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

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Dated: 11.02.2023

Date of Zero Draft MoM sent to EAC: 06.02.2023
Approval by Chairman:11.02.2023
Uploading on PARIVESH:11.02.2023

MINUTES OF THE 22ND EXPERT APPRAISAL COMMITTEE (INDUSTRY-1 SECTOR) MEETING HELD ON JANUARY 30-31, 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: JANUARY 30, 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 21st Meeting of the EAC (Industry-1 Sector) held during January 30-31, 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 **21st Meeting of the EAC (Industry-1 Sector) held during January 30-31, 2023** conducted through Video Conferencing, and noted that no request has been received for modifications/factual correction, in the minutes of the 21st EAC meeting for the project/activities, and confirmed the same.

(iv) Correction in the Minutes of the 19th Meeting of the EAC (Industry-1 Sector) held during December 16 & 19, 2022 at MoEF&CC through VC.

Agenda No. 19.9: Setting of 3.2 MTPA Pellet Plant (PP) and 3.6 MTPA Pellet feed cum Beneficiation Plant (BP) by M/s. Resources Pellets Concentrates Private Limited (RPCL), located at Somalapura Village, Sandur Taluk, Bellary District, Karnataka - Consideration of Environmental Clearance.

[Proposal No.: IA/KA/IND1/408033/2022; File No. J- 11011/39/2021-IA I)]

The aforementioned proposal was considered and recommended by EAC in its 19th EAC meeting held during December 16 & 19, 2022. A specific condition was mistakenly mentioned in the MoM of 19th EAC, which may be corrected as following -

Ref in MoM	Mentioned in the MoM of 19th EAC meeting	Proposed Modificaion / Correction
19.9.20 A. Specific Conditions Point (iii).	Seasonal drains/Nallah of about 2-5 m width were observed within the proposed project site. Diversion of about 350 m Nallah may be needed within the project site. The Narihalla stream is passing in the western direction of project site at about 1.5km. Few ponds are located within the study area. 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.	No diversion of any stream or nallaha shall be permitted in 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.

Deliberations by the EAC:

It was informed to the Committee members that a specific condition was mistakenly mentioned in the MoM of 19th EAC for Industry-I sector held on December 16 & 19, 2022 pertaining to proposal agenda no. 19.9 as referred above.

The EAC noted that the suggestions made by the Ministry may be accepted and recommended for the incorporation of the above mentioned corrections/modifications in the minutes of the meeting. Accordingly, [19.9.20, A. Specific Conditions Point (iii)] stands modified in the minutes of 19th EAC (Industry-1) meeting as detailed in table above.

Details of the proposals considered during the 22nd meeting **conducted** through **Video Conferencing**, deliberations made and the recommendations of the Committee are explained in the respective agenda items as under:

Consideration of Environmental Clearance Proposals

Agenda No. 22.1

22.1 Expansion of DRI Plant [Sponge Iron] from 375,000 TPA [existing] to 953,000 TPA [Post Expansion], Steel Melting Shop from 384,000 TPA [existing] to 1171,000 TPA [post expansion], Rolling Mill from 480,000 TPA [existing] to 1020,000 TPA [Post Expansion], Coal washery from 360,000 TPA [existing] to 720,000 TPA [post expansion], Captive power plant from 72.5 MW [existing] to 123.5 MW [post expansion], new Sinter Plant of 720,000 TPA, new Blast Furnace of 450,000 TPA, new oxygen plant [220 TPD] by M/s MSP Steel & Power Ltd., located at Village – Jamgaon, Tehsil Raigarh District – Raigarh, Chhattisgarh- Consideration of Environmental Clearance.

[Proposal No. IA/CG/IND/286310/2019; File No. J-11011/267/2007-IA.II(I)]
[Consultant: Ind Tech House Consult; Valid Upto: 29.04.2023]

22.1.1 M/s MSP Steel & Power Limited has made an online application vide proposal no. IA/CG/IND/286310/2019 dated 12.01.2023 along with copy of EIA/EMP report, Form 2 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 appraised at Central Level.

22.1.2 Name of the EIA consultant: M/s Ind Tech House Consult [List of ACOs with their Certificate / Extension Letter no. NABET/EIA/2023/SA 0174; valid upto 29.04.2023, as on February 01, 2023].

Details submitted by Project proponent

22.1.3 The details of the ToR are furnished as below:

Date of Application	Consideration	Details	Date of Accord	ToR Validity
25 Aug 2020	Standard TOR granted	Terms of Reference	08.09.2020	07.09.2024

22.1.4 The project of M/s MSP Steel & Power Limited located in Jamgaon Village, Raigarh Tehsil, Raigarh District, Chhattisgarh is for expansion of DRI Plant [Sponge Iron] from 375,000 TPA [existing] to 953,000 TPA [Post Expansion], Steel Melting Shop from 384,000 TPA [existing] to 1171,000 TPA [post expansion], Rolling Mill from 480,000 TPA [existing] to 1020,000 TPA [Post Expansion], Coal washery from 360,000 TPA [existing] to 720,000 TPA [post expansion], Captive power plant from 72.5 MW [existing] to 123.5 MW [post expansion], new Sinter Plant of 720,000 TPA, new Blast Furnace of 450,000 TPA, new oxygen plant [220 TPD].

22.1.5 Environmental Site Settings:

<table>
<tr><th>S. No.</th><th>Particulars</th><th>Details submitted by PP</th><th>Remarks</th></tr>
<tr><td>1</td><td>Total land</td><td>Total Land - 98.08 Ha [Private Land]</td><td></td></tr>
<tr><td>2</td><td>Land acquisition details as per MoEF&CC O.M. dated 7/10/2014</td><td>• Existing projects: 50.9 Ha (ownership of MSPL)
• Additional Land available (in possession of MSPL) for expansion units: 24.20 ha,
• Land under acquisition by State Govt: 23 Ha. (case forwarded to District Collector by SIPB)</td><td>MSPL is requesting to permit the expansion units in two phases; one that could be established on the 24.2 ha land available with MSPL and second on 22.98 ha land under acquisition by the state government</td></tr>
<tr><td>3</td><td>Existence of habitation & involvement R&R, if any.</td><td>23 ha additional land will be acquired as per the land acquisition policy of CG government. R&R plan for the project affected families has been prepared. No house or other structures are present on the identified land. The land-owners will be paid financial compensation, as decided by the State Government. One member of the project affected family will be given employment in MSPL. R&R Plan is submitted.

Nearest Habitations:
The nearest human settlement from the project site are Jamgaon – (1.6 km, SSW), Manuapali (0.3 km, West), Saraipali (0.8 km, NW) and Kolaibahal (0.5 km, SE).</td><td>R&R will be done as per the Policy of State Government</td></tr>
<tr><td>4</td><td>Latitude and Longitude of all corners of project site.</td><td>
<table>
<tr><th>Point</th><th>Latitude</th><th>Longitude</th></tr>
<tr><td>A</td><td>21°52'31.10"N</td><td>83°33'18.89"E</td></tr>
<tr><td>B</td><td>21°52'31.97"N</td><td>83°33'21.99"E</td></tr>
<tr><td>C</td><td>21°52'44.87"N</td><td>83°33'24.15"E</td></tr>
<tr><td>D</td><td>21°52'52.98"N</td><td>83°33'23.23"E</td></tr>
<tr><td>E</td><td>21°52'47.67"N</td><td>83°33'15.33"E</td></tr>
<tr><td>F</td><td>21°53'00.07"N</td><td>83°33'09.42"E</td></tr>
<tr><td>G</td><td>21°53'13.97"N</td><td>83°33'12.38"E</td></tr>
<tr><td>H</td><td>21°53'13.56"N</td><td>83°33'03.94"E</td></tr>
<tr><td>I</td><td>21°53'16.50"N</td><td>83°33'01.98"E</td></tr>
<tr><td>J</td><td>21°53'17.96"N</td><td>83°33'00.20"E</td></tr>
<tr><td>K</td><td>21°53'19.67"N</td><td>83°32'50.79"E</td></tr>
<tr><td>L</td><td>21°53'19.55"N</td><td>83°32'45.80"E</td></tr>
<tr><td>M</td><td>21°53'15.11"N</td><td>83°32'43.70"E</td></tr>
<tr><td>N</td><td>21°53'07.49"N</td><td>83°32'47.89"E</td></tr>
<tr><td>O</td><td>21°53'01.25"N</td><td>83°32'57.32"E</td></tr>
<tr><td>P</td><td>21°52'53.44"N</td><td>83°33'04.44"E</td></tr>
<tr><td>Q</td><td>21°52'35.33"N</td><td>83°33'11.65"E</td></tr>
</table>
</td><td></td></tr>
</table>

<table>
<tr><th>S. No.</th><th>Particulars</th><th colspan="4">Details submitted by PP</th><th>Remarks</th></tr>
<tr><td></td><td></td><td colspan="4"><table>
<tr><td>R</td><td>21°52'34.93"N</td><td>83°33'10.56"E</td></tr>
<tr><td>S</td><td>21°52'42.26"N</td><td>83°32'53.67"E</td></tr>
<tr><td>T</td><td>21°52'50.18"N</td><td>83°32'48.42"E</td></tr>
<tr><td>U</td><td>21°52'41.50"N</td><td>83°32'38.28"E</td></tr>
<tr><td>V</td><td>21°52'35.14"N</td><td>83°32'36.13"E</td></tr>
<tr><td>W</td><td>21°52'29.71"N</td><td>83°32'38.96"E</td></tr>
<tr><td>X</td><td>21°52'30.61"N</td><td>83°33'08.98"E</td></tr>
</table></td><td></td></tr>
<tr><td>5</td><td>Elevation of the project site</td><td colspan="4">250 m above MSL</td><td></td></tr>
<tr><td>6</td><td>Involvement of Forest land if any.</td><td colspan="4">No Forest Land is involved</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 colspan="4">Water body within project site:
One seasonal nalla is passing through the plant area will be kept undisturbed.

In study area (10 km)<table>
<tr><th>Water body</th><th>Distance</th><th>Direction</th></tr>
<tr><td>Kur Nalla</td><td>1.2 km</td><td>North to South</td></tr>
<tr><td>Sapnai Nadi</td><td>5 km</td><td>North-East to South</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 colspan="4">Nil

Reserve forest and protected forest of Raigarh division in CG side (22 Nos) forests) and Sundergarh division in Odisha Side (7 Nos) are present in the study area.</td><td></td></tr>
</table>

22.1.6 M/s. MSP Steel and Power Limited was granted environmental Clearance by MoEF&CC vide letter No. J-11011/267/2007-IA II (I) dated 02/04/2009 for capacity expansion of Billet production from 95,000 to 695,000 TPA and Captive Power Plant from 16 MW to 52 MW. Subsequently, amendment to the environmental Clearance was issued on 9/9/2010 for change in the capacity of Pellet plant from 0.6 MTPA to 0.9 MTPA and Captive Power Plant from 20 MW to 44 MW (AFBC Boiler). Thereafter, another amendment to the environmental Clearance was issued on 23/08/2012 for change in configuration of Steel Melting Shop within permitted production capacity of 672,172 TPA Billets and inclusion of 4.5 MW biomass based power plant. The EC was further amended on 26.12.2019 for expansion of Sponge Iron Plant from 3,00,000 TPA to 3,75,000 TPA through process optimisation. MSP obtained CTE vide letter dated 31.10.2009 for constructing the 4th DRI kiln, did some construction work but could not complete it because of financial problems. The details of permissions obtained are as follows:

Environment Clearance			
SL.NO	**FILE NAME/ LETTER NO.**	**DATE OF APPROVAL**	**CAPACITY**
1	J-11011/267/2007-IA II (I)	26.12.2019	Sponge Iron - 4,00,000 TPA SMS - 6,72,172 TPA Sinter - 6,41,520 TPA Blast Furnace - 4,00,000 TPA Iron ore Beneficiation & Pellet - 9,00,000 TPA Coal Washery - 7,20,000 TPA Rolling Mill - 4,80,000 TPA Power (WHRB) - 32 MW Power (AFBC) - 44 MW Bio-Mass- 4.5 MW
2	J-11011/267/2007-IA II (I)	09.09.2010	Sponge Iron - 4,00,000 TPA SMS - 6,95,000 TPA Sinter - 6,41,520 TPA Blast Furnace - 4,00,000 TPA Iron ore Beneficiation & Pellet - 9,00,000 TPA Coal Washery - 7,20,000 TPA Rolling Mill - 4,80,000 TPA Power (WHRB) - 32 MW Power (AFBC) - 44 MW
3	J-11011/267/2007-IA II (I)	02.04.2009	Sponge Iron - 4,00,000 TPA SMS - 6,95,000 TPA Sinter - 6,41,520 TPA Blast Furnace - 4,00,000 TPA Iron ore Beneficiation & Pellet - 6,00,000 TPA Coal Washery - 7,20,000 TPA Rolling Mill - 4,80,000 TPA Power (WHRB) - 32 MW Power (AFBC) - 20 MW

Consent to Operate				
SL.NO	**FILE NAME/ LETTER NO.**	**DATE OF APPROVAL**	**Valid Up To**	**CAPACITY**
1	7703/TS/CECB/2022	29.01.2022	28.02.2025	Bio Mass Base Power 4.5 MW
2	8177/TS/CECB/2019	17.12.2019	28.02.2023	Power CFBC (34 +10) = 44 MW
3	957/TS/CECB/2022	12.05.2022	31.06.2025	Pellet - 12,50,000 TPA
4	933/TS/CECB/2020	05.06.2021	31.05.2024	Sponge Iron - 3,75,000 TPA Power (WHRB) - 24 MW Coal Washery - 3,60,000 TPA MS Ingot / Billet - 3,05,000 TPA
5	959/TS/CECB/2022	12.05.2022	31.05.2024	MS Ingot / Billet - 3,84,000 TPA
6	10389/TS/CECB/2020	24.02.2021	31.01.2024	Rolling Mill - 4.80 LTPA
7	10391/TS/CECB/2021	24.02.2021	31.07.2025	Coal Gasifier - 116.81 NM3 / Year

22.1.7 Implementation status of the existing EC

Facilities		As per Environmental Clearance		Installed	
		Units	Annual Production Capacity in Tons	Units	Annual Production Capacity in Tons
Sponge Iron Plant		4x300 TPD	400,000	3x300 TPD	3,75,000
Steel Melting Shop		3x15 Ton IF 5x8 Ton IF 1x18 Ton IF 2x35 Ton EAF	139,680 119,832 46,000 366,660 672,172	3x15 Ton IF 5x8 Ton IF 1x18 Ton IF	3,84,000*
Sinter Plant		1x60 m^2	641,520	Not Installed	
Blast Furnace		1x450 m^3	400,000	Not Installed	
Iron Ore Beneficiation & Pellet		---	900,000	---	12,50,000*
Coal Washery		---	720,000	---	360,000
Rolling Mill		---	480,000	---	480,000
Power Plant	WHRB AFBC Bio-mass	4x8 MW 1x10 MW 1x34 MW 1x4.5 MW	32 MW 44 MW 4.5 MW 80.5 MW	3x8 MW 1x10 MW 1x34 MW 1x4.5 MW	24 MW 44 MW 4.5 MW 72.5 MW
M/s. MSP Steel and Power Limited submitted Form 1 application vide Proposal No. IA/CG/IND/169681/2020 dated 25th August, 2020 for increasing the production of Pellets in Pellet Plant from 900,000 TPA to 12,50,000 TPA and production of Billets in SMS-1 from 305,512 TPA to 1171,000 TPA. TOR was issued on 8th September 2020. After that, MSPL submitted application (SW/1446/2021 dated 12.05.2021) for increasing the production of Pellets and Billets as per the provisions of Notification S.O. 980 (E) dated 02.03.2021. Chhattisgarh Environment Conservation Board vide letter No. 935/TS/CECB/2021 dated 05.06.2021 issued CTO to MSPL for producing 12,50,000 TPA Pellets and vide letter No. 982/TS/CECB/2021 dated 07.06.2021 for producing 384,000 TPA Billets						

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

S. No	Name of Unit	Name of Product	Existing Production Capacity		Expansion Production Capacity, TPA		Ultimate Production
			Configuration	Capacity TPA	Configuration	Capacity TPA	Capacity TPA
1	Coal Washery	Clean coal	1 x 50 TPH	3,60,000	1 x 50 TPH	3,60,000	7,20,000 TPA
2	Producer gas plant	Coal gas	2 x 6000 + 6 x 2200 + 1 x 8000 Nm^3/h	116.81 mNm^3/yr	-	-	116.81 $mNm^3/year$
3	Iron ore beneficiation plant	Iron ore Concentrate	9,00,000 TPA	9,00,000	-	-	9,00,000 TPA
4	Pellet Plant	Iron ore Pellets	1 x 0.833 MTPA	8,33,000	-	-	8,33,000

S. No	Name of Unit	Name of Product	Existing Production Capacity		Expansion Production Capacity, TPA		Ultimate Production
			Configuration	Capacity TPA	Configuration	Capacity TPA	Capacity TPA
			1 x 0.417 MTPA	4,17,000	-	-	4,17,000
						Total	**12,50,000 TPA**
5	DRI Plant	Sponge iron	3 x 375 TPD	375,000	-	-	3,75,000
			-	-	2 x 600 TPD 1 x 500 TPD	4,08,000 1,70,000	5,78,000
						Total	**9,53,000 TPA**
6	Sinter Plant	Sinter	-	-	60 m^2	7,20,000	7,20,000 TPA
7	Blast Furnace	Hot Metal/ Pig Iron	-	-	380 m^3	4,50,000	4,50,000 TPA
8	SMS – 1	Billets	1x18 tons IF 3x15 tons IF 5 x 8 tons IF	384,000	3x20 tons IF	1,93,000	5,77,000
	SMS – 2	Billets	-	-	4x30 tons IF 1x60 tons LD Convt LRF-60T, VDU-60T	5,94,000	5,94,000
						Total	**1,171,000 TPA**
9	Rolling Mill-1	TMT Bar, LSM, HSM	TMT mill	4,80,000	-	-	4,80,000
	Rolling Mill-2	Strip, Bar, Wire Rod	Hot Strip Mill & Bar & Wire Rod Mill	-	-	5,40,000	5,40,000
						Total	**10,20,000 TPA**
10	Oxygen Plant	Oxygen, Nitrogen, Argon			1x220 TPD	220 TPD	220 TPD
11	Captive Power Plant	Electricity	WHRB 1x16 MW 1x8 MW	24 MW	WHRB 2x18 MW 1x15 MW	51 MW	75 MW
			CFBC 1x34 MW 1x10 MW	44 MW	-	-	44 MW
			Biomass 1x4.5 MW	4.5 MW	-	-	4.5 MW
						Total	**123.5 MW**

22.1.9 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.	Name of Raw Materials	Quantity (Existing units TPA)	Quantity (Proposed units, TPA)	Source	Transportation
1	Iron Ore	63,000	303,600	Purchase from open market	Rail
2	Iron Ore (Fines)	1375,000	500,000	Purchase from open market	Rail
3	Coal - Indian	52,500	940,000	Purchase through e-auction, SECL	Rail
4	Coal - Imported	256,500	473,000	Imported from South Africa	Rail
5	Coal – Anthracite	35,000	67,500	Imported from South Africa	Rail
6	Coke – Imported	-	204,000	Import from South Africa / Australia / China	Rail
7	Dolomite	11,250	29,000	Purchase from Bilaspur, CG	Road
8	Limestone	-	108,000	Purchase from Bilaspur	Road
9	Quartzite	-	4500	Purchase from Bilaspur	Road
10	Ferroalloys	-	7225	Purchased from Raigarh, CG	Road
11	Bentonite	5000	0	From Kutch, Gujarat	Road

22.1.10 The water requirement for the existing project is 5505 KLD, which is taken from anicut constructed on Kur nala. Fresh water requirement for the expansion project is 3050 KLD, which will be taken from the anicut on Kur nala. Recommendation for supply of water from Kur nala has been issued by State Investment Promotion Board, Govt of Chhattisgarh vide Letter No. 41-C/SIPB/2021 Dated. 28/08/2021.

22.1.11 The power requirement for the existing project is 65 MW. The power requirement of the expansion project will be 85 MW. Total requirement will be 150 MW. 110 MW will be taken from the Captive Power Plant. 40 MW will be taken from State Grid. 2x500 KVA DG sets will be installed to meet the electricity during emergency / grid failure.

22.1.12 Baseline Environmental Studies:

Period	From 1st October 2020 to 31st December 2020 (Season: Post Monsoon)
AAQ parameters at 8 Locations, Min and Max	• $PM_{2.5}$ - 9 to 32 µg/m³ • PM_{10} - 24 to 65 µg/m³ • SO_2 - 4.0 to 9.0 µg/m³ • NO_2 - 9.0 to 14.5 µg/m³ • CO - 0.12 to 0.26 mg/m³
Incremental GLC level	• PM_{10} =6.2 µg/m^3 • $PM_{2.5}$ = 3.1 µg/m • SO_2 = 12.1 µg/m^3 • NO_x = 6.1 µg/m^3
Ground water Quality at 8 locations	• pH: 6.52 to 7.06, • TDS: 290 to 790 mg/L • TSS: 5 to 8 mg/L • Total Hardness : 70 to 370 mg/L • Calcium: 20 to 68 mg/L • Magnesium 4.9 to 63 mg/L • Chlorides: 20 to 120 mg/l, • Fluoride. 0.62 to 1.14 mg/1.

	• Nitrates: 5.8 to 9.5 mg/L • Sulphates : 8.2 to 78 mg/L • Toxic Metals: <0.5 mg/L • Total Coliform : Absent
Surface water quality at 8 locations	• pH: 6.80 to 6.97 mg/L • Dissolved Oxygen : 6.5 to 7.2 mg/L • BOD : 1.4 to 1.8 mg/L • COD: 6 to 10 mg/L • TDS : 35 to 60 mg/L • Total Coliform varies: 80 to 140 MPN/100 mg/L
Noise levels Leq (Day and Night)	• 49.4 to 51.8 dBA - day time (Residential areas) • 42.2 To 43.2 dBA - Night time. (Residential areas) • 56.4 dBA - day time & 48.2 dBA - Night time. (Plant)
Traffic assessment study findings	Existing vehicle movement on the existing road (Towards Sakosimal-Tilga-Raigarh) was surveyed on 8th & 9th Dec 2020. The observation was as follows: ❖ Daily Incoming road traffic: 36 trucks per day. Load– 30 tons ❖ Daily Outgoing road traffic: 121 trucks per day. Load– 30 tons ❖ Daily Road use by Employees (incoming+outgoing): Bus 5+5, Cars 32+32, Motorcycle 150 + 150 ❖ Daily Road use by Non-employees: Bus 16, Cars 160, Motorcycle 400 Carrying capacity of the existing road (Towards Sakosimal-Tilga-Raigarh): 15000 PCU ❖ Carrying capacity of the existing road: 15000 PCU ❖ Existing utilization: 1100 PCU ❖ Proposed addition: 1100 ❖ Balance Left: 12800 PCU ❖ LOS 0.15 (smooth traffic flow)
Flora and fauna	Elephant, Sloth bear, Pangolin, Monitor Lizard and Peacock are the Schedule 1 species found in study area. Wildlife Conservation Plan approved by PCCF. Wildlife Conservation Plan has been prepared for envisaging budget of Rs.15,30,307. Wild life conservation plan has been approved by PCCF / CWLW vide letter dated 23.09.2022.

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

Sl. No.	Name of Unit	Quantity, TPD	Utilization / Disposal
1	Dust from DRI Plant	101180	Reused in Sinter Plant and for civil construction as filler material
2	DRI Dolochar	149990	Used as fuel in captive power plant.
3	DRI Kiln Accretions	530	Used as sub-base material for road making, for civil construction as filler material
4	SMS slag	57300	Slag will be crushed and metal content will be recovered. The crushed slag will be used in civil construction and road making.

Sl. No.	Name of Unit	Quantity, TPD	Utilization / Disposal
5	SMS dust	4370	Reused in Sinter Plant
6	Blast Furnace dust	6750	Reused in Sinter Plant
7	Blast Furnace slag	144000	The slag will be granulated sold to cement plants
8	Sinter plant dust	130000	Return fines to sinter plant (recycled)
9	Coal washery middlings/ rejects/fines	144000	Used as fuel in captive power plant

Hazardous Waste:

The generation of spent oil & lubricants will be 5 kl/year. It will be stored in drums and sold to authorized re-processors.

Particulars	Quantity	Utilization / Disposal
Used oil, grease and lubricants (Hazardous wastes)	5 kl/year	It will be collected in drums and stored at an earmarked place. Half yearly it will be auctioned to authorized re-processors. Authorization will be obtained from State Pollution Control Board

Other Waste:

Particulars	Quantity	Utilization / Disposal
STP sludge	220 TPA	Dried sludge will be used as soil conditioning agent.
Used Batteries	1250 pc/year	It will be sold to Battery Manufacturers as buy back policy.
Electronic Wastes	2.5 TPA	It will be collected in drums and stored at an earmarked place. Half yearly it will be auctioned to authorized re-processors.
Municipal Solid Waste	16 TPA	Organic waste composter will be installed at site. Non-biodegradable, non-recyclable solid wastes will be disposed through authorized vendor.

22.1.14 Public Consultation:

Details of advertisement given	The notice for PH was published in three newspapers on 22nd February 2022; Hari Bhoomi, Raigarh Sandesh and Business Standard.
Date of public consultation	25/03/2022
Venue	Community Hall, Gram Panchayat, Jamgaon
Presiding Officer	ADM, Raigarh
Major issues raised	i. Employment to local people ii. Loss of livelihood and productivity of crops iii. Development of roads iv. Development of healthcare facility v. Development of education facility

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

S.N	Activity	Action plan	Target and Budget INR (Lakhs)	Yearwise Budget, Rs. Lakhs						
				1	2	3	4	5	6	7
1	Providing Employment to local people in the project	Skill Development of Local Youth and then offering them employment in the project	Target 800 youths Stipend: 12000/- annual (96,00000/-)	48	48	48	48	48	48	48

S.N	Activity	Action plan	Target and Budget INR (Lakhs)	Yearwise Budget, Rs. Lakhs						
				1	2	3	4	5	6	7
		400 skilled and 400 semi-skilled jobs exist in the expansion project. Willing and employable youths will be identified in consultation with gram panchayat of 10 adopted villages- (Mixed Oriya and Chhattisgarhi speaking people) They will be trained in Raigarh ITI for various trades like electrician, fitter, turner, welder, rigger, Tool and Die maker, Lathe operator, pump operator, Motor driver cum mechanic, painter, and masons, etc. Fees and stipend will be paid by PP. After successful completion of training, the youths will be offered employment in the project	ITI Fee: 30000/- pp for 1 year (240,00000/-) Capex 336 Lakhs							
2	Compensate The Loss of Livelihood of land losers and landless labourers	Livelihood Support for Poor People Self Help Groups for women SHG will be formed in the 10 adopted villages (2 groups in each village). The members will be training for cooking, gardening & plantation, making clothes & uniforms, sanitary napkins, pickles, papads, dumlings (badi), paper plates, cups and napkins, organic wastes composting. Few of them will be trained in accounts, typing and computers. Each SHG will be provided seed money MSPL will purchase their services and products inside the plant (like running the staff canteen, uniform of staff, gardening & plantation) and in its township.	Target Financial support to 20 Self Help Groups Seed money to each SHG 500000/- CAPEX 100 Lakhs	20	20	20	20	20	-	-
3	Development of Roads	Making paved roads inside villages	Target 3 m wide, 2 km roads inside 10 villages @1500 psqm. Capex: 900 Lakhs CAPEX 900 Lakhs	150	150	150	150	150	150	-
4	Health Infrastructure Development	Develop Infrastructure and provide Ambulance, and Medical equipment to Government Hospital / Health Centre at Kolaibahal	Targets Building renovation – 10 L Ambulance (2) – 40 L Beds (100) – 10 L O_2 Cylinder (100) – 5 L	-	-	20	20	20	20	20

S.N	Activity	Action plan	Target and Budget INR (Lakhs)	Yearwise Budget, Rs. Lakhs						
				1	2	3	4	5	6	7
			AC (6) – 30 L Compound wall – 5 L CAPEX: 100 Lakhs							
5	Improvement of crop yield	Training to Farmers of 10 adopted villages on modern agriculture practices by engaging experts from Raipur Agriculture University. (on improved farming techniques, use of hybrid seeds, use of organic fertilizers and pesticides, modern irrigation techniques, etc to improve their crop yield.	Target 560 poor farmers will be chosen in consultation with village panchayat 50,000/- per farmers CAPEX 280 L	40	40	40	40	40	40	40
6	Education Infrastructure Development	Infrastructure development of Schools in 10 adopted villages.	Targets School Kitchens (10) – 20 L Tables/ Chairs (1000) – 5 L Computers (10) – 5 L Colour printer (10) – 5 L Smart Boards (10) – 10 L Auditorium (10) – 100 L Classroom refurbishment (50) – 25 L Separate toilets for boys & girls (20) – 20 L Develop playgrounds for sports (10) – 20 L LED Lights & Solar Panels – 20 L Rainwater Harvesting (10) – 50 L CAPEX 280 Lakhs	40	40	40	40	40	40	40
7	Community Infrastructure Development	Sewerage & Drainage, MSW Landfill Sites, Toilets with piping and water tanks connected to Tubewell, Charagaha land at 10 adopted villages	Target STP with sewerage – 100 L MSW landfill site (2) – 40 L Toilets (40 Nos) – 60 L Charagaha land – 10 L CAPEX 210 L	30	30	30	30	30	30	30
8	Development of Agriculture Facilities	Water conservation in ponds of the 10 adopted villages (approx. 70 acres), protection of banks, desilting, making facility for bathing, providing pumping arrangement & promoting pisciculture in these ponds for livelihood support of the fisherman community	Target 70 acres x 12 lakhs CAPEX 840 Lakhs	120	120	120	120	120	120	120
9	Plantation in villages	35000 fruit bearing trees in 10 adopted villages and 3800 trees along the PWD road Fencing Organic fertilizers Watering for 3 years	Target CAPEX 38500 x 400/- CAPEX 154 Lakhs	22	22	22	22	22	22	22

M/s. MSP Steel and Power Limited will adopt the following 10 villages & develop them into Model village. 1) Jamgaon 2) Manuapali 3) Kolaibahal 4) Jundaih 5) Kukurda 6) Mahapalli 7) Bhuyanpali 8) Behrapali 9) Chhuhipali 10) Koilanga.

S. No	Activity	AMOUNT (Crores Rs)
1	Skill Development for providing employment	3.36
2	Support livelihood of poor people by forming SHG	1.0
3	Development of Roads	9.0
4	Development of Health Infrastructure	1.0
5	Improvement of crop yield	2.8
6	Development of Education Infrastructure	2.8
7	Development of Community Infrastructure	2.1
8	Development of Agriculture Facilities	8.4
9	Plantation in villages and PWD road (No. of Trees 60,000)	1.54
	Total	**32 Crores**

22.1.15 The capital cost of the proposed project is Rs 2045 crores and the capital cost for environmental protection measures is proposed as Rs 210.88 Crores. The annual recurring cost towards the environmental protection measures is proposed as Rs 13.88 Crores. The employment generation from the proposed project is 400. The details of cost for environmental protection measures is as follows:

Measures for mitigating the impacts	CAPEX [Rs. in Lakh]	OPEX/ year [Rs. in Lakh]
Construction stage Water sprinkling system (Fixed type), WBM roads & maintenance, barricades, APCD of RMC plant, cover on stockpiles, C&D wastes, wheel washing arrangement, ETP, Rain guns mounted on water tankers, water sprinklers fitted to water tankers, sedimentation ponds	2000	200 (for 7 years)
Operation stage (Air pollution control) ESP, Bag Filters, Cyclone, Oil separator, FES, Hood, Water Sprinklers,Tall stacks, Concrete Roads, etc)	6000	800
Operation stage (water pollution control), ETP, STP, Segregation, treatment and recycling systems (ZLD)	1200	200
Operation stage (Solid wastes management) Metal recovery plant, dumpers, dozers and trucks,	2500	500
Operation stage (Noise pollution control) Acoustic enclosures, acoustic treatment of staff cabins, silencers, etc	500	50
Environmental monitoring Online monitoring systems (CEMS & CAAQS), Lab with water testing facility, air and stack testing facility, Online noise monitoring stations	1500	100

Measures for mitigating the impacts	CAPEX [Rs. in Lakh]	OPEX/ year [Rs. in Lakh]
Environment Management Dept Staff, Lab, furniture, computers and printers	2000	1000
Occupational Health Centre, Infrastructure Testing instruments, PPEs, Ambulance with paramedical staff and equipment,	1200	100
Safety & Risk Mitigation Measures, Fire Brigade and Crew	1000	100
Landscaping & Greenbelt Development	500	50
Rainwater Harvesting	700	50
Energy conservation measures (LED lights, sensors, solar panels for street lights, solar panels for water heating, HT motors and compressors, Variable frequency drives, VRV Air conditioners)	600	50
Total	**19700**	**3200**

22.1.16 Existing greenbelt is in 16.8 ha (33% of existing project area of 50.81 ha), as reported 28000 saplings have been planted and balanced 14000 saplings @2500 plants/ha will be planted during 2023-24. Further for the additional land proposed greenbelt will be developed in 15.5 ha land which is 33% of the additional project area (47 ha for expansion). Thus total of 32.3 ha area (33% of total project area) will be developed and retained as greenbelt. A 10 m to 25 meter wide greenbelt, consisting of at least 3 tiers around 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 density of 2500 trees per hectare. Total 38750 new saplings will be planted and nurtured in 15.5 hectares in 1-3 years (8 ha land in 1st year – Ph-1; 7.5 ha in 2-3 years- Ph 2).

	Green Belt Status as on January 2023		Action Plan			Total Plantation
	Plantation Area in Ha. @ 33%	Plantation Done So Far	March'2023	2023-24	2024-25	
Within Existing Plant area 50.81 Ha	16.8 Ha	14,400	2300	14,000	--	42,000
		11,300 (Replantation)	--	--	--	
Additional Plantation Outside Plant As Per EC dated 26-12-2019	50,000 (In 5 Years)	25,200 (Nearby Villages & Ash Mound)	2000	14800	8000	50000
Expansion Project (applied) 47.24 Ha	15.58 Ha @ 33%	----	--	10000	28,750	38750
		50, 900	**4,300**	**38,800**	**36,750**	**1,30,750**

22.1.17 It is submitted 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 Integrated Regional office MoEFCC

22.1.18 The Status of compliance of earlier EC was obtained from Regional Office, MoEF&CC Raipur vide letter No. 5-189/2009(ENV)/938 dated 21.09.2022 in the name of M/s. MSP Steel and Power Limited. ATR was submitted by the PP vide letter No. NIL dated 03.10.2022 for partially/non complied conditions. IRO has reviewed the ATR and has issued a review report no. 5-189/2009(ENV)/1025 dated 09.11.2022.

<table>
<tr><th>Sr. No.</th><th>Observation reported on</th><th>Compliance status as on 03.10.2022</th><th>IRO Review dated 09.11.2022</th></tr>
<tr><td>i.</td><td>On the day of monitoring fugitive emission were observed near coal washery, pellet plant and near rolling mill area. PP needs to improve the housekeeping inside the plant and more permanent water sprinkling system shall be installed in high dust areas. PP has been asked to submit the ATR in this regard to this office (Specific Condition – VI).</td><td><u>Sprinkler Details(Existing & Proposed) :</u>
<table><tr><th>Location</th><th>Existing No.</th><th>Addition Proposed</th><th>Total</th></tr><tr><td>Rolling Mill</td><td>32</td><td>05</td><td>37</td></tr><tr><td>Pellet</td><td>50</td><td>10</td><td>60</td></tr><tr><td>Coal Washery</td><td>36</td><td>05</td><td>41</td></tr></table>i. As directed altogether 20 Nos. of additional Sprinklers will be installed as location-wise as mentioned in table above. Additional new sprinklers will be installed within 12th Oct’22.
ii. Online Stack Monitoring (CEMS) data and AAQMS data for the inspection period is attached herewith which indicates that the emission was within prescribed limit. Annexure-I & II.
iii. Fugitive Dust Monitoring Data for last 3 months are attached herewith. The data shows no abnormality. Annexure-III.</td><td>PP has submitted the Fugitive emission monitoring report for the last three months the same has been analyzed and it was observed that fugitive emission was within the prescribed limits. In addition to that PP assured to install additional sprinklers to control the dust suppression. As committed by the PA once the installation of additional sprinklers the same may be submitted to this office with photographs.</td></tr>
<tr><td>ii.</td><td>On the day of monitoring dolochar has been stored inside the plant. PA has been asked to submit the reasons for the storing the dolochar inside the plant and it was also asked to submit the time bound action plan to utilization of the dolochar to this office. (Specific</td><td>i. As a practice, daily generated Char is consumed fully in CPP of 34 MW & 10 MW. (ii) About 2000 MT Char is seen to be lying in stock at the coal yard of DRI unit because of planned shutdown of 34 MW coal base CPP from 01/8/2022 to 25/08/2022 and inhouse char consumption fall substantially resulting in temporary Stock of char. Copy of intimation sent to RO,CECB,Raigarh regarding shut down of our CPP 34 MW from 01/8/2022 to 25/08/2022 and lit up intimation on 26/08/2022 are attached herewith as Annexure – IV.
ii. Otherwise, we purchase about 2400 TPM char from open market in addition to 4360 TPM char generated in-house for consumption in 44 MW CPP. (iv)Temporary stock pile of char will be fully consumed in 25 days @ 80 MT per day. Since consumption quantity of char is much higher that we generate event of surplus is zero.</td><td>It was informed that the 34 MW CPP was shutdown from 01.08.2022 to 25.08.2022 the same was informed to the RO, CECB, Raigarh. The copy of the same has been provided by the PP.</td></tr>
</table>

<table>
<tr><th>Sr. No.</th><th>Observation reported on</th><th>Compliance status as on 03.10.2022</th><th>IRO Review dated 09.11.2022</th></tr>
<tr><td></td><td>Condition – XI & XV).</td><td></td><td></td></tr>
<tr><td>iii.</td><td>Project authorities are directed to submit the time bound action plan reduce solid waste, its proper utilization and disposal to this office as the stipulated condition (Specific Condition – XIV)</td><td><u>Solid Waste Generation & Utilisation Details :</u>
<table>
<tr><th>Source</th><th>Type</th><th>Monthly Qty (MT)</th><th>Utilization process</th></tr>
<tr><td>DRI Kiln</td><td>Char</td><td>4360</td><td>Used in own CPP</td></tr>
<tr><td>CPP</td><td>Fly ash/ bottom ash</td><td>22000</td><td>Brick plant/ Filling of low lying area/ Civil work/Road work</td></tr>
<tr><td>SMS</td><td>Slag</td><td>6000</td><td>Road repairing/ filling of low lying area/Civil work</td></tr>
<tr><td>PGP</td><td>CHHAI</td><td>2400</td><td>Sold to brick units</td></tr>
</table>
<u>Reduction process proposed:</u>
Time bound action plan for the reduction of solid waste is submitted.</td><td>PP has submitted the action plan for reduction of the solid waste for the FY 2022-2023 to 2024-25.</td></tr>
<tr><td>iv.</td><td>As committed by the PP and action plan submitted by the PP vide letter no. dated 17.11.2021, 30.11.2021 and 30.12.2021 the implementation status of the action plan shall be submitted to this office on quarterly basis (Specific Condition – XVI)</td><td>
<table>
<tr><th>Action Area</th><th>Implementation on process proposed</th><th>Status Target/Achieved as on Date</th><th>Time Schedule</th></tr>
<tr><td>Toe wall & Drain at Ash Mound</td><td>M-1 (1680 Mtr) and M-2 (1060 Mtr.)</td><td>M-1 (500/480 Mtr) and M-2 (360/360 Mtr)</td><td>June-2023</td></tr>
<tr><td>Plantation on Ash Mound</td><td>5000 Nos</td><td>2800 Nos</td><td>Sep-2023</td></tr>
<tr><td>Solar Plant</td><td>1.5 + 0.5 MW</td><td>Enquiry called from various suppliers.</td><td>Dec-2023</td></tr>
</table>
</td><td>On the day of monitoring, it was observed that the civil construction work was under process. PP has submitted the timelines for implementation of the same to this office.</td></tr>
<tr><td>v.</td><td>As the plant was installed in 2 different locations around 500 m apart for the two units it was not cleared how many acres the plantation was developed by the PP, hence PP has been asked to submit the plant lay out plan with earmarking the plantation done in</td><td>
<table>
<tr><th rowspan="2">Project Area</th><th rowspan="2">Units</th><th colspan="2">Area Break-up</th><th rowspan="2">No. of Plant Trees</th></tr>
<tr><th>Plant (Acres)</th><th>Green Belt (Acres)</th></tr>
<tr><td>I.</td><td>DRI,SMS, CPP (I), Rolling Mill, Coal washery-(I)</td><td>69 approx</td><td>22.77</td><td>23020</td></tr>
<tr><td>II.</td><td>Pellet, CPP(II),Coal washery-(II), PGP, Brick Unit</td><td>57 approx</td><td>18.81</td><td>18750</td></tr>
<tr><td colspan="2">TOTAL</td><td>126</td><td>41.58</td><td>41770</td></tr>
</table>
</td><td>PP has submitted that plantation was developed in 41.48 acres against total land of 126 acres. It was also submitted by the PP that a total number of 41770 tress have been planted. PP also submit the plant layout plant which showing the same.</td></tr>
</table>

Sr. No.	Observation reported on	Compliance status as on 03.10.2022	IRO Review dated 09.11.2022
	the 33% of the area as per stipulated condition (Specific Condition – XVII)		
vi.	On the day of monitoring it has been observed that pillars were found under construction adjacent to the kiln area adjacent that kiln materials were also observed. **(General Condition – II)**	The old concrete Pillars were constructed in FY: 2012-13 for our 4th 350 TPD Sponge Iron Kiln after obtaining CTE from CECB, CG vide CTE order bearing No. 5787, dt. 31.10.2009. The work was left unfinished condition due to financial crisis caused for country wide recession steel in sector thereafter. Kiln materials lying at site are namely Slip Ring, few Coal Injection ducts and 2 nos. Transfer Chutes for the purpose of replacement in our 3 nos pre-existing kilns 3,75,000 TPA in operation.	PP submitted that: i. The old concrete Pillars were constructed in FY: 2012-13 for our 4th 350 TPD Sponge Iron Kiln after obtaining CTE from CECB, CG vide CTE order bearing No. 5787, dt. 31.10.2009. The work was left unfinished condition due to financial crisis caused for country wide recession steel in sector thereafter. ii. Kiln materials lying at site are namely Slip Ring, few Coal Injection ducts and 2 nos. Transfer Chutes for the purpose of replacement in our 3 nos pre-existing kilns 3,75,000 TPA in operation.
vii.	Project authorities are directed to submit the details of funds earmarked towards capital cost and recurring cost / annum for	(i) Capital cost of Pollution Control: Rs. 4652.9 Lakhs. (ii) Recurring Cost / annum: Rs. 175.92 Lakhs.	PP has submitted the breakup of environmental budget expenses details to this office.

Sr. No.	Observation reported on	Compliance status as on 03.10.2022	IRO Review dated 09.11.2022
	environment pollution control measures to implement the conditions to this office **(General Condition – X)**.		

Written representations:

22.1.19 During the meeting, based on the deliberations made by the EAC, the project proponent vide letter dated 31.01.2023 through email dated 31.01.2023 submitted the following information:

S. No	Comments/ Query	Reply by the PP
i.	Revised CER and Action Plan	The same is updated at para 22.1.14 above.
ii.	Fire protection measures in coal yard	1. Maintaining the height of Coal stockpile up to 4 Mtrs with contoured top for ensuring reduced thrust load. 2. Segregated stocking to avoid hard compaction maintaining shallow slope of 20-25$^{o.}$ 3. Coal Stockpile will be under shed or with LDPE / PVC tarpaulin cover on temporary stock to prevent exposure to moisture. 4. Installation of Thermographic Camera vision with alarm system covering entire coal stock yard for prompt detection of combustion incidence. 5. During hot summer manual temperature check will be made on daily basis by smell and by use of pyrometer by dedicated coal yard operators. 6. Coal pile attaining temperature above 60^{o}c should by cut out by pay-loader for cooling of coal. 7. Under extreme situation water sprayer will be used for temperature control.
iii.	Action Plan for greenbelt development	The same is updated at para 22.1.16 above.
iv.	Water for greenbelt	Water required for greenbelt development during October 2023 to June 2024 (Phase 1): 272 KLD @20 kl/ha/day Water required for greenbelt development during October 2024 to June 2026 (Phase 2): 422 KLD @20 kl/ha/day Permission to draw additional water from Kur nala: 1.11 MCM = 3050 KLD

S. No	Comments/ Query	Reply by the PP
		This water is sufficient for developing the greenbelt for initial 3 years, when the plant is under construction.
v.	Final plant layout showing 33% greenbelt	Final plant layout showing 33% greenbelt has been submitted.

Deliberations by the Committee

22.1.20 The Committee noted the following:

1. The instant proposal is for expansion of DRI Plant [Sponge Iron] from 375,000 TPA [existing] to 953,000 TPA [Post Expansion], Steel Melting Shop from 384,000 TPA [existing] to 1171,000 TPA [post expansion], Rolling Mill from 480,000 TPA [existing] to 1020,000 TPA [Post Expansion], Coal washery from 360,000 TPA [existing] to 720,000 TPA [post expansion], Captive power plant from 72.5 MW [existing] to 123.5 MW [post expansion], new Sinter Plant of 720,000 TPA, new Blast Furnace of 450,000 TPA, new oxygen plant [220 TPD].
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. M/s. MSP Steel and Power Limited was granted environmental Clearance by MoEF&CC vide letter No. J-11011/267/2007-IA II (I) dated 02/04/2009 for capacity expansion of Billet production from 95,000 to 695,000 TPA and Captive Power Plant from 16 MW to 52 MW. Subsequently, amendment to the environmental Clearance was issued on 9/9/2010 for change in the capacity of Pellet plant from 0.6 MTPA to 0.9 MTPA and Captive Power Plant from 20 MW to 44 MW (AFBC Boiler). Thereafter, another amendment to the environmental Clearance was issued on 23/08/2012 for change in configuration of Steel Melting Shop within permitted production capacity of 672,172 TPA Billets and inclusion of 4.5 MW biomass based power plant. The EC was further amended on 26.12.2019 for expansion of Sponge Iron Plant from 3,00,000 TPA to 3,75,000 TPA

through process optimisation. MSP obtained CTE vide letter dated 31.10.2009 for constructing the 4th DRI kiln, did some construction work but could not complete it because of financial problems. The details of permissions are given at para 22.1.6 above.

6. Total project land is 98.08 ha. Existing projects is located within 50.9 Ha which is under the ownership of the company. Additional Land for expansion project is 47 ha out of which 24.20 ha is in possession of company and balance 23 ha land is under acquisition by State Govt (case forwarded to District Collector by SIPB). MSPL is requesting to permit the expansion units in two phases; one that could be established on the 24.2 ha land available with MSPL and second on 22.98 ha land under acquisition by the state government.
7. The project involves R&R as 23 ha additional land will be acquired as per the land acquisition policy of Chhattisgarh government. R&R plan for the project affected families has been prepared. No house or other structures are present on the identified land. The land-owners will be paid financial compensation, as decided by the State Government. One member of the project affected family will be given employment in MSPL. R&R Plan is submitted.
8. The nearest human settlement from the project site are Jamgaon – (1.6 km, SSW), Manuapali (0.3 km, West), Saraipali (0.8 km, NW) and Kolaibahal (0.5 km, SE).
9. Kur Nalla (1.2 km, North to South) and Sapnai Nadi (5 km, North-East to South) flows within the study area of 10 km from 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 water requirement for the existing project is 5505 KLD, which is taken from anicut constructed on Kur nala. Fresh water requirement for the expansion project is 3050 KLD, which will be taken from the anicut on Kur nala. As the PP committed to plant about 66000 trees as a proposed Green belt plantation, it is necessary to keep atleast 500 Cu m water provision in water balance for such GB.
11. Existing greenbelt is in 16.8 ha (33% of existing project area of 50.81 ha), as reported 28000 saplings have been planted and balanced 14000 saplings @2500 plants/ha will be planted during 2023-24. Further for the additional land proposed greenbelt will be developed in 15.5 ha land which is 33% of the additional project area (47 ha for expansion). Thus total of 32.3 ha area (33% of total project area) will be developed and retained as greenbelt. A 10 m to 25 meter wide greenbelt, consisting of at least 3 tiers around 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 density of 2500 trees per hectare. Total 38750 new saplings will be planted and nurtured in 15.5 hectares in 1-3 years (8 ha land in 1st year – Ph-1; 7.5 ha in 2-3 years- Ph 2). The EAC deliberated on the greenbelt action plan and found it satisfactory.
12. The Committee has found that the baseline data and incremental GLC due to the proposed project within NAAQ standards.
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 revised action plan submitted by the proponent to address the issues raised during the public hearing and found it satisfactory.
15. Elephant, Sloth bear, Pangolin, Monitor Lizard and Peacock are the Schedule 1 species found in study area. Wildlife Conservation Plan approved by PCCF. Wildlife Conservation Plan has been prepared for envisaging budget of Rs.15,30,307. Wild life conservation plan has been approved by PCCF / CWLW vide letter dated 23.09.2022. The EAC deliberated on the Wildlife Conservation Plan and found it satisfactory.
16. The Committee deliberated upon the certified compliance report of IRO and action taken report submitted by PP with respect to the partial/non complied conditions alongwith review report of IRO and is of the opinion that PP shall strictly comply with the all the conditions as per the submitted action plan.
17. The EAC deliberated on the written submission of project proponent and found it satisfactory.
18. 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.
19. 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.

Recommendations of the Committee

22.1.21 In view of the foregoing and after detailed deliberations, the committee **recommended** the instant proposal for grant of Environment Clearance **subject to uploading of written submission on PARIVESH portal** under the provisions of EIA Notification, 2006 subject to 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. <u>Specific conditions:</u>

(i) The PP 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 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 human settlement from the project site are Jamgaon – (1.6 km, SSW), Manuapali (0.3 km, West), Saraipali (0.8 km, NW) and Kolaibahal (0.5 km, SE). Project Proponent shall prepare and implement an action plan for environmental safeguard measures to minimise the impact on the habitation of the locals. The company shall also include some of these locations in its environmental monitoring programme.

(v) Kur Nalla (1.2 km, North to South) and Sapnai Nadi (5 km, North-East to South) flows within the study area of 10 km from 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 for the existing project of 5505 KLD, fresh water requirement for the expansion project of 3050 KLD, shall be taken from the anicut on Kur nala after obtaining necessary permission from the Competent Authority.

(vii) As commited, M/s. MSP Steel and Power Limited shall adopt 10 villages namely 1) Jamgaon 2) Manuapali 3) Kolaibahal 4) Jundaih 5) Kukurda 6) Mahapalli 7) Bhuyanpali 8) Behrapali 9) Chhuhipali 10) Koilanga. PP shall formulate robust village Adoption program consisting of need-based community development activities, to develop them into model villages.

(viii) All the observations stated in the certified compliance report of IRO dated 21.09.2022 and 09.11.2022 shall be complied with as committed. Compliance status in this regard, shall be submitted to concerned Regional Office of the MoEF&CC.

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

(x) 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.

(xi) Three tier Green Belt shall be developed in a atleast 33% of total project area in a time frame of one year 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. 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 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 alongwith windshield inside the plant premises to act as green barrier for air pollution & noise levels towards Jamgaon, Manuapali, Saraipali and Kolaibahal villages. Compliance status in this regard, shall be submitted to concerned Regional Office of the MoEF&CC.

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

(xiii) Rejects from coal washery shall only be used either in the captive power plant (or) in the Thermal Power Plants meeting emission standards.

(xiv) Solid waste utilization

- 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.
- PP shall recycle/reuse solid waste generated in the plant as far as possible.
- Used refractories shall be recycled as far as possible.

(xv) Sinter Plant shall be equipped with Sinter cooler waste recovery system and suitable technology for control of dioxins and furans emissions from the plant.

(xvi) 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.

(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) Blast Furnaces shall be equipped with Top Recovery Turbine (capacity more than 450 m^3), dry gas cleaning plant, stove waste heat recovery, cast house and stock house ventilation system and slag granulation facility.

(xix) Secondary fume extraction system shall be installed on converters of Steel Melting Shop.

(xx) Electric Arc Furnace shall be closed type with 4^{th} hole extraction system.

(xxi) 85-90 % of billets shall be rolled directly in hot stage. RHF shall operate using only Light Diesel Oil or Mixed BF/CO gas/Producer gas.

(xxii) Dust emission from all the stacks shall be less than 30 mg/Nm^3.

(xxiii) Air Cooled condensers shall be used in the captive power plant.

(xxiv) During operational phase at Captive Power Plant, PP shall measure coal dust exposures and to maintain coal dust exposures within stipulated standards at coal handling areas. 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.

(xxv) Action Plan for fire fighting system including provision for flame detectors, temperature actuated heat detectors with alarms, automatic sprinkler system, fixing the location of fire water tanks, separate power system for fire fighting, involvement of qualified and trained fire personnel, nearest fire station & time required to reach the proposed site shall be prepared and implemented.

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

(xxvii) 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. MSW waste shall be treated in digester and recovered gas shall be used in the canteen.

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

(xxix) As a drainage Nallah passes through the project area, the PP shall implement the Drainage conservation and Soil Erosion control Plans. Grading within the project site shall be planned and implemented such that there shall be negligible impacts on the existing natural

drainage system/pattern. Suitable measures should be taken to prevent the washing away of construction materials into the drainage system.

(xxx) The PP shall implement the best practices of Housekeeping of the project and adjacent areas.

(xxxi) Adequate number of Mobile Fog / Mist Sprinklers shall be commissioned at conveyors, on bulk raw material storage area/ transfer points like Iron Ore, Coal and for Fly Ash and similar solid waste storage areas. This Fog/Mist sprinkling should also be facilitated to the surrounding villages on a periodic basis.

(xxxii) All the commitments made to the public during the Public Hearing/Public Consultation 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.

(xxxiii) 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.

(xxxiv) 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.

(xxxv) 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. 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 (CAAQS) 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 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.

iii. Sampling facility at process stacks and at quenching towers shall be provided as per CPCB guidelines for manual monitoring of emissions.

iv. 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.

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

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

vii. 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.

viii. The project proponent use leak proof trucks/dumpers carrying coal and other raw materials and cover them with tarpaulin.

ix. 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).

x. Land-based APC system shall be installed to control coke pushing emissions.

xi. Monitor CO, HC and O2 in flue gases of the coke oven battery to detect combustion efficiency and cross leakages in the combustion chamber.

xii. 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.

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

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

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 vide G.S.R 277 (E) dated 31st March 2012 (Integrated iron & Steel); G.S.R 414 (E) dated 30th May 2008 (Sponge Iron) as amended from time to time; S.O. 3305 (E) dated 7th December

2015 (Thermal Power Plants) 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. Sewage Treatment Plant shall be provided for treatment of domestic wastewater to meet the prescribed standards.

iv. 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.

v. Tyre washing facilities shall be provided at the entrance of the plant gates.

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

IV. Noise monitoring and prevention

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

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. Ensure installation of regenerative/recuperative 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. 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.

VII. Green Belt

i. Green belt shall be developed in an area equal to 33% of the plant area with native tree species in accordance with CPCB guidelines. The greenbelt shall inter alia cover the entire periphery of the plant

ii. The project proponent shall prepare GHG emissions inventory for the plant and shall submit the program for reduction of the same including carbon sequestration by trees in the plant premises.

iii. 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 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.

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. 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.

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.

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. 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.

vi. 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.

vii. 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.

viii. 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.

ix. 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).

x. 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.

xi. 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.

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

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

xiv. 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.

xv. 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.

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Agenda No. 22.2

22.2 5.00 MTPA Iron Ore Processing Plant & 3.0 MTPA Pellet Plant over an area of 26.44 Ha, Integrated with Downhill Pipe Conveyor over an area of 16.58 Ha by M/s MSPL Limited, located at Village Somalapura, Sandur Taluk, Bellary District, Karnataka– Consideration of Environmental Clearance.

[Proposal No.: IA/KA/IND1/402872/2022; File No. IA-J-11011/329/2021-IAII(IND-1)]
[Consultant: M/s. Mineral Engineering Services; valid upto 15.05.2023 and M/s Ardra Consulting Services Pvt Ltd.: valid upto 29.12.2022]

22.2.1 M/s. MSPL Limited has made an online application vide proposal no. IA/KA/IND1/413204/2023 Dated 12.01.2023 along with copy of EIA/EMP 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. 2(b) Mineral Beneficiation and 3(a), Metallurgical industries (ferrous & non-ferrous) under Category "A" of the schedule of the EIA Notification, 2006 and appraised at Central Level.

22.2.2 Name of the EIA consultant:

Beneficiation Plant: M/s. Mineral Engineering Services [List of ACOs with their Certificate / Extension Letter No: NABET/EIA/2023/SA0163 valid till 15.05.2023].

Pellet Plant: M/s Ardra Consulting Services Pvt Ltd. [List of ACOs with their Certificate / Extension Letter no. QCI/NABET/ENV/ACO/22/2629; valid upto 27.03.2023, as on February 1, 2023].

Details submitted by Project proponent

22.2.3 The details of the ToR are furnished as below:

Date of Application	Consideration	Details	Date of Accord	ToR Validity
09.10.2021	47th meeting of EAC held on 28th - 29th Oct, 2021	Terms of Reference	15.11.2021	14/11/2025
01.01.2022	52nd meeting of EAC held on 07.01.2022 27th, 28th and 31st Jan 2022	Amendment in ToR	14.02.2022	

22.2.4 The project of M/s. MSPL Ltd., located in Somalapur Village, Sandur Tehsil, Ballari District, Karnataka State is for setting up of a new Beneficiation Plant & Pellet Plant integrated with Downhill Pipe Conveyor for production of 5.0 Million Tons Per Annum (MTPA) of Iron Ore Processing Plant & 3.0 MTPA of Pellet Plant.

22.2.5 Environmental Site Settings:

<table>
<tr><th>SNo</th><th>Particulars</th><th>Details</th><th>Remarks</th></tr>
<tr><td>i.</td><td>Total land</td><td>124.73 ha [Private: 29.04 ha; Govt: 81.71 ha; and Forest Land : 13.98 Ha.]

Land use breakup for Plant area at Somalapura village is as given below.
<table>
<tr><th>Description of the unit</th><th>Area in Ha</th></tr>
<tr><td>Iron Ore Processing</td><td>1.68</td></tr>
<tr><td>Pellet Plant</td><td>1.88</td></tr>
<tr><td>Green zone</td><td>9.82</td></tr>
<tr><td>Water storage</td><td>0.85</td></tr>
<tr><td>Raw material yard</td><td>4.56</td></tr>
<tr><td>Office space & Ancillary</td><td>5.95</td></tr>
<tr><td>Slime (tailing reject) storage & Management in Plant</td><td>1.70</td></tr>
<tr><td>Total</td><td>26.44</td></tr>
</table>
Land use breakup for Plant area at Kalingeri village
<table>
<tr><th>Description of the unit</th><th>Area in Ha</th></tr>
<tr><td>Tailing dumping /stacking & Installation of filtration/dewatering unit.</td><td>20.32</td></tr>
<tr><td>Buildings, water complex & reservoir system.</td><td>8.10</td></tr>
<tr><td>Internal roads & drainage system.</td><td>6.37</td></tr>
<tr><td>Future expansion for ancillary facilities</td><td>16.41</td></tr>
<tr><td>Green belt development.</td><td>30.51</td></tr>
<tr><td>Total</td><td>81.71</td></tr>
</table></td><td>PP reported that stage I Forest Clearance Application was submitted vide File. no. FP/KA/MIN/144985/ 2021 dated 19/07/2021 for diversion of 13.98 Ha the forest land for Downhill pipe conveyor from mine to the Unit.</td></tr>
<tr><td>2.</td><td>Land acquisition details as per MoEF&CC O.M. dated 7/10/2014</td><td>The proposed land for plant layout at Somlapura is owned by MSPL and the Tailing area at Kalingeri is applied to Karnataka Udhyoga Mitra which are Non –agriculture land

Partially Acquired:
Acquired : 29.04 Ha,
To be acquired : 95.69 Ha
<table>
<tr><th>Sl. No.</th><th>Project Land</th><th>Area in ha</th><th>Land Acquisiton Status</th></tr>
<tr><td>1</td><td>DHPC</td><td>13.98</td><td>13.98 Ha Applied for FC.
A joint survey of the forest and revenue department has been completed. The file is at the DCF Bellary for further processing</td></tr>
<tr><td>2</td><td>Kalingeri (Tailing dump Area)</td><td>81.71</td><td>The Govt. of Karnataka in principle considered the proposal and formal details are sought from Deputy Commissioner Ballari district, which is under the advanced stage</td></tr>
<tr><td colspan="2">Total</td><td>95.69</td><td></td></tr>
</table></td><td>-</td></tr>
</table>

<table>
<tr><th>SNo</th><th>Particulars</th><th>Details</th><th>Remarks</th></tr>
<tr><td>ii.</td><td>Existence of habitation & involvement of R&R if any.</td><td>R&R is not involved.

Yashwantnagar Village is about 1.5 km</td><td>-</td></tr>
<tr><td>iii.</td><td>Latitude and Longitude of the project site</td><td><table><tr><th>Point</th><th>Latitude</th><th>Longitude</th></tr><tr><td>From</td><td>N 15°01’26.00”</td><td>E 76° 29'47.10"</td></tr><tr><td>To</td><td>N 15°01’57.30”</td><td>E 76°30’12.00”</td></tr></table></td><td>-</td></tr>
<tr><td>iv.</td><td>Elevation of the project site</td><td>At Plant site : 609 m to 619 m AMSL,
Tailing storage area: 644 m to 673 m AMSL</td><td>-</td></tr>
<tr><td>v.</td><td>Involvement of Forest land if any.</td><td>Status of stage I Forest Clearance: Application submitted vide File. no. FP/KA/MIN/144985/2021 dated 19/07/2021

Area of the forest land involved: 13.98 Ha</td><td>For Downhill pipe conveyor from mine - 16.58 ha</td></tr>
<tr><td>vi.</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>Water body</th><th>Distance</th><th>Direction</th></tr><tr><td>Narihalla Stream</td><td>0.32 km</td><td>W</td></tr><tr><td>Ankamanuhallu Kere</td><td>3.7 km</td><td>SE</td></tr><tr><td>Bandri Kere</td><td>6.4 km</td><td>SW</td></tr></table>Tungabhadra river is located at 22.6 Kms from the proposed plant site. Only a small seasonal nallah starts adjacent to the plant area and joins Narihalla seasonal nallah/canal. Narihalla has a dam constructed downstream at a distance of 11.7 Kms. The HFL of Tungabhadra dam is at 498m AMSL and the proposed plant site has as elevation of 630m AMSL Therefore there is no impact of flood hazards for the plant site.</td><td>-</td></tr>
<tr><td>vii.</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:
Kumaraswamy betta R.F. : 0.68 km/ E
Ramgarh R. F. : 2.3 km/ N
Somalapur R. F. : 0.47 km/ SW
Tumbbaragudi R. F: 7.0 km/ SE</td><td>-</td></tr>
</table>

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

S. No	Unit Detail	Unit Configuration	Production Capacities
1.	Iron ore Beneficiation (Beneficiated ore)	5.0 MTPA	5.0 MTPA (through output)
2.	Pellet Plant (Pellet)	3.0 MTPA	3.0 MTPA

22.2.7 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.	Raw Material	Quantity required per annum	Source	Distance from site (Kms)	Mode of Transportation
Beneficiation plant					
1	**Iron Ore**	**50,00,000**	NIOM Captive & Other Mines	**4**	Through DHPC & By road.
Pellet Plant					
1	Iron ore fines	33600000	Beneficiation Plant	4	Online Conveyor.
2	Bentonite	36000	Gujarat	2000	Road
3	Coke breeze	24000	Imported from Australia / Russia	-	Port/ road
4	Coal	96000	Imported	475	Port and by road
5	Limestone	24000	Lokapur, Karnataka	150	By road
6	Dolomite	24000	Lokapur, Karnataka	150	By road
7	Furnace Oil	14850	Goa	475	By road

22.2.8 The water requirement for the project is estimated as 2491 KLD, which will be obtained from the Tungabhadra dam reservoir and the requirement of 336 m^3/day during construction for three years will be met from the Bore well. The permission for drawl of surface water at operation stage is obtained from Karnataka Neravari Nigam Ltd., Vide Letter. No. KNN/Tungabadhra/Water to Factories/2022/0465 dated 25/04/2022 and in 35th proceedings of the committee formed water distribution to industries held on 04.08.2022 and the committee has recommended to provide the approval. The permission for drawl of groundwater has been obtained from Karnataka Ground Water Authority Vide Letter. No. KGWAN1673372668 dated 30.06.2022.

22.2.9 The power requirement for the project is estimated as 40 MW, which will be obtained from the Karnataka Power Transmission Corporation Limited.

22.2.10 Baseline Environmental Studies:

Period	Post Monsoon Season (Oct 2021 to Dec 2021)
AAQ parameters at 12 Locations (min and max)	• $PM_{2.5}$ = 12 to 36 μg/m^3 • PM_{10} = 29 to 69 μg /m^3 • SO_2 = 5 to 13 μg/m^3 • NOx = 9 to 19 μg/m^3 • CO = 0.32 to 0.58 μg/m^3
Incremental GLC level	• $PM_{2.5}$ = 0.8 μg/m^3 (Level at 0.5 .km in NE Direction) • PM_{10} = 2.0 μg/m^3 (Level at 0.5 km in NE Direction) • SO_2 = 0.1 μg/m^3 (Level at 0.5 km in NE Direction) • NOx = 0.1 μg/m^3 (Level at 0.5 km in NE Direction) • CO = 0.1 μg/m^3 (Level at 0.5 km in NE Direction)
Ground water quality at 14 locations	pH: 6.96 to 8.20, Total Hardness: 210 to 770 mg/l; Chlorides: 55 to 550 mg/l, Fluoride: <0.1 to 1.70 mg/l

<table>
<tr><td>Surface water quality at 10 locations</td><td>pH: 7.72 to 8.30; DO: min 5.3 to 5.8 mg/l and BOD: <2 to 2.4 mg/l.</td></tr>
<tr><td>Noise levels Leq (Day and Night)</td><td>45.3 to 54.6 for the day time and 36.8 to 43.9 For the Night time.</td></tr>
<tr><td>Traffic assessment study findings</td><td>Traffic study has been conducted at SH-40 which is approximately 1.2 kms (distance) from the plant site. Transportation of raw material, fuel & finished product will be done 100 % by road. Existing PCU is 2127.5 PCU/day on SH-40 and existing level of service (LOS) is:

<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>SH-40 Sandur –Kudgli Road</td><td>4571</td><td>15000</td><td>0.304</td><td>B (very good)</td></tr>
</table>
PCU load after proposed project will be 4571(Existing) + 1237 (Additional) PCU/day and level of service (LOS) will be: B good

<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>SH-40 Sandur –Kudgli Road</td><td>5808.3</td><td>15000</td><td>0.387</td><td>B (Very good)</td></tr>
</table>
* Note: Capacity as per IRC-64. Guide line for capacity for roads.

Conclusion: The levels of service will same. After including additional traffic due to proposed project.</td></tr>
<tr><td>Flora and fauna</td><td>• Schedule-I species have been observed in the study area – Common Leopard, Sloth Bear, and Indian Rock Python. Wild life conservation plan is prepared and submitted to PCCF (Wildlife) and Chief Wildlife Warden, Karnataka vide letter dated 20.08.2022 and the same is forwarded to DCF (Ballari) vide letter No. PCCF(WL)/D/CR-60/2021-22 dated 20.09.2022 for review.</td></tr>
</table>

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

S. No.	Type of Waste	Source	Quantity generated	Mode of Treatment	Disposal
Solid Waste					
1	Tailing	Beneficiation Plant	0.9 MTPA	Tailings will be stored at Kalingeri village about 6 Kms from within the project site	Nearby Cement Industries, Brick, Tiles, Paver Manufactures.
2	Fines collected from ESP/Bag filters	Pellet Plant	-	Will be recycled in pellet plant alongwith concentrate	
Hazardous Waste					

S. No.	Type of Waste	Source	Quantity generated	Mode of Treatment	Disposal
1	Used Oil & Grease waste	Pump area, DG room	15 KL	KSPCB Authorized recyclers	By road
2	Waste Residue	Work shops	5 KL	KSPCB Authorized recyclers	By road

22.2.12 Public Consultation:

Details of advertisement given	07.06.2022
Date of public consultation	08.07.2022
Venue	Somlapura Village at Plant Site
Presiding Officer	District Magistrate
Major issues raised	Environmental pollution caused from plant, Local Employment, Women empowerment, Education scholarships

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

Sl. No	Issues Raised during Public Hearing	Physical targets	Year of Implementation				Remark
			1st Year	2nd Year	3rd Year	Total amount (In Lakhs)	
1	**Pollution Control**						
a	**Air Pollution During Construction Period:** **F**ugitive dust emission from construction activities.	* Use of covered trucks, * Regular water sprinkling at vulnerable areas of construction site and roads * Development of green belt plantation • Plantation around boundary area of plant and boundary area of tailing disposal dump(15.6 Ha area @ 2500/ Ha, 39,000 plants) • Plantation in open area 23.54 Ha with high canopy cover consisting of Neem, @ 1600 /Ha , 37664 trees * Supply of fruit bearing sapliings to Somalapur(300), Yeshwantanagar(450) , Kalingeri (300)and Ankanmanhall (150)villages in consultaion with the village committee and local administration	30	30	30	90	The total plantation is been considered under EMP cost
	During Operation Period: Degradation of AAQ in the plant & vicinity due to Stack emission (mainly PM) Vehicular traffic may result in air pollution in nearby habitations Fugitive emissions from material	ESP & bagfilter will be installed and all APCDs designed to meet emissions of <30 mg/Nm3	3190	35	50	3275	The respective capital cost is already been included in EMP
		Monitoring of process stacks. Ambient Air Monitoring, Fugitive emission monitoring in the plant and nearby areas	10	10	10	30	
		Fixed water sprinklers on raw material transport roads	20	2	2	24	
		Road Sprinkling by Tankers with Spray fittings	20	1.2	1.2	22.4	

Sl. No	Issues Raised during Public Hearing	Physical targets	Year of Implementation				Remark
			1st Year	2nd Year	3rd Year	Total amount (In Lakhs)	
	handling, transfer, loading and unloading operations	Concreting/Blacktopping of internal roads (6 Km CC road)	1500	2	2	1504	
		Green belt development along the boundary of the plant	0.5	0.5	0.5	1.5	
	Sub total		**4770.5**	**80.7**	**95.7**	**4946.9**	
	Water Pollution Control						
b	**Surface water During Construction Period:** Increase in suspended solids from strom water runoff during heavy rain, situations carrying loose soil/construction material from site	All washable construction material will be stored under sheds or enclosed space to prevent spillage into the drainage network. Monitoring of pollutants on monthly basis	0.25	0.25	0.25	0.75	This cost is only for construction phase
	During Operation Period: Contamination of surface water due to flow of process water and surface runoff	* Process water from beneficiation plant is recycled and kept in closed circuit through thickeners, so there is no discharge of wastewater * STP based on MBBR technology for treatment of domestic wastewater * The tailing dump area will have toe walls and drainage channels followed by stabilization tanks into a tailing pond, from tailing pond water will be recirculate in the process..	1550	60	60	1670	
	Sub total		**1550.25**	**60.25**	**60.25**	**1670.75**	
	Noise Pollution Control						
c	**During Construction Period: Movement of construction equipment's and vehicles, installation of machineries etc.**	Vehicles with BS6 standards with PUC will only be deployed. No machinery or vehicle will be kept in idle running beyond 2 min time span. The whole plant is stabilized with honking zone. Workers will be provided with necessary PPE, e.g. Ear plug, Earmuffs	2	2	2	6	The mentioned procedures will be standard operating procedures under any or every contractual conditions
	During Operation Period: Equipments in the plant and auxiliaries	All noise generating equipment's including machine rooms will be covered with paddings for local noise attenuation. Equipment will be designed to confirm to occupational noise levels prescribed by regulatory agencies. A three tier tall plantation is planned all along the boundary wall to stabilization noise transmission beyond the boundary level. Workers will be provided with necessary PPE, e.g. Ear plug, Earmuffs	3	2	2	7	The cost of plantation and stabilize complied machinery cost are already incorporated in EMP Cost and the given cost is only for PPE's
	Sub total		**5**	**4**	**4**	**13**	

Sl. No	Issues Raised during Public Hearing	Physical targets	Year of Implementation				Remark
			1st Year	2nd Year	3rd Year	Total amount (In Lakhs)	
2	**Employment opportunity for the local people**	About 1500 nos of manpower during construction activity. During operation, Approximately 1652 nos of manpower is required (Direct 752 and 900 Indirect) and considering the suitability, and requirement of MSPL employment to the local shall be provided.	The salary compensation will be booked under the operation expenses				
	Sub total		**0**	**0**	**0**	**0**	
3	**Education for locals population**						
a	School infrastructure development Projects (Smart class, science lab, Distribution of furniture, teaching and learning materials for schools)	Government Higher Primary School-Somalapura - One Smart Class Room-1st Yr; Government Higher Primary School - Yashwanth nagar - One Smart Class Room -1st Yr Shri Ujjini Jagadguru Siddeshwara High School - Yashwanth nagar - Teaching Material - 1st Yr Government Higher Primary School - Kalingeri - School Furnitures -1st Yr. Government Higher Primary School - D Mallapura- Teaching Material - 1st Yr Government Higher Primary School - Dharmapura - Funding for Science Lab -2nd Yr Government Higher Primary School - Ankamanahal - 2nd Yr Government Higher Primary School - Hirehal - Teaching Material -3rd Yr Government Lower Primary School - Yashwanth nagar - One Smart Class Room -3rd Yr Shri Ujjini Jagadguru Siddeshwara Higher Primary School - Yashwanth nagar -Teaching Material - 3rd Yr	20	10	10	40	
	Sub total		**20**	**10**	**10**	**40**	
4	**Health care facilities to the surrounding villages**						
a	Facilitating Doctors in dispensaries with provision of basic amenities	Initially Dispensary at Yashvant Nagar is been chosen for furnacing with check up table , autoclave, wall fitted test tube and jar hangers, providing two celling fans for operability. On second year based on the need assessment the second primary health care facility will be chosen for strengthening.	5	5	5	15	
b	Health Awareness program on Eye screening camps & operation camp and other general health camps	50 camps in a year and 150 such camps in 3 years.	12	12	12	36	

Sl. No	Issues Raised during Public Hearing	Physical targets	Year of Implementation				Remark
			1st Year	2nd Year	3rd Year	Total amount (In Lakhs)	
c	Artificial limbs and calliper camp (Jaipur foot camp)	1 camps in a year concluding the total 3 camps in 3 years	13	13	14	40	
	Sub Total		**30**	**30**	**31**	**91**	
5	**Transport opportunity for the local truck drivers**	Raw material iron ore fines are being transported directly through DHPC from nines. Hence, there is no requirement of engaging local trucks for this purpose. Only product pellet will be transported by trucks by the purchasers directly. However, PP will recommend the local transporters for this work to the pellet purchase vendors	0	0	0	0	
	Sub total		**0**	**0**	**0**	**0**	
6	**Employment to the women, unemployed and disabled people of the surrounding villages of the taluk.**						
A	Women empowerment through Self Help Groups	Identified self helf groups will be provided training on various skills like pickle making, papad making, tailoring to 20 chosen SHGs in the first instant. Women literacy campaign will run through in near by villages somalapura, annkamanhalla, YTG and kalingeri.	10	10	10	30	
	Sub total		**10**	**10**	**10**	**30**	
7	**Land Acquisition**	Land is under acquisition is litigation free and has been identified and delinated for this project by state govt..					
8	**Preservation of wild life** The project doesn't come under the forest area. The Biodiversity survey conducted in 10 KM radius from project site, where PP have found the Schedule-I fauna. Wild life conservation Plan is prepared and submitted to Chief Wild Life Warden as per TOR Condition.	10 Nos of awareness programme on wildlife and environment will be conducted in 3 villages every year. Conservation measures will be implemented such as construction of water bodies and maintenance, fruit bearing and shade giving trees around water bodies, erection of watch towers/walkie- talkie, provision of salt licks , anti-poaching guards, fire lines and budget has allocated every year.	15	5	5	25	
	Sub total		**15**	**5**	**5**	**25**	
9	**Basic Infrastructure development**						
a	Providing drinking water facilities	RO (Purified Drinking Water) plants will be installed at strategic public locations in 3 villages to meet the drinking water stabilization	10	0.5	0.5	11	
b	Provision of solar power street light	Solar street lights for 10 villages	5	5	5	15	
	Sub total		**15**	**5.5**	**5.5**	**26**	

Sl. No	Issues Raised during Public Hearing	Physical targets	Year of Implementation				Remark
			1st Year	2nd Year	3rd Year	Total amount (In Lakhs)	
	Grand Total		**6419.75**	**203.45**	**219.45**	**6842.65**	

22.2.13 The capital cost of the proposed project is Rs.1920 Crores and the capital cost for environmental protection measures is proposed as Rs. 75.14 Crores. The annual recurring cost towards the environmental protection measures is proposed as Rs. 1.47 Crores. The employment generation from the proposed project is 1652 [752 Nos. direct & 900 Nos. indirect]. The details of cost for environmental protection measures is as follows:

S. No.	Description of Item	Proposed (Rs. In Crores/lakhs)	
		Capital Cost	Recurring Cost
1	Air Pollution Control/ Noise Management	1550	6.03
2	Water Pollution Control	50	2
3	Green Belt Development	77	1.0
4	Occupational health	5	31
5	Fire extinguishers	12	3
6	Fire hydrant with pipe line	100	
7	ESP & Stack	4000	35
8	Bag filter system (PP+IOPB+IOGS)	190	
9	Filter press & Water Recovery	1500	60
	Total	**7514**	**147.03**

22.2.14 Proposed greenbelt will be developed in 39.14 ha which is about 36% of the total project area. A 2.5 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 no. of 77055 saplings will be planted and nurtured in 39.14 Hectares in 3 years.

22.2.15 It is submitted that there is no violation under EIA notification 2006/no court cases/no show cause/no direction related to the project under consideration.

22.2.16 M/s. MSPL had earlier applied for EC vide Proposal no. IA/KA/IND1/402872/2022 dated 13.10.2022 and the proposal was initially considered in the 18th meeting of the EAC for Industry-I sector held on 28-29th November, 2022 wherein the Committee deferred the proposal on account of technical shortcomings. The proponent submitted the ADS reply on PARIVESH on 9th December, 2022 and 21st December, 2022. Point-wise reply of ADS is given as below:

Sl. No	Points raised by MOEFCC	Reply by M/s. MSPL Limited
1	A representation has been received through email dated 23.11.2022 for rejection of the instant Environment Clearance application on multiple issues raised pertaining to the said project. The EAC is of the opinion that the project	The pointwise clarification on the issues raised in the representation dated 23.11.2022 submitted

Sl. No	Points raised by MOEFCC	Reply by M/s. MSPL Limited
	proponent shall submit the pointwise clarification on the issues raised in the representation dated 23.11.2022. The EAC advised the Ministry to forward the representation to project proponent for their clarification. In this context, representation has forwarded to PP.	
2	EAC noted that in the specific TOR prescribed by the earlier Committee there are very specific conditions stating to submit various action plans relating to erosion control, drainage protection, 100% waste utilisation etc. The PP needs to provide and submit the detailed action plans for mitigation. The Consultant/PP had provided very sketchy information in vague manner with arbitrary statements. Whereas it was noted during the EAC meeting that the project area is falling adjacent to thick lush green forest area and is significantly environmentally sensitive. Further, the PP is going to generate huge amount of waste tailings per year to the tune of about one million tonnes per year and has proposed to store them on a relatively high elevation of about 600 AMSL, which will cause serious pollution problems and land degradation at the dumping site as well as downstream. PP has not provided a concrete action plan to reuse the tailings or an MoU with end-user. Further, PP has to undertake ground water leaching study for heavy metals of the tailing site. Therefore, the PP shall address all the above issues in detail scientifically and with engineering details and specific financial provisions.	Action Plan for Tailing generation, stacking and re use of the tailings generated is submitted in detail. MOU with end user pertaining to reuse of the tailing is submitted. The surrounding area of kalingeri village where tailing filters and stacking is proposed is having only scrub forest. Please refer 10 Km radius topo sheet as submitted. The 600 AMSL is mentioned about the RL above the sea level whereas the contour map of tailing area at Kalingeri shows gentle gradients with in the area selected. The area is selected for stacking is at a lower level as compare to surrounding areas of the site. Further PP is also constructing retaining wall, drains along the dump for collecting rain water. The contour maps is submitted A groundwater leaching study will be conducted once tailing dumps are established.
3	The EAC noted in the application form on PARIVESH under section for Name of the Company/ Organization/User agency, the name appears as “Dr. Meda Venkataiah” which is also the name of the applicant whereas the name of the company is M/s. MSPL Limited. The EAC also noted that the Ministry has raised EDS also in this regard and issue has not been sorted at the end of project proponent. Taking into consideration that the whole process is online including generation of EC wherein	PP is constantly following up with NIC and trying to resolve it.

<table>
<tr><th>Sl. No</th><th>Points raised by MOEFCC</th><th>Reply by M/s. MSPL Limited</th></tr>
<tr><td></td><td>data is fetched automatically from the application form on PARIVESH, it is advised that the same shall be rectified.</td><td></td></tr>
<tr><td>4</td><td>Total project land is 124.73 ha which also include 13.98 ha of Forest land. As reported, the proposed land for plant layout at Somalapura is owned by MSPL and the Tailing area at Kalingeri is applied to Karnataka Udhyoga Mitra. So far 29.04 ha has been acquired. whereas 95.69 ha is yet to be acquired. 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.</td><td>Status of remaining land proposed to be acquired
<table>
<tr><th>SI. No</th><th>Project Land</th><th>Area in Ha</th><th>Land Acquisition Status</th></tr>
<tr><td>1</td><td>DHPC</td><td>13.98</td><td>13.98 Ha Applied for FC.
A joint survey of the forest and revenue department has been completed.
The file is at the DCF Bellary for further processing.</td></tr>
<tr><td>1</td><td>Kalingeri (Tailing dump Area)</td><td>81.71</td><td>Karnataka Udyog Mitra sent letter to the Revenue department Bangalore and the Deputy commissioner Ballari district for an opinion. Documents submitted.</td></tr>
<tr><td colspan="2">Total</td><td>95.69</td><td></td></tr>
</table></td></tr>
<tr><td>5</td><td>The PP has reported that application for Forest Clearance has been submitted vide File. no. FP/KA/MIN/144985/2021 dated 19.07.2021. The EAC advised the PP to take note of Ministry's O.M. vide No. J-11013/41/2006-IA.II(I) dated 09.09.2011 as amended on 18.05.2012 and 19.06.2014 pertaining to procedure for grant of environment clearance under EIA Notification, 2006 which involve Forest land.</td><td>Noted & Agreed.</td></tr>
<tr><td>6</td><td>The nearest human settlement from the site is Yashwantnagar Village located at a distance of 1.5 Kms from the project site. Project Proponent shall prepare an action plan for environmental safeguard measures to minimise the impact on the habitation of the locals.</td><td>Dust collected from all the above locations at the Pellet Plant which contains iron ore micro fines is sent back into the process as Fine Dust is recycled in the process of pelletization. The green belt has been proposed within the plant area of 26.44 Ha @ 33.3% i.e., 8.8Ha with a density of 2500 saplings per Ha with high canopy i.e, Neem, Radha Chuda (Caesalpinia pulcherrima), Peepal tree etc.
This plantation will reduce the dust pollution from the emitted from the plant. Also 30-meter-wide green belt development within the project area towards Yashwant Nagar village (North) is proposed. Detailed Action is explained in EIA & EMP report</td></tr>
</table>

<table>
<tr><th>Sl. No</th><th>Points raised by MOEFCC</th><th>Reply by M/s. MSPL Limited</th></tr>
<tr><td>7</td><td>Narihalla Stream (0.32 km, W), Ankamanuhallu Kere (3.7 km, SE) and Bandri Kere (6.4 km, SW) exists within the study area of 10 km from the project site. A robust and full proof Drainage Conservation scheme with design and engineering details to protect the natural drainage and its flow parameters; along with Soil conservation scheme and multiple Erosion control measures shall be submitted.</td><td>Drainage Conservation scheme with design and engineering details submitted.</td></tr>
<tr><td>8</td><td>On perusal of kml file, the committee noticed that a railway line is passing through the project site. However, the PP/Consultant stated that the aforementioned railway line is passing adjacent to the project site. In this regard, the EAC is of the opinion that the PP/Consultant shall re-verify/recheck the kml file and submit the revised KML file.</td><td>The Railway line is passing adjacent to the plant site, attached KML file shows the black line is the railway line and whereas red line boundary of the project site which is outside the railway property.</td></tr>
<tr><td>9</td><td>The EAC noted that PP has not uploaded the covering letter forwarding of PH proceedings addressed to the Ministry. Also, EAC noted that there are several written representations received for the project. The EAC is of the view that PP shall submit the breakup of the written representations received categorically in favour of the project and against the project. The PP is also advised to share the video recording of the PH proceedings in the next consideration of proposal by EAC.</td><td>Forwarding letter with PH proceedings addressed to the Ministry submitted.
<table><tr><th>Description</th><th>Nos of Written statements</th></tr><tr><td>In Favour of Industry</td><td>10108</td></tr><tr><td>Against of Industry</td><td>3396</td></tr><tr><td>Total</td><td>13504</td></tr></table>PP will share the video of PH proceedings at the time of presentation.</td></tr>
<tr><td>10</td><td>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 has advised PP to revise the action plan. The PP agreed to the advice of Committee and also committed to raise the cost of addressing PH issues to 1.5-2% of the total project cost.</td><td>Points raised in the written submissions have been reviewed and accordingly action plan is revised.
Cost of Addressing PH Issues details are as listed below.
<table><tr><th>Cost Involved</th><th>Cost In Cr</th><th>In Percentage</th></tr><tr><td>Project cost</td><td>1920 Cr</td><td>-</td></tr><tr><td>Cost Addressing PH issues already mentioned in EIA/EMP</td><td>68.43 Cr</td><td>3.56% of the Total Project cost</td></tr></table>The public hearing action plan is submitted.</td></tr>
<tr><td>11</td><td>The EAC noted that the TOR compliance in EIA/EMP report is general and vague and only reference is there. The PP/Consultant shall submit the gist of the TOR compliances and details of specific</td><td>Revised ToR Compliance is enclosed in EIA & EMP report</td></tr>
</table>

<table>
<tr><th>Sl. No</th><th>Points raised by MOEFCC</th><th>Reply by M/s. MSPL Limited</th></tr>
<tr><td></td><td>answers and accordingly revise EIA/EMP Report.</td><td></td></tr>
<tr><td>12</td><td>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.</td><td>The report with financial implication for the same in detail is submitted.</td></tr>
<tr><td>13</td><td>The EAC deliberated on the management of tailings generated out of Iron Ore beneficiation plant and is of the view that details related to generation, storage and disposal of tailings shall be submitted in a tabular form.</td><td>A relevant report with all the details is submitted.</td></tr>
<tr><td>14</td><td>The Committee deliberated on the greenbelt development proposed by the project proponent and noted that proposed 30.51 ha greenbelt shall be developed at Kalingeri village. Since the total project area is distributed in pockets, PP shall clarify whether the greenbelt will be developed in all the pockets @33% as per the norms. PP shall submit a detailed action plan in this regard.</td><td>
<table>
<tr><th>Year</th><th>Plant Area (Ha)</th><th>Tailing Area (Ha)</th><th>Total Greenbelt Area (Ha)</th></tr>
<tr><td>1st</td><td>3.52</td><td>12.204</td><td>15.724</td></tr>
<tr><td>2nd</td><td>2.64</td><td>9.153</td><td>11.793</td></tr>
<tr><td>3rd</td><td>2.64</td><td>9.153</td><td>11.793</td></tr>
<tr><td>Total</td><td>8.80</td><td>30.51</td><td>39.31</td></tr>
<tr><td>Total Extent</td><td>26.44</td><td>81.71</td><td>108.15</td></tr>
<tr><td>% of green belt</td><td>33.28</td><td>37.34</td><td>36.34</td></tr>
</table>
</td></tr>
<tr><td>15</td><td>Action plan for the stock pile management including the details, financial aspects, drawings etc. shall be submitted.</td><td>A relevant report with all the details is submitted.</td></tr>
</table>

Sl. No	ADS Points	PP Reply
1	PP has uploaded the unsigned letter in Portal.	Due to compression of the document to its maximum extent before uploading in order to be within the storage limits for upload, the graphics of the signature has thinned out with almost non visibility. PP is extremely sorry for this documental upload and submitted herewith a clear copy of the letter.
2	FC is in very initial stage. PP has to expedite the submission of adequate documents for Stage-I FC	a. As per the narrative of the FC proposal and as proposed in EC, the category of the project comes under Mining; Shape of the forest land proposed to be diverted is Linear and Area of forest land proposed for diversion is 13.98 Ha. c. In lieu of the ADS Point No.5 and taking note of Ministry's O.M vide No. J-l1013/41/2006-IA.II(I) dated 09.09.2011 as amended on 18.05.2012, and 19.06.2014. The detail status of the FC process after Scrutiny by the Division Office Bellary is as follows: The evidence of step-wise advancement in DRP process the following attached Annexure is provided for your kind perusal. • Application Submission Acknowledgement Copy.

Sl. No	ADS Points	PP Reply
		• Forwarding of Hard copies of Application & ancillary documents to Divisional Forest Office and as well as District Collector. • Receipt of the proposal being forwarded to the concerned DFO and DC for further processing. • As on date status of the project in the portal is with User agency • DGPS Survey Completion Certificate by the Authorized Vendor. d. As per the proposal status and in compliance to the EDS raised by DFO on 22.10.2021, further advancements are being done for the necessary forest clearance as below: After DCF Bellary processed application, ordered for Joint Survey by department of Mines & Geology, Revenue and Forest for which the EDS was raised. The joint DGP Survey has been completed and CA land has been identified at Goveli Village, Khanapur Taluk, Belgaum district, which is a "Patta" land within the Bhimgad Wildlife Sanctuary. Further, tree enumeration for the pathway of DHCP is under process at present and shall be completed within a months' time frame. After completion of tree enumeration, the file will be complete in all requirements & shall be processed and moved to the nodal officer and MoEF&CC for stage-1 approval.

22.2.17 Based on the ADS submission of PP, the proposal was reconsidered during 20th meeting of the EAC for Industry-I sector held on 29th December, 2022 wherein the Committee recommended that proposal to be returned in its present form to address the shortcomings. The deliberations and recommendations of EAC are as follows:

Deliberations by the Committee (EAC during 29th December, 2022)

22.2.18 The Committee noted the following:

1. In the application form on PARIVESH under section for Name of the Company/ Organization/User agency, the EAC observed that the name still appears as "Dr. Meda Venkataiah" which is actually the name of the applicant whereas the name of the company is M/s. MSPL Limited. The EAC also noted that the Ministry initially raised EDS in this regard, thereafter the Committee raised ADS during its meeting held on 28-29th November, 2022 and issue has not been sorted at the end of project proponent. PP has submitted that they are constantly following up with NIC and trying to resolve it. However, taking into consideration that the whole process is online including generation of digital EC wherein data is fetched automatically from the application form on PARIVESH, the EAC reiterated its earlier concern and advised PP/ Consultant to rectify the same and shall submit a fresh application since it is a technical issue and may not get resolved early.
2. Total project land is 124.73 ha which also include 13.98 ha of Forest land. As reported, the proposed land for plant layout at Somlapura is owned by MSPL and the Tailing area at Kalingeri is applied to Karnataka Udhyoga Mitra which are Non –agriculture land. So far 29.04 ha has been acquired whereas 95.69 ha is yet to be acquired. Further, PP has reported that application for Forest Clearance has been submitted vide File. no.

FP/KA/MIN/144985/2021 dated 19/07/2021. However, taking into consideration the Ministry's O.M. issued vide No. J-11013/41/2006-IA.II(I) dated 09.09.2011 as amended on 18.05.2012 and 19.06.2014 pertaining to procedure for grant of environment clearance under EIA Notification, 2006 which involve Forest land, the EAC deliberated that even if the proposal is recommended, the EC may not be issued by the Ministry and in that case proponent will have to submit Stage-I FC order to the Ministry within 1 year of grant of EC.

3. The EAC deliberated on the pointwise submission of PP to the points raised in the representation dated 23.11.2022 for rejection of the instant Environment Clearance application pertaining to the said project and found it unsatisfactory. The EAC advised PP/Consultant to review its submission and submit revised clarifications on the points raised in the representation.
4. The EAC deliberated on the submitted action plan of Tailing Management and asked to revisit the same with regard to its reuse, storage and different pollution control mitigation measures with supportive documents after a technical study.
5. The EAC after deliberation agreed for 'in Principle' recommendation of EC subject to addressing above issues.
6. The PP/Consultant is agreed to the suggestion of EAC and requested to allow for reappearance after revision of the application incorporating the desired information.

Recommendations of the Committee (EAC during 29th December, 2022)

22.2.19 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. 22.2.18 above and submit and upload the revised application including all the EDS/ADS reply as sought by the EAC in earlier meeting. PP shall also revise the EIA/EMP Report accordingly and upload on Parivesh Portal for further deliberations by the EAC.

22.2.20 M/s. MSPL has again applied for EC vide Proposal no. IA/KA/IND1/413204/2023 Dated 05.01.2023 with reply to the points raised during the 20th EAC meeting as follows:

Sl. No.	Issues raised	Submission of PP
1.	In the application form on PARIVESH under section for Name of the Company/ Organization/User agency, the EAC observed that the name still appears as "Dr. Meda Venkataiah" which is actually the name of the applicant whereas the name of the company is M/s. MSPL Limited. The EAC also noted that the Ministry initially raised EDS in this regard, thereafter the Committee raised ADS during its meeting held on 28-29th November, 2022 and issue has not been sorted at the end of project	The registration for necessary correction for the company name is been done by a fresh registration of the company in the Parivesh Portal and the company name is reflected as M/s MSPL. As for the advice of the Committee, all the documents are updated as on date with ADS replies duly incorporated in EIA report in Chapter-13, which has been uploaded with New User ID and PWD. This new proposal number is IA/KA/IND1/413204/2023, which is to be considered for necessitating the Environmental Clearance of the Proposed Project.

<table>
<tr><th>Sl. No.</th><th>Issues raised</th><th>Submission of PP</th></tr>
<tr><td></td><td>proponent. PP has submitted that they are constantly following up with NIC and trying to resolve it. However, taking into consideration that the whole process is online including generation of digital EC wherein data is fetched automatically from the application form on PARIVESH, the EAC reiterated its earlier concern and advised PP/ Consultant to rectify the same and shall submit a fresh application since it is a technical issue and may not get resolved early.</td><td></td></tr>
<tr><td>2.</td><td>Total project land is 124.73 ha which also include 13.98 ha of Forest land. As reported, the proposed land for plant layout at Somlapura is owned by MSPL and the Tailing area at Kalingeri is applied to Karnataka Udhyoga Mitra which are Non –agriculture land. So far 29.04 ha has been acquired whereas 95.69 ha is yet to be acquired. Further, PP has reported that application for Forest Clearance has been submitted vide File. no. FP/KA/MIN/144985/2021 dated 19/07/2021. However, taking into consideration the Ministry’s O.M. issued vide No. J-11013/41/2006-IA.II(I) dated 09.09.2011 as amended on 18.05.2012 and 19.06.2014 pertaining to procedure for grant of environment clearance under EIA Notification, 2006 which involve Forest land, the EAC deliberated that even if the proposal is recommended, the EC may not be issued by the Ministry and in that case proponent will have to submit Stage-I FC order to the Ministry within 1 year of grant of EC.</td><td>The details of Land status are been presented before the EAC with all evidences, whose summary is as follows:
<table>
<tr><th>Sl. No.</th><th>Project Land</th><th>Area in ha</th><th>Land Acquisiton Status</th></tr>
<tr><td>1</td><td>DHPC</td><td>13.98</td><td>13.98 Ha Applied for FC.
A joint survey of the forest and revenue department has been completed. The file is at the DCF Bellary for further processing</td></tr>
<tr><td>2</td><td>Kalingeri (Tailing dump Area)</td><td>81.71</td><td>The Govt. of Karnataka in principle considered the proposal and formal details are sought from Deputy Commissioner Ballari district, which is under the advanced stage</td></tr>
<tr><td colspan="2">Total</td><td>95.69</td><td></td></tr>
</table>
M/s. MSPL Limited has been already acquired 29.04 Ha and is Industrial NA Land Category.
With respect to the forest land in DHPC Area, the status is been already illustrated in the MoM of 29/12/2022 EAC Meeting. Therefore 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……,”, the credible documental evidences are provided to the honorable EAC as well</td></tr>
</table>

Sl. No.	Issues raised	Submission of PP
		as incorporated in the EIA Report as Annexure for your perusal. Further a undertaking is been submitted for not to start the operation until the Stage I FC for DHPC is been granted for MSPL. Therefore PP requests to kindly issue them the EC in accordance to the above mentioned notification for the interest of the project and oblige.
3.	The EAC deliberated on the pointwise submission of PP to the points raised in the representation dated 23.11.2022 for rejection of the instant Environment Clearance application pertaining to the said project and found it unsatisfactory. The EAC advised PP/Consultant to review its submission and submit revised clarifications on the points raised in the representation.	The Point wise Clarification to the points as raised in the representation dated 23.11.2022 is been duly incorporated in the EIA Report to their best ability under Chapter 13 (To address the issues raised by EAC at times) and is also submitted.
4.	The EAC deliberated on the submitted action plan of Tailing Management and asked to revisit the same with regard to its reuse, storage and different pollution control mitigation measures with supportive documents after a technical study.	The detailed action plan of Tailing Management with its safety measures as well as pollution control measures to be taken is mentioned under ADS Reply submitted on 09.12.2022 along with an utilization plan to sale the tailings to Brick Manufacturing & Cement Plant, whose agreements are submitted as an evidence to their commitment. PP will dispose these tailing rather than storing as much as possible. The residual tailings will be stored for future usage. Due to the fact that the tailing generation, storage and usage are planned as submitted with undertakings from the buyers, it is a sustainable plan to go ahead with the project. The tailing pollution control mitigation measures are addressed in EIA/EMP report chapter-4; page no 132-133.
5.	The EAC after deliberation agreed for 'in Principle' recommendation of EC subject to addressing above issues. The PP/Consultant is agreed to the suggestion of EAC and requested to allow for reappearance after revision of the application incorporating the desired information.	Acknowledged with thanks.
6.	The EAC after deliberation agreed for 'in Principle' recommendation of EC subject to addressing above issues.	As per the meeting discussion, on submission of the compliances as pointed out by the honorable EAC, it would be considered for approval of Environment Clearance for the mentioned project.

Sl. No.	Issues raised	Submission of PP
	The PP/Consultant is agreed to the suggestion of EAC and requested to allow for reappearance after revision of the application incorporating the desired information.	

Deliberations by the Committee

22.2.21 The Committee noted the following:

1. The instant proposal is for setting up of a new Beneficiation Plant & Pellet Plant integrated with Downhill Pipe Conveyor for production of 5.0 million Tons Per Annum (MTPA) of Iron Ore Processing Plant & 3.0 MTPA of Pellet 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. Total project land is 124.73 ha which also include 13.98 ha of Forest land. As reported, the proposed land for plant layout at Somlapura is owned by MSPL and the Tailing area at Kalingeri is applied to Karnataka Udhyoga Mitra which are Non –agriculture land. So far 29.04 ha has been acquired whereas 95.69 ha is yet to be acquired. Application for Forest Clearance has been submitted vide File. no. FP/KA/MIN/144985/2021 dated 19/07/2021. PP has further reported that joint survey of the forest and revenue department has been completed. The file is at the DCF Bellary for further processing.
6. The nearest human settlement from the site is Yashwantnagar Village located at a distance of 1.5 Kms from the project site.
7. Narihalla Stream (0.32 km,W), Ankamanuhallu Kere (3.7 km, SE) and Bandri Kere (6.4 km, SW) exists within the study area of 10 km from 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.

8. The water requirement for the project is estimated as 2491 KLD, which will be obtained from the Tungabhadra dam reservoir and the requirement of 336 m^3/day during construction for three years will be met from the Bore well.
9. Proposed greenbelt will be developed in 39.14 ha which is about 36% of the total project area. Total no. of 77055 saplings will be planted and nurtured in 39.14 Hectares in 3 years.
10. The Committee has found that the baseline data and incremental GLC due to the proposed project within NAAQ standards.
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. During deliberation on tailing management, PP assured that they will be using filter press for the tailing and the solid tailing will be stored at specified area. PP/Consultant also assured to reuse the solid tailing (obtained from Filter press) in various activities to the best possible extent.
14. The PP assured for storage/dumping of tailing in a safe, systematic and scientific manner over cement concrete matting and proper vegetation/grass will be developed to stop leaching, soil erosion and to mitigate other environmental pollution.
15. Schedule-I species namely Common Leopard, Sloth Bear, and Indian Rock Python have been observed in the study area. Wild life conservation plan is prepared and submitted to PCCF (Wildlife) and Chief Wildlife Warden, Karnataka vide letter dated 20.08.2022 and the same is forwarded to DCF (Ballari) vide letter No. PCCF(WL)/D/CR-60/2021-22 dated 20.09.2022 for review.
16. The Committee deliberated upon taking into consideration the previous application and the reply submitted to the points raised in the previous application 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.

Recommendations of the Committee

22.2.22 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 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. <u>Specific conditions:</u>

(i) The Environmental Clearance is subject to grant of Forest Clearance of 13.98 ha under the provisions of the FC Act, 1980 for Downhill pipe conveyor from mine to the Unit.

(ii) The PP 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 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.

(iv) 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.

(v) Total project land is 124.73 ha which also include 13.98 ha of Forest land. PP shall commence the project activity only after acquisition of complete land and other necessary permission from the Competent Authority.

(vi) The nearest human settlement from the site is Yashwantnagar Village located at a distance of 1.5 Kms from the project site. Project Proponent shall prepare and implement an action plan for environmental safeguard measures to minimise the impact on the habitation of the locals. The company shall also include some of these locations in its environmental monitoring programme.

(vii) Narihalla Stream (0.32 km,W), Ankamanuhallu Kere (3.7 km, SE) and Bandri Kere (6.4 km, SW) exists within the study area of 10 km from 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 2491 KLD, shall be met from the Tungabhadra dam reservoir and the requirement of 336 m^3/day during construction for three years shall be met from the Bore well. Project proponent shall strictly implement an action plan for gradually phasing out of 2491 KLD ground water usage in a time frame of three years from the date of issue of EC for the proposed project.

(ix) PP shall undertake village adoption and formulate Village Adoption program consisting of need-based community development activities, to develop them into model villages.

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

(xi) Tailing obtained from filter press are to be reused in different activities like manufacturing bricks, road filling, cement plants etc to the best possible extent. The solid tailing to be kept in safe, systematic scientific manner in the specified area over cement concrete matting and proper vegetation to be developed to avoid ground leaching, soil erosion and to mitigate other environmental hazards.

(xii) Only 20.33 ha land in Kalingeri Village located at 6 km distance from site shall be used for tailing disposal. Total land in the village Kalingeri, under project is 101.17 ha.

(xiii) 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.

(xiv) Three tier Green Belt shall be developed in a time frame of one year 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. 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 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 alongwith windshield inside the plant premises to act as green barrier for air pollution & noise levels towards the Yashwantnagar village. Compliance status in this regard, shall be submitted to concerned Regional Office of the MoEF&CC.

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

(xvi) 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.

(xvii) Dust emission from all the stacks shall be less than 30 mg/Nm^3.

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

(xix) Action Plan for fire fighting system including provision for flame detectors, temperature actuated heat detectors with alarms, automatic sprinkler system, fixing the location of fire water tanks, separate power system for fire fighting, involvement of qualified and trained fire personnel, nearest fire station & time required to reach the proposed site shall be prepared and implemented.

(xx) The proposed project shall be designed as "Zero Liquid Discharge" Plant. No waste water will be discharged outside the plant boundary.

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

(xxii) The Leaching study of the tailings shall be conducted from the tailings stacks/ storage dumps every six-monthly to assess contamination of ground water and surface water sources. The PP shall take all adequate mitigation measures. The leaching study reports shall be submitted to MoEFCC.

(xxiii) The Acid mine/ Metalliferous drainage assessment shall be done periodically and the results shall be submitted to MoEFCC. The PP shall take all adequate mitigation measures.

(xxiv) The Piezometric wells shall be established in all directions surrounding the project area to monitor groundwater levels and determine aquifer parameters such as transmissibility, hydraulic conductivity, storage, to sample groundwater for chemical/ heavy metals/ toxic leachates and microbiological analysis.

(xxv) The PP shall adopt the best practices of House-keeping in the whole project area and specially whre the tailings are proposed to be stacked.

(xxvi) All the commitments made to the public during the Public Hearing/Public Consultation 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.

(xxvii) 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.

(xxviii) 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.

(xxix) 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. 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 (CAAQS) 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 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.

iii. Sampling facility at process stacks and at quenching towers shall be provided as per CPCB guidelines for manual monitoring of emissions.

iv. 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.

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

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

vii. 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.

viii. The project proponent use leak proof trucks/dumpers carrying coal and other raw materials and cover them with tarpaulin.

ix. 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).

x. Land-based APC system shall be installed to control coke pushing emissions.

xi. Monitor CO, HC and O2 in flue gases of the coke oven battery to detect combustion efficiency and cross leakages in the combustion chamber.

xii. 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.

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

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

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 vide G.S.R 277 (E) dated 31st March 2012 (Integrated iron & Steel); G.S.R 414 (E) dated 30th May 2008 (Sponge Iron) as amended from time to time; S.O. 3305 (E) dated 7th December 2015 (Thermal Power Plants) 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. Sewage Treatment Plant shall be provided for treatment of domestic wastewater to meet the prescribed standards.

iv. 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.

v. Tyre washing facilities shall be provided at the entrance of the plant gates.

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

IV. Noise monitoring and prevention

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

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. Ensure installation of regenerative/recuperative 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. 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.

VII. Green Belt

i. Green belt shall be developed in an area equal to 33% of the plant area with native tree species in accordance with CPCB guidelines. The greenbelt shall inter alia cover the entire periphery of the plant

ii. The project proponent shall prepare GHG emissions inventory for the plant and shall submit the program for reduction of the same including carbon sequestration by trees in the plant premises.

iii. 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 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.

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. 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.

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.

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. 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.

vi. 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.

vii. 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.

viii. 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.

ix. 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).

x. 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.

xi. 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.

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

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

xiv. 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.

xv. 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. 22.3

22.3 Greenfield Project of Primary Metallurgical Process (Ferro Alloys) for production of 35,176 TPA (maximum) Ferro Manganese/Silico Manganese/Ferro Chrome/Silico Chrome (SAF)/ Ferro Silicon) and 2 x 4.5 MTPA to make 29,700 MTPA Low Carbon Ferro Chrome (EAF) at MouzaChausal, P.S Gangajalghati, District- Bankura, West Bengal by located at Mouza- Chausal, P.S Gangajalghati, District- Bankura, West Bengal by M/s Hariaksh Industries Private Limited– Consideration of Environmental Clearance.

[Proposal No. IA/WB/IND1/410990/2022; File No. IA-J-11011/167/2019-IA-II(IND-I)] [Consultant: Grass Roots Research & Creation India (P) Ltd.; Valid upto 15.02.2024]

22.3.1 M/s Hariaksh Industries Private Limited has made an online application vide proposal No-IA/WB/IND1/410990/2022 dated 12.01.2023 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 schedule no. 3(a) Metallurgical industries (ferrous & non-ferrous) under Category "A" of the schedule of the EIA Notification, 2006 and appraised at Central Level.

22.3.2 Name of the EIA consultant: Grass Roots Research & Creation India (P) Ltd [List of ACOs with their Certificate / Extension Letter no. NABET/EIA/2124/RA0213; valid upto 15.02.2024, as on February 1, 2023].

Details submitted by Project proponent

22.3.3 The details of the ToR are furnished as below:

Date of Application	Consideration	Details	Date of Accord	ToR Validity
15.04.2019	6th meeting of the EAC (Industry-I) held during 29th to 30th April, 2019.	Terms of Reference	21.05.2019	20.05.2023

22.3.4 The project of M/s Hariaksh Industries Private Limited located in Mouza Chausal, PS: Gangajalghati, District Bankura, West Bengal state is for installation of 2 x 9 MVA Submerged Arc Furnace (SAF) to make 35,176 TPA Ferro Manganese / Silico Manganese / Ferro Chrome / Silico Chrome/ Ferro Silicon) and 2 x 4.5 MVA Electric Arc Furnace (EAF) to make 29,700 TPA Low Carbon Ferro Chrome' for production of Ferro Manganese / Silico Manganese / Ferro Chrome / Silico Chrome/ Ferro Silicon 35,176 tonnes per annum(TPA) & Low Carbon Ferro Chrome 29,700 tonne per annum (TPA).

22.3.5 Environmental Site Settings:

S. No	Particulars	Details submitted by the PP	Remarks
1	Total Land	4.20 ha [Private]	Converted to Industrial, Letter received from District Planning

<table>
<tr><td></td><td></td><td></td><td>Cell, Bankura, West Bengal, vide letter no. memo no. 943/DPC/BGPA on dated 10/01/2018</td></tr>
<tr><td>2</td><td>Land acquisition details as per MoEF&CC O.M dated 7/10/2014</td><td>Entire land of 4.20 ha is under the possession of M/s Hariaksh Industries Private Limited</td><td></td></tr>
<tr><td>3</td><td>Existence of habitation & involvement of R&R, if any.</td><td>R&R not applicable

Nearest habitation:<table><tr><th>Sl. No.</th><th>Name</th><th>Distance</th><th>Direction</th></tr><tr><td>1</td><td>Chausal</td><td>0.35 km</td><td>WNW</td></tr></table></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>23°28'35.41"N</td><td>87°10'12.24"E</td></tr><tr><td>2</td><td>23°28'27.94"N</td><td>87°10'4.37"E</td></tr><tr><td>3</td><td>23°28'28.17"N</td><td>87°10'2.47"E</td></tr><tr><td>4</td><td>23°28'38.41"N</td><td>87°10'5.75"E</td></tr></table></td><td></td></tr>
<tr><td>5</td><td>Elevation of the project site</td><td>107 Meter above the 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>Damodar River</td><td>7.2 km</td><td>North East</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>Nil

List of RF:
Gangajalghati Forest - 4.4 KM SW
Boriora Forest - 6 km SE</td><td></td></tr>
</table>

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

S. No	Name of Unit	Capacity	Name of Product	Production Capacity (TPA)
1	Ferro Alloy Unit (SAF – 2 units)	9 MVA each	Ferro Manganese/ Silico Manganese/ Ferro Silicon/ Ferro Chrome/ Silico Chrome	35,176/ 23,455/ 11,585/ 20,000/ 15,000/
2	Ferro Alloy Unit (EAF – 2 units)	4.5 MVA each	Low Carbon Ferro Chrome	29,700
Total Ferro Alloy				**64,876**

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

Raw Material details for Ferro Manganese

Sl. No.	Raw Material	Quantity (TPA)	Source	Distance (w.r.t. Plant)	Mode of transport
1.	Manganese Ore	77387	Odisha	270 km	By Railway Rake
2.	Coke	17588	Local Market	25 km	By Road
3.	Dolomite	7035	West Bengal	550 km	By Railway Rake

Raw Material details for Silico-Manganese

Sl. No.	Raw Material	Quantity (TPA)	Source	Distance (w.r.t. Plant)	Mode of transport
1.	Manganese Ore	43392	Odisha	270 km	By Railway Rake
2.	Steam Coal	7037	Eastern Coalfield Limited (ECL)	25 km	By Road
3.	Coke	9382	Local Market	25 km	By Road
4.	Dolomite	3987	West Bengal	550 km	By Railway Rake
5.	Ferro Manganese Slag	11023	Local Market	25 km	By Road

Raw Material details for Ferro-Silicon

Sl. No.	Raw Material	Quantity (TPA)	Source	Distance (w.r.t. Plant)	Mode of transport
1.	Quartz	20853	Local Market	25 km	By Road
2.	Mill Scale	4055	Local Market	25 km	By Road
3.	Cooking Coal	9847	Haldia/Pharma	225 km	By Road
4.	Coke	4982	Local Market	25 km	By Road

Raw Material details for Ferro Chrome

Sl. No.	Raw Material	Quantity (TPA)	Source	Distance (w.r.t. Plant)	Mode of transport
1.	Chrome Chips	48000	Local Market	25 km	By Road
2.	Quartz	6000	Local Market	25 km	By Road
3.	Lime	2400	Local Market	25 km	By Road
4.	Steam Coal	12000	Eastern Coalfield Limited (ECL)	25 km	By Road

Raw Material details for Silico Chrome

Sl. No.	Raw Material	Quantity (TPA)	Source	Distance (w.r.t. Plant)	Mode of transport
1.	Chrome Chips	9000	Local Market	25 km	By Road
2.	Charcoal & Quartz	23850	Local Market	25 km	By Road
3.	Coke	3900	Local Market	25 km	By Road

Raw Material details for Low Carbon Chrome

Sl. No.	Raw Material	Quantity (TPA)	Source	Distance (w.r.t. Plant)	Mode of transport
1.	Chrome Ore	44550	Odisha	270 km	By Railway rake
2.	Silico Chrome	17820	Local Market	25 km	By Road
3.	Lime	32670	Local Market	25 km	By Road

22.3.8 The water requirement for the project is estimated as 350 m^3/day, including 5 m^3/day of freshwater requirement for domestic use will be sourced from the Surface water. The permission is obtained from the Ministry of Jal Shakti, Dept. of Water Resources, RD&GR, Central Water Commission, Damodar Valley Reservoir Regulation Unit, Maithon, Dhanbad (Jharkhand), vide letter no. MD/DVRR/W-6/145(H I P L)/2022/698 on dated 30.11.2022.

22.3.9 The power requirement for the proposed project is estimated as 32 MW. The permission has been obtained from Damodar Valley Corporation, Kolkata, vide letter no. Coml./PS/HIPL/MTPS/831 on dated 13.10.2022.

22.3.10 Baseline Environmental Studies:

Period	Post Monsoon Season: 1st October 2018 to 31st December 2018
AAQ parameters at 08 locations	• $PM_{2.5}$: 35.2 – 50.5 µg/m^3 • PM_{10} : 63.8 – 85.4 µg/m^3 • SO_2 : 6.5 to 11.3 µg/m^3 • NO_x : 9.8 – 22.6 µg/m^3 • CO : 310 – 750 µg/m^3
AAQ modelling	• Incremental GLCs due to the proposed proposal: • $PM_{2.5}$ = 0.3 µg/m^3 • PM_{10} =0.75 µg/m^3 • SO_2 = 4.7 µg/m^3 • NOx = 3.38 µg/m^3 • CO= 2.07 µg/m^3
Ground water quality at 08 locations	pH: 7.68 to 8.16, Total Hardness: 305 to 360 mg/l, Chlorides: 43 to 60 mg/l, Fluoride:0.3 to 0.7 mg/l. Heavy metals are within the limits.

<table>
<tr><td>Surface water quality at 8 locations</td><td>pH: 7.23 to 7.86, DO: 4.1 to 6.6 mg/l, BOD: 2.4 to 10.6 mg/l and COD from 9.7 to 42 mg/l</td></tr>
<tr><td>Noise levels</td><td>40.30 to 67.8 dBA for the day time and 32.5 to 59.30 dBA For the Night time.</td></tr>
<tr><td>Traffic assessment study findings</td><td>Traffic study has been conducted at Durgapur –Purupilia- Raghunathpur Road & NH-14 Which are approximately 0.12 km & 3.5 km respectively from the plant site.
Transportation of raw material, fuel & furnished product will be done maximum by road.
Existing traffic is 2690 PCU/day on Durgapur –Purupilia- Raghunathpur Road & 19338 PCU/day on NH-14 and existing level of services (LOS) is:
<table>
<tr><th>S .No</th><th>Category of Road</th><th>Maximum PCU/day</th><th>Existing Capacity PCU/day</th><th>Existing V/C Ratio</th><th>LOS</th></tr>
<tr><td>1.</td><td>Durgapur – Purupilia-raghunathpur Road</td><td>2690</td><td>15,000</td><td>0.179</td><td>A</td></tr>
<tr><td colspan="6">Source: IRC:64:1990</td></tr>
<tr><td>2.</td><td>NH-14</td><td>19338</td><td>72000</td><td>0.268</td><td>B</td></tr>
<tr><td colspan="6">Source: IRC:106:1990</td></tr>
</table>
PCU load after proposed Project will be Existing and Proposed PCU/day and level of Services (LOC) will be:
<table>
<tr><th>S.No</th><th>Category of Road</th><th>Increased PCU/D</th><th>Modified V</th><th>C</th><th>Modified V/C Ratio</th><th>Modified V/C Grade</th></tr>
<tr><td>1.</td><td>Durgapur – Purupilia-raghunathpur Road</td><td>100</td><td>2690+100 =2790</td><td>15000</td><td>0.18</td><td>A</td></tr>
<tr><td>2.</td><td>NH-14</td><td>150</td><td>19338+150= 19488</td><td>72000</td><td>0.27</td><td>B</td></tr>
</table>
Note: Capacity as per IRC 64:1990 & 106:1990 guidelines for capacity for roads.
Conclusion:
The modified LOS on Durgapur –Purupilia- raghunathpur Road will be remained “A”, i.e. Excellent.
The modified LOS on NH-14 will be remained “B”, i.e. Very Good.
Therefore there will be marginal change in LOS after completion of the project.</td></tr>
<tr><td>Flora and fauna</td><td>No schedule I fauna and endangered Flora reported in study area.</td></tr>
</table>

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

Sl. No	Type of waste	Source	Quantity Generated (TPA)	Mode of Treatment	Disposal
1.	Slag	Ferro Manganese	35000	Reuse in Manufacturing process	Ferro Manganese Slag will be reused in Silico Manganese

Sl. No	Type of waste	Source	Quantity Generated (TPA)	Mode of Treatment	Disposal
					manufacturing process due to high concentration of Mn ore
2.	Slag	Silico Manganese	27500	Reuse in construction	slag will be used in filling low laying areas, construction activities, etc.
3.	Slag	Ferro Silicon	16000	Reuse in construction	slag will be used in filling low laying areas, construction activities, etc.
4.	Slag	Ferro Chrome	27100	TSDF waste management	TCLP Test will be carried out for all chrome slag and if found hazardous (as per threshold rule), then it will be given to TSDF sites
5.	Slag	silico Chrome	20050	TSDF waste management	TCLP Test will be carried out for all chrome slag and if found hazardous (as per threshold rule), then it will be given to TSDF sites
6.	Slag	Low Carbon Chrome	63500	TSDF waste management	TCLP Test will be carried out for all chrome slag and if found hazardous (as per threshold rule), then it will be given to TSDF sites
7.	Dust	Bag Filter	6200	Used in Construction activities	Bag Filter dust will be used for construction activities.
8.	Used Oil	DG Set, manufacturing process	200LPA	Registered recyclers	Saleable to the registered recyclers in the market.
There is no hazardous waste from the plant except for used oil with approx. quantity of 200 Liters per annum during course of production and is also saleable to the registered recyclers in the market.					

22.3.12 Public Consultation:

Details of advertisement given	Notice made through advertisement in the Newspapers AAJ KAL, Millenium & Sunmarg, on 18.07.2022 by WBPCB
Date of public consultation	25/08/2022
Venue	Gangajalghati Panchayat Samity Meeting Hall, PS_ Gangajalghati , District- Bankura, West Bengal
Presiding Officer	ADM (General), Bankura
Major issues raised	The issues raised during Public Hearing are: ➢ Pollution Control during operation phase ➢ Employment to local people ➢ Development of facilities in schools ➢ Development of road in local areas ➢ Concern about Health of local people

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	2nd Year
1.	Adoption of village	PP has proposed to adopt 1 village i.e. Chausal 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.	A budget of **56 lakhs** has been proposed.	**28 Lakhs** A budget of Rs 6 **Lakhs** has been proposed for providing Drinking water facility. A budget of Rs. **6 lakhs** has been proposed for Solar system to schools. A budget of Rs. **16 lakhs** has been proposed for providing Medical Facility.	**28 Lakhs** A budget of Rs 6 **Lakhs** has been proposed for providing Drinking water facility. A budget of Rs. **6 lakhs** has been proposed for Solar system to schools. A budget of Rs. **16 lakhs** has been proposed for providing Medical Facility.
2.	Pollution control measure & Environment norms	Air Pollution Control Systems (Covered furnace top and bag filters, chimney, RMH yard cover, garland drain, industrial vacuum cleaner, dust sweeping machine, bag filter for material handling, closed conveyors, CAMS). Green Belt will be developed in with in site plan in favor of controlling pollution.	A budget of Rs. 400 Lakhs as a Capital cost and Rs. 3 Lakhs per Annum as a recurring cost has been allotted. (EMP) A budget of Rs 19.5 Lakhs as a capital cost and Rs. 2.6 Lakhs per Annum as a recurring cost has been allocated. (EMP)	3450 nos. trees will be planted (EMP) within site	

S. No	Issue Raised during PH	Physical activity and action plan	Budget	1st Year	2nd Year
		Tree Plantation will be developed in nearby villages in consultation will the authority.	A budget of Rs **20 Lakhs** has been proposed for Development of green belt in nearby villages	**10 lakhs** for planting 4000 trees	**10 lakhs** for planting 4000 trees
		Water sprinkling on road for air dust dispersion control in nearby villages in consultation with the authority.	A budget of Rs. **20 lakhs** has been proposed for dust dispersion control measure.	**10 Lakh**	**10 Lakh**
3.	Infrastructure development in Locality & Villages	Company will develop the infrastructure, Playground, maintenance in schools building in nearby villages & school building in consultation with the local authority.	**28 Lakhs**	**14 lakhs**	**14 lakhs**
4.	Road Development and maintenance work in Locality & Villages	Company will construct the road in nearby villages in consultation with the authority and Continuous maintenance work.	**26 Lakhs** Road development works in nearby villages in consultation with local authority.	**13 lakhs**	**13 Lakhs-**
5.	Concern about health of local people	Arrangement of 2 Modern Ambulance with Life Support system with necessary Medical Staff.	**20 Lakhs** 2 Ambulance and Medical staff will be arranged	**10 Lakhs**	**10 lakhs**
Total				**170 Lakhs**	
Note: Village – Chousal will be adopted and required development work will be done in consultation with local authorities.					

22.3.13 The capital cost of the project is Rs 92.56 Cr and the capital cost for environmental protection measures is proposed as Rs 9.3 Cr. The annual recurring cost towards the environmental

protection measures is proposed as Rs 0.22 Cr. The total employment generation from the proposed project is 250. The details of cost for environmental protection measures is as follows:

Sl. No.	Activity	Capital Cost	Annual Recurring Cost
1	Air Pollution Control Systems (Covered furnace top and bag filters, chimney, RMH yard cover, garland drain, industrial vacuum cleaner, dust sweeping machine, bag filter for material handling, closed conveyors, CAMS).	400	3
2	Wastewater Management and Effluent & Sewage Treatment Plant, Water conservation practices	210	2
3	Environmental Monitoring	-	6.4
4	Occupational Health Management, PPE, Training, Work zone, OHC etc.	45	5
5	Green Belt and Greenery Development	19.5	2.6
6	Risk Mitigation, Fire & Safety Plan	35.5	1
7	DCS	27	2
8	CER	93	
9	Contingency	100	
Total		**930**	**22**

22.3.14 Proposed greenbelt will be developed in 1.38 ha which is about 33% of the total project area. Thus total of 1.38 ha area (33% of total project area) will be developed as greenbelt. A 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 no. of 3450 saplings will be planted and nurtured in 1.38 hectares in 5 years.

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

Written representations:

22.3.16 During the meeting, based on the deliberations made by the EAC, the project proponent vide letter dated 30.01.2023 through email dated 30.01.2023 submitted the following information:

S. No	Comments/ Query	Reply by the PP
vi.	PP should submit revised CER budget.	CER budget is revised to 1.7 Cr. The same is updated at para 22.3.12 above.
vii.	PP should submit revised water balance diagram.	Approx. 350 KLD water will be required to run the industry. 251.6 KLD of water will be daily water demand; where in 246.6 KLD will be process make up water and 5 KLD for domestic purpose. 28 KLD of water will be used for greenbelt development and 2.0 KLD for dust suppression. Discharge

S. No	Comments/ Query	Reply by the PP
		water from domestic use will be treated in STP and the water used in industrial purpose will be treated in ETP. There will be 82.4 KL of water storage facility by rainwater harvesting and will be used in circulated loop in cooling sump and raw water after treatment. Copy of revised diagram is submitted.
viii.	PP should submit justification for change in water requirement	ToR was granted for 87 KL/day for proposed project. During detailed engineering the quantity of waler was recalculated by detailed engineering consultant to 350 KL/day and including additional water for greenbelt as per suggestion of Hon'ble EAC during meeting. In ToR source of water was considered as ground water. Affterwards the source of water is considered as surface.
ix.	PP should submit solid waste management of Ferro chrome slag with toxic content.	TCLP Test will be carried out for all chrome slag and hazardous in nature with toxic content (as per threshold rule) will be supplied to nearest TSDF sites. MoU will be executed as per the requirement.
x.	PP should submit air modelling for CO emission	Incremental CLC value of CO is 2.07 $\mu g/m^3$. Copy of isopleth showing incremental value is submitted.
xi.	PP should submit name of village for adoption	Village – Chousal will be adopted and required development work will be done in consultation with local authorities.

Deliberations by the Committee

22.3.17 The Committee noted the following:

1. The instant proposal is for installation 2 x 9 MVA Submerged Arc Furnace (SAF) to make 35,176 TPA Ferro Manganese / Silico Manganese / Ferro Chrome / Silico Chrome/ Ferro Silicon) and 2 x 4.5 MVA Electric Arc Furnace (EAF) to make 29,700 TPA Low Carbon Ferro Chrome' for production of Ferro Manganese / Silico Manganese / Ferro Chrome / Silico Chrome/ Ferro Silicon 35,176 tonnes per annum(TPA) & Low Carbon Ferro Chrome 29,700 tonne per annum (TPA).

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 4.20 ha which is under the possession of M/s Hariaksh Industries Private Limited. The same is Converted to Industrial, as per Letter from District Planning Cell, Bankura, West Bengal, vide letter no. memo no. 943/DPC/BGPA on dated 10/01/2018.

6. The water requirement for the project is estimated as 350 m^3/day, including 5 m^3/day of freshwater requirement for domestic use will be sourced from the Surface water.

7. Damodar River is at a distance of 7.2 km from the project site in the NE direction. The EAC is of the opinion that water body shall not be disturbed. Mitigation measures w.r.t. safeguarding the water body shall be implemented.

8. The Committee has found that the baseline data and incremental GLC due to the proposed project within NAAQ standards.

9. The PP has submitted that greenbelt will be developed in 1.38 ha which is about 33% of the total project area. Total no. of 3450 saplings will be planted and nurtured in 1.38 hectares in 5 years. The EAC is of the opinion that greenbelt shall be completed within 1st year of grant of EC.

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

11. 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.

12. The Committee deliberated upon the written submission of the Project Proponent and found it satisfactory.

13. 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.

14. 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.

Recommendations of the Committee:

22.3.18 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. Damodar River is at a distance of 7.2 km from the project site in the NE direction. 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.

iv. Following additional arrangements to control fugitive dust shall be provided:
   a. Fog / Mist Sprinklers at all conveyors point and 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.

v. All internal road and connecting road from project site to main highway shall be developed and maintained with suitable Million Axle Standard (MSA) as per the traffic load due to existing and proposed project.

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

vii. Particulate matter emission from stacks shall be less than 30 mg/Nm^3.

viii. PP shall carry out periodically occupational health survey as per the applicable norms.

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

x. 100% of the slag generated through the process shall be utilised.

xi. The water requirement of 350 m^3/day, shall be sourced from the Surface water. Necessary permission shall be obtained from the Competent Authority in this regard.

xii. 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.

xiii. The company shall also undertake rain water harvesting measures as per the plan submitted in the EIA/EMP report and reduce water dependence from the outside source.

xiv. As reported, PP shall adopt Village Chousal and prepare and implement a robust plan to develop it into model villages in next 10 years.

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

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

xvii. Three tier Green Belt shall be developed in at least 33% of the project area in a time frame of one year 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. 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 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 alongwith windshield inside the plant premises to act as green barrier for air pollution & noise levels towards the Chousal village. Compliance status in this regard, shall be submitted to concerned Regional Office of the MoEF&CC.

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

xix. Dry gas cleaning systems shall be provided by the project proponent to meet particulate matter emission norms of less than 30mg/Nm^3 for the furnace flue gases.

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

xxi. The PP shall install CO sensors at the furnace top level and the monitoring report shall be submitted to the IRO, MoEFCC in this regard.

xxii. Action Plan for fire fighting system including provision for flame detectors, temperature actuated heat detectors with alarms, automatic sprinkler system, fixing the location of fire water tanks, separate power system for fire fighting, involvement of qualified and trained fire personnel, nearest fire station & time required to reach the proposed site shall be prepared and implemented.

xxiii. The Piezometric wells shall be established in all directions surrounding the project area to monitor groundwater levels and determine aquifer parameters such as transmissibility, hydraulic conductivity, storage, to sample groundwater for chemical/ heavy metals/ toxic leachates and microbiological analysis.

xxiv. The PP shall adopt the best practices of House-keeping in the whole project area and specially whre the tailings are proposed to be stacked.

xxv. All the commitments made to the public during the Public Hearing/Public Consultation 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.

xxvi. 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.

xxvii. 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.

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 two Continuous Ambient Air Quality Station (CAAQS) 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 recognised under Environment (Protection) Act, 1986 or NABL accredited laboratories.

ii. 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.

iii. 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.

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

v. 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.

vi. The project proponent shall ensure covered transportation and conveying of ore, coal and other raw material to prevent spillage and dust generation.
vii. The project proponent shall provide primary and secondary fume extraction system at all melting furnaces.
viii. Design the ventilation system for adequate air changes as per prevailing norms for all tunnels, motor houses, Oil Cellars.

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 (G.S.R 414 (E) dated 30th May 2008; G.S.R 277 (E) dated 31st March 2012 (applicable to IF/EAF); 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 recognised 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 recognised under Environment (Protection) Act, 1986 and NABL accredited laboratories.
iii. Sewage Treatment Plant shall be provided for treatment of domestic wastewater to meet the prescribed standards.
iv. 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.
v. 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.
vi. Tyre washing facilities shall be provided at the entrance/exit of the plant gates.

IV. Noise monitoring and prevention

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

V. Energy Conservation measures

i. Energy conservation measures may be adopted such as adoption of solar energy and provision of LED lights etc., to minimize the energy consumption.

VI. Waste management

i. Used refractories shall be recycled.
ii. Kitchen waste shall be composted or converted to biogas for further use.

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 including plantation.

ii. Project proponent shall submit a study report on De-carbonization 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.

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 of Factory Act.

iii. 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.

ii. 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.

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. 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.

vi. 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.

vii. 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.

viii. 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.

ix. 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.

x. 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).

xi. 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.

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

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

xiv. 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.

xv. 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 in Environmental Clearance

Agenda No. 22.4

22.4 Proposed Standalone Cement Grinding Unit, Production capacity of 1,03,500 TPA, over an extent of 1.59.44 Ha (159454.16 Sq.m) by M/s Ottathingal India Pvt. Ltd., located at Plot No. B1, SF. No. 1599 (P), 1600 (P), 1601(P) SIPCOT, Pirancheri Village, Tirunelveli Taluk (Now Manur Taluk) & District, Tamil Nadu. - Re-Consideration of Environmental Clearance.

[Proposal No. IA/TN/IND/290087/2021; File No. J-11011/93/2021-IA-II(I)]
[Consultant: Aadhi Boomi Mining & Enviro Tech (P) Ltd; valid upto 22.10.2024]

22.4.1 M/s. Ottathingal India Pvt Ltd has made an online application vide proposal no. IA/TN/IND/290087/2021 dated 21st September 2022 along with copy of EIA/EMP report, 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 S. No. 3(b) Cement Plants under Category "B" of the schedule of the EIA Notification, 2006. However, due to the applicability of general condition i.e., project site is located at a distance of 3km from the boundary of the Gangaikondan Spotted Deer Sanctuary for which final ESZ notification was issued by MoEF&CC vide S.O. 2773 (E) dated 31/07/2019, the project is being appraised at the central level as Category 'A'.

22.4.2 Name of the EIA consultant: M/s. Aadhi Boomi Mining & Enviro Tech (P) Ltd. [List of ACOs with their Certificate / Extension Letter No: NABET/EIA/2124/RA 0228 valid till 22.10.2024; as on February 01, 2023].

Details submitted by Project proponent

22.4.3 The details of the ToR are furnished as below:

Date of Application	Consideration	Details	Date of Accord	ToR Validity
05.04.2021	34th meeting of EAC held on 15-16th April, 2021	Terms of Reference	29.04.2021	28.04.2025

22.4.4 The project of M/s. Ottathingal India Private Limited located in plot no. B1, Sipcot, Village Pirancheri, Tehsil & District Tirunelvelli, Tamil Nadu is for Proposed standalone cement grinding unit (WOPC) production capacity of 300 TPD or 1,03,500 TPA.

22.4.5 Environmental Site Settings:

S. No.	Particulars	Details	Remarks
i.	Total land	1.59 Ha (15944.16 sq m) [Gov Land]	Land use: SIPCOT Industrial Land

<table>
<tr><th>S. No.</th><th>Particulars</th><th>Details</th><th>Remarks</th></tr>
<tr><td>ii.</td><td>Land acquisition details as per MoEF&CC, O.M. dated 7/10/2014.</td><td>The land has been acquiesced from Tamil Nadu State Government, The memorandum of lease deed entered into at Gangaikondan on 03.05.2019 between SIPCOT and Ottathingal India Pvt. Ltd. The lease period for the proposed factory is 99 years.</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

R & R is not applicable.

Study Area
<table>
<tr><th>Habitation</th><th>Distance</th><th>Direction</th></tr>
<tr><td>Vengadasalapuram</td><td>0.25 km</td><td>N</td></tr>
<tr><td>Pirancheri</td><td>2.6 km</td><td>N</td></tr>
<tr><td>Gangaikondan</td><td>4.0 km</td><td>NE</td></tr>
<tr><td>Chittarchatram</td><td>3.0 km</td><td>N</td></tr>
<tr><td>Manur</td><td>9.5 km</td><td>W</td></tr>
<tr><td>Kanarpatti</td><td>9.5 km</td><td>NW</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>Point</th><th>Latitude</th><th>Longitude</th></tr>
<tr><td>1.</td><td>8°50’57.30”N</td><td>77°44’33.86”E</td></tr>
<tr><td>2.</td><td>8°50’57.90”N</td><td>77°44’30.12”E</td></tr>
<tr><td>3.</td><td>8°51’0.33”N</td><td>77°44’31.19”E</td></tr>
<tr><td>4.</td><td>8°51’2.88”N</td><td>77°44’31.81”E</td></tr>
<tr><td>5.</td><td>8°51'2.69"N</td><td>77°44'34.58"E</td></tr>
</table></td><td>-</td></tr>
<tr><td>v.</td><td>Elevation of the project site</td><td>63 m AMSL</td><td>-</td></tr>
<tr><td>vi.</td><td>Involvement of Forest Land, if any</td><td>No involvement of Forest Land</td><td>-</td></tr>
<tr><td>vii.</td><td>Water body (Rivers, Lakes, Pond, Nala, Natural Drianage, Canal etc.,) exists within the project site as well as study area</td><td><u>Project Site:</u> Nil

<u>Study area:</u>
<table>
<tr><th>Place</th><th>Distance</th><th>Direction</th></tr>
<tr><td>Gangaikondan tank</td><td>3.7 km</td><td>East</td></tr>
<tr><td>Chittar River</td><td>3.2 km</td><td>North</td></tr>
<tr><td>Karisalkulam</td><td>2.4 km</td><td>North</td></tr>
<tr><td>Parakiram-pandiyan kulam</td><td>5.3 km</td><td>Northeast</td></tr>
<tr><td>Palamadai Kulam</td><td>6.5 km</td><td>West</td></tr>
<tr><td>Thamirabarani River</td><td>8.11 km</td><td>Southeast</td></tr>
<tr><td>Tirunelveli Canal</td><td>7.3 km</td><td>South</td></tr>
<tr><td>Seliyanallur Canal</td><td>6.9 km</td><td>Northwest</td></tr>
<tr><td>Uppodai River</td><td>6.5 km</td><td>Northeast</td></tr>
</table></td><td>-</td></tr>
<tr><td>viii.</td><td>Existence of ESZ / ESA / National Park /</td><td><u>Study area</u>
• <u>Name of the ESZ/ESA:</u> Gangaikondan Spotted Deer Sanctuary – 3km</td><td>NOC from competent authority –</td></tr>
</table>

S. No.	Particulars	Details	Remarks
	Wildlife Sanctuary / Biosphere Reserve / Tiger Reserve / Elephant Reserve etc. if any within the study area	• Status of Notification: Project site is located at a distance of 3km from the boundary of the Gangaikondan Spotted Deer Sanctuary for which final ESZ notification was issued by MoEF&CC vide S.O. 2773 (E) dated 31/07/2019 • Authenticated map of ESZ projecting distance of ESZ from project site is included in EIA report. **Others:** Vallanadu Black Buck Sanctuary -21Km-SE Mundanthurai Tiger Reserve-43 Km-SW Bird Sanctuary – 4.5 km - E **List of Reserved and protected forests:** Gangaikondan Protected Forest – 600m – East Talaiyattu Reserve forest – 1.1 km – West	District Forest officer, Tirunelveli Division has been got by SIPCOT officials dated: 25.03.2010

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

S. No.	Description	Capacity
1	Cement Grinding Plant	300 TPD or 1,03,500 TPA

22.4.7 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.	Raw Material	Quantity required per annum	Source	Distance from site (Kms)	Mode of Transportation
Construction Phase					
1	Cement	1189.936 MT	Local Market - Aurora Ready Mix Concretes 369/1b, Mangamma Salai, Palamadai, Tirunelveli-627 359, Opp. To SIPCOT Gangaikondan, Tamil Nadu.	5km	By Road
2	Sand	1641.69952 MT			
3	Aggregate	2163.7854 MT			
4	REBAR	157.2223 MT	Safi Traders, Trivandrum Road, Ramvilas Nagar, Perumalpuram, Udaya Nagar, Tirunelveli-627 005, Tamil Nadu.	15km	By Road
Operational Phase					
	Clinker	91080 MT	Imported from Middle East	1900 km	By Ship
	Gypsum	8280 MT	Local Market	Within 100km	By Road
	Dolomite	4140 MT	Local Market	Within 100km	By Road

22.4.8 The water requirement for the proposed project is estimated as 8 m^3/day of fresh water requirement will be obtained from the SIPCOT Industrial Park water supply if available, or it will be sourced from a well or bore well.

22.4.9 The power requirement for the proposed project is estimated as 1026.45 KW, which will be obtained from TNEB Grid.

22.4.10 Baseline Environmental Studies:

<table>
<tr><td>Period</td><td>01.10.2021 to 31.12.2021 (Post Monsoon Season)</td></tr>
<tr><td>AAQ parameters at 8 locations</td><td>$PM_{2.5}$ = 18 To 33 µg/m^3
PM_{10} = 40 To 60 µg/m^3
SO_2 = 3 to 12 µg/m^3
NOx = 6 To 20 µg/m^3
CO = BDL (<0.1) To 0.12 mg/m^3</td></tr>
<tr><td>AAQ modelling</td><td>PM_{10} = 0.1 µg/m^3 (Level at 50m in South Direction)
SO_2 = 6.93 µg/m^3 (Level at 50m in South Direction)
NOx = 9.69 µg/m^3 (Level at 50m in South Direction)</td></tr>
<tr><td>Ground water quality at 8 locations</td><td>pH: 7.11 to 8.97, Total Hardness: 166 to 320 mg/l, Chlorides: 51 to 87 mg/l,
Heavy metals – Fe - BDL (<0.1) To 0.01 mg/m3</td></tr>
<tr><td>Surface water quality at 8 locations</td><td>pH: 8.20 to 9.5 ; DO: 2.9 to 5.2 mg/l and
BOD: 1.4 to 3 mg/l
COD: 24 to 48 mg/l</td></tr>
<tr><td>Noise levels (Day and Night) 8 locations</td><td>39.2 to 45.8 dBA for the day time and
37.6 to 42.1 dBA for the Night time.</td></tr>
<tr><td>Traffic assessment study findings</td><td>Traffic study has been conducted at NH/SH/MDR 7 (4 lane) which is approximately 3.3km East (distance) from the plant site.
Transportation of raw material, fuel & finished product will be done 80% by road.
Existing PCU is 5423 PCU/day on NH 7 (NH/SH/MDR) and existing level of service (LOS) is:
<table>
<tr><th>Road</th><th>V (Volume in PCU/day)</th><th>C (Capacity in PCU/day)</th><th>Proposed V/C Ratio</th><th>LOS</th></tr>
<tr><td>NH 7</td><td>5423</td><td>10,000</td><td>0.5423</td><td>C</td></tr>
</table>
PCU load after proposed project will be 5423 (Existing)+120 (Additional) = 5543 PCU/hr 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>Proposed V/C Ratio</th><th>LOS</th></tr>
<tr><td>NH 7</td><td>5543</td><td>10,000</td><td>0.5543</td><td>C</td></tr>
</table>
* Note: Capacity as per IRC73:1980 Guide line for Capacity for roads.

Level of Service (LOS) of the Road as per IRC 73: 1980
<table>
<tr><th>V/C</th><th>LOS</th><th>Performance</th></tr>
<tr><td>0.0 – 0.2</td><td>A</td><td>Excellent</td></tr>
<tr><td>0.2 – 0.4</td><td>B</td><td>Very Good</td></tr>
<tr><td>0.4 – 0.6</td><td>C</td><td>Good</td></tr>
<tr><td>0.6 – 0.8</td><td>D</td><td>Fair/ Average</td></tr>
</table></td></tr>
</table>

	0.8 – 1.0	E	Poor	
	1.0 & Above	F	Very Poor	

Conclusion: The level of service will remain 'C' after including additional traffic due to proposed project. Accordingly there will not be any adverse impact on the traffic due to the proposed expansion.

Flora and fauna	There is no schedule I fauna and endangered Flora noticed in Project site and its buffer area.

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

S. No.	Type of Waste	Quantity generated (TPA)	Mode of Treatment	Disposal	Remarks
1.	Bio Sludge generated from STP (Construction Phase)	23 kg/day or 0.023 TPD	-	Sold to authorised recyclers/ Vendors	Agreement will be made at the commencement of project
2.	Used or Spent Oil (Hazardous waste)	—	—	Stored in MS drums and sold to authorised recyclers	
3.	Bio Sludge generated from STP (Operational Phase)	16 kg/day or 0.016 TPD		Sold to authorised Vendors for manufacture of manures, recycle and reuse	
Hazardous Waste: Spillages of lubricants used for operation of plant and machineries, shall be collected properly using tray as not to disturb the surface soil, water bodies, underground water etc. Waste Lubricant Oil will be stored in HDPE drums.					

22.4.12 Public Consultation:

Date of advertisement	Notice made through advertisement in the Newspapers 'Times of India' and 'Thina Thanthi on 07.06.2022
Date of public consultation	15.07.2022 at 11.00 AM
Venue	Dr. P. Sivanthi Athithanar Thirumana Mandapam located at 37 B, Madurai Main Road, Sankar Nagar, Tirunelveli Taluk, Tirunelveli District, , Tamil Nadu.
Presiding Officer	DRO, Tirunelveli district
Major issues raised	Submitted along with Action Plan and Budget

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

S. No	Queries Raised by Public	Replied by Project Proponent/EIA Consultant	Budget in Rupees	Time Line
1	**Mr.S.P.Muthuraman, Shankar Nagar, Tirunelveli:** This Ottathingal India Pvt Ltd, company came from Malapuram, Kerala State to set up a factory in this SIPCOT. Another name for Kerala is Gods own country, they say it is Gods own country because they protect the nature. Tamil Nadu is called as 'Vantharai Vazhavaikkum Thamizhgam'. Essential commodities like vegetables and eggs are being exported from Tamil Nadu to Kerala. But, the people of Kerala are not giving water to Tamil Nadu. They have come from Kerala, PP will give them all the facilities and make them live. But they won't even give them water. I want to ask the Tamil Nadu Pollution Control Board Engineer for an explanation. This company purchased 3.94 acres of land from SIPCOT. According to your Board Proceeding Order, the SIPCOT must have consent to operate license under the category -1079. But so far SIPCOT has not received the board's approval. Even though the board asked to get approval in the year of 2018 and now, the company did not get approval. If I go out without wearing a helmet or if I don't wear a seatbelt in the car, I get fined. So he said whether all the laws are only for private individuals or not applicable to government institutions, whoever is to respect the law. I have brought an offense before the District Revenue Officer that Sterlite Pvt. Ltd has been shut down due to non-grant of operating mandate. A law for Sterlite, a law for SIPCOT? He also requested that action should be taken through the head office of the District Pollution Control Board Engineer. Due to the introduction of SIPCOT, poor people have to pay Rs. 3000 to Rs. 5000 as house rent. Companies in SIPCOT campus are providing jobs to North Indians, but the educated people here are unemployed. So the economy of the people here is not improving and they are suffering. The Scheme is hosted by SIPCOT. In 2009, the SIPCOT companies submitted applications to the town and country planning that they were going to start an industrial estate in an area of more than	Mr. S.P. Muthuraman has not given any views related to the proposed project except about the employment opportunity. The project proponent assured that preference will be given to the local people for employment opportunities.	No budget required for this.	The project proponent assures that after the commencement of project, the employment will be generated for the local people.

S. No	Queries Raised by Public	Replied by Project Proponent/EIA Consultant	Budget in Rupees	Time Line
	500 hectare in the Tirunelveli districts SIPCOT area, Pirancheri village. On 30.04.2010 Town and Country Planning gave permission to SIPCOT layout. The Environmental Impact Assessment Notification 2006 of the Government of India is in force at the time of granting this permission. According to this, as per Schedule 7A, wherever the industrial park is set up, environmental clearance should be obtained. After obtaining such environmental clearance consent under the Water (Prevention and Control of Pollution) Act, 1974 and Air Prevention and Control of Pollution) Act, 1981 should be obtained. After setting up the factory, an operating consent must be obtained under the above Acts. But the SIPCOT has not yet received any such permission. Because of Reserve Forest in that area, As per the instructions of Town and country planning, SIPCOT company requested the permission of the Forest Department, Mr. Ambrose, District Officer, Tirunelveli on 25.03.2010 and the No objection was issued. He said that the environment clearance from the Union Ministry, which should have been given and actually obtained, was not obtained. Gangaikondan is in middle of SIPCOT. A four-lane road is on the east side of SIPCOT. The east side of which is declared as the Gangaikondan Spotted Deer Sanctuary, which is in the Gangaikondan Part 1 Revenue Village. It has 195 spotted deer. I ask District Revenue officer to note what I say. The Forest Department census says there are 196 spotted deer. Only this area had been declared as a Spotted Deer Sanctuary. There are 107 Spotted Deer in the middle of SIPCOT in Gangaikondan Part 2 Revenue Village (Reserve Forest). 600 meters west of this is the Thalaiyuthu Reserve Forest which has an area of more than 500 hectare. There are 212 Spotted Deer in this Reserve Forest, and that area has not been notified as a sanctuary. There are 107 Spotted Deer in Gangaikondan Part 2 Revenue Village. It is not declared a sanctuary. Only Gangaikondan Part 1 has been declared as a sanctuary. He also asked if			

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	anyone has brought this to the attention of the Tirunelveli district administration. These deer are hit and killed everywhere. They also died because of stray dog bite. Forest department have given information under information act that 62 deer have died in 10 years, but not even a single case has been registered by the Forest Department. All the deer in the Thalaiyuthu (Reserve Forest) had migrated and around 150 deer have settled permanently in Abhishekapatti Manonmaniyam Sundaranar University. Is that university a reserve forest? The front wall of the Spotted Deer Sanctuary had damaged. So the Deer can get out easily and the deer can easily jump 10meters high walls. Railway line is situated at the back of the sanctuary without any enclosure. Spotted deer went to Rajavallipuram sandal wood farm for food and 50 deer have settled there. Their area is not Western Ghats. These, three (Reserve Forest) are within the town and from three places there are 5 spots of spotted deer. The Forest department has not taken any steps to protect these deer. Thus the habitat of deer had been migrated into SIPCOT. Only a letter from the District Forest Officer had been received, and the environment remains unsettled. He also asked whether this area will be considered as industrial area or Forest area for noise pollution assessments. If you will take Standards for Industrial zones then what about the condition of the deer roaming in the SIPCOT campus at night time. Do you allow someone to operate without the environment becoming peaceful? In this regard, I had submitted a petition to the Tamil Nadu Pollution Control Board and Town and country planning Department. Town and country planning Department said that environmental approval should be achieved but it was not achieved. The Tamil Nadu Pollution Control Board said that it had sent a complaint to State level Environmental Impact Assessment Authority, Tamil Nadu for appropriate action. State level Environmental Impact Assessment Authority told that they have			

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	set the matter to the Pollution Control Board and Town and country planning Department to take appropriate action. Environment should be protected. Kerala does not allow anyone to carry soil. But here PP are destroying nature. SIPCOT allows water based company by settling up a big water station in the Thamiraparani River. There, a company called Aquafina buys 1 liter of water for 60 paisa, filters it and sells it for 20 rupees. Does this increase their economy? They take water from their river and sell at 20 rupees and make a profit for them, Why SIPCOT is giving permission to the water based companies? It may give water to companies that don't need more water. PP have duty and responsibility to protect their forest. At least 75% of the companies are giving jobs to North Indians. Tirunelveli Corporation has set up waste water treatment plant and they are discharging the treated sewage in to the channel. This treated effluent can be used as a substitute for Thamiraparani river water for the use of SIPCOT companies. Water from Thamiraparani River could be provided for drinking water purpose and essential needs. All PP need in the time of Corona is food and Nature. Corona came to them because nature was not properly maintained. So it is good for people to live in harmony with nature. I request to do it and give jobs to the people.			
2	**Mr.R.Prabhakar, Pastor of the Christian Church, Shankar nagar, Thaazhaioothu:** As far as Tirunelveli district is concerned, it is a district where there are more farmers. This district really needs a lot of industries. Tirunelveli was once known as the Oxford of south India. Now there is a lack of employment opportunities for the youth. Therefore Tirunelveli district needs a lot of industries. But the development of the industry should be done in a way nature and environments are not affected. Even though I don't know a lot of things, my request is that there are no job opportunities for the local people in the factories coming up in SIPCOT. I welcome what the first person has said. There are many local educated youths but	The project proponent assured preferences will be given only to the local people for employment opportunities.	No budget required for this.	The project proponent assures that after the commencement of their project, the employment will be generated for the local people.

S. No	Queries Raised by Public	Replied by Project Proponent/EIA Consultant	Budget in Rupees	Time Line
	there are no job opportunities for the youths here. Employment is denied for local people since other state people come and work here. Therefore, whatever kinds of factories are built here, the authorities should try to give priority to the local youth in employment, so that all the eligible people will be given job opportunities regardless of their caste. I believe that economy of the local people will rise because of these employments.			
3	**Mr. Uchimakali, 14th Ward Councilor of Pirancheri Panchayat:** There is already a lot of Environmental issues on the SIPCOT campus. Sanitation issue is caused by Suguna Company located in SIPCOT, and a lot of companies are also responsible for this issue. By the time the Cement plant is set up, almost 12 villages have to be evacuated due to smoke. There is no other way. So don't set up the Cement Plant in SIPCOT complex. Already PP are suffering without a path to their land by giving away their agricultural land for SIPCOT industrial complex. At present they are still taking land in Rajapathi and its surrounding villages for the expansion of SIPCOT. The above said land is taken for setting up solar plant. PP are protesting against solar plant. Also in SIPCOT campus no employment opportunities are provided to local people or to those who have given land. So don't set up a Cement Plant in SIPCOT complex.	It is standalone cement grinding unit. As there are no burning activities in this plant, no smoke will be expected from this plant. The Unit has been proposed with adequate Air pollution Control measures such as provisions of bag filter at the source of air pollution to minimize dust emissions. The expansion of SIPCOT is government process not covered under this project. Local people will be given preference for Employment according to their educational qualification if required for the particular Job available.	The budget allocated for installing Pulse Jet Type Bag Filters to control dust generated is Rs.9.41 Lakhs -- --	The time line for installing the bag filters is within 9 months during the construction phase. -- The project proponent assures that the local people will be given employment after the commencement of the cement factory.
4	**Mr. George Rajendiran, Social activist, Thuraiyur, Gangaikondan:** I would like to point out one important thing here. It is on the basis of Hon'ble justice Mr. Rathinavel Pandian's report that the present SIPCOT factory complex had been built. For whatever purpose he had recommended it to the government, it is now necessary for the District Administration to better monitor it. The SIPCOT campus was built for the sole reason of the stopping caste riots in the Southern Districts. But contrary to his report, malpractice is going on in the SIPCOT campus. All the factories that are currently functioning acts against to the	Caste riot is irreverent to the project, still adequate representation from different communities will be ensured during Employment opportunities. There is no usage of hazardous materials/chemicals/toxic element as raw material which may contaminate soil or water. The major impact may be due dust pollution. The Unit has been proposed	-- The budget allocated for installing Pulse Jet Type Bag Filters to control dust generated is Rs.9.41 Lakhs and	The project proponent assures that the employment will be given to all categories of people. The time line for installing the bag filters within 9 months during the construction

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	fact that the SIPCOT complex was set up to prevent caste riots. Even though their people are qualified and talented, they are denied from jobs. All the jobs are given to northern people only. PP lost their place. PP lost their land. PP even lost their livelihood and PP are losing everything. PP could live by growing cattle. Comparisons should be made on the environment at the SIPCOT between current situation where Pepsi and Coco cola companies had been set up and year before 2000. It is now certain that there is contamination. The people of that time did not get skin disease, but many of the people living in the area now have skin disease, so PP can say with proof that the toxin that causes skin disease is emitted from factory. The factories should be monitored in this regard.	with adequate Air pollution Control measures such as provisions of bag filter at the source of air pollution to minimize dust emissions. 33% of the total plot area is allocated for developing green belt such as Casurina, Eucalyptus, Ashoka Tree, Neem and Badham trees which minimize the dust Pollution and arrest noise pollution. Moreover this proposed grinding unit is a dry process which does not require water for the process. Thus no effluent will be generated from the process. The only wastewater is municipal waste water and will be treated in permanent built soak pit and septic tank within the project site. Thus due to the Proposed Cement Grinding Unit the possibility of occurrence of Skin problems is negligible.	for green belt development in and around the project site is Rs.1,20,000. The cost for construction of soak pit and septic tank is included in the overall construction cost.	phase and for green belt development is 3 years after the commencement of the cement plant. The time line construction of soak pit and septic tank is within 9 months during the construction phase
5	**Mr. Murugapperumal 9th Ward Panchayat Council Member, Pirancheri:** Pump sets and well are located in my place (Survey no at 87 & 88) at Pirancheri village. But it was reported that samples were taken from land with survey no 89 and analysed. But the well water of my land which is near 100 meters has not been tested even though sample water is said to have been taken for testing somewhere. Why samples should be taken 2 km apart from industry without taking water samples at the nearest point? Instead of inspecting the places to be inspected, they have inspected only what is required to start the factory and given a false report. Also, women are suffering from breast cancer, uterine problems and miscarriages due to SIPCOT factories. Since the SIPCOT factory was set up, thousands of	The purpose of Baseline analysis is for the quality of water at present in and around the project site. As per TOR given by MOEF&CC, the ground water sample has been taken from 8 locations covering the buffer zone of proposed project. There are more than 1000 open/bore wells in 10km radius. It is not possible to take sample from each and every well. The proposed project does not use any hazardous or toxic material as raw materials so this project does not	Nil The cost allocated for PPE for workers – 1.3Lakhs and for green belt development in and around the project site is Rs.1,20,000.	Nil The PPE will be made available on the first day of the commencement of the project and green belt will be developed within three years after the commencement of the project. It will be enabled at the

S. No	Queries Raised by Public	Replied by Project Proponent/EIA Consultant	Budget in Rupees	Time Line
	spotted deer live on agricultural land. Due to the noise of factories and heavy traffic, the deer live in agricultural places. The existing factories are enough; PP don't need any more companies. PP have no livelihood from the SIPCOT industries. Northerners are surviving all over. Locals are hired on contract basis for one year only. After that they are fired from the job. Again they are giving a one year contract. No PF and ESI are deducted from the company. So the existing establishments are sufficient. There is no need for new establishments or SIPCOT 2 expansion either.	cause any health impacts to the village people. The workers are provided with personnel protective equipments. 33% of the total plot area is allocated for developing green belt development which helps the smooth movement of deer by arresting noise pollution. Local people will be given preference for Employment opportunities. PF and ESI deduction are noted and will be implemented according to the norms of the Government.	PF and ESI deduction will be deduced as per government norms.	first month salary of the employees.
6	**Mr. Tamilmani, Keezhthenkulam:** PP fully welcome this cement plant project. But the problem here is employment. Therefore, I would like to inform that the District Administration should come up with a draft decision to provide employment opportunities to the local people in order to give permission to the above project, so that it will be useful for the livelihood and economic development of the local people.	The project proponent assured preferences will be given only to the local people for employment opportunities.	No budget required for this.	The project proponent assures that after the commencement of their project, the employment will be generated for the local people.
7	**Mr. M. Chellathurai, 15th Ward Councillor, Gangaikondan:** Due to the opening of this cement plant, there will be more health problems. No company located in SIPCOT provides employment to people belonging to their panchayat. All jobs are given to Northen people. Local workers are employed only on daily wage basis. Most of the permanent workers are from the north states. There is no source of income for people in their region due to SIPCOT. These factories just pollute their places. So this cement factory is not needed in their area. PP get water which is polluted more than the water that supplied to the SIPCOT. They are selling the water. But PP don't get clean water. PP don't get enough sanitation facilities too. So, on	The proposed project will not cause any health impacts to the surrounding villages as it is standalone grinding unit. The project proponent assured preferences will be given only to the local people for employment opportunities. Mr. M. Chellathurai's statement of selling water is not relevant to this project.	The medical camp will be conducted in the surrounding village people to identify any health impacts due to this project. The cost required for medical camp will be covered under CSR cost. (2.5% of profit)	Every six months once.

S. No	Queries Raised by Public	Replied by Project Proponent/EIA Consultant	Budget in Rupees	Time Line
	behalf of Gangaikondan, I inform that PP don't want above said industry. Also, I request the officers to take actions for providing jobs to youth of their area according to their qualifications.			

22.4.13 The capital cost of the proposed project is Rs 35.11 Crores and the capital cost for environmental protection measures is proposed as Rs 11.30 Lakhs. The annual recurring cost towards the environmental protection measures is proposed as Rs 1.93 Lakhs. The employment generation from the proposed project is Direct employment - 65 persons & Indirect employment - 100 persons. The details of cost for environmental protection measures is as follows:

S. No.	Description of Item	Proposed (Rs. In Crores/lakhs)	
		Capital Cost	Recurring Cost
(i).	Air Pollution Control/ Noise Management	9,41,500 Lakhs	1,63,000 Lakhs
(ii).	Water Pollution Control	73, 500	
(iii).	Environmental Monitoring and Management		
(iv).	Green Belt Development	1, 20, 000 Lakhs	30,000

22.4.14 Proposed greenbelt will be developed in 0.531275 ha which is about 33% of the total project area. Thus total of 0.531275 ha area (33 % of total project area) will be developed as greenbelt. A 2.5m x 2.5m 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 798 trees. Total no. of saplings will be planted and nurtured in 0.531275 hectares in Within 3 Years after the commencement of project.

22.4.15 It is submitted that there is no violation under EIA notification 2006/no court cases/no show cause/no direction.

22.4.16 The proposal was initially considered in the 15th meeting of the EAC for Industry-I sector held on 17-18th October, 2022 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 17-18th October, 2022)

22.4.17 The Committee noted the following:

1. The project proponent submitted that the proposed cement griding unit is a category B project and appraised as Category A project due to presence of Gangaikondan spotted dear sanctuary only 3 km away from site. Final ESZ notification for Gangaikondan Spotted Deer Sanctuary was issued by MoEF&CC vide S.O. 2773 (E) dated 31/07/2019. As per the said notification, the Eco sensitive Zone shall be to an extent of zero kilometres to 0.82

kilometres around the boundary of Gangaikondan Spotted Deer Sanctuary. PP has submitted that the proposed project is outside the ESZ. In this regard, PP has further submitted Google Image showing location of Gangaikondan Spotted Deer Sanctuary and Eco-sensitivity Zone and NOC from District Forest Officer, Tirunelveli Division obtained by SIPCOT officials dated 25.03.2010 stating that "for the approval of layout proposed by the SIPCOT in Gangaikondan and Piranchery village, Tamil Nadur Forest Department has no objection from Forestry point of view."

2. It was appraised to the EAC during the meeting that the Ministry issued an OM vide No. 11/20/2018-ESZ dated 29th June, 2022 regarding the compliance of judgement dated 03.06.2022 of the Hon'ble Supreme Court in IA No. 1000 of 2003 in W.P. (C) No. 202 of 1995: T.N Godavarman vs. Union of India & Ores. Hon'ble Supreme Court, in its order dated 3rd June 2022, inter-alia, directed that each Protected Forest i.e., National park or Wild life sanctuary must have an ESZ of minimum 1 km measured from the demarcated boundary of such protected forest in which the activities prescribed. Further, mining within national parks and wildlife sanctuaries shall not be permitted and no new permanent structure shall be permitted to come up for whatsoever purpose within ESZ and power has been vested in Central Empowered Committee to decide any ESZ where the above norms cannot be made applicable. Thus, the Committee also deliberated the proposal taking into account the Ministry's OM dated 29th June, 2022 in pursuance to judgment of Hon'ble Supreme Court dated 3rd June, 2022, EAC is of the view that the said Unit is very near to the sanctuary and in this regard the comments from ESZ Division of the Ministry may be required.

3. The EAC further is of the view that the proposal will be appraised only after obtaining the comments from the ESZ Division of the Ministry.

4. The Project Proponent is also required to submit authenticated map of ESZ projecting distance of ESZ from project site from the Competent Authority.

Recommendations of the Committee (EAC during 17-18th October, 2022)

22.4.18 In view of the foregoing and after detailed deliberations, the committee recommended to defer the proposal and advised the Ministry to furnish the comments from ESZ Division of the Ministry in the instant case. The Project Proponent shall also submit map of ESZ projecting distance of ESZ from project site authenticated from the Competent Authority. The proposal shall be considered after submission of requisite information in EAC meeting.

22.4.19 The proponent uploaded the ADS reply on PARIVESH on 14.12.2022 as follows:

1. Letter from District Forest Officer & Wildlife Warden, Tirunelveli Division vide letter No. D/10977/2022 dated 09.12.2022 certifying that the nearest wildlife sanctuary is Gangaikondan Spotted Deer Sanctuary and the distance is 2.90 km from the project site. The extent of ESZ varies from 0 km to 0.82 km, around the Gangaikondan Spotted Deer

Sanctuary. The proposed stand-alone Cement Plant site falls outside the ESZ of Gangaikondan Spotted Deer Sanctuary.

2. Map showing Distance from proposed stand alone Cement Grinding Unit and ESZ boundary of Gangaikondan sanctuary, certified from Forest Range Officer, Tirunelveli Range, Tirunelveli (Google map & Normal map).

22.4.20 The Ministry also received the comments from ESZ Division which states that "As per examination done in-house in the ESZ Division, the project site is located outside ESZ boundary and beyond 1 km from the nearest ESZ boundary of the sanctuary vis-a-vis the project site. The project location does not seem to have any implications in so far as the Order dated 03.06.2022 of the Hon'ble Supreme Court is concerned."

22.4.21 The proposal was placed for re-consideration during 20th meeting of the EAC for Industry-I sector held on 29th December, 2022 wherein Consideration of the proposal was deferred as the Project Proponent did not attend the meeting. PP vide letter dated 10.01.2023 has submitted that due to internet connection issues, they were unable to join the meeting on time and further requested EAC and MoEF&CC to place their proposal in the upcoming EAC meeting. Accordingly, on the request of PP, the proposal was placed for re-consideration during 22nd meeting of the EAC for Industry-I sector held on 30-31st January, 2023. The deliberations and recommendations of the EAC are as follows:

Deliberations by the Committee

22.4.22 The Committee noted the following:

1. The instant proposal is for proposed standalone cement grinding unit (WOPC) production capacity of 300 TPD or 1,03,500 TPA.
2. The proposed cement griding unit is a category B project and appraised as Category A project due to presence of Gangaikondon spotted dear sanctuary only 3 km away from site.
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. Final ESZ notification for Gangaikondan Spotted Deer Sanctuary was issued by MoEF&CC vide S.O. 2773 (E) dated 31/07/2019. As per the said notification, the Ecosensitive Zone shall be to an extent of zero kilometres to 0.82 kilometres around the boundary of Gangaikondan Spotted Deer Sanctuary. The location of the project, at 3 kms from the sanctuary, appears to be outside the ESZ. Letter from District Forest Officer & Wildlife Warden, Tirunelveli Division vide letter No. D/10977/2022 dated 09.12.2022 certifying that the nearest wildlife sanctuary is Gangaikondan Spotted Deer Sanctuary and the distance is 2.90 km from the project site. The extent of ESZ varies from 0 km to 0.82 km, around the Gangaikondan Spotted Deer Sanctuary. The proposed stand alone Cement Plant site falls outside the ESZ of Gangaikondan Spotted Deer Sanctuary. PP has also uploaded Map showing Distance from proposed stand alone Cement Grinding Unit and ESZ boundary of Gangaikondan sanctuary, certified from Forest Range Officer, Tirunelveli Range, Tirunelveli.

It was also appraised to the EAC during the meeting that the Ministry issued an OM vide No. 11/20/2018-ESZ dated 29th June, 2022 regarding the compliance of judgement dated 03.06.2022 of the Hon'ble Supreme Court in IA No. 1000 of 2003 in W.P. (C) No. 202 of 1995: T.N Godavarman vs. Union of India & Ores. Hon'ble Supreme Court, in its order dated 3rd June 2022, inter-alia, directed that each Protected Forest i.e., National park or Wild life sanctuary must have an ESZ of minimum 1 km measured from the demarcated boundary of such protected forest in which the activities prescribed. Further, mining within national parks and wildlife sanctuaries shall not be permitted and no new permanent structure shall be permitted to come up for whatsoever purpose within ESZ and power has been vested in Central Empowered Committee to decide any ESZ where the above norms cannot be made applicable. Thus, the Committee also deliberated the proposal taking into account the Ministry's OM dated 29th June, 2022 in pursuance to judgment of Hon'ble Supreme Court dated 3rd June, 2022. EAC is of the view that the said Unit is located outside the ESZ.

Further it was appraised to the EAC that ESZ Division has given its comments which states that "As per examination done in-house in the ESZ Division, the project site is located outside ESZ boundary and beyond 1 km from the nearest ESZ boundary of the sanctuary vis-a-vis the project site. The project location does not seem to have any implications in so far as the Order dated 03.06.2022 of the Hon'ble Supreme Court is concerned."

7. Land required is 1.5944 ha only. The land has been acquiesced from Tamil Nadu State Government. The memorandum of lease deed entered into at Gangaikondan on 03.05.2019 between SIPCOT and Ottathingal India Pvt Ltd. The lease period for the proposed factory is 99 years.
8. Gangaikondan tank (3.7 km, E), Chittar River (3.2 km, N), Parakirampandiyan kulam (5.3 km, NE), Palamadai kulam (6.5 km, W), Thamirabarani River (8.11 km, SE), Tirunelveli

Canal (7.3 km, S), Seliyanallur canal (6.9 km, NW) and Uppodai River (6.5, NE) exists within the study area of 10 km from 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. 8 KLD of water will be required which will sourced from the SIPCOT Industrial Park water supply if available, or it will be sourced from a well or bore well.
10. Greenbelt will be developed in 0.531275 ha which is about 33% of the total project area. The Committee deliberated on the action plan and budget allocation for green belt development and is of the view that the greenbelt shall be completed within a span of one year.
11. The Committee has found that the baseline data and incremental GLC due to the proposed project within NAAQ standards.
12. The nearest habitation to plant are Vengadasalapuram (0.25 Km, N), Pirancheri (2.6 Km, N), Gangaikondan (4 Km, NE), Chittarchatram (3.0 km, N), Manur (9.5 km, W) and Gangapur (1.65 Km, SE) from the project site boundary.
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 Committee deliberated upon the ADS reply of the 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.

Recommendations of the Committee

22.4.23 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 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 conditions:

(i) The PP 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) Gangaikondan tank (3.7 km, E), Chittar River (3.2 km, N), Parakirampandiyan kulam (5.3 km, NE), Palamadai kulam (6.5 km, W), Thamirabarani River (8.11 km, SE), Tirunelveli Canal (7.3 km, S), Seliyanallur canal (6.9 km, NW) and Uppodai River (6.5, NE) exists within the study area of 10 km from 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.

(iv) PP shall undertake village adoption and formulate Village Adoption program consisting of need-based community development activities, to develop them into model villages.

(v) 8 KLD of water will be required which will sourced from the SIPCOT Industrial Park water supply if available, or it will be sourced from a well or bore well. Necessary permission shall be obtained from the Competent Authority in this regard. PP shall explore the possibility of shifting to alternate source of water to reduce dependency on groundwater.

(vi) Three tier Green Belt shall be developed in a time frame of one year covering at least 33% of the total 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. 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. The PP shall ensure 100% survival rate of the trees planted in the green belt development program and shall fill the gaps due to death of the plants, if any, in the following monsoon season with tall trees. To this effect, the PP shall ensure adequate water supply and watering to the trees and shall provide the water resources in the Project's water Balance program.

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

(viii) 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. MSW waste shall be treated in digester and recovered gas shall be used in the canteen.

(ix) The PP shall also undertake rain water harvesting measures as per the plan submitted in the EIA/EMP report and reduce water dependence from the outside source.

(x) All stockyards shall be having impervious flooring and shall be equipped with water spray system for dust suppression. Stock yards shall also have garland drains to trap the run off material.

(xi) All internal and connecting road to the Highway shall be black topped/ concreted with suitable load in term of Million Standard Axle (MSA) as per IRC guidelines.

(xii) Performance monitoring of pollution control equipment shall be taken up yearly and compliance status in this regard shall be reported to the concerned Regional Office of the MoEF&CC.

(xiii) Dioxin and furans shall be monitored twice a year during co-processing of hazardous waste and report shall be submitted to the Regional Office of the MoEF&CC.

(xiv) Particulate matter emissions from all the stacks shall be less than 30 mg/Nm^3.

(xv) DeSOx system shall be provided dry type. NOx level shall be maintained below 600 mg/Nm^3 by using best available technology.

(xvi) Petcoke dosing shall be controlled automatically to control SO2 emission from chimney within the prescribed limits.

(xvii) PP shall identify the Source of fluoride emissions and action plan to mitigate the same shall be implemented.

(xviii) Action Plan for fire fighting system including provision for flame detectors, temperature actuated heat detectors with alarms, automatic sprinkler system, fixing the location of fire water tanks, separate power system for fire fighting, involvement of qualified and trained fire personnel, nearest fire station & time required to reach the proposed site shall be prepared and implemented.

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

(xx) All the recommendations made in the risk assessment report shall be implemented and compliance status in this regard shall be furnished to the Regional Office of the MoEF&CC along with the six monthly compliance report.

(xxi) All the commitments made to the public during the Public Hearing/Public Consultation 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.

(xxii) 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.

(xxiii) 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.

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 with respect to standards prescribed in Environment (Protection) Rules 1986 vide G.S.R. No. 612 (E) dated 25thAugust, 2014 (Cement) and subsequent amendment dated 9thMay, 2016 (Cement) and 10th May, 2016 (in case of Co-processing Cement); 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 fugitive emissions in the plant premises at least once in every quarter through labs recognised under Environment (Protection) Act, 1986.
iii. The project proponent shall install system carryout to Ambient Air Quality monitoring for common/criterion parameters relevant to the main pollutants released (e.g. PM10 and PM2.5 in reference to PM emission, and SO2 and NOx in reference to SO2 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.
iv. The project proponent shall submit monthly summary report of continuous stack emission and air quality monitoring and results of manual stack monitoring and manual monitoring of air quality /fugitive emissions to Regional Office of MoEF&CC, Zonal office of CPCB and Regional Office of SPCB along with six-monthly monitoring report.
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 mechanised bag cleaning facilities for better maintenance of bags.
vii. Pollution control system in the cement plant shall be provided as per the CREP Guidelines of CPCB.
viii. Sufficient number of mobile or stationery vacuum cleaners shall be provided to clean plant roads, shop floors, roofs, regularly.
ix. Ensure covered transportation and conveying of raw material to prevent spillage and dust generation; Use closed bulkers for carrying fly ash.
x. Provide wind shelter fence and chemical spraying on the raw material stock piles; and

xi. Provide Low NOX burners as primary measures and SCR /NSCR technologies as secondary measure to control NOX emissions.
xii. Have separate truck parking area and monitor vehicular emissions at regular interval.
xiii. Efforts shall be made to reduce impact of the transport of the raw materials and end products on the surrounding environment including agricultural land by the use of covered conveyor belts/railways as a mode of transport
xiv. Ventilation system shall be designed for adequate air changes as per ACGIH document for all tunnels, motor houses, cement bagging 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 vide G.S.R. No. 612 (E) dated 25thAugust, 2014 (Cement) and subsequent amendment dated 9thMay, 2016 (Cement) and 10th May, 2016 (in case of Co-processing Cement) 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 regularly monitor 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. Sewage Treatment Plant shall be provided for treatment of domestic wastewater to meet the prescribed standards.
iv. 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
v. Water meters shall be provided at the inlet to all unit processes in the cement plant.
vi. The project proponent shall make efforts to minimize water consumption in the cement plant complex by segregation of used water, practicing cascade use and by recycling treated water.

IV. Noise monitoring and prevention

i. Noise quality shall be monitored as per the prescribed Noise Pollution (Regulation and Control) Rules, 2000 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. Waste heat recovery system shall be provided for kiln and cooler.
ii. The project proponent makes efforts to achieve power consumption less than 65 units/ton for Portland Pozzolona Cement (PPC) and 85 units/ton for Ordinary Portland Cement (OPC) production and thermal energy consumption of 670 Kcal/Kg of clinker.
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 the project proponent for LED lights in their offices and residential areas.

VI. Waste management

i. 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 program for reduction of the same including carbon sequestration by trees in the plant premises.

ii. Project proponent shall submit a study report within six months on Decarbonisation program, which would essentially consist of company's carbon emissions, carbon budgeting/ balancing, carbon sequestration activities and carbon 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.

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. 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 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.

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. 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.

vi. 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.

vii. 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.

viii. 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.

ix. 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.

x. 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).

xi. 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.

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

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

xiv. 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.

xv. 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.

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Agenda No. 22.5

22.5 Expansion of Existing Pellet Plant (1.2 Million TPA To 6.4 Million TPA), Iron Ore Beneficiation Plant (Matching With Pellet Plant - 6.4 Million TPA), Producer Gas Plant (75,000 N.Cu.M/Hr To 2,00,000 N.Cu.M/Hr) with Addition of New Sponge Iron Plant (2.0 Million TPA), Ferro Alloys Plant (0.036 Million TPA) with Chrome Briquette & Zigging Plant, Steel Melting Shop with Matching LRF, CCM, Oxygen Optimized Furnace (1.8 Million TPA) With Slag Crushing Unit, Oxygen Plant (400 TPD), Rolling Mill With Pickling And Continuous Galvanizing Line (0.35 Million TPA), Wire Rod & Wire Drawing Mill (1.4 Million TPA) And CPP 245 Mw (120 Mw Coal And Dolochar Mix Based And 125 MW WHRB Based) by M/s Orissa Steel & Power Pvt. Ltd., located at Village - Jitusole & Baghmuri, P. O. - Garhsalboni, P. S. - Jhargram, District - Jhargram, West Bengal - Re-Consideration of Environmental Clearance.

[Proposal No.: IA/WB/IND/274512/2012; File No. IA-J-11011/180/2012-IA-II(I)]
[Consultant: Centre for Envotech and Management Consultancy (P); Valid upto 18.03.2024]

22.5.1 M/s Orissa Steel & Power Private Limited has made an online application vide proposal no. IA/WB/IND/274512/2012 dated 07.12.2022 along with copy of EIA/EMP report, Form 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 schedule no. 2(b) Mineral Beneficiation, 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 appraised at Central Level.

22.5.2 Name of the EIA consultant: M/s. Centre for Envotech and Management Consultancy (P) [List of ACOs with their Certificate / Extension Letter no. QCI/NABET/EIA/2124/RA 0243; Valid up to 18.03.2024, as on February 01, 2023].

Details submitted by Project proponent

22.5.3 The details of the ToR are furnished as below:

Date of application	Consideration	Details	Date of accord	ToR Validity
16.05.2020 & 17.02.2021	The proposal was considered in the 21st, 25th, 26th and 31st meeting of the Re-constituted EAC (Industry-I) 30th July- 1st August 2020; 26-27th November 2020; 16 - 17th December 2020 and 25-26th February 2021.	Terms of Reference	04.03.2021	04.03.2025
27.09.2021	--	Transfer of TOR from M/s Rashmi Udyog Pvt. Ltd. to M/s Orissa Steel & Power Pvt. Ltd.	27.10.2021	

22.5.4 The project of M/s Orissa Steel & Power Private Limited located at Villages – Jitusole & Baghmuri, P.O. - Garhsalboni, P.S. - Jhargram, District - Jhargram, West Bengal is for expansion of existing Pellet Plant (1.2 Million TPA To 6.4 Million TPA), Iron Ore Beneficiation Plant (Matching With Pellet Plant – 6.4 Million TPA), Producer Gas Plant (75,000 N.Cu.M/Hr To 2,00,000 N.Cu.M/Hr) with Addition of New Sponge Iron Plant (2.0 Million TPA), Ferro Alloys Plant (0.036 Million TPA) with Chrome Briquette & Zigging Plant, Steel Melting Shop with Matching LRF, CCM, Oxygen Optimized Furnace (1.8 Million TPA) With Slag Crushing Unit, Oxygen Plant (400 TPD), Rolling Mill With Pickling And Continuous Galvanizing Line (0.35 Million TPA), Wire Rod & Wire Drawing Mill (1.4 Million TPA) And CPP 245 MW (120 Mw Coal And Dolochar Mix Based And 125 MW WHRB Based).

22.5.5 Environmental Site Settings:

<table>
<tr><th>Sl. No.</th><th>Particulars</th><th>Details submitted by PP</th><th>Remarks</th></tr>
<tr><td>i.</td><td>Total land</td><td>56.658 ha [Private: 55.746 ha; Agriculture: 0.92 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>23.176</td><td>40.90</td></tr>
<tr><td>2</td><td>Water Reservoir</td><td>5.30</td><td>9.35</td></tr>
<tr><td>3</td><td>Built up Area</td><td>0.59</td><td>1.04</td></tr>
<tr><td>4</td><td>Internal roads</td><td>0.81</td><td>1.43</td></tr>
<tr><td>5</td><td>Green Belt</td><td>18.69</td><td>33.00</td></tr>
<tr><td>6</td><td>Tailing Area</td><td>2.02</td><td>3.56</td></tr>
<tr><td>7</td><td>Truck Parking area</td><td>1.01</td><td>1.78</td></tr>
</table></td></tr>
</table>

<table>
<tr><th>Sl. No.</th><th>Particulars</th><th>Details submitted by PP</th><th>Remarks</th></tr>
<tr><td></td><td></td><td></td><td>
<table>
<tr><td>8</td><td>Raw Material Storage</td><td>5.06</td><td>8.94</td></tr>
<tr><td colspan="2">TOTAL PROJECT AREA</td><td>56.656</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 total 140.0 Acres (56.658 Hectare) land area, 104 acres (42.09 hectare) land is already in possession of M/s Orissa Steel & Power Private Limited (Formerly M/s Rashmi Udyog Private Limited) and for rest of the land 36.0 acres (14.57 ha.) consent from private rayat obtained.

Detail of land tie up/ agreement for 104.0 acres (42.09 hectare) & Consent from private rayat for remaining 36.0 acres (14.57 ha) land dully Notarised is uploaded on parivesh portal vide letter OSPPL/EC_Expansion/2022-23/ADS_ REPLY, dated 07.01.2023.</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>Baghmuri</td><td>0.6 km</td><td>S</td></tr>
<tr><td>Jitusole</td><td>1.1 km</td><td>NE</td></tr>
<tr><td>Ghritakham</td><td>1.0 km</td><td>W</td></tr>
<tr><td>Garo</td><td>1.2 km</td><td>ESE</td></tr>
<tr><td>Shalboni</td><td>2.1 km</td><td>N</td></tr>
<tr><td>Jhargram</td><td>9.5 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 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 colspan="3">Existing Project Boundary</td></tr>
<tr><td>Point a</td><td>22˚21’53.67”N</td><td>87˚00’59.70”E</td></tr>
<tr><td>Point b</td><td>22˚21’32.76”N</td><td>87˚00’47.50”E</td></tr>
<tr><td>Point c</td><td>22˚21’32.12”N</td><td>87˚00’57.59”E</td></tr>
<tr><td>Point d</td><td>22˚21’18.87”N</td><td>87˚00’55.83”E</td></tr>
<tr><td>Point e</td><td>22˚21’28.58”N</td><td>87˚01’00.88”E</td></tr>
<tr><td>Point f</td><td>22˚21’25.61”N</td><td>87˚01’08.84”E</td></tr>
<tr><td>Point g</td><td>22˚21’22.80”N</td><td>87˚01’14.18”E</td></tr>
<tr><td>Point h</td><td>22˚21’27.09”N</td><td>87˚01’13.53”E</td></tr>
<tr><td>Point i</td><td>22˚21’29.97”N</td><td>87˚01’07.56”E</td></tr>
<tr><td>Point j</td><td>22˚21’32.19”N</td><td>87˚01’00.63”E</td></tr>
<tr><td>Point k</td><td>22˚21’49.24”N</td><td>87˚01’04.80”E</td></tr>
<tr><td colspan="3">Expansion Project Boundary</td></tr>
<tr><td>Point A</td><td>22°21'19.79"N</td><td>87° 01'54.78"E</td></tr>
<tr><td>Point B</td><td>22°21’07.22"N</td><td>87° 01'53.82"E</td></tr>
<tr><td>Point C</td><td>22°21'02.24"N</td><td>87° 00'55.56"E</td></tr>
<tr><td>Point D</td><td>22°21'01.83"N</td><td>87° 01'09.13"E</td></tr>
<tr><td>Point E</td><td>22°21'04.57"N</td><td>87° 01'06.24"E</td></tr>
</table></td><td>--</td></tr>
</table>

<table>
<tr><th>Sl. No.</th><th>Particulars</th><th>Details submitted by PP</th><th>Remarks</th></tr>
<tr><td></td><td></td><td>
<table>
<tr><td>Point F</td><td>22°21'07.39"N</td><td>87° 01'09.43"E</td></tr>
<tr><td>Point G</td><td>22°21'13.04"N</td><td>87° 01'12.18"E</td></tr>
<tr><td>Point H</td><td>22°21'11.64"N</td><td>87° 01'07.87"E</td></tr>
<tr><td>Point I</td><td>22°21'16.00"N</td><td>87° 01'07.12"E</td></tr>
<tr><td>Point J</td><td>22°21'15.89"N</td><td>87° 01'13.03"E</td></tr>
<tr><td>Point K</td><td>22°21'20.39"N</td><td>87° 01'17.70"E</td></tr>
<tr><td>Point L</td><td>22°21'25.00"N</td><td>87° 01'18.21”E</td></tr>
<tr><td>PointM</td><td>22°21'25.67"N</td><td>87° 01'14.23"E</td></tr>
<tr><td>Point N</td><td>22°21'47.78"N</td><td>87° 01'08.90"E</td></tr>
<tr><td>Point O</td><td>22°21'40.34"N</td><td>87° 01’08.10"E</td></tr>
<tr><td>Point P</td><td>22°21'32.83"N</td><td>87° 01'11.09"E</td></tr>
<tr><td>Point Q</td><td>22°21'32.24"N</td><td>87° 01'07.01"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 68 m to 86 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>--</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>03 Nos. R.W.H Structure of RCL</td><td>0.5 km</td><td>NE</td></tr>
<tr><td>Jangalkhas Pond</td><td>0.6 km</td><td>N</td></tr>
<tr><td>Ghritakham Pond</td><td>0.8 km</td><td>W</td></tr>
<tr><td>Ghosher Bandh Pond</td><td>1.9 Km</td><td>NE</td></tr>
<tr><td>Shalboni Pond</td><td>2.5 km</td><td>NNE</td></tr>
<tr><td>Kangsabati Canal</td><td>3.5 Km</td><td>E</td></tr>
<tr><td>Kangsabati River</td><td>13.5 Km</td><td>NE</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</td><td>Several Revenue Forest is present in the 10 km area of project site. There is no protected or reserved forest. Name of Forests are: Fairly dense mix jungle mainly Sal (Jhargram Forest Rang, Dhobi Jangal, Lalgarh Forest and Gurguripal Forest).</td></tr>
</table>

22.5.6 The existing project was accorded environmental clearance in the name of M/s Rashmi Iron Industries Private Limited vide Letter No. J-11011/180/2012-IA.II (I) dated 22nd June, 2015

which was transferred to M/s Rashmi Cement Limited vide letter no. J-11011/180/2012-IA.II (I) dated 4th October, 2019. The EC was further transferred from M/s Rashmi Cement Limited to M/s Rashmi Udyog Private Limited (Wholly own subsidiary of M/s Rashmi Cement Limited) vide letter dated 28.01.2020. EC is ultimately transferred from M/s Rashmi Udyog Private Limited to M/s Orissa Steel & Power Private Limited by MoEFCC vide letter no. J-11011/180/2012-IA.II (I) dated 9th June, 2021. Consent to Operate for the existing unit was accorded by West Bengal Pollution Control Board vide lr. No. CO131911 dated 20.01.2021 and 23.06.2021. The validity of CTO is up to 30.11.2025. The transfer status of statutory permission in the name of M/s Orissa Steel & Power Private Limited is as follows:

S.N	Documents	Statutory Documents in the name of OSPPL	Date of Receiving
1	Certificate of Incorporation	Already Obtained	17th November 2020
2	Environment Clearance	Already Obtained	09th June 2021
3	Consent to Establish	Already Obtained	21st June 2021
4	Consent to Operate	Already Obtained	23rd June 2021
5	Form-3 – Factory License	Already Obtained	17th April 2021
6	Form 11- Trade License	Already Obtained	27th July 2021
7	GST Certificate	Already Obtained	13th May 2021
8	Certificate of Importer-Exporter Code	Already Obtained	30th June 2021
9	IEM	Already Obtained	02nd June 2021
10	Company's PAN	Already Obtained	10th May 2021
11	Company's TAN	Already Obtained	29th June 2021
12	Form-D- Mineral Trading-Storage & Export	Already Obtained	16th March 2021
13	IBM	Already Obtained	03th August 2021
14	Water Permission	Already Obtained	10th March 2022

22.5.7 **Implementation status of the existing EC:**

Sl. No.	Units	As per EC dated 22.06.2015, 04.10.2019, 28.01.2020 & 09.06.2021		Implementation Status as on November 2022	Production as per CTO
		Configuration	Capacity		
1	Pellet Plant, Million TPA	2 x 0.6 MTPA	1.2 MTPA	Implemented	1.2 MTPA
2	I/O Beneficiation Plant, Million TPA	1 x 1.5 MTPA	1.5 MTPA	Implemented	1.5 MTPA
3	Producer Gas Plant Nm^3/hr	10 x 7,500 Nm^3/hr	75,000 Nm^3/hr	Implemented	75,000 Nm^3/hr

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

Sl. No.	Plant Equipment/ Facility	Existing facilities as per EC dated 22.06.2015, 04.10.2019, 28.01.2020 & 09.06.2021 Total (A+B)		Expansion Proposal considering 350 annual working days		Final (Existing + Proposed)		Remarks
		Configuration	Capacity	Configuration	Capacity	Configuration	Capacity	
1	DRI plant	--	--	**5 x 900 TPD**	2.0 Million TPA	5 x 900 TPD	2.0 Million TPA	Sponge Iron
2	SMS with matching LRF/AOD,CCM and oxygen optimized furnace	--	--	**(8 x 30 T + 2 x 40 T) I.F + 1 x 60 T EAF**	1.80 Million TPA	(8 x 30 T + 2 x 40 T) I.F + 1 x 60 T EAF	1.80 Million TPA	Billets & Slab
3	SMS Slag Crusher	--	--	**4 x 25 TPH**	100 TPH	4 x 25 TPH	100 TPH	Metal Recovery
4	Oxygen Plant	--	--	**2 x 200 TPD**	400 TPD	2 x 200 TPD	400 TPD	Oxygen
5	Ferro Alloy Plant	--	--	**3 x 9 MVA**	36,000 TPA	3 x 9 MVA	36,000 TPA	Ferro Alloys (FeMn, FeSi, SiMn & FeCr)
6	Jigging Plant	--	--	**3 x 30 TPD**	90 TPD	3 x 30 TPD	90 TPD	Metal Recovery
7	Chrome Briquette plant	--	--	**1 x 20 TPH**	20 TPH	1 x 20 TPH	20 TPH	Chrome Briquette
8	Rolling Mill with Pickling Line & Continuous Galvanizing Line	--	--	**0.35 Million TPA**		0.35 Million TPA		H.R Plate, Galvanized Sheets
9	Wire Rod Mill and Wire Drawing	--	--	**1.40 Million TPA**		1.4 Million TPA		TMT Bar, Wire & Wire Rod
10	Enhancement in pellet plant capacity	2 x 0.6 Million TPA	1.2 Million TPA	2 x 0.6 Million TPA to 2 x 1.0 Million TPA	(+) 0.8 Million TPA	2 x 1.0 Million TPA	6.4 Million TPA	Iron Ore Pellet
	New Pellet plant		--	**Addition** (2 x 2.2 Million TPA)	4.4 Million TPA	2 x 2.2 Million TPA		
11	Matching I/O Beneficiation	1 x 1.5 Million TPA	1.5 Million TPA	**Addition** (2 x 2.45 Million TPA)	(+) 4.9 Million TPA	1.5 Million TPA + 2 x 2.45 Million TPA	6.4 Million TPA	Concentrated Iron Ore
12	Producer Gas Plant	10 x 7,500 Nm^3/hr	75,000 Nm^3/hr	**Additional** (10 x12,500 Nm^3/hr)	(+) 1,25,000 Nm^3/hr	10 x 7,500 + 10 x 12,500 Nm^3/hr	2,00,000 Nm^3/hr	Producer Gas

Sl. No.	Plant Equipment/ Facility	Existing facilities as per EC dated 22.06.2015, 04.10.2019, 28.01.2020 & 09.06.2021 Total (A+B)		Expansion Proposal considering 350 annual working days		Final (Existing + Proposed)		Remarks
		Configuration	Capacity	Configuration	Capacity	Configuration	Capacity	
13	Captive Power Plant	--	--	**WHRB Based125 MW from DRI Plant + CFBC (Coal Dolochar mix based) 2 x 60 MW**	245 MW	**125 MW WHRB** Based from DRI Plant **120 MW CFBC** (Coal & Dolochar Mix based) 2 x 60 MW	245 MW	Power

22.5.9 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.	Name of the Raw Materials	Quantity (TPA)			Source	Distance of Source from		Up to First Unloading point (RAIL/ PORT)	Plant site	
		Existing for EC awarded Project	Additional for expansion Unit	Total		First Unloading Point (Km)	Project Site		Distance from first unloading point (Approx.)	Mode of Transportation
1	Iron Ore Fines & lumps	15,00,000	90,99,950	1,05,99,950	Applied for captive iron ore mines Alternate source: Purchased from Barbil-Joda, Orissa	270-300	---	Train up to Jhargram Public Siding	10.5 KM	By Road SH-5 and/or from dedicated road (post approval of construction of road from competent authority)
								Train up to Siding of associate company or Nimpura Public Siding	22-30 KM	By Road NH-49 (previously NH-6) by SH-5 or from dedicated road.
2	Pig Iron	---	2,28,206	2,28,206	Form other unit of group company	---	30-200	---	---	By Road NH-49 (previously NH-6) by SH-5 or from dedicated road.
3	Non - coking coal	1,44,000	40,73,960	42,17,960	CCL, MCL & Imported Coal. Also, applied for captive Coal mines (Jagnnathpur - B, (Raniganj Coal field West Bengal), vesting order	300 - 500	---	By vessel up to nearest port (Haldia / Paradeep / Vizag) and followed by train up to Jhargram Public	10.5 KM	By Road SH-5 and also from dedicated road (post approval of construction of road from competent authority)

Sl. No.	Name of the Raw Materials	Quantity (TPA)			Source	Distance of Source from		Up to First Unloading point (RAIL/ PORT)	Plant site	
		Existing for EC awarded Project	Additional for expansion Unit	Total		First Unloading Point (Km)	Project Site		Distance from first unloading point (Approx.)	Mode of Transportation
					from MOC, Govt. India obtained.			Siding		
								By vessel up to nearest port (Haldia / Paradeep / Vizag) and followed by Train up to Siding of associate company	30 KM	By Road NH-49 (previously NH-6) by SH-5 or from dedicated road.
4	Coke	---	43,200	43,200	Imported, E-Auction	300	---	By vessel up to nearest port (Haldia / Paradeep / Vizag) and followed by train up to Jhargram Public Siding	10.5 KM	By Road SH-5 and/or from dedicated road.
								By vessel up to nearest port (Haldia / Paradeep / Vizag) and followed by Train up to Siding of associate company	30 KM	By Road NH-49 (previously NH-6) by SH-5 or from dedicated road.
5	Dolomite	---	2,18,680	2,18,680	From Birmitrapur, Orissa / Bilaspur, CG	270-350	---	Train up to Jhargram Public Siding	10.5 Km	By Road SH-5 and/or from dedicated road.
6	Bentonite	40,000	88,000	1,28,000	From Gujarat, Rajasthan	1000	---	Train up to Jhargram Public Siding	10.5 Km	By Road SH-5
7	Limestone	26,000	2,76,322	3,02,322	From Birmitrapur, Orissa / Bilaspur, Raipur CG / Katni MP	270-350	---	Train up to Jhargram Public Siding	10.5 Km	By Road SH-5 and/or from dedicated road.
8	Manganese Ore	---	68,400	68,400	From Balaghat, MP & Orissa	1000	---	Train up to Jhargram Public Siding	10.5 Km	By Road SH-5 and/or from dedicated road.
9	Chromium Ore	---	90,000	90,000	Orissa, Jharkhand etc.	300	---	Train up to Jhargram Public Siding	10.5 Km	By Road SH-5 and/or from dedicated road.

Sl. No.	Name of the Raw Materials	Quantity (TPA)			Source	Distance of Source from		Up to First Unloading point (RAIL/ PORT)	Plant site	
		Existing for EC awarded Project	Additional for expansion Unit	Total		First Unloading Point (Km)	Project Site		Distance from first unloading point (Approx.)	Mode of Transportation
10	Quartzite	---	64,800	64,800	From Belpahar Orissa / Bilaspur, Raipur CG	500	---	Train up to Siding of associate company	30 Km	By Road NH-49 (previously NH-6) and by SH-5 or from dedicated road.

22.5.10 The existing water requirement (as per sanctioned EC) is 489 m^3/day. The water requirement for the proposed project is estimated as 7,191 m^3/day, water requirement will be obtained from Subarnarekha River (335 days @ 7380), Rain Water Harvesting (30 days @ 7380 KLD) & Ground water-(365 days @ 300.0 KLD) (for domestic purpose). The permission for drawl of surface water 3.0 MGD (13,500 m3/day) for 07 months from Subarnarekha River is obtained from Irrigation & Water Department, West Bengal vide Memo no-185-I/I-4M-02/2021 dated 01.10.2021 and memo no-73-I/I-4M/02/2021 dated 10.03.2022 and permission for ground water has been obtained from State Water Investigation Directorate (SWID) vide even permit no-07367; 07368; 07369; 07370 and 07371 dated 13.03.2014.

Sl. no.	Permission Granted by	Permission Obtained for drawl of water		Total Daily Make up Water requirement for the proposed project	
		Quantity of drawl KLD	No of days of drawl	m^3/hr.	KLD
1.	Irrigation & water Department, West Bengal from Subarnarekha River. [3 MGD (13,500 KLD) for 07 months or 224 days]	7,380	335 days	320	7,680
2.	Water Storage Reservoir (surplus water stored)				
3.	Rain Water Harvesting Pond-02 Nos. (Dimension 185 M x 100 M x 6 M and 165 M x 135 M x 6 M)	7,380	30 days		
4.	State Water Investigation Directorate (SWID), West Bengal from Bore Well for 960 KLD. *	300	365 days		
***Ground water will be used for meeting domestic water requirement.**					

22.5.11 The existing power requirement of 08 MW is obtained from Captive power plant & State grid. The power requirement for the proposed project is estimated as 318.60 MW which will be

obtained from the captive power plant {125 MW WHRB Based from DRI Plant + 120 MW CFBC (Coal & Dolochar Mix based) 2 x 60 MW} & balance from State Grid power supply system at 220 kV/ 400 kV.

22.5.12 Baseline Environmental Studies:

<table>
<tr><td>Period</td><td>1st March 2021 to 31st May 2021</td></tr>
<tr><td>AAQ parameters at 10 Locations (min and max)</td><td>• $PM_{2.5}$ = 43.4 to 50.8 µg/m^3
• PM_{10} = 66.9 to 80.1 µg/m^3
• SO_2 = 6.4 to 15.3 µg/m^3
• NO_X = 12.3 to 18.1 µg/m^3
• CO = <0.1 to 0.40 mg/m^3</td></tr>
<tr><td>Cumulative Incremental GLC level</td><td>• PM_{10} = 4.24 µg/m^3 (Level at 0.42 km in NE Direction)
• SO_2 = 4.41 µg/m^3 (Level at 0.62 km in NE Direction)
• NO_X = 3.08 µg/m^3 (Level at 0.62 km in NE Direction)
• CO = 1.25 mg/m^3 (Level at 2.7 km in N Direction)</td></tr>
<tr><td>Ground water quality at 8 Locations</td><td>• pH: 6.6 to 7.1,
• Total Hardness: 152 to 178 mg/l,
• Iron: 0.12 to 0.17 mg/l,
• Chloride: 32.1 to 40.4 mg/l,
• Heavy metals (Mercury, Lead, Cadmium & Arsenic): BDL</td></tr>
<tr><td>Surface water quality at 9 Locations</td><td>• pH: 6.2 to 6.9,
• DO: 5.6 to 6.4 mg/l,
• BOD: 4.6 to 6.9 mg/l,
• COD: 14.8 to 21.6 mg/l</td></tr>
<tr><td>Noise levels Leq (Day and Night)</td><td>49.7 to 69.8 for the day time and 39.9 to 59.6 for the Night time.</td></tr>
<tr><td>Traffic assessment study findings</td><td>• Traffic study has been conducted on NH-49 (Formerly NH-6) in South East direction approximately 3.5 km w.r.t to the project site and on State Highway-5 in East direction approximately 1.5 km w.r.t to the project site.
• Transportation of raw material, fuel & finished product will be by existing road (NH-49 followed by SH-5) from railway siding (03 nos. private & 02 no. public railways siding at a distance of 10-30 km) to the plant site.
• Also a dedicated Road Corridor for 100% Material Transportation being constructed. Dedicated road will be constructed within 18 months. Post that material transportation to plant site from railway siding will be by NH-49 followed by dedicated road corridor.
• Existing PCU is 8,416 PCU/hr on NH-49 (Formerly NH-6) & 5,201 PCU/hr on SH-5 and existing level of service (LOS) is:
<table>
<tr><td>Road</td><td>V (Volume in PCU/hr)</td><td>C (Capacity in PCU/Hr)</td><td>Existing (V/C Ratio</td><td>LOS</td></tr>
<tr><td>NH-49 (Formerly NH-6)</td><td>8,416/24 = 351</td><td>3600*</td><td>0.09</td><td>A</td></tr>
<tr><td>State Highway-5</td><td>5,201/24 = 217</td><td>1500*</td><td>0.14</td><td>A</td></tr>
</table>
• PCU load after proposed project will be:
<table>
<tr><td>Road</td><td>V (Volume in PCU/hr)</td><td>C (Capacity in PCU/Hr)</td><td>Existing (V/C Ratio</td><td>LOS</td></tr>
</table></td></tr>
</table>

	NH-49 (Formerly NH-6)	13,748/24 = 573	3600*	0.16	A
	State Highway-5	10,533/24 = 439	1500*	0.29	B
	* Note: Capacity as per IRC-106:1990 Guide line for capacity for roads. **Conclusion** The level of service is "A" for National Highway 49 (formerly NH-6); and for State Highway-5; to "B" in the LOS value. Thus, it can be concluded that the present road network is good enough to bear the minor increased traffic load.				
Flora and fauna	No schedule-I species & endangered fauna were recorded in the core & buffer zone of plant area.				

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

S. No.	Type of waste	Source	Quantity (TPA)			Mode of Treatment	Disposal	Remarks
			Existing	Additional	Total			
1	Dolo Char	DRI Plant	**	3,77,400	3,77,400	Not Applicable	100% used in CFBC Boilers.	--
2	Slag & Scale	SMS	**	2,85,600	2,85,600	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;	--
3	Slag	Ferro Alloys Plant	**	39,600	39,600	Not Applicable	• **34,200 TPA Ferro Manganese Slag:** - Slag generated during FeMn production - used as raw material for SiMn production. • **39,000 TPA Silico Manganese Slag:** - After maximum recovery of Mn (3,900 TPA) Silico Manganese Slag - 35,100 TPA will be used for road construction and land levelling. • **45,000 TPA Ferro Chrome Slag:** - After maximum recovery of Chrome (3,600 TPA) Ferro Chrome Slag - 41,400 TPA will be undergoing TCPL Test. If the toxic level within permissible limit it will be used for green concreting/ stone chips or else sent to CHWTSDF, Haldia. • **1,700 TPA Ferro Silico Slag:** - Slag generated during Ferro Silico production will be used for road construction /land levelling As stated above after metal recovery balance slag (SiMn slag- 35,100 TPA; FeSi Slag-1,700 TPA & FeCr Slag-41,400) shall be used as stone chips / road construction materials	

S. No.	Type of waste	Source	Quantity (TPA)			Mode of Treatment	Disposal	Remarks
			Existing	Additional	Total			
							for road construction & repairing / land levelling purposes.	
4	Bottom Ash	CPP	**	1,50,912	1,50,912	Not Applicable	Used for Road construction/ Land levelling purpose	--
5	Dust	APC Devices of DRI & Ferro Plant	**	2,81,840	2,81,840	Not Applicable	Used in Sinter Plant and Brick Manufacturing, Pelletisation mix	--
		APC Devices of SMS	**	1,26,000	1,26,000	Not Applicable	Cement making, Brick Manufacturing & Road construction, in the pellet plant as pelletisation mix	
		APC device of Pellet Plant	30,000	1,06,960	1,36,960	Not Applicable	100% Recycled in the process.	
6	Kiln Accretion	DRI Plant	**	16,044	16,044	Not Applicable	Road Construction	--
7	Tar Sludge	Producer gas plant	20,927	34,877	55,804	Not Applicable	Sold to WBPCB authorized vendor	--
	Coal Tar					Not Applicable		
8	Miss Roll/End Cuts	Rolling Mill	**	50,000	50,000	Not Applicable	Used as raw material in SMS Plant	--
9	Fly Ash	CPP	**	6,43,260	6,43,260	Not Applicable	Used for Brick making and also in Cement Plant	Agreement made with associate companies.
10	Tailing	I/O Beneficiation plant	2,64,700	1,34,570	3,99,270	Not Applicable	Used for Brick manufacturing/ Paver block making, aggregate in concrete, road construction	--
11	Iron oxide Powder from ARP	Rolling Mill	**	1,500	1,500	Not Applicable	Eliminated due to surrendering cold rolling mill with pickling & galvanizing line	--

22.5.14 Public Consultation:

Details of advertisement	• "Millennium Post" (in English) dated 13th December, 2021. • "Aajkaal" (in Bengali) dated 13th December, 2021. • "Sanmarg" (in Hindi) 13th December, 2021.
Date/Time of Public Hearing	13th January, 2022 at 12:00 P.M.
Venue	Jhargram Range Auction Hall, P.O.- Jhargram, Dist.: Jhargram, West Bengal
Presiding Officer	Additional District Magistrate (ZP), Jhargram
Major Issues Raised	1. Environment – APCD, Pollution Control, Housekeeping 2. Employment 3. Road Construction & Development/ maintenance

	4. Drinking water facilities 5. CSR Activities related etc. 6. Installation of solar street lights 7. Construction of temple

Action plan as per MoEF&CC O.M. F.No. 22-65/2017-IA.III 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 240 persons will receive stipend of Rs. 12,500 per month for three months training.	₹ 0.30 Crores	₹ 0.30 Crores	₹ 0.30 Crores	0.90
		Vocational Training Center for Educated youth of villages and Skill development to unemployed local youth through National Skill Development Corporation, Govt. of India Scheme. (Contribution to DM, Jhargram & ITI, Jhargram- ₹ 8 Lakhs each in 1st year, 2nd Year & 3rd Year).	₹ 0.16 Crores	₹ 0.16 Crores	₹ 0.16 Crores	0.48
2	Maintenance, Development & Construction of road in nearby villages	Construction of cement concrete road, development & maintenance of road in villages Jangalkhas Shirshi & Shalboni. (3.0 km in 1st year in Shirshi village, 3.5 km in 2nd year in Jangalkhas-Gadro village and 3.5 km in 3rd year in Shalboni village).	₹ 3.00 Crores	₹ 3.5 Crores	₹ 3.5Crores	10.0
3	Drinking water facility	Bore well (100 Nos.) in villages Ghritakham (Village 18 Nos. & 02 Nos. in 'Sonakuri Temple'), Bagmuri (20 Nos.), Shirshi (20 Nos.), Shalboni (20 Nos.) & Jitusole (20 Nos.) – 1st Year one village – Shalboni; 2nd Year two villages (Ghritakham & Shirshi) and in 3rd year two villages (Bagmuri & Jitusole)	₹ 0.13 Crores	₹ 0.26 Crores	₹ 0.26 Crores	0.65
		Development & construction of 04 nos. Pond in 02 nos. in Garro-1st Year & 02 nos. in Boria village-3rd Year.	--	₹ 0.16 Crores	₹ 0.16 Crores	0.32
		Installation of Community Drinking water facility' Jal Kendra" 01 no. in Jitusole-1st Year, 01 no. in Ghritakham -2nd Year & 01 no. in Baghmuri Village in 3rd Year	₹ 0.08 Crores	₹ 0.08 Crores	₹ 0.08 Crores	0.24
4	Installation of solar street lights	Installation of Street Lights with pole (100 Nos. Solar/Led) at suitable public places & road of village Shirshi (20 Nos.) (1st year), Salboni (20 Nos.) & Boria (20 Nos.) (2nd year); Garro (20 Nos.) & Bagmuri (20 Nos.) in (3rd year).	₹ 0.15 Crores	₹ 0.30 Crores	₹ 0.30 Crores	0.75
5	Construction of Temple	Construction of Temple in village Shirshi (1 No.) in 2nd year.	-	₹ 0.15	-	0.15
6	Control of Pollution	Most effective and advanced stage technology having techno-economic viability for air pollution control devices of adequate capacity have been installed for existing operational units and will be installed in parallel with implementation of the proposed plant. Plant is being design as Zero Liquid Discharge plant and entire waste water after treatment used in plant. Monitoring will be carried by WBPCB & NABL/ MoEFCC accredited lab in a time bound manner and to ensure emission within permissible limit.				
NEED BASED ACTIVITIES (Adopting 08 nos. villages -Salboni, Shirshi, Baghmuri, Jitusole, Garo, Ghritakham, Jangalkhas & Boria as a part of Social welfare development)						

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)	
7	Financial Support to the Local School for better education facility, development of infrastructure & library facilities	Jhargram Bikash Bharati Sikshayatan, Jangalkhas in 1st year, Ramakrishna Mission in 2nd year and Jitusole Primary School in 3rd year	₹ 0.30 Crores	₹ 0.30 Crores	₹ 0.30 Crores	0.90
8	Provision for health care facility	Financial support to charitable Dispensary with specialist doctor, compounder & assistant etc./ Free Health Center at Jitusole for providing free consultation & medicine to nearby villager- Cost for 1 doctor, 02 nurses, Support staffs, medicines etc.	₹ 0.25 Crores	₹ 0.25 Crores	₹ 0.25 Crores	0.75
		01 no. dedicated Ambulance for meeting emergency demand of nearby villagers at Free Health Center at Jitusole	-	₹ 0.23 Crores	-	0.23
9	Social infrastructure development	Development and construction of community center/ houses in village Jangalkhas-02 Nos.-1st year, Jitusole 02 nos. -2nd year & Salboni 04 nos.-3rd year etc.	₹ 0.70 Crores	₹ 0.70 Crores	₹ 1.40 Crores	2.80
10	Avenue plantation	Avenue plantation/ development of park in village Salboni (Krish Garden)- -1st Year, & Plantation alongside the state Highway SH-5 near factory and near West End High School, Jhargram in 3rd year.	₹ 0.30 Crores	₹ 0.30 Crores	₹ 0.30 Crores	0.90
11	Development/ Maintenance of nalla canal	Development / Maintenance of 1.0 km stretch of Kansabati canal in Jitusole Village in 2nd & 3rd year.	--	₹ 0.25 Crores	₹ 0.25 Crores	0.50
12	Construction of public toilet	Construction of 12 nos. of public toilet with well chamber facilities in the village of Baghmuri (04 nos. in 1st year); Garro (04 nos. in 2nd year) & Boria (04 nos. in 3rd year). (1 toilet @ cost of 1.5 lac)	₹ 0.06 Crores	₹ 0.06 Crores	₹ 0.06 Crores	0.18
13	Provision for collection bins/ dustbin	Providing 100 nos. of collection bins in villages- Baghmuri (20 nos.)-1st Year, Jitusole & Garro (20 nos. each)-2nd Year, Shirshi & Ghritakham (20 nos. each) -3rd Year	₹ 0.05 Crores	₹ 0.10 Crores	₹ 0.10 Crores	0.25
TOTAL			**₹ 5.48 Crores**	**₹ 7.10 Crores**	**₹ 7.42 Crores**	**₹ 20.0 Crores**

- M/s. Orissa Steel & Power Private Limited is also proposing to adopt the 08 nos. of Villages namely Salboni, Shirshi, Baghmuri, Jitusole, Garo, Ghritakham, Jangalkhas & Boria as a part of Social welfare development based on need base assessment carried.
- 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. Details regarding the same are incorporated in revised EIA/EMP Report.
- In this regard an affidavit signed by the Director of the company stating the action plan timelines with revised budget with quantified targets to full fill the Commitment on Public hearing issues & Need based activities is uploaded on parivesh portal vide letter OSPPL/EC_Expansion/2022-23/ADS_ REPLY, dated 07.01.2023.

Status of earlier PH issues and revised timelines

- As per the original EC dated 22.06.2015, Rs 16.50 crores have been earmarked for CSR towards 5% of the Enterprise Social Commitment on Public hearing issues under different heads and the amount was to be spent over a period of 05 years.
- The physical work i.e. land development work started from 17.01.2020 after obtaining Consent to Establish (NOC) from WBPCB and accordingly since the project implementation stage the fund earmarked under CSR head started to get utilized for fulfilling Enterprise Social Commitment on Public hearing issues.
- Since 2020 till 1st December 2022 Rs. 4.63 crores had been spent under different head to address the Public hearing issues.

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)	
• Balance Rs. 11.87 crores will be spent by March, 2024. In this regard an affidavit dated 29.12.2022 signed by the Director of the company stating the revised action plan timelines and budget with quantified targets to full fill the Commitment on Public hearing issues is uploaded on parivesh portal vide letter OSPPL/EC_Expansion/2022-23/ ADS_ REPLY, dated 07.01.2023.						

22.5.15 The existing capital cost of project was Rs 330 Crores. The capital cost of the proposed project is Rs. 1,500 Crores and the capital cost for environmental protection measures is proposed as Rs. 301 Crores. The annual recurring cost towards the environmental protection measures is proposed as Rs. 30 Crores. The employment generation from the proposed expansion is 3,000 (Direct additional employment - Regular & Contractual). The details of cost for environmental protection measures is as follows:

S. No.	Description	Existing ECs (Rs. in Crores)		Proposed (Rs. in Crores)	
		Capital cost	Recurring cost	Capital cost	Recurring cost
1	Air pollution control	3.34	0.38	163.34	16.78
2	Water pollution control	3.35	0.10	28.35	1.95
3	Solid Waste Management System	0.74	0.07	25.84	2.42
4	Green belt Development	0.75	0.10	13.75	1.06
5	Noise pollution control	0.25	0.10	10.85	0.96
6	Occupational health Management	0.75	0.15	6.95	1.33
7	Risk Mitigation & Safety Plan	0.25		6.35	
8	Env. Monitoring and Surveillance System	1.50	0.90	14.40	4.30
9	Implementation of Controlling measures to minimize impacts due to transportation and traffic	--	--	7.17	0.70
10	Setting Environmental Management Cell	0.10	0.10	-	-
11	Setting Environmental Laboratory	1.40		4.00	0.50
13	EMP for Social & Infrastructure development	-		20.00	--
	Total	**12.43**	**1.81**	**301.00**	**30.00**

22.5.16 Existing green belt has been developed in 6.81 ha area which is about 33.0% of the total project area of 20.639 ha with total sapling of 21,350 Trees. Proposed greenbelt will be developed in 11.88 ha which is about 20.97% of the total project area. Thus total of 18.69 ha area (33% of total project area) will be developed as greenbelt. A 10-15 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, guidelines. Local and native species will be planted with a density of 2,500 trees per hectare. Total no. of 51,025 saplings (Existing -21,350 + New-29,725) will be planted and nurtured in 18.69 hectares in first two year.

22.5.17 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 Regional Office:

22.5.18 The Status of compliance of earlier EC was obtained from Integrated Regional Office, Kolkata vide letter no-102-495/EPE/433 dated 19.10.2022. The Action taken report regarding the partially non-complied condition was submitted to Regional officer MoEF&CC, Kolkata vide letter no. OSPL/ATR/22-23/01 dated 08.11.2022. MoEF&CC (IRO), Kolkata evaluated the same and has issued Certified Closure Compliance report letter vide memo no- no-102-495/EPE/466 dated 15.11.2022. The details of the observations made by IRO in the report dated 19.10.2022 along with its re-assessment/present status as furnished by the PP is given as below.

S. No	Non-compliance details	Observation of IRO	Condition no.			Response by PP	Re-assessment by IRO, Kolkata
			EC date	Specific	General		
1.	Efforts shall further be made to use maximum water from the rain water harvesting sources. If needed, capacity of the reservoir shall be enhanced to meet the maximum water requirement. Only balance water requirement shall be met from other sources. Use of air-cooled condensers shall be explored and closed-circuit cooling system shall be provided to reduce water consumption and water requirement shall be modified accordingly.	Sand mounds were observed at the rain water harvesting structure. It is recommended that contour of the rain water harvesting structure should be maintained properly.	22.06.2015	vi		Rain water harvesting structural development work was going on and was kept on hold due to unavailability/ lack of labour because of which sand mound were observed during the day of inspection. Post inspection the same has been removed/ utilised for development of the R.W.H structure and now rain water harvesting structure with connecting drain has been developed completely. The details are: 02 nos. R.W.H Pond of Dimension 185 M x 100 M x 6.0 M. and another 165 M x 135 M x 6.0	From the information submitted a photograph provided, it is observed that PAs have removed the sand mound from the rain water harvesting structure. It has been further informed that rain water harvesting structure has been developed with connecting drainage.
	The company shall develop rain water harvesting structures to harvest the rain water for utilization in the lean season besides recharging the ground water table.				vii		
2.	Proper handling, storage, utilization and disposal of all the solid waste shall	PAs have not submitted the report regarding the toxic metal		x	--	Toxic metal content in the waste material (dust from air pollution control	As per the information provided by PAs, it is observed that

S. No	Non-compliance details	Observation of IRO	Condition no.			Response by PP	Re-assessment by IRO, Kolkata
			EC date	Specific	General		
	be ensured and regular report regarding toxic metal content in the waste material and its composition, end use of solid/hazardous waste shall be submitted to the Ministry's Regional Office at Bhubaneswar, SPCB and CPCB.	content in the waste material. The same needs to be submitted to the Integrated Regional office				device) attached with pellet plant and coal ash from Producer Gas plant carried by NABL accredited laboratory.	Pas have submitted the report regarding the toxic metal content in the waste material (sample collected from dust from air pollution control device attached with pellet plant. Pas have also submitted the TCL testing results of coal ash from producer gas plant). It is observed that the results are within the stipulated standard.

Further in compliance to ToR condition, Verification report has been issued by Integrated Regional Office, MoEFCC, Kolkata vide letter No. - 102-179/07/EPE dated 07.06.2021 of corrective action taken by the project proponent on each of the observations of the sub-committee.

22.5.19 The proposal was initially considered in the 19th meeting of the EAC for Industry-I sector held on 16th & 19th December, 2022 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 19th December, 2022)

22.5.20 The Committee noted the following:

1. The total project area reported in the instant application is 56.656 ha [Private: 55.746 ha; Agriculture: 0.91 ha]. However, the EAC observed that as per the ToR, the area reported was 56.653 ha [Private: 54.60 ha; Agriculture: 2.053 ha]. Thus there is mismatching in the reported area and also the nature of the land. The EAC seeks clarification in this regard alongwith supporting documents. Further, as reported, out of the 56.656 hectare of land, 42.09 hectare of land is already in possession of M/s Orissa Alloy Steel Private Limited & for rest of land (14.57 hectare) consent from private rayat obtained. PP is required to submit the credible documents showing the status of land acquisition in pursuance to Ministry's O.M. vide F.No. 22-76/2014-IA-III dated 07.10.2014.
2. The EAC deliberated on the solid and hazardous waste disposal plan and observed that details with respect to ferro alloy slag are limited to Ferro Chrome only. PP shall take into

consideration the slag generated from Ferro Alloy plant in all forms and accordingly submit plan for management and disposal of the slag. The PP shall revise the EIA/EMP report incorporating all such details.

3. The EAC deliberated on the earlier PH issues and status of issues addressed based on the action plan submitted and noted that the same is not clear from the submission. PP is required to provide the status of the targets achieved as per the Action Plan. The EAC further advised that in case the PP has failed to meet the targets and timelines shall clearly state the reasons and revise the action plan timelines and budget with quantified targets to be achieved latest March, 2024.

4. 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 in the instant proposal and noted that the submitted action plan is very limited and do not justify the cost to address all the PH issues. Action plan submitted to address the PH issues and socio-economic development of the nearby villages shall be revised and submitted as per Ministry's OM dated 30.09.2020. The same shall be submitted in the form of an affidavit signed by the higher authority of the company not below the Director of the company.

5. PP is required to 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 alongwith physical targets and financial aspects.

6. The Committee deliberated on the proposed mitigation measure towards Air, Water, Noise and Soil pollutions and the associated EMP cost and found it unsatisfactory. The EAC is of the opinion that revised EMP cost for the project shall be submitted.

7. The EAC observed that existing project was initially accorded EC in the name of M/s Rashmi Iron Industries Private Limited vide Letter dated 22nd June, 2015 which was transferred to M/s Rashmi Cement Limited vide letter dated 4th October, 2019, further transferred to M/s Rashmi Udyog Private Limited vide letter dated 28.01.2020 and ultimately transferred in the name of M/s Orissa Steel & Power Private Limited vide letter dated 9th June, 2021. PP is required to clarify whether all the other statutory permissions have been transferred in the name of M/s Orissa Steel & Power Private Limited. The PP shall prepare and submit a summary of such permissions in a tabular form along with requisite documents.

8. The Committee noted that there is a confusion in the facilities proposed to be installed in the instant application. As per ToR, PP had proposed for SMS with matching LRF, CCM and oxygen optimized furnace. In the instant EC application PP has proposed for SMS with matching LRF/AOD, CCM and oxygen optimized furnace. PP shall submit clarification with respect to AOD furnished in the instant case.

9. The EAC also noted that the as per ToR, PP had proposed for SMS Slag Crusher for a configuration/capacity of 4x25 TPH. However, in the brief shared alongwith other documents to all the EAC members through email, PP has mentioned SMS Slag Crusher for a configuration/capacity of 4x25 TPD. The EAC advised PP to submit the documents after due diligence only.

10. On perusal of kml file on Google Earth, the Committee noticed that there is Memorial Bird Sanctuary at a distance of approx. 1.7 km from the boundary of the project site. The EAC is of the view that PP shall submit clarification whether the Memorial Bird Sanctuary is notified or not. PP shall confirm in this regard.

11. The Committee noted that PP has revised the resource requirement. As per TOR granted, the water requirement was 7680 m^3/day and power requirement was 320 MW. However, in the instant EC application the water requirement is reduced to 7191 m^3/day and power requirement is increased to 324.9 MW. Also, the raw material requirement has been increased against the quantity approved in the ToR. The Committee observed that PP/Consultant did not bring the changes to the notice of EAC themselves or through EIA/EMP Report and therefore, advised PP/Consultant to be more transparent in the facts presented during the appraisal of the proposal. The EAC also warned the consultant in this regard.

12. In view of above facts, EAC advised PP to revise the EIA/EMP report covering all the desired information for further consideration.

13. 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 December, 2022)

22.5.21 In view of the foregoing and after detailed deliberations, the committee recommended to defer the proposal to address the shortcomings enumerated at para no. 22.5.20 above. The proposal may be considered after submission of the requisite information.

22.5.22 The proponent submitted the ADS replies vide letter dated 07.01.2023 uploaded on PARIVESH on 07.01.2023. Point-wise reply of ADS is given as below:

S. No.	A.D.S Point	Reply
1.	The total project area reported in the instant application is 56.656 ha [Private: 55.746 ha; Agriculture: 0.91 ha]. However, the EAC observed that as per the ToR, the area reported was 56.653 ha [Private: 54.60 ha; Agriculture: 2.053 ha]. Thus there is mismatching in the reported area and also the nature of the land. The EAC seeks clarification in this regard along with supporting documents. Further, as reported, out of the 56.656 hectare of land, 42.09 hectare of land is already in possession of M/s Orissa Steel & Power Private Limited & for rest of land (14.57 hectare) consent from private rayat obtained. PP is required to submit the credible documents showing the status of land acquisition in pursuance to Ministry's	**Issue w.r.t mismatching in the reported area:** Sir, there is no change in total project area. In acres it is 140.0 acres of project area. At the time of conversion of the unit in hectares conversion factor considered was 0.404664 (mostly use on field), so the value came to be: 140 acres x 0.404664= 56.65296 ha. ≈ 56.653 ha. So, according 56.653 ha. land was mentioned in TOR accorded by ministry. At the time of submission of EIA/EMP report for Public Hearing & EC appraisal, the conversion factor considered is 0.40469 (as per IS 786-1967, reaffirmed 2005), so the value came to be: 140 acres x 0.40469= 56.6566 ha. ≈ 56.656 ha.

S. No.	A.D.S Point	Reply
	O.M. vide F. No. 22-76/2014-IA-III dated 07.10.2014.	So, according 56.656 ha. project area is mentioned. But in acre there is no change in the figure of the project area, it is still 140.0 acres. **<u>Issue w.r.t mismatching in the nature of the land:</u>** Initially as per preliminary data the nature of land for complete project area was considered as Private: 54.60 ha and Agriculture: 2.053 ha. But at the time of verification of the record it was found that, initially the plot which was considered as agricultural land is actually non-agricultural land and the nature of the land stands as Private: 55.746 ha and Agriculture: 0.91 ha. The detail list of plot which was initially considered as agricultural land and found to be non – agricultural land as per authenticated documents from B.L & L.R.O Office Jhargram, Govt. of West Bengal records and also as per record available on 'Banglarbhumi' website, Dept. of Land & Land Reforms, Govt. of West Bengal is uploaded on parivesh portal vide letter OSPPL/EC_Expansion/ 2022-23/ADS_REPLY, dated 07.01.2023. **<u>Status of land acquisition in pursuance to Ministry's O.M. vide F. No. 22-76/2014-IA-III dated 07.10.2014:</u>** Out of total 140.0 Acres (56.658 Hectare) land area, 104 acres (42.09 hectare) land is already in possession of M/s Orissa Steel & Power Private Limited (Formerly M/s Rashmi Udyog Private Limited) and for rest of the land 36.0 acres (14.57 ha.) consent from private rayat obtained. Detail of land tie up/ agreement for 104.0 acres (42.09 hectare) & Consent from private rayat for remaining 36.0 acres (14.57 ha) land dully Notarised is uploaded on parivesh portal vide letter OSPPL/EC_Expansion/2022-23/ADS_ REPLY, dated 07.01.2023.
2.	The EAC deliberated on the solid and hazardous waste disposal plan and observed that details with respect to ferro alloy slag are limited to Ferro Chrome only. PP shall take into consideration the slag generated from Ferro Alloy plant in all forms and accordingly submit plan for	The main solid waste generated from the proposed 3 x 9 MVA Ferro Alloy plant is slag during production of Ferro Manganese, Ferro Chrome, Silico Manganese and Ferro Silico. The detail slag management is: a) **34,200 TPA Ferro Manganese Slag**: - Slag generated during Ferro Manganese production

S. No.	A.D.S Point	Reply
	management and disposal of the slag. The PP shall revise the EIA/EMP report incorporating all such details.	will be used as a raw material for Silico Manganese production. b) **39,000 TPA Silico Manganese Slag**: - After maximum recovery of Mn (3,900 TPA) Silico Manganese Slag - 35,100 TPA will be used for road construction and land levelling. c) **45,000 TPA Ferro Chrome Slag**: - After maximum recovery of Chrome (3,600 TPA) Ferro Chrome Slag - 41,400 TPA will be undergoing TCPL Test. If the toxic level within permissible limit it will be used for green concreting/ stone chips or else sent to CHWTSDF, Haldia. d) **1,700 TPA Ferro Silico Slag**: - Slag generated during Ferro Silico production will be used for road construction /land levelling. As stated above after metal recovery balance slag (SiMn slag- 35,100 TPA; FeSi Slag-1,700 TPA & FeCr Slag-41,400) shall be used as stone chips / road construction materials for road construction & repairing / land levelling purposes. Detail calculation with project for utilization of slag for road construction is as followed: ❖ Considering average 7.0 m width & depth 12 inch (0.3 m) of the road and density of the Mn slag as 3.1 ton/cum, 6,720 T slag may be consumed for 1.0 km stretch. Therefore, the entire quantity of slag generated in a year (35,100 TPA) shall be utilized for the construction/ repairing of around 5.0 km dedicated & internal roads of the plant and nearby gram panchayat road under CSR/CER scheme. Also it can be used for land levelling and the requirement will be based on elevation. ❖ Considering average 7.0 m width & depth 12 inch (0.3 m) of the road and density of the FeCr

S. No.	A.D.S Point	Reply
		slag as 2.8 ton/cum, 5,880 T slag post TCLP test may be consumed for 1.0 km stretch. Therefore, the entire quantity of slag generated in a year (41,400 TPA) shall be utilized for the construction/ repairing of around 7.0 km dedicated & internal roads of the plant and nearby gram panchayat road under CSR/CER scheme. ❖ Considering average 7.0 m width & depth 12 inch (0.3 m) of the road and density of the FeSi slag on an average 3.4 ton/cum, 7,140 T slag may be consumed for 1.0 km stretch. Therefore, the entire quantity of slag generated in a year (1,700 TPA) shall be utilized for the construction/ repairing of around 0.22 km internal roads of the plant. Also it can be used for land levelling and the requirement will be based on elevation. Details process descriptions with material balance for 3 x 9 MVA Ferro Alloy Plant for production of FeMn, FeSi, SiMn & FeCr along with briquette plant & Jigging plant have been incorporated in revised EIA/EMP report and is uploaded on parivesh portal vide letter OSPPL/EC_Expansion/2022-23/ADS_ REPLY, dated 07.01.2023. Please refer Section 2.3.4, of Chapter 2 of revised EIA report. End use of slag is also incorporated in revised EIA/EMP report. Please refer Section 4.10 of Chapter 4.
3.	The EAC deliberated on the earlier PH issues and status of issues addressed based on the action plan submitted and noted that the same is not clear from the submission. PP is required to provide the status of the targets achieved as per the Action Plan. The EAC further advised that in case the PP has failed to meet the targets and timelines shall clearly state the reasons and revise the action plan timelines	Sir, as per the original EC dated 22.06.2015, Rs 16.50 crores have been earmarked for CSR towards 5% of the Enterprise Social Commitment on Public hearing issues under different heads and the amount was to be spent over a period of 05 years. The details are as: a) **Infrastructure Support** – *Fund earmarked Rs. 16.0 Crores*

S. No.	A.D.S Point	Reply
	and budget with quantified targets to be achieved latest March, 2024.	b) **Vocational Training Centres for local youths**- *Fund earmarked Rs. 0.69 Crores* c) **Construction & maintenance of community centre, Green Belt development in nearby villages**- *Fund earmarked Rs. 0.55 Crores* d) **Organising health Camp (Blood donation, eye check-up, child health etc.) for the villagers and ambulance service to the surrounding populations**- *Fund earmarked Rs. 1.20 Crores* e) **Distribution of blankets, shoes, umbrella etc. to the needy and poor people**- *Fund earmarked Rs. 0.50 Crores* f) **Scholarship for higher education**- *Fund earmarked Rs. 0.56 Crores* The physical work i.e. land development work started from 17.01.2020 after obtaining Consent to Establish (NOC) from WBPCB and accordingly since the project implementation stage the fund earmarked under CSR head started to get utilized for fulfilling Enterprise Social Commitment on Public hearing issues. Since 2020 till 1st December 2022 Rs. 4.63 crores had been spent under different head to address the Public hearing issues. The summarised details are as: a) **Infrastructure Support –** *Fund spent Rs. 3.0 Crores* b) **Vocational Training Centres for local youths**- *Fund spent Rs. 0.45 Crores* c) **Construction & maintenance of community centre, Green Belt development in nearby villages**- *Fund spent Rs. 0.40 Crores*

S. No.	A.D.S Point	Reply
		d) **Organising health Camp (Blood donation, eye check-up, child health etc.) for the villagers and ambulance service to the surrounding populations**- *Fund spent Rs. 0.60 Crores* e) **Distribution of blankets, shoes, umbrella etc. to the needy and poor people** *Fund spent Rs. 0.13 Crores* f) **Scholarship for higher education**- *Fund spent Rs. 0.05 Crores* Balance Rs. 11.87 crores will be spent by March, 2024. In this regard an affidavit signed by the Director of the company stating the revised action plan timelines and budget with quantified targets to full fill the Commitment on Public hearing issues is uploaded on parivesh portal vide letter OSPPL/EC_Expansion/2022-23/ ADS_ REPLY, dated 07.01.2023.
4.	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 in the instant proposal and noted that the submitted action plan is very limited and do not justify the cost to address all the PH issues. Action plan submitted to address the PH issues and socio-economic development of the nearby villages shall be revised and submitted as per Ministry's OM dated 30.09.2020. The same shall be submitted in the form of an affidavit signed by the higher authority of the company not below the Director of the company.	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 Steel & Power Private Limited is also proposing to adopt the below mentioned 08 nos. of Villages as a part of Social welfare development based on need base assessment carried. The detail of villages are: 1) Salboni, 2) Shirshi, 3) Baghmuri, 4) Jitusole, 5) Garo, 6) Ghritakham, 7) Jangalkhas & 8) Boria 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.
5.	PP is required to 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 along with physical targets and financial aspects.	

S. No.	A.D.S Point	Reply
		Details regarding the same are incorporated in revised EIA/EMP Report in Section 7.1, Table No. C7-1 & Table No. C7-2 of Chapter 7. The activities/ area under which the fund earmarked will be spent are as follows: a) **Creation of local employment**- *Fund earmarked Rs. 1.38 Crores.* b) **Maintenance, Development & Construction of road in nearby villages**- *Fund earmarked Rs. 10.0 Crores.* c) **Development of Drinking water facility**- *Fund earmarked Rs. 0.97 Crores.* d) **Installation of solar street lights-** *Fund earmarked Rs. 0.75 Crores.* e) **Construction of Temple (P. hearing Demand)** - *Fund earmarked Rs. 0.15 Crores.* f) **Financial Support to the Local School for better education facility, development of infrastructure & library facilities.** - *Fund earmarked Rs. 0.90 Crores.* g) **Provision for health care facility**- *Fund earmarked Rs. 0.98 Crores.* h) **Social infrastructure development**- *Fund earmarked Rs. 2.80 Crores* i) **Avenue plantation**- *Fund earmarked Rs. 0.90 Crores.* j) **Development/ Maintenance of nalla canal**-*Fund earmarked Rs. 0.50 Crores.* k) **Construction of public toilet**- *Fund earmarked Rs. 0.18 Crores.* l) **Provision for collection bins/ dustbin**- *Fund earmarked Rs. 0.25 Crores.*

<table>
<tr><th>S. No.</th><th>A.D.S Point</th><th>Reply</th></tr>
<tr><td></td><td></td><td>In this regard an affidavit signed by the Director of the company stating the action plan timelines with revised budget with quantified targets to full fill the Commitment on Public hearing issues & Need based activities is uploaded on parivesh portal vide letter OSPPL/EC_Expansion/2022-23/ADS_ REPLY, dated 07.01.2023.</td></tr>
<tr><td>6.</td><td>The Committee deliberated on the proposed mitigation measure towards Air, Water, Noise and Soil pollutions and the associated EMP cost and found it unsatisfactory. The EAC is of the opinion that revised EMP cost for the project shall be submitted.</td><td>Company has reassessed the fund earmarked under the head of EMP for implementing the mitigation measure towards Air, Water, Noise and Soil pollutions.

The revised capital cost is Rs. 301.0 crores and recurring cost Rs. 30.0 crores per annum. The summarised details are as:
<table>
<tr><th>Description</th><th>Capital cost, Rs. in crores</th><th>Recurring cost Rs. in crores</th></tr>
<tr><td>Air pollution control</td><td>163.34</td><td>16.78</td></tr>
<tr><td>Water pollution control</td><td>28.35</td><td>1.95</td></tr>
<tr><td>Solid Waste Management System</td><td>25.84</td><td>2.42</td></tr>
<tr><td>Green belt Development</td><td>13.75</td><td>1.06</td></tr>
<tr><td>Noise pollution control</td><td>10.85</td><td>0.96</td></tr>
<tr><td>Env. Monitoring and management</td><td>14.40</td><td>4.30</td></tr>
<tr><td>Occupational Health Management</td><td>6.95</td><td rowspan="2">1.33</td></tr>
<tr><td>Risk Mitigation & Safety Plan</td><td>6.35</td></tr>
<tr><td>Implementation of Controlling measures to minimize impacts due to transportation and traffic</td><td>7.17</td><td>0.70</td></tr>
<tr><td>Setting Environmental Laboratory</td><td>4.00</td><td>0. 50</td></tr>
</table>
</td></tr>
</table>

S. No.	A.D.S Point	Reply
		EMP for Social & Infrastructure development: 20.00 / -- **Total: 301.0 / 30.00** Total capital and recurring cost per annum for environmental pollution control measures is incorporated in revised EIA/ EMP report in Section 10.6, Table No. C10-17 of Chapter 10 and is uploaded on parivesh portal vide letter OSPPL/EC_Expansion/2022-23/ADS_ REPLY, dated 07.01.2023.
7.	The EAC observed that existing project was initially accorded EC in the name of M/s Rashmi Iron Industries Private Limited vide Letter dated 22nd June, 2015 which was transferred to M/s Rashmi Cement Limited vide letter dated 4thOctober, 2019, further transferred to M/s Rashmi Udyog Private Limited vide letter dated 28.01.2020 and ultimately transferred in the name of M/s Orissa Steel & Power Private Limited vide letter dated 9th June, 2021. PP is required to clarify whether all the other statutory permissions have been transferred in the name of M/s Orissa Steel & Power Private Limited. The PP shall prepare and submit a summary of such permissions in a tabular form along with requisite documents.	Along with environment clearance all the other statutory permissions like Certificate of Incorporation, Consent to Establish, Consent to Operate, Factory License, Trade License, GST Certificate, IEC Certificate (Certificate of Importer-Exporter Code), IEM, PAN, TAN, Mineral Trading-Storage and Export and IBM have been transferred in the name of M/s Orissa Steel & Power Private Limited. The summary of such permissions in a tabular form along with requisite documents is uploaded on parivesh portal vide letter OSPPL/EC_Expansion/2022-23/ADS_ REPLY, dated 07.01.2023.
8.	The Committee noted that there is confusion in the facilities proposed to be installed in the instant application. As per ToR, PP had proposed for SMS with matching LRF, CCM and oxygen optimized furnace. In the instant EC application PP has proposed for SMS with matching LRF/AOD, CCM and oxygen optimized furnace. PP shall submit clarification with respect to AOD furnished in the instant case.	Argon Oxygen Decarburization (AOD) is a process primarily used in high grade steel making and other high grade alloys with oxidizable elements. At the time of submission of proposal IA/WB/IND/151940/2020 for getting TOR, AOD is mentioned in PFR Report in Section 3.3.2 (Project Description) page no 54; Section 3.4.3 (Material balance) page no 100 and Section 5.2 (Impact on Ambient Air Quality) Page no- 120 which is submitted on parivesh portal. Also in the presentation shared to all the EAC members through email dated 20th July 2020, AOD is mentioned in slide no-25, 38 & 58.

S. No.	A.D.S Point	Reply
		Sir, in order to have more transparency, uniformity with EIA/EMP report and better understanding w.r.t. the facilities proposed to be installed, company has decided to furnish AOD route in proposed expansion facilities detail. Detail process description of AOD, emission control measure and slag management is mentioned in section 2.3.2.3 of EIA/EMP report.
9.	The EAC also noted that the as per ToR, PP had proposed for SMS Slag Crusher for a configuration/capacity of 4 x 25 TPH. However, in the brief shared along with other documents to all the EAC members through email, PP has mentioned SMS Slag Crusher for a configuration/capacity of 4 x 25 TPD. The EAC advised PP to submit the documents after due diligence only.	Because of typographical error instead of 4 x 25 TPH SMS Slag Crusher configuration/ capacity 4 x 25 TPD is written in brief write-up. PP do hereby extend their sincerest apologies for unintended action and seek your kind forgiveness. In the final EIA/EMP report and other documents SMS Slag Crusher configuration/capacity is mentioned as 4 x 25 TPH.
10.	On perusal of kml file on Google Earth, the Committee noticed that there is Memorial Bird Sanctuary at a distance of approx. 1.7 km from the boundary of the project site. The EAC is of the view that PP shall submit clarification whether the Memorial Bird Sanctuary is notified or not. PP shall confirm in this regard.	It was seen on 'GOOGLE EARTH' that some anonymous body' Niribili Homestay" three (03) weeks ago from today's date marked a place at Jangal Khash, West Bengal 721514 as 'Ranajay Gupta Memorial Bird Sanctuary' at a distance of approx. 1.7 km from the boundary of the project site. But as per the data of Protected Area Gazette Notification Database (West Bengal) issued by Wildlife Institute of India, Govt. of India available on website of http://www.wiienvis.nic.in/Database/WestBengal_7842.aspx there are in total 21 protected area [05 Nos. National Park (*Buxa NP, Gorumara NP, Neora Valley NP, Singalila NP & Sunderban NP*) and 16 nos. Wildlife Sanctuary (*Ballavpur WLS, Bethuadahari WLS, Bibhutibhusan WLS, Buxa WLS, Chapramari WLS, Chintamani Kar Bird Sanctuary, Haliday Island WLS, Jaldapara WLS, Jorepokhri Salamander WLS, Lothian Island WLS, Mahananda WLS, Raiganj WLS, Ramnabagan WLS, Sajnakhali WLS, Senchal WLS & West Sundarban WLS*). There is no existence of such bird sanctuary. Snapshot of the website is uploaded on parivesh portal vide letter OSPPL/EC_Expansion/2022-23/ADS_ REPLY, dated 07.01.2023. A photo affidavit dated 29.12.2022 signed by the Director of the company stating that 'No' Memorial

S. No.	A.D.S Point	Reply
		Bird Sanctuary exists at a distance of approx. 1.7 km from the boundary of the project site is uploaded on parivesh portal vide letter OSPPL/EC_Expansion/2022-23/ADS_ REPLY, dated 07.01.2023.
11.	The Committee noted that PP has revised the resource requirement. As per TOR granted, the water requirement was 7680 m^3/day and power requirement was 320 MW. However, in the instant EC application the water requirement is reduced to 7191 m^3/day and power Requirement is increased to 324.9 MW. Also, the raw material requirement has been increased against the quantity approved in the ToR. The Committee observed that PP/Consultant did not bring the changes to the notice of EAC themselves or through EIA/EMP Report and therefore, advised PP/Consultant to be more transparent in the facts presented during the appraisal of the proposal. The EAC also warned the consultant in this regard.	**Issue w.r.t mismatching in the water demand:** Make up water demand stated in TOR is 7680 m^3/day. This figure is for complete project (expansion + existing). Out of the total makeup water demand, 7191 m^3/day is make up water demand for expansion project and 489 m^3/day is for existing operational project. **Issue w.r.t mismatching in the power demand:** Project proponent has reassessed the power requirement for the complete project and has been reduced to 318.60 MW from TOR stated 320 MW and same has been in incorporate in Revised EIA/EMP report. Reduction in power demand is because of reduction in specific energy consumption. The following measures are proposed to be adopted: a) 85% direct charging of hot billet from SMS in rolling mill. b) Use of better quality raw material in DRI resulting reduction in specific energy conservation. c) Use of energy efficient electric motors complying IEE3 Standards. d) Use of highly efficient VFD, minimizing idle running of machines. e) Installation of LED/CFL lighting. **Issue w.r.t mismatching in the raw material requirement:** Raw material demand stated in Sl. No –8 of TOR issued by ministry vide File No. J-11011/180/2012-IA-II (I) dated 04.03.2021 & 27.10.2021 is against the plant configuration & capacity mentioned in Sl. No –7.

S. No.	A.D.S Point	Reply
		Deviation in raw material demand is because of increase in capacity of the unit considering 350 annual working days as mentioned in Sl No.-15 of TOR issued by ministry vide File No. J-11011/180/2012-IA-II (I) dated 04.03.2021 & 27.10.2021. Details w.r.t to mismatching of data from TOR accorded figures is uploaded on parivesh portal vide letter OSPPL/EC_Expansion/2022-23/ADS_ REPLY, dated 07.01.2023.
12.	In view of above facts, EAC advised PP to revise the EIA/EMP report covering all the desired information for further consideration.	Sir, the EIA/EMP report is revised covering all the information as desired by the Honourable committee members.
13.	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.	Application is revised by incorporating all the information.

22.5.23 Based on the ADS reply of PP, the proposal is reconsidered during 22nd meeting of the EAC for Industry-I sector held on 30-31st January, 2023. The deliberations and recommendations of EAC are as follows:

Deliberations by the Committee

22.5.24 The Committee noted the following:

1. The instant proposal is for expansion of existing Pellet Plant (1.2 Million TPA To 6.4 Million TPA), Iron Ore Beneficiation Plant (Matching With Pellet Plant – 6.4 Million TPA), Producer Gas Plant (75,000 N.Cu.M/Hr To 2,00,000 N.Cu.M/Hr) with Addition of New Sponge Iron Plant (2.0 Million TPA), Ferro Alloys Plant (0.036 Million TPA) with Chrome Briquette & Zigging Plant, Steel Melting Shop with Matching LRF, CCM, Oxygen Optimized Furnace (1.8 Million TPA) With Slag Crushing Unit, Oxygen Plant (400 TPD), Rolling Mill With Pickling And Continuous Galvanizing Line (0.35 Million TPA), Wire Rod & Wire Drawing Mill (1.4 Million TPA) And CPP 245 MW (120 Mw Coal And Dolochar Mix Based And 125 MW WHRB Based).
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 existing project was accorded environmental clearance in the name of M/s Rashmi Iron Industries Private Limited vide Letter No. J-11011/180/2012-IA.II (I) dated 22nd June, 2015 which was transferred to M/s Rashmi Cement Limited vide letter no. J-11011/180/2012-IA.II (I) dated 4th October, 2019. The EC was further transferred from M/s Rashmi Cement Limited to M/s Rashmi Udyog Private Limited (Wholly own subsidiary of M/s Rashmi Cement Limited) vide letter dated 28.01.2020. EC is ultimately transferred from M/s Rashmi Udyog Private Limited to M/s Orissa Steel & Power Private Limited by MoEFCC vide letter no. J-11011/180/2012-IA.II (I) dated 9th June, 2021. Consent to Operate for the existing unit was accorded by West Bengal Pollution Control Board vide lr. No. CO131911 dated 20.01.2021 and 23.06.2021. The validity of CTO is up to 30.11.2025.

6. The total project area is 56.658 ha. As reported, Out of total 140.0 Acres (56.658 Hectare) land area, 104 acres (42.09 hectare) land is already in possession of M/s Orissa Steel & Power Private Limited (Formerly M/s Rashmi Udyog Private Limited) and for rest of the land 36.0 acres (14.57 ha.) consent from private rayat obtained.

7. Existing green belt has been developed in 6.81 ha area which is about 33.0% of the total project area of 20.639 ha with total sapling of 21,350 Trees. Proposed greenbelt will be developed in 11.88 ha which is about 20.97% of the total project area. Thus total of 18.69 ha area (33% of total project area) will be developed as greenbelt. Total no. of 51,025 saplings (Existing -21,350 + New-29,725) will be planted and nurtured in 18.69 hectares in first two year. The Committee deliberated on the action plan and budget allocation for green belt development and noted that the green belt development shall be completed within a year.

8. Existing Water requirement (as per sanctioned EC) is 489 m^3/day. The water requirement for the proposed project is estimated as 7,191 m^3/day (Total after expansion – 7680 m^3/day), which will be obtained from Subarnarekha River (335 days @ 7380), Rain Water Harvesting (30 days @ 7380 KLD) & Ground water-(365 days @ 300.0 KLD) (for domestic purpose).

9. Two rain water harvesting ponds are existing within the project site. Three R.W.H Structure of RCL (0.5 Km, NE), Jangalkhas Pond (0.6 Km, N), Ghritakham Pond (0.8 Km, W), Ghosher Bandh Pond (1.9 Km, NE), Shalboni Pond (2.5 Km, NNE) and Kangsabati Canal (3.5 Km, E) also exists within the study area of 10 km from the project site. The water bodies shall not be disturbed. Mitigation measures w.r.t. safeguarding the water bodies shall be implemented.

10. The Committee has found that the baseline data and incremental GLC due to the proposed project within NAAQ standards.

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 Committee deliberated upon the certified compliance report of IRO dated 19.10.2022 and 15.11.2022 and found it satisfactory. Further, the EAC also deliberated on the verification report issued by Integrated Regional Office, MoEFCC, Kolkata vide letter No. - 102-179/07/EPE dated 07.06.2021 of corrective action taken by the project proponent on each of the observations of the sub-committee and found it satisfactory.

14. The EAC also deliberated on the ADS reply submitted by the 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.

Recommendations of the Committee

22.5.25 In view of the foregoing and after detailed deliberations, the committee **recommended** the instant proposal for grant of Environment Clearance **subject to uploading** Appendix -VI of ADS reply dated 07.01.2023 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 obtain land permission for the entire proposed land from the Competent Authority prior to commencement of 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. 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.

v. Tailings from Iron Ore washing plant shall be dewatered in filter press and stored dry maximum for a period of 30 days inside the plant premises.

vi. The Leaching study of the tailings shall be conducted from the tailings stacks/ storage dumps every six-monthly to assess contamination of ground water and surface water sources. The PP shall take all adequate mitigation measures. The leaching study reports shall be submitted to MoEFCC.

vii. The Acid mine/ Metalliferous drainage assessment shall be done periodically and the results shall be submitted to MoEFCC. The PP shall take all adequate mitigation measures.

viii. The Piezometric wells shall be established in all directions surrounding the project area to monitor groundwater levels and determine aquifer parameters such as transmissibility, hydraulic conductivity, storage, to sample groundwater for chemical/ heavy metals/ toxic leachates and microbiological analysis.

ix. The PP shall adopt the best practices of House-keeping in the whole project area and specially whre the tailings are proposed to be stacked.

x. Sinter Plant shall be equipped with Sinter cooler waste recovery system and suitable technology for control of dioxins and furans emissions from the plant.

xi. The gasifier shall be equipped with closed loop circuit design, proper collection and treatment system shall be in place before commencement of production for tar and phenolic waste generated if any.

xii. Tar shall be recovered from producer gas and shall be sold to registered processors and Phenolic water from PGP shall be treated for phenol, tar and cyanide.

xiii. SAF/EAF shall be closed type and fourth hole extraction system shall be included for fume control from these furnaces.

xiv. 85-90 % of billets shall be rolled directly in hot stage. RHF shall operate using only Light Diesel Oil or Mixed BF/CO gas/Producer gas.

xv. Dust emission from Steel Plant stacks shall be up to 30 mg/Nm^3. Control measures for fugitive emission from raw material storage, packaging section, transfer points, movement of trucks, loading and unloading shall be implemented.

xvi. Under the instant proposal two more CAAQMS shall be included and all these stations shall now be located as - Station 1 – N Direction, Station 2 – SE Direction, Station 3 – SSW Direction, Station 4 – SW Direction and Station 5 – NE Direction.

xvii. FeCr slag after jigging shall be subjected to TCLP test to ensure its utilization or disposal in TSDF.

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

xix. The company shall also undertake rain water harvesting measures as per the plan submitted and reduce water dependence from the outside source.

xx. The company shall obtain complete acquisition of the project land prior to commencement of the project work.

xxi. The water requirement of 7,680 m^3/day shall be obtained from Subarnarekha River (335 days @ 7380), Rain Water Harvesting (30 days @ 7380 KLD) & Ground water-(365 days @ 300.0 KLD) (for domestic purpose). Necessary permissions shall be obtained

from Competent Authority. PP shall explore the possibility to shift to alternate source of water to reduce the dependency to ground water.

xxii. Two rain water harvesting ponds are existing within the project site. Three R.W.H Structure of RCL (0.5 Km, NE), Jangalkhas Pond (0.6 Km, N), Ghritakham Pond (0.8 Km, W), Ghosher Bandh Pond (1.9 Km, NE), Shalboni Pond (2.5 Km, NNE) and Kangsabati Canal (3.5 Km, E) also exists within the study area of 10 km from 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.

xxiii. Acid recovery plant shall be included to recover acid from pickling lines.

xxiv. Air cooled condensers shall be used in the Power plant. 100% consumption of Dolo char in FBC based boiler.

xxv. Ultralow NOx burner with three stage combustion, flue gas recirculation and auto combustion control system shall be used.

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

xxvii. Three tier Green Belt shall be developed in atleast 33% of project area in a time frame of one year 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. 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. Compliance status in this regard, shall be submitted to concerned Regional Office of the MoEF&CC.

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

xxix. The coal dust to be measured at coal handling areas, ball mills, furnace charging areas through personal and area monitoring and to be compared and it should be within 2 mg/m^3, respirable dust fraction containing less than 5% quartz as per Indian Factories Act, 1948.

xxx. The proposed project shall be designed as "Zero Liquid Discharge" Plant. There shall be no discharge of effluent from the plant. Domestic waste water will be treated in STP and treated water shall be re-used for greenbelt development and plantation and dust suppression.

xxxi. All internal road and connecting road from project site to main highway shall be developed and maintained with suitable Million Axle Standard (MSA) as per the traffic load due to existing and proposed project. All plant roads shall be paved and industrial vacuum cleaners shall be used to clean the roads regularly.

xxxii. All stockyards shall be having impervious flooring and shall be equipped with water spray system for dust suppression. Stock yards shall also have garland drains to trap the run off material.

xxxiii. As committed to adopt 08 villages namely Salboni, Shirshi, Baghmuri, Jitusole, Garo, Ghritakham, Jangalkhas & Boria, project proponent shall prepare and implement a robust plan to develop them into model villages in next 10 years.

xxxiv. Action Plan for fire fighting system including provision for flame detectors, temperature actuated heat detectors with alarms, automatic sprinkler system, fixing the location of

fire water tanks, separate power system for fire fighting, involvement of qualified and trained fire personnel, nearest fire station & time required to reach the proposed site shall be prepared and implemented.

xxxv. All the commitments made to the public during the Public Hearing/Public Consultation 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.

xxxvi. 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.

xxxvii. 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.

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 (CAAQS) 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 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.

iii. Sampling facility at process stacks and at quenching towers shall be provided as per CPCB guidelines for manual monitoring of emissions.

iv. 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.

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

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

vii. 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.

viii. The project proponent use leak proof trucks/dumpers carrying coal and other raw materials and cover them with tarpaulin.

ix. 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).

x. Land-based APC system shall be installed to control coke pushing emissions.

xi. Monitor CO, HC and O2 in flue gases of the coke oven battery to detect combustion efficiency and cross leakages in the combustion chamber.

xii. 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.

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

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

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 vide G.S.R 277 (E) dated 31st March 2012 (Integrated iron & Steel); G.S.R 414 (E) dated 30th May 2008 (Sponge Iron) as amended from time to time; S.O. 3305 (E) dated 7th December 2015 (Thermal Power Plants) 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. Sewage Treatment Plant shall be provided for treatment of domestic wastewater to meet the prescribed standards.

iv. 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.
v. Tyre washing facilities shall be provided at the entrance of the plant gates.
vi. Water meters shall be provided at the inlet to all unit processes in the steel plants.

IV. Noise monitoring and prevention

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

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. Ensure installation of regenerative/recuperative type burners on all reheating furnaces.

VI. Waste management

i. An attrition grinding unit to improve the bulk density of BF granulated slag from 1.0 to 1.5 Kg/l shall be installed to use slag as river sand in construction industry.
ii. Carbon recovery plant to recover the elemental carbon present in GCP slurries for use in Sinter plant shall be installed.
iii. Used refractories shall be recycled as far as possible.
iv. 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.
v. 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.
vi. Kitchen waste shall be composted or converted to biogas for further use.

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.

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. 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.

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. 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.

vi. 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.

vii. 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.

viii. 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.

ix. 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.

x. 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).

xi. 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.

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

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

xiv. 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.

xv. 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.

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Consideration of ToR

Agenda No. 22.6

22.6 Greenfield Project comprising of establishment of DRI Kilns (Sponge iron – 7,00,000 TPA), Induction Furnace with LRF & CCM (Hot Billets / MS Billets / MS Slab – 6,72,000 TPA), Rolling Mill (TMT Bars, Structural Steel - Angles, Channels, Gutters, Coils, Flat Bars, Strips, MS Pipes, MS Tubes, Galvanized Pipes and angles (85 % Hot charging with Hot Billets and remaining 15% through RHF with LDO/Producer Gas as fuel – 7,00,000 TPA), Coal Gasifier for Rolling Mill (6,300 Nm3/ hr), Ferro Alloys – 3 x 9 MVA (FeSi – 21,000 TPA / FeMn-75,600 TPA / SiMn-43,200 TPA / FeCr-45,000 TPA / Pig Iron – 75,600 TPA), WHRB based Power Plant – 60 MW, FBC based Power Plant - 20MW, Galvanizing Plant (1,00,000 TPA), Brick Manufacturing unit (70,000 Bricks/day) & Briquetting Plant (Briquettes – 300 Kg/Hr.)] M/s BHAGYALAXMI METALS PRIVATE LIMITED, located at Plot No: B-1, Mul Growth Center Mul Village & Tehsil, Chandrapur District, Maharashtra- Consideration of TOR.

[Proposal No. IA/MH/IND1/407975/2022; File No. IA-J-11011/347/2022-IA-II(IND-I)]
[Consultant: M/s Pioneer Enviro Laboratories & Consultants Pvt. Ltd.; Valid upto 11.03.2023

22.6.1 M/s. Bhagyalaxmi Metals Pvt. Ltd has made an online application vide proposal no. IA/MH/IND/407975/2022 dated 06.01.2023 along with the application in prescribed format (Form-I), 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 Sl. No. 3(a) Metallurgical Industries (Ferrous and Non-ferrous) and 1(d) Thermal Power Plants under Category "A" of the schedule of the EIA Notification, 2006 and appraised at central level.

22.6.2 Name of the EIA consultant: M/s. Pioneer Enviro Laboratories & Consultants Pvt. Ltd. [List of ACOs with their Certificate / Extension Letter No: QCI/NABET/ENV/ACO/22/2613 valid till 11.03.2023, as on February 01, 2023].

Details submitted by Project proponent

22.6.3 The project of M/s. Bhagyalaxmi Metals Pvt. Ltd located at Plot No. B-1, Mul Growth Center, Mul Village & Taluka, Chandrapur District, Maharashtra is for setting up of new Steel Plant comprising of establishment of DRI Kilns (Sponge iron – 7,00,000 TPA), Induction Furnace with LRF & CCM (Hot Billets / MS Billets / MS Slab – 6,72,000 TPA), Rolling Mill (TMT Bars, Structural Steel - Angles, Channels, Gutters, Coils, Flat Bars, Strips, MS Pipes, MS Tubes, Galvanized Pipes and angles (85 % Hot charging with Hot Billets and remaining 15% through RHF with LDO/Producer Gas as fuel – 7,00,000 TPA), Coal Gasifier for Rolling Mill (6,300 Nm3/ hr), Ferro Alloys – 3 x 9 MVA (FeSi – 21,000 TPA / FeMn-75,600 TPA / SiMn-43,200 TPA / FeCr-45,000 TPA / Pig Iron – 75,600 TPA), WHRB based Power Plant – 60 MW, FBC

based Power Plant - 20MW, Galvanizing Plant (1,00,000 TPA), Brick Manufacturing unit (70,000 Bricks/day) & Briquetting Plant (Briquettes – 300 Kg/Hr.)].

22.6.4 Environmental site settings:

<table>
<tr><th>S.No.</th><th>Particulars</th><th>Details submitted by PP</th><th>Remarks</th></tr>
<tr><td>i.</td><td>Total Land</td><td>29.44 Ha. (72.74 Acres)
(Govt. Land)</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>Total land identified for the proposed project is 29.44 Ha. (72.74 Acres) and has been allotted by Maharashtra Industrial Development Corporation (MIDC) vide no. MIDC/RON/Mul/B-1/4333/2010 dt. 13.09.2010 and subsequently the same land has been reallotted vide letter No. MIDC/RO(NAGPUR)/Mul/LMS-72/1691/2022 dt. 09/05/2022.</td><td>---</td></tr>
<tr><td>iii.</td><td>Existence of habitation & involvement of R & R, if any</td><td><u>Project site:</u>
No habitation exists in project site; Hence no R & R is involved.

<u>Study area:</u>
Nearest habitation: Maregaon Village – 0.8 Kms. (SW Direction)</td><td>---</td></tr>
<tr><td>iv.</td><td>Latitude and Longitude of the project site</td><td>Latitude and Longitude of the project site:<table><tr><th>S.No.</th><th>Point</th><th>Coordinates</th></tr><tr><td>6.</td><td>Point # 1</td><td>20°5'30.08"N
79°42'53.91"E</td></tr><tr><td>7.</td><td>Point # 2</td><td>20°5'30.64"N
79°43'01.40"E</td></tr><tr><td>8.</td><td>Point # 3</td><td>20°5'30.36"N
79°43'10.56"E</td></tr><tr><td>9.</td><td>Point # 4</td><td>20°5'12.87"N
79°43'12.50"E</td></tr><tr><td>10.</td><td>Point # 5</td><td>20°5'11.21"N
79°42'51.96"E</td></tr><tr><td>11.</td><td>Point # 6</td><td>20°5'15.93"N
79°42'51.96"E</td></tr><tr><td>12.</td><td>Point # 7</td><td>20°5'15.93"N
79°42'56.13"E</td></tr><tr><td>13.</td><td>Point # 8</td><td>20°5'18.42"N
79°42'56.13"E</td></tr><tr><td>14.</td><td>Point # 9</td><td>20°5'18.70"N
79°42'53.07"E</td></tr></table></td><td>---</td></tr>
<tr><td>v.</td><td>Elevation of the project site</td><td>MSL of the Project area – 197 m to 203 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 project site.</td><td>---</td></tr>
</table>

<table>
<tr><th>S.No.</th><th>Particulars</th><th>Details submitted by PP</th><th>Remarks</th></tr>
<tr><td></td><td></td><td><u>Forests within 10 Kms. radius</u>
Scrub Forest (Zudpi Jungle) exists adjacent to the project site (South direction)
Rajoli RF – Adjacent to the project site (NEE)
Mul RF - 6.6 kms (SSW)</td><td></td></tr>
<tr><td>vii.</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>Water Body</th><th>Distance & Direction</th></tr><tr><td>Human Nadi</td><td>2.5 kms (E)</td></tr><tr><td>Mul river</td><td>3.9 kms (S)</td></tr><tr><td>Saloli Nadi</td><td>2.7 kms (SSE)</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><table><tr><th>Name</th><th>Distance w.r.t project site</th></tr><tr><td>Tadoba Andhari Tiger Reserve - Boundary</td><td>17.0 Kms.</td></tr><tr><td>Tadoba Andhari Tiger Reserve – ESZ</td><td>5.0 Kms.</td></tr></table>
Status of NBWL approval: Not applicable, as project site is outside the ESZ of Tadoba Andhari Tiger Reserve (which is notified by MoEF&CC vide dt. 11.09.2019)

<u>List of Reserved Forests & Protected Forests:</u>
Reserved Forests:
• Rajoli RF – Adjacent to the project site (NEE)
• Mul RF - 6.6 kms (SSW)

Protected Forests:
• Nil</td><td>• There are no notified National Park / Wild life sanctuary / Biosphere reserve / Elephant corridor within 10 Km. radius of the project site.
• Letter is issued by Divisional Forest Officer, Chandrapur Forest Division, Chandrapur, Forest Department, Govt. of Maharashtra vide letter no. Desk-14 / Survey / Land / 1863 dt. 30.12.2022, confirming that the
i) Tadoba – Andhari Tiger reserve boundary starting point is at a distance of 17.18 Kms. & beyond from the project site
ii) ii) ESZ is at distance of 5.0 Kms. from the project site
• GO has been issued by MoEF&CC vide dt. 11.09.2019 notifying Tadoba – Andhari Tiger Reserve.
• Preparation of Conservation plan & PCCF approval for the</td></tr>
</table>

S.No.	Particulars	Details submitted by PP	Remarks
			same and will be incorporated in EIA report.

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

S.No.	Unit (Product)		Configuration	Capacity
1.	DRI Kilns (Sponge Iron)		4 x 500 TPD	7,00,000 TPA
2.	Induction Furnaces (Hot Billets / MS Billets / MS Slab)		4 x 40 T	6,72,000 TPA
3.	Rolling Mills (TMT Bars, Structural Steel - Angle, Channels, Gutters, Coils, Flat Bars, Strips, MS Pipes, MS Tubes, Galvanized Pipes and angles) (85 % Hot charging with Hot Billets and remaining 15% through RHF with LDO / Producer Gas as fuel)		1 x 1300 TPD & 1 x 700 TPD	7,00,000 TPA
4.	Coal Gasifier for Rolling Mill		6,300 NM^3/ Hr	6,300 NM^3/ Hr
5.	Submerged Electric Arc Furnaces – Ferro Alloys (FeSi / FeMn / SiMn / FeCr/Pig Iron)		3 x 9 MVA	FeSi – 21,000 TPA / FeMn-75,600 TPA / SiMn-43,200 TPA / FeCr-45,000 TPA/ Pig Iron - 75,600 TPA
6.	Power plant (80 MW)	WHRB Based Power Plant	4 x 15 MW	60 MW
		FBC Based Power Plant	1 x 20 MW	20 MW
7.	Galvanizing Unit		---	1,00,000 TPA
8.	Bricks manufacturing Unit		70,000 Bricks /Day	70,000 Bricks /Day
9.	Briquetting plant		300 Kg/Hr.	300 Kg/Hr.

22.6.6 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 from site (in Kms.)	Mode of Transport
1.	Pellets	10,15,000	Maharashtra / Chhattisgarh	~ 500 Kms.	By road (through covered trucks)
	OR				
2.	Iron ore	11,20,000	Maharashtra / Chhattisgarh	~ 500 Kms.	By rail & road (through covered trucks)
3.	Sponge Iron	6,79,000	Own generation	---	Through covered conveyers
4.	MS Scrap / Pig Iron	1,01,000	Maharashtra	~ 100 Kms.	By road (through covered trucks)
5.	Ferro alloys	34,000	Own generation	---	By road (through covered trucks)

S.No.	Raw Material	Quantity (TPA)	Sources	Distance from site (in Kms.)	Mode of Transport
6.	LDO	3400 Kl/annum	Nearby IOCL Depot	~ 100 Kms.	By road (through Tankers)
7.	Hot Billets (for Hot charging)	5,95,000	Own generation	---	----
8.	Billets (for Reheating furnace)	1,05,000	Inhouse Generation	---	---
9.	Manganese Ore	1,71,990	MOIL / OMC	~ 500 Kms.	By Rail & Road (through covered trucks)
10.	LAM coke	27,594	Andhra Pradesh	~ 500 Kms.	By road (through covered trucks)
11.	Quartz	10,368	Maharashtra / Andhra Pradesh	~ 500 Kms.	By road (through covered trucks)
12.	MS Scrap / Mill scales	11,340	Inhouse Generation	---	By road (through covered trucks)
13.	Electrode Paste	1,512	Maharashtra / West Bengal	~ 300 Kms.	By road (through covered trucks)
14.	Bagfilter dust	3,780	Own generation	---	---
15.	Magnetite / Bauxite	7,605	Chhattisgarh / Maharashtra	~ 500 Kms.	By road (through covered trucks)
16.	Dolomite	12,852	Chhattisgarh / Andhra Pradesh	~ 500 Kms.	By road (through covered trucks)
17	Hot Billets (for Hot charging)	2,91,720	Own generation	---	----
18.	Indian Coal	10,47,700	SECL Chhattisgarh /MCL Odisha	~ 500 Kms.	By rail & road (through covered trucks)
19.	Imported Coal	6,70,496	Indonesia / South Africa / Australia	~ 600 Kms. (from Vizag Port)	Through sea route, rail route & by road (through covered trucks)
20.	Chrome Ore	90,000	Sukinda, Odisha Import, South Africa	~ 500 Kms. ~ 600 Kms. (from Vizag Port)	By road (through covered trucks) From Port By Road (through covered Trucks)
21.	FeMn Slag	45,708	In house generation	---	----
22.	HG Iron Ore	1,11,510	Maharashtra / Chhattisgarh	~ 500 Kms.	By rail & road (through covered trucks)

22.6.7 Water required for the proposed project will be 2800 KLD. Water required for proposed project will be supplied by Maharashtra Industrial Development Corporation (MIDC). In case of any shortfall from MIDC, it is proposed to source remaining quantity of water through Borewells in the company owned private land of 10 acres, proximate to the proposed project site (which not

part of the MIDC land). A pipeline will be laid to bring water to the proposed project site. Approval will be obtained from CGWA for drawl of Ground water.

22.6.8 Power required for the proposed project will be 121.0 MW and same will be sourced from Captive Power Plant (80.0 MW) and remaining (41.0 MW) from State Grid.

22.6.9 The capital cost of the project is Rs. 615 Crores and capital cost for Environmental Protection Measures is proposed as Rs. 61.5 Crores. Employment generation from proposed project will be 250 nos. through direct employment and 500 nos. through indirect employment.

22.6.10 It is submitted that there is no violation under EIA notification 2006/no court cases/no show cause/no direction related to the project under consideration.

22.6.11 Proposed Terms of Reference: [Baseline data collection period: 1st March to 31st May 2022]

Attributes	Sampling		Remarks
	No. of Stations	Frequency	
A. Air			
a. Meteorological parameters	1	On hourly basis for one season	• Wind Speed • Wind Direction • Temperature • Relative Humidity • Rainfall
b. AAQ parameters	8	24 hourly Twice a week for 3 months (One Season)	Parameters Monitored: • $PM_{2.5}$ • PM_{10} • SO_2 • NOx • CO
B. Noise	8	On hourly basis for 24 Hrs. at each station	Parameters Monitored: • Day equivalent • Night equivalent
C. Water			
a. Ground Water	8	One sample at each of the locations	Parameters Monitored: as per IS: 10500
b. Surface Water	4	One sample at each of the locations	Parameters Monitored: as per BIS: 2296
D. Land			
a. Soil quality	8	One sample at each of the locations	Parameters Monitored: Texture, infiltration rate, SAR bulk density, pH, Ca, Mg, Na, K, Zn, Mn
b. Land use	--	--	LU map prepared by concerned FAE for study area
E. Biological			
a. Aquatic	--	Once in Season	---

Attributes	Sampling		Remarks
	No. of Stations	Frequency	
b. Terrestrial	--	Once in Season	Preparation of Conservation plan & PCCF approval for the same
F. Socio economic parameters	--	Once in Season	Social Impact Assessment by concerned FAE for study area

Deliberation by the Committee

22.6.12 The Committee noted the following:

i. The instant proposal is for setting up of new Steel Plant comprising of establishment of DRI Kilns (Sponge iron – 7,00,000 TPA), Induction Furnace with LRF & CCM (Hot Billets / MS Billets / MS Slab – 6,72,000 TPA), Rolling Mill (TMT Bars, Structural Steel - Angles, Channels, Gutters, Coils, Flat Bars, Strips, MS Pipes, MS Tubes, Galvanized Pipes and angles (85 % Hot charging with Hot Billets and remaining 15% through RHF with LDO/Producer Gas as fuel – 7,00,000 TPA), Coal Gasifier for Rolling Mill (6,300 Nm3/ hr), Ferro Alloys – 3 x 9 MVA (FeSi – 21,000 TPA / FeMn-75,600 TPA / SiMn-43,200 TPA / FeCr-45,000 TPA / Pig Iron – 75,600 TPA), WHRB based Power Plant – 60 MW, FBC based Power Plant - 20MW, Galvanizing Plant (1,00,000 TPA), Brick Manufacturing unit (70,000 Bricks/day) & Briquetting Plant (Briquettes – 300 Kg/Hr.)].

ii. The EAC deliberated on the proposal. Based on the KML file presented by the PP, the proposed Unit is greenfield project.

iii. Total Project area is 29.44 ha and has been allotted by Maharashtra Industrial Development Corporation (MIDC) vide no. MIDC/RON/Mul/B-1/4333/2010 dt. 13.09.2010 and subsequently the same land has been reallotted vide letter No. MIDC/RO(NAGPUR)/Mul/LMS-72/1691/2022 dt. 09/05/2022.

iv. The nearest habitation to plant is Maregaon village at a distance of 0.8 km from the project site boundary in the SW direction.

v. Human Nadi (2.5 Km, E), Mul river (3.9 Km, S) and Saloli Nadi (2.7 Km, SSE), are flowing 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 prepared and included in the EIA/EMP Report.

vi. Tadoba Andhari Tiger Reserve is at a distance of 17 km from the project site boundary and its ESZ is at distance of 5 km from the project site boundary. Letter is issued by Divisional Forest Officer, Chandrapur Forest Division, Chandrapur, Forest Department, Govt. of Maharashtra vide letter no. Desk-14 / Survey / Land / 1863 dt. 30.12.2022 certifying the same.

vii. Water required for the proposed project will be 2800 KLD which will be supplied by Maharashtra Industrial Development Corporation (MIDC). In case of any shortfall from MIDC, it is proposed to source remaining quantity of water through Borewells in the company owned private land of 10 acres, proximate to the proposed project site (which

not part of the MIDC land). Approval will be obtained from CGWA for drawl of Ground water.

Recommendations of the Committee

22.6.13 After deliberations, the Committee **recommended** the project proposal for prescribing following specific ToRs for undertaking detailed EIA and EMP study in addition to the generic ToRs enclosed at **Annexure-1** read with additional ToRs at **Annexure-2**.

(i) The nearest habitation to plant is Maregaon village at a distance of 0.8 km from the project site boundary in the SW direction. Project Proponent shall prepare an action plan for environmental safeguard measures to minimise the impact on the habitation of the locals. The company shall also include some of these locations in its environmental monitoring programme.

(ii) Human Nadi (2.5 Km, E), Mul river (3.9 Km, S) and Saloli Nadi (2.7 Km, SSE), are flowing 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.

(iii) Water required for the proposed project will be 2800 KLD which will be supplied by Maharashtra Industrial Development Corporation (MIDC). In case of any shortfall from MIDC, it is proposed to source remaining quantity of water through Borewells. PP shall explore the possibility of shifting to alternate source of water to reduce dependency on groundwater.

(iv) Detailed description of micro flora and fauna (terrestrial and aquatic) existing in the study area with special reference to rare, endemic and endangered species. Details of flora and fauna existing in the study area shall be duly authenticated by the concerned DFO of the area. In case of existence of any endangered species and Schedule I fauna, authenticated conservation plan shall be submitted.

(v) Explore possibilities for recycling and reusing of treated water in the unit to reduce the fresh water demand and waste disposal.

(vi) The PP should submit the photograph of monitoring stations & sampling locations. The photograph should bear the date, time, latitude & longitude of the monitoring station/sampling location. In addition to this PP should submit the original test reports and certificates of the labs which will analyze the samples.

(vii) PP shall submit action plan for rainwater harvesting system.

(viii) Action plan for 100 % solid waste utilization shall be submitted.

(ix) 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.

(x) 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.

(xi) 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 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", when PP comes for EC proposal. This study shall be formulated keeping in view of India's Net-zero commitment at the COP-26 Climate Summit.

(xii) As part of Corporate Environment Responsibility (CER) activity, company shall adopt nearby villages based on the socio-economic survey (10 Kms radial coverage from the project site) 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.

(xiii) Traffic study shall be carried out inter-alia including existing road details with traffic load, proposed quantum of material to be transported by sea/rail/road with anticipated vessels/rakes/vehicles details, line source modelling and infrastructure strengthening details etc., These details shall be included in the EIA report.

(xiv) Air Cooled condensers shall be used in the captive power plant.

(xv) Action plan for the stock piles with impervious floor, provision of garland drains and catch pits to trap run off material shall be submitted.

(xvi) Action plan to limit the dust emission from all the stacks below 30 mg/Nm^3 shall be furnished. Action plan for fugitive emission control in the plant premises shall be provided.

(xvii) A Plan of Action for disposal of e-waste must be drawn up and implemented.

(xviii) PP shall explore the possibility of plastic waste utilization in the Plant/Unit process.

(xix) Action Plan for fire fighting system including provision for flame detectors, temperature actuated heat detectors with alarms, automatic sprinkler system, location of fire water tanks & capacity, separate power system for fire fighting, details of qualified and trained fire personnel & their job specifications, nearest fire station & time required to reach the proposed site shall be submitted.

(xx) The PP shall conduct and submit Ponds Conservation Plan, Eco-development plan of Ponds

(xxi) The PP shall conduct and submit Soil conservation and Erosion control plan

(xxii) PP shall conduct and submit River/ drainage/ watershed protection and conservation plan

(xxiii) PP shall formulate Training modules on livelihood and skill development programs to make villagers employable, with special emphasis on Animal husbandry

(xxiv) Action plan for solid waste utilization; Recycle/reuse 100 % solid waste generated in the plant to be prepared.

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Re-Consideration of ToR

Agenda No. 22.7

22.7 Proposed Greenfield Cement Plant of 2.50 MTPA Clinker & 3.50 MTPA Cement (OPC/PPC), 50 MW Thermal Power Plant, and 15 MW Waste Heat Recovery Plant of M/s. Saraswati Power & Industries Private Limited, located at Tangeda, Vemavaram & Chennayyapalem Villages, Dachepalli & Machavaram Mandals, Guntur District, Andhra Pradesh – Consideration of TOR

[Proposal No. IA/AP/IND1/406403/2022; File No. J-11011/543/2009-IA.II(IND-I)]

22.7.1 M/s. Saraswati Power & Industries Private Limited has made an online application vide proposal no. IA/AP/IND1/406403/2022 dated 14.12.2022 along with the application in prescribed format (Form-I), 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(b) Cement Plants and 1(d) Thermal Power Plants under Category "A" of the schedule of the EIA Notification, 2006 and appraised at central level.

22.7.2 Name of the EIA consultant: M/s. B.S.Envi Tech Pvt. Ltd. [List of ACOs with their Certificate / Extension Letter No: NABET/EIA/2023/SA 0157 valid till 15.05.2023; as on February 1, 2023].

Details submitted by Project proponent

22.7.3 The project of M/s. Saraswati Power & Industries (P) Ltd., located in Tangeda, Vemavaram & Chennayyapalem village, Machavaram Mandal, Palnadu district, Andhra Pradesh State is for setting up of a greenfield Cement Plant – 2.5 MTPA Clinker & 3.5 MTPA Cement (OPC/PPC), 50 MW Thermal Power Plant, 15 MW Waste Heat Recovery Plant.

22.7.4 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>121.4 Ha [Private Agricultural land]</td><td>Land use:
<table>
<tr><th>S. No</th><th>Descriptions</th><th>Area (Ha)</th></tr>
<tr><td>1</td><td>Cement Plant – Process area including cement mill and packing area</td><td>10.30</td></tr>
<tr><td>2</td><td>Captive Power Plant with switch yard</td><td>10.00</td></tr>
<tr><td>3</td><td>Storages (Limestone, Coal & Additives)</td><td>12.00</td></tr>
<tr><td>4</td><td>Water reservoir</td><td>2.70</td></tr>
<tr><td>5</td><td>Railway siding</td><td>12.00</td></tr>
<tr><td>6</td><td>Truck parking</td><td>2.50</td></tr>
<tr><td>7</td><td>Roads</td><td>12.00</td></tr>
<tr><td>8</td><td>Area inbetween structures</td><td>9.40</td></tr>
</table></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></td><td>
<table>
<tr><td>9</td><td>Greenbelt</td><td>42.50</td></tr>
<tr><td>10</td><td>Colony</td><td>8.00</td></tr>
<tr><td></td><td>Total</td><td>121.4</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>SPIPL has purchased about 107 Ha. of land directly and balance is under process.</td><td>-</td></tr>
<tr><td>iii.</td><td>Existence of habitation & involvement of R&R, if any.</td><td>None, No R&R is involved
<u>Study Area:</u>
<table>
<tr><th>Habitation</th><th>Distance (Km)</th><th>Direction</th></tr>
<tr><td>Chennayyapalem</td><td>0.40</td><td>N</td></tr>
<tr><td>Vemavaram</td><td>0.88</td><td>ESE</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>LATITUDE N”</th><th>LONGITUDE E”</th></tr>
<tr><td>A</td><td>16°38'48.75” N</td><td>79°50'35.17” E,</td></tr>
<tr><td>B</td><td>16°38'48.03” N</td><td>79°51'12.52” E,</td></tr>
<tr><td>C</td><td>16°38'7.09” N</td><td>79°51'10.31” E,</td></tr>
<tr><td>D</td><td>16°38'16.77” N</td><td>79°50'35.67” E,</td></tr>
</table></td><td>-</td></tr>
<tr><td>v.</td><td>Elevation of the project site</td><td>68-83 m above MSL.</td><td>-</td></tr>
<tr><td>vi.</td><td>Involvement of Forest land if any.</td><td>No Forest Land Involved as reported by the PP.</td><td>-</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><u>Project site:</u>
1. Canal inside the Plant Site - S
<u>Study area</u>
2. Krishna River – 3.96 km - E
3. Stream Adjacent to the Plant Site - N.
4. Elaga Vagu – 5.36 km – NE
5. Chintriyal Major – 5.31 km – ENE
6. Ganneru Vagu – 4.07 km – SE
7. Ralla Vagu – 1.59 km – E
8. Tadutla Minor – 3.56 km – SSE
9. Barimeda Vagu – 2.71 km – W
10. Nearest Canal – 1.25 km - W
11. Tangeda Major Canal – 3.36 km – W
12. Nendra Vagu – 5.32 km – W</td><td>Krishna River is at 3.96 km

HFL of Krishna River is 51 m AMSL

Plant site is 83 m AMSL</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:
1. Reserved Forest beside Mamidimota Vagu – 10.07 km – N
2. Regulagadda RF – 1.27 km - NE
3. Pittalsarikota RF – 6.06 km – NE
4. Chintalapalem RF – 6.20 km – NE
5. Uranam RF – 5.36 km – ENE
6. Govindapuram RF – 2.76 km – ESE
7. Vemavaram RF – 1.44 km – S
8. Madinapadu RF – 4.19 km – WNW;
9. Tangeda RF – 3.40 – NW</td><td></td></tr>
</table>

S. No	Particulars	Details	Remarks
ix	Interlinked project	The limestone requirement of the plant will be 3.75 MTPA which will be met from the Captive Limestone Mining Leases located at 500 m from the plant site over an extent of 613.476 Ha in Tangeda Village, Dachepalli Tehsil, Palnadu District of Andhra Pradesh. The Captive Limestone mine spreads over an area of 613.476 Ha with about 592.6 Million Tonnes of mineable reserves feeding for more than 178 years. The mine was accorded integrated Environmental Clearance (EC) by MOEF&CC along with the cement plant vide letter No. F.NO. J-11011/543/2009 – IA II (I) dated 29.03.2012. As per SO 1533, EIA Notification, 2006, the EC is valid for the mine for 30 Years.	

22.7.5 The subject project of Saraswathi Power & Industries Limited Cement Plant was granted Environmental Clearance vide letter No. F.NO. J-11011/543/2009 –IA II (I) dated 29.03.2012 for Integrated Cement Plant (Clinker-2.5 MTPA; Cement-3.5 MTPA) along with Captive Power Plant (50 MW) and captive Limestone mine (3.75 MTPA). The EC validity was extended vide letter dated 03.07.2019 for a period of 3 years i.e. up to 28.03.2022. The instant proposal is for obtaining Terms of Reference for obtaining fresh Environmental Clearance for the same Project. There is no change in Capacity and location for which EC was granted earlier.

Implementation of the existing EC:

22.7.6 Due to economic down turn and sluggish market conditions, and delay in land acquisition and issues involved in mining lease, the project on ground could not be initiated. Considering the expiry of the EC validity, and the construction time requirement, SPIPL proposes to obtain fresh Environmental clearance.

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

Sl. No.	Units	Proposed Capacity
1	Clinker (MTPA)	2.5
2	Cement (OPC/PPC) (MTPA)	3.5
3	Coal Based Captive Power Plant (CPP) (MW)	50
4	Waste Heat Recovery Power Plant (MW)	15
5	Colony	150 Houses (<20000 m^2 – built-up area)

22.7.8 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.	Name of Raw Material	Quantity (MTPA)	Source	Approx. distance from plant (km)	Mode of Transportation	Remarks
1.	Limestone	3.75	Captive Mine / Outsource	500 M	Covered Conveyor Belt	Covered Stock Pile
2.	Bauxite	0.07	East Godavari & Vishakhapatnam (AP) / Local Market	300	Road	Covered shed
3.	Iron Ore	0.07	Cuddaph District (AP) / Local Market	450	Road	
4.	Gypsum (Mineral / Synthetic)	0.175	Captive Synthetic Gypsum Unit / Near-by Fertilizer Plants at Vizag / Vishakhapatnam	300	Road	
5.	Fly ash	0.95	CPP / Thermal Power Plants at VTPS /TSGENCO and Near-by Power Plants	30-100	Road	Silo
7	Coal for cement plant	0.360	Coal Indian - Preferably SCCL / Open market Imported Coal - Indonesia, South Africa, Australia etc.	220	Rail	Covered Stockpile
8	Coal for power plant	0.328	Coal Indian – E-auction	200-250	Rail	

22.7.9 The water requirement for Cement plant, captive power plant, colony and mines is estimated to be 2300 m^3/day, of which 350 m^3/day is treated recycled wastewater from Power Plants. The net fresh water requirement of the plant and mine will be 1950 m^3/day. The source of the water is Krishna River & Borewells. The permission for drawl of Krishna water was obtained from Govt. of A.P. vide G.O.MS. No. 16 Dt. 15-05-2020 for 19 Cusecs or 0.0689 TMC or 5345 m^3/day and Permission for drawl of Ground water was obtained from Ground Water Department, Govt. of A.P.

22.7.10 The total power requirement for the cement plant including will be about 40 MW and for proposed mine is about 4.0 MW. The total proposed capacity of the captive power plant will be 65 MW (50 MW coal-based power plant and 15 MW WHRB power plant).

22.7.11 The capital cost of the project is Rs.1800 Crores and the capital cost for environmental protection measures is proposed as Rs.150 Crores. The employment generation from the proposed project is 350.

22.7.12 PP has reported that no litigation is pending. However, a Writ Appeal has been filed in WA 340/2021 and leave to appeal is not yet granted by the Hon'ble High Court of Andhra Pradesh.

22.7.13 Proposed Terms of Reference: [Baseline data collection period: October 2022 – December 2022]

Attributes	Parameters	Sampling		Remarks
		No. of Stations	Frequency	
A. Air a) Meteorological Parameters	Temperature, wind speed, wind direction, relative humidity, rainfall, and cloud cover	1	24 hours	-
b) AAQ parameters	PM_{10}, $PM_{2.5}$, SO_2, NOx, and CO	9	Twice a week per-month for three months	-
B. Noise	Day and Night	9	24hour reading will-collected once in the monitoring season	-
C. Water Surface water/Ground water quality parameters	Surface water as per CPCB Ground Water as per IS 10500	8 9	Once in monitoring-season	-
D. Land a) Soil quality	As per CPCB covering Texture, pH, Electrical Conductivity, Exchangeable Cations, CEC, Organic Carbon, Organic Matter available NPK and Heavy Metals Remote sensing satellite data	9	Once in monitoring season	-
b) Land use		10 km radial-distance	-	-
E. Biological a. Aquatic b. Terrestrial	Primary as well as secondary data will be conducted for flora and fauna of the study area during monitoring Season.			
F. Socio-economic parameters	Primary and Secondary Data Collection Need Based Studies			

22.7.14 The proposal was initially considered during 20th meeting of the EAC for Industry-I sector held on 29th December, 2022 wherein after detailed deliberations, the Committee recommended to defer the proposal to address the shortcomings. The deliberations and recommendations of EAC are as follows:

Deliberation by the Committee (EAC during 29th December, 2022)

22.7.15 The Committee noted the following:

i. The EAC observed that PP has not 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 PP/ Consultant to present the drone survey during appraisal of the proposal. The EAC advised the Consultant to read the instructions given in the Agenda before coming to the EAC meeting.

ii. The Committee noted that a Writ Appeal has been filed in WA 340/2021 and leave to appeal is not yet granted by the Hon'ble High Court of Andhra Pradesh. The EAC is of the opinion that PP shall submit the details of the court case alongwith requisite documents.

iii. Total project area is 121.4 ha which is private agricultural land. M/s SPIPL has purchased about 107 Ha (88%) of land directly and balance is under process. PP shall submit credible document w.r.t. acquisition of land for the proposed project in pursuance to Ministry's O.M. vide F.No. 22-76/2014-IA-III dated 07.10.2014. It seems that Consultant is not properly read the provisions of EIA Notification, 2006.

iv. The nearest habitation to the proposed project site are Chennayyapalem (0.40 km, N) and Vemavaram (0.88 km, ESE). Project Proponent shall submit action plan for environmental safeguard measures to minimise the impact on the habitation of the locals.

v. There is a Canal inside the Plant Site in the South direction. Also, Krishna River (3.96 km – E), Stream (Adjacent to the Plant Site – N), Elaga Vagu (5.36 km – NE), Chintriyal Major (5.31 km – ENE), Ganneru Vagu (4.07 km – SE), Ralla Vagu (1.59 km – E), Tadutla Minor (3.56 km – SSE), Barimeda Vagu (2.71 km – W), Nearest Canal (1.25 km – W), Tangeda Major Canal (3.36 km – W) and Nendra Vagu (5.32 km – W) exists within the study area of 10 km of the project site. The EAC is of the opinion that the water bodies shall not be disturbed. The PP shall submit the suitable steps /conservation plan along with contouring (close intervals), Run -off calculations, disposal etc. A robust and full proof Micro-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.

vi. The PP shall explore the possibility to avoid ground water usage and propose alternative source of water for fulfilling its requirement.

vii. In view of above facts, EAC advised PP to revise the PFR covering all the desired information for further consideration.

viii. 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 29th December, 2022)

22.7.16 In view of the foregoing and after detailed deliberations, the Committee recommended to defer the proposal to address the shortcomings enumerated at para no. 22.7.15 above and revise the application accordingly. The proposal may be considered after submission of the requisite information.

22.7.17 The proponent submitted the ADS reply vide letter dated 10.01.2023 uploaded on PARIVESH on 11.01.2023. Point- wise reply of ADS is given as below:

Sl. No	ADS Point	Reply/Response of PP
1	The EAC observed that PP has not 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 PP/ Consultant to present the drone survey during appraisal of the proposal. The EAC advised the Consultant to read the instructions given in the Agenda before coming to the EAC meeting.	The Drone survey of the project site was conducted. Mosaic print of the same is submitted. Drone video will be displayed to the EAC during the appraisal.
2	The Committee noted that a Writ Appeal has been filed in WA 340/2021 and leave to appeal is not yet granted by the Hon'ble High Court of Andhra Pradesh. The EAC is of the opinion that PP shall submit the details of the court case alongwith requisite documents.	The case details along with requisite document are submitted. • **Mine lease granted:** 613.476 Ha adjacent to plant site. Mining lease executed with the Department of Mines and Geology, AP on August 20, 2009 for a period of 20 years • Government of Andhra Pradesh ("GoAP") issued G.O.Ms.No.98 cancelling mining lease and treated it as lapsed Rule 28(1) of Mineral Concession Rules, 1960 in October 2014. • SPIPL filed a Writ Petition W.P.No.33420 of 2014 before the Hon'ble High Court of Andhra Pradesh challenging the cancellation in December, 2014. • Hon'ble High Court restored the mining lease vide orders dated 15.10.2019. • GoAP alongwith restoring the mining lease has also extended lease period for 50 years dated 08.06.2020. Mining lease is Valid till 10.08.2059 • After a lapse of 19 months, Mr. Kanumuru Raghu Ramakrishna Raju, who has no locus standi in the matter, filed a writ appeal in **WA No. 340 of 2021 on 19.06.2021** in Hon'ble High Court challenging the order dated 15.10.2019 passed by the Hon'ble High Court in W.P No.33420 of 2019. He sought leave of the court to appeal. • The proposed appellant in WA 340/2021 is a stranger to the original writ petition. A stranger

Sl. No	ADS Point	Reply/Response of PP
		cannot pursue an Appeal without leave of the Appellate court and without the original parties being heard on the eligibility of the stranger to file and pursue the Appeal. • Saraswati filed counter affidavit on 16.07.2021 and the State also filed its counter on 15.07.2021. • Matter came up on multiple occasions (21) ever since 23.06.2021. The counsel for the proposed appellant has been seeking time without arguing for the reasons best known to them. Of late, it has been posted for hearing on 25.01.2023.
3	Total project area is 121.4 ha which is private agricultural land. M/s SPIPL has purchased about 107 Ha (88%) of land directly and balance is under process. PP shall submit credible document w.r.t. acquisition of land for the proposed project in pursuance to Ministry's O.M. vide F.No. 22-76/2014-IA-III dated 07.10.2014. It seems that Consultant is not properly read the provisions of EIA Notification, 2006.	Obtaining intent of the land owners for the balance land is under process.
4	The nearest habitation to the proposed project site are Chennayyapalem (0.40 km, N) and Vemavaram (0.88 km, ESE). Project Proponent shall submit action plan for environmental safeguard measures to minimise the impact on the habitation of the locals.	Chennayyapalem village is located at 0.40 km in N. The process units will be located 850 m away from the village. The colony of SPIPL and Water reservoir along with greenbelt are located towards Chennayapalem. Vemavaram village is located at 0.88 km in ESE. the process units will be located 850 m away from the village. Inbetween the process units and boundary wall, greenbelt of minimum 50 m will be provided to act as barrier. Further minimum of 20 m width greenbelt will be developed all along the boundary The cement plant will be designed to comply with the emission norm of Particulate matter <30 mg/Nm3, Sulphur dioxde < 100 mg/Nm^3 and Oxides of Nitrogen < 600 mg/Nm^3 The cement plant will have the following air pollution control equipment and systems: • Bag house system for cleaning of 2 No. of raw mill/kiln flue gas with 99.9 % efficiency. • Bag houses for coal mill and Cement Mill

Sl. No	ADS Point	Reply/Response of PP
		• No. of ESP for cooler for control of dust. • 95 Bag filter systems along with ventilation systems to control the fugitive dust generated from the material handling areas. • Low NOx burner with multichannel burner will be installed for kiln with optimised primary air • Latest Technology pyro system will be installed for better control of emissions All the flue gas outlets will be provided with air pollution control equipment to maintain the particulate emission level below 30 mg/Nm^3.
5	There is a Canal inside the Plant Site in the South direction. Also, Krishna River (3.96 km – E), Stream (Adjacent to the Plant Site – N), Elaga Vagu (5.36 km – NE), Chintriyal Major (5.31 km – ENE), Ganneru Vagu (4.07 km – SE), Ralla Vagu (1.59 km – E), Tadutla Minor (3.56 km – SSE), Barimeda Vagu (2.71 km – W), Nearest Canal (1.25 km – W), Tangeda Major Canal (3.36 km – W) and Nendra Vagu (5.32 km – W) exists within the study area of 10 km of the project site. The EAC is of the opinion that the water bodies shall not be disturbed. The PP shall submit the suitable steps /conservation plan along with contouring (close intervals), Run -off calculations, disposal etc. A robust and full proof Micro-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.	The irrigation canal located within the project site is a distribution canal for supply of water to the crops located with in the project area. With acquisition this land, the irrigation canal will be terminated at the boundary without effecting the supply to the surrounding agricultural area No other water bodies are located within the project area The slope of the land is towards NE direction. The project site will be provided with drainage and boundary wall to prevent draining of runoff water into the stream. A water reservoir is proposed at the NE corner. Storm water network will be provided in the project area to collect and drain water to rainwater harvesting pits. Detailed of storm water and runoff management along with calculations is submitted. The entire project area will be levelled during construction activity. No sloping areas will be there within the project areas which will result in soil erosion. The cement plant operational activities will not result in soil erosion. Most of the areas will be paved. 42.5 Ha will be developed under greenbelt covering. Grassing will be done in exposed areas within the plant site to prevent soil erosion. The boundary wall proposed all along will prevent carryover of any residual soil.

Sl. No	ADS Point	Reply/Response of PP
6	The PP shall explore the possibility to avoid ground water usage and propose alternative source of water for fulfilling its requirement.	The source of the water for project activities during operation is Krishna River. The permission for drawl of Krishna water was obtained from Govt. of A.P. vide G.O.MS. No. 16 Dt. 15-05-2020 for 19 Cusecs or 0.0689 TMC or 5345 m^3/day. Ground water will be tapped only on non-availability of surface water. Permission is already obtained from State Ground Water Department.
7	In view of above facts, EAC advised PP to revise the PFR covering all the desired information for further consideration.	Revised PFR incorporating above points is submitted.
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.	The desired information as above is incorporated in PFR and submitted on Parivesh-2.0 portal. SPIPL will reappear before EAC with drone video and additional information.

22.7.18 Based on the ADS reply of PP, the proposal is reconsidered during 22nd meeting of the EAC for Industry-I sector held on 30-31st January, 2023. The deliberations and recommendations of EAC are as follows:

Deliberation by the Committee

22.7.19 The Committee noted the following:

i. The instant proposal is for setting up of a greenfield Cement Plant – 2.5 MTPA Clinker & 3.5 MTPA Cement (OPC/PPC), 50 MW Thermal Power Plant, 15 MW Waste Heat Recovery Plant.

ii. The subject project of Saraswathi Power & Industries Limited Cement Plant was granted Environmental Clearance vide letter No. F.NO. J-11011/543/2009 –IA II (I) dated 29.03.2012 for Integrated Cement Plant (Clinker-2.5 MTPA; Cement-3.5 MTPA) along with Captive Power Plant (50 MW) and captive Limestone mine (3.75 MTPA). The EC validity was extended vide letter dated 03.07.2019 for a period of 3 years i.e. up to 28.03.2022. Due to economic down turn and sluggish market conditions, and delay in land acquisition and issues involved in mining lease, the project on ground could not be initiated.

iii. The instant project is a part of Interlinked project. The limestone requirement of the plant will be 3.75 MTPA which will be met from the Captive Limestone Mining Leases located at 500 m from the plant site over an extent of 613.476 Ha in Tangeda Village, Dachepalli Tehsil, Palnadu District of Andhra Pradesh. The Captive Limestone mine spreads over an area of 613.476 Ha with about 592.6 Million Tonnes of mineable reserves feeding for more than 178 years. The mine was accorded integrated Environmental Clearance (EC) by MoEF&CC along with the cement plant vide letter No. F.NO. J-11011/543/2009 –IA

II (I) dated 29.03.2012. As per SO 1533, EIA Notification, 2006, the EC is valid for the mine for 30 Years.

iv. The EAC deliberated on the proposal. Based on the KML file presented by the PP, the proposed Unit is green field project.

v. Total project area is 121.4 ha which is private agricultural land. M/s SPIPL has purchased about 107 Ha (88%) of land directly and balance is under process. PP has reported that obtaining intent of the land owners for the balance land is under process.

vi. The nearest habitation to the proposed project site are Chennayyapalem (0.40 km, N) and Vemavaram (0.88 km, ESE). PP has submitted an action plan for environmental safeguard measures to minimise the impact on the habitation of the locals.

vii. There is a Canal inside the Plant Site in the South direction. Also, Krishna River (3.96 km – E), Stream (Adjacent to the Plant Site – N), Elaga Vagu (5.36 km – NE), Chintriyal Major (5.31 km – ENE), Ganneru Vagu (4.07 km – SE), Ralla Vagu (1.59 km – E), Tadutla Minor (3.56 km – SSE), Barimeda Vagu (2.71 km – W), Nearest Canal (1.25 km – W), Tangeda Major Canal (3.36 km – W) and Nendra Vagu (5.32 km – W) exists within the study area of 10 km of the project site. The EAC is of the opinion that the water bodies shall not be disturbed. Action plan comprising of mitigation measures for conservation of the water bodies submitted shall be included in EIA/EMP report. For this purpose the PP to prepare and implement a contour map with definite contour interval and drainage conservation with its disposal showing proper indexing, deaigns, drawings etc.

viii. The water requirement for Cement plant, captive power plant, colony and mines is estimated to be 2300 m^3/day, of which 350 m^3/day is treated recycled wastewater from Power Plants. The net fresh water requirement of the plant and mine will be 1950 m^3/day. The source of the water is Krishna River & Borewells. PP has further reported Ground water will be tapped only on non-availability of surface water. Permission is already obtained from State Ground Water Department.

ix. The Committee noted that a Writ Appeal has been filed in WA 340/2021 and leave to appeal is not yet granted by the Hon'ble High Court of Andhra Pradesh.

x. The EAC deliberated on the ADS reply to the issues raised in earlier meeting nad found it satisfactory.

Recommendations of the Committee

22.7.20 After deliberations, the Committee **recommended** the project proposal for prescribing following specific ToRs for undertaking detailed EIA and EMP study along with conduction of Public Hearing in addition to the generic ToRs enclosed at Annexure-1 read with additional ToRs at Annexure-2:

(i) This TOR for undertaking detailed EIA and EMP study is subject to outcome of writ appeal [WA No. 340 of 2021] in Hon'ble High Court challenging the order dated 15.10.2019 passed by the Hon'ble High Court in W.P No.33420 of 2019 in the matter.

(ii) The nearest habitation to the proposed project site are Chennayyapalem (0.40 km, N) and Vemavaram (0.88 km, ESE). Project Proponent shall include the action plan for environmental safeguard measures to minimise the impact on the habitation of the locals in the EIA/EMP report. The company shall also include this location in its environmental monitoring programme.

(iii) There is a Canal inside the Plant Site in the South direction. Also, Krishna River (3.96 km – E), Stream (Adjacent to the Plant Site – N), Elaga Vagu (5.36 km – NE), Chintriyal Major (5.31 km – ENE), Ganneru Vagu (4.07 km – SE), Ralla Vagu (1.59 km – E), Tadutla Minor (3.56 km – SSE), Barimeda Vagu (2.71 km – W), Nearest Canal (1.25 km – W), Tangeda Major Canal (3.36 km – W) and Nendra Vagu (5.32 km – W) exists 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 Micro-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.

(iv) PP shall submit credible document at the time of submission of EC application w.r.t. acquisition of land for the proposed project in pursuance to Ministry's O.M. vide F.No. 22-76/2014-IA-III dated 07.10.2014.

(v) PP shall explore the possibility to avoid ground water usage for fulfilling its requirement.

(vi) Detailed description of micro flora and fauna (terrestrial and aquatic) existing in the study area with special reference to rare, endemic and endangered species.

(vii) Explore possibilities for recycling and reusing of treated water in the unit to reduce the fresh water demand and waste disposal.

(viii) The PP should submit the photograph of monitoring stations & sampling locations. The photograph should bear the date, time, latitude & longitude of the monitoring station/sampling location. In addition to this PP should submit the original test reports and certificates of the labs which will analyze the samples.

(ix) PP shall submit action plan for rainwater harvesting system.

(x) Action plan for 100 % solid waste utilization shall be submitted.

(xi) Action plan for establishment of conveyor between the plant site and limestone mine shall be submitted.

(xii) 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.

(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) 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 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", when PP comes for EC proposal. This study shall be formulated keeping in view of India's Net-zero commitment at the COP-26 Climate Summit.

(xv) As part of Corporate Environment Responsibility (CER) activity, company shall adopt nearby villages based on the socio-economic survey (10 Kms radial coverage from the project site) 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.

(xvi) Traffic study shall be carried out inter-alia including existing road details with traffic load, proposed quantum of material to be transported by sea/rail/road with anticipated vessels/rakes/vehicles details, line source modelling and infrastructure strengthening details etc., These details shall be included in the EIA report.

(xvii) Action plan for the stock piles with impervious floor, provision of garland drains and catch pits to trap run off material shall be submitted.

(xviii) Action plan to limit the dust emission from all the stacks below 30 mg/Nm^3 shall be furnished.

(xix) A Plan of Action for disposal of e-waste must be drawn up and implemented.

(xx) PP shall explore the possibility of plastic waste utilization in the Plant/Unit process.

(xxi) Action Plan for fire fighting system including provision for flame detectors, temperature actuated heat detectors with alarms, automatic sprinkler system, location of fire water tanks & capacity, separate power system for fire fighting, details of qualified and trained fire personnel & their job specifications, nearest fire station & time required to reach the proposed site shall be submitted.

(xxii) The PP shall conduct and submit Ponds Conservation Plan, Eco-development plan of Ponds

(xxiii) The PP shall conduct and submit Soil conservation and Erosion control plan

(xxiv) PP shall formulate Training modules on livelihood and skill development programs to make villagers employable, with special emphasis on Animal husbandry

(xxv) Action plan for solid waste utilization; Recycle/reuse 100 % solid waste generated in the plant to be prepared.

***

DAY 2: JANUARY 31st, 2023 (TUESDAY)

Consideration of Environmental Clearance Proposals

Agenda No. 22.8

22.8 Proposed Integrated Cement Plant - Clinker (3.25 MTPA), Cement (2.5 MTPA), WHRS (15 MW) and D.G. Set (1000 KVA) by M/s. Dalmia Cement (Bharat) Ltd., located at at Kharora, Tehsil: Kharora (Earlier Tilda), District: Raipur, Chhattisgarh - Consideration of Environmental Clearance.

[Proposal No. IA/CG/IND1/413879/2023; File No IA-J-11011/163/2019-IA.II(IND-I)]
[Consultant: J.M. Environet Pvt. Ltd.; Valid upto: 07.02.2023]

22.8.1 M/s. Dalmia Cement (Bharat) Limited has made an online application vide proposal no. IA/CG/IND1/413879/2023 dated 23.01.2023 along with copy of EIA/EMP 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(b) Cement Plants under Category "A" of the schedule of the EIA Notification, 2006 and appraised at central level.

22.8.2 Name of the EIA consultant: M/s. J.M. Environet Pvt. Ltd. [List of ACOs with their Certificate / Extension Letter no. NABET/EIA/2023/SA0158; Valid up to 05.05.2023, as on February 1, 2023].

Details submitted by Project proponent

22.8.3 The details of the ToR are furnished as below:

Date of application	Consideration	Details	Date of accord	ToR Validity
30th March, 2019	7th meeting of R-EAC (Industry - I) held during 29-31st May, 2019	Terms of Reference	27th June, 2019	26th June, 2023

22.8.4 The project of M/s. Dalmia Cement (Bharat) Limited located at Kharora Village, Kharora (Earlier Tilda) Tehsil, Raipur District, (Chhattisgarh) State is for Proposed Integrated Cement Plant - Clinker (3.25 MTPA), Cement (2.5 MTPA), WHRS (15 MW) and D.G. Set (1000 KVA).

22.8.5 Environmental Site Settings:

S. No.	Particulars	Details	Remarks
1.	Total land	Total area 60 Ha [Pvt. Land – 59.717; Govt. Land – 0.081] Earlier, total land area proposed for the Plant was approx. 102.6 ha (Including colony, CPP and Conveyor to mine). ToR was obtained from MoEFCC for the same area on 27th June, 2019 and Public hearing has also been conducted on 24th January, 2020 for the same area and same	Land use: Agricultural Land.

<table>
<tr><th>S. No.</th><th>Particulars</th><th>Details</th><th>Remarks</th></tr>
<tr><td></td><td></td><td>configuration. However, due to delay in land acquisition because of Covid, DCBL has dropped the proposal for setting of CPP and colony which in turn the proposed project area reduced from 102.6 ha to 60.0 ha. Now, DCBL proposes to install the Cement Plant excluding the CPP and colony over an area of 60 ha.</td><td></td></tr>
<tr><td>2.</td><td>Land acquisition details as per MoEF&CC O.M. dated 7/10/2014.</td><td>DCBL intends to install the Cement Plant excluding the CPP and colony over an area of 60 ha. Out of total project area; 33.389 ha land has already been purchased in the name of Dalmia Bharat Green Vision Ltd. (A Wholly owned subsidiary of Dalmia Cement (Bharat) Ltd. Consent has been obtained from private land owners for 10.451 ha and 3.334 ha is yet to be taken. Remaining land belongs to industries / Industrialist like Shri Sarda / CIL – 7.227 ha, Century /Ultratech Cement Ltd.- 5.316 ha which will be purchased/exchange in due course.</td><td>Partially Acquired</td></tr>
<tr><td>3.</td><td>Existence of habitation & involvement of R&R, if any.</td><td>Plant Site: No habitation exists within the plant site and R&R is not applicable.
Study Area:
<table>
<tr><th>Habitation</th><th>Distance (km)</th><th>Direction</th></tr>
<tr><td>Kharora (NP)</td><td>~1.2</td><td>SE</td></tr>
<tr><td>Kesla</td><td>~1.8</td><td>SE</td></tr>
<tr><td>Math</td><td>~2.0</td><td>SW</td></tr>
<tr><td>Nawagaon</td><td>~2.5</td><td>South</td></tr>
<tr><td>Pachri</td><td>~2.5</td><td>NNE</td></tr>
<tr><td>Bardih</td><td>~2.5</td><td>East</td></tr>
<tr><td>Chheriya</td><td>~2.6</td><td>NNE</td></tr>
<tr><td>Nahardih</td><td>~2.9</td><td>ENE</td></tr>
</table>
There are approx. 72 other villages in 10 km radius study area.</td><td>-</td></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>1.</td><td>21^0 25’ 08.76”</td><td>81^0 55’ 28.43”</td></tr>
<tr><td>2.</td><td>21^0 25’ 01.51”</td><td>81^0 55’ 10.73”</td></tr>
<tr><td>3.</td><td>21^0 24’ 57.14”</td><td>81^0 55’ 10.10”</td></tr>
<tr><td>4.</td><td>21^0 24’ 55.43”</td><td>81^0 55’ 03.20”</td></tr>
<tr><td>5.</td><td>21^0 24’ 55.22”</td><td>81^0 54’ 56.08”</td></tr>
<tr><td>6.</td><td>21^0 24’ 52.88”</td><td>81^0 54’ 55.80”</td></tr>
<tr><td>7.</td><td>21^0 24’ 52.87”</td><td>81^0 54’ 54.70”</td></tr>
<tr><td>8.</td><td>21^0 24’ 50.16”</td><td>81^0 54’ 54.25”</td></tr>
<tr><td>9.</td><td>21^0 24’ 50.18”</td><td>81^0 54’ 53.29”</td></tr>
<tr><td>10.</td><td>21^0 24’ 45.66”</td><td>81^0 54’ 53.43”</td></tr>
<tr><td>11.</td><td>21^0 24’ 45.60”</td><td>81^0 54’ 54.19”</td></tr>
<tr><td>12.</td><td>21^0 24’ 42.35”</td><td>81^0 54’ 54.19”</td></tr>
<tr><td>13.</td><td>21^0 24’ 39.78”</td><td>81^0 54’ 58.19”</td></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>14.</td><td>21^0 24’ 37.65”</td><td>81^0 54’ 53.86”</td></tr>
<tr><td>15.</td><td>21^0 24’ 33.90”</td><td>81^0 54’ 54.68”</td></tr>
<tr><td>16.</td><td>21^0 24’ 37.40”</td><td>81^0 55’ 10.71”</td></tr>
<tr><td>17.</td><td>21^0 24’ 40.66”</td><td>81^0 55’ 10.32”</td></tr>
<tr><td>18.</td><td>21^0 24’ 40.51”</td><td>81^0 55’ 16.18”</td></tr>
<tr><td>19.</td><td>21^0 24’ 46.33”</td><td>81^0 55’ 21.26”</td></tr>
<tr><td>20.</td><td>21^0 24’ 57.40”</td><td>81^0 55’ 28.76”</td></tr>
</table>
</td><td></td></tr>
<tr><td>5.</td><td>Elevation of the project site</td><td>292 m to 302 m above mean sea level.</td><td>-</td></tr>
<tr><td>6.</td><td>Involvement of Forest land if any.</td><td>No Forest Land is involved in the project site.</td><td>Certificate regarding involvement of No Forest Land in the project site has been issued by Principal Chief Conservator of Forest (Wildlife) and Chief Wildlife Warden, Raipur Chhattisgarh vide letter No. S. No / Wildlife/Management-475/466, Nava Raipur, dated 28th Jan., 2020</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>Plant site: No water body exists within the plant site.
Study area: Following water body fall within 10 km radius:
<table>
<tr><th>Water body</th><th>Distance (km)</th><th>Direction</th></tr>
<tr><td>Mahanadi Canal (Baloda branch)</td><td>3.5 km</td><td>ENE</td></tr>
<tr><td>Mahanadi Canal (Lawan branch)</td><td>4.5 km</td><td>South</td></tr>
<tr><td>Mahanadi Canal (Bhatapara branch)</td><td>5.5 km</td><td>WSW</td></tr>
<tr><td>Pindraon Tank</td><td>2.5 km</td><td>West</td></tr>
<tr><td>Pikridih Tank</td><td>4.0 km</td><td>WSW</td></tr>
<tr><td>Kumhari Tank</td><td>4.5 km</td><td>North</td></tr>
<tr><td>Kosrangi Tank</td><td>7.5 km</td><td>SE</td></tr>
<tr><td>Tengna Nala</td><td>8.5 km</td><td>NNE</td></tr>
<tr><td>Khorsi Nala</td><td>9.5 km</td><td>ENE</td></tr>
</table>
o Two seasonal water reservoirs towards north</td><td>-</td></tr>
<tr><td>8.</td><td>Existence of ESZ/ESA/national park/ wildlife sanctuary/ biosphere</td><td><u>Study area</u>
Name of the ESZ/ESA: Not Applicable
Status of Notification: Not Applicable
Distance of project from ESZ/ESA:
Authenticated map of ESZ projecting</td><td>Certificate regarding same has been issued by Principal Chief Conservator of Forest (Wildlife) and Chief</td></tr>
</table>

S. No.	Particulars	Details	Remarks
	reserve/tiger reserve/elephant reserve etc. if any within the study area.	**distance of ESZ from project site:** Not Applicable **Status of NBWL approval:** Not applicable **<u>List of Protected forests (PF)</u>** o Khaulidabri PF (Adjacent in N direction) o Mohranga PF (4.5 km in NNW direction)	Wildlife Warden, Raipur Chhattisgarh vide letter No. S. No / Wildlife/Management-475/ 466, Nava Raipur, dated 28th Jan., 2020-

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

S. No.	Plant Equipment / Facility/Area	Proposed Capacity as per ToR and Public Hearing	Applied for EC/Proposed Unit	
			Configuration	Capacity
1	Clinker	3.25 Million TPA	Kiln: 1 x 9500 TPD	3.25 Million TPA
2	Cement	2.5 Million TPA	Cement Mill: 760 TPH	2.5 Million TPA
3	CPP	27 MW	Dropped	0
4	WHRS (MW)	15 MW	PH & AQC Boiler: 15 MW	15 MW
5	DG Sets (KVA)	1000 KVA	1000 KVA	1000 KVA
6	Project area (ha)	102.6 Ha	60 Ha	60 Ha

22.8.7 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.	Raw Material	Total Quantity required per annum	Source	Distance (km)	Mode of Transportation
1.	Limestone	5.0	Captive Limestone Mine	0.5 from crusher	Covered Conveyor Belt (Initially by road and also during emergency / breakdown situation).
2.	Clay/Shale	0.15	Purchase	20 - 100	Road
3.	Slag	1.5	Nearby Steel Plant	50 - 100	Road
4.	Low grade iron/ Morrum	0.05	Purchase	20 - 100	Road
5.	Laterite/ Bauxite	0.06	Purchase	50 - 60	Road
6.	Gypsum	0.13	Vizag	600	Rail/Road

S. No.	Raw Material	Total Quantity required per annum	Source	Distance (km)	Mode of Transportation
7.	Fly Ash	1.0	GMR Chhattisgarh Power Project, NTPC SIPAT etc.	5 - 300	Road
8.	Coal-Indigenous	0.55	SECL/Open Market / E-Auction / Raigarh / Bilaspur	200	Road
9.	Coal-Imported	0.45	South Africa/ Indonesia through Paradeep port.	600	Through Paradeep port & thereafter Transport by Rail
10.	Petcoke as a feedstock	0.3	Jamnagar/ Saudi/ US/India, Through Paradeep port	-	Through Paradeep port & thereafter Transport by Rail

22.8.8 The water requirement for the proposed project is estimated as 1850 m3/day, Application for withdrawal of 1850 KLD of ground water for has been submitted to CGWA vide application no. 21-4/7981/CT/IND/2023 dated 12th Jan., 2023.

22.8.9 The power requirement for the proposed project is estimated as 42 MW; which will be sourced from WHRS (15 MW) and also from State Grid (27 MW). DG set (1000 kVA) (for back up & emergency).

22.8.10 Baseline Environmental Studies:

Period	Post Monsoon Season (Oct., to Dec., 2022)
AAQ parameters at 12 locations	• PM2.5 - 21.2 to 55.1 µg/m3 • PM10 – 37.9 to 78.3 µg/m3 • SO2 - 4.9 to 9.6 µg/m3 • NO2 - 6.7 to 27.0 µg/m3 • CO - BDL(DL-0.50) to 0.7 mg/m3
Incremental GLC level	• PM = 4.87 µg/m^3 (within project site) • SO2 = 3.44 µg/m^3 (within project site) • NOx = 2.29 µg/m^3 (within project site) • CO = 0.703 mg/m^3 (within project site)
Ground water quality at 09 locations	• pH - 7.15 to 7.83 • Total Hardness - 131.79 to 366.97 mg/l • Chlorides – 31.84 to 120.25 mg/l • Fluoride - 0.31 to 0.68 mg/l • Heavy Metals (Fe) – 0.13 to 0.42 mg/l
Surface water quality	• pH - 7.22 to 7.7 • DO – 6.7 to 7.0 mg/l • BOD – 4.1 to 7.3 mg/l • COD – 16 to 28 mg/l
Noise levels at 08 locations	Noise Level During Day Time – 48.1 to 57.7 Leq dB (A) Noise Level During Night Time – 38.9 to 48.9 Leq dB (A)

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

Traffic study has been conducted at NH –130 B which is approximately 2.0 km in south direction and SH - 20 which is adjacent to the project site in west direction.
Transportation of raw material & finished product will be done as per details given below:
Limestone - via Covered Conveyor belt from Captive Limestone Mine
Fly ash - 100% by road
Gypsum– 100% by road
Slag - 100 % by road
Low grade iron/Morrum - 100 % by road
Laterite/ Bauxite - 100 % by road
Clinker – 100 % by road
Cement - 100 % by road.
PCU load after proposed project will be 338.24 (Existing) + 97 (Additional) PCU/hr on NH-130B and 250.35 (Existing) + 97 (Additional) at on SH-20 and level of service (LOS) will be:

Exisiting
<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-130B</td><td>338.24</td><td>1200</td><td>0.28</td><td>B</td></tr>
<tr><td>SH-20</td><td>250.35</td><td>625</td><td>0.40</td><td>C</td></tr>
</table>
After Expansion
<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-130B</td><td>338.24 (Existing) + 97 (Additional) = 435.24</td><td>1200</td><td>0.36</td><td>B</td></tr>
<tr><td>SH-20</td><td>250.35 (Existing) + 97 (Additional) = 347.35</td><td>625</td><td>0.55</td><td>C</td></tr>
</table>
* Capacity as per IRC- 64-1990 & 106-1990 Guidelines.
Conclusion: The level of service will be “B” i.e., Very Good for NH – 130B and the level of service will be “C) i.e., Good/Average for SH – 20 after including additional traffic due to proposed project.
</td>
</tr>
<tr>
<td>Flora and fauna</td>
<td>Three schedule - I species i.e., Monitor lizard (Varanus bengalensis), Python (Python molurus) & Indian Peafowl (Pavo cristatus) has been reported in study area of the proposed project site.; which are categorized as Schedule - I according to (IWPA) Indian Wildlife Protection Act’ 1972.
Wildlife Conservation Plan for the Schedule - I species has been approved by Principle Chief Conservator of Forest (Wildlife) and Chief Wildlife Warden, Raipur Chhattisgarh vide letter No. S.No. / Wildlife/Management-475/466, Nava Raipur, dated 28th Jan., 2020.
The total budget allocated for implementation of Indian Peafowl, Python and Monitor lizard Conservation is Rs. 49.50 Lacs for the implementation period of 5 years.</td>
</tr>
</table>

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

S. No.	Type of Waste	Waste	Source	Quantity Generated (Approx.)	Mode of Treatment / Disposal
1.	SW	Dust	Cement Plant	140000 Tonnes / annum	Dust collected from various APCEs will be totally recycled back into the process.
2.	SW	STP Sludge	STP	0.25 Tonnes/annum	Used as manure for greenbelt development / plantation
3.	HW	Used Oil	Plant maintenance	48 Tonnes / Annum	Will be sold to CPCB registered recycler / co-processed in Cement kiln.
		Contaminated cotton rags or other cleaning materials		24 Tonnes / Annum	
		Empty barrels/containers/liners		200 nos./annum	
		Lead Acid batteries		300 Nos. / Annum	Will be sold to CPCB registered recycler / co-processed in Cement kiln.
4.	MSW	Bottles, paper, cans, textile, etc.	Plant and Colony	30 Kg / day	MSW generated from the plant and residential colony is being/will be disposed off after segregating into Bio-degradable and non-biodegradable waste. Bio–degradable waste is being/will be composted & will be used as manure in greenbelt development / plantation. Non-biodegradable waste will be disposed off suitably. Concept of waste minimization 3R's (Recycle, Reduce & Recover) scheme will be adopted.
5.		Kitchen and canteen/ Green waste			

22.8.12 Public Consultation:

Details of advertisement given	Public Hearing Notice published in Newspapers "Dainik Bhaskar, Raipur Addition" on 23rd Dec., 2019 and "Times of India, Delhi Addition" on 24th Dec., 2019.
Date of Public Consultation	24th Jan., 2020 (Friday) at 12:00 am
Venue	Govt. Sports Stadium, Near Sub Tehsil Office Kharora, Tehsil: Tilda, District: Raipur (Chhattisgarh)
Presiding Officer	• Additional District Magistrate: Shri Vineet Nandanwar • Regional Officer: Dr. S. K. Upadhyay

Major issues raised	Employment, Environment & pollution, Land, Health, Education, Water, Plantation, Socio-Economic, etc.

Action plan as per MoEF&CC O.M. F.No. 22-65/2017-IA.III dated 30/09/2020

S. No.	Activities	Budget	Physical Targets		
		(Rs. Lakh)	1st Year	2nd Year	3rd year
A	**Socio- economic Development Related**				
1	Development of community play grounds	40	Nahardih & Bardih	Kesla	Kharora
2.	Construction/Rejuvenation of Community Centers	120	Kharora	Nayakatand & Manth	Moherenga
3.	Repair / Restoring the Village Pathways/Road	250	Kharora & Kesla	Nahardih & Bardih	Nayakatand & Manth
4.	Provision of solar lights/Fans (**200 nos.**) in the village streets, Anganwdi, schools and distribution of Solar lantern in villages Nahardih, Kharora, Kesla and Bardih	60	Nahardih & Bardih	Kesla	Kharora
Sub-Total (A)		**470**			
B	**Health Related**				
1.	Upgradation of medical equipment such as providing extra beds, X-ray machines, ECG machines etc. in existing health sub-centers	150	Kharora	Moherenga	Nahardih
2.	Providing Mobile Medical Van facility	25	Kharora		
3.	Renovation of Community Health Centre	80	Kharora	Nayakatand & Manth	Moherenga
Sub-Total (B)		**255**			
C	**Drinking Water Facility**				
1.	Provision of Clean drinking water in schools and Gram Panchayat / villages of Nahardih, Kharora, Kesla and Bardih etc. (RO, UV, Water Tank, Hand pump, Water tanker for community service in nearby villages etc.) **(5 nos.)**	75	Kharora	Kesla	Nahardih & Bardih
Sub-Total (C)		**75**			
D	**Education Infrastructure Development**				
1.	Installation of Smart classes in the Government schools to promote Digital education	150	Kharora	Nahardih	Kesla
2.	Improvement/refurbishment of Govt. schools like construction of Girls toilets in Schools, drinking water facility, sanitation, sports equipment, laboratory equipment etc.)	250	Kharora	Nayakatand & Manth	Moherenga
Sub-Total (D)		**400**			
E	**Water Conservation**				
1.	Rejuvenation of Ponds **(10 nos)**	250	Kharora	Moherenga	Nahardih
2.	Construction of check- dams **(5 nos)**	250	Math	Sirri	Chheriya
3.	Ground Water Recharging through defuncted Bore wells **(250 nos)**	250	Nahardih, Kesla & Bardih	Kharora, Raikhera & Beparitala	Math, Sirri & Chheriya
4.	Support in Infrastructural development for Rain water harvesting on Govt. School Buildings and public buildings	250	Kharora	Math	Beparitala
Sub-Total (E)		**1000**			
F	**Skill Development & Livelihood Enhancement**				
1	Setting up of skill training center **(1 nos.)** under the banner of Dalmia Institute of Knowledge and Skill Harnessing (DIKSHa) for training of unemployed youth common for plant and captive mines proposed in the area. **Providing Vocational Training to local youths for development of own business for the livelihood** such as:	165	Village Kesla (In addition to 90 lacs committed under mines; 75 lacs additional for enhanced facilities)		

S. No.	Activities	Budget (Rs. Lakh)	Physical Targets		
			1st Year	2nd Year	3rd year
	i. Small enterprises – Workshops, grocery stores, electric repair shops etc; ii. Dairy farming; iii. Poultry farming iv. Flour mills, Dall mills etc.				
	Affiliation: NSDC/Chhattisgarh State Skill Dev. Mission				
2	Providing Infrastructural Support through Women Income Generating Programmes through the formation of SHGs to various economic activities like Cutting & Tailoring, Nursery, Stitching / embroidery, Pickle & Sauces making, Soft Toys & Gem Jeweller and Beautician Courses will be carried out for **Women Empowerment** in the area.	75	Nahardih & Bardih	Kesla	Kharora
Sub-Total (F)		**240**			
G	**Plantation**				
1	Distribution of tree saplings **(25000 nos.)** in nearby villages & schools and Quarterly incentives for maintenance	25	Nahardih, Kesla & Bardih	Kharora, Raikhera & Beparitala	Math, Sirri & Chheriya
2	Training and Infrastructure Support for **development of Nursery/Orchard** in nearby villages	45	Kharora	Kesla	Math
Sub-Total (G)		**70**			
H	**Agriculture Practices and Productivity**				
1.	Providing seeds and organizing training camps for improvement of Agri - crop yield & social forestry	40	Kharora & Kesla	Nahardih & Bardih	Nayakatand & Manth
2.	Training, Scientific Support and Awareness to local Farmers to increase yield of crop and Fodder, Contribution to various Govt. Schemes (Swachh Bharat etc.)	50	Nahardih, Kesla & Bardih	Kharora, Raikhera & Beparitala	Math, Sirri & Chheriya
Sub-Total (H)		**90**			
Grand Total		**2600**			
Note: The Action Plan has been in the manner to develop the project impacted villages namely Kharora, Nahardih, Bardih and Kesla as a Model village.					

22.8.13 The capital cost of the proposed project is Rs 1800 crores and the capital cost for environmental protection measures is proposed as Rs 195 crores. The annual recurring cost towards the environmental protection measures is proposed as Rs 8 crores/annum. The employment generation from the proposed project is 2644 persons (During Construction 1544 + During Operation 1100). The details of cost for environmental protection measures is as follows:

S. No.	Description	Proposed (Rs. In lakhs)	
		Capital Cost	Recurring Cost
1.	**Air Pollution Control & Housekeeping measures**		
	Air Pollution Control Equipment	8400	630
	Sweeping Vacuum machines (1 Large & 2 Small)	100	10
	Construction of internal CC roads inside the plant premises	2900	10
	Covered Sheds for Raw Material Storage, Fuel Storage	7200	10
2.	**Environmental Monitoring**		
	CAAQM Stations (2 online each Rs. 50 Lakhs)	100	10
	CEMS (4 online each Rs. 25 Lakhs)	100	10
3.	**Water Pollution Control measures**		
	STP of 25 KLD Capacity (including Drains)	50	10
	Online Piezometer for water level measurement (2 nos.)	15	1.5

S. No.	Description	Proposed (Rs. In lakhs)	
		Capital Cost	**Recurring Cost**
	Drip irrigation System & Water Sprinkling	40	4
	RWH pond and Storm Water Management	100	15
	RO Plant for Drinking	50	7.5
4.	**Noise Pollution Control**	200	5
5.	**Hazardous Waste Storage & Handling**	50	7.5
6.	**Occupational Health & Safety**	75	45
7.	**Greenbelt and plantation**	148.5	30.88
9.	**Others (Housekeeping and Municipal Waste Management)**	50	7.5
	Sub-Total	**19578.5**	**813.88**
10	**Adressal of Public Consultation Concerns during Public Hearing** **Details of adoption of Villages, if any**	855 (Kharora, Nahardih, Bardih and Kesla as a Model village)	-
Total		**20433.5**	**813.88**

22.8.14 Proposed greenbelt will be developed in 19.8 ha which is about ~33% of the total project area. A 5m 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 no. of 49,500 saplings will be planted and nurtured in 5 years. A greenbelt action plan of Cement Plant and Limestone Mine has been approved by DFO, Raipur vide letter dated 17th March, 2021. Besides this, company has proposed distribution of tree saplings (15000 nos.) in nearby villages & schools and 10,000 trees will be planted along with road adjacent to the plant area. Also, company will undertake additional greenbelt/Plantation in contiguous areas of the existing Plant boundary over an area of 4.2 Ha to make the total plantation area up to 24 ha which is approx. 40 % of the total plant area proposed for the project. Company will adopt Miyawaki technique as recommended by Hon'ble EAC for greenbelt development / plantation. During 1st and 2nd Year peripheral plantation will be undertaken and completed along with Construction of the plant and during 3rd year after completion of construction, Internal plantation and laydown area will be covered.

22.8.15 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.

Written representations:

22.8.16 During the meeting, based on the deliberations made by the EAC, the project proponent vide letter dated 31.01.2023 through email dated 31.01.2023 submitted the following information:

Sn.	Additional Information sought	Reply
1.	Plant Layout should be modified with three layers separately for Roads, greenbelt and Contour & Drainage.	The Plant layout has been modified with three layers separately for Roads, greenbelt and Contour & Drainage and the same is submitted along with this reply. Detailed Engineering Plant Layout with all features & facilities as Plate 1. Roads and Facilities within the Plant as Plate 2. Contour and Drainage as Plate 3. Greenbelt Plan as Plate 4.
2.	Greenbelt area to be increase from 33% to 40% including outside plantation (25000 Nos.) along with Proposal of Miyawaki Technique.	Out of the total plant area, company has proposed 19.8 ha area (i.e. 33% of the plant area) will be covered under greenbelt development / plantation within the plant premises. Besides this, company has proposed distribution of tree saplings (15000 nos.) in nearby villages & schools and 10,000 trees will be planted along with road adjacent to the plant area. Also, company will undertake additional greenbelt/Plantation in contiguous areas of the existing Plant boundary over an area of 4.2 Ha to make the total plantation area up to 24 ha which is approx. 40 % of the total plant area proposed for the project. Company will adopt Miyawaki technique as recommended by EAC for greenbelt development / plantation. During 1st and 2nd Year peripheral plantation will be undertaken and completed along with Construction of the plant and during 3rd year after completion of construction, Internal plantation and laydown area will be covered.
3.	Details of Green / Substitute Raw Material to be provided.	Major raw material required for Clinker & Cement production is Limestone, Clay / Shale, Slag, Fly ash, Low grade iron / Morrum, Laterite / Bauxite and Gypsum. Company will be manufacturing mostly Blended Cement like PPC, PSC, PCC etc for which Waste materials of Power Plant i.e Fly Ash (Upto Max 35% of Cement) and Slag from Steel Plant (Max upto 65%) will be utilised. Also, waste materials form other industries including Hazardous and Non-Hazardous materials along with Municipal Solid waste can be processed as Alternate Fuel in cement Kiln to the extent available and feasible. Company has a target of utilising AFR up to 35%, which we have achieved in our operating Plants at other locations.
4.	CER Action Plan to be revised from Rs. 8.55 Crores to Rs. 26 Crores and methods to be adopted suggested by committee member for Model village plan	The company has revised the budget for Socio-economic development activities prepared based on the issues raised during the public hearing and Suggestions of the Hon'ble members of EAC during appraisal of the project and hereby allocate Rs. 26 Crores. The revised action plan for Socio-economic development is submitted and updated at para 22.8.12 above.
5.	Existing traffic data w.r.t. LOS to be submitted	Traffic survey has been conducted for 24 hours at NH - 130 B which is ~ 2.0 km from the proposed project site in South direction and at SH - 20 which is adjacent to the project site in west direction. The traffic survey monitoring was done in Dec., 2022 to predict the future traffic growth and the load on the plant road and surroundings due to the proposed project. Measurements of Traffic density were made continuously for 24 hours by visual observation and counting of vehicles under seven categories, viz.,

Sn.	Additional Information sought	Reply
		Motor cycle/ scooter, Passenger car/ van, Tractors, trucks, Busy, Trailer, Cycle. Total numbers of vehicles per hour under the seven categories were determined. The detailed existing traffic study is submitted.
6.	Provide details of ground water recharge and Borewell.	PP has proposed Ground Water Recharging through defuncted Bore wells **(250 nos)** in 9 villages covering core & buffer area. Budgetary provisions has been incorporated under point no. 3 of Water Conservation action plan with of CER. Apart from this, Village Pond Rejuvenation and deepening have also been considered. We have already undertaken biological Remediation of 2 nos of Ponds in village and made the waterbody suitable for "Nistari". A case study is submitted**.** Details of proposed Borewell for abstraction is also submitted**.**
7.	CO Modelling to be submitted	The ground level concentration for CO is predicted as 0.703 mg/m^3. The isopleth showing the CO Modelling is submitted.
8.	Wind Shield to be proposed towards maximum GLC.	Windshield is proposed towards the habitation area and maximum GLC and included in Plant layout. It is shown in submitted Plate 4.

Deliberations by the Committee

22.8.17 The Committee noted the following:

1. The instant proposal is for proposed Integrated Cement Plant - Clinker (3.25 MTPA), Cement (2.5 MTPA), WHRS (15 MW) and D.G. Set (1000 KVA).
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. Total proposed land area is 60 ha out of which 33.389 ha land has already been purchased in the name of Dalmia Bharat Green Vision Ltd. (A Wholly owned subsidiary of Dalmia Cement (Bharat) Ltd. Consent has been obtained from private land owners for 10.451 ha and 3.334 ha is yet to be taken. Remaining land belongs to industries / Industrialist like

Shri Sarda / CIL – 7.227 ha, Century /Ultratech Cement Ltd.- 5.316 ha which will be purchased/exchange in due course. The EAC further noted that earlier, total land area proposed for the Plant was approx. 102.6 ha (Including colony, CPP and Conveyor to mine). ToR was obtained from MoEFCC for the same area on 27th June, 2019 and Public hearing has also been conducted on 24th January, 2020 for the same area and same configuration. However, due to delay in land acquisition because of Covid, DCBL has dropped the proposal for setting of CPP and colony which in turn the proposed project area reduced from 102.6 ha to 60.0 ha. Now, DCBL proposes to install the Cement Plant excluding the CPP and colony over an area of 60 ha. The Committee accepted the request of PP for reduction of area.

6. The nearest habitation to plant are Kharora (NP) (1.2 km, SE), Kesla (1.8 km, SE), Math (2.0 km, SW), Nawagaon (2.5 km, South), Pachri (2.5 km, NNE), Bardih (2.5 km, East), Chheriya (2.6 km, NNE) and Nahardih (2.9 km, ENE).
7. Two seasonal water reservoirs towards north along with Mahanadi Canal (Baloda branch) (3.5 km, ENE), Mahanadi Canal (Lawan branch) (4.5 km, South), Mahanadi Canal (Bhatapara branch) (5.5 km, WSW), Pindraon Tank (2.5 km, West), Pikridih Tank (4.0 km, WSW), Kumhari Tank (4.5 km, North), Kosrangi Tank (7.5 km, SE), Tengna Nala (8.5 km, NNE) and Khorsi Nala (9.5 km, ENE) exists within the study area of 10 km from 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.
8. The water requirement for the proposed project of 1850m^3/day, is proposed to be met ground water.
9. Three schedule - I species i.e., Monitor lizard (Varanus bengalensis), Python (Python molurus) & Indian Peafowl (Pavo cristatus) has been reported in study area of the proposed project site. Wildlife Conservation Plan has been approved by Principle Chief Conservator of Forest (Wildlife) and Chief Wildlife Warden, Raipur Chhattisgarh vide letter No. S.No. / Wildlife/Management-475/466, Nava Raipur, dated 28th Jan., 2020. The total budget allocated for implementation of Conservation Plan is Rs. 49.50 Lacs for the implementation period of 5 years.
10. Proposed greenbelt will be developed in 19.8 ha which is about ~33% of the total project area. Total no. of 49,500 saplings will be planted and nurtured in 5 years. Besides this, company has proposed distribution of tree saplings (15000 nos.) in nearby villages & schools and 10,000 trees will be planted along with road adjacent to the plant area. Also, company will undertake additional greenbelt/Plantation in contiguous areas of the existing Plant boundary over an area of 4.2 Ha to make the total plantation area up to 24 ha which is approx. 40 % of the total plant area proposed for the project. Company will adopt Miyawaki technique as recommended by Hon'ble EAC for greenbelt development / plantation. During 1st and 2nd Year peripheral plantation will be undertaken and completed along with Construction of the plant and during 3rd year after completion of construction, Internal plantation and laydown area will be covered.
11. The Committee has found that the baseline data and incremental GLC due to the proposed project within NAAQ standards.
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 deliberated upon 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.

Recommendations of the Committee

22.8.18 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 information** on Parivsh portal under the provisions of EIA Notification, 2006 subject to 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. <u>Specific conditions:</u>

(i) The PP 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 are Kharora (NP) (1.2 km, SE), Kesla (1.8 km, SE), Math (2.0 km, SW), Nawagaon (2.5 km, South), Pachri (2.5 km, NNE), Bardih (2.5 km, East), Chheriya (2.6 km, NNE) and Nahardih (2.9 km, ENE). Project Proponent shall take appropriate environmental safeguard measures to minimise the impact on the habitation of the locals. The PP shall also include some of these locations in its environmental monitoring programme.

(iv) Two seasonal water reservoirs towards north along with Mahanadi Canal (Baloda branch) (3.5 km, ENE), Mahanadi Canal (Lawan branch) (4.5 km, South), Mahanadi Canal

(Bhatapara branch) (5.5 km, WSW), Pindraon Tank (2.5 km, West), Pikridih Tank (4.0 km, WSW), Kumhari Tank (4.5 km, North), Kosrangi Tank (7.5 km, SE), Tengna Nala (8.5 km, NNE) and Khorsi Nala (9.5 km, ENE) exists within the study area of 10 km from 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) As committed, PP shall adopt villages namely Kharora, Nahardih, Bardih and Kesla and formulate Village Adoption program consisting of need-based community development activities, to develop them into model villages.

(vi) The water requirement for the proposed project of 1850m^3/day, is proposed to be met ground water. Necessary permission shall be obtained from the Competent Authority in this regard. PP shall explore the possibility of shifting to alternate source of water to reduce dependency on groundwater.

(vii) Three tier Green Belt shall be developed in a time frame of one year covering at least 40% of the total project area as per the submitted plan 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. 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 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 the villages namely Kharora (NP) (1.2 km, SE), Kesla (1.8 km, SE), Math (2.0 km, SW), Nawagaon (2.5 km, South), Pachri (2.5 km, NNE), Bardih (2.5 km, East), Chheriya (2.6 km, NNE) and Nahardih (2.9 km, ENE). Compliance status in this regard, shall be submitted to concerned Regional Office of the MoEF&CC.

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

(ix) 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. MSW waste shall be treated in digester and recovered gas shall be used in the canteen.

(x) The PP shall also undertake rain water harvesting measures as per the plan submitted in the EIA/EMP report and reduce water dependence from the outside source.

(xi) All stockyards shall be having impervious flooring and shall be equipped with water spray system for dust suppression. Stock yards shall also have garland drains to trap the run off material.

(xii) All internal and connecting road to the Highway shall be black topped/ concreted with suitable load in term of Million Standard Axle (MSA) as per IRC guidelines.

(xiii) Performance monitoring of pollution control equipment shall be taken up yearly and compliance status in this regard shall be reported to the concerned Regional Office of the MoEF&CC.

(xiv) Dioxin and furans shall be monitored twice a year during co-processing of hazardous waste and report shall be submitted to the Regional Office of the MoEF&CC.

(xv) Particulate matter emissions from all the stacks shall be less than 30 mg/Nm^3.

(xvi) DeSOx system shall be provided dry type. NOx level shall be maintained below 600 mg/Nm^3 by using best available technology.

(xvii) Petcoke dosing shall be controlled automatically to control SO2 emission from chimney within the prescribed limits.

(xviii) PP shall identify the Source of fluoride emissions and action plan to mitigate the same shall be implemented.

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

(xx) Action Plan for fire fighting system including provision for flame detectors, temperature actuated heat detectors with alarms, automatic sprinkler system, fixing the location of fire water tanks, separate power system for fire fighting, involvement of qualified and trained fire personnel, nearest fire station & time required to reach the proposed site shall be prepared and implemented.

(xxi) All the recommendations made in the risk assessment report shall be implemented and compliance status in this regard shall be furnished to the Regional Office of the MoEF&CC along with the six monthly compliance report.

(xxii) All the commitments made to the public during the Public Hearing/Public Consultation 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.

(xxiii) 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.

(xxiv) 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.

(xxv) 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. Air quality monitoring and preservation

i. The project proponent shall install 24x7 continuous emission monitoring system with respect to standards prescribed in Environment (Protection) Rules 1986 vide G.S.R. No. 612 (E) dated 25thAugust, 2014 (Cement) and subsequent amendment dated 9thMay, 2016 (Cement) and 10th May, 2016 (in case of Co-processing Cement); 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 fugitive emissions in the plant premises at least once in every quarter through labs recognised under Environment (Protection) Act, 1986.

iii. The project proponent shall install system carryout to Ambient Air Quality monitoring for common/criterion parameters relevant to the main pollutants released (e.g. PM10 and PM2.5 in reference to PM emission, and SO2 and NOx in reference to SO2 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.

iv. The project proponent shall submit monthly summary report of continuous stack emission and air quality monitoring and results of manual stack monitoring and manual monitoring of air quality /fugitive emissions to Regional Office of MoEF&CC, Zonal office of CPCB and Regional Office of SPCB along with six-monthly monitoring report.

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 mechanised bag cleaning facilities for better maintenance of bags.

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

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

ix. Ensure covered transportation and conveying of raw material to prevent spillage and dust generation; Use closed bulkers for carrying fly ash.

x. Provide wind shelter fence and chemical spraying on the raw material stock piles; and

xi. Provide Low NOX burners as primary measures and SCR /NSCR technologies as secondary measure to control NOX emissions.

xii. Have separate truck parking area and monitor vehicular emissions at regular interval.

xiii. Efforts shall be made to reduce impact of the transport of the raw materials and end products on the surrounding environment including agricultural land by the use of covered conveyor belts/railways as a mode of transport

xiv. Ventilation system shall be designed for adequate air changes as per ACGIH document for all tunnels, motor houses, cement bagging 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 vide G.S.R. No. 612 (E) dated 25thAugust, 2014 (Cement) and subsequent amendment dated 9thMay, 2016 (Cement) and 10th May, 2016 (in case of Co-processing Cement) 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 regularly monitor 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. Sewage Treatment Plant shall be provided for treatment of domestic wastewater to meet the prescribed standards.

iv. 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

v. Water meters shall be provided at the inlet to all unit processes in the cement plant.

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

IV. Noise monitoring and prevention

i. Noise quality shall be monitored as per the prescribed Noise Pollution (Regulation and Control) Rules, 2000 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. Waste heat recovery system shall be provided for kiln and cooler.

ii. The project proponent makes efforts to achieve power consumption less than 65 units/ton for Portland Pozzolona Cement (PPC) and 85 units/ton for Ordinary Portland Cement (OPC) production and thermal energy consumption of 670 Kcal/Kg of clinker.

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 the project proponent for LED lights in their offices and residential areas.

VI. Waste management

i. 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 program for reduction of the same including carbon sequestration by trees in the plant premises.

ii. Project proponent shall submit a study report within six months on Decarbonisation program, which would essentially consist of company's carbon emissions, carbon budgeting/ balancing, carbon sequestration activities and carbon 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.

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. 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 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.

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. 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.

vi. 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.

vii. 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.

viii. 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.

ix. 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.

x. 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).

xi. 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.

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

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

xiv. 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.

xv. 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.

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Agenda No. 22.9

22.9 Proposed an Integrated Steel Plant of 3.1 Million Ton per annum (Finished Steel) along with 230MW (80MW WHRB/TRT based +150 MW coal based) Captive Power Plant by M/s Rashmi Green Hydrogen Steel Private Limited., located at Mouza – Changual (J.L. No-360), Jethia (J.L. No- 361),Khatranga(J.L. No-362), Gopinathpur (J.L. No. 359) and Goyalara (J.L. No. 391),P.S. – Kharagpur (Local), Dist. – Paschim Medinipur ,West Bengal-Consideration of Environmental Clearance.

[Proposal No. IA/WB/IND1/414629/2023; File No. IA-J-11011/102/2022-IA-II(IND-I)]
[Consultant: Centre for Envotech and Management Consultancy Private Limited; valid upto 18.03.2024]

22.9.1 M/s Rashmi Green Hydrogen Steel Private Limited has made an online application vide proposal no. IA/WB/IND1/414629/2023 dated 22.01.2023 along with copy of EIA/EMP report 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), 1(d) Captive Power Plant, 2 (b) Mineral beneficiation and 4(b) Coke oven Plant under Category "A" of the schedule of the EIA Notification, 2006 and appraised at central level.

22.9.2 Name of the EIA consultant: M/s. Centre for Envotech and Management Consultancy Private Limited [List of ACOs with their Certificate / Extension Letter no. QCI/NABET/EIA/2124/RA0243; valid upto 18.03.2024, as on February 1, 2023].

Details submitted by the project proponent

22.9.3 The detail of the ToR is furnished as below:

Date of application	Consideration	Details	Date of accord	ToR Validity
09.07.2022	Standard ToR granted	Terms of Reference	18.07.2022	17.07.2026
The proposal was considered in 4th meeting of the EAC (Industry-I) held on 27-28th April, 2022 and after detailed deliberation, the Committee recommended that Subcommittee of EAC Industry-1 shall undertake a site visit. Accordingly, MOEFCC, EAC (Industry-I) subcommittee conducted a site visit on 21st May 2022 and considered in the 6th EAC meeting held on May 30-31st, 2022 for Agenda no.-				

Date of application	Consideration	Details	Date of accord	ToR Validity
6.12, after detail deliberation/ observations from the subcommittee's site visit report, the committee recommended the proposal of ToR to return in present form due to change in the proposed land. New ToR application may be considered after complying with the conditions stated in the 6th EAC (Industry-I) minutes of meeting held on May 30-31, 2022 for Agenda no.- 6.12. Accordingly a fresh application was made vide proposal no. IA/WB/IND/282674/2022 dated 09.07.2022 incorporating all the observations stated in 6th EAC (Industry-I) meeting held on May 30-31st, 2022 for Agenda no.- 6.12 and standard TOR was granted.				

22.9.4 The project of M/s Rashmi Green Hydrogen Steel Private Limited located at Mouza – Changual (J.L. No. - 360), Jethia (J.L. No. - 361), Khatranga (J.L. No. - 362), Gopinathpur (J.L. No. 359) and Goyalara (J.L. No. 391), P.S. – Kharagpur (Local), Dist. – Paschim Medinipur, West Bengal is for setting up of a greenfield Integrated Steel Plant of capacity 3.1 Million Ton per Annum (Finished Steel) along with 230 MW (80 MW WHRB/TRT based + 150 MW Coal based) Captive Power Plant.

22.9.5 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>112.10 ha [Agriculture: 60.70 ha; Other Land (Industrial): 51.40 ha]</td><td>Land use:
<table>
<tr><td colspan="4">Plant Area</td></tr>
<tr><td rowspan="2">S. No.</td><td rowspan="2">Particulars</td><td colspan="2">Land area</td></tr>
<tr><td>Hectares</td><td>%</td></tr>
<tr><td>1</td><td>Main Plant</td><td>38.55</td><td>36.64</td></tr>
<tr><td>2</td><td>Water Reservoir & Rainwater harvesting pond</td><td>6.73</td><td>6.4</td></tr>
<tr><td>3</td><td>Built up Area & Internal roads</td><td>6.56</td><td>6.24</td></tr>
<tr><td>4</td><td>Green Belt</td><td>35.10</td><td>33.40</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>4.4</td><td>4.19</td></tr>
<tr><td colspan="2">Total Plant Area---(A)</td><td>105.22</td><td>100.0</td></tr>
<tr><td colspan="4">Rail & Road Corridor Area</td></tr>
<tr><td rowspan="2">S. No.</td><td rowspan="2">Particulars</td><td colspan="2">Land area</td></tr>
<tr><td>Hectares</td><td>%</td></tr>
<tr><td>1</td><td>Rail & Road Corridor</td><td>5.99</td><td>87.06</td></tr>
<tr><td>2</td><td>Greenbelt on both side of road corridor</td><td>0.89</td><td>12.94</td></tr>
</table></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></td><td>
<table>
<tr><td>Total Rail & Road Corridor Area---(B)</td><td>6.88</td><td>100.00</td></tr>
<tr><td>TOTAL PROJECT AREA (A+ B)</td><td>112.10</td><td>-</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 105.22 Hectares (260 acres) of plant area land, 90.03 Hectares (222.47 acres) of land in in possession of the company and for rest of plant area land measuring 15.19 Hectares (37.53 acres) along with 6.88 Hectares (17.0 acres) of additional land for rail corridor & road access consent obtained from private rayat.</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>Khatranga</td><td>Adjacent to plant boundary</td><td>W</td></tr>
<tr><td>Gopinathpur</td><td>2.5 km</td><td>SE</td></tr>
<tr><td>Goalara</td><td>1.2 km</td><td>NE</td></tr>
<tr><td>Radhanagar</td><td>2.5 km</td><td>NNW</td></tr>
<tr><td>Kharagpur</td><td>7.5 km</td><td>W</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 given to the land looser in addition to the land cost.

The human habitations are adjacent to plant boundary toward North East. To minimize the impact on environmental sensitivity area thick Green belt to a width of 30 meters with a tree density of about 2500 trees/ha consisting of at least 3 tiers will be developed as a green buffer, also land use based unit is proposed to be set up and BAT available APC device to keep the emission below 30 mg/Nm^3.</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>Location</th><th>Latitude</th><th>Longitude</th></tr>
<tr><td>1.</td><td>Point 1</td><td>22°19'31.85"N</td><td>87°23'49.15"E</td></tr>
<tr><td>2.</td><td>Point 2</td><td>22°19'32.36"N</td><td>87°23'50.51"E</td></tr>
<tr><td>3.</td><td>Point 3</td><td>22°19'31.79"N</td><td>87°23'50.84"E</td></tr>
<tr><td>4.</td><td>Point 4</td><td>22°19'31.94"N</td><td>87°23'55.41"E</td></tr>
<tr><td>5.</td><td>Point 5</td><td>22°19'32.39"N</td><td>87°23'56.19"E</td></tr>
<tr><td>6.</td><td>Point 6</td><td>22°19'32.95"N</td><td>87°23'56.75"E</td></tr>
<tr><td>7.</td><td>Point 7</td><td>22°19'32.96"N</td><td>87°23'58.08"E</td></tr>
<tr><td>8.</td><td>Point 8</td><td>22°19'33.32"N</td><td>87°23'59.05"E</td></tr>
<tr><td>9.</td><td>Point 9</td><td>22°19'33.60"N</td><td>87°24'0.32"E</td></tr>
<tr><td>10.</td><td>Point 10</td><td>22°19'33.63"N</td><td>87°24'1.67"E</td></tr>
<tr><td>11.</td><td>Point 11</td><td>22°19'32.87"N</td><td>87°24'1.79"E</td></tr>
</table>
</td><td>--</td></tr>
</table>

S. No.	Particulars	Details				Remarks
		12.	Point 12	22°19'32.79"N	87°24'5.83"E	
		13.	Point 13	22°19'38.62"N	87°24'6.09"E	
		14.	Point 14	22°19'38.28"N	87°24'13.56"E	
		15.	Point 15	22°19'37.59"N	87°24'14.02"E	
		16.	Point 16	22°19'37.52"N	87°24'15.10"E	
		17.	Point 17	22°19'38.02"N	87°24'15.34"E	
		18.	Point 18	22°19'37.73"N	87°24'17.02"E	
		19.	Point 19	22°19'38.95"N	87°24'17.09"E	
		20.	Point 20	22°19'39.21"N	87°24'15.76"E	
		21.	Point 21	22°19'41.14"N	87°24'15.79"E	
		22.	Point 22	22°19'41.07"N	87°24'14.68"E	
		23.	Point 23	22°19'46.02"N	87°24'14.67"E	
		24.	Point 24	22°19'46.15"N	87°24'13.52"E	
		25.	Point 25	22°19'48.36"N	87°24'13.47"E	
		26.	Point 26	22°19'48.45"N	87°24'11.78"E	
		27.	Point 27	22°19'48.65"N	87°24'11.68"E	
		28.	Point 28	22°19'48.70"N	87°24'10.10"E	
		29.	Point 29	22°19'48.93"N	87°24'9.88"E	
		30.	Point 30	22°19'48.96"N	87°24'8.71"E	
		31.	Point 31	22°19'52.30"N	87°24'9.07"E	
		32.	Point 32	22°19'52.76"N	87°24'8.46"E	
		33.	Point 33	22°19'53.61"N	87°24'8.15"E	
		34.	Point 34	22°19'54.41"N	87°24'6.48"E	
		35.	Point 35	22°19'54.68"N	87°24'6.92"E	
		36.	Point 36	22°19'55.64"N	87°24'7.01"E	
		37.	Point 37	22°19'55.65"N	87°24'6.69"E	
		38.	Point 38	22°19'58.07"N	87°24'6.62"E	
		39.	Point 39	22°19'58.11"N	87°24'4.77"E	
		40.	Point 40	22°19'57.80"N	87°24'4.46"E	
		41.	Point 41	22°19'57.80"N	87°24'3.95"E	
		42.	Point 42	22°19'58.55"N	87°24'3.86"E	
		43.	Point 43	22°19'58.85"N	87°24'4.38"E	
		44.	Point 44	22°20'0.29"N	87°24'4.53"E	
		45.	Point 45	22°20'0.32"N	87°24'5.46"E	
		46.	Point 46	22°20'0.57"N	87°24'5.52"E	
		47.	Point 47	22°20'1.35"N	87°24'5.28"E	
		48.	Point 48	22°20'1.71"N	87°24'6.34"E	
		49.	Point 49	22°20'3.07"N	87°24'5.92"E	
		50.	Point 50	22°20'3.08"N	87°24'4.85"E	
		51.	Point 51	22°20'2.49"N	87°24'4.67"E	
		52.	Point 52	22°20'2.73"N	87°24'3.82"E	
		53.	Point 53	22°20'2.70"N	87°24'3.37"E	
		54.	Point 54	22°20'3.33"N	87°24'3.41"E	
		55.	Point 55	22°20'3.63"N	87°24'2.13"E	
		56.	Point 56	22°20'3.81"N	87°24'2.07"E	
		57.	Point 57	22°20'4.00"N	87°24'2.38"E	
		58.	Point 58	22°20'5.00"N	87°24'2.34"E	

S. No.	Particulars	Details				Remarks
		59.	Point 59	22°20'4.96"N	87°24'1.91"E	
		60.	Point 60	22°20'3.55"N	87°24'1.87"E	
		61.	Point 61	22°20'3.42"N	87°24'1.09"E	
		62.	Point 62	22°20'3.69"N	87°24'1.07"E	
		63.	Point 63	22°20'3.78"N	87°24'0.93"E	
		64.	Point 64	22°20'4.54"N	87°24'0.80"E	
		65.	Point 65	22°20'4.65"N	87°23'59.86"E	
		66.	Point 66	22°20'4.36"N	87°23'59.78"E	
		67.	Point 67	22°20'4.46"N	87°23'59.36"E	
		68.	Point 68	22°20'5.11"N	87°23'59.40"E	
		69.	Point 69	22°20'5.23"N	87°23'59.82"E	
		70.	Point 70	22°20'5.50"N	87°23'59.83"E	
		71.	Point 71	22°20'5.61"N	87°23'59.62"E	
		72.	Point 72	22°20'6.76"N	87°23'59.79"E	
		73.	Point 73	22°20'7.25"N	87°23'57.70"E	
		74.	Point 74	22°20'5.27"N	87°23'57.65"E	
		75.	Point 75	22°20'5.20"N	87°23'58.29"E	
		76.	Point 76	22°20'4.37"N	87°23'57.96"E	
		77.	Point 77	22°20'4.52"N	87°23'57.66"E	
		78.	Point 78	22°20'4.40"N	87°23'56.69"E	
		79.	Point 79	22°20'3.61"N	87°23'56.70"E	
		80.	Point 80	22°20'3.19"N	87°23'56.57"E	
		81.	Point 81	22°20'1.91"N	87°23'56.63"E	
		82.	Point 82	22°20'2.12"N	87°23'54.42"E	
		83.	Point 83	22°20'3.04"N	87°23'54.47"E	
		84.	Point 84	22°20'14.98"N	87°23'50.26"E	
		85.	Point 85	22°20'41.16"N	87°24'3.55"E	
		86.	Point 86	22°20'44.97"N	87°23'48.85"E	
		87.	Point 87	22°20'27.53"N	87°23'41.30"E	
		88.	Point 88	22°20'27.73"N	87°23'34.14"E	
		89.	Point 89	22°20'15.35"N	87°23'32.09"E	
		90.	Point 90	22°20'2.79"N	87°23'46.21"E	
		91.	Point 91	22°20'2.58"N	87°23'49.57"E	
		92.	Point 92	22°19'58.63"N	87°23'49.80"E	
		93.	Point 93	22°19'58.36"N	87°23'53.51"E	
		94.	Point 94	22°19'58.84"N	87°23'55.33"E	
		95.	Point 95	22°19'54.28"N	87°23'55.36"E	
		96.	Point 96	22°19'54.15"N	87°23'53.79"E	
		97.	Point 97	22°19'54.65"N	87°23'52.78"E	
		98.	Point 98	22°19'54.03"N	87°23'52.34"E	
		99.	Point 99	22°19'34.11"N	87°23'50.48"E	
		100.	Point 100	22°19'33.29"N	87°23'48.45"E	
v.	Elevation of the project site	Elevation of the project site varies from 26 m to 30 m AMSL.				--

<table>
<tr><th>S. No.</th><th>Particulars</th><th>Details</th><th>Remarks</th></tr>
<tr><td>vi.</td><td>Involvement of Forest land if any.</td><td>No forest land involved.</td><td>NOC from DFO, Kharagpur Division, Paschim Medinipur, Govt. of West Bengal obtained vide letter no-91/8-3(LR)/Rashmi/2023 dated 13.01.2023</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:
06 Nos. manmade artificial ponds.

Study area:
<table>
<tr><th>Water body</th><th>Distance</th><th>Direction</th></tr>
<tr><td>Digra Pond</td><td>3.30 km</td><td>W</td></tr>
<tr><td>Kajla Pond</td><td>1.85 km</td><td>NW</td></tr>
<tr><td>Paiknagari pond</td><td>3.25 km</td><td>E</td></tr>
<tr><td>Changual Pond</td><td>1.45 Km</td><td>SW</td></tr>
<tr><td>Midnapore High Level Canal</td><td>4.0 km</td><td>N</td></tr>
<tr><td>Kapaleshwari Khal</td><td>4.5 Km</td><td>SE</td></tr>
<tr><td>Kangsabati River</td><td>5.0 Km</td><td>N</td></tr>
<tr><td>Jakala Nalla</td><td>2.5 Km</td><td>NW</td></tr>
</table></td><td>06 Nos. manmade artificial pond to be developed as rain water harvesting pond of Dimension 110 m x 205 m; 120 m X 170 m; 105 m X 85 m; 130 m X 70 m; 50 m X 115 m & 20 m X 30 m based on contour of the project site and according drainage system of the project site is designed to harvest 4,01,000 Cu.m which is sufficient to meet 37 days industrial make up water demand.</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
Nil

• Two protected forests lies in the study area the details are:
✓ ~7.5 km in South West and
✓ ~10.0 km in South West direction

• Griffins International School – 0.45 km & Khatranga School – 0.46 are in close proximity to the project site, Environmental safeguards to be adopted in this regard has to be submitted</td><td>----</td></tr>
</table>

22.9.6 The unit configuration and capacity of proposed unit are given as below:

S. No.	Plant Equipment/ Facility	Configuration	Capacity	Remarks (Product)
1.	Blast Furnace with matching	3 x 750 m^3	3.0 Million TPA	Molten Metal
	PCM	3 x 3000 TPD		Pig Iron
	LD Converter & CCM	1 x 125 Ton + 1 x 100 Ton		High Quality Billets, Slab
2.	Sinter Plant	2 x 130 m^2 + 1 x 70 m^2	4.0 Million TPA	Iron Ore Sinter

S. No.	Plant Equipment/ Facility	Configuration	Capacity	Remarks (Product)
3.	Ferro Alloy Plant with matching jigging & briquette plant	4 x 9 MVA	0.070 Million TPA	FeSi , FeCr , FeMn, SiMn,
4.	Non-recovery type Coke Oven Plant	2 x 0.5 MTPA	1.0 Million TPA	Metallurgical Coke
5.	Seamless Tube/ Pipe Line	***	0.5 Million TPA	Seamless Tube/ Pipe
6.	Strip Mill/ CRM	***	2.0 Million TPA	H.R. Plate/ Coil Flat Products
	Pickling Line & Galvanizing Line	***		Galvanised Product
7.	Ductile Iron Pipe Unit, Fitting & Accessories Plant	***	0.6 Million TPA	Ductile Iron, Pipe, Fitting & Accessories
8.	Oxygen Plant	3 x 200 TPD	600 TPD	Oxygen
9.	Lime Dolomite Plant	3 x 200 TPD	600 TPD	Lime dolomite
10.	Pellet Plant with matching wet grinding	2 x 0.6 Million TPA	1.2 Million TPA	Iron Ore Pellet
11.	Producer Gas Plant	15 x 7,500 Nm^3/hr	1,12,500 Nm^3/Hr	Producer Gas
12.	Captive Power Plant	**80 MW WHRB Based** (69 MW from Coke Oven Plant + 11 MW from TRT MBF) **150 MW CFBC** (3 x 50 MW Coal Based)	230 MW	Power
13.	Railway Siding	01 No.	01 No.	Raw Material/ Finished Product Transportation

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

S. No.	Raw Material	Quantity (TPA)	Source	Distance from site (km)	Mode of Transportation
1	Iron Ore Fines & Lump	55,31,234	Purchased from Barbil-Joda, Orissa	270-300	Rail /Road
2	Non-coking coal	22,88,063	CCL, MCL & Imported Coal.	300-500	Rail /Road
3	Coking Coal	13,40,001	E-Auction, Purchased from BCCL, Dhanbad or Imported	300-500	Rail /Road
4	Coke	6,32,193	Imported, E-Auction	300	Rail /Road
5	Dolomite/Dolomite fines	3,93,265	From Birmitrapur, Orissa / Bilaspur, CG	270-350	Rail /Road

S. No.	Raw Material	Quantity (TPA)	Source	Distance from site (km)	Mode of Transportation
6	Limestone	7,72,967	From Birmitrapur, Orissa / Bilaspur, Raipur CG / Katni MP	270-350	Rail /Road
7	Manganese	1,78,200	From Balaghat, MP & Orissa	1000	Rail /Road
8	Chrome Ore	1,75,000	From Balaghat, MP & Orissa	1000	Rail /Road
9	Quartzite	4,26,000	From Belpahar Orissa / Bilaspur, Raipur CG	500	Rail /Road
10	DRI	3,69,650	From associate company of Group, Kharagpur, Jhargram	<100	Rail /Road
11	Pyroxenite	90,000	Fromm Jharkhand ,Orissa	500	Rail /Road
12	Mould powder	13,322	Local Market	---	Road
13	Refractory	4,620	Local Market	---	Road
14	Inoculant	550.0	Local Market	---	Road
15	Slag Coagulant	875	Local Market	---	Road
16	Runner Coat	3,025	Local Market	---	Road
17	Magnesium	1,017	Local Market	---	Road
18	Bituminous / Epoxy Solution*	3,368	WRAS* Approved vendor	---	Road
19	Zinc	1,262	Local Market	---	Road
20	Bentonite	24,000	From Kutch, Gujarat	2500-3000	Road
21	Binder & Resin, Hot Metal Glue	1,250	Local Market	---	Road
22	Latex Emulsion	100.00	Local Market	---	Road
23	Castable High Aluminum	4.25	Local Market	---	Road
24	Expandable Polystyrene, Plastic Sheet	400.00	Local Market	---	Road
25	Shot Blasting Grit, Steel Shots	1,300	Local Market	---	Road
26	Paper Tips, Thermocole Block, Hollow Sprue, Steel Straps	Variable	Local Market	---	Road
Total (TPA)		**1,20,76,667**			
***The above quantities are likely to vary in narrow range as the quality of inputs to have variations*					

22.9.8 The water requirement for the proposed project is estimated as 11,000 m^3/day, out of which 10,850 m^3/day of fresh water requirement will be obtained from the Surface Water (Kangsabati River) & Rainwater Harvesting Structure. Permission obtained from Irrigation and Water ways

departments Govt. of West Bengal vide memo no. 530 dated 22.04.2022 for 5,000 KLD water withdrawals from Kansabati river through pipe line. Also Permission obtained by West Bengal Industrial Development Corporation Limited, Govt. of W.B. for 2.0 MGD surface water from Kansabati River vide letter no-WBIDC/VIP/Water & Sewerage/2014-15/2021/3627 dated 01.03.2021 in name of associate company RISPL (Formerly Gleam Iron Mines Pvt. Ltd.). Tie-up made for water demand with associate company and the remaining requirement of 150 m3/day will be met from the ground water (Domestic purpose). The permission for drawl of groundwater obtained from SWID, West Bengal for 150 KLD vide permits no.- P142116900511000000 2TSE; P142116900525000000 1TSE & P142116900499000000 3TSE.

22.9.9 The power requirement for the proposed project is estimated as 279.0 MW, out of which 230 MW will be obtained from proposed Captive Power Plant and balance 49 MW from WBSEDCL. Further the management will have 10 x 720 KVA DG sets to meet the emergency power requirement.

22.9.10 Baseline Environmental Studies

Period	1st December 2021 to 28th February 2022
AAQ parameters at 9 Locations (min and max)	• $PM_{2.5}$ = 26.67 to 47.08 µg/m^3 • PM_{10} = 56.12 to 75.71 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
Cumulative Incremental GLC level	• PM_{10} = 9.39 µg/m^3 (Level at 1.0 km in South Direction) • SO_2 = 10.02 µg/m^3 (Level at 0.8 km in South Direction) • NO_X = 9.69 µg/m^3 (Level at 1.2 km in South Direction) • CO = 1.18 mg/m^3 (Level at 1.7 km in South Direction)
Ground water quality at 8 Locations	• pH: 6.67 to 6.92, • Total Hardness: 108 to 190 mg/l, • Chloride: 16.9 to 31.8 mg/l, • Fluoride: <0.05 mg/l, • Heavy metals (Mercury, Lead, Cadmium & Arsenic): BDL
Surface water quality at 8 Locations	• pH: 6.96 to 7.22, • DO: 4.7 to 5.7 mg/l, • BOD: 4.2 to 7.7 mg/l, • COD: 10.0 to 20.0 mg/l
Noise levels Leq (Day and Night)	45.7 to 51.8 for the day time and 35.9 to 44.1 for the Night time.
Traffic assessment study findings	• Traffic study has been conducted on NH-16 which is approximately 1.2 km from the proposed plant site. • Transportation of raw material, fuel & finished product will be 25% by road. In worst case, due to delay in construction of dedicated railway siding or due to unavailability of rakes, 100% materials will be transported through road or will be unloaded at nearest public siding "Nimpura" or associate company private railway siding and then transported to plant through trucks via NH-60 vice versa. • Existing PCU is 868.58 PCU/hr on NH-16 and existing level of service (LOS) is "B".

	<table><tr><td>Road</td><td>V (Volume in PCU/hr)</td><td>C (Capacity in PCU/Hr)</td><td>Existing (V/C Ratio</td><td>LOS</td></tr><tr><td>NH-16</td><td>868.58</td><td>3600*</td><td>0.24</td><td>B</td></tr></table> • PCU load after proposed project will be 1,038.92 PCU/Hr and level of service (LOS) will be "B". <table><tr><td>Road</td><td>V (Volume in PCU/hr)</td><td>C (Capacity in PCU/Hr)</td><td>Existing (V/C Ratio</td><td>LOS</td></tr><tr><td>NH-16</td><td>1,038.92</td><td>3600*</td><td>0.29</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" for National Highway 16 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.
Flora and fauna	No schedule-I species & endangered fauna were recorded in the core & buffer zone of proposed site.

22.9.11 The details of solid and hazardous 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
Solid waste						
1	MBF Slag	Blast furnace	10,50,000	Slag granulation	To be used in Cement plant of associate company of the Group	-
2	MBF Dust & Sludge		3,00,000	Not applicable	To be used in Proposed Sinter Plant.	-
3	Sinter Dust	Sinter plant	5,99,985	Not applicable	To be used in Proposed Sinter Plant.	Reused in sintering process.
4	Dust from APC Devices	Ferro Alloy Plant & DIP	14,300	Not applicable	To be used in Proposed Sinter Plant.	Reused in sintering process.
5	Ferro Alloy Slag	Ferro Alloy Plant	63,000	Not applicable	Slag generated during Ferro Manganese production will be used as a raw material for Silico Manganese production.	-

S. No.	Type of waste	Source	Quantity generated (TPA)	Mode of treatment	Disposal	Remarks
			77,000	Recovery of Mn.	After maximum recovery of Mn (7,700 TPA), SiMn slag (69,300 TPA) generated during Silico Manganese production will be used for road construction /land levelling.	-
			84,000	Recovery of Chrome.	After maximum recovery of Chrome (6,720 TPA), Ferro Chrome Slag 77,280 TPA will be undergoing TCPL Test. If the toxic level within permissible limit it will be used for green concreting/ stone chips or else sent to CHWTSDF, Haldia.	-
			8,400	Not applicable	Ferro Silico slag will be used for road construction /land levelling.	-
6	Fly Ash	CPP	5,11,211	Not applicable	To be used in Cement Plant & Brick Making	Agreement made with associate companies

S. No.	Type of waste	Source	Quantity generated (TPA)	Mode of treatment	Disposal	Remarks
						cement plant.
7	Bottom Ash	CPP	1,47,683	Not applicable	To be used for low land levelling, Road Construction	--
8	LD/BOF Slag	Blast Furnace LD/BOF	3,65,909	Recovery of metal.	To be used for Road construction / cement making, Paver Block Making after recovering metal from Slag Crushing unit	-
9	Miss Roll/ End Cuts / Steel & DI Scrap	Rolling mill/DIP	1,31,000	Not applicable	To be used in Proposed LD/BOF Plant.	-
10	Cement Slurry	DIP	15,288	Not applicable	Shall be sent for Brick making and Cement Manufacturing	-
11	Sludge from Galvanizing & Pickling Line	ETP of Galvanizing & Pickling Line	3,103	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.	--
12	Tar Sludge	Producer gas plant	785	Not applicable	Sold to WBPCB authorized vendor	-

S. No.	Type of waste	Source	Quantity generated (TPA)	Mode of treatment	Disposal	Remarks
13	Iron oxide Powder from ARP	Rolling mill	2,344	Not applicable	To be sold to Tape & Paint manufacture	-
14	Core Sand & Slag from DIP	DIP	30,090	Not applicable	To be used for Road construction / Land levelling purpose	-
15	Zinc Ash /Dross	DIP & Rolling mill	1,439	Not applicable	To be sold to WBPCB Authorized Vendors	-
16	Dust from ESP and Bag Filters of Pellet Plant	Pellet Plant	25,680	Not applicable	To be 100% reuse in process	-
17	Sludge from ETP	ETP	105	Not applicable	Sent to (CHWTSDF)	-
18	Sludge from STP	STP	08	Not applicable	Used for green belt development	-
18	Molding Line from DIP Plant	DIP	05	Not applicable	To be used for Road construction / Land leveling purpose	-
19	Shot Blasting from DIP Plant	DIP	10	Not applicable	To be used for Road construction / Land leveling purpose	-
20	Fettling & Grinding from DIP Plant	DIP	05	Not applicable	To be used for Road construction / Land leveling purpose	-
Hazardous Waste Management						
S. No	**Type of waste**	**Source**	**Quantity generated (TPA)**	**Mode of treatment**	**Disposal**	**Remarks**
1	Damaged Bag Filters	APCD (Bag filter)	5000 Nos.	Not applicable	Sent to WBPCB	Membership obtained by the

S. No.	Type of waste	Source	Quantity generated (TPA)	Mode of treatment	Disposal	Remarks
					Authorized CHWTSDF	Group from CHWTSDF, Haldia W.B.
2	Used Oil	Plant, machineries & automobile	45.0 KLA	Not applicable	Sell to WBPCB Authorized Vendors	Sold to WBPCB authorised vendor as per HWM, 2016
3	Cotton Waste		1.6 TPA	Not applicable	Sent to WBPCB Authorized CHWTSDF	Membership obtained by the Group from CHWTSDF, Haldia W.B.
4	Process Residue FeCr Plant	Ferro Alloy Plant	78,000 TPA	Not applicable	After doing TCLP test sent to green concreting manufacturers	
5	Zinc dust residue from Galvanizing Plant	DIP & Rolling Mill	1439 TPA	Not applicable	Sell to WBPCB Authorized Vendors	Sold to WBPCB authorised vendor as per HWM, 2016
6	Tar & Tar Sludge	Producer gas plant	785 TPA	Not applicable	Sold to WBPCB authorized vendor	Sold to WBPCB authorised vendor as per HWM, 2016.
7	Sludge from CRM, Galvanising & Pickling Line & ETP of R. Mill	Rolling mill & ETP	3,103	Not applicable	Oily scum and metallic sludge recovered from rolling mills ETP shall be mixed, dried and briquetted and reused in Furnaces	
8	Sludge from ETP for Type-I Industrial water	ETP	105 TPA	Not applicable	Sent to (CHWTSDF)	Membership obtained by the Group from

S. No.	Type of waste	Source	Quantity generated (TPA)	Mode of treatment	Disposal	Remarks
						CHWTSDF, Haldia W.B.
9	Phenolic Water	Producer Gas Plant	Variable	Not applicable	Phenolic water of Producer Gas plant to be used for spraying on coal & coke	Not applicable.

22.9.12 Public Consultation

Details of advertisement	• "Millennium Post" (in English) dated 28th September, 2022. • "Aajkaal" (in Bengali) dated 29th September, 2022. • "Sanmarg" (in Hindi) 29th September, 2022.
Date/Time of Public Hearing	04th November, 2022 at 12:00 Hours
Venue	Mahasakti Mahasangha, Satkui, P.O. Matkatpur (near BDO Office Kharagpur-I), Dist. – Paschim Medinipur, West Bengal.
Presiding Officer	Shri Suman Sourav Mohanty, IAS, Additional District Magistrate (LR) and DL&LRO, Paschim Medinipur
Major Issues Raised	1. Local Employment 2. Environment – APCD, Pollution Control, Housekeeping 3. Road Construction & Development/maintenance 4. CSR Activities related etc. 5. Infrastructure Development-Construction of temple

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 300 persons will receive stipend of ₹ 12,500 per month for six months training.	₹ 1.125	₹ 1.125	₹ 1.125	₹ 3.375
		Vocational Training Center for Educated youth of villages and Skill development to unemployed local youth through National Skill Development Corporation, Govt. of India Scheme. (ITI, Paschim Medinipur 1st year, 2nd Year & 3rd Year)	₹ 0.500	₹ 0.380	₹ 0.350	₹ 1.23

<table>
<tr><th rowspan="3">S. No.</th><th colspan="2" rowspan="2">Physical activity and action plan</th><th colspan="3">Year of implementation
(Budget in ₹)</th><th rowspan="3">Total Expenditure (₹ in Crores)</th></tr>
<tr><th>1st</th><th>2nd</th><th>3rd</th></tr>
<tr><th>Name of the activity</th><th>Physical Targets</th><th>(2023-24)</th><th>(2024-25)</th><th>(2025-26)</th></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 the proposed project 01 x 120 KLD STP and 1 x 600 KLD + 1 x 1000 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.</td><td colspan="4"><table>
<tr><th>S. No.</th><th>Description of 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>300</td><td>30</td></tr>
<tr><td>2</td><td>Cost of Water conservation & Pollution Control</td><td>12.5</td><td>2.0</td></tr>
<tr><td>3</td><td>Cost of Solid Waste Management System</td><td>19.0</td><td>1.9</td></tr>
<tr><td>4</td><td>Green belt development</td><td>12.0</td><td>0.6</td></tr>
<tr><td>5</td><td>Noise Reduction Systems</td><td>6.0</td><td>1.0</td></tr>
<tr><td>6</td><td>Occupational Health Management</td><td>3.5</td><td>0.4</td></tr>
<tr><td>7</td><td>Risk Mitigation & Safety Plan</td><td>3.0</td><td>0.6</td></tr>
<tr><td>8</td><td>Environmental Monitoring Surveillance System</td><td>7.88</td><td>1.85</td></tr>
<tr><td>9</td><td>Implementation of Controlling measures to minimise impacts due to transportation and traffic</td><td>5.0</td><td>1.0</td></tr>
<tr><td>10</td><td>Setting Environmental Laboratory with necessary setup and manpower</td><td>1.12</td><td>0.65</td></tr>
<tr><td>11</td><td>EMP for Social and Infrastructure Development (Proposed):
➢ Addressal of public consultation concerns.
➢ Need based assessment.
(Adopting 08 nos. of villages –Khatranga, Chakmakrampur, Jethia, Gopinathpur, Goalara, Kajla, Changual and Radhanagar in nearby project area)</td><td>45.0</td><td>-</td></tr>
<tr><td colspan="2">Total</td><td>415</td><td>40</td></tr>
</table></td></tr>
<tr><td>3</td><td>Maintenance, Development & Construction of road in nearby villages</td><td>Construction, development & maintenance of the road, Cement/metal/murrum in villages Khatranga, Jethia & Changual. (3.0 km in 1st year in Khatranga village, 3.5 km in 2nd year in Jethia and 3.5 km in 3rd year in Changual).
(1.0 Km @ cost of 1.25 Cr.)</td><td>₹ 4.375</td><td>₹ 4.375</td><td>₹ 3.750</td><td>₹ 12.50</td></tr>
<tr><td>4</td><td>Construction of Temple</td><td>Construction of Temple in village Jethia (1 No.) in 2nd year.</td><td>₹ 0.45</td><td>-</td><td>-</td><td>₹ 0.45</td></tr>
<tr><td colspan="6">PUBLIC HEARING-CSR RELATED & NEED BASED ACTIVITIES
(Adopting 08 nos. of villages –Khatranga, Chakmakrampur, Jethia, Gopinathpur, Goalara, Kajla, Changual and Radhanagar in nearby project area)</td></tr>
<tr><td rowspan="3">5</td><td rowspan="3">Provision for health care facility</td><td>Free ambulance service for meeting emergency demand.</td><td>₹ 0.300</td><td>-</td><td>-</td><td>₹ 0.300</td></tr>
<tr><td>Free Health check-up, blood donation camp, eye check-up camp and free cataract operation.</td><td>₹ 0.400</td><td>₹ 0.400</td><td>₹ 0.400</td><td>₹ 1.200</td></tr>
<tr><td>Financial support to existing health center [Changual BPHC Community Health Center (1st Year & 2nd Year) and Gokulpur Health Center (3rd year)] with specialist doctor, compounder & assistant etc.</td><td>₹ 0.400</td><td>₹ 0.400</td><td>₹ 0.400</td><td>₹ 1.200</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)	
6	Financial Support to the Local School for better education facility and development of infrastructure (toilets, boundary wall), free bench distribution	1st Year - Gopinathpur Primary School, Jethia SSK School, 2nd Year – Khatranga & Chakmakrampur High School and in 3rd Year - Changual Primary & high school, Financial support of 15 lakhs in each school & 02 nos. toilets construction (01 No. Male & 01 no. female) at each school. *(01 no. toilet @ 1.50 Lakhs)*	₹ 0.33	₹ 0.33	₹ 0.33	₹ 0.99
7	Adopting 01 no. school for better education facility	Financial support for computer lab & other infrastructure facility in Griffin International school	₹ 0.500	₹ 0.500	₹ 0.300	₹ 1.300
8	Avenue plantation	Avenue plantation & sapling distribution will be done in nearby villages by planting more or less approx. 2,00,000 nos. of trees. (1st Year – Gopinathpur & Jethia, 2nd Year – Khatranga & Chakmakrampur and in 3rd Year - Changual) 40,000 trees in each village 01 no. tree plantation @ 375 rupees	₹ 3.000	₹ 3.000	₹ 1.500	₹ 7.500
9	Installation of Street Lighting (Solar/Led) provision at suitable public places	Installation of LED solar Street Lights with pole 180 nos. 1st year - Khatranga (25 nos.), Changual (25 nos.) & Gopinathpur (25 nos.) 2nd year - Jethia (25 nos.), Kajla (20 nos.) & Radhanagar (20 nos.) and in 3rd year - Goalara (20 nos.) & Chakmakrampur (20 nos.) *(01 no. LED solar Street Lights with pole @ 1 lac)*	₹ 0.75	₹ 0.65	₹ 0.40	₹ 1.80
10	Providing Drinking water facility	Bore well/hand pump (80 Nos. in villages- 1st year - Khatranga (10 nos.), Changual (10 nos.) & Gopinathpur (10 nos.) 2nd year - Jethia (10 nos.), Kajla (10 nos.) & Radhanagar (10 nos.) and in 3rd year - Goalara (10 nos.) & Chakmakrampur (10 nos.)	₹ 0.30	₹ 0.30	₹ 0.20	₹ 0.80
11	Providing collection bins/ dustbin	40 nos. of collection bins with stand in village 1st year - Khatranga (5 nos.), Changual (5 nos.) & Gopinathpur (5 nos.) 2nd year - Jethia (5 nos.), Kajla (5 nos.) & Radhanagar (5 nos.) and in 3rd year - Goalara (5 nos.) & Chakmakrampur (5 nos.)	₹ 0.038	₹ 0.03	₹ 0.025	₹ 0.100
12	Maintenance of roads in nearby villages	Maintenacne of 2.0 km road. 1st and 2nd year- Goalara to NH-6 underpass (Nawab road - 2.0 km)	₹ 0.300	₹ 0.700	-	₹ 1.00
13	Infrastructure Development	Construction of 04 nos. community hall 1st year - Khatranga	₹ 0.400	₹ 0.800	₹ 0.400	₹ 1.600

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)	
		2nd year – Jethia & Changual and in 3rd year - Gopinathpur				
14	Restoration of pond & development of drainage system	Restoration of ponds & development of drainage system 1st Year – Gopinathpur (02 nos. ponds & 1.5 km drainage system), Goalara (02 nos. pond & 1.0 km drainage system) & Jethia (01 no. pond), 2nd Year - Khatranga (02 nos. pond & 1.0 km drainage system), Kajla (01 no. pond) & Chakmakrampur (03 nos. pond & 1.5 km drainage system), 3rd Year - Changual (3.0 nos. pond & 2.5 km drainage system) & Radhanagar (02 nos. pond & 1.5 km drainage system) 01 no. pond restoration cost @ 2.5 Lakh & Development of drainage system @ 25.0 lakhs per km.	₹ 0.750	₹ 0.775	₹ 1.125	₹ 2.650
15	Awareness Campaign for Single Use Plastic & installation of plastic waste shredder machine in community hall	Awareness Campaign for Single Use Plastic in Lachmapur Gram Panchayat (1st Year), Chakmakrampur Gram Panchayat (2nd year) & Changual Gram Panchayat (3rd Year) Installation of plastic waste shredder machine 02 no. in each community hall of corresponding village 1st Year - Khatranga, Chakmakrampur, Jethia, 2nd Year - Gopinathpur, Goalara & Changual 3rd Year - Kajla and Radhanagar Awareness campaign @ 10.0 Lakhs & Shredder machine @ 2 .5 Lakhs each.	₹ 0.175	₹ 0.175	₹ 0.150	₹ 0.500
16	Utilisation paddy straw & other biomass for bio pelletization	Collection/ seggeration of paddy straw & other crop residue from nearby villages for bio pelletizting & feeding in bio pellet plant of associate company of the Group for utilising biopellet /co-firing in proposed boiler (blending with coal 5-10%) as per MOEFCC guidelines dated 22.10.2022	₹ 2.000	₹ 2.000	₹ 2.000	₹ 6.000
17	Funding to IIT Kharagpur for supporting their CSR initiative programmes	Funding to IIT Kharagpur for supporting their CSR initiative programmes such as environmental, sustainability, agriculture research & rural development programme etc.	₹ 0.200	₹ 0.200	₹ 0.100	₹ 0.500
TOTAL			**₹ 16.29**	**₹ 16.15**	**₹ 12.56**	**₹ 45.00**
Note: M/s. Rashmi Green Hydrogen Steel Private Limited is also proposing to adopt 08 nos. of Villages namely Khatranga, Chakmakrampur, Jethia, Gopinathpur, Goyalara, Kajala, Changual & Radhanagar as a part of Social welfare development based on need base assessment carried.						

22.9.13 The capital cost of the proposed project is ₹ 2,900 Crores and the capital cost for environmental protection measures is proposed as ₹ 400.0 Crores. The annual recurring cost towards the environmental protection measures is proposed as ₹ 40.0 Crores. The employment generation from the proposed project is 3,000 (Direct employment - Regular & Contractual). The details of cost for environmental protection measures is as follows:

S. No.	Description of Item	Capital Cost (in Crores)	Recurring Cost (in Crores)
1	Cost of Air Pollution Control Devices/ System	300	30
2	Cost of Water conservation & Pollution Control	12.5	2.0
3	Cost of Solid Waste Management System	19.0	1.9
4	Green belt development	12.0	0.6
5	Noise Reduction Systems	6.0	1.0
6	Occupational Health Management	3.5	0.4
7	Risk Mitigation & Safety Plan	3.0	0.6
8	Environmental Monitoring Surveillance System	7.88	1.85
9	Implementation of Controlling measures to minimise impacts due to transportation and traffic	5.0	1.0
10	Setting Environmental Laboratory with necessary setup and manpower	1.12	0.65
11	EMP for Social and Infrastructure Development (Proposed): ➢ Addressal of public consultation concerns. ➢ Need based assessment. *(Adopting 08 nos. of villages –Khatranga, Chakmakrampur, Jethia, Gopinathpur, Goalara, Kajla, Changual and Radhanagar in nearby project area*)	45.0	-
Total		**415**	**40**

22.9.14 The greenbelt development will be covered 35.0% of the plant area i.e. about 36.83 Hectares at the project area.. 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. Around 92,075 numbers of trees which are resistant to pollutants, will be planted as per CPCB/MoEFCC, New Delhi guidelines. Also, 1,350 nos. of tree sapling shall be planted on both side of road corridor on additional land to be used for road access. Additional under EMP for Social & Infrastructure development Avenue plantation will be done in nearby villages by planting at least 2,00,000 Nos. of tress. (40,000 nos. of trees in Gopinathpur, Jethia, Khatranga, Goyalar and Changual villages in 03 years).

22.9.15 It is submitted by the PP that there is no violation under EIA notification 2006/no court cases/no show cause/no direction.

Written representations:

22.9.16 During the meeting, based on the deliberations made by the EAC, the project proponent vide letter dated 31.01.2023 through email dated 31.01.2023 submitted the following information:

Sl. No.	Observations	Reply by the Project proponent
1	Land Detail as per Ministry O.M. dated 7/10/2014	Out of the 105.22 Hectares (260 acres) of plant area land, 90.03 Hectares (222.47 acres) of land in in possession of the company and for rest of plant area land measuring 15.19 Hectares (37.53 acres) along with 6.88 Hectares (17.0 acres) of additional land for rail corridor & road access consent obtained from private rayat. Land tie up detail along with supporting documents is submitted**.**
2	Revision of material balance	Material balance is revised incorporating the correction in Wet grinding unit and chrome Briquette plant. Revised material balance is submitted**.** Also, detail process Detail of Wet Grinding Plant; Waste Generation and its Management is submitted**.**
3	Layout of the Plant	As suggested by the honorable committee members PP has submitted plant layout for five different aspects: a) Composite engineering plant layout b) Plant layout showing only green belt c) Plant layout showing plant drainage system & internal road d) Plant layout showing contour map of the project site e) Layout showing only plant & machineries
4	EMP Plan for environmental sensitivity area (nearby school & villages) with the proposal for installation of wind barrier	To minimize the impact on environmental sensitivity area thick Green belt to a width of 30 meters with a tree density of about 2500 trees/ha consisting of at least 3 tiers will be developed as a green buffer, wind barrier of 20 ft. height will be developed, also land use based unit is proposed to be set up and BAT available APC device to keep the emission below 30 mg/Nm^3. The details of nearby schools, villages, habitations (environmental sensitivity area) and its impact due to the proposed activities and details mitigation measures is submitted.
5	Protection of existing water bodies	In the project site 06 Nos. manmade artificial ponds exists. All the existing pond will be developed as rain water harvesting pond of Dimension 110 m x 205 m; 120 m X 170 m; 105 m X 85 m; 130 m X 70 m; 50 m X 115 m & 20 m X 30 m based on contour of the project site and according drainage system of the project site is designed to harvest 4,01,000 Cu.m which will meet 37 days industrial make up water demand. Declaration/Undertaking dated 31.01.2023 by Director of the Company for protection of water bodies is submitted.
6	Revised Greenbelt plan	The greenbelt development will be covered 35.0% of the plant area i.e. about 36.83 Hectares at the project area. Around 92,075 numbers of trees which are resistant to pollutants, will be planted as per CPCB/MoEFCC, New Delhi guidelines. Also, 1,350 nos. of tree sapling shall be planted on both side of road corridor on additional land to be used for road access. Additional under EMP for Social & Infrastructure development Avenue plantation will be done in nearby villages by planting at least 2,00,000 Nos. of tress. (40,000 nos. of trees in Gopinathpur, Jethia, Khatranga, Goyalar and Changual villages in 03 years). Detailed Greenbelt plan is submitted**.**

Sl. No.	Observations	Reply by the Project proponent
7	Status of Railway Siding Permission	Raw material will be transported through proposed railway siding. Take off point for the same is Jakpur station at a distance of 2.1 KM NNW from project site. In principal approval obtained from Indian railway vide letter no-GW/1/RGHSPL-JPR (IPA)/77, dated 01.06.2022 for construction of private railway siding ESP drawing approved by Indian Railway vide letter no. GW/1/RGHSPL-JPR(ESP Approval)/357, dt. 21.12.2022. Copy of the permission is submitted**.**
8	Water balance to be shown in KLD	Updated water balance in KLD is submitted**.**
9	CER cost to be revised	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. Rashmi Green Hydrogen Steel Private Limited is also proposing to adopt the below mentioned 08 nos. of Villages as a part of Social welfare development based on need base assessment carried. The detail of villages are: 1) Khatranga 2) Chakmakrampur 3) Jethia 4) Gopinathpur 5) Goyalara 6) Kajala 7) Changual & 8) Radhanagar Rs. 45.0 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. Details regarding the same is submitted and updated at para 22.9.12 above.
10	Source of Magnesium (Raw Material)	Raw material Magnesium will be mainly use for manufacturing of Ductile Iron Pipe and it will be purchased from local traders like Sanjay Commercial, Calcutta Metal Depot, Metal Alloys India etc.
11	ToR condition (No 17, 19, 28 & 42 etc.) to be revised in PPT.	Point wise ToR condition is revised in the PPT & the revised PPT incorporating all the modifications is submitted**.**
12	Revised PPT is to be submitted	

Deliberations by the Committee

22.9.17 The Committee noted the following:

1. The instant proposal is for setting up of a greenfield Integrated Steel Plant of capacity 3.1 Million Ton per Annum (Finished Steel) along with 230 MW (80 MW WHRB/TRT based + 150 MW Coal 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. Total project land is 112.10 ha. Out of the 105.22 Hectares (260 acres) of plant area land, 90.03 Hectares (222.47 acres) of land in in possession of the company and for rest of plant area land measuring 15.19 Hectares (37.53 acres) along with 6.88 Hectares (17.0 acres) of additional land for rail corridor & road access consent obtained from private rayat.
6. No forest land is involved in the proposed site. NOC from DFO, Kharagpur Division, Paschim Medinipur, Govt. of West Bengal obtained vide letter no-91/8-3(LR)/Rashmi/2023 dated 13.01.2023 has been submitted.
7. The nearest human settlement from the project site are Khatranga (Adjacent to plant boundary, W), Gopinathpur (2.5 km, SE), Goalara (1.2 km, NE), Radhanagar (2.5 km, NNW) and Kharagpur (7.5 km, W). The EAC noted that in order to to minimize the impact on environmental sensitivity area thick Green belt to a width of 30 meters with a tree density of about 2500 trees/ha consisting of at least 3 tiers will be developed as a green buffer, also land use based unit is proposed to be set up and BAT available APC device to keep the emission below 30 mg/Nm^3.
8. Digra Pond (3.30 km, W), Kajla Pond (1.85 km, NW), Paiknagari pond (3.25 km, E), Changual Pond (1.45 Km, SW), Midnapore High Level Canal (4.0 km, N), Kapaleshwari Khal (4.5 Km, SE), Kangsabati River (5.0 Km, N) and Jakala Nalla (2.5 Km, NW) exists within the study area of 10 km from 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. Griffins International School – 0.45 km & Khatranga School – 0.46 are in close proximity to the project site. The EAC is of the opinion that Environmental safeguards shall be adopted in this regard.
10. The water requirement for the proposed project is estimated as 11,000 m^3/day, out of which 10,850 m^3/day of fresh water requirement will be obtained from the Surface Water (Kangsabati River) & Rainwater Harvesting Structure. Tie-up made for water demand with associate company and the remaining requirement of 150 m^3/day will be met from the ground water (Domestic purpose).

11. The EAC noted that M/s. Rashmi Green Hydrogen Steel Private Limited has proposed to adopt 08 nos. of Villages namely Khatranga, Chakmakrampur, Jethia, Gopinathpur, Goyalara, Kajala, Changual & Radhanagar as a part of Social welfare development based on need based assessment carried.
12. The greenbelt development will be covered 35.0% of the plant area i.e. about 36.83 Hectares at the project area. Around 92,075 numbers of trees which are resistant to pollutants, will be planted as per CPCB/MoEFCC, New Delhi guidelines. Also, 1,350 nos. of tree sapling shall be planted on both side of road corridor on additional land to be used for road access. Additional under EMP for Social & Infrastructure development Avenue plantation will be done in nearby villages by planting at least 2,00,000 Nos. of tress. (40,000 nos. of trees in Gopinathpur, Jethia, Khatranga, Goyalar and Changual villages in 03 years). The EAC deliberated on the greenbelt action plan and found it satisfactory.
13. The Committee has found that the baseline data and incremental GLC due to the proposed project within NAAQ standards.
14. The committee deliberated details of carbon foot prints and carbon sequestration study w.r.t. proposed project and found them to be satisfactory.
15. 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.
16. The EAC deliberated on the written submission of project proponent 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.

Recommendations of the Committee

22.9.18 In view of the foregoing and after detailed deliberations, the committee **recommended** the instant proposal for grant of Environment Clearance **subject to uploading of written submission on PARIVESH portal** under the provisions of EIA Notification, 2006 subject to 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. <u>Specific conditions:</u>

(i) The PP 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 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 human settlement from the project site are Khatranga (Adjacent to plant boundary, W), Gopinathpur (2.5 km, SE), Goalara (1.2 km, NE), Radhanagar (2.5 km, NNW) and Kharagpur (7.5 km, W). Project Proponent shall prepare and implement an action plan for environmental safeguard measures to minimise the impact on the habitation of the locals. The company shall also include some of these locations in its environmental monitoring programme.

(v) Digra Pond (3.30 km, W), Kajla Pond (1.85 km, NW), Paiknagari pond (3.25 km, E), Changual Pond (1.45 Km, SW), Midnapore High Level Canal (4.0 km, N), Kapaleshwari Khal (4.5 Km, SE), Kangsabati River (5.0 Km, N) and Jakala Nalla (2.5 Km, NW) exists within the study area of 10 km from 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) ESA's such as Griffins International School – 0.45 km & Khatranga School – 0.46 are in close proximity to the project site. Environmental safeguards as per the submitted EMP Plan for environmental sensitivity area shall be implemented.

(vii) The water requirement of 11,000 m^3/day, shall be met from the Surface Water (Kangsabati River) & Rainwater Harvesting Structure. Necessary permission from the Competent Authorities shall be obtained. PP shall explore the possibility of shifting to alternate source of water to reduce dependency on groundwater.

(viii) As commited, PP shall adopt 08 nos. of Villages namely Khatranga, Chakmakrampur, Jethia, Gopinathpur, Goyalara, Kajala, Changual & Radhanagar. PP shall formulate robust village Adoption program consisting of need-based community development activities, to develop them into model villages.

(ix) 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) Three tier Green Belt shall be developed in a atleast 33% of total project area as per the asubmitted action plan 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. 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 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 towards Khatranga

(Adjacent to plant boundary, W), Gopinathpur (2.5 km, SE), Goalara (1.2 km, NE), Radhanagar (2.5 km, NNW) and Kharagpur (7.5 km, W) villages and other ESA's to act as green barrier for air pollution & noise levels. Compliance status in this regard, shall be submitted to concerned Regional Office of the MoEF&CC.

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

(xii) 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.

(xiii) Sinter Plant shall be equipped with Sinter cooler waste recovery system and suitable technology for control of dioxins and furans emissions from the plant.

(xiv) Coke oven plant shall be equipped with modified wet quenching system.

(xv) Tar shall be recovered from producer gas and shall be sold to registered processors.

(xvi) 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.

(xvii) Blast Furnaces shall be equipped with Top Recovery Turbine (capacity more than 450 m^3), dry gas cleaning plant, stove waste heat recovery, cast house and stock house ventilation system and slag granulation facility.

(xviii) Secondary fume extraction system shall be installed on converters of Steel Melting Shop.

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

(xx) Electric Arc Furnace shall be closed type with 4^{th} hole extraction system.

(xxi) 85-90 % of billets shall be rolled directly in hot stage. RHF shall operate using only Light Diesel Oil or Mixed BF/CO gas/Producer gas.

(xxii) 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.

(xxiii) Dust emission from all the stacks shall be less than 30 mg/Nm^3.

(xxiv) Air Cooled condensers shall be used in the captive power plant.

(xxv) During operational phase at Captive Power Plant, PP shall measure coal dust exposures and to maintain coal dust exposures within stipulated standards at coal handling areas. 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.

(xxvi) 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/Nm^3.

f. ETP with recycling facility shall be included.

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

(xxviii) 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. MSW waste shall be treated in digester and recovered gas shall be used in the canteen.

(xxix) Action Plan for fire fighting system including provision for flame detectors, temperature actuated heat detectors with alarms, automatic sprinkler system, fixing the location of fire water tanks, separate power system for fire fighting, involvement of qualified and trained fire personnel, nearest fire station & time required to reach the proposed site shall be prepared and implemented.

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

(xxxi) All the commitments made to the public during the Public Hearing/Public Consultation 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.

(xxxii) 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.

(xxxiii) 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.

A. <u>General conditions</u>

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 04 Nos. Continuous Ambient Air Quality Station (CAAQS) 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 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.

iii. Sampling facility at process stacks and at quenching towers shall be provided as per CPCB guidelines for manual monitoring of emissions.

iv. 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.

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

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

vii. 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.

viii. The project proponent use leak proof trucks/dumpers carrying coal and other raw materials and cover them with tarpaulin.

ix. 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).

x. Land-based APC system shall be installed to control coke pushing emissions.

xi. Monitor CO, HC and O2 in flue gases of the coke oven battery to detect combustion efficiency and cross leakages in the combustion chamber.

xii. 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.

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

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

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 vide G.S.R

277 (E) dated 31st March 2012 (Integrated iron & Steel); S.O. 3305 (E) dated 7th December 2015 (Thermal Power Plants) 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. Sewage Treatment Plant shall be provided for treatment of domestic wastewater to meet the prescribed standards.

iv. 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.

v. Tyre washing facilities shall be provided at the entrance of the plant gates.

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

IV. Noise monitoring and prevention

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

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. Ensure installation of regenerative/recuperative 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. 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.

VII. Green Belt

i. Green belt shall be developed in an area equal to 33% of the plant area with native tree species in accordance with CPCB guidelines. The greenbelt shall inter alia cover the entire periphery of the plant

ii. The project proponent shall prepare GHG emissions inventory for the plant and shall submit the program for reduction of the same including carbon sequestration by trees in the plant premises.

iii. 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 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.

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. 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.

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.

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. 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.

vi. 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.

vii. 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.

viii. 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.

ix. 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).

x. 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.

xi. 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.

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

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

xiv. 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.

xv. 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.

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Agenda No. 22.10

22.10 Expansion in the production capacity of MS Billets from 1,32000 TPA to 1,58,400 TPA & TMT Bars 2,00,000 TPA with existing facility of two induction furnace (20 MT each) and Reheating Furnace (30TPH) and Rolling Mill by M/s. SBF Ispat Private Limited at Plot No. F-109-117 & G-143-151 (Karoli Industrial Area), Village Tapukara, Tehsil Tijara, District Alwar, Rajasthan- Consideration of Environmental Clearance under para 7 (ii) of the EIA notification 2006.

[Proposal No. IA/RJ/IND1/408549/2022; File No. IA-J-11011/29/2018-IA-II(IND-I)]
[Consultant: Grass Roots Research and Creation India (P) Ltd. Valid Upto: 15-02-2024]

22.10.1 M/s SBF Ispat Pvt. Ltd. has made an online application vide proposal No-IA/RJ/IND1/408549/2022, dated 20.01.2023 along with copy of Addendum EIA/EMP report, Form-1 & Certified compliance report seeking Environment Clearance (EC) under para 7(ii) (a) of the EIA Notification, 2006. The proposed project activity is listed at schedule no. 3 (a) Metallurgical industries (ferrous & non-ferrous) & 1(d) Thermal Power Plants under Category "B" of the schedule of the EIA Notification, 2006 and general condition is applicable as Rajasthan SPCB has notified Bhiwadi as Critically Polluted Area (CPA) vide Letter No. CPCB/ IPC/ CEPI/ Rajasthan/ Action plan/ 8050 dt 12.10.2020, and the project site is falling within 5km i.e. 1.38 km (N) from Kushkera CEPI boundary and therefore the proposal being appraised at Central Level as Category 'A'.

22.10.2 Name of the EIA consultant: Grass Roots Research & Creation India (P) Ltd [List of ACOs with their Certificate / Extension Letter no. NABET/EIA/2124/RA0213; valid upto 15.02.2024, as on February 1, 2023].

22.10.3 **Justification for applying under para 7(ii) of EIA Notification, 2006:** In pursuance to the Ministry's O.M. dated 11.04.2022, PP has submitted the pointwise justification for the application qualifying the criteria for appraisal under para 7(ii) of EIA Notification, 2006:

S. No.	Criteria as per OM dated 11.04.2022	Reply
1	The project should have gone through the public hearing process, at least once, for its existing EC capacity on which expansion is being sought, except those categories of projects which have been exempted as per para 7 III (i) of EIA Notification 2006 and its amendments.	Our existing project is granted EC by SEIAA, Rajasthan Vide File No- F1 (4)/SEIAA/SEAC-Raj/Sectt/Project/Cat.7(d)B1(15541)/2018-19, dated:-01.04.2019. Copy of EC letter is submitted. Public Hearing for our existing project was conducted by Rajasthan State Pollution Control Board dated 31.07.2018 at Sub-Tehsil office, Tapukara. Copy of PH proceeding are submitted.

S. No.	Criteria as per OM dated 11.04.2022	Reply
2	There should not be change in Category of the project from "B2" to "B1" or 'A' due to proposed modernization or expansion.	Earlier EC was granted by SEIAA, Rajasthan under category "B" as per EIA notification 2006 vide File No F1 (4)/SEIAA/SEAC-Raj/Sectt/Project/Cat.7(d) B1(15541)/2018-19, dated:-01.04.2019 and there is no change in project category due to proposed expansion. With reference to the Letter No. CPCB/ IPC/ CEPI/ Rajasthan/ Action plan/ 8050 dt 12.10.2020, Rajasthan SPCB has notified Bhiwadi as Critically Polluted Area (CPA) and our project site is falling within 5km i.e. 1.38 km (N) from Kushkera CEPI boundary Therefore, general condition will be applicable for this project and now project comes under Category 'A'. Copy of letter received from RSPCB is submitted**.** The category of project is changing due to general conditions applicability (which was not applicable earlier due to CPA memorandum) not due to project configuration or proposed modernization or expansion.
3	There is no additional land acquisition or forest land diversion involved for the proposed expansion or there is no increase in lease area with regard to mining vis-a.-vis the area mentioned in the EC, based on which public hearing has been held earlier.	Total land of the present plant is 3.22 ha and no additional land acquisition or forest land diversion is involved for the proposed expansion as per earlier granted EC dated 01.04.2019.
4	The proposed expansion shall not be more than 50% of production capacity as mentioned in the prior EC, issued on the basis of public hearing held and the same shall be allowed in minimum three phases.	The expansion of M.S. Billets production is 20% of the capacity as per EC granted.
5	Predicted environmental quality parameters arising out of proposed expansion/ modernization shall be within the prescribed norms and the same shall be maintained as per prescribed norms.	Fresh baseline data has been collected during March to May 2022. The average value 125.2µg/m^3 of PM_{10} at the project Site was reported and the minimum & maximum values were reported 102.4 µg/m^3 and 138.5 µg/m^3 respectively, which was higher than the NAAQS permissible limit (100 µg/m^3) and the average value of $PM_{2.5}$ at the project site was found to be 70.0 µg/m^3 and the

S. No.	Criteria as per OM dated 11.04.2022	Reply
		minimum & maximum values were recorded 58.6 µg/m^3 and 79.5µg/m^3 respectively, which was also higher than the standard permissible limit (60µg/m^3). 98 Percentile Values recoded for PM10 and PM2.5 was 138.5µg/m^3 and 79.2µg/m^3 and the incremental GLC is insignificant for all pollutants. Incremental GLC after expansion for PM_{10} will be 0.76 µg/m^3; for $PM_{2.5}$-0.44µg/m^3; for NO_2-10.697µg/m^3 and for SO_2-0.36 µg/m^3. The values of PM_{10} and $PM_{2.5}$ were higher at project site due to industrial activities nearby and within the project site as well as vehicular movement on the adjacent road near the project site. All ambient air quality parameters are observed above the prescribed norms due to CPA near to project site. It is not due to our project only or proposed expansion.
6	The proposed expansion should not result in reduction in the greenbelt area as stipulated in the earlier EC, or if the existing ratio of greenbelt is more than 33%, after expansion it should not reduce below 33%.	The proposed expansion is not going to reduce the green belt area. As our project site falls within 5 km of CPA boundary. The green belt area to 40% from 33% as per the OM dated:-31.10.2019. Copy of OM is submitted**.**
7	The project proponent should have satisfactorily complied the conditions stipulated in the existing EC(s) and satisfactorily fulfilled all the commitments made during the earlier public hearing/consultation proceedings and also the commitments given while granting previous expansion, as may be applicable. This shall be duly recorded in the certified compliance report issued by the IRO/CPCB/SPCB, which should not be more than one year old at the time of submission of application.	The current plant is granted EC by SEIAA, Rajasthan 01.04.2019. Site visit was conducted by IRO, Jaipur on 12.07.2022 and Certified Compliance Report was obtained by IRO, Jaipur Vide File No. F/SEIAAJRAJ/2329, dated 28.07.2022. Copy of CCR is submitted**.**
8	Public Consultation shall be undertaken [if applicable as per table below] by obtaining response in writing, as per para 7 III (ii) (b) of EIA Notification 2006, except those categories of projects which have been exempted as per para 7 III (i) of EIA Notification 2006 and its amendments.	Public consultation is not applicable for our current project as we have applied for 20% expansion in MS Billets Production as per OM dated: -11.04.2022.

S. No.	Criteria as per OM dated 11.04.2022	Reply
9	Effluent monitoring including air quality monitoring systems as specified in the existing EC, if stipulated, should have been installed.	The CEMS will be installed as per the provisions.
Deliberation of EAC: EAC has deliberated the provisions of the Ministry's O.M. dated 11.04.2022, w.r.t. qualifying the criteria for appraisal the instant project under para 7(ii) of EIA Notification, 2006 and found that the instant project meets all the criteria in this regard.		

Details submitted by the project proponent

22.10.4 The project of M/s SBF Ispat Pvt. Ltd. located at at plot no. F-109–117 & G-143-151 (Karoli Industrial Area) village- Tapukara, Tehsil- Tijara, District- Alwar, Rajasthan is for expansion under Para 7(ii)(a) of EIA Notification, 2006 in production capacity of MS billets from 1,32,000 TPA to 1,58,400 TPA & Rolling Mill for manufacturing of TMT Bars 2,00,000 TPA within existing facility of two induction furnace (20 Tonne each) with Reheating Furnace (30TPH).

22.10.5 Environmental site settings

S. No	Particulars	Details	Remarks
1	Total Land	Existing – 3.22 ha Expansion – Nil Total Land – 3.22 Ha No additional land will be required for the proposed expansion as it is proposed within the existing facility. This unit got the land allotted by the RIICO	-
2	Land acquisition details as per MoEF&CC O.M dated 7/10/2014	Land is under the possession of M/s SBF Ispat Pvt. Ltd.	The land has been allotted to M/S SBF Ispat Industries Private limited on lease basis for 90 years from Rajasthan State Industrial Development and Investment Corporation Ltd (RIICO).
3	Existence of habitation & involvement of R&R, if any.	Nil **Nearest habitation:** Tapukara– 2.21 km, NE	-
4	Latitude and Longitude of the project site	**Latitude** / **Longitude** 29°5'53.38"N / 76°48'44.51"E 28°5'49.50"N / 76°48'43.22"E 28°5'49.68"N / 76°48'33.36"E 28°5'53.38"N / 76°48'34.09"E	-

S. No	Particulars	Details	Remarks
5	Elevation of the project site	269 Meter AMSL	-
6	Involvement of Forest land if any.	No forest land is involved.	-
7	Water body (Rivers, Lakes, Pond, Nala, Natural Drainage, Canal etc.) exists within the project site as well as study area.	**Project Site – Nil** **Study Area** Chaundi Nadi-6.81 km towards South Sahibi River-5.71 km towards WSW	-
8	Existence of ESZ/ ESA/ national park/ wildlife sanctuary/biosphere reserve/tiger reserve/ elephant reserve etc. if any within the study area	**Project area:** Nil List of Reserved and protected forests: Khori Kalan P.F- 4.76 km –ENE Banvan P.F.- 4.88 km – NE Godhan PF. – 8.77 km – NE	-

22.10.6 The existing project was accorded environmental clearance by SEIAA, Rajasthan Vide File No-F1(4)/SEIAA/SEAC-Raj/Sectt/Project/Cat.7(d) B1 (15541)/2018-19, dated 01.04.2019 to produce 1, 32,000 TPA of M.S. Billets and 2,00,000 TPA TMT bar per annum by using two 20 tonne induction furnace and rolling mill. Consent to Operate for the existing unit was accorded by RSPCB vide F (HDF)/Alwar (Tijara)/6874(1)/2021-2022/3924-3944 dated 16.11.2021, which is valid till 30.09.2026.

22.10.7 Implementation status as per existing EC:

S. No.	Facilities	Units	As per EC dated 01th April., 2019	Implementation Status as on date	Production as per CTO
1	M. S Billets	IF	2 x 20 Tonne	Installed	CTO obtained on 16.11.20221 & valid for a period from 01.10.2021 to 30.09.2026.
2	Reheating Furnace	--	30 TPH	Installed	
3	Continuous casting machine	--	1 CCM machine (4/7 double strand) producing size upto 160mm	Installed	
4	Rolling Mill	--	2,00,000 TPA	Installed	

22.10.8 The unit configuration and capacity of existing and proposed unit are given as below:

Description	Existing (As Per EC Granted)	Proposed expansion Configuration	Final capacity/ Configuration
Unit			
Induction Furnace	2 x 20 Tonne	No Change	2 x 20 Tonne
Continuous Casting Machine (4/7 radius)	2 Strand	No Change	2 Strand
Reheating Furnace	30 Tonne	No Change	30 Tonne
Rolling Mill	2,00,000 TPA	No Change	2,00,000 TPA

Description	Existing (As Per EC Granted)	Proposed expansion Configuration	Final capacity/ Configuration
Product			
M.S Billets	1,32,000 TPA	26,400 TPA	1,58,400 TPA
TMT Bars & Rolled Product	2,00,000 TPA	No Change	2,00,000 TPA

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

S. No.	Name	Requirement (TPA)-			Storage Capacity (Tonne)	Transportation
		Existing	Proposed	Total		
1	MS Scrap	1,01,400	27421	128821	1,000	Road through covered trucks
2	Sponge Iron/ Pig Iron	35,750	-	35,750	1,000	Road through covered trucks
3	Silico- Mn & Alloy Metals etc.	1,040	208	1248	200	Road through covered trucks
4	MS Ingots/ Billets (procured from outside for rolling mill)	80,000	-26,400*	53,600	1000	Road through covered trucks

22.10.10 Total existing Water requirement is 40 m^3/day and is being sourced from ground water. NOC for Ground Water extraction has been obtained vide letter no. CGWA/NOC/IND/ORIG/2021/11564 dated 13.02.2021. No additional water will be required for the proposed expansion.

22.10.11 Existing power requirement is 15 MW power and 7MW additionally will be required for the proposed expansion of the project and will be sourced form JVVNL supply. 2 x 500 kVA DG set is already installed to be used during emergency power failure

22.10.12 Baseline Environmental Studies

Period	March to May -2018	March to May 2022
AAQ parameters at 08 locations	$PM_{2.5}$ = 37.4 to 105.9 µg/m^3 PM_{10} = 111.3 to 242.2 µg/m^3 SO_2 = 6.4 to 16.8 µg/m^3 NO_2 = 12.5 to 63.5 µg/m^3	$PM_{2.5}$ = 35.2 to 79.5 µg/m^3 PM_{10} = 63.5 to 138.5 µg/m^3 SO_2 = 6.3 to 14.1 µg/m^3 NO_2 = 11.7 to 30.5 µg/m^3
Total incremental	**As per EC dated 01.04.2019** PM_{10} = 0.3 µg/m^3 $PM_{2.5}$ = 0.3 µg/m^3 NO_2 = 0.4 µg/m^3	**Proposed Expansion:** PM_{10} = 0.76 µg/m^3 $PM_{2.5}$ = 0.44 µg/m^3 NO_2 = 0.697 µg/m^3 SO_2 = 0.36 µg/m^3

<table>
<tr><td>Period</td><td>March to May -2018</td><td>March to May 2022</td></tr>
<tr><td></td><td colspan="2">Final after expansion:
PM_{10} = 1.06 µg/m^3
$PM_{2.5}$ = 0.74 µg/m^3
NO_2 = 1.097 µg/m^3
SO_2 = 0.36 µg/m^3</td></tr>
<tr><td>Ground water quality at 08 locations</td><td>pH: 7.09 to 8.21
Total Hardness: 389 to 486 mg/l
TDS : 873 to 1872 mg/l
Total Alkalinity : 438 -496mg/l</td><td>pH: 7.76 to 8.08
Total Hardness: 387 to 580mg/l
TDS : 1170 to 1375 mg/l
Total Alkalinity : 438 -496mg/l</td></tr>
<tr><td>Surface water quality at 08 locations</td><td>Surface water body was dry during March to May -2018.</td><td>pH : 7.35-7.61.
DO : 3.1-5.2 mg/l.
BOD : 3.6–28.4 mg/l
COD : 18.4-108.4mg/l</td></tr>
<tr><td>Noise levels 08 Locations</td><td>48.8 to 62.8 dB(A) - day time
39.2 to 54.6 dB (A) - Night time</td><td>47.8 to 73.7 dBA - day time
35.9 to 67.5 dBA - Night time.</td></tr>
<tr><td>Traffic assessment study findings</td><td colspan="2">Traffic study has been conducted at SH#25, which is approximately 2.05 km from the plant site.
Transportation of raw material, fuel & finished product will be done 100% by road.
Existing PCU is 284.5 PCU on SH#25 and existing level of service (LOS) is B.
<table>
<tr><th>S No</th><th>Category of Road</th><th>Maximum PCU/Hr</th><th>Capacity/Hr</th><th>Existing V/C Ratio</th><th>LOS</th></tr>
<tr><td>1.</td><td>SH#25</td><td>284.68</td><td>1250</td><td>0.227</td><td>B</td></tr>
</table>
PCU load after proposed project will be 30.75 say 31PCU/hr and level of service (LOS) will remain same as B.
<table>
<tr><th>Road</th><th>Modified V</th><th>C (Capacity in PCU/hr)</th><th>Existing V/C Ratio</th><th>LOS</th></tr>
<tr><td>SH-25</td><td>284.68+1.5= 286.18</td><td>1250</td><td>0.228</td><td>B</td></tr>
</table>
Note: Capacity as per IRC is 1250 PCU/hr Guide line for capacity for roads.
Conclusion: The level of service will B after including additional traffic due to proposed project.</td></tr>
<tr><td>Flora and fauna</td><td colspan="2">No schedule-1 species id found within study area.</td></tr>
</table>

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

Particulars	Waste Quantity in TPA			Treatment/ disposal
	Type of Waste	Source	Quantity in TPA	
Solid Waste	Mill Scale,	Generated during	3000	Reused in process

Particulars	Waste Quantity in TPA			Treatment/ disposal
	Type of Waste	Source	Quantity in TPA	
(TPD)	Cuts, discards, etc.	manufacturing of Billet and TMT		
	Slag	Induction Furnace	4980	Road making, cement manufacturing unit after separation of metallic content
APCD Dust		Generated from Bag House	3308	Sold to authorized vendor /sold to construction industry for plinth filling purpose
Used Oil	Used oil	Regular maintenance of Machinery, DG sets	2.5 KL/ Annum	Sold to authorized vendor

22.10.14 Public Consultation (Earlier PH during EC dated 01.04.2019):

Details of advertisement given	28.06.2018
Date of public consultation	31.07.2018
Venue	Sub Tehsil office, Tapukara
Presiding Officer	Mr. M.L. Yogi, Chief executive District Magistrate, Paschim Bardhaman.
Major issues raised	The issues raised during Public Hearing are: ➢ Water Pollution problems ➢ Employment generation ➢ Infrastructure Development

Action plan as per MoEF&CC O.M. dated 30/09/2020: As per exisiting EC dated 01.04.2019

S. No	Activity Head	Activity Sub-Head	Activities Details	Budget Cost (in lacs)
1	Skill developments	Vocational skills	Opening of various vocational skills like sewing centers for women, promoting short vocational skills development programs like electricians, ETT, solar etc. for rural youth	1.0
		Soft skills	Organizing Various Programs for Rural Youth to Development Soft Skills like Confidence, Commitment, Communication Skills, Personality Developments Etc.	1.0
2	Educational developments	Basic educations	Providing Infrastructure in Govt. Schools like Furniture, Mats, Electricals, Painting, Building Repairs & Scholarships to Needy Students & Teachers for Sports and Music etc.	2.0

S. No	Activity Head	Activity Sub-Head	Activities Details	Budget Cost (in lacs)
		Value based education	Organizing Various Programs in Govt. Schools & Villages to Provide Value Based Education to become Useful Citizens for Society.	2.0
3	Hygiene & Health and environmental awareness developments	Hygiene & health	Organizing Awareness Camps of Swach Bharat, Cleaning Drives, Nukad Plays, Medical Camps, Blood/Organ Donation Camps, Yoga Camps, Health is Wealth Camps Etc.	1.5
		Environment	Tree Plantations, Water Conservation Programs, Chemical Free Farming, Importance of Fruiting Trees, Village Pond Cleaning Drives, Solid Waste Management Programs Etc.	1.5
4	Administrative expenses on CER activities			1.0
Total				**10.0**

22.10.15 Existing capital cost of project was Rs. 85.3052 Crores. The capital cost of the proposed facilities is Nil. Thus total project cost after expansion remain the same as Rs. 85.3052 Crores. The capital cost for environmental management after expansion of project is estimated to be Rs. 245 lakhs. Rs. 41 lakhs per year is required as annual recurring expenses to meet the recurring expenditure for implementing the measures. The employment generation from the existing project is 200 Nos and for the proposed expansion there will not be any additional employment. The details of cost for environmental protection measures is as follows:

S. No.	Environmental Protection Measures	Capital Cost Rs. In lakhs	Recurring Cost Rs. In lakhs/year
1	Air Pollution Control Measures	160	24
2	Water Pollution Control Measures	30	5
3	Noise Pollution Control Measures	5	1
4	Greenbelt Development	15	5
5	Rain Water Harvesting	10	2
6	Fire Fighting and Occupational Safety Measures	10	4
7	CER	15	-
TOTAL		**245**	**41**

22.10.16 Total green area provided as per earlier granted EC is 33.23% of total project area i.e. 1.07 ha. Total no of trees to be planted as per EC =2500*1.07 = 2675 No's. Already Planted trees are 2000 No's. PP will develop additional green belt of 0.21 ha for expansion project. Hence total green area after expansion will be 1.28 ha (40% of the total plot area). Trees to be planted for expansion = 0.21*2500 = 525 No's. Total trees to be planted after expansion will be 525+675=1200. A 5-10 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.

22.10.17 It has been reported that following will be resource consumption after the proposed change:

Particulars	As per EC dated 01.04.2019	After proposed change under Para 7(ii)	% increase
Land	3.22 Ha	NIL	No Change
Greenbelt	1.07 ha	1.28 ha	25.23%
Water	40 KLD	NIL	No Change
Power	15 MW	22MW	46.66%
Raw material			
1. MS Scrap	101400 TPA	128821 TPA	27.04%
2. Sponge Iron/ Pig Iron	35750 TPA	35,750 TPA	NIL
3. Silico- Mn & Alloy Metals etc.	1040 TPA	1248 TPA	20%
4. MS Ingots/ Billets (procured from outside for rolling mill)	80000 TPA	53,600 TPA	-33%
Products	M.S Billets, TMT Bar, light, Medium section rolled product.	M.S Billets, TMT Bar, light, Medium section rolled product.	No Change

22.10.18 Pollution load assessment:

Particulars		As per EC dated 01.04.2019	Expansion under para 7 (ii) (a)	% Increase
Air	**$PM_{2.5}$**	0.3 $\mu g/m^3$	0.46 $\mu g/m^3$	153.33 %
	PM_{10}	0.3$\mu g/m^3$	0.11 $\mu g/m^3$	36.66 %
	NO_2	0.4 $\mu g/m^3$	0.297$\mu g/m^3$	74.25 %
water		40 KL/Day	40 KL/Day	No change
Solid & Hazardous Waste	Mill scales from Rolling Mill	3000 TPA	Nil	No Change
	SMS Slag	4150 TPA	830	20%
	APCD Dust	600 TPA	2708 TPA	451%
	Used Oil	2.5 KL/Annum	Nil	No Change
Traffic Load		13 trucks/day (30 ton Capacity)	13 trucks/day (30 ton Capacity)	7.69%

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

Certified Compliance Report from Regional Office

22.10.20 The Status of compliance of earlier EC was obtained from Integrated Regional Office, Jaipur dated 28.07.2022 in the name of M/s SBF Ispat Pvt. Ltd. As per the observations made by the IRO in the report, the conditions are either complied/being complied by the project proponent.

Written representations:

22.10.21 During the meeting, based on the deliberations made by the EAC, the project proponent submitted the Justification for consideration of instant proposal under the provisions of para 7(ii) of EIA Notification, 2006 and in pursuance to Ministry's OM dated 11.04.2022. The same is mentioned in para 22.10.3 above.

Deliberations by the Committee

22.10.22 The Committee noted the following:

1. The instant proposal is for expansion in production capacity of MS billets from 1,32,000 TPA to 1,58,400 TPA & Rolling Mill for manufacturing of TMT Bars 2,00,000 TPA within existing facility of two induction furnace (20 Tonne each) with Reheating Furnace (30TPH).
2. The proposal falls under Category "B" of the schedule of the EIA Notification, 2006, however, general condition is applicable as Rajasthan SPCB has notified Bhiwadi as Critically Polluted Area (CPA) vide Letter No. CPCB/ IPC/ CEPI/ Rajasthan/ Action plan/ 8050 dt 12.10.2020, and the project site is falling within 5 km i.e. 1.38 km (N) from Kushkera CEPI boundary and therefore the proposal being appraised at Central Level as Category 'A'.
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 addendum to the 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 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 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 expansion category.
6. The existing project was accorded environmental clearance by SEIAA, Rajasthan Vide File No- F1(4)/SEIAA/SEAC-Raj/Sectt/Project/Cat.7(d) B1 (15541)/2018-19, dated 01.04.2019 to produce 1, 32,000 TPA of M.S. Billets and 2,00,000 TPA TMT bar per

annum by using two 20 tonne induction furnace and rolling mill. Consent to Operate for the existing unit was accorded by RSPCB vide F (HDF)/Alwar (Tijara)/6874(1)/2021-2022/3924-3944 dated 16.11.2021, which is valid till 30.09.2026.

7. The total project area is 3.22 ha. Land has been allotted on lease basis for 90 years from Rajasthan State Industrial Development and Investment Corporation Ltd (RIICO).and under the possession of the company. No additional land is required for proposed expansion project.

8. The nearest habitation to plant is Tapukara village located at 2.21 km away from the project site boundary in the NE direction.

9. Total existing Water requirement is 40 m^3/day and is being sourced from ground water. No additional water will be required for the proposed expansion.

10. Sahibi River (5.71 km – WSW) and Chaundi Nadi (6.81 km – S) are flowing 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 implemented.

11. The Committee deliberated on the baseline data previously collected (March to May, 2018) at the time of EC dated 01.04.2019 and the fresh baseline data collected (March to May, 2022) during the instant application and observed that though the collected data shows the values beyond the NAAQ standards for some of the parameters in both the cases, however, there is decline in the values of the parameters in the baseline data of March to May, 2022 as compared to baseline data of March to May, 2018. Also, since the project falls under CPA, the monitored values are on higher side. Accordingly, the EAC deliberated on pollution load assessment reported by PP/Consultant and found it satisfactory. Considering the same, the proposal is appraised under para 7(ii)(a) of EIA Notification, 2006.

12. The EAC noted that total green area provided as per earlier granted EC is 33.23% of total project area i.e. 1.07 ha. Total 2675 no of trees to be planted as per EC. PP has already Planted 2000 trees. PP will further develop additional green belt of 0.21 ha for expansion project. Hence total green area after expansion will be 1.28 ha (40% of the total plot area). Thus total trees to be planted after expansion will be 1200.

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 deliberated upon the certified compliance report of IRO, MoEFCC and found it satisfactory.

15. 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 is of the opinion that project proponent shall stricty comply with the targets and timelines of the action plan.

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.

Recommendations of the Committee:

22.10.23 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 existing environmental clearance granted by the by SEIAA, Rajasthan Vide File No-F1(4)/SEIAA/SEAC-Raj/Sectt/Project/Cat.7(d) B1 (15541)/2018-19, dated 01.04.2019 shall also remain active and the project proponent shall comply with all the terms and conditions mentioned in the EC dated 01.04.2019.
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. In pursuance to MoEF&CC OMs dated 31st October, 2019 & 30th December, 2019 issued in compliance of the order of Hon'ble NGT in OA No. 1038/2018 dated 19th August, 2019, the compliance of all the conditions applicable to CEPI shall be implemented. Greenbelt shall be planned in 40% of the project area. CER allocation shall be 1.5 times of the normal calculated amount.
v. Water requirement of 40 m^3/day shall be sourced from ground water as proposed after obtaining necessary permission fromt the Competent Authority. However, PP shall explore the possibility of shifting to alternate source of water to reduce dependency on groundwater.
vi. Following additional arrangements to control fugitive dust shall be provided:
    a. Fog / Mist Sprinklers at all conveyors point and 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.

vii. All internal road and connecting road from project site to main highway shall be developed and maintained with suitable Million Axle Standard (MSA) as per the traffic load due to existing and proposed project.

viii. All stockyards shall be having impervious flooring and shall be equipped with water spray system for dust suppression. Stock yards shall also have garland drains to trap the run off material.

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

x. Particulate matter emission from stacks shall be less than 30 mg/Nm^3. Action plan submitted to limit the dust emission shall be strictly implemented.

xi. CEMS shall be provided on all process stacks and the signal shall be received in plant control room for central control of APCDs installed in the plant

xii. 85-90 % of billets shall be rolled directly in hot stage. RHF shall operate using only Light Diesel Oil as a fuel.

xiii. 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 100 % solid waste generated in the plant.
c. Used refractories shall be recycled as far as possible.

xiv. Sahibi River (5.71 km – WSW) and Chaundi Nadi (6.81 km – S) are flowing 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.

xv. 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. MSW waste shall be treated in digester and recovered gas shall be used in the canteen.

xvi. The company shall also undertake rain water harvesting measures as per the plan submitted in the EIA/EMP report and reduce water dependence from the outside source.

xvii. The nearest habitation to plant is Tapukara village located at 2.21 km away from the project site boundary in the NE direction. Project Proponent shall take appropriate environmental safeguard measures to minimise the impact on the habitation of the locals. The company shall also include this locations in its environmental monitoring programme.

xviii. PP shall undertake village adoption and formulate Village Adoption program consisting of need-based community development activities, to develop them into model villages.

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

xx. Three tier Green Belt shall be developed in at least 40% of the project area in a timeframe of one year 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. Gap filling shall be undertaken and 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. Compliance status in this regard, shall be submitted to concerned Regional Office of the MoEF&CC.

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

xxii. Action Plan for fire fighting system including provision for flame detectors, temperature actuated heat detectors with alarms, automatic sprinkler system, fixing the location of fire water tanks, separate power system for fire fighting, involvement of qualified and trained fire personnel, nearest fire station & time required to reach the proposed site shall be prepared and implemented.

xxiii. All the commitments made to the public during the Public Hearing/Public Consultation 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.

xxiv. 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.

xxv. 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.

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 two Continuous Ambient Air Quality Station (CAAQS) 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 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.
iii. 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.
iv. The project proponent shall provide leakage detection and mechanized bag cleaning facilities for better maintenance of bags.
v. 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.
vi. The project proponent shall ensure covered transportation and conveying of ore, coal and other raw material to prevent spillage and dust generation.
vii. Plant internal roads shall be concreted and a vacuum cleaner shall be used to regularly clean the roads.
viii. The project proponent shall provide primary and secondary fume extraction system at all melting furnaces.
ix. Design the ventilation system for adequate air changes as per prevailing norms for all tunnels, motor houses, Oil Cellars.

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 recognised 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 recognised under Environment (Protection) Act, 1986 and NABL accredited laboratories.
iii. Sewage Treatment Plant shall be provided for treatment of domestic wastewater to meet the prescribed standards.
iv. 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. Noise monitoring and prevention

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

V. Energy Conservation measures

i. Energy conservation measures may be adopted such as adoption of solar energy and provision of LED lights etc., to minimize the energy consumption.

VI. Waste management

i. Used refractories shall be recycled as far as possible.
ii. Oily scum and metallic sludge recovered from rolling mills ETP shall be mixed, dried, and briquetted and reused in melting Furnaces.
iii. Kitchen waste shall be composted or converted to biogas for further use.

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 including plantation.

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 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", when PP comes for EC proposal. This study shall be formulated keeping in view of India's Net-zero commitment at the COP-26 Climate Summit.

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).

iii. 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.

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.

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. 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.

vi. 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.

vii. 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.

viii. 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.

ix. 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.

x. 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).

xi. 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.

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

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

xiv. 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.

xv. 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. 22.11

22.11 The agenda number 22.11 was inadvertently leftover and not assigned to any proposal while preparing the agenda for 22nd EAC meeting for Industry-I held on 30-31st January, 2023.

***

Consideration of ToR Proposals

Agenda No. 22.12

22.12 Greenfield Steel Plant Project to produce Pellets 1.0 Million TPA; DRI 0.4 Million TPA, MS Billets 0.42 Million TPA and 0.4 Million TPA TMT Rebars with Iron ore beneficiation plant of capacity 2.65 Million TPA & Captive Power generation of 28 MW through WHRB and 15 MW through AFBC BY M/s PACIFIC METASTEEL PRIVATE LIMITED.

[Proposal No. IA/MP/IND1/410484/2022; File No. IA-J-11011/535/2022-IA-II(IND-I)]
[Consultant: Gaurang Environment Solutions Pvt. Ltd. Valid Upto: 07-12-2023]

22.12.1 M/s. Pacific Metasteel Private Limited (PMPL) has made an online application vide proposal no. IA/MP/IND1/410484/2022 dated 17.01.2023 along with the application in prescribed format (Form-I), 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 Sl. No. 2(b) Mineral benefication, 3(a) Metallurgical Industries (Ferrous and Non-ferrous) and 1(d) Thermal Power Plants under Category "A" of the schedule of the EIA Notification, 2006 and appraised at central level.

22.12.2 Name of the EIA consultant: M/s Gaurang Environment Solutions Pvt. Ltd. [List of ACOs with their Certificate / Extension Letter No: NABET/EIA/2023/RA 0192 (Rev.02) valid till 07.12.2023, as on February 01, 2023].

Details submitted by Project proponent

22.12.3 The project of M/s Pacific Metasteel Private Limited (PMPL) located in Survey no 20/3, 21, 22(part), 57, 52, 53, 54, 55, 121, 123, 124, 125, 126/3/2, 76/1, 75, 77, 58/1, 56/4, Village (s) Sakera Bhata, Sunrai Bhata, Papawani Khas, Tehsil Prithvipur, District Niwari, Madhya Pradesh is for setting up of a new Steel Plant for production of Pellets 1.0 Million TPA; DRI 0.4 Million TPA, MS Billets 0.42 Million TPA and 0.4 Million TPA TMT Rebars with Iron ore beneficiation plant of capacity 2.65 Million TPA & Captive Power generation of 43 MW (28 MW through WHRB and 15 MW through AFBC).

22.12.4 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>137.699 hectare (Govt. land)</td><td>Land use:
• Banjar: 69.359 Ha
• Pahad: 13.446 Ha
• Charagah: 30.699 Ha
• Pathar: 21.585 Ha
• Other: 2.61 Ha</td></tr>
<tr><td>2.</td><td>Land acquisition details as per MoEF&CC O.M. dated 7/10/2014</td><td>LoI for allotment of land to PMPL has been issued by MP Industrial Development Corporation Limited (MPIDCL), Madhya Pradesh vide letter dated 23.09.2022.</td><td>-</td></tr>
<tr><td>3.</td><td>Existence of habitation & involvement of R&R, if any.</td><td>Project site: 12 settlements in village Sakera Bhata, Sunarai Bhata & Papwani Khas.

Study area:
<table>
<tr><td>Habitation</td><td>Distance</td><td>Direction</td></tr>
<tr><td>Sunrai khas</td><td>0.4 km</td><td>South</td></tr>
<tr><td>Papawani Khas</td><td>0.6 km</td><td>ESE</td></tr>
</table></td><td>-</td></tr>
<tr><td>4.</td><td>Latitude & Longitude of all corners of the project site</td><td>
<table>
<tr><th>S. No.</th><th>Latitude</th><th>Longitude</th></tr>
<tr><td>1</td><td>25°14'24.23"N</td><td>78°39'51.07"E</td></tr>
<tr><td>2</td><td>25°14'13.81"N</td><td>78°39'47.67"E</td></tr>
<tr><td>3</td><td>25°14'9.71"N</td><td>78°39'57.87"E</td></tr>
<tr><td>4</td><td>25°13'59.62"N</td><td>78°39'54.18"E</td></tr>
<tr><td>5</td><td>25°13'59.37"N</td><td>78°39'40.01"E</td></tr>
<tr><td>6</td><td>25°13'53.64"N</td><td>78°39'40.01"E</td></tr>
<tr><td>7</td><td>25°13'42.45"N</td><td>78°39'41.71"E</td></tr>
<tr><td>8</td><td>25°13'41.59"N</td><td>78°39'39.54"E</td></tr>
<tr><td>9</td><td>25°13'58.94"N</td><td>78°39'25.94"E</td></tr>
<tr><td>10</td><td>25°14'13.46"N</td><td>78°39'25.56"E</td></tr>
<tr><td>11</td><td>25°14'21.67"N</td><td>78°39'31.13"E</td></tr>
<tr><td>12</td><td>25°14'23.89"N</td><td>78°39'39.16"E</td></tr>
<tr><td>13</td><td>25°13'34.59"N</td><td>78°39'24.15"E</td></tr>
<tr><td>14</td><td>25°13'31.51"N</td><td>78°39'21.22"E</td></tr>
<tr><td>15</td><td>25°13'27.50"N</td><td>78°39'15.65"E</td></tr>
<tr><td>16</td><td>25°13'22.80"N</td><td>78°39'6.86"E</td></tr>
<tr><td>17</td><td>25°13'21.43"N</td><td>78°39'0.82"E</td></tr>
<tr><td>18</td><td>25°13'33.13"N</td><td>78°39'0.63"E</td></tr>
<tr><td>19</td><td>25°13'36.64"N</td><td>78°38'50.81"E</td></tr>
<tr><td>20</td><td>25°13'43.64"N</td><td>78°38'50.71"E</td></tr>
<tr><td>21</td><td>25°13'45.61"N</td><td>78°38'50.99"E</td></tr>
<tr><td>22</td><td>25°13'56.37"N</td><td>78°38'54.30"E</td></tr>
<tr><td>23</td><td>25°13'50.99"N</td><td>78°39'12.81"E</td></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>24</td><td>25°13'50.57"N</td><td>78°39'23.67"E</td></tr>
<tr><td>25</td><td>25°13'59.02"N</td><td>78°39'13.76"E</td></tr>
<tr><td>26</td><td>25°13'56.38"N</td><td>78°39'9.03"E</td></tr>
<tr><td>27</td><td>25°14'0.90"N</td><td>78°39'1.95"E</td></tr>
<tr><td>28</td><td>25°14'6.37"N</td><td>78°39'2.51"E</td></tr>
<tr><td>29</td><td>25°14'14.23"N</td><td>78°39'9.69"E</td></tr>
<tr><td>30</td><td>25°14'20.56"N</td><td>78°39'14.79"E</td></tr>
<tr><td>31</td><td>25°14'18.08"N</td><td>78°39'21.97"E</td></tr>
<tr><td>32</td><td>25°14'5.86"N</td><td>78°39'22.82"E</td></tr>
<tr><td>33</td><td>25°13'58.43"N</td><td>78°39'21.41"E</td></tr>
<tr><td>34</td><td>25°13'55.78"N</td><td>78°39'21.03"E</td></tr>
<tr><td>35</td><td>25°13'57.91"N</td><td>78°39'18.48"E</td></tr>
<tr><td>36</td><td>25°13'58.96"N</td><td>78°39'19.18"E</td></tr>
</table>
</td><td></td></tr>
<tr><td>5.</td><td>Elevation of the project site</td><td>267 m above MSL.</td><td></td></tr>
<tr><td>6.</td><td>Involvement of forest land if any</td><td>No involvement of forest land.</td><td>4500 trees will be uprooted.
Application has been submitted to forest department for permission.</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: Ponds in project site.

Study area:
<table>
<tr><th>S. No.</th><th>Particulars</th><th>Distance (km)</th><th>Direction</th></tr>
<tr><td>1.</td><td>Bardai Nala</td><td>Adjacent to the Boundary</td><td>N</td></tr>
<tr><td>2.</td><td>Jamni River</td><td>5.3</td><td>WNW</td></tr>
<tr><td>3.</td><td>Magra Nala</td><td>5.4</td><td>NNE</td></tr>
<tr><td>4.</td><td>Birsagar Tall</td><td>5.8</td><td>SE</td></tr>
<tr><td>5.</td><td>Betwa River</td><td>6.6</td><td>NW</td></tr>
<tr><td>6.</td><td>Sanera Tall</td><td>9.5</td><td>SSE</td></tr>
<tr><td>7.</td><td>Radha Sagar</td><td>9</td><td>ESE</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>Study area
• Name of the ESZ/ESA: Orchha Wildlife sanctuary
• Status of Notification: Final Notification 174 S.O. 35(E) dated 03.01.2018
• Distance of project from ESZ/ESA: ESZ is (~ 2.4 km from project site
• Authenticated map of ESZ projecting distance of ESZ from project site: Application has been</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>submitted dated 09.01.2023 to the Office of D.C.F, Wildlife, Tikamgarh and the same is under process.
• Status of NBWL approval: Not applicable
• List of Reserved and protected forests
<table>
<tr><th>S. No.</th><th>Particulars</th><th>Distance (km)</th><th>Direction</th></tr>
<tr><td>1.</td><td>Tapariyan Hararan</td><td>1.3</td><td>W</td></tr>
<tr><td>2.</td><td>Neguwan P.F.</td><td>2.8</td><td>NNE</td></tr>
<tr><td>3.</td><td>Ladwari P.F.</td><td>5</td><td>ENE</td></tr>
<tr><td>4.</td><td>Kachhana P.F.</td><td>5.2</td><td>ESE</td></tr>
<tr><td>5.</td><td>Seguwan P.F.</td><td>5.5</td><td>NNE</td></tr>
<tr><td>6.</td><td>Kanvariya P.F.</td><td>6</td><td>SSW</td></tr>
<tr><td>7.</td><td>Smara P.F.</td><td>6.8</td><td>SW</td></tr>
<tr><td>8.</td><td>Kuryau R.F.</td><td>7.6</td><td>WSW</td></tr>
<tr><td>9.</td><td>Kandhari Kanan R.F.</td><td>7.9</td><td>WSW</td></tr>
<tr><td>10.</td><td>Lahar North R.F.</td><td>8.9</td><td>W</td></tr>
<tr><td>11.</td><td>Lahar South R.F.</td><td>9.2</td><td>W</td></tr>
<tr><td>12.</td><td>R.F (Pura Khurd)</td><td>9.8</td><td>SW</td></tr>
<tr><td>13.</td><td>Sukwan R.F.</td><td>9.8</td><td>WSW</td></tr>
<tr><td>14.</td><td>Dumduma P.F.</td><td>10</td><td>E</td></tr>
</table></td><td></td></tr>
</table>

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

S. No.	Plant/ Equipment/ Facility	Proposed Units		Remarks
		Configuration	Capacity	
1	Iron Ore Beneficiation Plant	Ball mill 350 TPH x 1 no. in Primary	• Processing capacity: 2,670,000 TPA • Iron Ore concentrate: 1.06 million TPA	Captive use
2	Pellet Plant	1 x 10,00,000 TPA	Pellet: 1.0 million TPA	Surplus pellet: 0.39 Million TPA for sale
3	DRI Plant	2 nos. 600 TPD (Grate Kiln Technology)	DRI: 0.4 Million TPA	Captive use
4	Steel Melt Shop	• IF: 6 x 25 T/10 MW (9 heats / furnace / day) • LRF: 2. x 25T/5MVA	Liquid Steel: 0.43 Million TPA	Captive use
5	Caster Shop	• Billet casters: 2 Nos., x 2 strand 6/11m radius Casters	MS Billets: 0.42 Million TPA	Captive use

S. No.	Plant/ Equipment/ Facility	Proposed Units		Remarks
		Configuration	Capacity	
6	Rolling Mill	• Reheating Furnace: 1 x 20 t/hour Pusher Type • Rolling mill capacity: 60 ton/hour	TMT Rebars: 0.4 Million TPA	Product for sale
7	Captive Power Plant with TG Set of 45 MW Rating	• DR kiln off gas based WHRB - 28 MW • Dolo Char, coal fines & coal based AFBC Boiler - 15 MW • TG Set of 45 MW rating	Power: 43 MW	Captive use

22.12.6 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	Source & distance from site	Mode of transportation
Beneficiation Plant				
1	Iron Ore	2,665,090	Nearby mines	Road
Pellet Plant				
1	Iron Concentrate	1,060,000	Own Beneficiation Plant	
2	Limestone	32,000	Karnataka and AP Mines, Imports from Vietnam, Malaysia and Dubai.	Trucks
3	Anthracite Coal (PCI)	45,000	Coal India Limited, Private Coal Mines, Imports from South Africa, Australia, Russia.	Trucks
4	Bentonite	9,000	Private Mines in Kutch district of Gujarat.	trucks
DRI Plant				
1	Pellets	610,290	Own Pellet Plant	
2	Dolomite	20,345	Karnataka and AP Mines, Imports from Vietnam, Malaysia and Dubai.	Trucks
3	Non-Coking Coal	366,175	Coal India Limited, Private Coal Mines, Imports from South Africa, Australia, Russia.	Trucks
Steel Melt Shop				
1	DRI	406,860	Own DRI Plant	
2	Pig Iron	76,285	Merchant Blast Furnace installations in Raipur-Raigarh belt.	trucks
3	Revert Scrap	25,430	From same Plant	
4	Calcined Lime	4,250	Domestic market	trucks

S. No.	Raw Material	Quantity	Source & distance from site	Mode of transportation
5	Ferro Alloys	5,100	Merchant Ferro Alloy Plants in Raipur-Raigarh belt.	trucks
Rolling Mill				
1	Billets	416,667	Own SMS	
Captive Power Plant				
1	Char	80,000	Own DRI Plant	
2	Steam Coal	66,270	Coal India Limited, Private Coal Mines, Imports from South Africa, Australia, Russia & Ukraine.	Trucks

22.12.7 The fresh water requirement for the proposed project is estimated as 7500 m^3 /day, which will be obtained from ground water. The permission for drawl of groundwater will be obtained.

22.12.8 The power requirement for the proposed project is estimated as 83MW, out of which 43 MW will be obtained from the proposed captive power plant & remaining from State power grid.

22.12.9 The capital cost of the project is Rs. 1772.08 Crores and the capital cost for environmental protection measures is proposed as Rs 41.75 Crores. The employment generation from the proposed project is 443 during construction phase & 1264 during operation phase.

22.12.10 It is submitted that there is no violation under EIA notification 2006/no court cases/no show cause/no direction related to the project under consideration.

22.12.11 Proposed Terms of Reference: [Baseline data collection period: December 2022 to February 2023]

S. No.	Particulars	Sampling		Remarks
		No. of stations	**Frequency**	
A.	**Air**			
	Meteorological parameters	1	Daily for 3 months (December 2022 to February 2023)	Hour, Wind speed & Direction, Rainfall/precipitation, Humidity, Temperature, Ceiling height, Cloud cover
	AAQ parameters	9	24 hourly samples Twice a week for 3 months (December 2022 to February 2023)	PM_{10}, $PM_{2.5}$, SO_2, NOx & CO
B.	**Noise**	9	day & night time, once during monitoring period (December 2022 to February 2023)	Noise levels monitoring, dB(A)
C.	**Water**			
	Surface water	7		

S. No.	Particulars	Sampling		Remarks
		No. of stations	Frequency	
	Ground water quality parameters	9	Once during monitoring period (December 2022 to February 2023)	Physical, chemical & biological parameters
D.	**Land**			
	Soil quality	9	Once during monitoring period (December 2022 to February 2023)	Physical & chemical parameters
	Land use	Study area	Once during monitoring period (December 2022 to February 2023)	Identification & classification of land use using satellite imagery
E.	**Biological**			
	Aquatic	Study area	Once during monitoring period (December 2022 to February 2023)	Existing terrestrial and aquatic flora and fauna
	Terrestrial			
F.	**Socio-economic parameters**		Once during monitoring period (December 2022 to February 2023)	Socio-economic characteristics of the impact zone

Deliberation by the Committee

22.12.12 The Committee noted the following:

i. The instant proposal is for setting up of a new Steel Plant for production of Pellets 1.0 Million TPA; DRI 0.4 Million TPA, MS Billets 0.42 Million TPA and 0.4 Million TPA TMT Rebars with Iron ore beneficiation plant of capacity 2.65 Million TPA & Captive Power generation of 43 MW (28 MW through WHRB and 15 MW through AFBC).

ii. The EAC deliberated on the proposal. Based on the KML file presented by the PP, the proposed Unit is greenfield project.

iii. Total Project area is 137.699 ha and LoI for allotment of land to PMPL has been issued by MP Industrial Development Corporation Limited (MPIDCL), Madhya Pradesh vide letter dated 23.09.2022.

iv. The nearest habitation are Sunrai Khas (0.4 km, S) and Papawani Khas (0.6 km, ESE) from the project site boundary.

v. Tree felling of 4500 trees in envisaged in the instant proposal. PP has submitted the application to forest department for obtaining permission.

vi. As reported by the project proponent, about 12 families are presently encroaching in the project area. Further, as reported by PP, R&R in the instant case is the responsibility of State Administration as the proposed land is a government land and the same will be handed over to the project proponent.

vii. Bardai Nala is adjacent to project boundary in the North direction. Jamni River (5.3 km, WNW), Magra Nala (5.4 km, NNE), Birsagar Tall (5.8 km, SE), Betwa River (6.6 km,

NW), Sanera Tall (9.5 km, SSE) and Radha Sagar (9 km, ESE) are other water bodies flowing 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 prepared and included in the EIA/EMP Report.

viii. Orchha Wildlife sanctuary is at a distance of 2.7 km from the project site boundary and its ESZ is at distance of 2.4 km from the project site boundary. Application has been submitted vide letter dated 09.01.2023 to the Office of D.C.F, Wildlife, Tikamgarh and for certification of the distance alongwith map and the same is under process.

ix. The fresh water requirement for the proposed project is estimated as 7500 m^3 /day, which will be obtained from ground water.

Recommendations of the Committee

22.12.13 After deliberations, the Committee **recommended** the project proposal for prescribing following specific ToRs for undertaking detailed EIA and EMP study in addition to the generic ToRs enclosed at **Annexure-1** read with additional ToRs at **Annexure-2**.

(i) The nearest habitation to plant are Sunrai Khas (0.4 km, S) and Papawani Khas (0.6 km, ESE). Project Proponent shall prepare an action plan for environmental safeguard measures to minimise the impact on the habitation of the locals. The company shall also include some of these locations in its environmental monitoring programme.

(ii) Bardai Nala is adjacent to project boundary in the North direction. Jamni River (5.3 km, WNW), Magra Nala (5.4 km, NNE), Birsagar Tall (5.8 km, SE), Betwa River (6.6 km, NW), Sanera Tall (9.5 km, SSE) and Radha Sagar (9 km, ESE) are other water bodies flowing 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.

(iii) Orchha Wildlife sanctuary is at a distance of 2.7 km and its ESZ is at distance of 2.4 km from the project site boundary. PP shall submit the certificate certifying the same along with the authenticated map from State Forest Department also ensuring the coordinates of the project site are mentioned in the certificate.

(iv) Tree felling of 4500 trees in envisaged in the instant proposal. PP shall obtain necessary permission from the felling of trees. PP shall also explore the possibility to minimise tree felling to bare minimum.

(v) Action Plan shall be developed for three tier Green Belt in atleast 33% of total project area @2500 trees per ha all along the periphery of the project site. PP shall plan to 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 alongwith windshield inside the plant premises to act as green barrier for air pollution & noise levels towards nearby ESAs. Compensatory Afforestation against tree felling shall be a separate plan apart from 33% greenbelt in the plant premises. PP shall further explore possibility to identify vacant spaces and plant additional greenbelt in addition to 33% project area.

(vi) Water required for the proposed project will be 7500 m^3/day which is proposed to be sourced from ground. PP shall explore the possibility of shifting to alternate source of water to reduce dependency on groundwater.

(vii) Detailed description of micro flora and fauna (terrestrial and aquatic) existing in the study area with special reference to rare, endemic and endangered species. Details of flora and fauna existing in the study area shall be duly authenticated by the concerned DFO of the area. In case of existence of any endangered species and Schedule I fauna, authenticated conservation plan shall be submitted.

(viii) Explore possibilities for recycling and reusing of treated water in the unit to reduce the fresh water demand and waste disposal.

(ix) The PP should submit the photograph of monitoring stations & sampling locations. The photograph should bear the date, time, latitude & longitude of the monitoring station/sampling location. In addition to this PP should submit the original test reports and certificates of the labs which will analyze the samples.

(x) PP shall submit action plan for rainwater harvesting system.

(xi) Action plan for 100 % solid waste utilization shall be submitted.

(xii) 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.

(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) 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 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", when PP comes for EC proposal. This study shall be formulated keeping in view of India's Net-zero commitment at the COP-26 Climate Summit.

(xv) As part of Corporate Environment Responsibility (CER) activity, company shall adopt nearby villages based on the socio-economic survey (10 Kms radial coverage from the project site) 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.

(xvi) Traffic study shall be carried out inter-alia including existing road details with traffic load, proposed quantum of material to be transported by sea/rail/road with anticipated vessels/rakes/vehicles details, line source modelling and infrastructure strengthening details etc., These details shall be included in the EIA report.

(xvii) Air Cooled condensers shall be used in the captive power plant.

(xviii) Action plan for the stock piles with impervious floor, provision of garland drains and catch pits to trap run off material shall be submitted.

(xix) Action plan to limit the dust emission from all the stacks below 30 mg/Nm^3 shall be furnished. Action plan for fugitive emission control in the plant premises shall be provided.

(xx) A Plan of Action for disposal of e-waste must be drawn up and implemented.

(xxi) PP shall explore the possibility of plastic waste utilization in the Plant/Unit process.

(xxii) Action Plan for fire fighting system including provision for flame detectors, temperature actuated heat detectors with alarms, automatic sprinkler system, location of fire water tanks & capacity, separate power system for fire fighting, details of qualified and trained fire personnel & their job specifications, nearest fire station & time required to reach the proposed site shall be submitted.

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Consideration of Modification in ToR proposal

Agenda No. 22.13

22.13 Proposed Integrated Cement Project - Clinker (3.0 MTPA), Cement (4.0 MTPA), Captive Power Plant (40 MW) & WHRS (15 MW) by M/s. Springway Mining Private Limited at Village: Gaisabad, Tehsil: Hatta, District: Damoh, Madhya Pradesh-Consideration for Modification in TOR.

[Proposal No. IA/MP/IND/295296/2022; File No. IA-J-11011/69/2019-IA-II(I)]
[Consultant: J.M. EnviroNet Pvt. Ltd. Valid Upto: 05.05.2023]

22.13.1 M/s. Springway Mining Private Limited has made an online application vide proposal no. IA/MP/IND/295296/2022 dated 10.01.2023 along with the application in prescribed format (Form-3), copy of revised Pre-feasibility report and revised Form-1 seeking amendment in Terms of Reference accorded by the Ministry vide letter no. IA-J-11011/69/2019-IA-II(I), dated 1st May, 2019 w.r.t. change in configuration of Clinker capacity to be increased from 2.5 MTPA to 3.0 MTPA and WHRS from 10 MW to 15 MW.

22.13.2 Name of the EIA consultant: M/s. J.M. Environet Pvt. Ltd. [List of ACOs with their Certificate / Extension Letter no. NABET/EIA/2023/SA0158; Valid up to 05.05.2023, as on February 1, 2023].

Details submitted by Project proponent

22.13.3 M/s. Springway Mining Private Limited had earlier applied for grant of ToR vide proposal no. IA/MP/IND/97176/2019 dated 25.02.2019 for an Integrated Cement Project - Clinker (2.5 MTPA), Cement (4.0 MTPA), Captive Power Plant (40 MW) & WHRS (10 MW) located at Village: Gaisabad, Tehsil: Hatta, District: Damoh, Madhya Pradesh. Accordingly, Terms of Reference was issued by MoEF&CC vide letter no. IA-J-11011/69/2019-IA-II(I), dated 1st May, 2019.

22.13.4 The instant proposal is for seeking amendment in ToR dated 01.05.2019 w.r.t. change in configuration of Clinker capacity to be increased from 2.5 MTPA to 3.0 MTPA and WHRS from 10 MW to 15 MW as follows:

S. No.	Reference of approved ToR	Description as per Approved ToR	Amendment required	Remarks
1.	Subject Matter	Proposed Integrated Cement Project - Clinker (2.5 MTPA), Cement (4.0 MTPA), Captive Power Plant (40 MW) & WHRS (10 MW) at Village: Gaisabad, Tehsil: Hatta, District: Damoh (Madhya Pradesh).	Proposed Integrated Cement Project - ***Clinker (3.0 MTPA),*** Cement (4.0 MTPA), Captive Power Plant (40 MW) & ***WHRS (15 MW)*** at Village: Gaisabad, Tehsil: Hatta, District: Damoh (Madhya Pradesh).	The, company is proposing change in configuration of Clinker capacity to be increased from 2.5 MTPA to 3.0 MTPA. M/s SMPL proposes installation of 9000 TPD kiln to bring synergy with the similar kilns being installed at other locations of JSW group who now have taken over the management control of M/s. SMPL. WHRS capacity will correspondingly increase from 10 MW to 15 MW w.r.t increased clinker production.
2.	S. No. 2	M/s. Springway Mining Pvt. Ltd. is proposing an Integrated Cement Project - Clinker (2.5 Million TPA), Cement (4.0 Million TPA), Captive Power Plant (40 MW) & WHRS (10 MW) at Village: Gaisabad, Tehsil: Hatta, District: Damoh (Madhya Pradesh).	M/s. Springway Mining Pvt. Ltd. is proposing an Integrated Cement Project - ***Clinker (3.0 Million TPA),*** Cement (4.0 Million TPA), Captive Power Plant (40 MW) & ***WHRS (15 MW)*** at Village: Gaisabad, Tehsil: Hatta, District: Damoh (Madhya Pradesh).	The company is proposing change in configuration of Clinker capacity and propose to increase the same from 2.5 MTPA to 3.0 MTPA. M/s. SMPL proposes installation of 9000 TPD kiln to bring synergy with the similar kilns being installed at other locations of JSW group who now have taken over the management control of M/s. SMPL. WHRS capacity will correspondingly increase from 10 MW to 15 MW w.r.t increased clinker production.
3.	S. No. 3	The land acquired for the proposed plant is 122.68; out of which 120.46 ha is private agricultural land and rest 2.22 ha is Govt. land. No forest land is	The land to be acquired for the proposed plant is 122.68; out of which 120.46 ha is private agricultural land and rest 2.22 ha is Govt. land. No forest land is	Company is proposing 42.044 ha (34.27 %) area under greenbelt development / plantation as the space will be available after computing the plant machineries.

S. No.	Reference of approved ToR	Description as per Approved ToR	Amendment required	Remarks
		involved. The entire land has been acquired for the project. Out of the total project area, 40.48 ha (33%) will be used for greenbelt development.	involved. ***Company has so far purchased approx. 68.5 Ha of land including allocation of 2.22 Ha of govt. land. Purchase of remaining land is in progress.*** Out of the total project area, ***42.044 ha (34.27 %)*** will be used for greenbelt development.	
4.	S. No. 5	Total project cost is approx. Rs. 1200 Crores. Proposed employment generation from proposed project will be 250 direct employments and 2200 indirect employments.	Total project cost is approx. ***Rs. 2300 Crores.*** Proposed employment generation from proposed project will be 250 direct employments and 2200 indirect employments.	The total project cost will be increased from Rs. 1200 Crores to Rs. 2300 Crores due to the following reasons - o Market Price escalation o Selection of latest state-of-the-art technology equipment from reputed cement plant manufacturers with air pollution control equipment's designed for 10 mg/Nm3 o Increase in clinker capacity from 2.5 MTPA to 3.0 MTPA o Increase in WHR capacity from 10 MW to 15 MW
5.	S. No. 8	The electricity load of 40 MW will be sourced from proposed Captive Power Plant, WHRS & Grid (for emergency)	The electricity load of ***43 MW*** will be sourced from proposed Captive Power Plant, WHRS & Grid (for emergency).	Due to change in configuration of Clinker capacity, power requirement will be increased from 40 MW to 43 MW.
6.	S. No. 13 (iv)	Action plan to initiate Mining activity in the northern part of the leased mine.	***M/s. Springway Mining Private Limited request for removal of this condition.***	M/s. Springway Mining Private Limited requests for removal of this condition as this is an Integrated project and company has already obtained EC for limestone mine and company shall abide by the conditions of

S. No.	Reference of approved ToR	Description as per Approved ToR	Amendment required	Remarks
				mine EC and approved mining plan.

Changes in granted ToR vis-à-vis proposed ToR are as follows –

S. No.	Units	Existing Capacity for which ToR has been granted	Proposed Capacity for which Amendment in ToR has been proposed
1.	Clinker	2.5 MTPA	3.0 MTPA
2.	Cement	4.0 MTPA	4.0 MTPA
3.	WHRS	10 MTPA	15 MTPA
4.	CPP	40 MTPA	40 MTPA

Other changes:

S. No.	Units	Existing Capacity for which ToR has been granted	Proposed Capacity for which Amendment in ToR has been proposed
1.	Greenbelt	40.48 (33%)	42.044 (34.27%)
2.	Project Cost	1200 Crores	2300 Crores
3.	Power Requirement	40 MW	43 MW
4.	Manpower Requirement (Nos.)	Operation Phase - 250 Construction Phase - 1200	Operation Phase - 850 (regular - 200 & 650 on contract) Construction Phase - 1250

22.13.5 **Reason for Amendment:**

a) Additional / Sp. ToR point No. IV : Action plan to initiate Mining activity in the northern part of the leased mine. M/s. Springway Mining Private Limited request for removal of this condition as they have already obtained EC for limestone mine and they assure to abide by the conditions of mine EC and approved mining plan.

b) The, company is proposing change in configuration of Clinker capacity to be increased from 2.5 MTPA to 3.0 MTPA. M/s SMPL proposes installation of 9000 TPD kiln to bring synergy with the similar kilns being installed at other locations of JSW group who now have taken over the management control of M/s SMPL.

c) WHRS capacity will correspondingly increase to 15 MW w.r.t. increase in clinker production.

d) Project cost increase: From INR 1200 Crore to 2300 Crore.
   - Market Price escalation
   - Selection of latest state-of-the-art technology equipment from reputed cement plant manufacturers with air pollution control equipment's designed for 10 mg/Nm3

- Increase in clinker capacity from 2.5 MTPA to 3.0 MTPA
- Increase in WHR capacity from 10 MW to 15 MW

22.13.6 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.

Deliberation by the Committee

22.13.7 The Committee noted the following:

i. M/s. Springway Mining Private Limited had earlier applied for grant of ToR vide proposal no. IA/MP/IND/97176/2019 dated 25.02.2019 for an Integrated Cement Project - Clinker (2.5 MTPA), Cement (4.0 MTPA), Captive Power Plant (40 MW) & WHRS (10 MW) located at Village: Gaisabad, Tehsil: Hatta, District: Damoh, Madhya Pradesh. Accordingly, Terms of Reference was issued by MoEF&CC vide letter no. IA-J-11011/69/2019-IA-II(I), dated 1st May, 2019.

ii. The instant proposal is for seeking amendment in ToR dated 01.05.2019 w.r.t. change in configuration of Clinker capacity to be increased from 2.5 MTPA to 3.0 MTPA and WHRS from 10 MW to 15 MW and other changes as detailed in para 22.13.4 above for the reasons stated in para 22.13.5 above.

iii. The EAC noted that baseline study for the project has already been conducted during Summer Season (March to May, 2022).

Recommendations of the Committee

22.13.8 After deliberations, the Committee **recommended** the proposal for amendment in ToR granted vide File no. IA-J-11011/69/2019-IA-II(I), dated 1st May, 2019 w.r.t. change in configuration of Clinker capacity to be increased from 2.5 MTPA to 3.0 MTPA and WHRS from 10 MW to 15 MW and other changes as detailed in para 22.13.4 above.

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Agenda No. 22.14

22.14 Expansion of existing 10 MW Thermal Power Plant to 0.2MTPA Integrated Steel Plant with 1,65,000 TPA Sponge Iron,45,000 TPA Charge Chrome, 2,13,840 TPA Billets. 2,03,150TPA TMT Rods with 25 MW Captive Power Plant by M/s Shantha Steel & Power Pvt. Ltd at Koppal District Karnataka- Consideration for Modification in TOR.

[Proposal No. IA/KA/IND/295815/2022; File No. IA-J-11011/147/2021-IA-II(I)]

22.14.1 M/s. Shantha Steel & Power Pvt. Ltd. has made an online application vide proposal no. IA/KA/IND/295815/2022 dated 16.01.2023 along with the application in prescribed format (Form-3), copy of revised Pre-feasibility report and revised Form-1 seeking amendment in Terms of Reference accorded by the Ministry vide letter no. No. IA-J-11011/147/2021-IA-II(I)

dated 20.09.2022 w.r.t. exclusion of 2(b) Mineral Beneficiation from the ToR and inclusion of configurations for Induction Furnace and SAF in the project title for the revised TOR.

Details submitted by Project proponent

22.14.2 M/s. Shantha Steel & Power Pvt. Ltd. had earlier applied for grant of ToR vide proposal no. IA/KA/IND/279678/2022 dated 17.09.2022 for Expansion of Existing Unit from 10 MW Thermal Power Plant to Integrated Steel Plant with configuration 1,65,000 TPA Sponge Iron,2,03,150 TPA, TMT Rolled Products and 25 MW Captive Power plant located at Village Hosahalli, Hirekalagada Hobli, Dist: Koppal, Karnataka. Accordingly, Standard Terms of Reference was issued by MoEF&CC vide letter no. IA-J-11011/147/2021-IA-II(I) dated 20.09.2022.

22.14.3 The instant proposal is for seeking amendment in ToR dated 20.09.2022 w.r.t. exclusion of 2(b) Mineral Beneficiation from the ToR and inclusion of configurations for Induction Furnace and SAF in the project title for the revised TOR as follows:

S. No.	Reference of approved ToR	Description as per Approved ToR	Description as per Proposal to be amended	Remarks
1.	Cover Page Point 4: *Project/ Activity applied for*	2(b) Mineral beneficiation 3(a) Metallurgical industries (ferrous & non ferrous)	3(a) Metallurgical industries (ferrous & non ferrous)	The, company is proposing exclusion of 2(b) Mineral Beneficiation from the ToR as by mistake in project schedule it got clicked on 2(b) Beneficiation Plant along with 3(a) Ferrous & Non-ferrous Plant.
2.	Cover Page Point 2: *Name of the Proposal*	Expansion of Existing Unit from 10 MW Thermal Power Plant to Integrated Steel Plant with configuration 1,65,000 TPA Sponge Iron, 2,03,150 TPA, TMT Rolled Products and 25 MW Captive Power plant.	Expansion of existing unit from 10 MW Thermal Power Plant to Integrated Steel Plant comprising of 2x250 TPD DRI (Sponge Iron - 1,65,000 TPA), 3x18 TPA IF with LRF & AOD (Hot Metal – 2,13,840 TPA), 1x13.5 MVA SAF (Charge Chrome – 45,000 TPA), 600 TPD Rolling Mill (TMT Rolled Products - 2,03,150 TPA), 15 MW AFBC and 10 MW WHRB by M/s. Shantha Steel & Power Pvt. Ltd. located at Village Hosahalli, Hirekalagada Hobli, Dist: Koppal, Karnataka.	During defining the Project configuration with capacity mentioned in Basic information of the Form, could not be changed due to earlier registration process. Therefore the configuration details as proposed in PFR could not been reflected in the approved TOR, although the total configuration is within the purview of 3(a); Ferrous & Non-Ferrous Plant process.

22.14.4 **Reason for Amendment:**

a) **Exclusion of 2(b) Mineral Beneficiation from the ToR:** The, company is proposing exclusion of 2(b) Mineral Beneficiation from the ToR as by mistake in project schedule it got clicked on 2(b) Beneficiation Plant along with 3(a) Ferrous & Non-ferrous Plant during the application of TOR

b) **Inclusion of configurations for Induction Furnace and SAF in the project title for the revised TOR** - During defining the Project configuration with capacity mentioned in Basic information of the Form, could not be changed due to earlier registration process. Therefore the configuration details as proposed in PFR could not been reflected in the approved TOR, although the total configuration is within the purview of 3(a); Ferrous & Non-Ferrous Plant process.

22.14.5 There are no changes in the configuration and capacity of the proposed project.

Deliberation by the Committee

22.14.6 The Committee noted the following:

i. M/s. Shantha Steel & Power Pvt. Ltd. had earlier applied for grant of ToR vide proposal no. IA/KA/IND/279678/2022 dated 17.09.2022 for Expansion of Existing Unit from 10 MW Thermal Power Plant to Integrated Steel Plant with configuration 1,65,000 TPA Sponge Iron,2,03,150 TPA, TMT Rolled Products and 25 MW Captive Power plant located at Village Hosahalli, Hirekalagada Hobli, Dist: Koppal, Karnataka. Accordingly, Standard Terms of Reference was issued by MoEF&CC vide letter no. IA-J-11011/147/2021-IA-II(I) dated 20.09.2022.

ii. The instant proposal is for seeking amendment in ToR dated 20.09.2022 w.r.t. exclusion of 2(b) Mineral Beneficiation from the ToR and inclusion of configurations for Induction Furnace and SAF in the project title for the revised TOR as detailed in para 22.14.3 above for the reasons stated in para 22.14.4 above.

iii. The EAC noted that there are no changes in the configuration and capacity of the proposed project.

Recommendations of the Committee

22.14.7 After deliberations, the Committee **recommended** the proposal for amendment in ToR granted vide File no. IA-J-11011/147/2021-IA-II(I) dated 20.09.2022 w.r.t. exclusion of 2(b) Mineral Beneficiation from the ToR and inclusion of configurations for Induction Furnace and SAF in the project title for the revised TOR as detailed in para 22.14.3 above.

The meeting ended with thanks to the Chair.

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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.

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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.

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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.

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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

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ANNEXURE-3

List of the Expert Appraisal Committee (Industry-1) members participated during VC meeting

S. No.	Name	Position	30.01.2023	31.01.2023
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. B. N. Mohapatra, 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 **Additional Director MoEFCC Dr R B LAL**

Re: Compiled Draft minutes of the 22nd EAC Meeting held on January 30-31, 2023 for approval of the Chairman EAC

From : rajivekumar1983@gmail.com Sat, Feb 11, 2023 04:22 AM

Subject : Re: Compiled Draft minutes of the 22nd EAC Meeting held on January 30-31, 2023 for approval of the Chairman EAC

To : Additional Director MoEFCC Dr R B LAL <rb.lal@nic.in>

Cc : chairman eac ind 1 <chairman.eac.ind.1@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 R B Lal,

The draft minutes of 22 EAC are approved.
Kindly do the needful.

Best wishes
Rajive Kumar
Chairman EAC-Industry-1

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