dust suppression, ash conditioning and for greenbelt development. ➢ Garland drains will be constructed around the storage yards to prevent any runoff from the storage yards entering into the water bodies and this will be collected in rainwater harvesting reservoirs (RWH Reservoirs). ➢ Sanitary wastewater will be treated in STP, and treated water will be used in green belt. ➢ Storm water will be collected in rainwater harvesting tanks.

S.No.	Queries	Reply by PP
5	No diversion of any stream or nallah shall be permitted in the project site.	Seasonal Nalla passing through the project site at entry point will not be diverted. A Cross over bridge will be constructed over the stream for movement of vehicles. There will be zero effluent discharge from the current project.
6	Proper Green belt may be developed in the vicinity of water bodies/Nallah/drain/stream. Further PP to ensure a thick Green belt all around project boundary within the project site with three tier system.	Total 21.12 ha i.e. 36 percent of total land has been earmarked for greenbelt. 10 m wide greenbelt along the project boundary and 20m wide green belt towards East has been proposed. Total 53,000 tree species will be planted @ 2500 trees per ha i.e. 21.12 x 2500 = 52,800.
7	Considering the fact regarding the existence of a Government Middle school, Newdha (**शासकीय पूर्व माध्यममक मर्द्यालय**, **नेर्धा**)) at the distance of about 600 meters from the project boundary, a dense vegetation/plantation must be developed in and around the school boundary/premises and shall provide basic facilities to the nearby School as part of Corporate Social Responsibility (CSR).	Agreed. As per the CER plan, total 5,000 trees will be planted in nearby villages Kesda, Newdha, Ringni & Hathbandh. Out of this 1000 trees will be planted within and around Govt Middle school, Newdha., in consultation with school management.
8	PP shall develop green belt around the school boundary/premises and shall provide basic facilities to the nearby School as part of Corporate Social Responsibility (CSR).	Agreed and will be complied.
9	During the operation phase, PP is advised to conduct air monitoring in the vicinity of adjoining schools and human habitations to assess environmental/ecological impact. The PP should implement a project specific AQMP (Air Quality Management Plan) with Best practices.	Agreed and will be complied.
10	The PP should develop a control strategy and mitigation plan that incorporates the pollution control measures. The Clean Air practices shall be adopted like mechanical collectors, wet scrubbers, fabric filters (baghouses), electrostatic precipitators, etc.	Agreed and will be complied.
11	The PP shall comply with all the aforementioned recommendations and deliberations as mentioned in the	Agreed.

S.No.	Queries	Reply by PP
	MoM of the 24th EAC (Ind-1) meeting.	

43.16.22 Based on the above submission of PP, the proposal was reconsidered during 43rd meeting of the EAC for Industry-I sector held on 4th – 5th September, 2023. The deliberations and recommendations of EAC are as follows:

Written submission by the PP:

43.16.23 During the meeting, based on the deliberations made by the EAC, the project proponent vide email dated 12.09.2023 submitted the following information:

- NOC dated 11.09.2023 from Executive Engineer, WRD that the project site does not fall in any of the project of irrigation department and have stated conditions to be complied for conservation of the water bodies.
- PP has submitted an undertaking dated 12.09.2023 that No Objection Certificate has been granted by Executive Engineer, MRP, Disnet, Division No-3, WRD, CG dated 11.09.2023 and they will abide by all the conditions mentioned in the NOC letter.

Deliberations by the Committee

43.16.24 The Committee noted the following:

1. The instant proposal is for setting up of a Greenfield Project for Installation of Iron Ore Pellet Plant (0.6 MTPA), DRI Plant (0.42 MTPA), SMS with Caster (0.25 MTPA), Rolling Mill (0.20 MTPA), Pig Iron Plant (0.26 MTPA), Sinter Plant (0.40 MTPA), DIP Plant (0.24 MTPA), Coal Washery Unit (0.98 MTPA) with Captive Power Plant (85 MW) for producing TMT bar, wire rods, steel bar coils and de-coiled bars and Ductile Iron Pipes with PGP of 8000 Nm^3/hr.
2. The EAC, constituted under the provision of the EIA Notification, 2006 comprising Expert Members/domain experts in various fields, examined the proposal submitted by the Project Proponent in desired format along with EIA/EMP reports prepared and submitted by the Consultant accredited by the QCI/ NABET on behalf of the Project Proponent.
3. The EAC noted that the Project Proponent has given an undertaking that the data and information given in the application and enclosures are true to the best of his knowledge and belief and no information has been suppressed in the EIA/EMP reports. If any part of data/information submitted is found to be false/ misleading at any stage, the project will be rejected and Environmental Clearance given, if any, will be revoked at the risk and cost of the project proponent.
4. The Committee noted that the EIA reports are in compliance of the ToR issued for the project, reflecting the present environmental status and the projected scenario for all the environmental components. The Committee deliberated on the proposed mitigation measure towards Air, Water, Noise and Soil pollutions. The Committee suggested that the storage of

toxic/explosive raw materials/products shall be undertaken with utmost precautions and following the safety norms and best practices.

5. While appraising the proposal, the EAC took into consideration the observations and recommendations of the sub-committee report on the site visit conducted during 12-13th August 2023, as detailed in para 43.16.20 above.

6. The PP reported that the total land involved in the proposed project is 58.68 ha [Private: 40.18 ha; Govt.: 3.86 ha] out of which approx. 40.18 ha land is under the possession of the company and entire land will be diverted for industrial purposes. Government land is under allotment process. Sale Agreement is signed with land owners for 14.64 ha. PP has reported that request letter for change of land use for 36.17 ha land has been submitted to competent authority. The EAC advised that total project land shall be acquired and converted for industrial purpose prior to commencement of project.

7. Newdha is at a distance of 0.5 km towards East direction of the project Site. There are approx. Total 56 villages and 1 town is present in 10 km radius study area of the project site. The EAC is of the opinion that PP shall strictly implement the environmental safeguard measures proposed to minimise the impact on the habitation of the locals.

8. A Small seasonal drain/Nalla is passing through the project site at entry point. Jamuniya Seasonal Nala is present at a distance of 1.2 km in the East of the plant site. Other water bodies are also present are within the study area. The EAC is of the opinion that water bodies including the seasonal drain/Nalla is passing through the project site shall not be disturbed/diverted. Mitigation measures w.r.t. safeguarding the water bodies shall be strictly implemented.

9. PP has reported that No Objection Certificate has been granted by Executive Engineer, MRP, Disnet, Division No-3, WRD, CG dated 11.09.2023 that the project site does not fall in any of the project of irrigation department and have stated conditions to be complied for conservation of the water bodies. PP has further submitted an undertaking date 12.09.2023 to abide by all the conditions mentioned in the NOC letter.

10. The water requirement for the project is estimated as 3642 m^3/day which is proposed to be sourced from surface water (Anicut Tulsi-Pausri Anicut on Shivnath River). Application for the same has been submitted to competent Authority. The EAC deliberated on the water requirement and is of the opinion that necessary permission shall be obtained from the Competent Authority prior to commencement of project.

11. The Committee has deliberated on the baseline data and incremental GLC due to the proposed project and found it satisfactory.

12. The PP has submitted that greenbelt will be developed in 21.12 ha which is about 36% of the total project area. Total 53,000 nos. of saplings will be planted and nurtured in 21.12 ha. The EAC deliberated on the revised greenbelt layout plan along with action plan and the budget earmarked and is of the opinion that PP shall complete the proposed greenbelt development in a period of 1 year. PP ha further committed that total 5,000 trees will be planted in nearby villages Kesda, Newdha, Ringni & Hathbandh. Out of this 1000 trees will

be planted within and around Govt Middle school, Newdha., in consultation with school management.

13. The committee deliberated details of carbon foot prints and carbon sequestration study w.r.t. proposed project and found them to be satisfactory.

14. The Committee also deliberated on the public hearing issues along with action plan submitted by the proponent to address the issues raised during the public hearing and found it satisfactory.

15. The EAC also deliberated on the ADS reply of the project proponent along with reply on observations and recommendations of sub-committee during site visit and found it satisfactory.

16. The EAC deliberated on the proposal with due diligence in the process as notified under the provisions of the EIA Notification, 2006, as amended from time to time and accordingly made the recommendations to the proposal. The Experts Members of the EAC found the proposal in order and recommended for grant of environmental clearance.

17. The environmental clearance recommended to the project/activity is strictly under the provisions of the EIA Notification 2006 and its subsequent amendments. It does not tantamount/construe to approvals/consent/permissions etc. required to be obtained or standards/conditions to be followed under any other Acts/ Rules/ Subordinate legislations, etc., as may be applicable to the project. The project proponent shall obtain necessary permission as mandated under the Water (Prevention and Control of Pollution) Act, 1974 and the Air (Prevention and Control of Pollution) Act, 1981, as applicable from time to time, from the State Pollution Control Board, prior to construction & operation of the project.

18. The EAC also reviewed the EC conditions (specific and general) pertaining to Industry-I projects and observed that some of the specific conditions stipulated so far in the previously recommended EC projects are common and applicable to most of the projects in general. In view of the same, the General Conditions (in case of EC projects) have been revised through reallocation of these common conditions from specific to General Conditions (in case of EC projects). Accordingly, the instant project is also being stipulated with the modified General conditions.

Recommendations of the Committee:

43.16.25 In view of the foregoing and after detailed deliberations, the committee **recommended** the instant proposal **subject to uploading of written submission on PARIVESH portal** for grant of Environment Clearance under the provisions of EIA Notification, 2006 subject to the stipulation of following specific conditions and general conditions as per the Ministry's Office Memorandum No. 22-34/2018-III dated 9/8/2018 based on project specific requirements:

A. Specific Condition:

i. This Environmental clearance is granted subject to final outcome of Hon'ble Supreme Court of India, Hon'ble High Court, Hon'ble NGT and any other Court of Law, if any, as may be applicable to this project.

ii. The project proponent shall comply with all the environmental protection measures and safeguards proposed in the documents submitted to the Ministry. All the recommendations made in the EIA/EMP in respect of environmental management, and risk mitigation measures relating to the project shall be implemented.

iii. The project proponent shall utilize modern technologies for capturing of carbon emitted and shall also develop carbon sink/carbon sequestration resources capable of capturing more than emitted. The implementation report shall be submitted to the IRO, MoEF&CC in this regard.

iv. Total project land acquisition shall be completed and converted for industrial purpose prior to commencement of project.

v. Newdha is at a distance of 0.5 km towards East direction of the project Site. There are approx. Total 56 villages and 1 town is present in 10 km radius study area of the project site. Proponent shall take appropriate environmental safeguard measures to minimise the impact on the habitation of the locals. PP needs to strengthen green belt all around the plant area to reduce the dust pollution. The PP shall also include some of these locations in its environmental monitoring programme.

vi. A Small seasonal drain/Nalla is passing through the project site at entry point. Jamuniya Seasonal Nala is present at a distance of 1.2 km in the East of the plant site. Other water bodies are also present are within the study area. The water bodies shall not be disturbed/diverted. A robust and full proof Drainage Conservation scheme to protect the natural drainage and its flow parameters; along with Soil conservation scheme and multiple Erosion control measures shall be implemented. PP to ensure that no disposal of drainage inside the project area shall be letting into the natural water bodies existing within and around project site.

vii. PP shall abide by all the conditions mentioned in the NOC granted by Executive Engineer, WRD, CG dated 11.09.2023.

viii. The water requirement of 3642 m^3/day shall be sourced from surface water (Anicut Tulsi-Pausri Anicut on Shivnath River) only after obtaining necessary permission from the Competent Authority.

ix. Three tier Green Belt shall be developed in at least 33% of the project area in a period of 1 year all along the project site of adequate width and tree density shall not be less than 2500 per ha. Survival rate of green belt developed shall be monitored on periodic basis to ensure that damaged plants are replaced with new plants in the subsequent years. PP shall also develop greenbelt in the form of shelter belt comprising of total of 6 rows of 2x2 m plantation with tall trees & broad leaves with thick canopy along with windshield inside the plant premises to act as green barrier for air pollution & noise levels towards sensitive habitation. As committed, total 5,000 trees will be planted in nearby villages Kesda, Newdha, Ringni & Hathbandh. Out of this 1000 trees will be planted within and around Govt Middle school, Newdha., in consultation with school management. Compliance status in this regard, shall be submitted to concerned Regional Office of the MoEF&CC.

x. All the commitments made towards socio-economic development of the nearby villages shall be satisfactorily implemented. The action plan based on the social impact assessment study of the project as per the EMP in accordance to the Ministry's OM dated 30.09.2020

amounting to Rs. 0.20 Crores shall be strictly implemented and progress shall be submitted to the Regional Office of MoEF&CC.

xi. As committed, PP shall adopt Village Newdha and prepare and implement the action plan to develop it into a model village.

xii. During the operation phase, PP shall conduct air monitoring in the vicinity of adjoining schools and human habitations to assess environmental/ecological impact. The PP should implement a project specific AQMP (Air Quality Management Plan) with Best practices.

B. General Conditions

I. Statutory compliance:

i. The Environment Clearance (EC) granted to the project/ activity is strictly under the provisions of the EIA Notification, 2006 and its amendments issued from time to time. It does not tantamount/ construe to approvals/ consent/ permissions etc., required to be obtained or standards/conditions to be followed under any other Acts/Rules/Subordinate legislations, etc., as may be applicable to the project.

II. Air quality monitoring and preservation

i. The project proponent shall install 24x7 continuous emission monitoring system at process stacks to monitor stack emission as well as 06 Nos. Continuous Ambient Air Quality Station (CAAQMS) for monitoring AAQ parameters with respect to standards prescribed in Environment (Protection) Rules 1986 as amended from time to time. The CEMS and CAAQMS shall be connected to SPCB and CPCB online servers and calibrate these systems from time to time according to equipment supplier specification through labs recognized under Environment (Protection) Act, 1986 or NABL accredited laboratories.

ii. The project proponent shall carryout Continuous Ambient Air Quality monitoring for common/criterion parameters relevant to the main pollutants released (e.g. PM_{10} and $PM_{2.5}$ in reference to PM emission, and SO_2 and NOx in reference to SO_2 and NOx emissions) within and outside the plant area (at least at four locations one within and three outside the plant area at an angle of 120° each), covering upwind and downwind directions.

iii. The project proponent shall monitor fugitive emissions in the plant premises at least once in every quarter through laboratories recognized under Environment (Protection) Act, 1986 or NABL accredited laboratories.

iv. Sampling facility at process stacks shall be provided as per CPCB guidelines for manual monitoring of emissions.

v. Appropriate Air Pollution Control (APC) system shall be provided for all the dust generating points including fugitive dust from all vulnerable sources, so as to comply prescribed stack emission and fugitive emission standards.

vi. The project proponent shall provide leakage detection and mechanized bag cleaning facilities for better maintenance of bags.

vii. Sufficient number of mobile or stationery vacuum cleaners shall be provided to clean plant roads, shop floors, roofs, regularly.

viii. Ensure covered transportation and conveying of raw material to prevent spillage and dust generation. The project proponent use leak proof trucks/dumpers carrying coal and other raw materials and cover them with tarpaulin.

ix. Recycle and reuse iron ore fines, coal and coke fines, lime fines and such other fines collected in the pollution control devices and vacuum cleaning devices in the process after briquetting/ agglomeration.

x. The project proponent shall provide primary and secondary fume extraction system at all heat treatment furnaces.

xi. Wind shelter fence and chemical spraying shall be provided on the raw material stock piles.

xii. Design the ventilation system for adequate air changes as per prevailing norms for all tunnels, motor houses, Oil Cellars.

xiii. Pollution control system in the plant shall be provided as per the CREP Guidelines of CPCB.

xiv. The project proponent shall adopt the Clean Air practices like mechanical collectors, wet scrubbers, fabric filters (bag houses), electrostatic precipitators, combustion systems (thermal oxidizers), condensers, absorbers, adsorbers, and biological degradation. Controlling emissions related to transportation shall include emission controls on vehicles as well as use of cleaner fuels. Sufficient numbers of additional truck mounted Fog/Mist water cannons shall be procured and operated regularly inside the project premises and also in the surrounding villages to arrest suspended dust in the atmosphere.

xv. Bag filters shall be cleaned regularly and efficiency of bag filter system shall be monitored at regular intervals.

xvi. Water Sprinklers/Water mist system shall be installed near raw material yards, operational units and other strategic locations to control fugitive emissions from the plant.

xvii. The particulate matter emissions from the process stacks shall be less than 30 mg/Nm^3 and measures shall be undertaken as per the submitted action plan. Efficient Air monitoring equipment shall be installed.

xviii. Following additional arrangements to control fugitive dust shall be provided:

a. Fog / Mist Sprinklers at all on bulk raw material storage area (at the transfer points) like Iron Ore, Coal and for Fly Ash and similar solid waste storage areas.
b. Proper covered vehicle shall be used while transport of materials.
c. Wheel washing mechanism shall be provided in entry and exit gates with complete recirculation system.

xix. Hoppers of the coal crushing unit and other washery units shall be fitted with high efficiency bag filters/mist spray water sprinkling system shall be installed and operated effectively at all times of operation to check fugitive emissions from crushing operations, transfer points of closed belt conveyor systems and from transportation roads.

xx. The raw coal, washed coal and coal wastes (rejects) shall be stacked properly at earmarked site (s) within stockyards fitted with wind breakers/shields. Adequate measures shall be taken to ensure that the stored mineral does not catch fire.

xxi. The temporary reject sites should appropriate planned and designed to avoid air and water pollution from such sites.

xxii. During operational phase at Captive Power Plant, Action Plan to monitor coke/coal dust exposures in different process plants using personal and area air samplers and to compare with permissible limits as per Indian Factories Act, 1948 shall be implemented.

xxiii. The coal dust should be monitored at coal unloading, crushing, furnace areas and should be within 2 mg/m^3, respirable dust fraction containing less than 5% quartz as per Indian Factories Act, 1948.

xxiv. Ductile Iron (DI) plant shall have the following provisions:

a. Bag filter for Zn coating and Mg converter area.
b. Wet scrubbers in paint and bitumen coating area.
c. Bag Filter in Cement lining area.
d. PTFE dipped bags shall be used in the plant.
e. PM emissions from BF in Zinc coating area shall be 5 mg/Nm3.
f. ETP with recycling facility shall be included.

xxv. Online stack monitoring system for IF and RHF shall be installed and monitoring report shall be submitted to the concerned Regional Office of the MoEF&CC along with the six monthly compliance report.

xxvi. Low NOx Burners will be installed at Reheating Furnace for control of Gaseous emissions generated while using PNG.

III. Water quality monitoring and preservation

i. The project proponent shall install 24x7 continuous effluent monitoring system with respect to standards prescribed in Environment (Protection) Rules 1986 as amended from time to time and connected to SPCB and CPCB online servers and calibrate these system from time to time according to equipment supplier specification through labs recognized under Environment (Protection) Act, 1986 or NABL accredited laboratories.

ii. The project proponent shall monitor regularly ground water quality at least twice a year (pre- and post-monsoon) at sufficient numbers of piezometers/sampling wells in the plant and adjacent areas through labs recognized under Environment (Protection) Act, 1986 and NABL accredited laboratories.

iii. Garland drains and collection pits shall be provided for each stock pile to arrest the run-off in the event of heavy rains and to check the water pollution due to surface run off.

iv. Water meters shall be provided at the inlet to all unit processes in the plants.

v. The project proponent shall make efforts to minimise water consumption in the plant complex by segregation of used water, practicing cascade use and by recycling treated water.

vi. The proposed project shall be designed as "Zero Liquid Discharge" Plant. ETP shall be installed and there shall be no discharge of effluent from the plant. Domestic effluent shall be treated in Sewage Treatment Plant. Suitable measures shall be adopted for sewage water handling to ensure no contamination of any kind of water body.

vii. All stockyards shall have impervious flooring and shall be equipped with water spray system for dust suppression. Stock yards shall also have garland drains and catch pits to trap the run off material and shall be implemented as per the action plan submitted in EIA/EMP report.

viii. Rain water harvesting shall be implemented to recharge/harvest water as per the action plan submitted in the EIA/EMP report.

ix. The project proponent shall provide the ETP for effluents of rolling mills to meet the standards prescribed in G.S.R 277 (E) 31st March 2012 (applicable to IF/EAF) as amended from time to time.

x. The effluent discharge (mine waste water, workshop effluent) shall be monitored in terms of the parameters notified under the Water Act, 1974 Coal Industry Standards vide GSR 742 (E) dated 25.9.2000 and as amended from time to time by the Central Pollution Control Board.

xi. Heavy metal content in raw coal and washed coal shall be analysed once in a year and records maintained thereof.

xii. The rejects should preferably be utilized in FBC power plant or disposed off through sale for its gainful utilization. If the coal washery rejects are to be disposed off, it should be done in a safe and sustainable manner with adequate compaction and post closure arrangement to avoid water pollution due to leachate from rejects and surface run of from reject dumping sites.

xiii. An Integrated Surface Water Management Plan for the washery area up to its buffer zone considering the presence of any river/rivulet/pond/lake etc. with impact of coal washing activities on it, shall be prepared, submitted to MoEFCC and implemented.

xiv. Waste Water shall be effectively treated and recycled completely either for washery operations or maintenance of green belt around the plant.

xv. Rainwater harvesting in the washery premises shall be implemented for conservation and augmentation of ground water resources in consultation with Central Ground Water Board.

xvi. No ground water shall be used for coal washing unless otherwise permitted in writing by competent authority (CGWA) or MoEFCC. The make-up water requirement of washery should not exceed 1.5 m^3/tonne of raw coal.

xvii. Regular monitoring of ground water level and quality shall be carried out in and around the mine lease area by establishing a network of existing wells and constructing new piezometers during the mining operations. The monitoring of ground water levels shall be carried out four times a year i.e. pre-monsoon, monsoon, post-monsoon and winter. The ground water quality shall be monitored once a year, and the data thus collected shall be sent regularly to MOEFCC/RO.

xviii. The project proponent shall take all precautionary measures to ensure riverine/ riparian ecosystem in and around the coal mine up to a distance of 5 km. A riverine/riparian ecosystem conservation and management plan should be prepared and implemented in consultation with the irrigation / water resource department in the state government

xix. Air Cooled condensers shall be used in the captive power plant.

IV. Noise monitoring and prevention

i. Noise pollution shall be monitored as per the prescribed Noise Pollution (Regulation and Control) Rules, 2000 and amendments thereof, and report in this regard shall be submitted to Regional Officer of the Ministry as a part of six-monthly compliance report.

ii. The ambient noise levels should conform to the standards prescribed under E(P)A Rules, 1986 viz. 75 dB(A) during day time and 70 dB(A) during night time.

iii. PP shall identify extreme hot areas through heat stress survey as well as noise monitoring within process plants to ensure that workers not exposed above 90 dBA levels as per Factories Act, 1948.

V. Energy Conservation measures

i. Use torpedo ladle for hot metal transfer as far as possible. If ladles not used, provide covers for open top ladles.
ii. Restrict Gas flaring to < 1%.
iii. Provide solar power generation on roof tops of buildings, for solar light system for all common areas, street lights, parking around project area and maintain the same regularly;
iv. Provide LED lights in their offices and residential areas.
v. The project proponent shall provide waste heat recovery system (pre-heating of combustion air) at the flue gases of reheating furnaces.
vi. Practice hot charging of slabs and billets/blooms as far as possible.
vii. Ensure installation of regenerative type burners on all reheating furnaces.
viii. Blast Furnaces shall be equipped with Top Recovery Turbine, dry gas cleaning plant, stove waste heat recovery, cast house and stock house ventilation system and slag granulation facility.
ix. The project proponent shall provide waste heat recovery system on the DRI Kilns.
x. The dolochar generated shall be used for power generation.
xi. Tar shall be recovered from producer gas and shall be sold to registered processors and phenolic water shall be incinerated in After Burn Chamber (ABC) of DRI kilns.
xii. The PP shall implement the guidelines on sponge iron plants issued by the CPCB/SPCB in this regard.

VI. Waste management

i. Oil Collection pits shall be provided in oil cellars to collect and reuse/recycle spilled oil.
ii. Kitchen waste shall be composted or converted to biogas for further use.
iii. 100% utilization of fly ash shall be ensured. All the fly ash shall be provided to cement and brick manufacturers for further utilization and Memorandum of Understanding in this regard shall be submitted to the Ministry's Regional Office.
iv. The Plastic Waste Management Rules 2016, inter-alia, mandated banning of identified Single Use Plastic (SUP) items with effect from 01/07/2022. In this regard, CPCB has issued a direction to all the State Pollution Control Boards (SPCBs)/Pollution Control Committees (PCCs) on 30/06/2022 to ensure the compliance of Notification published by Ministry on 12/08/2021. The technical guidelines issued by the CPCB in this regard is available at https://cpcb.nic.in/technical-guidelines-3/. All the project proponents are hereby requested to sensitize and create awareness among people working within the Project area as well as its surrounding area on the ban of SUP in order to ensure the compliance of Notification published by this Ministry on 12/08/2021. A report, along with photographs, on the measures taken shall also be included in the six monthly compliance report being submitted by the project proponents.
v. A proper action plan must be implemented to dispose of the electronic waste generated in the industry.

vi. Solid waste utilization
   a. PP shall install a slag crusher to convert steel slag into aggregate for use in construction industry, fine sand for use as flux in steel plant, sand in brick making and as lime in cement making.
   b. PP shall recycle/reuse solid waste generated in the plant as far as possible.
   c. Used refractories shall be recycled as far as possible.

vii. SMS slag after metal recovery in waste recycling facility shall be conditioned and used for road making, railway track ballast and other applications. The project proponent shall install a waste recycling facility to recover metallic and flux for recycle to sinter plant. The project proponent shall establish linkage for 100% reuse of rejects from Waste Recycling Plant.

viii. Carbon recovery plant to recover the elemental carbon present in GCP slurries for use in Sinter plant shall be installed.

ix. Waste recycling Plant shall be installed to recover scrap, metallic and flux for recycling to sinter plant and SMS.

x. Rejects from coal washery shall only be used either in the captive power plant (or) in the Thermal Power Plants meeting emission standards.

VII. Green Belt

i. The project proponent shall prepare GHG emissions inventory for the plant and shall submit the programme for reduction of the same including carbon sequestration by trees.

ii. Project proponent shall submit a study report on Decarbonisation program, which would essentially consist of company's carbon emissions, carbon budgeting/ balancing, carbon sequestration activities and carbon capture, use and storage and offsetting strategies. Further, the report shall also contain time bound action plan to reduce its carbon intensity of its operations and supply chains, energy transition pathway from fossil fuels to Renewable energy etc. All these activities/ assessments should be measurable and monitor able with defined time frames.

iii. The industry should draw up and implement and action plan for achieving carbon neutrality consistent with India's commitment to achieving carbon neutrality. The action plan should contain milestones with targets to be achieved in suitable periods.

iv. Greening and Paving shall be implemented in the plant area to arrest soil erosion and dust pollution from exposed soil surface.

VIII. Public hearing and Human health issues

i. Emergency preparedness plan based on the Hazard identification and Risk Assessment (HIRA) and Disaster Management Plan shall be implemented.

ii. The project proponent shall carry out heat stress analysis for the workmen who work in high temperature work zone and provide Personal Protection Equipment (PPE) as per the norms.

iii. Provision shall be made for the housing of construction labour within the site with all necessary infrastructure and facilities such as fuel for cooking, mobile toilets, mobile STP. Safe drinking water, medical health care, creche etc. The housing may be in the form of temporary structures to be removed after the completion of the project.

iv. Occupational health surveillance of the workers shall be done on a regular basis and records maintained.

IX. Environment Management

i. The project proponent shall comply with the provisions contained in this Ministry's OM vide F.No. 22-65/2017-IA.III dated 30/09/2020. As part of Corporate Environment Responsibility (CER) activity, company shall adopt nearby villages based on the socio-economic survey and undertake community developmental activities in consultation with the village Panchayat and the District Administration as committed.

ii. The company shall have a well laid down environmental policy duly approve by the Board of Directors. The environmental policy should prescribe for standard operating procedures to have proper checks and balances and to bring into focus any infringements/deviation/violation of the environmental / forest / wildlife norms / conditions. The company shall have defined system of reporting infringements / deviation / violation of the environmental / forest / wildlife norms / conditions and / or shareholders / stake holders. The copy of the board resolution in this regard shall be submitted to the MoEF&CC as a part of six-monthly report.

iii. A separate Environmental Cell both at the project and company head quarter level, with qualified personnel shall be set up under the control of senior Executive, who will directly to the head of the organization.

iv. Performance test shall be conducted on all pollution control systems every year and report shall be submitted to Integrated Regional Office of the MoEF&CC.

X. Miscellaneous

i. The project proponent shall make public the environmental clearance granted for their project along with the environmental conditions and safeguards at their cost by prominently advertising it at least in two local newspapers of the District or State, of which one shall be in the vernacular language within seven days and in addition this shall also be displayed in the project proponent's website permanently.

ii. The copies of the environmental clearance shall be submitted by the project proponents to the Heads of local bodies, Panchayats and Municipal Bodies in addition to the relevant offices of the Government who in turn has to display the same for 30 days from the date of receipt.

iii. The project proponent shall upload the status of compliance of the stipulated environment clearance conditions, including results of monitored data on their website and update the same on half-yearly basis.

iv. The project proponent shall monitor the criteria pollutants level namely; PM10, SO2, NOx (ambient levels as well as stack emissions) or critical sectoral parameters, indicated for the projects and display the same at a convenient location for disclosure to the public and put on the website of the company.

v. Action plan for developing connecting and internal road in terms of MSA as per IRC guidelines shall be implemented

vi. The project proponent shall submit six-monthly reports on the status of the compliance of the stipulated environmental conditions on the website of the ministry of Environment, Forest and Climate Change at environment clearance portal.

vii. The project proponent shall submit the environmental statement for each financial year in Form-V to the concerned State Pollution Control Board as prescribed under the Environment (Protection) Rules, 1986, as amended subsequently and put on the website of the company.

viii. The project proponent shall inform the Regional Office as well as the Ministry, the date of financial closure and final approval of the project by the concerned authorities, commencing the land development work and start of production operation by the project.

ix. The project proponent shall abide by all the commitments and recommendations made in the EIA/EMP report, commitment made during Public Hearing and also that during their presentation to the Expert Appraisal Committee.

x. The recommendations of the approved Site-Specific Wildlife Management Plan (in case of involvement of Schedule-I species) shall be implemented in consultation with the State Forest Department. The implementation report shall be furnished along with the six-monthly compliance report to the concerned Regional Office of the MoEF&CC.

xi. The PP shall put all the environment related expenditure, expenditure related to Action Plan on the PH issues, and other commitments made in the EIA/EMP Report etc. in the company web site for the information to public/public domain. The PP shall also put the information on the left over funds allocated to EMP and PH as committed in the earlier ECs and shall be carried out and spent in next three years, in the company web site for the information to public/public domain.

xii. No further expansion or modifications in the plant shall be carried out without prior approval of the Ministry of Environment, Forests and Climate Change (MoEF&CC).

xiii. Concealing factual data or submission of false/fabricated data may result in revocation of this environmental clearance and attract action under the provisions of Environment (Protection) Act, 1986.

xiv. The Ministry may revoke or suspend the clearance, if implementation of any of the above conditions is not satisfactory.

xv. The Ministry reserves the right to stipulate additional conditions if found necessary. The Company in a time bound manner shall implement these conditions.

xvi. The Regional Office of this Ministry shall monitor compliance of the stipulated conditions. The project authorities should extend full cooperation to the officer (s) of the Regional Office by furnishing the requisite data / information/monitoring reports.

xvii. Any appeal against this EC shall lie with the National Green Tribunal, if preferred, within a period of 30 days as prescribed under Section 16 of the National Green Tribunal Act, 2010.

The meeting ended with thanks to the Chair.

****

ANNEXURE –1

Standard ToR in line with Appendix III of the EIA, 2006. applicable to Proposals Under Industry-1 Sector

Preliminary requirements:

i. EIA/EMP report cover page shall consists of project title with location, applicable schedule of the EIA Notification, 2006, ToR letter No. with date, study period along with EIA consultant & laboratory details with QCI/NABET/NABL accreditation certificate detail.

ii. Besides, following points shall be compiled as per QCI/NABET norms:
   a. Disclaimer by the EIA consultant.
   b. Declaration by the Functional Area Experts contributed to the EIA study and declaration by the head of the accredited consultant organization/authorized person.
   c. Undertaking by the project proponent owning the contents (information and data) of the EIA/EMP report.
   d. Undertaking by the EIA consultant regarding compliance of ToR issued by MoEF&CC.
   e. Consultant shall submit the Plagiarism Certificate for the EIA/EMP Report.

Structure of EIA/EMP report

Executive Summary

i. Table of Contents of the EIA report including list of tables/figures/annexures/abbreviations/symbols/notations.

ii. Point wise compliance to the ToR issued by MoEF&CC.

iii. Executive Summary
   I. Introduction
      i. Name of the project along with applicable schedule and category as per EIA, 2006.
      ii. Location and accessibility
   II. Project description
      i. Resource requirements (Land; water; fuel; manpower)
      ii. Operational activity
      iii. Key pollution concerns
   III. Baseline Environment Studies
      i. Ambient air quality
      ii. Ambient Noise quality
      iii. Traffic study
      iv. Surface water quality
      v. Ground water quality
      vi. Soil quality
      vii. Biological Environment
      viii. Land use
      ix. Socio-economic environment
   IV. Anticipated impacts

i. Impact on ambient air quality
ii. Impact on ambient noise quality
iii. Impact on road and traffic
iv. Impact on surface water resource and quality
v. Impact on ground water resource and quality
vi. Impact on terrestrial and aquatic habitat
vii. Impact on socio-economic environment

V. Alternative analysis
VI. Environmental Monitoring program
i. Ambient air, noise, water and soil quality
ii. Emission and discharge from the plant
iii. Green belt
iv. Social parameters

VII. Additional studies
i. Risk assessment
ii. Public consultation
iii. Action plan to address the issues raised during public consultation as per MoEF&CC O.M. dated 30/09/2020

VIII. Project benefits
IX. Environment management plan
i. Air quality management plan
ii. Noise quality management plan
iii. Solid and hazardous waste management plan
iv. Effluent management plan
v. Storm water management plan
vi. Occupational health and safety management plan
vii. Green belt development plan
viii. Socio-economic management plan
ix. Project cost and EMP implementation budget.

EIA/EMP Report

1. Introduction

i. Background about the project
ii. Need of the project
iii. Purpose of the EIA study
iv. Scope of the EIA study

2. Project description

A. Site Details

i. Location of the project site covering village, Taluka/Tehsil, District and State.
ii. Site accessibility
iii. A digital toposheet in pdf or shape file compatible to google earth of the study area of radius of 10km and site location preferably on 1:50,000 scale. (including all eco-sensitive areas and environmentally sensitive places).

iv. Latest High-resolution satellite image data having 1 m - 5 m spatial resolution like quickbird, Ikonos, IRS P-6 pan sharpened etc., along with delineation of plant boundary co-ordinates. Area must include at least 100 m all around the project location.

v. Environment settings of the site and its surrounding along with map.

vi. A list of major industries with name, products and distance from plant site within study area (10km radius) and the location of the industries shall be depicted in the study area map.

vii. In case if the project site is in vicinity of the water body, 50 meters from the edge of the water body towards the site shall be treated as no development/construction zone. If it's near the wetland, Guidelines for implementing Wetlands (Conservation and Management) Rules, 2017 may be followed.

viii. In case if the project site is in vicinity of the river, the industry shall not be located within the river flood plain corresponding to one in 25 years flood, as certified by concerned District Magistrate/Executive Engineer from State Water Resources Department (or) any other officer authorized by the State Government for this purpose as per the provisions contained in the MoEF&CC Office Memorandum dated 14/02/2022.

ix. In case of canal/ nala/ seasonal drain and any other water body passing through project site, the PP shall submit the suitable steps /conservation plan/mitigation measures along with contouring, Run -off calculations, disposal etc. A robust and full proof Drainage Conservation scheme to protect the natural drainage/water bodies and its flow parameters; along with Soil conservation scheme and multiple Erosion control measures shall be provided in the report.

x. Type of land, land use of the project site needs to be submitted.

xi. Status of acquisition of land. If acquisition is not complete, stage of the acquisition process as per the MoEF&CC O.M. dated 7/10/2014 shall be furnished.

xii. Project proponent shall prepare Engineering layout plan showing all internal roads minimum 6 m width and 9 m turning radius for smooth traffic flow inside including fire tender as per NBC. Road network shall connect all service areas in layout. This drawing shall include area statement showing plot area, area under roads, parking, green belt with calculations and % with respect to plot area of project site and proper indexing. If located within an Industrial area/Estate/Complex, layout of Industrial Area indicating location of unit within the Industrial area/Estate.

xiii. Project proponent shall submit contour map of project site along with drainage disposal system with calculations and drawings supported with proper indexing including Rain Water Harvesting details with calculations mentioning about GW recharge along with relevant drawing.

xiv. A detailed report covering all aspects of Fire Safety Management and Fire Emergency Plan shall be submitted.

xv. Details of drone survey for the site, needs to be included in report and presented before the EAC during appraisal of the project.

B. Forest and wildlife related issues (if applicable):

i. Status of Forest Clearance for the use of forest land shall be submitted.
ii. Copy of application submitted for clearance under the Wildlife (Protection) Act, 1972, to the Standing Committee of the National Board for Wildlife if the project site located within notified Eco-Sensitive Zone, 10 km radius of national park/sanctuary wherein final ESZ notification is not in place as per MoEF&CC Office Memorandum dated 8/8/2019.
iii. The projects to be located within 10 km of the National Parks, Sanctuaries, Biosphere Reserves, Migratory Corridors of Wild Animals, Eco-sensitive Zone and Eco-sensitive areas, the project proponent shall submit the map duly authenticated by Divisional Forest Officer showing the distance between the project site and the said areas.
iv. Wildlife Conservation Plan duly authenticated by the Competent Authority of the State Government for conservation of Schedule I fauna along with budget and action plan, if any exists in the study area.

C. Salient features of the project

i. Products with capacities in **Tons per Annum** for the proposed project.
ii. If expansion project, status of implementation of existing project, details of existing/proposed products with production capacities in Tons per Annum.
iii. Site preparatory activities.
iv. List of raw materials required and their source along with mode of transportation.
v. Other than raw materials, other chemicals and materials required with quantities and storage capacities.
vi. Manufacturing process details along with process flow diagram of proposed units.
vii. Consolidated materials and energy balance for the project.
viii. Total requirement of surface/ ground water and power with their respective sources, status of approval.
ix. Water balance diagram
x. Details of Emission, effluents, hazardous waste generation and mode of disposal during construction as well as operation phase.
xi. Man-power requirement.
xii. Cost of project and scheduled time of completion.
xiii. In case of expansion projects, project proponent shall submit structural stability certificate showing whether existing structure withstand for proposed expansion activity.
xiv. Brief on present status of compliance (Expansion/modernization proposals)
    a. Cumulative Environment Impact Assessment for the existing as well as the proposed expansion/modernization shall be carried out.
    b. In case of ground water drawl for the existing unit, action plan for phasing out of ground water abstraction in next two years except for domestic purposes and shall switch over to 100 % use of surface water from nearby source.
    c. Copy of all the Environment Clearance(s) including Amendments/validity of extension/transfer of EC, there to obtained for the project from MoEF&CC/SEIAA shall be attached as Annexures. A Certified Compliance Report (CCR) of the Integrated Regional Office of the Ministry of Environment, Forest and Climate Change/ or concerned authority as per OM

No. IA3-22/10/2022-IA.III [E 1772581], dated 8th June, 2022 on the status of compliance of conditions stipulated in all the existing environment clearances including amendments shall be provided. A Certified Compliance Report (CCR) issued by the concerned Authority shall be valid for a period of one year from the date of inspection.

d. In case the existing project has not obtained Environment Clearance, reasons for not taking EC under the provisions of the EIA Notification 1994 and/or EIA Notification 2006 shall be provided. A proper justification needs to be submitted along with documentary proof. Copies of Consent to Establish/No Objection Certificate and Consent to Operate (in case of units operating prior to EIA Notification 1994 or 2006, CTE and CTO of FY 2005-2006) obtained from the SPCB shall be submitted. Further, compliance report to the conditions of CTO from the Regional Office of the SPCB shall be submitted, as per OM No. IA3-22/10/2022-IA.III [E 1772581], dated 8th June, 2022. CCR on CTO conditions issued by the concerned SPCBs/PCCs shall be valid for a period of one year from the date of inspection of the project.

3. Description of the Environment

i. Study period

ii. Approach and methodology for data collection as furnished below.

Attributes	Sampling		Remarks
	Network	Frequency	
A. Air Environment			
Micro-Meteorological • Wind speed (Hourly) • Wind direction • Dry bulb temperature • Wet bulb temperature • Relative humidity • Rainfall • Solar radiation • Cloud cover • Environmental Lapse Rate	Minimum 1 site in the project impact area	1 hourly continuous	• IS 5182 Part 1-20 • Site specific primary data is essential • Secondary data from IMD, New Delhi • CPCB guidelines to be considered.
Pollutants • $PM_{2.5}$	At least 8-12 locations	As per National Ambient Air Quality Standards, CPCB Notification.	• Sampling as per CPCB guidelines • Collection of AAQ data (except in monsoon season) • Locations of various stations for different
• PM_{10}			
• SO_2			
• NOx			
• CO			
• HC			

Attributes	Sampling		Remarks
	Network	Frequency	
• Other parameters relevant to the project and topography of the area			parameters should be related to the characteristic properties of the parameters. • The monitoring stations shall be based on the NAAQM standards as per GSR 826(E) dated 16/11/2009 and take into account the predominant wind direction, population zone and sensitive receptors including reserved forests, • Raw data of all AAQ measurement for 12 weeks of all stations as per frequency given in the NAAQM Notification of 16/11/2009 along with min., max., average and 98% values for each of the AAQ parameters from data of all AAQ stations should be provided as an annexure to the EIA Report.
B. Noise			
• Hourly equivalent noise levels	At least 8-12 locations	As per CPCB norms	-
C. Water			

Attributes	Sampling		Remarks
	Network	Frequency	
Parameters for water quality • pH, temp, turbidity, magnesium hardness, total alkalinity, chloride, sulphate, nitrate, fluoride, sodium, potassium, salinity • Total nitrogen, total phosphorus, DO, BOD, COD, Phenol • Heavy metals • Total coliforms, faecal coliforms • Phyto-plankton • Zoo-plankton • Microalgae/microalgal bloom	Samples for water quality should be collected and analyzed as per: • IS: 2488 (Part 1-5) methods for sampling and testing of Industrial effluents • Standard methods for examination of water and wastewater analysis published by American Public Health Association.		
For River Bodies • Total Carbon • pH • Dissolved Oxygen • Biological Oxygen Demand • Free NH4 • Boron • Sodium Absorption Ratio • Electrical Conductivity • TDS	• Surface water quality of the nearest River (60m upstream and downstream) and other surface water bodies	• Yield of water sources to be measured during critical season • Standard methodology for collection of surface water (BIS standards)	
For Ground Water	• Ground water monitoring data should be collected at minimum of 8 locations (from existing wells /tube wells/existing current records) from the study area and shall be included.		
D. Traffic Study			
• Type of vehicles • Frequency of vehicles for transportation of materials	-		

Attributes	Sampling		Remarks
	Network	Frequency	
• Additional traffic due to proposed project • Parking arrangement			
E. Land Environment			
Soil • Particle size distribution • Texture • pH • Electrical conductivity • Cation exchange capacity • Alkali metals • Sodium Absorption Ratio (SAR) • Permeability • Water holding capacity • Porosity	Soil samples be collected as per BIS specifications		
Land use/Landscape • Location code • Total project area • Topography • Drainage (natural) • Cultivated, forest, plantations, water bodies, roads and settlements	-		
E. Biological Environment			
Aquatic • Primary productivity • Aquatic weeds • Enumeration of phyto plankton, zoo plankton and benthos • Fisheries • Diversity indices • Trophic levels • Rare and endangered species • Marine Parks/ Sanctuaries/ closed	• Detailed description of flora and fauna (terrestrial and aquatic) existing in the study area shall be given with special reference to rare, endemic and endangered species. Indicator species which indicate ecological and environment degradation should be identified and included to clearly state whether the proposed project would result in to any adverse effect on any species. • Samples to collect from upstream and downstream of discharge point, nearby tributaries at downstream, and also from dug wells close to activity site. • For forest studies, direction of wind should be considered while selecting forests.		

Attributes	Sampling		Remarks
	Network	Frequency	
areas /coastal regulation zone (CRZ) **Terrestrial** • Vegetation-species list, economic importance, forest produce, medicinal value • Importance value index (IVI) of trees • Fauna • Avi fauna • Rare and endangered species • Sanctuaries / National park / Biosphere reserve • Migratory routes	• Secondary data to collect from Government offices, NGOs, published literature.		
F. Socio-economic			
• Demographic structure • Infrastructure resource base • Economic resource base • Health status: Morbidity pattern • Cultural and aesthetic attributes • Education	• Socio-economic survey is based on proportionate, stratified and random sampling method. • Primary data collection through questionnaire • Secondary data from census records, statistical hard books, topo sheets, health records and relevant official records available with Govt. agencies		

iii. Interpretation of each environment attribute shall be enumerated and summarized as given below:

- Ambient air quality
- Ambient Noise quality
- Surface water quality
- Ground water quality
- Soil quality
- Biological Environment
- Land use
- Socio-economic environment

4. **Anticipated Environment Impacts and mitigation measures (In case of expansion, cumulative impact assessment shall be carried out)**
    i. Identification of potential impacts in the form of a **matrix** for the construction and operation phase for all the environment components

Activity	Environment	Ecological	Socio-economic
Construction phase			
Operation phase			

    ii. Impact on ambient air quality (Sources; Embedded control measures; Assessment; Mitigation measures; Residual impact)
        a. Construction phase
        b. Operation phase
            - Details of stack emissions from the existing as well as proposed activity.
            - Assessment of ground level concentration of pollutants from the stack emission based on AQIP Modelling The air quality contours shall be plotted on a location map showing the location of project site, habitation nearby, sensitive receptors, if any along with wind rose map for respective period
            - Impact on ground level concentration, under normal, abnormal and emergency conditions. Measures to handle emergency situations in the event of uncontrolled release of emissions.
    iii. Impact on ambient noise quality (Sources; Embedded control measures; Assessment; Mitigation measures; Residual impact)
        a. Construction phase
        b. Operation phase
    iv. Impact on traffic (Sources; Embedded control measures; Assessment; Mitigation measures; Residual impact)
        a. Construction phase
        b. Operation phase
    v. Impact on soil quality (Sources; Embedded control measures; Assessment; Mitigation measures; Residual impact)
        a. Construction phase
        b. Operation phase
    vi. Impact on land use (Sources; Embedded control measures; Assessment; Mitigation measures; Residual impact)
        a. Construction phase
        b. Operation phase
    vii. Impact on surface water resource and quality (Sources; Embedded control measures; Assessment; Mitigation measures; Residual impact)
        a. Construction phase
        b. Operation phase
    viii. Impact on ground water resource and quality (Sources; Embedded control measures; Assessment; Mitigation measures; Residual impact)
        a. Construction phase

b. Operation phase

ix. Impact on terrestrial and aquatic habitat (Sources; Embedded control measures; Assessment; Mitigation measures; Residual impact)
   a. Construction phase
   b. Operation phase

x. Impact on socio-economic environment (Sources; Embedded control measures; Assessment; Mitigation measures; Residual impact)
   a. Construction phase
   b. Operation phase

xi. Impact on occupational health and safety (Sources; Embedded control measures; Assessment; Mitigation measures; Residual impact)
   a. Construction phase
   b. Operation phase

5. Analysis of Alternatives (Technology & Site)

i. No project scenario
ii. Site alternative
iii. Technical and social concerns
iv. Conclusion

6. Environmental Monitoring Program

i. Details of the Environment Management Cell
ii. Performance monitoring schedule for all pollution control devices shall be furnished.
iii. Corporate Environment Policy
   a. Does the company have a well laid down Environment Policy approved by its Board of Directors? If so, it may be detailed in the EIA report.
   b. Does the Environment Policy prescribe for standard operating process / procedures to bring into focus any infringement / deviation / violation of the environment or forest norms / conditions? If so, it may be detailed in the EIA.
   c. What is the hierarchical system or Administrative order of the company to deal with the environment issues and for ensuring compliance with the environment clearance conditions? Details of this system may be given.
   d. Does the company have system of reporting of non compliances / violations of environment norms to the Board of Directors of the company and / or shareholders or stakeholders at large? This reporting mechanism shall be detailed in the EIA report

iv. Action plan for **post-project environment monitoring matrix**:

Activity	**Aspect**	**Monitoring Parameter**	**Location**	**Frequency**	**Responsibility**
Construction phase					
Operation phase					

7. Additional Studies

i. Project proponent shall submit a study report on Decarbonisation program, which would essentially consist of company's carbon emissions, carbon budgeting/ balancing, carbon sequestration activities and carbon capture, use and storage after offsetting strategies. Further, the report shall also contain time bound action plan to reduce its carbon intensity of its operations and supply chains, energy transition pathway from fossil fuels to Renewable energy etc. All these activities/ assessments should be measurable and monitorable with defined time frames.

ii. Details of adoption/ implementation status/plan to achieve the goal of Glasgow COP26 Climate Submit with regard to enhance the non-fossil energy, use of renewable energy, minimization of net carbon emission and carbon intensity with long-term target of "net Zero" emission.

iii. Implementation status/measures adopted for avoiding the generation of single used plastic waste.

iv. In cases the project is located in Critically and Severely Polluted Areas, additional mitigation measures adopted and detailed action plan to be submitted in the EIA/EMP Report as per MoEF&CC O.M. No. 22-23/2028-IA.III dated 31/10/2019 and MoEF&CC O.M. No. 22-23/2028-IA.III dated 5/07/2022 has to be submitted.

v. Public consultation details (Entire proceedings as separate annexure along with authenticated English Translation of Public Consultation proceedings).

vi. As part of Corporate Environment Responsibility (CER) activity, company shall adopt nearby villages based on the socio-economic survey and undertake community developmental activities in consultation with the village Panchayat and the District Administration. In this regard, time bound action plan as per the MoEF&CC Office Memorandum dated 30/09/2020 shall be submitted.

vii. Summary of issues raised during public consultation along with action plan to address the same as per MoEF&CC O.M. dated 30/09/2020

S No	**Physical activity and action plan**		**Year of implementation (Budget in INR)**			**Total Expenditure (Rs. in Crores)**
	Name of the Activity	**Physical Targets**	**1st**	**2nd**	**3rd**	

viii. Risk assessment

- Methodology
- Hazard identification
- Frequency analysis
- Consequence analysis
- Risk assessment outcome

ix. Emergency response and preparedness plan

8. Project Benefits

i. Environment benefits

ii. Social infrastructure

iii. Employment and business opportunity
iv. Other tangible benefits

9. Environment Cost Benefit Analysis

i. Net present value
ii. Internal rate of return
iii. Benefit cost ratio
iv. Cost effectiveness analysis

10. Environment Management Plan (Construction and Operation phase)

i. Air quality management plan
ii. Noise quality management plan
iii. Action plan for hazardous waste management
iv. Action plan for solid waste management
v. Action plan for e-waste management.
vi. Action plan for plastic waste management.
vii. Action plan for construction and demolition waste management.
viii. Effluent management plan
ix. Storm water management plan
x. Rain water harvesting plan
xi. Plan for maximum usage of waste water/treated water in the Unit
xii. Occupational health and safety management plan
xiii. Green belt development plan: An action plan for Green Belt development consisting of 3 tiers of plantations of native species all along the periphery of the project of adequate width shall be raised in 33% of total area with a tree density shall not less than 2500 per ha within a time frame of one year shall be submitted. Survival rate of green belt shall be monitored on periodic basis to ensure that survival rate not be less than 80 %.
xiv. Socio-economic management plan
xv. Wildlife conservation plan (In case of presence of schedule I species)
xvi. Total capital cost and recurring cost/annum for environment pollution control measures shall be included.

11. Conclusion of the EIA study

12. In addition to the above, any litigation pending against the project and/or any direction/order passed by any Court of Law against the project, if so, details thereof shall also be included. Has the unit received any notice under the Section 5 of Environment (Protection) Act, 1986 or relevant Sections of Air and Water Acts? If so, details thereof and compliance/ATR to the notice(s) and present status of the case.

****

ANNEXURE-2

Standard ToRs FOR CEMENT INDUSTRY [3(b)]

1. Limestone and coal linkage documents along with the status of environment clearance of limestone and coal mines.
2. Quantum of production of coal and limestone from coal & limestone mines and the projects they cater to;
3. Present land use shall be prepared based on satellite imagery. High-resolution satellite image data having 1m-5m spatial resolution like quickbird, Ikonos, IRS P-6 pan sharpened etc. for the 10 Km radius area from proposed site. The same shall be used for land used/land-cover mapping of the area.
4. If the raw materials used have trace elements, an environment management plan shall also be included.
5. Plan for the implementation of the recommendations made for the cement plants in the Corporate Responsibility for Environmental Protection (CREP) guidelines shall be prepared.
6. Energy consumption per ton of clinker and cement grinding
7. Provision of waste heat recovery boiler
8. Arrangement for co-processing of hazardous waste in cement plant.
9. Provision of Alternate fuels.
10. Details of Implementation of Fly Ash Management Rules
11. Emission/Effluent norms as per GSR 496 (E) dated 9/5/2016 [EPA Rules 1986].
12. Action plan for the stock piles with impervious floor, provision of garland drains and catch pits to trap run off material shall be submitted.
13. Action plan to limit the particulate matter emission from all the stacks below 30 mg/Nm3 shall be furnished.
14. PP shall explore the possibility of plastic waste utilization in the Plant/Unit process.
15. Action plan for 100 % solid waste utilization shall be submitted.
16. PM (PM_{10} and $P_{2.5}$) present in the ambient air must be analysed for source analysis – natural dust/RSPM generated from plant operations (trace elements) of PM_{10} to be carried over.

Standard ToRs FOR INTEGRATED STEEL PLANT [3(a)]

1. Iron ore/coal linkage documents along with the status of environment clearance of iron ore and coal mines.
2. Quantum of production of coal and iron ore from coal & iron ore mines and the projects they cater to. Mode of transportation to the plant and its impact.
3. For Large ISPs, a 3-D view i.e. DEM (Digital Elevation Model) for the area in 10 km radius from the proposal site. MRL details of project site and RL of nearby sources of water shall be indicated.
4. Recent land-use map based on satellite imagery. High-resolution satellite image data having 1m-5m spatial resolution like quickbird, Ikonos, IRS P-6 pan sharpened etc. for the 10 Km radius area from proposed site. The same shall be used for land used/land-cover mapping of the area.

5. PM (PM_{10} and $PM_{2.5}$) present in the ambient air must be analysed for source analysis – natural dust/RSPM generated from plant operations (trace elements) of PM_{10} to be carried over.
6. All stock piles will have to be on top of a stable liner to avoid leaching of materials to ground water.
7. Plan for the implementation of the recommendations made for the steel plants in the CREP guidelines.
8. Plan for slag utilization
9. Plan for utilization of energy in off gases (coke oven, blast furnace)
10. System of coke quenching adopted with justification.
11. Trace metals Mercury, arsenic and fluoride emissions in the raw material.
12. Trace metals in waste material specially in slag.
13. Trace metals in water
14. Details of proposed layout clearly demarcating various units within the plant.
15. Complete process flow diagram describing each unit, its processes and operations, along with material and energy inputs and outputs (material and energy balance).
16. Details on design and manufacturing process for all the units.
17. Details on environmentally sound technologies for recycling of hazardous materials, as per CPCB Guidelines, may be mentioned in case of handling scrap and other recycled materials.
18. Details on requirement of energy and water along with its source and authorization from the concerned department. Location of water intake and outfall points (with coordinates).
19. Details on toxic metal content in the waste material and its composition and end use (particularly of slag).
20. Details on toxic content (TCLP), composition and end use of slag.
21. Fourth Hole fume extraction system shall be provided for submerged Arc Furnace (SAF). Waste heat recovery (WHR) system shall be installed to recover the sensible heat from flue gases of electric arc furnace (EAF).
22. Emission/effluent norms as per G.S.R 894 (E) dated 4/12/2019 [EPA Rules 1986].
23. Action plan for the stock piles with impervious floor, provision of garland drains and catch pits to trap run off material shall be submitted.
24. Action plan to limit the particulate matter emission from all the stacks below 30 mg/Nm3 shall be furnished.
25. Action plan for 100 % solid waste utilization shall be submitted.
26. PP shall explore the possibility of plastic waste utilization in the Plant/Unit process.

Standard ToRs FOR METALLURGICAL INDUSTRY (Ferrous and Non-ferrous)[3(a)]

1. A 3-D view i.e. DEM (Digital Elevation Model) for the area in 10 km radius from the proposal site. MRL details of project site and RL of nearby sources of water shall be indicated.
2. Plan for the implementation of the recommendations made for the proposed Unit in the Corporate Responsibility for Environmental Protection (CREP) guidelines.
3. Plan for solid wastes utilization.

4. Plan for utilization of energy in off gases (coke oven, blast furnace)
5. System of coke quenching adopted with full justification.
6. Details on environmentally sound technologies for recycling of hazardous materials, as per CPCB Guidelines, may be mentioned in case of handling scrap and other recycled materials.
7. Details on toxic metal content in the waste material and its composition and end use (particularly of slag).
8. Details on toxic content using Toxicity Characteristic Leaching Procedure (TCLP), composition and end use of slag.
9. 100 % dolo char generated in the plant shall be used to generate power.
10. Fourth Hole fume extraction system shall be provided for SAF.WHR system shall be installed to recover sensible heat from flue gases of EAF. Provision for installation of jigging and briquetting plant to utilise the fines generated in the process.
11. No tailing pond is permitted for Iron ore slimes. Dewatering and filtration system shall be provided.
12. Emission/effluent norms as per G.S.R 894 (E) dated 4/12/2019 [EPA Rules 1986].
13. Action plan for the stock piles with impervious floor, provision of garland drains and catch pits to trap run off material shall be submitted.
14. Action plan for developing connecting and internal road in terms of MSA as per IRC guidelines shall be submitted.
15. Action plan to limit the particulate matter emission from all the stacks below 30 mg/Nm3 shall be furnished.
16. Action plan for 100 % solid waste utilization shall be submitted.
17. PM (PM_{10} and $P_{2.5}$) present in the ambient air must be analysed for source analysis – natural dust/RSPM generated from plant operations (trace elements) of PM_{10} to be carried over.

******

Standard ToRs FOR PULP AND PAPER INDUSTRY [5(i)]

1. A note on pulp washing system capable of handling wood pulp shall be included.
2. Manufacturing process details for the existing and proposed plant shall be included. Chapter on Pulping & Bleaching shall include: no black liquor spillage in the area of pulp mill; no use of elemental chlorine for bleaching in mill; installation of hypo preparation plant; no use of potcher washing and use of counter current or horizontal belt washers. Chapter on Chemical Recovery shall include: no spillage of foam in chemical recovery plant, no discharge of foul condensate generated from MEE directly to ETP; control of suspended particulate matter emissions from the stack of fluidized bed recovery boiler and ESP in lime kiln
3. Studies shall be conducted and a chapter shall be included to show that Soda pulping process can be employed for Eucalyptus/Casuarina to produce low kappa (bleachable) grade of pulp.
4. Commitment that only elemental Chlorine-free technology will be used for the manufacture of paper and existing plant without chemical recovery plant will be closed within 2 years of issue of environment clearance.

5. A commitment that no extra chlorine base bleaching chemicals (more than being used now) will be employed and AOx will remain within limits as per CREP for used based mills. Plan for reduction of water consumption.
6. Undertaking to comply with the norms stipulated in the S.O. 3187 (E) dated 7/10/2016 for the projects located in Ganga basin.
7. Action plan for the stock piles with impervious floor, provision of garland drains and catch pits to trap run off material shall be submitted.
8. Action plan to limit the particulate matter emission from all the stacks below 30 mg/Nm3 shall be furnished.
9. Action plan for 100 % waste utilization shall be submitted.

Standard ToRs FOR LEATHER/SKIN/HIDE PROCESSING INDUSTRY [4(f)]

1. Justification for engaging a particular type of process (raw hide/skin into semi finishing or finished leather, semi-finished leather to finished leather, dry finishing operations, chrome/vegetable tanning, etc.).
2. Details regarding complete leather/ skin/ hide processing including the usage of sulphides, nitrogen compounds, chromium or other tanning agents, post-tanning chemicals, biocides, etc., along with the material balance shall be provided.
3. In case of chrome tanning, details of the chrome recovery plant, management of shavings/solid waste including safe disposal.
4. Details on reuse of soak liquor / saline stream from membrane system, if applicable, to the extent possible in pickling activity after required treatment. Also, mention the salt recovery measures.
5. Action plan to limit the particulate matter emission from all the stacks below 30 mg/Nm3 shall be furnished.
6. Action plan for 100 % waste utilization shall be submitted.

Standard ToRs FOR COKE OVEN PLANT [4(b)]

1. Justification for selecting recovery/non-recovery (beehive) type batteries with the proposed unit size.
2. Details of proposed layout clearly demarcating various facilities such as coal storages, coke making, by-product recovery area, etc within the plant.
3. Details of coke oven plant (recovery/non-recovery type) including coal handling, coke oven battery operations, coke handling and preparation.
4. Scheme for coal changing, charging emission centre, Coke quenching technology, pushing emission control.
5. Scheme for coke oven effluent treatment plant details including scheme for meeting cyanide standard.
6. Emission/effluent norms as per G.S.R 894 (E) dated 4/12/2019. Provision of CDQ in case of coke oven plant of 0.8 MTPA and above.

7. Action plan to limit the particulate matter emission from all the stacks below 30 mg/Nm3 shall be furnished.
8. Action plan for 100 % solid waste utilization shall be submitted.
9. Action plan for the stock piles with impervious floor, provision of garland drains and catch pits to trap run off material shall be submitted.

Standard ToRs FOR ASBESTOS MILLING AND ASBESTOS BASED PRODUCTS[4(c)]

1. Type of fibres used (Asbestos and others) and preference of selection from techno-environment angle should be furnished
2. As asbestos is used in several products and as the level of precautions differ from milling to usage in cement products, friction products gasketing, textiles and also differ with the process used, it is necessary to give process description and reasons for the choice for selection of process
3. Technology adopted, flow chart, process description and layout marking areas of potential environment impacts
4. National standards and codes of practice in the use of asbestos particular to the industry should be furnished
5. In case of newly introduced technology, it should include the consequences of any failure of equipment/ technology and the product on environment status.
6. In case of expansion project asbestos fibre to be measured at stack emission and work zone area, besides base line air quality.
7. In case of green field project asbestos fibre to be measured in the ambient air.
8. Action plan to limit the particulate matter emission from all the stacks below 30 mg/Nm3 shall be furnished.
9. Action plan for 100 % solid waste utilization shall be submitted.
10. PM (PM10 and P2.5) present in the ambient air must be analysed for source analysis – natural dust/RSPM generated from plant operations in case of expansion projects (trace elements /asbestos fibre) of PM10 to be carried over.
11. Action plan for the stock piles with impervious floor, provision of garland drains and catch pits to trap run off material shall be submitted.

Standard ToRs FOR IRON ORE BENEFICIATION PLANT [2 (b)]

1. Details regarding pollution control measures to be adopted in the mineral handling area, loading and unloading areas including all transfer points shall be submitted.
2. The Project proponent shall submit action plan for conditioning of the ore with water to mitigate fugitive dust emission, without affecting flow of ore in the ore processing and handling areas.
3. Treatment details regarding effluent generated from the ore beneficiation plant and the mode of transportation of tailing slurry shall be submitted.
4. Separate chapter on slime management shall be submitted.

5. Action plan for regular monitoring of ground water level and quality in and around the project area of beneficiation plant and tailing/slime pond shall be submitted by establishing a network of existing wells and constructing new piezometers.
6. Details regarding lining of the tailing/slime pond to be provided shall be submitted in order to ensure that there is no leaching from the tailing/slime pond.
7. Details regarding establishment of garland drain around the tailing/slime pond and the quantity of decanted water to be re-circulated from the tailing/slime pond shall be submitted along with complete water balance.
8. Technology to be adopted for maximum recovery of ore in order to reduce slurry discharge and to increase the life of the tailing/slime pond shall be submitted.
9. Action plan for 100 % solid waste utilization shall be submitted.
10. Action plan for the stock piles with impervious floor, provision of garland drains and catch pits to trap run off material shall be submitted.

****

Executive Summary

Executive summary of the report in about 8/10 pages incorporating the following:

i. Project name and location (Village, Dist, State, Industrial Estate (if applicable)
ii. Products and capacities. If expansion proposal, then existing products with capacities and reference to earlier EC.
iii. Requirement of land, raw material, water, power, fuel, with source of supply (Quantitative)
iv. Process description in brief, specifically indicating the gaseous emission, liquid effluent and solid and hazardous wastes. Materials balance shall be presented.
v. Measures for mitigating the impact on the environment and mode of discharge or disposal.
vi. Capital cost of the project, estimated time of completion
vii. Site selected for the project – Nature of land – Agricultural (single/double crop), barren, Govt/private land, status of is acquisition, nearby (in 2/3 km.) water body, population, with in 10km other industries, forest, eco/sensitive zones, accessibility, (note – in case of industrial estate this information may not be necessary)
viii. Baseline environmental data – air quality, surface and ground water quality, soil characteristic, flora and fauna, socio/economic condition of the nearby population
ix. Identification of hazards in handling, processing and storage of hazardous material and safety system provided to mitigate the risk.
x. Likely impact of the project on air, water, land, flora/fauna and nearby population
xi. Emergency preparedness plan in case of natural or in plant emergencies
xii. Issues raised during public hearing (if applicable) and response given
xiii. CSR plan with proposed expenditure.
xiv. Occupational Health Measures
xv. Post project monitoring plan

******

ANNEXURE-3

List of the Expert Appraisal Committee (Industry-1) members participated during VC meeting

S. No.	Name	Position	04.09.2023	05.09.2023
1.	Shri Rajive Kumar	Chairman	***Present***	***Present***
2.	Dr. Dipankar Shome	Vice Chairman	***Present***	***Present***
3.	Dr. S. Ranganathan	Member	***Present***	***Present***
4.	Dr. Ranjit Prasad	Member	***Present***	***Present***
5.	Dr. S. K. Singh	Member	***Present***	***Present***
6.	Dr. Tejaswini Ananthkumar	Member	***Present***	***Present***
7.	Dr. Hemant Sahasrabuddhe	Member	***Present***	***Present***
8.	Dr. Jai Krishna Pandey	Member	***Present***	***Present***
9.	Dr. E V R Raju	Member	***Present***	***Present***
10.	Dr. S K Chaturvedi, Actg. DG, (Representatives of NCCBM)	Member	***Present***	***Present***
11.	Shri Nazimuddin, Scientist 'F' (Representative of CPCB)	Member	***Present***	***Present***
12.	Dr. S. Raghavan, Scientist 'D' (Representative of National Institute of Occupational Health (NIOH)	Member	***Present***	***Present***
13.	Dr. Sanjay Bist, Scientist 'E' (Representative of Indian Meteorological Department)	Member	***Present***	***Present***
14.	Dr. R.B. Lal, Scientist F, MoEFCC	Member Secretary	***Present***	***Present***
MoEFCC				
15.	Dr R P Rastogi	Scientist C	***Present***	***Present***
16.	Dr Sandeepan BS	Scientist B	***Present***	***Present***

***

ANNEXURE-4

Approval of EAC Chairman

Email **Dr R. B. Lal**

Re: Compiled Draft minutes of the 43rd EAC Meeting held on 4-5 September 2023 for the approval of the Chairman, EAC

From : chairman eac ind 1 <chairman.eac.ind.1@gmail.com> — Mon, Sep 18, 2023 01:45 PM

Subject : Re: Compiled Draft minutes of the 43rd EAC Meeting held on 4-5 September 2023 for the approval of the Chairman, EAC

To : Dr R. B. Lal <rb.lal@nic.in>

Cc : rajivekumar1983@gmail.com, ranganathan metals <ranganathan.metals@gmail.com>, ranjitnitj@gmail.com, rajuevr60@gmail.com, sksinghdce@gmail.com, dshome61@gmail.com, tejaswini acf <tejaswini.acf@gmail.com>, sshemant 801 <sshemant_801@rediffmail.com>, NCCBM DIRECTOR GENERAL <dg@ncbindia.com>, Nazimuddin <nazim.cpcb@nic.in>, Raghavan S <raghuharihar@gov.in>, raghuharihar@yahoo.co.in, Sanjay Bist <sanjay.bist@imd.gov.in>, drjkpandey eac industry1 <drjkpandey.eac.industry1@gmail.com>

Dear Dr. Lal,
The draft minutes are approved.
Kindly do the needful.

Best Wishes
Rajive Kumar
Chairman-EAC-Industry-1

***