

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

\*\*\*\*\*

**Dated: 31.07.2023**

*Date of Zero Draft MoM sent to EAC: 28.07.2023*

*Approval by Chairman:31.07.2023*

*Uploading on PARIVESH: 31.07.2023*

**MINUTES OF THE 40<sup>TH</sup> EXPERT APPRAISAL COMMITTEE (INDUSTRY-1 SECTOR) MEETING HELD ON 19<sup>TH</sup>-21<sup>ST</sup> JULY, 2023**

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

**Time: 10:30 AM onwards**

**DAY-1: JULY 19, 2023 [WEDNESDAY]**

**(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 39<sup>th</sup> Meeting of the EAC (Industry-1 Sector) held during 6<sup>th</sup> and 7<sup>th</sup> July, 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 **39<sup>th</sup> Meeting of the EAC (Industry-1 Sector) held during 6<sup>th</sup> and 7<sup>th</sup> July, 2023** conducted through Hybrid Mode, and noted that there is no modifications/factual correction reported by the PP, in the minutes of the 39<sup>th</sup> EAC meeting for the project/activities.

Details of the proposals considered during the 40<sup>th</sup> meeting **conducted** through **Hybrid Mode**, deliberations made and the recommendations of the Committee are explained in the respective agenda items as under:

### **Consideration of Environmental Clearance Proposals**

#### **Agenda No. 40.1**

**40.1 Expansion of steel plant –Sponge Iron through DRI Klins from 99,000 TPA to 4,05,375 TPA, WHRB Based Power generation from 5.0 MW to 29 MW, New AFBC Power Plant of 8.0 MW Capacity, MS Billets/ Hot Billets through Induction Furnace from 48,000 TPA to 1,58,400 TPA, Rolled products through New Rolling Mill of 1,65,000 TPA, & New Slag Crusher of 120 TPD by M/s Bihar Foundry & Castings Limited, located at Ramgarh Industrial Area, Plot No. 1364 Marar Village, Ramgarh Tehsil & District, Jharkhand– Consideration of Environmental Clearance**

**[Proposal No.: IA/JH/IND1/430894/2023; File No.: IA-J-11011/310/2009-IA-II-(IND-I)]  
[Consultant; Pioneer Enviro Laboratories & Consultants Pvt. Ltd., Hyderabad; 21.09.2025]**

40.1.1 M/s. Bihar Foundry & Castings Limited (DRI Division) has made an online application vide proposal no. IA/JH/IND1/430894/2023 dated 2nd June 2023 along with copy of EIA/EMP report and certified compliance report for seeking Environment Clearance (EC) under the provisions of the EIA Notification, 2006 for the project mentioned above. The proposed expansion project activity is listed at schedule no. 3(a) & 1(d) under Category “A” of the schedule of the EIA Notification, 2006 and appraised at Central Level.

40.1.2 Name of the EIA Consultant: M/s. Pioneer Enviro Consultants Pvt. Ltd. [NABET certificate vide no. NABET/EIA/2225/RA 0282 valid till 21.09.2025.

40.1.3 The detail of the ToR is furnished as below:

<b>Date of Application</b>	<b>Consideration</b>	<b>Details</b>	<b>Date of Accord</b>	<b>TOR Validity</b>
02.02.2023	Standard ToR was issued by MoEF&CC	Standard Terms of Reference	08.02.2023	07.02.2023

40.1.4 The PP reported that the Existing plant of M/s. Bihar Foundry & Castings Limited (DRI Division). located in Ramgarh Industrial Area, Plot No. 1364, Marar Village, Ramgarh Tehsil & District, Jharkhand Proposed Expansion of Steel plant –Sponge Iron through DRI Klins from 99,000 TPA to 4,05,375 TPA, WHRB Based Power generation from 5.0 MW to 29 MW, New AFBC Power Plant of 8.0 MW Capacity, MS Billets/ Hot Billets through Induction Furnace from 48,000 TPA to 1,58,400 TPA, Rolled products through New Rolling Mill of 1,65,000 TPA, & New Slag Crusher of 120 TPD capacity.

40.1.5 Environmental site settings

S.No.	Particulars	Details	Remarks															
1.	Total land	<b>7.69 Ha. (19 Acres)</b> [Entire land is allotted by Jharkhand Industrial Area Development Authority (JIADA)]	The total land as per existing E.C. is 14 Acres (5.67 Ha.). Subsequently acquired another 5 Acres (2.02 Ha.). Hence the total land of 19 Ac. (7.69 Ha.) is envisaged for the project. Expansion will be taken up partly in existing land and remaining in the additional land .															
2.	Land acquisition details as per MoEF&CC, O.M. dated 7/10/2014.	Total 7.69 Ha. (19 Acres) of land has taken on lease from Ranchi Industrial Area Development Authority (RIADA) & Jharkhand Industrial Area Development Authority (JIADA) <ul style="list-style-type: none"> <li>• 14 Acres for a period of 99 years from 01-05-1974 (<b>RIADA</b>)</li> <li>• Further 5 Acres for a period of 30 years from 28-10-2015 (<b>JIADA</b>)</li> </ul>	As Land is allotted by JRIADA & JIADA, Land diversion is not required.															
3.	Existence of habitation & involvement of R&R, if any.	<b>Project site:</b> No habitation exists in the plant site <b>Study Area:</b> <table border="1"> <thead> <tr> <th>Habitation</th> <th>Distance</th> <th>Direction</th> </tr> </thead> <tbody> <tr> <td>Marar</td> <td>0.3 kms.</td> <td>NE</td> </tr> </tbody> </table>	Habitation	Distance	Direction	Marar	0.3 kms.	NE	No R & R applicable									
Habitation	Distance	Direction																
Marar	0.3 kms.	NE																
4.	Latitude and Longitude of all corners of the project site	The following are the Coordinates of the Plant site <table border="1"> <thead> <tr> <th>Point</th> <th>Latitude</th> <th>Longitude</th> </tr> </thead> <tbody> <tr> <td>Point # 1</td> <td>23°39'25.21' N</td> <td>5°30'25.80'E</td> </tr> <tr> <td>Point # 2</td> <td>23°39'26.01' N</td> <td>5°30'31.55'E</td> </tr> <tr> <td>Point # 3</td> <td>23°39'15.30' N</td> <td>5°30'34.89'E</td> </tr> <tr> <td>Point # 4</td> <td>23°39'15.16' N</td> <td>5°30'24.01'E</td> </tr> </tbody> </table>	Point	Latitude	Longitude	Point # 1	23°39'25.21' N	5°30'25.80'E	Point # 2	23°39'26.01' N	5°30'31.55'E	Point # 3	23°39'15.30' N	5°30'34.89'E	Point # 4	23°39'15.16' N	5°30'24.01'E	--
Point	Latitude	Longitude																
Point # 1	23°39'25.21' N	5°30'25.80'E																
Point # 2	23°39'26.01' N	5°30'31.55'E																
Point # 3	23°39'15.30' N	5°30'34.89'E																
Point # 4	23°39'15.16' N	5°30'24.01'E																
5.	Elevation of the project site	193 m to 204 m	--															
6.	Involvement of Forest Land, if any	Nil	--															
7.	Water body (Rivers, Lakes, Pond, Nala,	<b>Project Site:</b> Nil. <b>Study area:</b> <table border="1"> <thead> <tr> <th>Water body</th> <th>Distance</th> <th>Direction</th> </tr> </thead> <tbody> </tbody> </table>	Water body	Distance	Direction	--												
Water body	Distance	Direction																

S.No.	Particulars	Details			Remarks
	Natural Drainage, Canal etc.) exists within the project site as well as study area		(kms.)		
		Damodar River	1.4	S	
		Raura Nala	2.5	E	
		Meramgarh Nala	4.7	E	
		Unnamed stream	0.7	W	
		Ramgarh Village pond	3.6	S	
		Seota village Pond	1.5	NE	
8.	Existence of ESZ / ESA / National Park / Wildlife Sanctuary / Biosphere Reserve / Tiger Reserve / Elephant Reserve etc. if any within the study area	There are no ESZ/ESA/National Park/ Wild life sanctuary / Biosphere reserve / Tiger Reserve / Elephant reserve within 10 Km. radius of the plant.			--
		<b>Forest</b>	<b>Distance (kms.)</b>	<b>Direction</b>	
		Unnamed PF near Manuan village	0.7	W	
		Unnamed PF Jaratoli (V)	4.0	S	
		Unnamed PF near Tilaiya village	5.0	NW	

40.1.6 The EC has been obtained from MOEF vide order dated 28.01.2010. Consent-to-Establish (CTE) has been obtained vide order No. 632, dated 24.02.2010 for Sponge Iron Plant (3X100 TPD), Induction Furnace 1X6, 2X3 TPH & 1X10 TPH , WHRB 6 MW & AFBC Power Plant 4 MW. Consent To Operate from JSPCB vide no. JSPCB/HO/RNC/CTO-4426528/2019/2376 dated 28.11.2019 Valid up to 31.12.2024 for Induction Furnace (48,000 TPA). CTO for sponge iron (99,000 TPA) & captive power plant – 5 MW vide order No. JSPCB/HO/RNC/CTO-11688208/2022/345 dated 25.03.2022 and is valid till 31.03.2025.

40.1.7 Implementation status of the existing EC

S. No.	Facilities (product)	Permitted Capacities as per the CTE / E.C. issued vide dated 28-02-2010	Implementation status as per the current CTO dt 28-11-2019& 25-03-2022
1	DRI Kiln (Sponge Iron)	99,000 TPA (3x100 TPD)	99,000 TPA (valid till 31.03.2025)
2	Induction furnace with LRF & CCM (Hot Billets / MS billets)	75,000 TPA (2x3T + 1x6T + 1x10T)	48,000 TPA (valid till 31.12.2024)
3	Rolling Mill through Hot charging (Rolled products i.e. TMT bars / Structural steel e.t.c) 85% Hot charging +	16,500 TPA	Not Implemented

S. No.	Facilities (product)	Permitted Capacities as per the CTE / E.C. issued vide dated 28-02-2010	Implementation status as per the current CTO dt 28-11-2019& 25-03-2022
	15% through RHF		
4	Power generation through WHRB of DRI	6 MW	5 MW (valid till 31.03.2025)
5	Power Plant through AFBC Boiler	4 MW	Not Implemented

40.1.8 The unit configuration and capacity of existing and proposed expansion project:

S. No.	Unit	Total Capacity as per the CTE / E.C. issued vide dated 28-02-2010	Implementation status as per the current CTO dt 28-11-2019& 25-03-2022	Proposed Expansion	Total production capacity After Present Expansion
1.	DRI Kiln for Production of Sponge Iron	3x100 TPD (99,000 TPA)	99,000 TPA	Existing DRI Kilns from 3 x 100 TPD to 3x125 TPD (1,29,375 TPA) New 1x650 TPD (2,76,000 TPA)	4,05,375 TPA
2.	Induction furnace with LRF & CCM to produce MS billets	75,000 TPA (2x3T + 1x6T + 1x10T)	48,000 TPA	Replacement of 2 x 3T IF + 1 x 6T IF with 3 x10 T IF Additional 1,18,800 TPA and 1x10 T Induction furnace	1,58,400 TPA (4x10T IF)
3.	Rolling Mill through Hot charging (Rolled products i.e. TMT bars / Structural steel e.t.c) 85% Hot charging + 15% through RHF	16,500 TPA	Not Implemented	1,65,000 TPA	1,65,000 TPA
4.	Power generation through WHRB of DRI	6 MW	5 MW	Up gradation from 5.0 MW to 7.0 MW Proposed 1 x 22 MW	29 MW
5.	Power Plant	4 MW	Not	8 MW	8 MW

S. No.	Unit	Total Capacity as per the CTE / E.C. issued vide dated 28-02-2010	Implementation status as per the current CTO dt 28-11-2019& 25-03-2022	Proposed Expansion	Total production capacity After Present Expansion
	through AFBC Boiler		Implemented		
6.	Slag Crusher	---	---	120 TPD	120 TPD
Note:-Upgradation of Existing DRI Kilns from 3 x 100 TPD to 3x125 TPD & proposed 1x 650TPD DRI kiln with yield of 800 TPD due to usage of Pellets & Imported Coal i.e. 345 days Operation (i.e. 4,05,375 TPA). Replacement of existing 2 x 3T IF + 1 x 6T IF with 3 x10 T IF. The total Production capacity after expansion will be 1,58,400 TPA.					

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

S. No.	Raw Material	Quantity (TPA)	Sources	Distance from Plant (in Kms.)	Mode of Transport
<b>1.</b>	<b>For DRI Kilns (Sponge Iron) – 4,05,375 TPA</b>				
a)	Pellets (100%)	587,794	Rungta Mines, Amalgam Steel, Rashmi Metaliks	~ 300 Kms.	By rail & road (through covered trucks)
b)	Imported coal	337,272	Indonesia / South Africa / Australia	~ 400 Kms.	Through sea route, rail route & by road (through covered trucks)
c)	Dolomite	20,269	Bilaigarh Mines	~ 500 Kms.	By road (through covered trucks)
<b>2.</b>	<b>For Steel Melting Shop (Billets/ Ingots) – 1,58,400 TPA</b>				
a)	Sponge Iron	1,60,000	Own generation	---	Through covered conveyers
b)	Pig Iron / MS scrap / end cuttings	24,000	Nearby market	~ 100 Kms.	By road (through covered trucks)
c)	Ferro alloys	8,000	Group Company which is adjacent	Group Company	By road (through covered trucks)
<b>3.</b>	<b>For Rolling mill (Rolled Products) – 1,65,000 TPA</b>				
a)	Hot Billets / ingots	1,45,860	inhouse	----	
b)	MS Billets	12,540 14,760	Inhouse Nearby plants	---- ~ 100 Kms.	--- By road (through covered

S. No.	Raw Material	Quantity (TPA)	Sources	Distance from Plant (in Kms.)	Mode of Transport
					trucks)
c)	LDO/LSHS	800 KL/annum	Local areas	~ 100 Kms.	By road (through tanker)
<b>3.</b>	<b>For FBC Boiler [Power Generation - 1 x 8 MW]</b>				
a)	Dolochar + Indian Coal	Dolochar 81,075	In plant generation	---	through covered conveyors
		Indian Coal 9,143	CCL /GHATO	~ 10 Kms.	By road (through covered trucks)

40.1.10 The existing plant requirement is 300 m<sup>3</sup>/day which is obtained from water ground water. NOC has been obtained from Central Ground Water Authority (CGWA) vide letter no.CGWA / NOC / IND / ORIG / 2021 / 13540, dated 26.03.2021 and is valid till 25.03.2024. The water requirement for the proposed expansion project is estimated as 1260 m<sup>3</sup>/day and the same will be sourced from Damodar River. The permission for drawl of surface water has been obtained from DVRRC, Vide Lr. No. 1/PMC/VIVIDH/958/2020 174, Ranchi, dated 09.03.2022.

40.1.11 Existing power requirement of 5.7 MW. The power requirement for the proposed expansion project is estimated as 19.3 MW. Total Power required for after the proposed expansion will be 25 MW. Power required will be sourced from existing & proposed Captive Power plant of 25 MW.

40.1.12 Baseline Environmental Studies

Period	March 2021 to May 2021	
AAQ parameters at 8 locations	<ul style="list-style-type: none"> <li>• PM<sub>2.5</sub> = 35.2 to 47.2 µg/m<sup>3</sup></li> <li>• PM<sub>10</sub> = 58.6 to 79.9 µg/m<sup>3</sup></li> <li>• SO<sub>2</sub> = 7.5 to 13.8 µg/m<sup>3</sup></li> <li>• NO<sub>2</sub> = 14.1 to 28.2 µg/m<sup>3</sup></li> <li>• CO = 396 to 765 µg/m<sup>3</sup></li> </ul>	
AAQ modelling	<ul style="list-style-type: none"> <li>• PM<sub>10</sub> = 0.86 µg/m<sup>3</sup> (1200 m in SE ) PM<sub>10</sub> (vehicular) = 0.28 µg/m<sup>3</sup></li> <li>• PM<sub>2.5</sub> = 0.5 µg/m<sup>3</sup> (1200 m in SE ) PM<sub>2.5</sub> (vehicular) = 0.11 µg/m<sup>3</sup></li> <li>• SO<sub>2</sub> = 5.77 µg/m<sup>3</sup> (1260 m in SE)</li> <li>• NO<sub>x</sub> = 3.26 µg/m<sup>3</sup> (1290 m in SE) NO<sub>x</sub> (vehicular) = 2.12 µg/m<sup>3</sup></li> <li>• CO (vehicular) = 1.37 µg/m<sup>3</sup></li> </ul>	
Ground water quality at 8 locations	<b>Parameter</b>	<b>Range of Concentration</b>
	pH	7.06 to 8.06
	TDS (in mg/l)	428 to 611
	Total Hardness (in mg/l)	238.4 to 332.5
	Chlorides (in mg/l)	90.5 to 133.3
Fluoride (in mg/l)	0.79 to 1.14	

	<table border="1"> <tr> <td>Iron (in mg/l)</td> <td>:</td> <td>0.26 to 0.46</td> </tr> </table>	Iron (in mg/l)	:	0.26 to 0.46																											
Iron (in mg/l)	:	0.26 to 0.46																													
Surface water quality at 3 locations	<table border="1"> <thead> <tr> <th>Parameters</th> <th>:</th> <th>Range of Concentration</th> </tr> </thead> <tbody> <tr> <td>pH</td> <td>:</td> <td>7.43 to 7.75</td> </tr> <tr> <td>DO (in mg/l)</td> <td>:</td> <td>6.9 to 7.0</td> </tr> <tr> <td>BOD (in mg/l)</td> <td>:</td> <td>2.4 to 2.7</td> </tr> <tr> <td>COD (in mg/l)</td> <td>:</td> <td>20.5 to 22.6</td> </tr> <tr> <td>TDS (in mg/l)</td> <td>:</td> <td>336 to 358</td> </tr> <tr> <td>Sulphates (in mg/l)</td> <td>:</td> <td>38.5 to 40.4</td> </tr> <tr> <td>Chlorides (in mg/l)</td> <td>:</td> <td>60.8 to 64.6</td> </tr> <tr> <td>Fluoride</td> <td>:</td> <td>0.80 to 0.88</td> </tr> </tbody> </table>	Parameters	:	Range of Concentration	pH	:	7.43 to 7.75	DO (in mg/l)	:	6.9 to 7.0	BOD (in mg/l)	:	2.4 to 2.7	COD (in mg/l)	:	20.5 to 22.6	TDS (in mg/l)	:	336 to 358	Sulphates (in mg/l)	:	38.5 to 40.4	Chlorides (in mg/l)	:	60.8 to 64.6	Fluoride	:	0.80 to 0.88			
Parameters	:	Range of Concentration																													
pH	:	7.43 to 7.75																													
DO (in mg/l)	:	6.9 to 7.0																													
BOD (in mg/l)	:	2.4 to 2.7																													
COD (in mg/l)	:	20.5 to 22.6																													
TDS (in mg/l)	:	336 to 358																													
Sulphates (in mg/l)	:	38.5 to 40.4																													
Chlorides (in mg/l)	:	60.8 to 64.6																													
Fluoride	:	0.80 to 0.88																													
Noise levels	The equivalent day-night noise levels in the study zone are ranging from 48.12 dBA to 69.95 dBA.																														
Traffic assessment study findings	<p>Plant site is well connected by Ramgarh to Kuju (Ramgarh City Road) followed by NH # 20 is capable of absorbing additional truck movement due to proposed project.</p> <p><b>Existing baseline :</b></p> <table border="1"> <thead> <tr> <th>Road</th> <th>V (Volume in PCU/hr)</th> <th>C (Capacity in PCU/hr)</th> <th>V/C Ratio</th> <th>LOS</th> </tr> </thead> <tbody> <tr> <td>Ramgarh to Kuju (Ramgarh City Road)</td> <td>773</td> <td>1500</td> <td>0.513</td> <td>C</td> </tr> </tbody> </table> <p>Existing PCU is 773 PCU/hr on <b>Ramgarh to Kuju (Ramgarh City Road)</b> and existing Level of Service(LOS) is ‘C’.</p> <p><b>After Expansion :</b> PCU load after proposed expansion project will be 773 (Existing) + 130 (Additional) and Level of Service (LOS) will be</p> <table border="1"> <thead> <tr> <th>Ramgarh to Kuju (Ramgarh City Road)</th> <th>Existing Baseline Scenario (V) (PCU/hr)</th> <th>Due to the Project (V) (PCU/hr)</th> <th>Total (PCU/hr)</th> <th>Capacity of Road (C) (PCU/hr)</th> <th>V/C ratio</th> <th>LOS</th> </tr> </thead> <tbody> <tr> <td>PCU/Hour</td> <td>773</td> <td>130</td> <td>903</td> <td>1500</td> <td>0.60</td> <td>C</td> </tr> </tbody> </table> <p>PCU load after proposed expansion project will be 773 (Existing) + 130 (Additional) and Level of Service (LOS) will be ‘C’.</p> <p style="text-align: center;"><b>Level of Service (LOS) of the Road as per IRC</b></p> <table border="1"> <thead> <tr> <th>V/C</th> <th>LOS</th> <th>Performance</th> </tr> </thead> <tbody> <tr> <td>0.0–0.2</td> <td>A</td> <td>Excellent</td> </tr> </tbody> </table>	Road	V (Volume in PCU/hr)	C (Capacity in PCU/hr)	V/C Ratio	LOS	Ramgarh to Kuju (Ramgarh City Road)	773	1500	0.513	C	Ramgarh to Kuju (Ramgarh City Road)	Existing Baseline Scenario (V) (PCU/hr)	Due to the Project (V) (PCU/hr)	Total (PCU/hr)	Capacity of Road (C) (PCU/hr)	V/C ratio	LOS	PCU/Hour	773	130	903	1500	0.60	C	V/C	LOS	Performance	0.0–0.2	A	Excellent
Road	V (Volume in PCU/hr)	C (Capacity in PCU/hr)	V/C Ratio	LOS																											
Ramgarh to Kuju (Ramgarh City Road)	773	1500	0.513	C																											
Ramgarh to Kuju (Ramgarh City Road)	Existing Baseline Scenario (V) (PCU/hr)	Due to the Project (V) (PCU/hr)	Total (PCU/hr)	Capacity of Road (C) (PCU/hr)	V/C ratio	LOS																									
PCU/Hour	773	130	903	1500	0.60	C																									
V/C	LOS	Performance																													
0.0–0.2	A	Excellent																													

	0.2–0.4	B	VeryGood
	<b>0.4–0.6</b>	<b>C</b>	<b>Good</b>
	0.6–0.8	D	Fair/Average
	0.8–1.0	E	Poor
	1.0& Above	F	VeryPoor
	<b>V =VolumeinPCU's/hr, C=Capacity PCU's/hr, LOS=Level of Service</b>		
	<ul style="list-style-type: none"> <li>V/C after proposed expansion project will be 0.60. Hence LOS will be 'C' (<b>GOOD</b>).</li> <li>Hence the existing road is capable of taking the additional vehicular traffic due to the proposed expansion project</li> </ul>		
Flora and fauna	No schedule - 1 fauna present within 10 Kms. radius of the plant. Hence conservation plan is not required.		

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

S. No.	Solid & Hazardous Waste	Quantity (TPA) After expansion	Method of disposal
1.	Ash from DRI	52,699	Presently given to nearby brick manufacturing units and after expansion it will be given to nearby brick manufacturing units.
2.	Dolochar	81,075	Presently given to nearby power plant and after expansion it will be utilized in the proposed AFBC based power plant within the premises.
3.	Kiln Accretion Slag	3,648	Presently given to road contractors for road construction& given to brick manufacturer and after proposed expansion will be given to nearby brick manufacturing units.
4.	Wet Scraper Sludge	16,215	Is being given to road contractors for road construction& given to brick manufacturer and after proposed expansion will be given to nearby brick manufacturing units.
5.	SMS Slag	15,840	Slag from SMS will be crushed and iron will be recovered & then remaining non -magnetic material being inert by nature will be given to road contractors for road laying/ given to brick manufacturers.
6.	Mill scales	2,419	Mill Scales will be utilized in Ferro alloy plant of Group company.
7.	End cuttings	5,741	will be recycled to Induction Furnace
8.	Ash from Power Plant	52,759	Will be given to nearby brick manufacturing units.
9.	Waste oil	1.5 KL / Annum	This will be stored in covered HDPE drums in a designated area and will be given to SPCB approved recyclers / reproprocessors.

S. No.	Solid & Hazardous Waste	Quantity (TPA) After expansion	Method of disposal
10.	Used Batteries	0.16	Used batteries will be given back to the supplier under buy back agreement with supplier.

#### 40.1.14 Public Consultation:

<b>Date of advertisement</b>	23-03-2023
<b>Name of newspapers</b>	THE TIMES OF INDIA, RANCHI” & in “HINDUSTHAN
<b>Date on which Public Hearing conducted</b>	06-05-2023
<b>Venue</b>	Public Hearing for proposed expansion project has been conducted on 06-05-2023, at 11:00 AM @ Gym Khana Club Ranchi road, Ramgarh, Ramgarh Tehsil & District, Jharkhand. Following are the details of the Public Hearing.
<b>Chaired by</b>	Additional District Magistrate (ADM)
<b>Issues are</b>	<ul style="list-style-type: none"> <li>• Employment to Locals .</li> <li>• Utilization of CER funds for the development of the surrounding villages.</li> <li>• Maintenance &amp; Repair of Roads</li> <li>• Street Lights</li> <li>• Environmental protection measures</li> </ul>

**Action plan as per MoEF&CC O.M. dated 30/09/2020:** Socio Economic developmental activities will be carried out after the proposed expansion. Bihar Foundry & Castings Limited (DRI unit is being actively contributing to improve the Socio-economic conditions of the area by providing assistance for local persons from the nearby villages. Project cost : RS 300 Crores.

**Social Infrastructure Development Budget: @1.5% of Rs 300 Crores: Rs 4.50 Crores**

S. No.	MAJOR ACTIVITY HEADS	YEAR OF IMPLEMENTATION			TOTAL EXPENDITURE (Rs. in Lakhs)	
		1 <sup>st</sup> Year (Rs. in Lakhs)	2 <sup>nd</sup> Year (Rs. in Lakhs)	3 <sup>rd</sup> Year (Rs. in Lakhs)		
<b>A). Based on SIA Study</b>						
1	<b>Community &amp; Infrastructure Development Programmes</b>					
	i) Construction of public toilets	Physical Nos. & village	1 no. in Marar (v)	1no. in Phulsarai(v)	1 no. in Manuan(v) & 1 Nos. in Digwar(v)	25
		Budget in Lakhs	7.5	7.5	10	
	ii) Mineral water plants	Physical Nos. &	1 nos. in Hathimara	1nos. in Manuan (v)	1 nos. in Digwar (v)	18

S. No.	MAJOR ACTIVITY HEADS		YEAR OF IMPLEMENTATION			TOTAL EXPENDITURE (Rs. in Lakhs)
			1 <sup>st</sup> Year (Rs. in Lakhs)	2 <sup>nd</sup> Year (Rs. in Lakhs)	3 <sup>rd</sup> Year (Rs. in Lakhs)	
		village	(v) & 1 Nos. in Marar (v)	& 1 Nos. in Phulsarai (v)	1 nos. Pochra (v)	
		Budget in Lakhs	6	6	6	
	iii) Village road repair & maintenance	Physical Nos. & village	1 Nos. in Marar (v)	1 nos. in Hathimara (v)	1 Nos. in Phulsarai (v)	30
		Budget in Lakhs	10	10	10	
					<b>Sub Total</b>	<b>73</b>
2	<b>Education</b>					
	i) Providing Sport kits for schools	Physical Nos. & village	5 nos. in Kanjgi (v) & 10 Nos. in Marar (v)	5 no. in Manuan (v) & 10 Nos. in Digwar (v)	10 nos. in Phulsarai(v) & 10 Nos. in Painki (v)	5
		Budget in Lakhs	1.5	1.5	2	
	ii) Construction of class rooms in schools of size 8m x 5m x3 m	Physical Nos. & village	4 nos. in Kanjgi (v)	4 nos. in Seota (V)	4 nos. in Marar (V)	30
		Budget Rs in Lakhs	10	10	10	
	iii) Providing Model Anganwadi Centre in consultation with State Women and Child Development Department	Physical Nos. & village	Phulsarai(v) - 1 No.	Digwar (v) - 1 No.	Painki (v) -1 No.	30
		Budget Rs in Lakhs	10	10	10	
				<b>Sub Total</b>	<b>65</b>	
3	<b>Health &amp; hygiene</b>					
	i) Sanitation facility in	Physical Nos. &	in Phulsarai (v)	in Seota (V)	in Marar (V)	<b>30</b>

S. No.	MAJOR ACTIVITY HEADS		YEAR OF IMPLEMENTATION			TOTAL EXPENDITURE (Rs. in Lakhs)
			1 <sup>st</sup> Year (Rs. in Lakhs)	2 <sup>nd</sup> Year (Rs. in Lakhs)	3 <sup>rd</sup> Year (Rs. in Lakhs)	
	existing schools	village				
		Budget in Lakhs	10	10	10	
	ii) Napkins Vending Machine in High Schools.	Physical Nos. & village	Machines will be installed in Kanjgi (v)	Machines will be installed in Seota (V)	Machines will be installed in Marar (V)	9
		Budget in Lakhs	3	3	3	
	iii) Primary Health Centre for local people with Doctor & other facilities	Physical Nos. & village	Primary Health Centre with Ambulance in Ramgarh Town			60
		Budget in Lakhs	---	---	60	
					<b>Sub Total</b>	<b>99</b>
4	Tree Plantation in water body bunds @1000 Nos. in each village	Physical Nos. & village	1000 nos. in Kanjgi (v) &1000 Nos. in Marar (v)	1000 nos. in Manuan (v) &1000 Nos. in Digwar (v)	1000 nos. in Phulsarai(v) & 1000 Nos. in Painki (v)	30
		Budget in Lakhs	10	10	10	
5	RWH pits in the surrounding villages & De-siltation of ponds	Physical Nos. & village	Sandi (v) 2 nos. of ponds desiltation 2.0 m depth	Phulsarai(v) pond desiltation 1.5 m depth	Digwar (v) pond desiltation 1.5 m depth	84
		Budget in Lakhs	44	20	20	
					<b>TOTAL (A)</b>	<b>351</b>
<b>B). Based on Public Consultation/Hearing</b>						
1	Impart training to the local villagers for skill development. a)DISHA Centre” along with necessary infrastructure for various vocational	Physical Nos. & village	One DISHA centre in Ramgarh Town			90
		Budget in Lakhs	30	30	30	

S. No.	MAJOR ACTIVITY HEADS	YEAR OF IMPLEMENTATION			TOTAL EXPENDITURE (Rs. in Lakhs)	
		1 <sup>st</sup> Year (Rs. in Lakhs)	2 <sup>nd</sup> Year (Rs. in Lakhs)	3 <sup>rd</sup> Year (Rs. in Lakhs)		
	training program for employment generation in association with National Skill Development Mission (Automobile Repair, Welding, Electrical, Computer Hardware, Soft skills like computer programs etc.)					
2	Providing LED Street lighting with solar panels	Physical Nos. & village	3 nos. in Hathimara (v) & 3 Nos. in Marar (v)	3 nos. in Manuan (v) & 3 Nos. in Phulsarai (v)	3 nos. in Digwar (v) & 3 nos. Pochra (v)	9
		Budget in Lakhs	3	3	3	
					<b>Total (B)</b>	<b>99</b>
		<b>TOTAL</b>	<b>145</b>	<b>121</b>	<b>184</b>	
	<b>Grand Total (A+B)</b>					<b>450</b>
<b>Recurring expenditures under CSR as per companies Act 2014</b>						
<ul style="list-style-type: none"> <li>Health checkup will be carried out periodically in surrounding villages i.e. Marar, Sandi, Phulsarai, Hathimara villages @ Rs 5.0 Lakhs every year.</li> </ul>						

40.1.15 The capital cost of the expansion project is Rs. 300 Crores and the capital cost for environmental protection measures without SID is Rs. 28 Crores and with SID will be Rs 32.5 Crores. The annual recurring cost towards the environmental protection measures is proposed as Rs.3.93 Crores. The employment generation from the proposed expansion project is 250 direct & 250 Indirect. The details of cost for environmental protection measures is as follows:

S. No.	Particulars	Capital Cost (Rs.in Crores)	Recurring Cost / Annum (Rs.in Lakhs)
--------	-------------	-----------------------------	--------------------------------------

S. No.	Particulars	Capital Cost (Rs.in Crores)	Recurring Cost / Annum (Rs.in Lakhs)
1	<b>Air Emission Management</b>		
	· Electro Static Precipitators (ESP) - DRI	6.0	60
	· Electro Static Precipitators (ESP) - FBC	8.0	80
	· Fume Extraction system with bag filters (upgradation)	1.0	5
	· other APCS & Conveyor systems	3.0	45
	· Stacks	1.50	7.5
	· Mechanical Dust sweepers	0.30	3
	· Water Sprinklers	0.1	0.5
2	<b>Wastewater Management</b>		
	· for upgradation of ETP	0.5	10
	· for STP	0.4	8
	· for Garland drains	0.3	3
	· for Settling ponds	0.02	0.2
3	<b>Solid waste Management</b>		
	· Fly Ash Handling & disposal	2.0	80
	· Slag Handling & Disposal	0.2	5
	· Hazardous waste storage & disposal	0.1	5
	· Municipal solid waste storage & disposal	0.05	2.5
4	Greenbelt development, Land scaping	0.25	3.2
5	Noise Management	0.2	4
6	Storm water management & RWH in Plant	0.23	2.3
7	Fire Safety Systems	2.5	25
8	<b>Environmental Monitoring</b>		
	· CEMS	0.15	1
	· CAAQMS	0.8	16
	· Environment Monitoring	---	10
	· Performance monitoring of APCS	---	1
9	<b>Occupational Health &amp; Safety</b>		
	· Dispensary with Ambulance	0.3	6
	· Personal Protective Equipment's (PPEs)	0.1	10
		<b>28.00</b>	<b>393.2</b>

**TOTAL EMP BUDGET INCLUDING SOCIAL & INFRASTRUCTURAL DEVELOPMENT BUDGET**

Budget	Rs. in Crores
Environmental Protection measures (EMP)	28.0

Social & Infrastructural Development (SID)	4.5
<b>Total EMP Budget including SID</b>	<b>32.5</b>

40.1.16 Existing green belt has been developed in 1.9 Ha. (4.7 Ac) area which is about 33 % of the total project area of 5.67 Ha. (14 Acres) with total number of plants of 4620. Proposed greenbelt will be developed in 1.19 Ha. (2.94 Ac.). Thus total of 3.09 Ha. area (40% of total project area) will be developed with greenbelt. 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. Additional 3,200 nos. of plants will be planted by October 2023. Total number of plants will be 7,820.

40.1.17 Litigation / court case is pending against the proposed project

- A case has been filed by Sri Rakesh Srivastava vs State of Jharkhand vide Original Application No. 172/2023 dated 13<sup>th</sup> March 2023 before the Hon'ble National Green Tribunal (NGT), Principal Bench, New Delhi. NGT had ordered for an joint inspection by a committee comprising of State PCB, CPCB, Regional Officer, MoEF&CC Ranchi and District Magistrate. The Joint Committee report has been submitted by Member Secretary, JSPCB, Ranchi to Scientist "C" / Deputy Director, Impact Assessment Division, MOEF&CC. The matter has listed for 16<sup>th</sup> Aug, 2023.
- NGT Kolkata case has been stayed by Hon'ble Kolkata high court by its order no. CO1615 of 2023 dated 22nd May 2023.

#### **Certified Compliance report from Regional office**

40.1.18 The Status of compliance of earlier EC was obtained from Integrated Regional Office, Ranchi vide FileNo.103-254/09/EPE/925 Dated 21.02.2023 in the name of M/s Bihar Foundry & Castings Limited. The date of monitoring at the plant is on 05-01-2023. The observation of IRO and response by PP are given below.

S. No.	Non-compliances details	Observation of IRO (abridged)	Condition no.			Response by PP
			EC date	Specific	General	
1	Stipulated Specific Condition (ii) : Being Complied with an assurance. E.C. No. J-1101 / 310 / 2009-IA II (I)	The project has not installed interlocking facility. It is submitted by them that as they are utilizing the flue gas for WHRB therefore, the emission level is always within	28.01.2010	ii	--	Interlocking system is provided

S. No.	Non-compliances details	Observation of IRO (abridged)	Condition no.			Response by PP
			EC date	Specific	General	
		the prescribed limits. However, it has been assured by the project authorities that in case of any aberration or requirement, they would install the interlocking facilities.				
2	Stipulated Specific Condition No. (xix): Being complied. E.C.No. J-1101/310/2009-IA II(I)	The project proponents need to ensure survival and better growth of plantations raised.	28.01.2010	xix	--	Additional 3200 nos of plants will be planted by October 2023 in addition to existing 4600 nos.
3.	Stipulated General condition No. (viii) E.C. No. J-1101/310/2009-IA II(I)	Project authorities may improve further in water harvesting measures.	28.01.2010	--	viii	Rain water harvesting pond of 4250 cum capacity has been provided.
4.	EC Amendment letter dated 25.09.2012: Partially complied.	The project authorities should sell char to Inland Power Ltd as per the EC stipulation. Presently they are selling char to Inland Power Ltd and other units in the cluster.	25.09.2012			Char is being sold to neighboring power plants .

**Deliberation on Severely Polluted area (SPA)**

40.1.19 Since the project falls in the Ramgarh district of Jharkhand declared as Severely Polluted area (SPA), PP shall comply with all the conditions applicable to CEPI as per the submitted compliance as follows:

<b>Environment</b>	<b>Mitigation Measures</b>	<b>Compliance</b>
<b>Air</b>	Assessment of carrying of transportation load on roads inside the industrial premises if the roads required to be widened, shall be prescribed as a condition.	<p>Site is adjacent to Ramgarh Industrial Road &amp; NH # 20 (Ranchi – Hazaribagh) is at a distance of 2.7 Kms.</p> <p>No. of trucks required after expansion project will be 152 trucks /day or transporting raw materials, products and wastes .</p> <p>Existing road is capable of taking the additional vehicular traffic due to the proposed expansion.</p>
<b>Water</b>	<p><u>Stipulation of conditions such as:</u></p> <p>i. Reuse /recycle of treated wastewater, wherever feasible.</p>	<p>In existing plant recycle and reuse of waste water is being practiced. There will be not effluent discharge from DRI Unit as closed-circuit cooling system will be adopted.</p> <p>Effluent from Induction Furnace Unit, Rolling mill &amp; Power plant will be treated in ETP comprising of Neutralization Tank and R.O Plant. Sanitary wastewater will be treated in STP and after ensuring compliance with the norms the treated effluent from ETP &amp; STP will be utilized for dust suppression, ash conditioning and for greenbelt development. R.O. rejects will be utilized for dust suppression in CHP &amp; Ash conditioning.</p> <p>Zero liquid effluent discharge practice will be continued in the proposed expansion also</p>
	ii. Continuous monitoring of effluent quality/quantity in large and medium red category industries (water polluting).	Not applicable, as it is not a water polluting industry.
	iii. A detailed water harvesting plan may be submitted by the project proponent	The potential rain water that can be recharged / utilized to meet the plant water requirement is 33,462 m <sup>3</sup> / year. Accordingly, the net water requirement will reduce.

<b>Environment</b>	<b>Mitigation Measures</b>	<b>Compliance</b>
	iv. Zero liquid discharge wherever techno-economically feasible.	Zero liquid discharge is being maintained in the existing plant and same will be continued in the proposed expansion also.
	v. In case, domestic waste water generation is more than 10 KLD, the industry may install STP	STP of 40 KLD will be installed as part of the proposed expansion.
<b>Land</b>	i. Increase of green belt cover by 40% of the total land area beyond the permissible requirement of 33%, wherever, feasible for new projects.	<ul style="list-style-type: none"> <li>• 4620 nos. of plants are exists till date over an extent of 4.7 Acres (1.9 Ha.).</li> <li>• Another 3200 nos. of plants will be planted as part of expansion in 2.94 Acres (1.19 Ha.) by October 2023.</li> <li>• Hence the total greenbelt of <b>7.63 Acres (3.09 Ha.)</b> i.e. <b>40%</b> of land will be developed as greenbelt by October 2023 (including existing).</li> </ul>
	ii. Stipulation of greenbelt outside the project premises such as avenue plantation in vacant areas, social forestry, etc.	Avenue plantation/road side has been carried out.
	iii. Dumping of waste (fly ash, slag, red mud, etc.) may be permitted only at designated locations approved by SPCBs/PCCs.	Ash, slag are stored and given to end users in accordance with the permitted procedures as approved by the Board.
	iv. More stringent norms for management of hazardous waste generated should be preferably utilized in co-processing.	The unit is followed the guidelines of Hazardous and other wastes (Management and Transboundary Movement) rules, 2016.
<b>Other Condition (Additional)</b>	i. Monitoring of compliance of EC conditions may be submitted with third party audit every year.	Being Done
	ii. The % of the CER may be at least 1.5 times the slabs given in the OM dated 01.05.2018 for SPA and 2 times for CPA in case of Environmental Clearance.	Noted for compliance.

**Written representation:**

40.1.20 During the meeting, based on the deliberations made by the EAC, the project proponent vide letter dated 19.07.2023 through email dated 19.07.2023 submitted the following information:

<b>S. No.</b>	<b>Details sought</b>	<b>Reply by PP</b>
1.	PP shall develop Plantation in the nearby School & Dispensary	As advised by the Hon'ble EAC, <ul style="list-style-type: none"> <li>• PP hereby assure to develop 3-tier Plantation with at the School premises all along the school boundary.</li> </ul>

S. No.	Details sought	Reply by PP
		<ul style="list-style-type: none"> <li>PP hereby assure to develop 3-tier Plantation with at the Dispensary premises all along the Dispensary boundary.</li> </ul>
2.	In AAQ modelling results to be furnished for PM2.5	The incremental GLC of PM <sub>2.5</sub> due to process activities is 0.39 µg/m <sup>3</sup> & due to Vehicular emissions is 0.11 µg/m <sup>3</sup> The net resultant GLCs of PM <sub>2.5</sub> will be <b>0.5 µg/m<sup>3</sup></b> . The same is updated at para 40.1.12 above.
3.	PP shall commission AFBC Boiler along with DRI unit as part of proposed Expansion project so as to ensure consumption of entire Dolochar generated.	PP do here by assure that, they will commission AFBC Boiler along with DRI unit as part of proposed Expansion project to ensure consumption of entire Dolochar generated.
4.	PP shall follow the outcome of the NGT order directions	PP do here by assure that, they will follow the directions of the NGT order

### Deliberations by the Committee

40.1.21 The Committee noted the following:

1. The instant proposal is for Expansion of Steel plant –Sponge Iron through DRI Klins from 99,000 TPA to 4,05,375 TPA, WHRB Based Power generation from 5.0 MW to 29 MW, New AFBC Power Plant of 8.0 MW Capacity, MS Billets/ Hot Billets through Induction Furnace from 48,000 TPA to 1,58,400 TPA, Rolled products through New Rolling Mill of 1,65,000 TPA, & New Slag Crusher of 120 TPD capacity.
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 vide F. No. J-11011/310/2009-IA (II) (I) dated 28.01.2010. Consent-to-Establish (CTE) has been obtained vide order No. 632, dated 24.02.2010 for Sponge Iron Plant (3X100 TPD), Induction Furnace 1X6, 2X3 TPH & 1X10 TPH , WHRB 6 MW & AFBC Power

Plant 4 MW. Consent To Operate from JSPCB vide no. JSPCB/HO/RNC/CTO-4426528/2019/2376 dated 28.11.2019 Valid up to 31.12.2024 for Induction Furnace (48,000 TPA). CTO for sponge iron (99,000 TPA) & captive power plant – 5 MW vide order No. JSPCB/HO/RNC/CTO-11688208/2022/345 dated 25.03.2022 and is valid till 31.03.2025.

6. The EAC noted that the instant project comes under Severely Polluted area (SPA) falling in the Ramgarh district of Jharkhand. PP has committed the proposed mitigation measures and also submitted detailed action plan as detailed in para 40.1.19 above. The EAC is of the opinion that the mitigation plans shall be strictly implemented.
7. Total project land is 7.69 ha (19 Acres) which is allotted by Jharkhand Industrial Area Development Authority (JIADA). The total land as per existing E.C. is 14 Acres (5.67 Ha.) for a period of 99 years from 01.05.1974. Subsequently, PP has acquired another 5 Acres (2.02 Ha.) from JIADA for a period of 30 years from 28.10.2015. Hence the total land of 19 Ac. (7.69 Ha.) is envisaged for the project. Expansion will be taken up partly in existing land and remaining in the additional land.
8. The nearest human settlement from the project site is Village Marar (0.3 km, N). The EAC is of the opinion that PP shall strictly implement the environmental safeguard measures proposed to minimise the impact on the habitation of the locals.
9. Damodar River (1.4 Km, S), Raura Nala (2.5 km, E), Meramgarh Nala (4.7 Km, E), Unnamed stream (0.7 Km, W), Ramgarh Village pond (3.6 Km, S) and Seota village Pond (1.5 Km, 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.
10. The existing plant requirement is 300 m<sup>3</sup>/day which is obtained from water ground water. The water requirement for the proposed expansion project is estimated as 1260 m<sup>3</sup>/day and the same is proposed to be sourced from Damodar River.
11. The Committee has found that the baseline data and incremental GLC due to the proposed project within NAAQ standards.
12. Existing green belt has been developed in 1.9 Ha. (4.7 Ac) area which is about 33 % of the total project area of 5.67 Ha. (14 Acres) with total number of plants of 4620. Proposed greenbelt will be developed in 1.19 Ha. (2.94 Ac.). Thus total of 3.09 Ha. area (40% of total project area) will be developed with greenbelt. Additional 3,200 nos. of plants will be planted by October 2023. Total number of plants will be 7,820. PP further assured to develop 3-tier Plantation at the School premises all along the school boundary and at the Dispensary premises all along the Dispensary boundary. The EAC deliberated on the greenbelt action plan and found it satisfactory.
13. The EAC observed that a case has been filed vide Original Application No. 172/2023 dated 13<sup>th</sup> March 2023 before the Hon'ble National Green Tribunal (NGT), Principal Bench, New Delhi. Also there is a NGT Kolkata case which has been stayed by Hon'ble Kolkata high court by its order no. CO1615 of 2023 dated 22<sup>nd</sup> May 2023. The EAC deliberated that PP shall abide by the directions of the Hon'ble NGT in the aforementioned cases.

14. The committee deliberated on the 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 action plan submitted by the proponent to address the issues raised during the public hearing and found it satisfactory.
16. The Committee also deliberated the CCR of earlier EC and its Action Plan and found it satisfactory.
17. The EAC also deliberated on the submitted written representation 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.
20. The EAC also reviewed the EC conditions (specific and general) pertaining to Industry-I projects and observed that some of the specific conditions stipulated so far in the previously recommended EC projects are common and applicable to most of the projects in general. In view of the same, the General Conditions (in case of EC projects) have been revised through reallocation of these common conditions from specific to General Conditions (in case of EC projects). Accordingly, the instant project is also being stipulated with the modified General conditions.

#### **Recommendations of the Committee:**

40.1.22 In view of the foregoing and after detailed deliberations, the committee **recommended** the instant proposal for grant of Environment Clearance **subject to uploading the written submission on portal** under the 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 Conditions**

- i. **This Environmental clearance is granted subject to final outcome of Hon'ble NGT cases as applicable to the project.**

- ii. The project proponent shall comply with all the environmental protection measures and safeguards proposed in the documents submitted to the Ministry. All the recommendations made in the EIA/EMP in respect of environmental management, and risk mitigation measures relating to the project shall be implemented.
- iii. The project proponent shall utilize modern technologies for capturing of carbon emitted and shall also develop carbon sink/carbon sequestration resources capable of capturing more than emitted. The implementation report shall be submitted to the IRO, MoEF&CC in this regard.
- iv. PP shall strictly implement the Action Plan/Mitigation measures as prescribed for the SPA, as the Unit is located in SPA.
- v. The nearest human settlement from the project site is Village Marar (0.3 km, N). Project Proponent shall take appropriate environmental safeguard measures to minimise the impact on the habitation of the locals. PP needs to strengthen green belt all around the plant area to reduce the dust pollution. The PP shall also include this location in its environmental monitoring programme.
- vi. Damodar River (1.4 Km, S), Raura Nala (2.5 km, E), Meramgarh Nala (4.7 Km, E), Unnamed stream (0.7 Km, W), Ramgarh Village pond (3.6 Km, S) and Seota village Pond (1.5 Km, 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.
- vii. The water requirement of 1260 m<sup>3</sup>/day shall be sourced from Damodar River after obtaining necessary permission from the Competent Authority. PP shall also explore the possibility of shifting from ground water to alternative source of water to meet the water requirement of existing project.
- viii. Three tier Green Belt shall be developed and maintained in at least 40% of the project area with native species all along the periphery of the project site of adequate width and tree density shall not be less than 2500 per ha. Survival rate of green belt developed shall be monitored on periodic basis to ensure that damaged plants are replaced with new plants in the subsequent years. PP shall also develop greenbelt in the form of shelter belt comprising of total of 6 rows of 2x2 m plantation with tall trees & broad leaves with thick canopy along with windshield inside the plant premises to act as green barrier for air pollution & noise levels towards Marar Village. As committed, PP shall develop 3-tier Plantation at the School premises all along the school boundary and at the Dispensary premises all along the Dispensary boundary. Compliance status in this regard, shall be submitted to concerned Regional Office of the MoEF&CC.
- ix. All the commitments made towards socio-economic development of the nearby villages shall be satisfactorily implemented. The action plan based on the social impact assessment study of the project as per the EMP in accordance to the Ministry's OM dated 30.09.2020 amounting to Rs. 4.50 Crores shall be strictly implemented and progress shall be submitted to the Regional Office of MoEF&CC.
- x. PP shall adopt undertake village adoption programme, prepare and implement the action plan to develop them into model villages.
- xi. The PP shall adopt the best practices of House-keeping in the whole project area.

## **B. General Conditions**

### **I. Statutory compliance:**

- i. The Environment Clearance (EC) granted to the project/ activity is strictly under the provisions of the EIA Notification, 2006 and its amendments issued from time to time. It does not tantamount/ construe to approvals/ consent/ permissions etc., required to be obtained or standards/conditions to be followed under any other Acts/Rules/ Subordinate legislations, etc., as may be applicable to the project.
- ii. This Environmental clearance is granted subject to final outcome of Hon'ble Supreme Court of India, Hon'ble High Court, Hon'ble NGT and any other Court of Law, if any, as may be applicable to this project.

### **II. Air quality monitoring and preservation**

- i. The project proponent shall install 24x7 continuous emission monitoring system at process stacks to monitor stack emission as well as 04 Nos. Continuous Ambient Air Quality Station (CAAQMS) for monitoring AAQ parameters with respect to standards prescribed in Environment (Protection) Rules 1986 as amended from time to time. The CEMS and CAAQMS shall be connected to SPCB and CPCB online servers and calibrate these systems from time to time according to equipment supplier specification through labs recognized under Environment (Protection) Act, 1986 or NABL accredited laboratories.
- ii. The project proponent shall carryout Continuous Ambient Air Quality monitoring for common/criterion parameters relevant to the main pollutants released (e.g. PM<sub>10</sub> and PM<sub>2.5</sub> in reference to PM emission, and SO<sub>2</sub> and NO<sub>x</sub> in reference to SO<sub>2</sub> and NO<sub>x</sub> emissions) within and outside the plant area (at least at four locations one within and three outside the plant area at an angle of 120° each), covering upwind and downwind directions.
- iii. The project proponent shall monitor fugitive emissions in the plant premises at least once in every quarter through laboratories recognized under Environment (Protection) Act, 1986 or NABL accredited laboratories.
- iv. Sampling facility at process stacks shall be provided as per CPCB guidelines for manual monitoring of emissions.
- v. Appropriate Air Pollution Control (APC) system shall be provided for all the dust generating points including fugitive dust from all vulnerable sources, so as to comply prescribed stack emission and fugitive emission standards.
- vi. The project proponent shall provide leakage detection and mechanized bag cleaning facilities for better maintenance of bags.
- vii. Sufficient number of mobile or stationery vacuum cleaners shall be provided to clean plant roads, shop floors, roofs, regularly.
- viii. Ensure covered transportation and conveying of raw material to prevent spillage and dust generation. The project proponent use leak proof trucks/dumpers carrying coal and other raw materials and cover them with tarpaulin.
- ix. Recycle and reuse iron ore fines, coal and coke fines, lime fines and such other fines collected in the pollution control devices and vacuum cleaning devices in the process after briquetting/ agglomeration.

- x. The project proponent shall provide primary and secondary fume extraction system at all heat treatment furnaces.
- xi. Wind shelter fence and chemical spraying shall be provided on the raw material stock piles.
- xii. Design the ventilation system for adequate air changes as per prevailing norms for all tunnels, motor houses, Oil Cellars.
- xiii. Pollution control system in the plant shall be provided as per the CREP Guidelines of CPCB.
- xiv. The project proponent shall adopt the Clean Air practices like mechanical collectors, wet scrubbers, fabric filters (bag houses), electrostatic precipitators, combustion systems (thermal oxidizers), condensers, absorbers, adsorbers, and biological degradation. Controlling emissions related to transportation shall include emission controls on vehicles as well as use of cleaner fuels. Sufficient numbers of additional truck mounted Fog/Mist water cannons shall be procured and operated regularly inside the project premises and also in the surrounding villages to arrest suspended dust in the atmosphere.
- xv. Bag filters shall be cleaned regularly and efficiency of bag filter system shall be monitored at regular intervals.
- xvi. Water Sprinklers/Water mist system shall be installed near raw material yards, operational units and other strategic locations to control fugitive emissions from the plant.
- xvii. The particulate matter emissions from the process stacks shall be less than 30 mg/Nm<sup>3</sup> and measures shall be undertaken as per the submitted action plan. Efficient Air monitoring equipment shall be installed.
- xviii. Following additional arrangements to control fugitive dust shall be provided:
  - a. Fog / Mist Sprinklers at all on bulk raw material storage area (at the transfer points) like Iron Ore, Coal and for Fly Ash and similar solid waste storage areas.
  - b. Proper covered vehicle shall be used while transport of materials.
  - c. Wheel washing mechanism shall be provided in entry and exit gates with complete recirculation system.
- xix. During operational phase at Captive Power Plant, Action Plan to monitor coke/coal dust exposures in different process plants using personal and area air samplers and to compare with permissible limits as per Indian Factories Act, 1948 shall be implemented.
- xx. The coal dust should be monitored at coal unloading, crushing, furnace areas and should be within 2 mg/m<sup>3</sup>, respirable dust fraction containing less than 5% quartz as per Indian Factories Act, 1948.
- xxi. Online stack monitoring system for IF and RHF shall be installed and monitoring report shall be submitted to the concerned Regional Office of the MoEF&CC along with the six monthly compliance report.
- xxii. Low NO<sub>x</sub> Burners will be installed at Reheating Furnace for control of Gaseous emissions generated while using PNG.

### **III. Water quality monitoring and preservation**

- i. The project proponent shall install 24x7 continuous effluent monitoring system with respect to standards prescribed in Environment (Protection) Rules 1986 as amended from time to time and connected to SPCB and CPCB online servers and calibrate these system from time to time according to equipment supplier specification through labs recognized under Environment (Protection) Act, 1986 or NABL accredited laboratories.
- ii. The project proponent shall monitor regularly ground water quality at least twice a year (pre- and post-monsoon) at sufficient numbers of piezometers/sampling wells in the plant and adjacent areas through labs recognized under Environment (Protection) Act, 1986 and NABL accredited laboratories.
- iii. Garland drains and collection pits shall be provided for each stock pile to arrest the run-off in the event of heavy rains and to check the water pollution due to surface run off.
- iv. Water meters shall be provided at the inlet to all unit processes in the plants.
- v. The project proponent shall make efforts to minimise water consumption in the plant complex by segregation of used water, practicing cascade use and by recycling treated water.
- vi. The proposed project shall be designed as "Zero Liquid Discharge" Plant. ETP shall be installed and there shall be no discharge of effluent from the plant. Domestic effluent shall be treated in Sewage Treatment Plant. Suitable measures shall be adopted for sewage water handling to ensure no contamination of any kind of water body.
- vii. All stockyards shall have impervious flooring and shall be equipped with water spray system for dust suppression. Stock yards shall also have garland drains and catch pits to trap the run off material and shall be implemented as per the action plan submitted in EIA/EMP report.
- viii. Rain water harvesting shall be implemented to recharge/harvest water as per the action plan submitted in the EIA/EMP report.
- ix. The project proponent shall provide the ETP for effluents of rolling mills to meet the standards prescribed in G.S.R 277 (E) 31st March 2012 (applicable to IF/EAF) as amended from time to time.
- x. Air Cooled condensers shall be used in the captive power plant.

#### **IV. Noise monitoring and prevention**

- i. Noise pollution shall be monitored as per the prescribed Noise Pollution (Regulation and Control) Rules, 2000 and amendments thereof, and report in this regard shall be submitted to Regional Officer of the Ministry as a part of six-monthly compliance report.
- ii. The ambient noise levels should conform to the standards prescribed under E(P)A Rules, 1986 viz. 75 dB(A) during day time and 70 dB(A) during night time.
- iii. PP shall identify extreme hot areas through heat stress survey as well as noise monitoring within process plants to ensure that workers not exposed above 90 dBA levels as per Factories Act, 1948.

#### **V. Energy Conservation measures**

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

## **VI. Waste management**

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

## **VII. Green Belt**

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

#### **VIII. Public hearing and Human health issues**

- i. Emergency preparedness plan based on the Hazard identification and Risk Assessment (HIRA) and Disaster Management Plan shall be implemented.
- ii. The project proponent shall carry out heat stress analysis for the workmen who work in high temperature work zone and provide Personal Protection Equipment (PPE) as per the norms.
- iii. Provision shall be made for the housing of construction labour within the site with all necessary infrastructure and facilities such as fuel for cooking, mobile toilets, mobile STP. Safe drinking water, medical health care, creche etc. The housing may be in the form of temporary structures to be removed after the completion of the project.
- iv. Occupational health surveillance of the workers shall be done on a regular basis and records maintained.

#### **IX. Environment Management**

- i. The project proponent shall comply with the provisions contained in this Ministry's OM vide F.No. 22-65/2017-IA.III dated 30/09/2020. As part of Corporate Environment Responsibility (CER) activity, company shall adopt nearby villages based on the socio-economic survey and undertake community developmental activities in consultation with the village Panchayat and the District Administration as committed.
- ii. The company shall have a well laid down environmental policy duly approve by the Board of Directors. The environmental policy should prescribe for standard operating procedures to have proper checks and balances and to bring into focus any infringements/deviation/violation of the environmental / forest / wildlife norms / conditions. The company shall have defined system of reporting infringements / deviation / violation of the environmental / forest / wildlife norms / conditions and / or shareholders / stake holders. The copy of the board resolution in this regard shall be submitted to the MoEF&CC as a part of six-monthly report.
- iii. A separate Environmental Cell both at the project and company head quarter level, with qualified personnel shall be set up under the control of senior Executive, who will directly to the head of the organization.

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

## **X. Miscellaneous**

- i. The project proponent shall make public the environmental clearance granted for their project along with the environmental conditions and safeguards at their cost by prominently advertising it at least in two local newspapers of the District or State, of which one shall be in the vernacular language within seven days and in addition this shall also be displayed in the project proponent's website permanently.
- ii. The copies of the environmental clearance shall be submitted by the project proponents to the Heads of local bodies, Panchayats and Municipal Bodies in addition to the relevant offices of the Government who in turn has to display the same for 30 days from the date of receipt.
- iii. The project proponent shall upload the status of compliance of the stipulated environment clearance conditions, including results of monitored data on their website and update the same on half-yearly basis.
- iv. The project proponent shall monitor the criteria pollutants level namely; PM10, SO2, NOx (ambient levels as well as stack emissions) or critical sectoral parameters, indicated for the projects and display the same at a convenient location for disclosure to the public and put on the website of the company.
- v. Action plan for developing connecting and internal road in terms of MSA as per IRC guidelines shall be implemented
- vi. The project proponent shall submit six-monthly reports on the status of the compliance of the stipulated environmental conditions on the website of the ministry of Environment, Forest and Climate Change at environment clearance portal.
- vii. The project proponent shall submit the environmental statement for each financial year in Form-V to the concerned State Pollution Control Board as prescribed under the Environment (Protection) Rules, 1986, as amended subsequently and put on the website of the company.
- viii. The project proponent shall inform the Regional Office as well as the Ministry, the date of financial closure and final approval of the project by the concerned authorities, commencing the land development work and start of production operation by the project.
- ix. The project proponent shall abide by all the commitments and recommendations made in the EIA/EMP report, commitment made during Public Hearing and also that during their presentation to the Expert Appraisal Committee.
- x. The recommendations of the approved Site-Specific Wildlife Management Plan (in case of involvement of Schedule-I species) shall be implemented in consultation with the State Forest Department. The implementation report shall be furnished along with the six-monthly compliance report to the concerned Regional Office of the MoEF&CC.
- xi. The PP shall put all the environment related expenditure, expenditure related to Action Plan on the PH issues, and other commitments made in the EIA/EMP Report etc. in the company web site for the information to public/public domain. The PP shall also put the information on the left over funds allocated to EMP and PH as committed in the

earlier ECs and shall be carried out and spent in next three years, in the company web site for the information to public/public domain.

- xii. No further expansion or modifications in the plant shall be carried out without prior approval of the Ministry of Environment, Forests and Climate Change (MoEF&CC).
- xiii. Concealing factual data or submission of false/fabricated data may result in revocation of this environmental clearance and attract action under the provisions of Environment (Protection) Act, 1986.
- xiv. The Ministry may revoke or suspend the clearance, if implementation of any of the above conditions is not satisfactory.
- xv. The Ministry reserves the right to stipulate additional conditions if found necessary. The Company in a time bound manner shall implement these conditions.
- xvi. The Regional Office of this Ministry shall monitor compliance of the stipulated conditions. The project authorities should extend full cooperation to the officer (s) of the Regional Office by furnishing the requisite data / information/monitoring reports.
- xvii. Any appeal against this EC shall lie with the National Green Tribunal, if preferred, within a period of 30 days as prescribed under Section 16 of the National Green Tribunal Act, 2010.

**\*\*\***

#### **Agenda No. 40.2**

**40.2 Existing Rolling Mill with CCM having Installed Capacity of 3,00,000 TPA by M/s Viraj Steel & Energy Private Limited (Rolling Mill Division), located at: Gurupalli, PO: Lapanga, Tehsil: Rengali, District: Sambalpur, Odisha – Consideration of Environmental Clearance as per Provision under EIA Notification No. S.O. 3250 (E) dtd.20th July 2022**

**[Proposal No.: IA/OR/IND1/430860/2023; File No.: IA-J-11011/323/2022-IA-II(IND-I)]  
[Consultant: M/s Kalyani Laboratories Private Limited; Valid upto; 31.10.2023]**

40.2.1 M/s Viraj Steel & Energy Private Limited (Rolling Mill Division) has made an online application vide proposal no. IA/OR/IND/430860/2023 dated 27/05/2023 along with copy of EIA/EMP report, and Form seeking Environment Clearance (EC) under the provisions of the EIA Notification No. S.O. 3250 (E) dated 20<sup>th</sup>July 2022 for existing Rolling Mill for the project mentioned above. The proposed project activity is listed at schedule no. 3(a) under Category “A” of the schedule of the EIA Notification, 2006 and appraised at Central Level.

40.2.2 The proposal was returned in present form as the Project Proponent did not attend the meeting. The Member Secretary appraised the Committee that the PP vide email dated 19.07.2023 request to upload the revised documents in the Parivesh Portal regarding a wrong entry. Taking into consideration the communication from the PP, EAC is of the view that the proposal may be **returned in present form** so that PP can revise the application.

**\*\*\***

## **Consideration in Modification of Environment Clearance Proposal**

### **Agenda No. 40.3**

**40.3 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 Amendment in Environmental Clearance**

**[Proposal No. IA/CG/IND1/430971/2023; File No. IA-J-11011/267/2007-IA-II(IND-I)]**

40.3.1 M/s MSP Steel & Power Ltd. has made an online application vide proposal No. IA/CG/IND1/430971/2023 dated 29.05.2022 along with Form 4 and addendum EIA report sought for amendment in Environment Clearance accorded by the Ministry vide letter no. IA-J-11011/267/2007-IA-II(I) dated 16.03.2023 w.r.t.correction in EC specific condition for the said project.

#### **Details submitted by Project proponent**

40.3.2 M/s. MSP Steel & Power Ltd was accorded Environment Clearance by the Ministry vide letter No.IA-J-11011/267/2007-IA-II(I) dated 16.03.2023 for expansion EC configuration under EIA Notification 2006.

40.3.3 The instant proposal is for seeking amendment in EC dated 16.03.2023 w.r.t. correction in EC specific condition for the said project as detailed below:

<b>Condition</b>	<b>As per EC dated 16.03.2023</b>	<b>Corrections/Modification to be made as per instant application</b>	<b>Justification</b>
Specific Condition (xxiii)	Air Cooled condensers shall be used in the captive power plant.	Water Cooled Condenser will be used in 15 MW CPP (WHRB) for 500 TPD DRI Kiln and Air Cooled Condenser shall be used in 36 MW CPP for 2 no. 600 TPD DRI Kiln.	Additional land of 3.0 Acres needed for a bulk size ACC installation would warrant diversion of Reserve Forest adjoining to the North & East boundary of the project premises as well as and regulatory hurdles apart from longer gestation period and added project

Condition	As per EC dated 16.03.2023	Corrections/Modification to be made as per instant application	Justification
			cost. ACC will be set up for WHRB connected to 2 nos 600 TPD kiln as per EC dt. 16.03.2023 in a separate location as shown in plant layout Further Project site, being situated within 14/15 km radius of Hirakud Water Basin back water area, falls in water sufficiency & safe zone because of natural recharge of ground water level.

40.3.4 There is no change in configuration & capacity of units in granted EC.

#### **Deliberation by the Committee**

40.3.5 The Committee noted the following:

- i. M/s. MSP Steel & Power Ltd. was accorded Environment Clearance by the Ministry vide letter No. IA-J-11011/267/2007-IA-II(I) dated 16.03.2023 for expansion EC configuration under EIA Notification 2006.
- ii. The instant proposal is for seeking amendment in EC dated 16.03.2023 w.r.t. correction in Specific Condition (xxiii) as detailed in para 40.3.3 above.
- iii. The EAC deliberated on the justification provided by the project proponent and found it satisfactory in the instant case.
- iv. The EAC noted that there is no change in configuration & capacity of units in granted EC.

#### **Recommendations of the Committee**

40.3.6 After deliberations, the Committee **recommended** the proposal for amendment in EC granted vide letter no. IA-J-11011/267/2007-IA-II(I) dated 16.03.2023 w.r.t. correction in EC Specific Condition (xxiii) for the said project as detailed in para 40.3.3 above. The other terms and condition of the EC dated 16.03.2023 shall remain the same.

**\*\*\***

## Agenda No. 40.4

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

[Proposal No. IA/RJ/IND1/429564/2023; File No. J-11011/170/2012-IA-II-(IND-I)]  
[Consultant : JM EnviroNetPvt. Ltd. ; Valid upto: 07.08.2023]

40.4.1 M/s. UltraTech Cement Limited (Unit: Birla White) has made an online application vide proposal no.: IA/RJ/IND1/429564/2023 dated 25th May, 2023 along with copy of Addendum EIA/EMP report, Pre-feasibility Report and CAF, Form 1 (Part A, B & C) seeking Amendment in Existing Environment Clearance (EC) under the provisions of the EIA Notification, 2006 for the project mentioned above. The project activity is listed at schedule no. 3(b) - Cement Plant under Category "A" of the schedule of the EIA Notification, 2006 and does not attracts any general condition.

40.4.2 Name of EIA Consultant: M/s. J.M. EnviroNetPvt. Ltd., [S. No. - 114 (as updated on 12th July, 2023), List of ACOs with their Certificate / Extension Letter no. NABET/EIA/2023/SA 0172 valid till 07th August, 2023].

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

40.4.4 Environment Clearance for Expansion of White Cement Production Capacity from 0.56 to 1.40 MTPA and Captive Power Plant Capacity from 7.5 to 33.5 MW at Rajashree Nagar, Village: Kharia Khangar, Tehsil: Bhopalgarh, District: Jodhpur, Rajasthan by M/s. UltraTech Cement Ltd. (Unit: Birla White) was granted on 05<sup>th</sup> March, 2014; amended on 11<sup>th</sup> May, 2017 (w.r.t specific condition no. viii) & further validity extended on 18<sup>th</sup> Nov., 2020 (valid upto 4<sup>th</sup> March, 2024).

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

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

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

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

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

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

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

S. No.	Amendment proposal	Reference of EC's	Existing Proposal	Proposed Amendment	Reason
--------	--------------------	-------------------	-------------------	--------------------	--------

S. No.	Amendment proposal	Reference of EC's	Existing Proposal	Proposed Amendment	Reason
1.	Cement Production Configuration	Point no.-3 in the EC issued on 5 <sup>th</sup> March, 2014	Total Cement production will be 1.4 MTPA from existing line 0.68 MTPA & from new line 0.72 MTPA	Total Cement production will be 1.4 MTPA from existing line 0.72 MTPA & from new line 0.68 MTPA	Company intends to change the production configuration in existing line & new line and proposing Amendment in EC.
2.	Total Plant Area	Point no.-2 in the EC issued on 5 <sup>th</sup> March, 2014	Total Plant area 115 ha	Total Plant area 110.32 ha	The applicant company couldn't purchase 4.68 ha area out of the total plant area. And, as of now the total land area of 110.32 ha which is under possession of company is sufficient for the proposed amendment instead of 115 ha and the un-acquired i.e. 4.68 ha will not be used for plant installation.

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

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

**Deliberations by the Committee:**

40.4.11 The Committee noted the following:

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

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

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

#### **Recommendations of the Committee:**

- 40.4.12 In view of the foregoing and after detailed deliberations, the committee recommended to **defer the proposal** due to certain deficiencies in the proposal and sought requisite information on the points referred at para no. 40.2.11 above. The proposal shall be considered after submission of requisite information and updating the Report on Parivesh Portal.

**\*\*\***

#### **Consideration in Terms of Reference Proposal**

#### **Agenda No. 40.5**

- 40.5 Establishment of Integrated Steel Plant - Iron Ore Beneficiation Plant (1 x 5.2 MTPA, Pellet Plant (1 x 3.8 MTPA), Producer Gas Plant (4,27,500 NM<sup>3</sup>/Hr.) -1496 MNm<sup>3</sup>/annum, Coal Washery Unit - 2 x 2.5 MTPA (5.0 MTPA), Coke Oven Unit 2 x 1.25 MTPA (2.5 MTPA), Lime Calcination Unit -2,64,000 TPA, Sinter Unit (3 x 150 m<sup>2</sup>) to produce sinter of 52,03,440 TPA, Blast Furnace Unit (3 x 1590 m<sup>3</sup>) to produce liquid metal of 47,22,300 TPA, DRI Kilns (4 x 600 TPD) – to produce sponge iron of 7,92,000 TPA, WHRB Power through DRI kilns – (4 x 14 MW-56 MW);Power generation through BF gases- 75 MW; Power generation through Coke Oven gases-150 MW; CFBC based Power Plant of 2 x 250 MW (500 MW); SMS# 1 – 1 x 100 T EAF + 2 x 120 T LRF + 9/18 Billet Caster; SMS # 2- 1 x 100 T EAF + 2 x 120 T LRF + 9/18 Bloom Caster; SMS # 3-4 x 85 T EOF /BOF + Slab & Mini Slab Caster; SMS # 4- 2 x 40 T AOD/VOD + 9/18 Billet Caster to produce Billets, Blooms, Slabs, Mini slabs; Rolling Mill #1 – 0.5 Million TPA Long Product Mill (Structural); Rolling Mill # 2- 1.0 - MTPA**

**Plate Mill; Rolling Mill #3- 1.0 Million TPA Cold Rolling Mill; Rolling Mill # 4- 0.5 Million TPA Pipe Mill; Rolling Mill# 5- 0.5 Million TPA Stainless Steel Mill; Rolling Mill# 6- 0.5 Million TPA TMT Bar Mill; Coal Gasifier for Rolling Mill # 1 - 4,500 Nm<sup>3</sup> /Hr; Ferro Alloys (8x 24 MVA : FeSi – 1,49,100 TPA / FeMn – 5,36,760 TPA / SiMn – 3,06,720 TPA / FeCr– 3,19,500 TPA); Oxygen Plant (Oxygen-198 Mm<sup>3</sup> /annum, Nitrogen-594 Mm<sup>3</sup> /annum, Argon -19.8 Mm<sup>3</sup> /annum; Brick Manufacturing Unit -330 Million Bricks/Year and Briquetting Plant- 2100 kg/hr. by M/s N. R. Iron and Power Pvt. Ltd., located at Shivpuri Village, Raigarh Tehsil & District, Chhattisgarh– Consideration of TOR**

**[Proposal No.: IA/CG/IND1/425731/2023; File No.: IA-J-11011/179/2023-IA-II-(IND-I)]  
[Consultant; Pioneer Enviro Laboratories & Consultants Pvt. Ltd., Hyderabad;  
21.09.2025]**

- 40.5.1 M/s. NR Iron and Power Pvt. Ltd. has made an application online vide proposal no. IA/CG/IND1/425731/2023 dated 28th June 2023 along with the application in prescribed format (Part-A & Part-B), copy of pre-feasibility report and proposed ToR for undertaking detailed EIA study as per the EIA Notification, 2006 for the project mentioned above. The proposed project activity is listed at S. No. 3(a),1(d),2(a) &2(b) under Category “A” of the schedule of the EIA notification, 2006 being appraised at Central Level.
- 40.5.2 Name of the EIA Consultant: M/s. Pioneer Enviro Consultants Pvt. Ltd. [NABET certificate vide no. NABET/EIA/2225/RA 0282 valid till 21.09.2025].

**Details submitted by Project proponent**

- 40.5.3 The project of M/s. NR Iron and Power Pvt. Ltd, located at Shivpuri Village, Raigarh Tehsil & District, Chhattisgarh for green filed project of Establishment of Integrated Steel Plant - Iron Ore Beneficiation Plant (1 x 5.2 MTPA, Pellet Plant (1 x 3.8 MTPA), Producer Gas Plant (4,27,500 NM<sup>3</sup>/Hr.) -1496 MNm<sup>3</sup>/annum, Coal Washery Unit - 2 x 2.5 MTPA (5.0 MTPA), Coke Oven Unit 2 x 1.25 MTPA (2.5 MTPA), Lime Calcination Unit -2,64,000 TPA, Sinter Unit (3 x 150 m<sup>2</sup>) to produce sinter of 52,03,440 TPA, Blast Furnace Unit (3 x 1590 m<sup>3</sup>) to produce liquid metal of 47,22,300 TPA, DRI Kilns (4 x 600 TPD) – to produce sponge iron of 7,92,000 TPA, WHRB Power through DRI kilns – (4 x 14 MW-56 MW);Power generation through BF gases- 75 MW; Power generation through Coke Oven gases-150 MW; CFBC based Power Plant of 2 x 250 MW (500 MW); SMS# 1 – 1 x 100 T EAF + 2 x 120 T LRF + 9/18 Billet Caster; SMS # 2- 1 x 100 T EAF + 2 x 120 T LRF + 9/18 Bloom Caster; SMS # 3-4 x 85 T EOF /BOF + Slab & Mini Slab Caster; SMS # 4- 2 x 40 T AOD/VOD + 9/18 Billet Caster to produce Billets, Blooms, Slabs, Mini slabs; Rolling Mill #1 – 0.5 Million TPA Long Product Mill (Structural); Rolling Mill # 2- 1.0 - MTPA Plate Mill; Rolling Mill #3- 1.0 Million TPA Cold Rolling Mill; Rolling Mill # 4- 0.5 Million TPA Pipe Mill; Rolling Mill# 5- 0.5 Million TPA Stainless Steel Mill; Rolling Mill# 6- 0.5 Million TPA TMT Bar Mill; Coal Gasifier for Rolling Mill # 1 - 4,500 Nm<sup>3</sup> /Hr; Ferro Alloys (8x 24 MVA : FeSi – 1,49,100 TPA / FeMn – 5,36,760 TPA / SiMn – 3,06,720 TPA / FeCr– 3,19,500 TPA); Oxygen Plant (Oxygen-198 Mm<sup>3</sup> /annum, Nitrogen-594 Mm<sup>3</sup>

/annum, Argon -19.8 Mm<sup>3</sup> /annum; Brick Manufacturing Unit -330 Million Bricks/Year and Briquetting Plant- 2100 kg/hr.

40.5.4 Environmental Site Setting:

S.No.	Particulars	Details	Remarks																																																																																				
i.	Total Land	<b>299.009 Ha. (738.852 Acres)</b>	---																																																																																				
ii.	Land acquisition details as per MoEF&CC O.M. dated 7/10/2014	<p>Total Land : <b>299.009 Ha. (738.852 Acres)</b></p> <p><b>Land acquisition:</b></p> <p>Land allotted by CSIDC : 177.766 Ha. Private land : 121.243 Ha. <b>Total Land : 299.009 Ha.</b></p> <p>Govt. land (i.e. 177.766 Ha.) is taken on lease from CSIDC Ltd. for 99 years vide Lease deed dt. 7<sup>th</sup> July 2023.</p> <p>Entire Private Land (i.e. 121.243 Ha.) is registered in the name of M/s. N.R. Iron &amp; Power Pvt. Ltd.</p>	<p><b>Entire 299.009 Ha. of land is in possession of the company.</b></p> <p>Land diversion details will be submitted in Final EIA report.</p>																																																																																				
iii.	Existence of habitation & involvement of R & R, if any	---	---																																																																																				
iv.	Latitude and Longitude of the project site	<p>Latitude and Longitude of the project site:</p> <table border="1"> <thead> <tr> <th>Point</th> <th>Latitude</th> <th>Longitude</th> </tr> </thead> <tbody> <tr><td>Pt-1</td><td>N 22° 0' 30.49"</td><td>E 83° 20' 33.13"</td></tr> <tr><td>Pt-2</td><td>N 22° 0' 31.87"</td><td>E 83° 20' 28.3"</td></tr> <tr><td>Pt-3</td><td>N 22° 0' 33.4"</td><td>E 83° 20' 26.24"</td></tr> <tr><td>Pt-4</td><td>N 22° 0' 37.68"</td><td>E 83° 20' 32.67"</td></tr> <tr><td>Pt-5</td><td>N 22° 0' 40.43"</td><td>E 83° 20' 38.49"</td></tr> <tr><td>Pt-6</td><td>N 22° 0' 47.96"</td><td>E 83° 20' 40.31"</td></tr> <tr><td>Pt-7</td><td>N 22° 0' 49.13"</td><td>E 83° 21' 1.116"</td></tr> <tr><td>Pt-8</td><td>N 22° 0' 55.03"</td><td>E 83° 21' 2.814"</td></tr> <tr><td>Pt-9</td><td>N 22° 0' 55.8"</td><td>E 83° 21' 12.43"</td></tr> <tr><td>Pt-10</td><td>N 22° 0' 59.66"</td><td>E 83° 21' 12.93"</td></tr> <tr><td>Pt-11</td><td>N 22° 1' 0.764"</td><td>E 83° 21' 16.39"</td></tr> <tr><td>Pt-12</td><td>N 22° 0' 55.75"</td><td>E 83° 21' 16.34"</td></tr> <tr><td>Pt-13</td><td>N 22° 0' 56.13"</td><td>E 83° 21' 25.75"</td></tr> <tr><td>Pt-14</td><td>N 22° 0' 59.55"</td><td>E 83° 21' 25.91"</td></tr> <tr><td>Pt-15</td><td>N 22° 0' 59.4"</td><td>E 83° 21' 29.31"</td></tr> <tr><td>Pt-16</td><td>N 22° 0' 49.31"</td><td>E 83° 22' 7.638"</td></tr> <tr><td>Pt-17</td><td>N 22° 0' 47.38"</td><td>E 83° 22' 9.702"</td></tr> <tr><td>Pt-18</td><td>N 22° 0' 44.51"</td><td>E 83° 22' 6.366"</td></tr> <tr><td>Pt-19</td><td>N 22° 0' 43.52"</td><td>E 83° 22' 3.34"</td></tr> <tr><td>Pt-20</td><td>N 22° 0' 42.9"</td><td>E 83° 22' 3.79"</td></tr> <tr><td>Pt-21</td><td>N 22° 0' 43.1"</td><td>E 83° 22' 1.593"</td></tr> <tr><td>Pt-22</td><td>N 22° 0' 42.63"</td><td>E 83° 21' 59.99"</td></tr> <tr><td>Pt-23</td><td>N 22° 0' 42.23"</td><td>E 83° 21' 59.55"</td></tr> <tr><td>Pt-24</td><td>N 22° 0' 41.97"</td><td>E 83° 21' 59.8"</td></tr> <tr><td>Pt-25</td><td>N 22° 0' 42.57"</td><td>E 83° 22' 0.747"</td></tr> <tr><td>Pt-26</td><td>N 22° 0' 42.81"</td><td>E 83° 22' 1.784"</td></tr> <tr><td>Pt-27</td><td>N 22° 0' 42.56"</td><td>E 83° 22' 2.822"</td></tr> </tbody> </table>	Point	Latitude	Longitude	Pt-1	N 22° 0' 30.49"	E 83° 20' 33.13"	Pt-2	N 22° 0' 31.87"	E 83° 20' 28.3"	Pt-3	N 22° 0' 33.4"	E 83° 20' 26.24"	Pt-4	N 22° 0' 37.68"	E 83° 20' 32.67"	Pt-5	N 22° 0' 40.43"	E 83° 20' 38.49"	Pt-6	N 22° 0' 47.96"	E 83° 20' 40.31"	Pt-7	N 22° 0' 49.13"	E 83° 21' 1.116"	Pt-8	N 22° 0' 55.03"	E 83° 21' 2.814"	Pt-9	N 22° 0' 55.8"	E 83° 21' 12.43"	Pt-10	N 22° 0' 59.66"	E 83° 21' 12.93"	Pt-11	N 22° 1' 0.764"	E 83° 21' 16.39"	Pt-12	N 22° 0' 55.75"	E 83° 21' 16.34"	Pt-13	N 22° 0' 56.13"	E 83° 21' 25.75"	Pt-14	N 22° 0' 59.55"	E 83° 21' 25.91"	Pt-15	N 22° 0' 59.4"	E 83° 21' 29.31"	Pt-16	N 22° 0' 49.31"	E 83° 22' 7.638"	Pt-17	N 22° 0' 47.38"	E 83° 22' 9.702"	Pt-18	N 22° 0' 44.51"	E 83° 22' 6.366"	Pt-19	N 22° 0' 43.52"	E 83° 22' 3.34"	Pt-20	N 22° 0' 42.9"	E 83° 22' 3.79"	Pt-21	N 22° 0' 43.1"	E 83° 22' 1.593"	Pt-22	N 22° 0' 42.63"	E 83° 21' 59.99"	Pt-23	N 22° 0' 42.23"	E 83° 21' 59.55"	Pt-24	N 22° 0' 41.97"	E 83° 21' 59.8"	Pt-25	N 22° 0' 42.57"	E 83° 22' 0.747"	Pt-26	N 22° 0' 42.81"	E 83° 22' 1.784"	Pt-27	N 22° 0' 42.56"	E 83° 22' 2.822"	---
Point	Latitude	Longitude																																																																																					
Pt-1	N 22° 0' 30.49"	E 83° 20' 33.13"																																																																																					
Pt-2	N 22° 0' 31.87"	E 83° 20' 28.3"																																																																																					
Pt-3	N 22° 0' 33.4"	E 83° 20' 26.24"																																																																																					
Pt-4	N 22° 0' 37.68"	E 83° 20' 32.67"																																																																																					
Pt-5	N 22° 0' 40.43"	E 83° 20' 38.49"																																																																																					
Pt-6	N 22° 0' 47.96"	E 83° 20' 40.31"																																																																																					
Pt-7	N 22° 0' 49.13"	E 83° 21' 1.116"																																																																																					
Pt-8	N 22° 0' 55.03"	E 83° 21' 2.814"																																																																																					
Pt-9	N 22° 0' 55.8"	E 83° 21' 12.43"																																																																																					
Pt-10	N 22° 0' 59.66"	E 83° 21' 12.93"																																																																																					
Pt-11	N 22° 1' 0.764"	E 83° 21' 16.39"																																																																																					
Pt-12	N 22° 0' 55.75"	E 83° 21' 16.34"																																																																																					
Pt-13	N 22° 0' 56.13"	E 83° 21' 25.75"																																																																																					
Pt-14	N 22° 0' 59.55"	E 83° 21' 25.91"																																																																																					
Pt-15	N 22° 0' 59.4"	E 83° 21' 29.31"																																																																																					
Pt-16	N 22° 0' 49.31"	E 83° 22' 7.638"																																																																																					
Pt-17	N 22° 0' 47.38"	E 83° 22' 9.702"																																																																																					
Pt-18	N 22° 0' 44.51"	E 83° 22' 6.366"																																																																																					
Pt-19	N 22° 0' 43.52"	E 83° 22' 3.34"																																																																																					
Pt-20	N 22° 0' 42.9"	E 83° 22' 3.79"																																																																																					
Pt-21	N 22° 0' 43.1"	E 83° 22' 1.593"																																																																																					
Pt-22	N 22° 0' 42.63"	E 83° 21' 59.99"																																																																																					
Pt-23	N 22° 0' 42.23"	E 83° 21' 59.55"																																																																																					
Pt-24	N 22° 0' 41.97"	E 83° 21' 59.8"																																																																																					
Pt-25	N 22° 0' 42.57"	E 83° 22' 0.747"																																																																																					
Pt-26	N 22° 0' 42.81"	E 83° 22' 1.784"																																																																																					
Pt-27	N 22° 0' 42.56"	E 83° 22' 2.822"																																																																																					

S.No.	Particulars	Details			Remarks
		Pt-28	N 22° 0' 42.35"	E 83° 22' 4.57"	
		Pt-29	N 22° 0' 41.7"	E 83° 22' 4.831"	
		Pt-30	N 22° 0' 41.61"	E 83° 22' 5.626"	
		Pt-31	N 22° 0' 42.52"	E 83° 22' 6.727"	
		Pt-32	N 22° 0' 42.53"	E 83° 22' 8.25"	
		Pt-33	N 22° 0' 43.47"	E 83° 22' 10.77"	
		Pt-34	N 22° 0' 44.57"	E 83° 22' 15.68"	
		Pt-35	N 22° 0' 40.71"	E 83° 22' 24.66"	
		Pt-36	N 22° 0' 36.29"	E 83° 22' 26.74"	
		Pt-37	N 22° 0' 32.28"	E 83° 22' 35.51"	
		Pt-38	N 22° 0' 25.57"	E 83° 22' 33.34"	
		Pt-39	N 22° 0' 24.59"	E 83° 22' 31.9"	
		Pt-40	N 22° 0' 24.39"	E 83° 22' 32.62"	
		Pt-41	N 22° 0' 20.36"	E 83° 22' 30.48"	
		Pt-42	N 22° 0' 20.96"	E 83° 22' 26.75"	
		Pt-43	N 22° 0' 24.41"	E 83° 22' 28.61"	
		Pt-44	N 22° 0' 24.17"	E 83° 22' 24.09"	
		Pt-45	N 22° 0' 23.21"	E 83° 22' 19.4"	
		Pt-46	N 22° 0' 22.58"	E 83° 22' 14.33"	
		Pt-47	N 22° 0' 22.08"	E 83° 22' 10.01"	
		Pt-48	N 22° 0' 21.91"	E 83° 22' 8.064"	
		Pt-49	N 22° 0' 19.7"	E 83° 22' 5.018"	
		Pt-50	N 22° 0' 16.65"	E 83° 22' 4.845"	
		Pt-51	N 22° 0' 14.2"	E 83° 22' 2.41"	
		Pt-52	N 22° 0' 13.71"	E 83° 21' 56.36"	
		Pt-53	N 22° 0' 11.69"	E 83° 21' 55.84"	
		Pt-54	N 22° 0' 12.11"	E 83° 21' 43.09"	
		Pt-55	N 22° 0' 20.67"	E 83° 21' 43.69"	
		Pt-56	N 22° 0' 22.43"	E 83° 21' 44.4"	
		Pt-57	N 22° 0' 22.63"	E 83° 21' 42.14"	
		Pt-58	N 22° 0' 23.57"	E 83° 21' 40.18"	
		Pt-59	N 22° 0' 22.7"	E 83° 21' 39.59"	
		Pt-60	N 22° 0' 22.73"	E 83° 21' 39.68"	
		Pt-61	N 22° 0' 22.8"	E 83° 21' 39.88"	
		Pt-62	N 22° 0' 22.88"	E 83° 21' 28.74"	
		Pt-63	N 22° 0' 20.57"	E 83° 21' 27.67"	
		Pt-64	N 22° 0' 18.82"	E 83° 21' 29.21"	
		Pt-65	N 22° 0' 13.78"	E 83° 21' 26.87"	
		Pt-66	N 22° 0' 14.1"	E 83° 21' 24.83"	
		Pt-67	N 22° 0' 6.826"	E 83° 21' 24.33"	
		Pt-68	N 22° 0' 10.18"	E 83° 21' 13.55"	
		Pt-69	N 22° 0' 16.02"	E 83° 21' 14.33"	
		Pt-70	N 22° 0' 14.3"	E 83° 21' 18.77"	
		Pt-71	N 22° 0' 14.39"	E 83° 21' 18.85"	
		Pt-72	N 22° 0' 16.66"	E 83° 21' 19.59"	
		Pt-73	N 22° 0' 15.01"	E 83° 21' 23.04"	
		Pt-74	N 22° 0' 15.97"	E 83° 21' 23.39"	
		Pt-75	N 22° 0' 15.44"	E 83° 21' 26.15"	
		Pt-76	N 22° 0' 15.58"	E 83° 21' 26.23"	
		Pt-77	N 22° 0' 18.83"	E 83° 21' 27.54"	
		Pt-78	N 22° 0' 20.36"	E 83° 21' 26.09"	

S.No.	Particulars	Details		Remarks	
		Pt-79	N 22° 0' 29.09"	E 83° 21' 29.9"	
		Pt-80	N 22° 0' 34.98"	E 83° 21' 31.5"	
		Pt-81	N 22° 0' 34.15"	E 83° 21' 36.33"	
		Pt-82	N 22° 0' 36.13"	E 83° 21' 36.7"	
		Pt-83	N 22° 0' 36.5"	E 83° 21' 40.41"	
		Pt-84	N 22° 0' 37.01"	E 83° 21' 40.19"	
		Pt-85	N 22° 0' 37.04"	E 83° 21' 36.05"	
		Pt-86	N 22° 0' 35.38"	E 83° 21' 30.92"	
		Pt-87	N 22° 0' 35.02"	E 83° 21' 27.01"	
		Pt-88	N 22° 0' 32.49"	E 83° 21' 26.27"	
		Pt-89	N 22° 0' 33.15"	E 83° 21' 25.71"	
		Pt-90	N 22° 0' 33.39"	E 83° 21' 24.89"	
		Pt-91	N 22° 0' 35.2"	E 83° 21' 25.13"	
		Pt-92	N 22° 0' 35.2"	E 83° 21' 25.83"	
		Pt-93	N 22° 0' 35.97"	E 83° 21' 26.49"	
		Pt-94	N 22° 0' 36.49"	E 83° 21' 26.24"	
		Pt-95	N 22° 0' 36.53"	E 83° 21' 23.92"	
		Pt-96	N 22° 0' 36.14"	E 83° 21' 23.83"	
		Pt-97	N 22° 0' 35.96"	E 83° 21' 20.38"	
		Pt-98	N 22° 0' 36.56"	E 83° 21' 20.35"	
		Pt-99	N 22° 0' 36.68"	E 83° 21' 19.46"	
		Pt-100	N 22° 0' 33.72"	E 83° 21' 18.53"	
		Pt-101	N 22° 0' 33.18"	E 83° 21' 16.08"	
		Pt-102	N 22° 0' 33.32"	E 83° 21' 16.03"	
		Pt-103	N 22° 0' 36.63"	E 83° 21' 15.86"	
		Pt-104	N 22° 0' 36.57"	E 83° 21' 9.069"	
		Pt-105	N 22° 0' 29.85"	E 83° 21' 1.507"	
		Pt-106	N 22° 0' 31.64"	E 83° 21' 0.084"	
		Pt-107	N 22° 0' 32.47"	E 83° 20' 57.92"	
		Pt-108	N 22° 0' 32.47"	E 83° 20' 54.09"	
		Pt-109	N 22° 0' 32.56"	E 83° 20' 51.22"	
		Pt-110	N 22° 0' 32"	E 83° 20' 51.16"	
		Pt-111	N 22° 0' 31.89"	E 83° 20' 54.43"	
		Pt-112	N 22° 0' 32.08"	E 83° 20' 57.52"	
		Pt-113	N 22° 0' 31.41"	E 83° 20' 59.53"	
		Pt-114	N 22° 0' 29.59"	E 83° 21' 1.139"	
		Pt-115	N 22° 0' 26.74"	E 83° 21' 3.735"	
		Pt-116	N 22° 0' 23.57"	E 83° 21' 6.901"	
		Pt-117	N 22° 0' 21.38"	E 83° 21' 10.13"	
		Pt-118	N 22° 0' 20.23"	E 83° 21' 14.14"	
		Pt-119	N 22° 0' 12.61"	E 83° 21' 12.87"	
		Pt-120	N 22° 0' 13.63"	E 83° 21' 7.996"	
		Pt-121	N 22° 0' 11.77"	E 83° 21' 7.547"	
		Pt-122	N 22° 0' 13.22"	E 83° 21' 2.44"	
		Pt-123	N 22° 0' 14.88"	E 83° 21' 2.868"	
		Pt-124	N 22° 0' 15.34"	E 83° 21' 1.651"	
		Pt-125	N 22° 0' 24.08"	E 83° 21' 1.343"	
		Pt-126	N 22° 0' 24.18"	E 83° 20' 50.5"	
		Pt-127	N 22° 0' 14.81"	E 83° 20' 49.88"	
		Pt-128	N 22° 0' 14.63"	E 83° 20' 43.19"	
		Pt-129	N 22° 0' 14.72"	E 83° 20' 43.22"	

S.No.	Particulars	Details			Remarks																																																						
		Pt.No	N	E																																																							
		Pt-130	N 22° 0' 22.09"	E 83° 20' 42.23"																																																							
		Pt-131	N 22° 0' 26.5"	E 83° 20' 43.44"																																																							
		Pt-132	N 22° 0' 27.54"	E 83° 20' 31.7"																																																							
		Pt-133	N 22° 0' 30.49"	E 83° 20' 33.13"																																																							
v.	Elevation of the project site	MSL of the Project area – 242 m to 281 m			---																																																						
vi.	Involvement of Forest land, if any	No Forest land is involved in the project site.			---																																																						
vii.	Water body (Rivers, Lakes, Pond, Nala, Natural Drainage, Canal etc.) exists within the project site as well as study area	<p><u>Project site:</u> Small water pond (4.0 acres) exists in the site, same will be utilized for Water storage purpose.</p> <p><u>Study area:</u></p> <table border="1"> <thead> <tr> <th>Water Body</th> <th>Distance (Kms.)</th> <th>Direction</th> </tr> </thead> <tbody> <tr><td>Gerwani Nala</td><td>Adjacent</td><td>N</td></tr> <tr><td>Kelo River</td><td>1.4</td><td>E</td></tr> <tr><td>PajharNadi</td><td>6.7</td><td>ENE</td></tr> <tr><td>Jam Nala</td><td>0.19</td><td>N</td></tr> <tr><td>Dewanmunda Nala</td><td>2.9</td><td>NW</td></tr> <tr><td>Korapali Nala</td><td>2.3</td><td>NW</td></tr> <tr><td>Barade Nala</td><td>6.7</td><td>WSW</td></tr> <tr><td>Bodojuri Nala</td><td>6.5</td><td>NW</td></tr> <tr><td>Tipakhhol Tal</td><td>6.0</td><td>S</td></tr> <tr><td>Kokritaral Tal</td><td>6.6</td><td>SSW</td></tr> <tr><td>Kosam Nala</td><td>8.0</td><td>NW</td></tr> <tr><td>Rabo dam</td><td>9.5</td><td>NNW</td></tr> <tr><td>Chui Nala</td><td>9.9</td><td>NE</td></tr> <tr><td>Gardharasi Nala</td><td>9.5</td><td>NNE</td></tr> <tr><td>Ratrot Nala</td><td>4.9</td><td>NE</td></tr> <tr><td>Banjari Nala</td><td>2.7</td><td>NE</td></tr> <tr><td>Karanara Nala</td><td>2.4</td><td>ENE</td></tr> </tbody> </table>			Water Body	Distance (Kms.)	Direction	Gerwani Nala	Adjacent	N	Kelo River	1.4	E	PajharNadi	6.7	ENE	Jam Nala	0.19	N	Dewanmunda Nala	2.9	NW	Korapali Nala	2.3	NW	Barade Nala	6.7	WSW	Bodojuri Nala	6.5	NW	Tipakhhol Tal	6.0	S	Kokritaral Tal	6.6	SSW	Kosam Nala	8.0	NW	Rabo dam	9.5	NNW	Chui Nala	9.9	NE	Gardharasi Nala	9.5	NNE	Ratrot Nala	4.9	NE	Banjari Nala	2.7	NE	Karanara Nala	2.4	ENE	---
Water Body	Distance (Kms.)	Direction																																																									
Gerwani Nala	Adjacent	N																																																									
Kelo River	1.4	E																																																									
PajharNadi	6.7	ENE																																																									
Jam Nala	0.19	N																																																									
Dewanmunda Nala	2.9	NW																																																									
Korapali Nala	2.3	NW																																																									
Barade Nala	6.7	WSW																																																									
Bodojuri Nala	6.5	NW																																																									
Tipakhhol Tal	6.0	S																																																									
Kokritaral Tal	6.6	SSW																																																									
Kosam Nala	8.0	NW																																																									
Rabo dam	9.5	NNW																																																									
Chui Nala	9.9	NE																																																									
Gardharasi Nala	9.5	NNE																																																									
Ratrot Nala	4.9	NE																																																									
Banjari Nala	2.7	NE																																																									
Karanara Nala	2.4	ENE																																																									
viii.	Existence of ESZ/ESA/National Park/ Wildlife Sanctuary / Biosphere Reserve/Tiger Reserve etc. if any within the study area	<p>Study Area:Nil</p> <p><b>List of Reserved and protected forests:</b></p> <table border="1"> <thead> <tr> <th>Name</th> <th>Distance</th> </tr> </thead> <tbody> <tr><td>Taraimal RF</td><td>Adjacent</td></tr> <tr><td>Urdana RF</td><td>1.8</td></tr> <tr><td>Barkachhar RF</td><td>2.8</td></tr> <tr><td>Kharidungri RF</td><td>2.4</td></tr> <tr><td>Rabo RF</td><td>1.7</td></tr> <tr><td>Samaruma RF</td><td>8.0</td></tr> <tr><td>PajharP.F</td><td>6.5</td></tr> <tr><td>Amaghat PF</td><td>8.5</td></tr> <tr><td>Lakha PF</td><td>1.6</td></tr> </tbody> </table>			Name	Distance	Taraimal RF	Adjacent	Urdana RF	1.8	Barkachhar RF	2.8	Kharidungri RF	2.4	Rabo RF	1.7	Samaruma RF	8.0	PajharP.F	6.5	Amaghat PF	8.5	Lakha PF	1.6	<p>There are no notified National Park / Wild life sanctuary / Biosphere reserve /Tiger reserve within 10 Km. radius of the project site.</p> <p>Based on secondary sources, movement of elephants has been observed within the study area of the plant. Conservation plan will be prepared and budgetary approval will be</p>																																		
Name	Distance																																																										
Taraimal RF	Adjacent																																																										
Urdana RF	1.8																																																										
Barkachhar RF	2.8																																																										
Kharidungri RF	2.4																																																										
Rabo RF	1.7																																																										
Samaruma RF	8.0																																																										
PajharP.F	6.5																																																										
Amaghat PF	8.5																																																										
Lakha PF	1.6																																																										

S.No.	Particulars	Details	Remarks
			obtained from PCCF, Govt. of Chhattisgarh.
ix.	Critically polluted area as per MoEF&CC Office Memorandum dated 13 <sup>th</sup> January 2010	None The Plant area does not fall in the areas given in Hon'ble NGT order issued vide dated 10 <sup>th</sup> July 2019.	---
x.	Tree Enumeration	<ul style="list-style-type: none"> <li>• Total number of plants existing in the proposed project site: 9,278 Nos.</li> <li>• No cutting of trees will be involved.</li> <li>• Total number of trees to be retained undisturbed: 4,128 Nos.</li> <li>• Total Number of trees proposed to be translocated: 5,150 nos.</li> <li>• Trees proposed to be translocated to within the premises peripherally.</li> <li>• Total peripheral length of the site is around 16000 m.</li> <li>• Tree Enumeration report has been prepared by Mr. Arif Ali (Retd Dy. Conservator of Forests)</li> <li>• Copy of report submitted</li> <li>• Budget of Rs 2.06 Crores will be allocated for Tree translocation.</li> <li>• NOC issued by DFO, Govt. of Chhattisgarh vide letter no. Tech. Off./ 3509/2023/Raigarh dt. 28.06.2023</li> </ul>	<p>Tree enumeration study carried out by an expert</p> <p>No tree cutting envisaged</p> <p>NOC issued by DFO</p> <p>Budget of Rs 2.06 Cr earmarked for translocation of trees</p>

40.5.5 The proposed project is a Greenfield project. Consent to Establish (CTE) will be obtained from Chhattisgarh Environment Conservation Board (CECB) after getting Environment Clearance from MoEF&CC, New Delhi. Consent to Operate (CTO) will be obtained after getting CTE from CECB.

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

S. No.	Unit (Product)	Unit Configuration	Production Capacity
1.	Iron Ore Beneficiation Plant (I/O concentrate)	1 x 5.2 MTPA (Throughput capacity)	5.2 MTPA (Throughput capacity)
2.	Iron Ore Pelletization Plant (Pellets)	1 x 3.8 MTPA	3.8 MTPA
3.	Producer Gas Plant (Producer Gas)	4,27,500 Nm <sup>3</sup> /Hr	4,27,500 Nm <sup>3</sup> /Hr
4.	Coal Washery (Washed coal)	2 x 2.5 MTPA (Throughput capacity)	5.0 MTPA (Throughput capacity)
5.	Non-Recovery Type Coke Ovens (Coke)	2 x 1.25 MTPA	2.5 MTPA
6.	Lime Calcination Plant (Lime stone&Dolomite)	4 x 200 TPD	0.264 MTPA
7.	Sinter Plants (Sinter)	3 x 150 m <sup>2</sup>	52,03,440 TPA

S. No.	Unit (Product)	Unit Configuration	Production Capacity		
8.	Blast Furnaces (Liquid Pig Iron)	3 x 1590 m <sup>3</sup>	47,22,300 TPA		
9.	DRI Kilns (Sponge Iron)	4 x 600 TPD	0.792 MTPA		
10.	SMS # 1 (MS Billets)	1 x 100 T EAF + 2 x 120 T LRF + 9/18 Billet Caster	0.528 MTPA		
11.	SMS # 2 (MS Blooms)	1 x 100 T EAF + 2 x 120 T LRF + 9/18 Bloom Caster	0.528 MTPA		
12.	SMS # 3 (Slabs/ Mini Slabs)	4 x 85 T EOF/BOF + Slab/ Mini Slab Caster	2.64 MTPA		
13.	SMS # 4 (Billets)	2 x 40 T AOD/VOD + 9/18 Bloom Caster	5,01,600 TPA		
14.	Rolling Mill # 1 (Structural Steel)	1 x 1,515 TPD	0.5 MTPA		
15.	Rolling Mill # 2 (Plate Mill)	1 x 3,030 TPD	1.0 MTPA		
16.	Rolling Mill # 3 (Cold Rolling Mill)	1 x 3,030 TPD	1.0 MTPA		
17.	Rolling Mill # 4 (Pipe Mill)	1 x 1,515 TPD	0.5 MTPA		
18.	Rolling Mill # 5 (Stainless Steel Mill)	1 x 1,515 TPD	0.5 MTPA		
19.	Rolling Mill # 6 (TMT Bar Mill)	1 x 1,515 TPD	0.5 MTPA		
20.	Coal Gasifier for Rolling Mill # 1	4,500 Nm <sup>3</sup> /Hr	4,500 Nm <sup>3</sup> /Hr		
21.	Ferro Alloys Plant (FeSi / FeMn / SiMn / FeCr)	8 x 24 MVA	FeSi – 1,49,100 TPA / FeMn – 5,36,760 TPA / SiMn – 3,06,720 TPA / FeCr– 3,19,500 TPA		
22.	Oxygen Plant	Oxygen	6,00,000 m <sup>3</sup> /day	198 Mm <sup>3</sup> /annum	
		Nitrogen	18,00,000 m <sup>3</sup> /day	594 Mm <sup>3</sup> /annum	
		Argon	60,000 m <sup>3</sup> /day	19.8 Mm <sup>3</sup> /annum	
23.	Power Plant (781 MW)	WHRB	Blast Furnace	3 x 25 MW	75 MW
		WHRB	DRI Kilns	4 x 14 MW	56 MW
			Coke Oven	2 x 75 MW	150 MW
		CFBC	2 x 250 MW	500 MW	
24.	Bricks Manufacturing Unit	10,00,000 Bricks/day	10,00,000 Bricks/day		
25.	Briquetting Unit	2,100 Kg/hr.	2,100 Kg/hr.		

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

Raw Material	Quantity (TPA)	Sources	Mode of Transport
<b>Beneficiation Plant - 52,00,000 TPA</b>			
Iron Ore Fines	52,00,000	Chhattisgarh / Odisha	By Rail & Road (through Covered trucks)
<b>Pellet Plant – 38,00,000 TPA</b>			
I/O Concentrate	41,80,000	Own generation	Through Conveyor
Anthracite Coal	76,000	SECL Chhattisgarh / Jharkhand, Odisha	By Rail & Road (Covered trucks) & Through vessel.
Bentonite	34,200	Gujarat	By Road (Covered trucks)
Lime Powder	95,000	M.P. & Odisha	By Rail & Road (Covered trucks)
Coke breeze	1200	Own generation, Chhattisgarh & Jharkhand	Internal Transfer & By Road (Covered trucks)
<b>Producer Gas Plant- (4,27,500 Nm<sup>3</sup>/Hr)</b>			
Domestic Coal	12,82,500	SECL Chhattisgarh / MCL Odisha	By Rail & Road (Covered trucks)
Imported Coal	820,822	Indonesia / South Africa / Australia	Through sea route, rail route & by road (through covered trucks)
<b>Coal Washery - 50,00,000 TPA</b>			
ROM Coal	50,00,000	SECL Chhattisgarh / MCL Odisha	By rail & road (through covered trucks)
<b>Coke Ovens 25,00,000 TPA</b>			
Coking coal	37,50,000	SECL Chhattisgarh / MCL Odisha	By rail & road (through covered trucks)
<b>Lime Calcination Plant (Dolomite) 2,64,000 TPA</b>			
Limestone	4,75,200	Chhattisgarh	By rail & road (through covered trucks)
Coal	42,240	SECL Chhattisgarh / MCL Odisha	By rail & road (through covered trucks)
<b>Sinter Plant (Sintered Ore) 52,03,440 TPA</b>			
Iron ore fines	46,83,071	Chhattisgarh / Orissa	By rail & road (through covered trucks)
Limestone	6,68,000	SECL Chhattisgarh / MCL Odisha	By rail & road (through covered trucks)

Raw Material	Quantity (TPA)	Sources	Mode of Transport
			trucks)
Dolomite	4,68,000		
Coke fines	4,43,000	Chhattisgarh / Odisha/ Maharashtra	By rail & road (through covered trucks)
Mill scale	1,30,086	Own Generation	Internal Transfer (Covered trucks)
Dust from SMS, BF, Coke Oven	5,15,200	Own Generation	Internal Transfer (Covered trucks)
Sinter plant return	10,93,243	Own Generation	Internal Transfer (Covered trucks)
<b>Blast Furnace- 47,22,300 TPA</b>			
Sinter	52,03,440	Own Generation	Roller Conveyors
Iron Ore Pellets	18,88,920	Own generation Odisha, Chhattisgarh, Jharkhand	By Rail & Road Covered trucks
<b>(or)</b>			
Iron ore	22,14,600	Odisha, Chhattisgarh, Jharkhand	By Rail & Road Covered trucks
BF Coke	25,00,000	Own generation	Internal Transfer (Covered trucks)
Quartzite	94,446	Chhattisgarh, Jharkhand	Covered trucks
Dolomite	2,59,000	Odisha, Chhattisgarh, Jharkhand	By Rail & Road (Covered trucks)
Lime Stone	3,06,000	Own generation & external purchase from Odisha, Chhattisgarh, Jharkhand	Internal transfer by covered trucks By Rail & Road (Covered trucks)
<b>DRI Kilns (Sponge Iron) – 7,92,000 TPA</b>			
Iron Ore Pellets	11,48,400	Own generation/ Odisha, Chhattisgarh, Jharkhand	By Conveyors By Rail & Road (Covered trucks)
<b>(or)</b>			
Iron Ore	13,46,400	Chhattisgarh / Orissa	By Rail & y Road (Covered trucks)
Indian Coal	10,29,600	SECL Chhattisgarh / MCL Odisha	By Rail & Road (Covered trucks)
<b>(or)</b>			
Imported coal	6,73,200	Indonesia/South Africa/ other countries also	By sea, By rail & by Road (Covered trucks)
Dolomite	39,600	M.P., Chhattisgarh & Imported from Bhutan	By Rail & Road (Covered trucks)
<b>CFBC Boilers [Power Generation-2 X 250MW- 500 MW]</b>			
Indian Coal 100%	26,67,500	SECL Chhattisgarh /	By Rail & Road

Raw Material	Quantity (TPA)	Sources	Mode of Transport
		MCL Odisha	(Covered trucks)
OR			
Imported Coal 100%	16,79,472	Indonesia / South Africa / Australia	Through sea route, rail route & by road (through covered trucks)
Or/and			
Washery rejects	12,50,000		
<b>Steel Melting Shop # 1 (Electric Arc Furnace (EAF)) – 5,28,000 TPA</b>			
Sponge Iron	2,64,000	Own generation	Through Conveyors
Hot metal/Pig Iron	52,800	Own generation	Internal Transfer (piped conveyor)/covered trucks
Melting Scrap (end cuttings also)	79,703	Own generation, Odisha, Chhattisgarh, Jharkhand, WB & Imported	Internal transfer (Covered Trucks), By Rail & Road (Covered trucks) & Through vessel.
Slag Scrap	2,64,000	Own generation	Internal Transfer (Covered trucks)
SiMn	7,895	Own generation	Internal Transfer (Covered trucks)
<b>Steel Melting Shop # 2 (Electric Arc Furnace (EAF)) – 5,28,000 TPA</b>			
Sponge Iron	2,64,000	Own generation	Through Conveyors
Hot metal/Pig Iron	52,800	Own generation	Internal Transfer (piped conveyor)/covered trucks
Melting Scrap (end cuttings also)	79,703	Own generation, Odisha, Chhattisgarh, Jharkhand, WB & Imported	Internal transfer (Covered Trucks), By Rail & Road (Covered trucks) & Through vessel.
Slag Scrap	2,64,000	Own generation	Internal Transfer (Covered trucks)
SiMn	7,895	Own generation	Internal Transfer (Covered trucks)
<b>Steel Melting Shop # 3 (BOF) – 26,40,000 TPA</b>			
Hot Metal	28,60,000	Own generation	Piped conveyor
Lime	1,48,200	Odisha, Chhattisgarh, Jharkhand / Own Generation	By Rail & Road (Covered trucks) / Internal Transfer (Covered trucks)
Dolomite	67,300	M.P., Chhattisgarh & Imported from Bhutan/ Own Generation	By Rail & Road (Covered trucks) /Internal Transfer

Raw Material	Quantity (TPA)	Sources	Mode of Transport
			(Covered trucks)
SiMn	40,400	Own generation	Internal Transfer (Covered trucks)
<b>Steel Melting Shop #4 (AOD) – 5,01,600 TPA</b>			
Hot Metal	5,40,000	Own generation	Through Ladle
Lime	27,600	Odisha, Chhattisgarh, Jharkhand / Own Generation	By Rail & Road (Covered trucks) / Internal Transfer (Covered trucks)
Dolomite	12,500	M.P., Chhattisgarh & Imported from Bhutan/ Own Generation	By Rail & Road (Covered trucks) / Internal Transfer (Covered trucks)
SiMn	7,600	Own generation	Internal Transfer (Covered trucks)
<b>Rolling Mill #1 – 0.5 MTPA</b>			
MS Billet/ Ingots/ Bloom	5,20,000	Own generation	Roller Conveyors
<b>Coal Gasifier for Rolling Mill # 1 (4,500 Nm<sup>3</sup>/Hr) only for 15% through RHF</b>			
Coal (Indian)	13500	SECL Chhattisgarh / MCL Odisha	By Rail & Road (Covered trucks)
Coal (Imported)	8,500	Indonesia / South Africa / Australia	Through sea route, rail route & by road (through covered trucks)
<b>Rolling Mill # 2 – 1.0 MTPA</b>			
MS Billet/ Ingots/ Bloom	10,40,000	Own generation	Roller Conveyors
<b>Rolling Mill # 3 – 1.0 MTPA</b>			
MS Billet/ Ingots/ Bloom	10,40,000	Own generation	Roller Conveyors
<b>Rolling Mill # 4 – 0.5 MTPA</b>			
MS Billet/ Ingots/ Bloom	5,20,000	Own generation	Roller Conveyors
<b>Rolling Mill # 5 – 0.5 MTPA</b>			
MS Billet/ Ingots/ Bloom	5,20,000	Own generation	Roller Conveyors
<b>Rolling Mill # 6 – 0.5 MTPA</b>			
MS Billet/ Ingots/ Bloom	5,20,000	Own generation	Roller Conveyors
<b>For Ferro Alloys : 8x24 MVA [SiMn (or) FeMn (or) FeCr (or) FeSi]</b>			
<b>(i) For manufacturing Silico Manganese - 3,06,720 TPA</b>			
Manganese Ore	4,99,954	SECL Chhattisgarh / MCL Odisha	By Rail & Road (Covered trucks)
FeMn Slag	1,24,525	Own Generation	Through Conveyor
LAM Coke	1,15,020	Chhattisgarh, Jharkhand	By Road (Covered trucks)
Quartz	76,613	Chhattisgarh, Jharkhand	By Road (Covered trucks)
Bag filter dust	6,270	Own Generated plant	Internal Transfer (Covered trucks)
Electrode paste	6,134	Maharashtra/West Bengal	By Road (Covered

Raw Material	Quantity (TPA)	Sources	Mode of Transport
			trucks)
<b>(OR)</b>			
<b>(ii) For manufacturing Ferro Manganese – 5,36,720 TPA</b>			
Manganese Ore	12,21,129	SECL Chhattisgarh / MCL Odisha	By Rail & Road (Covered trucks)
LAM Coke	1,95,200	Chhattisgarh, Jharkhand	By Road (Covered trucks)
Dolomite	91,250	Chhattisgarh, Jharkhand	By Road (Covered trucks)
Electrode paste	6,980	Maharashtra/West Bengal	By Road (Covered trucks)
Bag filter dust	26,900	Own Generated plant	Internal Transfer (Covered trucks)
<b>(OR)</b>			
<b>(iii) For manufacturing Fe-Si – 1,49,100 TPA</b>			
Quartz	2,26,632	Chhattisgarh, Odisha, Jharkhand	By Rail & Road (Covered trucks)
Mill Scale	35,039	Chhattisgarh, Jharkhand	By Road (Covered trucks)
M.S. Scrap	5,219	Own generation	Covered trucks
LAM Coke	83,496	Chhattisgarh, Madhya Pradesh & Odisha	By Rail & Road (Covered trucks)
Bag filter dust	5,666	Own generation	Covered trucks
Electrode paste	2,982	Maharashtra/West Bengal	By Road (Covered trucks)
<b>(OR)</b>			
<b>(iv) For manufacturing Ferro chrome – 3,19,500 TPA</b>			
Chrome Ore	6,39,000	Odisha & Imported from South Africa	By rail, road (Covered trucks) & Through vessel.
LAM Coke	1,05,435	Chhattisgarh, Madhya Pradesh & Odisha	By rail, road (Covered trucks)
Quartz	55,913	Chhattisgarh, Madhya Pradesh & Odisha	By Road (Covered trucks)
MS scrap/Mill scales	47,925	Own generation	Internal transfer (Covered trucks)
Bag filter dust	20,448	Own Generation	Internal transfer (covered trucks)
Electrode paste	9,585	Maharashtra/West Bengal	By Road (Covered trucks)
<b>Composite Brick Plant- 330 Million Bricks/Year</b>			
IOB Tailing	4,97,829	Own generation	Covered trucks
Cement	1,03,714	Chhattisgarh	By rail & road (Covered trucks)
Bed Material	83,160	Own Generation	In covered trucks
Fly Ash/ash	5,61,754	Own Generation	In covered trucks
Slag Dust	3,51,464	Own Generation	In covered trucks

Raw Material	Quantity (TPA)	Sources	Mode of Transport
Wet scrapper sludge	53,961	Own Generation	In covered trucks
<b>Briquetting Plant-2,100 Kg/hr</b>			
Dust from Ferro Alloys plant	4,05,000	Own Generation	In covered trucks
<b>Note:</b> Major raw materials are proposed to be transported by Rail upto the Railway Siding at M/s. Nalwa Steel and Power Ltd., which is at a distance of 1.5 Kms. from the project site. From there it will be transported by road (SH#1).			

- 40.5.8 Water required for the proposed project will be 75,334 KLD, Water required for proposed project (for process and domestic) will be sourced from Kelo river (which is at a distance of 1.40 Km at E direction from the project site). A dedicated pipeline will be laid from Kelo river to the project site. Water drawl permission from Water Resources Department (WRD), Govt. of Chhattisgarh will be obtained.
- 40.5.9 Power required for the proposed project will be 794 MW and same will be sourced from Captive Power Plant @ 90% PLF 703 MW and remaining 91 MW from the Chhattisgarh state power grid.
- 40.5.10 The capital cost of the project is Rs.8,917Crores. Employment generation from proposed project will be 5000 nos. through direct employment and 7500 nos. through indirect employment.
- 40.5.11 No violation is done under EIA Notification 2006/court case/show cause/direction related to the project.
- 40.5.12 Proposed Terms of Reference (Baseline data collection period): Collected during 1<sup>st</sup> March 2023 to 31<sup>st</sup> May 2023.

Attributes	Sampling		Remarks
	No. of Stations	Frequency	
<b>A. Air</b>			
a. Meteorological parameters	1	On hourly basis for one season	<ul style="list-style-type: none"> <li>• Wind Speed</li> <li>• Wind Direction</li> <li>• Temperature</li> <li>• Relative Humidity</li> <li>• Rainfall</li> </ul>
b. AAQ parameters	12	24 hourly Twice a week for 3 months (One Season)	<ul style="list-style-type: none"> <li>• Parameters Monitored:</li> <li>• PM<sub>2.5</sub>, PM<sub>10</sub>, SO<sub>2</sub>, Nox, CO</li> <li>• Hg, Lead(Pb), Arsenic(As), Nickel(Ni),</li> <li>• Benzene(C<sub>6</sub>H<sub>6</sub>), Ammonia(NH<sub>3</sub>),</li> <li>• Benzo (a) Pyrene</li> <li>• Chemical characterization RSPM Poly-Aromatic Hydrocarbons(PAH), i.e., Benzene soluble fraction</li> </ul>

Attributes	Sampling		Remarks
	No. of Stations	Frequency	
<b>B. Noise</b>	12	On hourly basis for 24 Hrs. at each station	Parameters Monitored: <ul style="list-style-type: none"> <li>• Day equivalent</li> <li>• Night equivalent</li> </ul>
<b>C. Water</b>			
a. Ground Water	12	One sample at each of the locations	Parameters Monitored: as per IS: 10500
b. Surface Water	3	One sample at each of the locations	Parameters Monitored: as per BIS: 2296
<b>D. Land</b>			
a. Soil quality	12	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	--	--	LULC map prepared by concerned FAE for study area
<b>E. Biological</b>			
a. Aquatic	--	Once in Season	---
b. Terrestrial	--	Once in Season	Conservation Plan will be prepared
<b>F. Socio economic parameters</b>	--	Once in Season	Social Impact Assessment by concerned FAE for study area
<b>G. Traffic Density</b>	---	Once in Season	Vehicular traffic study will be carried out at Transportation route.

### Deliberation by the Committee

40.5.13 The Committee noted the following:

1. The instant green filed project is for Establishment of Integrated Steel Plant - Iron Ore Beneficiation Plant (1 x 5.2 MTPA, Pellet Plant (1 x 3.8 MTPA), Producer Gas Plant (4,27,500 NM<sup>3</sup>/Hr.) -1496 MNm<sup>3</sup>/annum, Coal Washery Unit - 2 x 2.5 MTPA (5.0 MTPA), Coke Oven Unit 2 x 1.25 MTPA (2.5 MTPA), Lime Calcination Unit -2,64,000 TPA, Sinter Unit (3 x 150 m<sup>2</sup>) to produce sinter of 52,03,440 TPA, Blast Furnace Unit (3 x 1590 m<sup>3</sup>) to produce liquid metal of 47,22,300 TPA, DRI Kilns (4 x 600 TPD) – to produce sponge iron of 7,92,000 TPA, WHRB Power through DRI kilns – (4 x 14 MW-56 MW);Power generation through BF gases- 75 MW; Power generation through Coke Oven gases-150 MW; CFBC based Power Plant of 2 x 250 MW (500 MW); SMS# 1 – 1 x 100 T EAF + 2 x 120 T LRF + 9/18 Billet Caster; SMS # 2- 1 x 100 T EAF + 2 x 120 T LRF + 9/18 Bloom Caster; SMS # 3-4 x 85 T EOF /BOF + Slab & Mini Slab Caster; SMS # 4- 2 x 40 T AOD/VOD + 9/18 Billet Caster to produce Billets, Blooms, Slabs, Mini slabs; Rolling Mill #1 – 0.5 Million TPA Long Product Mill (Structural); Rolling Mill # 2- 1.0 - MTPA Plate Mill; Rolling Mill #3- 1.0 Million TPA Cold Rolling Mill;

Rolling Mill # 4- 0.5 Million TPA Pipe Mill; Rolling Mill# 5- 0.5 Million TPA Stainless Steel Mill; Rolling Mill# 6- 0.5 Million TPA TMT Bar Mill; Coal Gasifier for Rolling Mill # 1 - 4,500 Nm<sup>3</sup> /Hr; Ferro Alloys (8x 24 MVA : FeSi – 1,49,100 TPA / FeMn – 5,36,760 TPA / SiMn – 3,06,720 TPA / FeCr– 3,19,500 TPA); Oxygen Plant (Oxygen-198 Mm<sup>3</sup> /annum, Nitrogen-594 Mm<sup>3</sup> /annum, Argon -19.8 Mm<sup>3</sup> /annum; Brick Manufacturing Unit -330 Million Bricks/Year and Briquetting Plant- 2100 kg/hr.

2. The EAC noted that there are 9278 Nos. of trees in the proposed project site which are proposed to be translocated/retained.
3. The EAC observed that a WaterPond (4.0 acres) is situated within the project site and Gerwani Nala is flowing adjacent to the project boundary with Kelo River at a distance of 1.4 km from the project site boundary. Also, there are other water bodies within the study area of the project site.
4. The EAC also noted that Protected and Reserve Forest are adjacent to the project site. It is required to understand the measures undertaken by PP to minimise the impact of the project activities on these PF/RF.
5. The PP has also reported that based on secondary sources, movement of elephants has been observed within the study area of the plant.
6. As reported, Shivpuri village is adjacent and Gerwani Village is at a distance of 0.3 km in S direction of the project site. Also, on perusal of kml file, it appears that there is a schools nearby within the study area. Considering the Environmental Sensitivity to the habitation in the area, the EAC opined that it is prudent to inspect the area for understanding the ground reality as the area appears to have habitation and forest area nearby.
7. Thus, in view of the above observations the EAC is of the opinion that it is pertinent to undertake site visit to understand the violation issues, ecological/environmental sensitivity of the area to the ESA's and local habitation, greenbelt development at the project site etc.

### **Recommendations of the Committee**

- 40.5.14 In view of the foregoing and after deliberations, the Committee recommended to **defer the proposed project and recommended for site visit** of the proposed project area by a sub-committee of EAC Industry-1 members comprising of Dr.Tejaswini Ananthkumar, Dr. E V R Raju, Representative of MoEFCC to conduct the site visit and submit the Report. The proposal shall be appraised based on the findings of the sub-committee and deliberation of EAC.

**\*\*\***

## **DAY-2: JULY 20, 2023 [THURSDAY]**

### **Agenda No. 40.6**

#### **40.6 Discussions/Deliberations of various Technical issues related various studies/models/technologies used by the EAC while appraisals of the proposals**

The EAC deliberated the various model on Air quality and deliberated the various mitigation measures so that pollutants can be decreased in the emissions.

**\*\*\***

## **Consideration of Environmental Clearance Proposals**

### **Agenda No. 40.7**

#### **40.7 Regularization of the existing Rolling Mill having capacity of MS Ingots of 80TPD, MS Twisted Bar, Angle & Channel of 430 TPD and Re- Heating Furnace – 22 TPH, Induction Furnace-8TPH” by M/s Ashiana Ispat Limited, located at Plot no. A-1116, RIICO Industrial Area, Bhiwadi, Phase-III, Tehsil: Tijara, District. Alwar, Rajasthan- Consideration of Environmental Clearance as per Ministry’s Notification dated 20.07.2022.**

**[Proposal No. IA/RJ/IND1/ 434445/2023, File No. IA-J-11011/216/2022-IA-II(IND-I)]**

**[Consultant: Enkay Enviro Services Pvt. Ltd.; Valid upto 12.12.2023]**

40.7.1 M/s. Ashiana Ispat Limited has made an application online vide proposal no IA/RJ/IND1/434445/2023 dated 05.07.2023 along with the copy of EIA/EMP Report seeking Environment Clearance (EC) under the provisions of the EIA Notification, 2006 for the project mentioned above. The proposed project activity is listed at S. No. 3(a) Metallurgical industries (ferrous & non-ferrous) under Category “A” of the schedule of the EIA Notification, 2006 due to attracts general condition - Inter-state boundary of Rajasthan & Haryana lies at a distance 1.21 Km, North East and project lies in critically polluted area (CPA), hence being appraised at Central Level.

40.7.2 Name of the EIA consultant: Enkay Enviro Services Pvt. Ltd. [S. No. 55 List of ACOs with their Certificate / Extension Letter no NABET/EIA/2023/RA 0183; Valid up to 12.12.2023).

#### **Details submitted by Project proponent**

40.7.3 The details of the ToR are furnished as below:

<b>Date of application</b>	<b>Consideration</b>	<b>Details</b>	<b>Date of accord</b>	<b>ToR Validity</b>
21.06.2022	Standard ToR issued	Terms of Reference	29.08.2022	28.08.2026

40.7.4 The project of M/s Ashiana Ispat Limited located in RIICO Industrial Area, Bhiwadi, Tehsil: Tijara, District. Alwar, Rajasthan State is for "Regularization of the existing Rolling Mill having capacity of MS Ingots of 80TPD, MS Twisted Bar, Angle & Channel of 430 TPD and Re- Heating Furnace – 22 TPH, Induction Furnace-8TPH.

40.7.5 Environmental site settings:

S. No.	Particulars	Details			Remarks						
1.	Total land	Total plot Area is 13,495 Sq.m. (1.34Ha) - RIICO Industrial land.			Industrial land. There is no change in land use.						
S. No.	Land Use	Area (Sq.m)		Total area	Percentage (%)						
		Existing Area	Proposed Area								
1.	Plant Area	8409.00	None	8409.00	62.32						
2.	Paved Area (Road, Corridor, )	4240.00	None	4240.00	31.42						
3.	plantation	846	-	846	6.26						
4.	Open area	0.0	None	0.0	0.0						
	Total	13,495	--	13,495	100						
<p><b>Note*:</b> The green area developed inside the premises is 846Sq.m. (6.26% &amp; 240Plants) &amp; proposed Plantation in Container (1.5 ft x1.5ft) of 100 numbers will be developed as hardscape contributing to Green area development due to land constraint. The rest 4552Sq.m. (33.74% &amp; 780 Plants) area also planted outside the plant premises within the park of RIICO industrial area in the impact zone of the project. The RIICO has given permission for maintenance of park/plantation at open area near Plot no. F-129-130 I/A Kaharani (Bhiwadi) vide letter no. U(5)I/2022-23/2236 dated 28.07.2022.</p>											
2.	Land acquisition details as per MoEF&CC O.M. dated 7/10/2014	Not Applicable as land is already converted for industrial use by RIICO. (RIICO Industrial Area)			Existing project is already situated RIICO Industrial Area, Bhiwadi						
3.	Existence of habitation & involvement of R&R, if any.	<p><b>Project site:</b> RIICO Industrial Area, Bhiwadi</p> <table border="1"> <thead> <tr> <th>Habitation</th> <th>Distance(km)</th> <th>Direction</th> </tr> </thead> <tbody> <tr> <td colspan="3">Not Applicable as this is industrial land and project is already existing.</td> </tr> </tbody> </table>			Habitation	Distance(km)	Direction	Not Applicable as this is industrial land and project is already existing.			<p><b>Status of R&amp;R:</b>  <b>Not applicable</b> as land is already converted for industrial use. (RIICO Industrial Area) there is no habitation in the existing area, therefore rehabilitation &amp; resettlement</p>
Habitation	Distance(km)	Direction									
Not Applicable as this is industrial land and project is already existing.											

S. No.	Particulars	Details			Remarks																														
					plan is not required/ applicable.																														
4.	Latitude and Longitude of all corners of the Project site.	<b>Pillars</b>	<b>Latitude</b>	<b>Longitude</b>	--																														
		A	28°11'57.00"N	76°51'36.25"E																															
		B	28°11'57.36"N	76°51'33.45"E																															
		C	28°12'2.47"N	76°51'34.40"E																															
		D	28°12'1.99"N	76°51'37.99"E																															
		E	28°12'0.88"N	76°51'37.84"E																															
		F	28°12'1.01"N	76°51'36.94"E																															
5.	Elevation of the project site	The Highest elevation– 268 MSL; Lowest elevation– 266 MSL.			--																														
6.	Involvement of Forest land if any.	The proposed project does not involved/fall in any forest land.			The land lies in RIICO Industrial area.																														
7.	Water body exists within the project site as well as study area	<p><b>Project site:</b> No natural water bodies exist within the project site.</p> <p><b>Study Area:</b></p> <table border="1"> <thead> <tr> <th>S. No.</th> <th>Particulars</th> <th>Distance(Km)</th> <th>Direction</th> </tr> <tr> <th colspan="4">(From Project Boundary)</th> </tr> </thead> <tbody> <tr> <td colspan="4"><b>Water Bodies</b></td> </tr> <tr> <td>1.</td> <td>IndoriNala</td> <td>5.29</td> <td>E</td> </tr> <tr> <td>2.</td> <td>SareKhurd nala</td> <td>5.85</td> <td>SE</td> </tr> <tr> <td>3.</td> <td>Pond N/V Sare Khurd</td> <td>9.81</td> <td>SE</td> </tr> <tr> <td>4.</td> <td>SahibiRiver</td> <td>10.52</td> <td>W</td> </tr> </tbody> </table>			S. No.	Particulars	Distance(Km)	Direction	(From Project Boundary)				<b>Water Bodies</b>				1.	IndoriNala	5.29	E	2.	SareKhurd nala	5.85	SE	3.	Pond N/V Sare Khurd	9.81	SE	4.	SahibiRiver	10.52	W	--		
S. No.	Particulars	Distance(Km)	Direction																																
(From Project Boundary)																																			
<b>Water Bodies</b>																																			
1.	IndoriNala	5.29	E																																
2.	SareKhurd nala	5.85	SE																																
3.	Pond N/V Sare Khurd	9.81	SE																																
4.	SahibiRiver	10.52	W																																
8.	Existence of ESZ/ ESA/ national park/wildlife sanctuary/biosphere reserve/tiger reserve/ elephant reserve etc. if any within the study area	<p><b>Study area:</b> Nil</p> <p><b>List of Reserved and protected forests:</b> Are given in the following table.</p> <table border="1"> <thead> <tr> <th>S. No.</th> <th>Distance (Km)</th> <th>Direction</th> </tr> <tr> <th colspan="3">(From Project Boundary)</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>Gondhan Protected Forest</td> <td>1.97 S</td> </tr> <tr> <td>2</td> <td>Rangala Reserved Forest</td> <td>2.62 N</td> </tr> <tr> <td>3</td> <td>Banvan Protected Forest</td> <td>4.27 S</td> </tr> <tr> <td>4</td> <td>Chaupanki Protected Forest</td> <td>6.51 SSE</td> </tr> <tr> <td>5</td> <td>Sarekalan ProtectedForest</td> <td>8.01 SE</td> </tr> <tr> <td>6</td> <td>KhorikalanProtected Forest</td> <td>8.15 S</td> </tr> <tr> <td>7</td> <td>IndaurReservedForest</td> <td>8.77 SSE</td> </tr> <tr> <td>8</td> <td>GuwaldaProtectedForest</td> <td>9.85 S</td> </tr> </tbody> </table>			S. No.	Distance (Km)	Direction	(From Project Boundary)			1	Gondhan Protected Forest	1.97 S	2	Rangala Reserved Forest	2.62 N	3	Banvan Protected Forest	4.27 S	4	Chaupanki Protected Forest	6.51 SSE	5	Sarekalan ProtectedForest	8.01 SE	6	KhorikalanProtected Forest	8.15 S	7	IndaurReservedForest	8.77 SSE	8	GuwaldaProtectedForest	9.85 S	
S. No.	Distance (Km)	Direction																																	
(From Project Boundary)																																			
1	Gondhan Protected Forest	1.97 S																																	
2	Rangala Reserved Forest	2.62 N																																	
3	Banvan Protected Forest	4.27 S																																	
4	Chaupanki Protected Forest	6.51 SSE																																	
5	Sarekalan ProtectedForest	8.01 SE																																	
6	KhorikalanProtected Forest	8.15 S																																	
7	IndaurReservedForest	8.77 SSE																																	
8	GuwaldaProtectedForest	9.85 S																																	

40.7.6 The existing project was accorded, initially, Consent to Establish vide letter no. F(CPM)/Alwar(Tijara)/3927(1)/2017-2018/3121-3123 dated 07.07.2017. The proposal is

applied first time for obtaining Environmental Clearance (Secondary metallurgical processing industries with Production  $\leq$ 60,000 TPA) Consent to Operate (Latest) for the existing unit was accorded by Rajasthan State Pollution Control Board vide letter no F(HDF)/Alwar(Tijara)/7005(1)/2023-2024/445-447 dated 24.04.2023 The validity of CTO is up to 31.01.2028.

40.7.7 Implementation status of the existing CTE/CTO:

<b>Date of Issue of consent</b>	<b>Document No.</b>	<b>Particulars</b>	<b>Implementation Capacity</b>	<b>Valid upto</b>
17.06.2006	F12(2-1279) RPCB/G.I/1009	CTO for MS Twisted Bar, Angle & Channel and MS Ingots	60,000MTPA And 25,200MTPA	20.02.2006 TO 19.02.2009
10.06.2009	F(Tech)/Alwar (Tizara)/16(1)/ 2008- 2009/1207-1209	CTE for Coal/gas Fired Reheating Furnace	--	24.04.2009 To 31.03.2012
8.12.2009	F(Tech)/Alwar (Tizara)/16(1)/ 2008-2009/4163-4165	CTO for Coal Gasification Unit for Heating Furnace (1No.)	--	18.09.2009 To 31.01.2012
18.01.2009	F(Tech)/Alwar (Tizara)/16(1)/ 2008-2009/1856-1857	CTO for Renewal of MS Twisted Bar, Angle & Channel and MS Ingots	60,000MTPA And 25,200MTPA	20.02.2009 To 31.01.2012
29.09.2012	F(Tech)/Alwar (Tizara)/16(1)/ 2008-2009/5911-5913	CTO for Renewal of MS Twisted Bar, Angle & Channel and MS Ingots	60,000MTPA and 25,200MTPA	01.02.2012 To 31.01.2015
18.02.2016	F(Tech)/Alwar (Tizara)/16(1)/ 2008-2009/8129-8132	CTO for Renewal of MS Twisted Bar, Angle & Channel and MS Ingots	60,000MTPA (180TPD) and 25,200MTPA (84TPD)	01.02.2015 To 31.01.2018
18.02.2016	F(Tech)/Alwar (Tizara)/16(1)/ 2008-2009/8126-8128	CTE for DG Set (1No.)	250KVA	22.05.2015 To 30.04.2018
07.07.2017	F(CPM)/Alwar (Tijara)/3927(1)/ 2017-2018/3121-3123	CTE for Expansion of 250TPD MS Twisted Bar, Angle & Channel	from 60,000TPA (180TPD to 1,35,000 TPA (430TPD))	05.11.2016 to 31.10.2021
29.05.2018	F(CPM)/ Alwar(Tijara)/3927(1)/ 2017-2018/1211- 1213	CTO for Extension of MS Twisted Bar, Angle & Channel and MS Ingots	180TPD to 430TPD And 80TPD	01.02.2018 To 31.01.2023
24.04.2023	F(HDF)/Alwar(Tijara)/ 7005(1)/2023-2024/ 445-447	CTO for Extension of MS Twisted Bar, Angle & Channel	430TPD	01.02.2023 to 31.01.2028

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

S. No.	Product	Existing Quantity (TPD)	Total Capacity (TPD)
1.	MS Ingots	80 TPD	80 TPD
2.	MS Twisted Bar, Angle & Channel	430 TPD	430 TPD
3.	Induction Furnace	8 TPH	8 TPH
4.	Re- Heating Furnace	22 Ton/Heat	22 Ton/Heat

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

S. No	Raw Material	Existing Quantity	Total Quantity	Source	Mode of transport
1.	MS Billets	455.940MT/Day	455.940MT/Day	Local	Transported by Trucks
2.	Sponge iron/meal heavy/MS scrap etc.	84.338 MT/Day	84.338 MT/Day	Local	Transported by Trucks
3.	LSHS	10-15 KL/day (4474.500 TPA)	10-15 KL/day (4474.500 TPA)	Reliance Industries Limited	Transported by Tankers

40.7.10 Total one-time water demand is 116 KLD. Out of which 22 KLD is supplied from Ground Water (22.0 KLD is drawn from ground water with permission from CGWA) and 18.0 KLD is drawn from RIICO water Supply with permission from RIICO. Ground Water.NOC Renewal has been obtained from CGWA vide letter no.-CGWA/NOC/IND/REN/1/2023/7908 dated 24.05.2023 valid up to 07.01.2025 to tune of 22 KLD. Fresh water 18 KLD is being obtained from RIICO water supply.76 m<sup>3</sup>/day water shall be recycled.

40.7.11 Existing power requirement of 3200 kVA (7062KW Sanctioned capacity) is obtained from JVVNL, Alwar from nearest GSS Bhiwadi-33KV, JVVNL Alwar from the project site.

40.7.12 Baseline Environmental Studies

PERIOD	March-May-2022
AAQ parameters at 9 locations	<ul style="list-style-type: none"> <li>• PM<sub>10</sub>- 74.1 to 190.6µg/m<sup>3</sup></li> <li>• PM<sub>2.5</sub>- 45.0 to 119.8 µg/m<sup>3</sup></li> <li>• SO<sub>2</sub>-8.1 to 35.1 µg/m<sup>3</sup></li> <li>• NO<sub>2</sub>-14.1 to 69.4 µg/m<sup>3</sup></li> <li>• CO-802 to 2062 µg/m<sup>3</sup></li> </ul>
Incremental level	<ul style="list-style-type: none"> <li>• PM-0.05455 to 1.22774 µg/m<sup>3</sup> (at 2.66 Km in NE Direction)</li> <li>• SO<sub>2</sub>-0. 4 to 0 µg/m<sup>3</sup> (at 2.66Km in NE Direction)</li> <li>• NO<sub>x</sub>-0.09417 to 2.11 µg/m<sup>3</sup> (at 2.66Km in NE Direction)</li> </ul>

	<ul style="list-style-type: none"> <li>CO-0.05 to 1.50 µg/m<sup>3</sup> (Level at project site)</li> </ul>																				
Ground Water Quality at 11 locations	<ul style="list-style-type: none"> <li>pH: 6.84-7.75;</li> <li>Total Hardness: 136 to 716mg/l,</li> <li>Chlorides: 33.99 to 443.86 mg/l,</li> <li>Fluoride: 0.11 to 0.72 mg/l.</li> <li>Heavy metals &lt;0.001mg/l.</li> </ul>																				
Surface Water Quality at 1 locations	<ul style="list-style-type: none"> <li>Surface water was found in the study area</li> <li>pH: 7.78;</li> <li>BOD-16.8mg/l;</li> <li>COD-135.2mg/l;</li> <li>TDS-1068mg/l,</li> <li>Total hardness-160 mg/l</li> </ul>																				
Noise Levels at 11 locations	<ul style="list-style-type: none"> <li>50.0 to 67.9 dBA for day time and</li> <li>42.3 to 57.8 dBA for night time.</li> </ul>																				
Traffic assessment study findings	<ul style="list-style-type: none"> <li>Traffic study has been conducted at SH-25 which is approximately 4.11Km, WSW from the plant site.</li> <li>Transportation of raw material, fuel &amp; finished product will be done 100% by road.</li> <li>Existing PCU is 808.25PCU/hr on SH-25 and existing level of service (LOS) is Good/Average/Fair (V/C=0.538).</li> </ul> <table border="1"> <thead> <tr> <th>Road</th> <th>(V) Volume in PCU/Hr</th> <th>C Capacity in PCU/Hr</th> <th>V/C*</th> <th>LOS</th> </tr> </thead> <tbody> <tr> <td>SH-25</td> <td>808.25</td> <td>1500</td> <td>0.538</td> <td>C</td> </tr> </tbody> </table> <ul style="list-style-type: none"> <li>PCU load after proposed project will be 808.25+ 19(Additional due to existing) PCU/hr and level of service (LOS) will be: Good/Average/Fair (V/C=0.5935)</li> </ul> <table border="1"> <thead> <tr> <th>Road</th> <th>(V) Volume in PCU/Hr</th> <th>C Capacity in PCU/Hr</th> <th>V/C*</th> <th>LOS</th> </tr> </thead> <tbody> <tr> <td>SH-25</td> <td>827.25</td> <td>1500</td> <td>0.55</td> <td>C</td> </tr> </tbody> </table>	Road	(V) Volume in PCU/Hr	C Capacity in PCU/Hr	V/C*	LOS	SH-25	808.25	1500	0.538	C	Road	(V) Volume in PCU/Hr	C Capacity in PCU/Hr	V/C*	LOS	SH-25	827.25	1500	0.55	C
Road	(V) Volume in PCU/Hr	C Capacity in PCU/Hr	V/C*	LOS																	
SH-25	808.25	1500	0.538	C																	
Road	(V) Volume in PCU/Hr	C Capacity in PCU/Hr	V/C*	LOS																	
SH-25	827.25	1500	0.55	C																	
Flora and fauna	No Schedule – I Species was found within the study area.																				

40.7.13 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	Existing	Total	
Sludge	STP Sludge	0.150	0.150	Used as manure for plantation
Municipal Solid	Biodegradable	6.868	6.868	Sent to Municipal

Waste (@0.125Kg/day)		TPA or 21.875 Kg/Day	TPA or 21.875 Kg/Day	site,Bhiwadi,Rajasthan
Slag	Solid waste	4.338TPD or 1362.13 TPA	4.338TPD or 1362.13 TPA	Sold to authorize vendor within the Local Market.
Miss roll	Solid waste	7.6TPD or 2386.4 TPA	7.6TPD or 2386.4 TPA	Sold to authorized vendor within the Local Market.
Plant Return Scrap	Solid waste	9.21TPD or 2891.9 TPA	9.21TPD or 2891.9 TPA	Sold to authorize vendor within the Local Market.

40.7.14 Public Consultation: The Public Hearing is exempted as per MOEF&CC Notification S.O. 3250(E), New Delhi, 20th July, 2022.

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

Activity under CER	Location	Total Capital Cost to be invested (in Lacs)	Action Plan with Budget in (Capital Cost-in Lakhs)			Recurring (In Lakh)
			I <sup>st</sup> Year	II <sup>nd</sup> Year	III <sup>rd</sup> Year	
Construction of 3.0 Nos. Rain water Harvesting structure	Naglia, Chilghathal, Mahesri, Milkpurgujar	16.0	8.0	4.0	4.0	0.5
RO with Water cooler	Naglia, Chilghathal, Mahesri, Milkpurgujar	2.0	0.5	1.0	0.5	0.5
Solar light on Street	Naglia, Chilghathal, Mahesri, Milkpurgujar	8.0	2.0	4.0	2.0	0.5
Plantation & Tree Guard nearby villages	Naglia, Chilghathal, Mahesri, Milkpurgujar	9.6	3.2	3.2	3.2	1.0
Medical checkup camps	Naglia, Chilghathal, Mahesri, Milkpurgujar	2.0	0.5	0.5	1.0	0.5
Awareness program regarding	Naglia, Chilghathal, Mahesri,	3.0	0.5	1.0	1.5	0.5

organic manure use for agriculture, hygiene, sanitation	Milkpurgujar					
Distribution of computers, Furniture etc in Govt. Schools.	Naglia, Chilghathal, Mahesri, Milkpurgujar	<b>6.0</b>	<b>1.5</b>	<b>2.0</b>	<b>2.5</b>	<b>1.0</b>
Woman skill development Programme.	Naglia, Chilghathal, Mahesri, Milkpurgujar	<b>3.4</b>	<b>1.0</b>	<b>1.2</b>	<b>1.2</b>	<b>0.5</b>
<b>TOTAL-50Lacs</b>			<b>17.2</b>	<b>16.9</b>	<b>15.9</b>	<b>5</b>

40.7.15 The capital cost of the existing project is Rs 3307.15 Lacs and the capital cost for environmental protection measures is proposed as Rs. 198 lacs. The annual recurring cost towards the environmental protection measures is proposed as Rs. 27.9 Lacs. The employment generation from the proposed project is 175. The details of cost for environmental protection measures is as follows:

S. No.	Description of Item	Existing Capital Cost (In Lacs)	Recurring Cost (In Lacs)	Proposed Cost (In Lacs)	Proposed Recurring Cost (In Lacs)	Total Existing +proposed Capital Cost	Total Existing +proposed Recurring Cost (In Lacs)	Remarks
1	Air Pollution Control/ Noise	20.0	1.0	100	15.0	120	16.0	Proposed wet Scrubber for APCM, plantation inside the plant premises
2	Water Pollution Control	10.0	0.50	5.0	0.30	15.0	0.80	Modular STP proposed
3	Plantation Development	5.0	1.0	5.0	5.0	10.0	6.0	-
4.	RWH (Flow meter etc.) (Maintenance )	3.0	0.10	-	-	3.0	0.10	-
5.	CER Activity	50	5.0	-	-	50.0	5	-
<b>Total</b>		<b>88.0</b>	<b>7.60</b>	<b>110</b>	<b>20.3</b>	<b>198.0</b>	<b>27.9</b>	<b>-</b>

40.7.16 Existing green belt has been developed in 0.0846 Ha (Existing) area which is about 6.26% of the total project area with total sapling of 240 plants and 0.4552 Ha (780 Plants) developed within the RIICO Park. Thus total of 0.5398 Ha area (40% of total project area) will be developed as plantation. A 1m wide one row plantation, is being developed as plantation at plant boundary and green cover as per CPCB/MoEF&CC, New Delhi guidelines. Local and native species will be planted with a density of 2500 trees per hectare. Total no. of 1020 saplings is already planted and nurtured in 0.5398 hectares.

**Certified Compliance Report from SPCB**

40.7.17 The verification cum compliance report of CTO is received from Regional Office of RSPCB, Bhiwadi vide letter no. . RPCB/RO/BWD-2153/21 dated 06.04.2023. As per observations of RO, the conditions have been complied with.

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

40.7.19 The project falls under CPA. The Mitigation Action Plans submitted by the project proponent are as follows:

**I. Action Plan as per Ministry’s OM dated 28th January 2021**

Environmental Attributes	Mitigation Measure
Air	<ul style="list-style-type: none"> <li>❖ The coal usage is already discontinued and industry is already switch over to LSHS as per issued guideline.</li> <li>❖ Stack monitoring is being carried out and quarterly submission is being done to RSPCB</li> <li>❖ CEMS will be installed within 3 month &amp; connected to SPCB &amp; CPCB Server.</li> <li>❖ All the material transfer point will be covered and storage on cooling beds.</li> <li>❖ Best available technology is being used for Induction Furnace</li> <li>❖ 40% plantation is being/will be done inside and outside the premises. Plantation outside the project premises such as avenue plantation, plantation in vacant areas, social forestry etc.</li> <li>❖ Strength internal roads such as widening, pavement etc.</li> </ul>
Water	<ul style="list-style-type: none"> <li>❖ Use of treated water from CETP to reduce the stress on ground water. The AshianaIspat Ltd. has applied for permission of CETP water From BhiwadiJalPradhushanNivaran Association on dated 10.03.2023 for the water of 30KLD.</li> <li>❖ Continuous monitoring of effluent quality will be done.</li> <li>❖ The rain water collected from the Roof Top, plant premises is enrooted to 1No. of Rain water harvesting pit with the volume of 18m<sup>3</sup> having pit size of 4.0 m(Width) x 4.5m (Depth) &amp;1.0m (L) to connected to Bore well of 6’’ radius with 130 m depth).</li> </ul>

<b>Environmental Attributes</b>	<b>Mitigation Measure</b>
	<ul style="list-style-type: none"> <li>❖ No waste water is being/ will be discharged outside the plant premises.</li> <li>❖ Domestic waste water is being treated in STP of 10KLD.</li> </ul>
<b>Land</b>	<ul style="list-style-type: none"> <li>❖ Strengthen the plantation is being/will be done to at plant premises.</li> <li>❖ Plantation developed at plant premises to reduce the carbon emission and contain the emission at plant site.</li> </ul>
<b>Other Condition (additional)</b>	<ul style="list-style-type: none"> <li>❖ Monitoring of compliance of EC conditions will be submitted with third party audit every year</li> <li>❖ 1.5 % of the project cost for CER for CPA areas.</li> </ul>

## **II. Action Plan and compliance with regards to CEPI Guidelines:**

<b>S. No.</b>	<b>Objective</b>	<b>Environmental Benefits</b>	<b>Suggested Action</b>	<b>Remark</b>	<b>Action Plan</b>
1.	Separation of industrial effluent, domestic effluent and storm water	The provision will have low-cost treatment and segregation will add to better recovery of treated w/w.	Separate ETP/STP and RWH network is done at site	ETP based on physicochemical treatment (Settling Tank/ Neutralization Tank) capacity of 35 KLD is in function and STP of 10KLD is already in function. The RWH is as per norm of CGWA is installed.	The cost incurred on the Settling Tank/ Neutralization Tank / RWH is 13Lacs. Modular STP is already installed 10Lacs. Settling Tank/ Neutralization Tank / RWH is already executed.
2.	Treated effluent from CETP in Bhiwadi to be used by Industries.	Main environmental benefit is the reduction in groundwater extraction.	Use of treated water from CETP to reduce the stress on ground water. The Ashiana Ispat Ltd. has applied for permission of CETP water From Bhiwadi Jal Pradhushan Nivaran Association on dated 10.03.2023 for the water of 30KLD.	Thus, the reduction in fresh water consumption will be implemented.	The expenditure on the same will be implemented.
3.	Regulation/	Prevent over-	About 75% of	More provision	As soon as the

S. No.	Objective	Environmental Benefits	Suggested Action	Remark	Action Plan
	restriction on groundwater abstraction by the industries Bhiwadi.	exploitation of groundwater resources. Main Environmental benefit is to encourage water conservation, water reuse/ recycling.	treated CETP water will be used to cut down the ground water.	will be made to use treated w/w from CETP. About 75% of treated w/w from CETP will be used gradually.	consistent quality of CETP treated w/w will be obtained we shall use about 75% of the demand and reduced the ground water abstraction.
4	Monitoring of groundwater quality in Bhiwadi	The ground water quality will be monitored regularly as per CGWA.	The nearby wells within 5.0km will be monitored	As part of compliance of CGWA NOC, the same will be followed.	Approved NABL/MOEF&CC approved lab is/will be engaged to conduct the water analysis every quarter.
5	Groundwater recharge in Bhiwadi	Main environmental benefit is to prevent depletion of groundwater resources.	Provision of 5245.98 m <sup>3</sup> / annum of rain water is being/will be collected and recharged.	About 43.72% of the fresh water will be recharged.	The rain water collected from the Roof Top, plant premises is enrouted to 1No. of Rain water harvesting pit with the volume of 18m <sup>3</sup> having pit size of 4.0 m(Width) x 4.5m (Depth) & 1.0m (L) to connected to Bore well of 6'' radius with 130 m depth).
6	Establishment of zero liquid discharge (ZLD)	Main environmental benefit is the prevention of land and groundwater pollution.	The unit has ZLD already maintained.	ETP based on physicochemical treatment The Settling Tank/ Neutralization Tank of is being 75% of treated/w recycled back for quenching and cooling. The STP will be installed and will have 75 % of treated w/w	Already implemented with ETP based on physicochemical treatment Settling Tank/ Neutralization Tank and STP is already installed to treat domestic sewage.

S. No.	Objective	Environmental Benefits	Suggested Action	Remark	Action Plan
				used for plantation purposes. Thus, the status of ZLD will be maintained.	
7	Controlling emissions from industries using furnaces	Main environmental benefits shall be the improvement of ambient air quality	Fuel used has been changed to LSHS. Also, the emissions are routed through Wet Scrubber is proposed to be installed for controlling particulate emissions. The emissions from stack attached is ranging up to 59 mg/Nm <sup>3</sup>	The emission standards laid down by RSPCB are adhered from time to time.	Already implemented. The emissions from stack attached is ranging up to 59 mg/Nm <sup>3</sup>
8	Reduction emissions from induction furnaces	Main environmental benefits will be in occupational safety and the improvement of ambient air quality	Wet scrubber is proposed to be installed and it reduces the Particulate matter emission due to fuel change (LSHS is used) (59mg/Nm <sup>3</sup> )	The control equipment's are being monitored from time to time.	CEMS will be installed within 3 months.
9	Reduction of fugitive emissions from industrial premises	Main environmental benefits will be the improvement of ambient air quality.	The interval roads are already paved and will be spread on bare land within industrial premises. Planting of vegetation on bare land within industrial premises.	Provisions of paved area in the movement and transportation will be done	Already Implemented
10	Controlling emissions of road dust in	Volunteered measures will be adopted by	Covered shed storage of industrial waste	Action of campaign of clean and	Action with corrective measures will be

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

**Written representations:**

- 40.7.20 During the meeting, based on the deliberations made by the EAC, the project proponent vide letter dated 20.07.2023 through email dated 20.07.2023 submitted the following information:
- Affidavit dated 07.07.2023 by Project Proponent regarding reduction in air quality emissions and plantation.
  - CEPI action plan as updated at para 40.7.19 above.

**Deliberations by the Committee**

- 40.7.21 The Committee noted the following:
1. The instant proposal is for regularization of existing Rolling Mill having MS Ingots of 80TPD, MS Twisted Bar, Angle & Channel of 430 TPD and Re- Heating Furnace – 22 TPH, Induction Furnace-8TPH
  2. The proposal is for regularization of existing unit in compliance of MoEF&CC letter no. F. No.-IA-J-11013/24/2022-IA-II(I) dated 13.04.2022 to Rajasthan State Pollution Control Board and order of Hon'ble National Green Tribunal in O.A. no. 55/2019(WZ) in matter of Gajubha Jesar Jadeja vs Union of India &Ors. dated 12.02.2020 & Letter no. F. No. - IA-J-11013/24/2022-IA-II(I) dated 13.04.2022.
  3. The Commission for Air Quality Management in National Capital Region and Adjoining Areas is opinion that air pollution is generated in the reheating furnaces of the Steel rolling mills and therefore made compulsory the use of clean fuel to control air pollution

and improve air quality. Commission has issued various direction in GNCTD & NCR to switch over on PNG/LSHS (Low Sulphur Heavy Stock) by 30.09.2022.

4. The Ministry has issued a notification on 20<sup>th</sup> July 2022 and directed that all the standalone re-rolling units or cold rolling units, which are in existence and in operation as on the date of this notification, with valid CTE and CTO from the concerned SPCB/PCC, shall apply online for grant of Terms of Reference (ToR) followed by Environment Clearance and the said units shall be granted Standard Terms of Reference and shall be exempted from the requirement of public consultation, Provided that the application for the grant of ToR shall be made within a period of one year i.e. up to 19<sup>th</sup> July 2023.
5. 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.
6. 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.
7. 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.
8. The existing project was initially accorded Consent to Establish vide letter no. F(CPM)/Alwar(Tijara)/3927(1)/2017-2018/3121-3123 dated 07.07.2017. The proposal is applied first time for obtaining Environmental Clearance. Latest Consent to Operate (Latest) for the existing unit was accorded by Rajasthan State Pollution Control Board vide letter F(HDF)/Alwar(Tijara)/7005(1)/2023-2024/445-447 dated 24.04.2023 The validity of CTO is up to 31.01.2028.
9. The EAC noted that the instant project comes under Critically Polluted Area (CPA). PP has committed the proposed mitigation measures and also submitted detailed action plan as detailed in para 40.7.19 above. The EAC is of the opinion that the mitigation plans shall be strictly implemented.
10. The total project area is 13,495 Sq.m. (1.34Ha) which is under the possession of the project proponent. Land is already Industrial in nature due to existing operations of the plant.

11. Total one-time Water requirement is 116 m<sup>3</sup>/day, out of which 18 m<sup>3</sup>/day of fresh water is obtained from RIICO water supply & 22 m<sup>3</sup>/day is drawn from ground water with permission from CGWA. NOC Renewal has been obtained from CGWA dated 24.05.2023 with a validity upto 07.01.2025 for a quantity of 22 m<sup>3</sup>/day.
12. The Committee has deliberated on the baseline data and incremental GLC due to the proposed project and is of the opinion that PP shall strictly implement the mitigation measures as per the submitted action plans to minimise the pollution.
13. The PP has submitted that existing green belt has been developed in 0.0846 Ha area which is about 6.26% of the total project area of 1.34Ha with total sapling of 240 plants and 0.4552 Ha (780 Plants) developed within the RIICO Park. Thus total of 0.5398 Ha area (40% of total project area) will be developed as plantation. Total no. of 1020 saplings is already planted and nurtured in 0.5398 hectares. The EAC deliberated on the greenbelt action plan along with the budget earmarked and is of the opinion that as committed, the greenbelt shall be developed and maintained in atleast 40% of project area.
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 action plan submitted by the proponent to address the issues as per socio economic survey for development of nearby area and found it satisfactory.
16. The EAC deliberated on certified compliance report on existing CTO obtained from SPCB along with ATR and found it satisfactory.
17. The EAC also deliberated on the submitted written representation 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.
20. The EAC also reviewed the EC conditions (specific and general) pertaining to Industry-I projects and observed that some of the specific conditions stipulated so far in the

previously recommended EC projects are common and applicable to most of the projects in general. In view of the same, the General Conditions (in case of EC projects) have been revised through reallocation of these common conditions from specific to General Conditions (in case of EC projects). Accordingly, the instant project is also being stipulated with the modified General conditions.

**Recommendations of the Committee:**

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

**A. Specific Condition:**

- i. **This Environmental clearance is granted subject to final outcome of Hon'ble Supreme Court of India, Hon'ble High Court, Hon'ble NGT and any other Court of Law, if any, as may be applicable to this project.**
- ii. **The PP shall strictly comply with the Direction issued by the Commission for Air Quality Management in National Region and Adjoining Areas.**
- iii. **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 as per the submitted plan.**
- iv. **The industry shall use PNG gas as per direction no. 64 of the Commission for Air Quality Management in National Region and Adjoining Areas by 30.09.2022.**
- v. 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.
- vi. 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.
- vii. The industry shall use CETP treated waste water for industrial processes to reduce the stress on Ground water resource as and when made available.
- viii. The water requirement of 116 m<sup>3</sup>/day shall be obtained from RIICO water supply (18 m<sup>3</sup>/day), ground water (22 m<sup>3</sup>/day) after obtaining necessary permission from the Competent Authority. 76m<sup>3</sup>/day water shall be recycled. PP shall explore the possibility of shifting from ground water to alternative source of water to minimise the dependency on ground water.

- ix. Three tier Green Belt shall be developed in at least 40% of the project area all along the the project site (as per the submitted plan) of adequate width and tree density shall not be less than 2500 per ha. Survival rate of green belt developed shall be monitored on periodic basis to ensure that damaged plants are replaced with new plants in the subsequent years. PP shall also develop greenbelt in the form of shelter belt comprising of total of 6 rows of 2x2 m plantation with tall trees & broad leaves with thick canopy along with windshield inside the plant premises to act as green barrier for air pollution & noise levels towards nearby habitation. Compliance status in this regard, shall be submitted to concerned Regional Office of the MoEF&CC.
- x. All the commitments made towards socio-economic development of the nearby villages shall be satisfactorily implemented. The action plan based on the social impact assessment study of the project as per the EMP in accordance to the Ministry's OM dated 30.09.2020 amounting to Rs. 0.5 Crores shall be strictly implemented and progress shall be submitted to the Regional Office of MoEF&CC.
- xi. The PP shall adopt undertake village adoption programme, prepare and implement the action plan to develop them into model villages.
- xii. The PP shall install digital display Board for environmental monitoring data in front of the factory's main gate within a month.
- xiii. The PP shall adopt relevant measures to improve the housekeeping in the plant premises.

## **B. General Conditions**

### **I. Statutory compliance:**

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

### **II. Air quality monitoring and preservation**

- i. The project proponent shall install 24x7 continuous emission monitoring system at process stacks to monitor stack emission as well as Continuous Ambient Air Quality Station (CAAQMS) for monitoring AAQ parameters with respect to standards prescribed in Environment (Protection) Rules 1986 as amended from time to time. The CEMS and CAAQMS shall be connected to SPCB and CPCB online servers and calibrate these systems from time to time according to equipment supplier specification through labs recognized under Environment (Protection) Act, 1986 or NABL accredited laboratories.
- ii. The project proponent shall carryout Continuous Ambient Air Quality monitoring for common/criterion parameters relevant to the main pollutants released (e.g. PM<sub>10</sub> and PM<sub>2.5</sub> in reference to PM emission, and SO<sub>2</sub> and NO<sub>x</sub> in reference to SO<sub>2</sub> and NO<sub>x</sub> emissions) within and outside the plant area (at least at four locations one within and three outside the plant area at an angle of 120° each), covering upwind and downwind directions.

- iii. The project proponent shall monitor fugitive emissions in the plant premises at least once in every quarter through laboratories recognized under Environment (Protection) Act, 1986 or NABL accredited laboratories.
- iv. Sampling facility at process stacks shall be provided as per CPCB guidelines for manual monitoring of emissions.
- v. Appropriate Air Pollution Control (APC) system shall be provided for all the dust generating points including fugitive dust from all vulnerable sources, so as to comply prescribed stack emission and fugitive emission standards.
- vi. The project proponent shall provide leakage detection and mechanized bag cleaning facilities for better maintenance of bags.
- vii. Sufficient number of mobile or stationary vacuum cleaners shall be provided to clean plant roads, shop floors, roofs, regularly.
- viii. Ensure covered transportation and conveying of raw material to prevent spillage and dust generation. The project proponent use leak proof trucks/dumpers carrying coal and other raw materials and cover them with tarpaulin.
- ix. Recycle and reuse iron ore fines, coal and coke fines, lime fines and such other fines collected in the pollution control devices and vacuum cleaning devices in the process after briquetting/ agglomeration.
- x. The project proponent shall provide primary and secondary fume extraction system at all heat treatment furnaces.
- xi. Wind shelter fence and chemical spraying shall be provided on the raw material stock piles.
- xii. Design the ventilation system for adequate air changes as per prevailing norms for all tunnels, motor houses, Oil Cellars.
- xiii. Pollution control system in the plant shall be provided as per the CREP Guidelines of CPCB.
- xiv. The project proponent shall adopt the Clean Air practices like mechanical collectors, wet scrubbers, fabric filters (bag houses), electrostatic precipitators, combustion systems (thermal oxidizers), condensers, absorbers, adsorbers, and biological degradation. Controlling emissions related to transportation shall include emission controls on vehicles as well as use of cleaner fuels. Sufficient numbers of additional truck mounted Fog/Mist water cannons shall be procured and operated regularly inside the project premises and also in the surrounding villages to arrest suspended dust in the atmosphere.
- xv. Bag filters shall be cleaned regularly and efficiency of bag filter system shall be monitored at regular intervals.
- xvi. Water Sprinklers/Water mist system shall be installed near raw material yards, operational units and other strategic locations to control fugitive emissions from the plant.
- xvii. The particulate matter emissions from the process stacks shall be less than 30 mg/Nm<sup>3</sup> and measures shall be undertaken as per the submitted action plan. Efficient Air monitoring equipment shall be installed.
- xviii. Following additional arrangements to control fugitive dust shall be provided:

- a. Fog / Mist Sprinklers at all on bulk raw material storage area (at the transfer points) like Iron Ore, Coal and for Fly Ash and similar solid waste storage areas.
  - b. Proper covered vehicle shall be used while transport of materials.
  - c. Wheel washing mechanism shall be provided in entry and exit gates with complete recirculation system.
- xix. Online stack monitoring system for IF and RHF shall be installed and monitoring report shall be submitted to the concerned Regional Office of the MoEF&CC along with the six monthly compliance report.
- xx. Low NOx Burners will be installed at Reheating Furnace for control of Gaseous emissions generated while using PNG.

### **III. Water quality monitoring and preservation**

- i. The project proponent shall install 24x7 continuous effluent monitoring system with respect to standards prescribed in Environment (Protection) Rules 1986 as amended from time to time and connected to SPCB and CPCB online servers and calibrate these system from time to time according to equipment supplier specification through labs recognized under Environment (Protection) Act, 1986 or NABL accredited laboratories.
- ii. The project proponent shall monitor regularly ground water quality at least twice a year (pre- and post-monsoon) at sufficient numbers of piezometers/sampling wells in the plant and adjacent areas through labs recognized under Environment (Protection) Act, 1986 and NABL accredited laboratories.
- iii. Garland drains and collection pits shall be provided for each stock pile to arrest the run-off in the event of heavy rains and to check the water pollution due to surface run off.
- iv. Water meters shall be provided at the inlet to all unit processes in the plants.
- v. The project proponent shall make efforts to minimise water consumption in the plant complex by segregation of used water, practicing cascade use and by recycling treated water.
- vi. The proposed project shall be designed as "Zero Liquid Discharge" Plant. ETP shall be installed and there shall be no discharge of effluent from the plant. Domestic effluent shall be treated in Sewage Treatment Plant. Suitable measures shall be adopted for sewage water handling to ensure no contamination of any kind of water body.
- vii. All stockyards shall have impervious flooring and shall be equipped with water spray system for dust suppression. Stock yards shall also have garland drains and catch pits to trap the run off material and shall be implemented as per the action plan submitted in EIA/EMP report.
- viii. Rain water harvesting shall be implemented to recharge/harvest water as per the action plan submitted in the EIA/EMP report.
- ix. The project proponent shall provide the ETP for effluents of rolling mills to meet the standards prescribed in G.S.R 277 (E) 31st March 2012 (applicable to IF/EAF) as amended from time to time.

### **IV. Noise monitoring and prevention**

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

**V. Energy Conservation measures**

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

**VI. Waste management**

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

## **VII. Green Belt**

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

## **VIII. Public hearing and Human health issues**

- i. Emergency preparedness plan based on the Hazard identification and Risk Assessment (HIRA) and Disaster Management Plan shall be implemented.
- ii. The project proponent shall carry out heat stress analysis for the workmen who work in high temperature work zone and provide Personal Protection Equipment (PPE) as per the norms.
- iii. Provision shall be made for the housing of construction labour within the site with all necessary infrastructure and facilities such as fuel for cooking, mobile toilets, mobile STP. Safe drinking water, medical health care, creche etc. The housing may be in the form of temporary structures to be removed after the completion of the project.
- iv. Occupational health surveillance of the workers shall be done on a regular basis and records maintained.

## **IX. Environment Management**

- i. The project proponent shall comply with the provisions contained in this Ministry's OM vide F.No. 22-65/2017-IA.III dated 30/09/2020. As part of Corporate Environment Responsibility (CER) activity, company shall adopt nearby villages based on the socio-economic survey and undertake community developmental activities in consultation with the village Panchayat and the District Administration as committed.
- ii. The company shall have a well laid down environmental policy duly approve by the Board of Directors. The environmental policy should prescribe for standard operating procedures to have proper checks and balances and to bring into focus any infringements/deviation/violation of the environmental / forest / wildlife norms / conditions. The company shall have defined system of reporting infringements / deviation / violation of the environmental / forest / wildlife norms / conditions and / or shareholders / stake holders. The copy of the board resolution in this regard shall be submitted to the MoEF&CC as a part of six-monthly report.
- iii. A separate Environmental Cell both at the project and company head quarter level, with qualified personnel shall be set up under the control of senior Executive, who will directly to the head of the organization.

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

## **X. Miscellaneous**

- i. The project proponent shall make public the environmental clearance granted for their project along with the environmental conditions and safeguards at their cost by prominently advertising it at least in two local newspapers of the District or State, of which one shall be in the vernacular language within seven days and in addition this shall also be displayed in the project proponent's website permanently.
- ii. The copies of the environmental clearance shall be submitted by the project proponents to the Heads of local bodies, Panchayats and Municipal Bodies in addition to the relevant offices of the Government who in turn has to display the same for 30 days from the date of receipt.
- iii. The project proponent shall upload the status of compliance of the stipulated environment clearance conditions, including results of monitored data on their website and update the same on half-yearly basis.
- iv. The project proponent shall monitor the criteria pollutants level namely; PM10, SO2, NOx (ambient levels as well as stack emissions) or critical sectoral parameters, indicated for the projects and display the same at a convenient location for disclosure to the public and put on the website of the company.
- v. Action plan for developing connecting and internal road in terms of MSA as per IRC guidelines shall be implemented
- vi. The project proponent shall submit six-monthly reports on the status of the compliance of the stipulated environmental conditions on the website of the ministry of Environment, Forest and Climate Change at environment clearance portal.
- vii. The project proponent shall submit the environmental statement for each financial year in Form-V to the concerned State Pollution Control Board as prescribed under the Environment (Protection) Rules, 1986, as amended subsequently and put on the website of the company.
- viii. The project proponent shall inform the Regional Office as well as the Ministry, the date of financial closure and final approval of the project by the concerned authorities, commencing the land development work and start of production operation by the project.
- ix. The project proponent shall abide by all the commitments and recommendations made in the EIA/EMP report, commitment made during Public Hearing and also that during their presentation to the Expert Appraisal Committee.
- x. The recommendations of the approved Site-Specific Wildlife Management Plan (in case of involvement of Schedule-I species) shall be implemented in consultation with the State Forest Department. The implementation report shall be furnished along with the six-monthly compliance report to the concerned Regional Office of the MoEF&CC.
- xi. The PP shall put all the environment related expenditure, expenditure related to Action Plan on the PH issues, and other commitments made in the EIA/EMP Report etc. in the company web site for the information to public/public domain. The PP shall also put

the information on the left over funds allocated to EMP and PH as committed in the earlier ECs and shall be carried out and spent in next three years, in the company web site for the information to public/public domain.

- xii. No further expansion or modifications in the plant shall be carried out without prior approval of the Ministry of Environment, Forests and Climate Change (MoEF&CC).
- xiii. Concealing factual data or submission of false/fabricated data may result in revocation of this environmental clearance and attract action under the provisions of Environment (Protection) Act, 1986.
- xiv. The Ministry may revoke or suspend the clearance, if implementation of any of the above conditions is not satisfactory.
- xv. The Ministry reserves the right to stipulate additional conditions if found necessary. The Company in a time bound manner shall implement these conditions.
- xvi. The Regional Office of this Ministry shall monitor compliance of the stipulated conditions. The project authorities should extend full cooperation to the officer (s) of the Regional Office by furnishing the requisite data / information/monitoring reports.
- xvii. Any appeal against this EC shall lie with the National Green Tribunal, if preferred, within a period of 30 days as prescribed under Section 16 of the National Green Tribunal Act, 2010.

**\*\*\***

#### **Agenda No. 40.8**

#### **40.8 Expansion of Manufacturing capacity of Ferro Alloys from 8,000 TPA to 19,000 TPA by replacing old 1 x 6 MVA SAF by 1 x 9 MVA SAF and one New Unit of 1 x 9 MVA SAF for manufacturing 19,000 TPA Ferro Alloys. Total expansion will be from 8000TPA to 38000 TPA by M/s The Metallic Alloys, located at Plot No. 28 &29, Industrial Growth Centre Siltara Phase II, District: Raipur, State: Chhattisgarh- Consideration of Environmental Clearance**

**[Proposal No. IA/CG/IND1/425548/2023; File No. F. No. IA-J-11011/67/2020-IA-II(I)]**  
**[Consultant: Pollution and Ecology Control Services.; Valid upto 09.06.2023]**

- 40.8.1 M/s. Metallic Alloys has made an online application vide proposal no. IA/CG/IND1/425548/2023 dated 06.07.2023 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 schedule no. 3(a) Under Category “A” of the schedule of the EIA Notification, 2006 and attracts general condition due to Siltara Industrial Area comes under CPA and appraised at Central Level.
- 40.8.2 Name of the EIA consultant: M/s Pollution and Ecology Control Services [S.No. 75, List of ACOs with their Certificate / Extension Letter no NABET/EIA/2023/SA 0165; Valid up to 8<sup>th</sup> September 2023].

40.8.3 The detail of the ToR is furnished as below:

Date of application	Consideration	Details	Date of accord	Validity
14.03.2020	Stand ToR issued	Terms of Reference	31.03.2020	30.03.2024

40.8.4 The project of M/s. The Metallic Alloys located in Plot No. 28 & 29, Industrial Growth Centre Siltara Phase II, District: Raipur, Chhattisgarh is for expansion of Manufacturing of Ferro Alloys from 8,000 TPA to 19,000 TPA by replacing 1 x 6 MVA SAF by 1 x 9 MVA SAF and New Unit of 1 x 9 MVA SAF for manufacturing 19,000 TPA Ferro Alloys, Total expansion will be 8000 TPA to 38000 TPA Ferro Alloys (Ferro Manganese OR Silico Manganese OR Pig Iron OR Ferro Silicon)

40.8.5 Environmental site settings

S. No.	Particulars	Details	Remarks															
i.	Total land	1.01 ha [Govt. land] Allotted by CSIDC PP have purchased adjacent additional 0.48 ha. of land for plantation and other activity (not for manufacturing process).	Land use: Industrial															
ii.	Land acquisition details as per MoEF&CC O.M. dated 7/10/2014	All the land is in possession of the proponent for Industrial set up.  Additionally, PP has reported that they have purchased adjacent additional 0.48 ha. of land for plantation and other activity (not for manufacturing process). PP has developed greenbelt on 0.187 ha in existing land and will cover 0.384 ha on adjacent land in greenbelt. Thus, the total plantation will be 0.571 ha which is more than 40% of total land.																
iii.	Existence of habitation & involvement of R&R, if any.	<b>Project site:</b> None  <b>Study Area:</b> <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th>Habitation</th> <th>Distance</th> <th>Direction</th> </tr> </thead> <tbody> <tr> <td>Sankara</td> <td>1.0 Km</td> <td>(S)</td> </tr> </tbody> </table>	Habitation	Distance	Direction	Sankara	1.0 Km	(S)	No R&R involved.									
Habitation	Distance	Direction																
Sankara	1.0 Km	(S)																
iv.	Latitude and Longitude of <u>all corners</u> of the project site.	<table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th>Point</th> <th>Latitude</th> <th>Longitude</th> </tr> </thead> <tbody> <tr> <td>A.</td> <td>21°22'5.29"N</td> <td>81°39'23.18"E</td> </tr> <tr> <td>B.</td> <td>21°22'4.83"N</td> <td>81°39'25.83"E</td> </tr> <tr> <td>C.</td> <td>21°22'0.70"N</td> <td>81°39'24.92"E</td> </tr> <tr> <td>D.</td> <td>21°22'1.18"N</td> <td>81°39'21.85"E</td> </tr> </tbody> </table>	Point	Latitude	Longitude	A.	21°22'5.29"N	81°39'23.18"E	B.	21°22'4.83"N	81°39'25.83"E	C.	21°22'0.70"N	81°39'24.92"E	D.	21°22'1.18"N	81°39'21.85"E	
Point	Latitude	Longitude																
A.	21°22'5.29"N	81°39'23.18"E																
B.	21°22'4.83"N	81°39'25.83"E																
C.	21°22'0.70"N	81°39'24.92"E																
D.	21°22'1.18"N	81°39'21.85"E																
v.	Elevation of the project site	276 m above mean sea level																

vi.	Involvement of Forest land if any.	No Forest Land involved																
vii.	Water body (Rivers, Lakes, Pond, Nala, Natural Drainage, Canal etc.) exists within the project site as well as study area	<p><b>Project site:</b> None</p> <p><b>Study area</b></p> <table border="1"> <thead> <tr> <th>Water body</th> <th>Distance</th> <th>Direction</th> </tr> </thead> <tbody> <tr> <td>Chhokra Nala</td> <td>2.5 Km</td> <td>(W)</td> </tr> <tr> <td>Kharoon River</td> <td>4.0 Km</td> <td>(NW)</td> </tr> <tr> <td>Kulhan Nala</td> <td>7.0 Km</td> <td>(NE)</td> </tr> <tr> <td>DaldalSioni Talab:</td> <td>10 km</td> <td>(S)</td> </tr> </tbody> </table>	Water body	Distance	Direction	Chhokra Nala	2.5 Km	(W)	Kharoon River	4.0 Km	(NW)	Kulhan Nala	7.0 Km	(NE)	DaldalSioni Talab:	10 km	(S)	-
Water body	Distance	Direction																
Chhokra Nala	2.5 Km	(W)																
Kharoon River	4.0 Km	(NW)																
Kulhan Nala	7.0 Km	(NE)																
DaldalSioni Talab:	10 km	(S)																
viii.	Existence of ESZ/ESA/national park/wildlife sanctuary/biosphere reserve/tiger reserve/elephant reserve etc. if any within the study area	Nil																
ix.	CPA/SPA/ESA/ESZ, IF ANY	Siltara Industrial Area comes under CPA as per the NGT order dated 10 <sup>th</sup> July 2019 and lifting of abeyance of Ministry's OM is published on 5th July 2022. All conditions given in MOEF & CC letter No-Q-16017/38/2018-CPA dated 24 <sup>th</sup> October 2019 are being complied.																

40.8.6 The existing project was accorded Consent to Establish vide Ir.no. 1108/RO/TS/CECB/2006 dated 19.5.2006. The CTE was issued prior to EIA notification 2006. The renewal of Consent to Operate issued by Chhattisgarh Environment Conservation Board vide letter no. 4373/RO/TS/CECB/2020 dated 25/01/2020 valid upto 31.01.2025

S.N.	Unit	Consent Details & Date	Valid upto	Production Details
1.	Plot No. 29, Industrial Growth Centre Siltara Phase II, District: Raipur, State: Chhattisgarh	Consent to Establish vide Ir.no. 1108/RO/TS/CECB/2006 dated 19.5.2006	-	Low Carbon Ferro Alloys: 8000 MT/Y
2.	Plot No. 29, Industrial Growth Centre Siltara Phase II, District: Raipur, State: Chhattisgarh	1231/RO/TS/CECB/2011 dated 23.08.2011	Twelve months from first day of Commissioning	Low Carbon Ferro Alloys: 8000 MT/Y

S.N.	Unit	Consent Details & Date	Valid upto	Production Details
3.	Plot No. 29, Industrial Growth Centre Siltara Phase II, District: Raipur, State: Chhattisgarh	2764/RO/TS/CECB/2014 dated 14.03.2014	31.01.2017	Low Carbon Ferro Alloys: 8000 MT/Y
4.	Plot No. 29, Industrial Growth Centre Siltara Phase II, District: Raipur, State: Chhattisgarh	3902/RO/TS/CECB/2017 dated 04.02.2017	31.01.2020	Low Carbon Ferro Alloys: 8000 MT/Y
5.	Plot No. 29, Industrial Growth Centre Siltara Phase II, District: Raipur, State: Chhattisgarh	4373/RO/TS/CECB/2020 dated 25.01.2020	31.01.2025	Low Carbon Ferro Alloys: 8000 MT/Y

#### 40.8.7 Implementation status of the existing CTE

Sr. No.	Facilities	Units	Present Implementation status	Production as per CTO
1.	Submerged Arc Furnace	6 MVA	Implemented and in operation	8000 TPA

#### 40.8.8 The unit configuration and capacity of existing and proposed project is given as below

S. No.	Plant Equipment/ Facility	Existing facilities as per CTE dated 19.05.2006		Proposed Units		Final (Existing +Proposed)	
		Configuration	Capacity	Configuration	Capacity	Configuration	Capacity
1.	SAF	1 x 6 MVA	8000 TPA	2 x 9 MVA SAF	38000 TPA	2 x 9 MVA SAF	38000 TPA

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

**Table: Quantitative Details of Raw Materials Required for Ferro Manganese**

Sr. No.	Product	Raw Material Quantity (TPA)	Source	Mode of Transportation
1.	Manganese Ore	87400	Domestic Mines/Imported	By Road (Covered Trucks)
2.	Coke	30400	Domestic/Imported	By Road (Covered Trucks)
3.	Dolomite	9500	Local Market	By Road (Covered Trucks)
5.	Carbon Paste	2100	Local Market	By Road (Covered Trucks)

**OR**

**Table: Quantitative Details of Raw Materials Required for Silico Manganese**

Sr. No.	Product	Raw Material Quantity	Source	Mode of Transportation
1.	Manganese Ore	70500	Domestic Mines/Imported	By Road (Covered Trucks)
2.	Ferro Manganese Slag	6000	In house	-
3.	Pearl Coke	24000	Local Market	By Road (Covered Trucks)
4.	Dolomite	7500	Local Market	By Road (Covered Trucks)
5.	Quartz	6000	Local Market	By Road (Covered Trucks)
6.	Carbon Paste	2100	Local Market	By Road (Covered Trucks)

**OR**

**Table: Quantitative Details of Raw Materials Required for Pig Iron**

Sr. No.	Product	Raw Material Quantity (TPA)	Source	Mode of Transportation
1.	Mill Scale	3800	Local Market	By Road (Covered Trucks)
2.	Iron ore	38000	Local Market	By Road (Covered Trucks)
3.	Quartz	1140	Local Market	By Road (Covered Trucks)
4.	Dolomite/Lime stone	13300	Local Market	By Road (Covered Trucks)
5.	Pearl coke	28500	Local Market	By Road (Covered Trucks)
6.	Fluorospar	1520	Local Market	By Road (Covered Trucks)
7.	Electrode Paste	1520	Local Market	By Road (Covered Trucks)

**OR**

**Table: Quantitative Details of Raw Materials Required for Ferro Silicon**

Sr. No.	Product	Raw Material Quantity (TPA)	Source	Mode of Transportation
1.	Quartz	26825	Local Market	By Road (Covered Trucks)
2.	Coke	17400	Local Market	By Road (Covered Trucks)
3.	Mill Scale	7250	Local Market	By Road (Covered Trucks)
4.	Carbon paste	2610	Local Market	By Road (Covered Trucks)

40.8.10 Total water requirement for the proposed project will be about 12 KLD. Water requirement for the project will be sourced from CSIDC.

40.8.11 The power required for the proposed project will be 18 MW which will be sourced from State Electricity Board.

40.8.12 Baseline Environmental Studies

Period	October 2020 to December 2020
AAQ parameters	<ul style="list-style-type: none"> <li>• PM<sub>10</sub> : 48 to 88 µg/m<sup>3</sup></li> </ul>

Period	October 2020 to December 2020										
at 8 Locations (min and max)	<ul style="list-style-type: none"> <li>PM<sub>2.5</sub> : 18 to 48 µg/m<sup>3</sup></li> <li>SO<sub>2</sub>: 6 to 26 µg/m<sup>3</sup></li> <li>NO<sub>x</sub>: 20 to 38 µg/m<sup>3</sup></li> </ul>										
Incremental GLC level	<ul style="list-style-type: none"> <li>PM<sub>2.5</sub> = 0.483 µg/m<sup>3</sup> (0.6 km/ South West)</li> <li>PM<sub>10</sub> = 0.752 µg/m<sup>3</sup> (0.7 km/ South West)</li> </ul>										
Ground water quality at 8 locations	<ul style="list-style-type: none"> <li>pH: 7.17 to 7.57, Total Hardness: 168 to 502 mg/l, Chlorides: 28.9 to 289 mg/l, Fluoride: 0.1 to 0.94 mg/l.</li> </ul>										
Surface water quality at 8 locations	<ul style="list-style-type: none"> <li>pH: 6.55 to 7.54, DO: 2.8 to 5.2 mg/l, BOD: 3 to 36.8 mg/l &amp; COD: 12 to 364 mg/l.</li> </ul>										
Noise levels Leq (Day and Night)	<ul style="list-style-type: none"> <li>31 to 72 dBA for day time and</li> <li>32 to 58 dBA for night time.</li> </ul>										
Traffic assessment study findings	<ul style="list-style-type: none"> <li>Traffic study has been conducted at NH 200 which is approximately 1.0 km from the plant site.</li> <li>Transportation of raw material, fuel &amp; finished product will be done by road.</li> <li>Existing PCU is 687.5 PCU/hr on NH 200 and existing level of service (LOS) is:</li> </ul> <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th>Road</th> <th>V (Volume in PCU/hr.)</th> <th>C (Capacity in PCU/hr.)</th> <th>Proposed V/C Ratio</th> <th>LOS</th> </tr> </thead> <tbody> <tr> <td>NH 200</td> <td>687.5</td> <td>3600</td> <td>0.19</td> <td>A</td> </tr> </tbody> </table> <p>* Note: Capacity as per IRC-73:1980 Guide line for capacity for roads.</p> <p><b>Conclusion:</b> The level of service will Very Good after including additional traffic due to proposed project.</p>	Road	V (Volume in PCU/hr.)	C (Capacity in PCU/hr.)	Proposed V/C Ratio	LOS	NH 200	687.5	3600	0.19	A
Road	V (Volume in PCU/hr.)	C (Capacity in PCU/hr.)	Proposed V/C Ratio	LOS							
NH 200	687.5	3600	0.19	A							
Flora and fauna	No schedule I species are found in the study area.										

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

Solid Waste generation	Quantity (TPA)	Method of Disposal
Ferro Manganese Slag	32300	Part of Ferro Manganese slag will be used in manufacturing of Silico Manganese. Balance Ferro Manganese Slag shall be sold in market as raw material to other silico manganese manufacturing units.
Silico Manganese Slag	30000	The Silico Manganese slag will be disposed through land filling in construction work.

Solid Waste generation	Quantity (TPA)	Method of Disposal
Pig Iron Slag	30400	Will be used / sold for road making, hardening of working area etc.

#### 40.8.14 Public Consultation:

Details of advertisement given	18.03.2022 & 20.03.2022
Date of public consultation	21.04.2022
Venue	CSIDC Building, Industrial Area, Phase II, Siltara Raipur
Presiding Officer	Additional District Magistrate and Upper Collector, Raipur.
Major issues raised	Employment

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

S. No.	Physical activity and action plan		Year of implementation (Budget in Rs in Lakhs)			Total Expenditure (Rs. in Lakhs)
	Name of the Activity		1 <sup>st</sup>	2 <sup>nd</sup>	3 <sup>rd</sup>	
1.	Provision of Drinking water Facility	Physical Nos. and Village	Sankara	Sondra	Siltara	9
		Budget in Lakhs	5	2	2	
2.	Training will be provided to the local youths for skill development and then providing employment to them in the company.	Physical Nos. and Village	Training to unemployed youth of Sankara, Sondra & Nimora	Training to unemployed youth of Sankara, Sondra & Nimora	Training to unemployed youth of Sankara, Sondra & Nimora	6
		Budget in Lakhs	2	2	2	
3.	Plantation in the School as per demand	@100 Rs. Per Sapling	2	2	2	6
4.	Primary Health Centre	Physical Nos. and Village	Provision of various medical kits to primary health centres at Sankara village.	Provision of various medical kits to primary health centres at Nimora village.	Provision of various medical kits to primary health centres at Sondra village.	11
		Budget in	7	2	2	

S. No.	Physical activity and action plan		Year of implementation (Budget in Rs in Lakhs)			Total Expenditure (Rs. in Lakhs)
	Name of the Activity		1 <sup>st</sup>	2 <sup>nd</sup>	3 <sup>rd</sup>	
		Lakhs				
<b>Total</b>						<b>Rs. 32 Lakhs</b>

40.8.15 Existing capital cost of project was Rs. 6.72 Crores. The capital cost of the proposed project is Rs. 16 Crores and the capital cost for environmental protection measures is proposed as Rs. 1.6 Crores. The annual recurring cost towards the environmental protection measures is proposed as Rs. 0.16 Crores. The employment generation from the project is 90. The details of cost for environmental protection measures is as follows:

Sr. No	Component	Description	Capital Cost Rs in Lacs	Operation & Maintenance Cost Rs.in Lacs/annum
1	Air Pollution Control	Bag Filter, Water Sprinkler System, Stack	Rs.100	Rs. 10
2	Water Pollution Control	Packaged type STP	Rs 20	Rs.2
3	Green Belt	Plantation	Rs.10	Rs.1
4	Environmental Monitoring and provision of pocket CO monitor equipment	Air Quality, Water and Wastewater Quality, Noise Level, Soil Quality monitoring by third party	Rs.30	Rs.3
<b>Total</b>			<b>Rs. 160 Lacs</b>	<b>Rs. 16 Lacs</b>

40.8.16 The land for project under consideration is 1.01 ha. as per TOR. PP have purchased adjacent additional 0.48 ha. of land for plantation and other activity (not for manufacturing process). Thus, total land is 1.49 ha. PP have developed greenbelt on 0.187 ha in existing land and will cover 0.384 ha on adjacent land in greenbelt. Thus, the total plantation will be 0.571 ha which is more than 40% of total land. In addition to this PP has purchased 0.3950 ha. extra land at Khasra no. 4/1, 4/2, 5,6,7,8/1,10/1 & 10/6 P.H. No. 99/25, Village Sondra, Raipur. which is 1.7 km away from our unit. Out of this 0.3950 ha land we proposed to cover 0.1185 Ha as plantation. Total plantation will be 0.6895 ha. Local and native species will be planted with a density of 2500 trees per hectare. Total no. of 1725 saplings will be planted and nurtured in 0.6895 hectares in 1 year.

40.8.17 A complaint was filed in Honorable NGT Principal Bench, New Delhi regarding violation of environmental norms against M/s Metallic Alloy, Plot No. 29 Industrial Growth Centre, Phase II, Raipur Chhattisgarh. The matter was considered on 14.05.2020 with original

application number 694/2019, in the light of the report furnished by the State Pollution Control Board. The matter was deferred for a fresh report by a joint Committee comprising of CPCB, MoEF&CC and the State PCB. The matter was again considered by NGT on 25.11.2020 & 11.08.2021 with application no. 644/2019 & 694/2019, in the light of the joint report of CPCB, MoEF&CC and the State PCB and objections of applicants too. The applications are **disposed** of.

Show cause notice by Chhattisgarh Environment Conservation Board vide letter no. 3771/RO/TS/CECB/2022 Raipur, dated 09.12.2022 with follow up letter no. 3872/RO/TS/CECB/2022 Raipur, dated 15.12.2022. The reason for which the show cause was issued it has been complied.

**Certified Compliance Report of CTO from SPCB**

40.8.18 The verification cum compliance report of CTO is received from Regional Office Regional Office, Raipur vide letter no. 600/TK/CGPSM/2023 dated 23.05.2023 in the name of M/s. The Metallic Alloys. As per observations of RO, the conditions have been complied with.

40.8.19 The project falls under CPA. The Mitigation Action Plans submitted by the project proponent are as follows:

**Table: Compliance of conditions stipulated in mechanism for environmental management of Critically and Severely Polluted Areas vide no. Q-16017/38/2018-CPA dated 24.10.2019**

Sr. No.	Stipulated Conditions / Recommendations	Measures to comply CEPI Recommendation
<b>Air Environment</b>		
i.	Stack emission levels should be stringent than the existing standards in terms of the identified critical pollutants.	Existing Ferro Alloy Plant: As per the renewed Consent to operate the maximum limit of PM emission is 50 mg/Nm <sup>3</sup> . In the existing Ferro Alloy Plant Bag Filter of 6 chambers with 144 nos. tafflon bags in each chambers i.e. Total 864 nos. bags. The online results for the month of February for operational 1x 6 MVA SAF shows that PM emission is in the range of 21.42 to 47.75 mg/m <sup>3</sup> . Proposed Expansion: In proposed expansion additional 1 no. of bag filter of 6 chambers with 144 nos. tafflon bags in each chambers i.e. Total 864 nos. bags will be installed to proposed 1 x 9 MVA SAF. Bag filter installed for existing 6 MVA SAF will be retained for 9 MVA SAF. Additional CEMS will be installed for proposed 1 x 9 MVA SAF.
ii.	CEMS may be installed in all large/medium red category industries (air polluting) and connected to SPCB and CPCB servers.	Existing stack is equipped with continuous emission monitoring system (CEMS) along with remote calibration facility for gaseous parameters and is connected to CECB and CPCB servers. For proposed 1 x 9 MVA SAF stack will be equipped with continuous emission monitoring system (CEMS)

Sr. No.	Stipulated Conditions / Recommendations	Measures to comply CEPI Recommendation
		<p>along with remote calibration facility for gaseous parameters and will be connected to CECB and CPCB servers.</p> <p>After expansion there will be a total 2 Nos. Opacity meters as OCEMS (1 Nos. existing + 1 No. proposed).</p>
iii.	Effective fugitive emission control measures should be imposed in the process, transportation, packing etc.	<ul style="list-style-type: none"> <li>● All Internal roads and working area are concretized to prevent the fugitive dust emission due to vehicular movement.</li> <li>● Speed limit in plant premises is in control.</li> <li>● All transportation vehicles carry/ will carry a valid PUC (Pollution under Control) Certificate.</li> <li>● Flow of vehicles is being/will be maintained.</li> <li>● Proper traffic management is being/will be undertaken.</li> <li>● Regular servicing &amp; maintenance of vehicles is being/will be carried out.</li> <li>● Proper dust masks are being/will be provided to workers coming in direct contact of fugitive emissions</li> <li>● Greenbelt has already been developed in the plant area which will be further strengthen in the proposed expansion project. Greenbelt acts as a surface for settling of dust particles and thus reduces the concentration of particulate matter in air. In addition to total existing in possession land 1.01 ha. we have purchased adjacent 0.48 ha. land for plantation purpose.</li> <li>● Water Sprinkling is being /will be done to reduce fugitive emission in the plant and maintain the ambient air quality within CPCB standard.</li> <li>● Existing No. of water sprinklers:10 Nos.</li> <li>● Proposed No. of water sprinklers:10 Nos.</li> <li>● Total No. of Water Sprinklers:20 Nos.</li> <li>● All material transporting conveyor belt are covered with GI sheets.</li> <li>● All raw material stored in premises are being covered by Tarpaulin sheets and this will be also followed in expansion phase.</li> <li>● Adequate spares of critical components of dust and gas collection systems will be kept to ensure trouble - free operations and continuous compliance to emission norms.</li> <li>● Ambient air quality is being/will be regularly monitored, so as to keep a check on the emissions of different pollutants.</li> <li>● Fugitive emission sources are being identified and monitored on a regular basis.</li> </ul>
iv.	Transportation of materials by rail/	The raw material required for the existing SAF plant is

Sr. No.	Stipulated Conditions / Recommendations	Measures to comply CEPI Recommendation
	conveyor belt, wherever feasible.	being transported by tarpaulin covered trucks by road. Internal transportation of raw material to raw material mixing feeder and to furnace bunker is being done by closed conveyor belt. This practice will be continue in expansion phase also.
v.	Encourage use of cleaner fuels (pet coke/ furnace oil/ LSHS may be avoided).	<ul style="list-style-type: none"> <li>• Electricity will be used as fuel in Submerged Arc Furnace.</li> <li>• pet coke/ furnace oil/ LSHS are not used in existing plant and will not be used proposed expansion also.</li> </ul>
vi.	Best Available Technology may be used. For example; usage of EAF/SAF/IF in place of Cupola furnace. Usage of Supercritical technology in place of sub-critical technology.	<ul style="list-style-type: none"> <li>• Submerge Arc Furnace is being and will be used for various Ferro Alloys production.</li> <li>• No Cupola furnace is installed in existing plant and will not be in expansion phase also.</li> </ul>
vii.	Increase of green belt cover by 40% of the total land area beyond the permissible requirement of 33%, Wherever feasible.	The land for project under consideration is 1.01 ha. as per TOR. We have purchased adjacent additional 0.48 ha. of land for plantation and other activity (not for manufacturing process). Thus, total land is 1.49 ha. We have developed greenbelt on 0.187 ha in existing land and will cover 0.384 ha on adjacent land in greenbelt. Thus, the total plantation will be 0.571 ha which is more than 40% of total land. In addition to this we have purchased 0.3950 ha. extra land at Khasra no. 4/1, 4/2, 5,6,7,8/1,10/1 & 10/6 P.H. No. 99/25, Village Sondra, Raipur. which is 1.7 km away from our unit. Out of this 0.3950 ha land we proposed to cover 0.1185 Ha as plantation. Total plantation will be 0.6895 ha after this.
viii.	Stipulation of greenbelt outside the project premises such as avenue plantation, plantation in vacant areas, social forestry, etc.	The land for project under consideration is 1.01 ha. as per TOR. We have purchased adjacent additional 0.48 ha. of land for plantation and other activity (not for manufacturing process). Thus, total land is 1.49 ha. We have developed greenbelt on 0.187 ha in existing land and will cover 0.384 ha on adjacent land in greenbelt. Thus, the total plantation will be 0.571 ha which is more than 40% of total land. In addition to this we have purchased 0.3950 ha. extra land at Khasra no. 4/1, 4/2, 5,6,7,8/1,10/1 & 10/6 P.H. No. 99/25, Village Sondra, Raipur. which is 1.7 km away from our unit. Out of this 0.3950 ha land we proposed to cover 0.1185 Ha as plantation. Total plantation will be 0.6895 ha after this.
ix.	Assessment of carrying capacity of transportation load on roads inside the industrial premises. If the roads are required to be widened, shall be	Adequate Roads of proper size are present inside the plant premises further strengthening and widening of roads is in progress. Roads with their sizes are given in Plant layout.

Sr. No.	Stipulated Conditions / Recommendations	Measures to comply CEPI Recommendation
	prescribed as a condition.	
<b>Water Environment</b>		
i.	Reuse/recycle of treated wastewater, wherever feasible.	100% reuse of waste water after proper treatment is being practiced. Domestic wastewater from the proposed plant will be treated in proposed STP.
ii.	Continuous monitoring of effluent quality/quantity in large and medium Red Category Industries (water polluting).	The plant is maintaining zero liquid discharge. In the proposed plant 1.4 KLD of wastewater generated will be treated in settling tank and reused in the process. Continuous monitoring of effluent quality/quantity is not applicable as ours is not water polluting industry.
iii.	A detailed water harvesting plan may be submitted by the project proponent	Rain water harvesting has been already developed in the existing plant to harvest the rain water to recharge the ground water level. The details of the proposed rain water harvesting are given in Chapter 10 of the EIA Report.
iv.	Zero liquid discharge wherever techno - economically feasible.	The plant is maintaining zero liquid discharge. In the proposed plant 1.4 KLD of wastewater generated will be treated in settling tank and reused in the process.
v.	In case, domestic waste water generation is more than 10 KLD, the industry may install STP.	Domestic wastewater from the proposed plant will be treated in proposed STP.
<b>Land Environment</b>		
	Increase of green belt cover by 40% of the total land area beyond the permissible requirement of 33%, wherever feasible for new projects.	The land for project under consideration is 1.01 ha. as per TOR. We have purchased adjacent additional 0.48 ha. of land for plantation and other activity (not for manufacturing process). Thus, total land is 1.49 ha. We have developed greenbelt on 0.187 ha in existing land and will cover 0.384 ha on adjacent land in greenbelt. Thus, the total plantation will be 0.571 ha which is more than 40% of total land. In addition to this we have purchased 0.3950 ha. extra land at Khasra no. 4/1, 4/2, 5,6,7,8/1,10/1 & 10/6 P.H. No. 99/25, Village Sondra, Raipur. which is 1.7 km away from our unit. Out of this 0.3950 ha land we proposed to cover 0.1185 Ha as plantation. Total plantation will be 0.6895 ha after this.
	Stipulation of greenbelt outside the project premises such as avenue plantation, plantation in vacant areas, social forestry, etc.	
	Dumping of waste (fly ash, slag, red mud, etc.) may be permitted only at designated locations approved by SPCBs / PCCs.	32300 TPA Ferro Manganese slag. Part of it will be used in manufacturing of Silico Manganese and balance will be sold to other manufacturers. 30000 TPA Silico Manganese slag will be disposed through land filling in construction work. 30400 TPA Pig Iron Slag Will be used / sold for road making, hardening of working area etc.
	More stringent norms for management of hazardous waste. The waste generated should be preferably utilized	Storage and handling of hazardous waste will be done as per provisions of Hazardous Waste Rules, 2016.

Sr. No.	Stipulated Conditions / Recommendations	Measures to comply CEPI Recommendation
	in co-processing.	
<b>Other Condition (Additional)</b>		
i.	Monitoring of compliance of EC conditions may be submitted with a third party audit every year.	Six Monthly Compliances will be sent to Regional office MOEFCC, Raipur every six months.
ii.	The % of the CER may be at least 1.5 times the slabs given in the OM dated 01.05.2018 for SPA and 2 times for CPA in case of Environmental Clearance.	As per CPA mechanism the company will spend the CER amount i.e. Rs 32 Lakhs.

**Written representations:**

40.8.20 During the meeting, based on the deliberations made by the EAC, the project proponent vide letter dated 21.07.2023 through email dated 21.07.2023 submitted the CEPI action plan as updated at para 40.8.19 above.

**Deliberations by the Committee**

40.8.21 The Committee noted the following:

1. The instant proposal is for Manufacturing of Ferro Alloys from 8,000 TPA to 19,000 TPA by replacing old 1 x 6 MVA SAF by 1 x 9 MVA SAF and one New Unit of 1 x 9 MVA SAF for manufacturing 19,000 TPA Ferro Alloys. Total expansion will be from 8000TPA to 38000 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 existing project was initially accorded Consent to Establish vide letter no. 1108/RO/TS/CECB/2006 dated 19.5.2006. The proposal is applied first time for

obtaining Environmental Clearance. Latest Consent to Operate (Latest) for the existing unit was accorded by issued by Chhattisgarh Environment Conservation Board vide letter no. 4373/RO/TS/CECB/2020 dated 25/01/2020 valid upto 31.01.2025

6. The EAC noted that the instant project comes under Critically Polluted Area (CPA). PP has committed the proposed mitigation measures and also submitted detailed action plan as detailed in para 40.8.19 above. The EAC is of the opinion that the mitigation plans shall be strictly implemented.
7. The total project area is 1.49 ha Allotted by CSIDC which is under the possession of the project proponent. Land is already Industrial in nature due to existing operations of the plant.
8. Total one-time Water requirement is 12 m<sup>3</sup>/day Water requirement for the project will be sourced from CSIDC.
9. The Committee has deliberated on the baseline data and incremental GLC due to the proposed project and found it satisfactory.
10. The PP has submitted that the land for project under consideration is 1.01 ha. as per TOR. PP have purchased adjacent additional 0.48 ha. of land for plantation and other activity (not for manufacturing process). Thus, total land is 1.49 ha. PP have developed greenbelt on 0.187 ha in existing land and will cover 0.384 ha on adjacent land in greenbelt. Thus, the total plantation will be 0.571 ha which is more than 40% of total land. In addition to this we have purchased 0.3950 ha. extra land at Khasra no. 4/1, 4/2, 5,6,7,8/1,10/1 & 10/6 P.H. No. 99/25, Village Sondra, Raipur. which is 1.7 km away from our unit. Out of this 0.3950 ha land we proposed to cover 0.1185 Ha as plantation. Total plantation will be 0.6895 ha after this. Local and native species will be planted with a density of 2500 trees per hectare. Total no. of 1725 saplings will be planted and nurtured in 0.6895 hectares in 1 year.
11. The committee deliberated details of carbon foot prints and carbon sequestration study w.r.t. proposed project and found them to be satisfactory.
12. The Committee also deliberated on the action plan submitted by the proponent to address the issues as per socio economic survey for development of nearby area and found it satisfactory.
13. The EAC deliberated on certified compliance report on CTO obtained from SPCB and found it satisfactory.
14. The EAC also deliberated on the submitted written representation of project proponent and found it satisfactory.
15. The EAC deliberated on the proposal with due diligence in the process as notified under the provisions of the EIA Notification, 2006, as amended from time to time and accordingly made the recommendations to the proposal. The Experts Members of the EAC found the proposal in order and recommended for grant of environmental clearance.
16. The environmental clearance recommended to the project/activity is strictly under the provisions of the EIA Notification 2006 and its subsequent amendments. It does not

tantamount/construe to approvals/consent/permissions etc. required to be obtained or standards/conditions to be followed under any other Acts/ Rules/ Subordinate legislations, etc., as may be applicable to the project. The project proponent shall obtain necessary permission as mandated under the Water (Prevention and Control of Pollution) Act, 1974 and the Air (Prevention and Control of Pollution) Act, 1981, as applicable from time to time, from the State Pollution Control Board, prior to construction & operation of the project.

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

### **Recommendations of the Committee:**

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

#### **A. Specific Condition:**

- i. **This Environmental clearance is granted subject to final outcome of Hon'ble Supreme Court of India, Hon'ble High Court, Hon'ble NGT and any other Court of Law, if any, as may be applicable to this project.**
- ii. **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 as per the submitted plan.**
- 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. Sankara Village is a distance of 1 km in S of the project site. Project Proponent shall take appropriate environmental safeguard measures to minimise the impact on the habitation of the locals. PP needs to strengthen green belt all around the plant area to

reduce the dust pollution. The PP shall also include these locations in its environmental monitoring programme.

- vi. The total one-time water requirement of 12 KLD, shall be obtained from from CSIDC after necessary permission. No ground water abstraction is permitted.
- vii. SiMn slag shall be used for road construction. Maximum 90 days storage shall be permitted inside the plant for slag.
- viii. Three tier Green Belt shall be developed in at least 40% 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. On south and western side 25 m green belt shall be planted towards agriculture fields. In other part of the plot, normal with of 10-15 m shall be planted. PP shall also develop greenbelt in the form of shelter belt comprising of total of 6 rows of 2x2 m plantation with tall trees & broad leaves with thick canopy along with windshield inside the plant premises to act as green barrier for air pollution & noise levels towards Khapa and Wakodi Village. Compliance status in this regard, shall be submitted to concerned Regional Office of the MoEF&CC.
- ix. All the commitments made towards socio-economic development of the nearby villages shall be satisfactorily implemented. The action plan based on the social impact assessment study of the project as per the EMP in accordance to the Ministry's OM dated 30.09.2020 amounting to 0.32 Crores shall be strictly implemented and progress shall be submitted to the Regional Office of MoEF&CC.
- x. PP shall adopt nearby villages and prepare and implement a robust plan to develop them into model villages in next 10 years.

## **B. General Conditions:**

### **I. Statutory compliance:**

- i. The Environment Clearance (EC) granted to the project/ activity is strictly under the provisions of the EIA Notification, 2006 and its amendments issued from time to time. It does not tantamount/ construe to approvals/ consent/ permissions etc., required to be obtained or standards/conditions to be followed under any other Acts/Rules/Subordinate legislations, etc., as may be applicable to the project.
- ii. This Environmental clearance is granted subject to final outcome of Hon'ble Supreme Court of India, Hon'ble High Court, Hon'ble NGT and any other Court of Law, if any, as may be applicable to this project.

### **II. Air quality monitoring and preservation**

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

through labs recognized under Environment (Protection) Act, 1986 or NABL accredited laboratories.

- ii. The project proponent shall carryout Continuous Ambient Air Quality monitoring for common/criterion parameters relevant to the main pollutants released (e.g. PM<sub>10</sub> and PM<sub>2.5</sub> in reference to PM emission, and SO<sub>2</sub> and NO<sub>x</sub> in reference to SO<sub>2</sub> and NO<sub>x</sub> emissions) within and outside the plant area (at least at four locations one within and three outside the plant area at an angle of 120° each), covering upwind and downwind directions.
- iii. The project proponent shall monitor fugitive emissions in the plant premises at least once in every quarter through laboratories recognized under Environment (Protection) Act, 1986 or NABL accredited laboratories.
- iv. Sampling facility at process stacks shall be provided as per CPCB guidelines for manual monitoring of emissions.
- v. Appropriate Air Pollution Control (APC) system shall be provided for all the dust generating points including fugitive dust from all vulnerable sources, so as to comply prescribed stack emission and fugitive emission standards.
- vi. The project proponent shall provide leakage detection and mechanized bag cleaning facilities for better maintenance of bags.
- vii. Sufficient number of mobile or stationery vacuum cleaners shall be provided to clean plant roads, shop floors, roofs, regularly.
- viii. Ensure covered transportation and conveying of raw material to prevent spillage and dust generation. The project proponent use leak proof trucks/dumpers carrying coal and other raw materials and cover them with tarpaulin.
- ix. Recycle and reuse iron ore fines, coal and coke fines, lime fines and such other fines collected in the pollution control devices and vacuum cleaning devices in the process after briquetting/ agglomeration.
- x. The project proponent shall provide primary and secondary fume extraction system at all heat treatment furnaces.
- xi. Wind shelter fence and chemical spraying shall be provided on the raw material stock piles.
- xii. Design the ventilation system for adequate air changes as per prevailing norms for all tunnels, motor houses, Oil Cellars.
- xiii. Pollution control system in the plant shall be provided as per the CREP Guidelines of CPCB.
- xiv. The project proponent shall adopt the Clean Air practices like mechanical collectors, wet scrubbers, fabric filters (bag houses), electrostatic precipitators, combustion systems (thermal oxidizers), condensers, absorbers, adsorbers, and biological degradation. Controlling emissions related to transportation shall include emission controls on vehicles as well as use of cleaner fuels. Sufficient numbers of additional truck mounted Fog/Mist water cannons shall be procured and operated regularly inside the project premises and also in the surrounding villages to arrest suspended dust in the atmosphere.
- xv. Bag filters shall be cleaned regularly and efficiency of bag filter system shall be monitored at regular intervals.

- xvi. Water Sprinklers/Water mist system shall be installed near raw material yards, operational units and other strategic locations to control fugitive emissions from the plant.
- xvii. The particulate matter emissions from the process stacks shall be less than 30 mg/Nm<sup>3</sup> and measures shall be undertaken as per the submitted action plan. Efficient Air monitoring equipment shall be installed.
- xviii. Following additional arrangements to control fugitive dust shall be provided:
  - a. Fog / Mist Sprinklers at all on bulk raw material storage area (at the transfer points) like Iron Ore, Coal and for Fly Ash and similar solid waste storage areas.
  - b. Proper covered vehicle shall be used while transport of materials.
  - c. Wheel washing mechanism shall be provided in entry and exit gates with complete recirculation system.
- xix. Briquetting and Jigging plant shall be installed in Ferro Alloys Plant.
- xx. The PP shall minimize the evaporation losses in jigging operation to less than 10% using suitable advanced process.
- xxi. The 4<sup>th</sup> hole extraction system shall be provided in the Sub Merged Arc Furnaces.
- xxii. Industry is going to use silica quartz in large quantities and going to produce Silico Manganese and Ferro Silicon alloy steel. Therefore, it is necessary to control silica/quartz exposures at production Departments, not only emission norms as per Indian Factories Act. The permissible limit for silica/quartz should be within 10 mg/m<sup>3</sup> for total dust as per Indian Factories Act. Therefore, it is recommended to monitor personal and area exposures for silica quartz dust in the process plants.
- xxiii. No Ferro-chrome production shall be carried out without prior Environmental clearance from MOEF&CC.

### **III. Water quality monitoring and preservation**

- i. The project proponent shall install 24x7 continuous effluent monitoring system with respect to standards prescribed in Environment (Protection) Rules 1986 as amended from time to time and connected to SPCB and CPCB online servers and calibrate these system from time to time according to equipment supplier specification through labs recognized under Environment (Protection) Act, 1986 or NABL accredited laboratories.
- ii. The project proponent shall monitor regularly ground water quality at least twice a year (pre- and post-monsoon) at sufficient numbers of piezometers/sampling wells in the plant and adjacent areas through labs recognized under Environment (Protection) Act, 1986 and NABL accredited laboratories.
- iii. Garland drains and collection pits shall be provided for each stock pile to arrest the run-off in the event of heavy rains and to check the water pollution due to surface run off.
- iv. Water meters shall be provided at the inlet to all unit processes in the plants.
- v. The project proponent shall make efforts to minimise water consumption in the plant complex by segregation of used water, practicing cascade use and by recycling treated water.

- vi. The proposed project shall be designed as "Zero Liquid Discharge" Plant. ETP shall be installed and there shall be no discharge of effluent from the plant. Domestic effluent shall be treated in Sewage Treatment Plant. Suitable measures shall be adopted for sewage water handling to ensure no contamination of any kind of water body.
- vii. All stockyards shall have impervious flooring and shall be equipped with water spray system for dust suppression. Stock yards shall also have garland drains and catch pits to trap the run off material and shall be implemented as per the action plan submitted in EIA/EMP report.
- viii. Rain water harvesting shall be implemented to recharge/harvest water as per the action plan submitted in the EIA/EMP report.

#### **IV. Noise monitoring and prevention**

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

#### **V. Energy Conservation measures**

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

#### **VI. Waste management**

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

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

## **VII. Green Belt**

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

## **VIII. Public hearing and Human health issues**

- i. Emergency preparedness plan based on the Hazard identification and Risk Assessment (HIRA) and Disaster Management Plan shall be implemented.
- ii. The project proponent shall carry out heat stress analysis for the workmen who work in high temperature work zone and provide Personal Protection Equipment (PPE) as per the norms.
- iii. Provision shall be made for the housing of construction labour within the site with all necessary infrastructure and facilities such as fuel for cooking, mobile toilets, mobile STP. Safe drinking water, medical health care, creche etc. The housing may be in the form of temporary structures to be removed after the completion of the project.
- iv. Occupational health surveillance of the workers shall be done on a regular basis and records maintained.

## **IX. Environment Management**

- i. The project proponent shall comply with the provisions contained in this Ministry's OM vide F.No. 22-65/2017-IA.III dated 30/09/2020. As part of Corporate Environment Responsibility (CER) activity, company shall adopt nearby villages based on the socio-economic survey and undertake community developmental activities in consultation with the village Panchayat and the District Administration as committed.
- ii. The company shall have a well laid down environmental policy duly approved by the Board of Directors. The environmental policy should prescribe for standard operating

procedures to have proper checks and balances and to bring into focus any infringements/deviation/violation of the environmental / forest / wildlife norms / conditions. The company shall have defined system of reporting infringements / deviation / violation of the environmental / forest / wildlife norms / conditions and / or shareholders / stake holders. The copy of the board resolution in this regard shall be submitted to the MoEF&CC as a part of six-monthly report.

- iii. A separate Environmental Cell both at the project and company head quarter level, with qualified personnel shall be set up under the control of senior Executive, who will directly to the head of the organization.
- iv. Performance test shall be conducted on all pollution control systems every year and report shall be submitted to Integrated Regional Office of the MoEF&CC.

## **X. Miscellaneous**

- i. The project proponent shall make public the environmental clearance granted for their project along with the environmental conditions and safeguards at their cost by prominently advertising it at least in two local newspapers of the District or State, of which one shall be in the vernacular language within seven days and in addition this shall also be displayed in the project proponent's website permanently.
- ii. The copies of the environmental clearance shall be submitted by the project proponents to the Heads of local bodies, Panchayats and Municipal Bodies in addition to the relevant offices of the Government who in turn has to display the same for 30 days from the date of receipt.
- iii. The project proponent shall upload the status of compliance of the stipulated environment clearance conditions, including results of monitored data on their website and update the same on half-yearly basis.
- iv. The project proponent shall monitor the criteria pollutants level namely; PM10, SO<sub>2</sub>, NO<sub>x</sub> (ambient levels as well as stack emissions) or critical sectoral parameters, indicated for the projects and display the same at a convenient location for disclosure to the public and put on the website of the company.
- v. Action plan for developing connecting and internal road in terms of MSA as per IRC guidelines shall be implemented
- vi. The project proponent shall submit six-monthly reports on the status of the compliance of the stipulated environmental conditions on the website of the ministry of Environment, Forest and Climate Change at environment clearance portal.
- vii. The project proponent shall submit the environmental statement for each financial year in Form-V to the concerned State Pollution Control Board as prescribed under the Environment (Protection) Rules, 1986, as amended subsequently and put on the website of the company.
- viii. The project proponent shall inform the Regional Office as well as the Ministry, the date of financial closure and final approval of the project by the concerned authorities, commencing the land development work and start of production operation by the project.

- ix. The project proponent shall abide by all the commitments and recommendations made in the EIA/EMP report, commitment made during Public Hearing and also that during their presentation to the Expert Appraisal Committee.
- x. The recommendations of the approved Site-Specific Wildlife Management Plan (in case of involvement of Schedule-I species) shall be implemented in consultation with the State Forest Department. The implementation report shall be furnished along with the six-monthly compliance report to the concerned Regional Office of the MoEF&CC.
- xi. The PP shall put all the environment related expenditure, expenditure related to Action Plan on the PH issues, and other commitments made in the EIA/EMP Report etc. in the company web site for the information to public/public domain. The PP shall also put the information on the left over funds allocated to EMP and PH as committed in the earlier ECs and shall be carried out and spent in next three years, in the company web site for the information to public/public domain.
- xii. No further expansion or modifications in the plant shall be carried out without prior approval of the Ministry of Environment, Forests and Climate Change (MoEF&CC).
- xiii. Concealing factual data or submission of false/fabricated data may result in revocation of this environmental clearance and attract action under the provisions of Environment (Protection) Act, 1986.
- xiv. The Ministry may revoke or suspend the clearance, if implementation of any of the above conditions is not satisfactory.
- xv. The Ministry reserves the right to stipulate additional conditions if found necessary. The Company in a time bound manner shall implement these conditions.
- xvi. The Regional Office of this Ministry shall monitor compliance of the stipulated conditions. The project authorities should extend full cooperation to the officer (s) of the Regional Office by furnishing the requisite data / information/monitoring reports.
- xvii. Any appeal against this EC shall lie with the National Green Tribunal, if preferred, within a period of 30 days as prescribed under Section 16 of the National Green Tribunal Act, 2010.

**\*\*\***

### **Consideration in Terms of Reference Proposal**

#### **Agenda No. 40.9**

**40.9 I/O Beneficiation-1.5 MTPA (throughput), Pellet Plant-0.8 MTPA, DRI Kilns-2x600 TPD (Sponge Iron-396000 TPA), Power generation-60 MW (WHRB-2 x 15MW+CFBC-1 x 30 MW), IFs (4x20 T)+CCM & LRF (Hot Billets/Billets-264000 TPA), Billet Caster-253400 TPA, Rolling Mill with RHF (TMT bars/Wire rod/re-rolled products-250000 TPA, Oxygen Plant-17000 TPA, SEAFs 2x9 MVA (FeSi-14,000 TPA/FeMn-50,400 TPA/SiMn-28,800 TPA/FeCr-30,000 TPA/Pig iron-50,400 TPA, Coal Gasifier-17,100 Nm<sup>3</sup>/Hr, Fly Ash Bricks-18.15 Million/Annum by M/s Rama Metals And Energy Private Limited, located at Mohbhata Village, Simga Tehsil, Balodabazar Bhatapara District, Chhattisgarh - Consideration of TOR**

**[Proposal No. IA/CG/IND1/435946/2023, File No. J-11011/209/2023-IA.II(Ind1)]**

**[Consultant: Pioneer Enviro Consultants Pvt. Ltd. ; Valid upto 21.09.2025]**

40.9.1 M/s. Rama Metals and Energy Pvt. Ltd. has made an application online vide proposal no. IA/CG/IND1/435946/2023 vide dated 10<sup>th</sup> July, 2023 along with the application in prescribed format (Part-A & Part-B), copy of pre-feasibility report and proposed ToR for undertaking detailed EIA study as per the EIA Notification, 2006 for the project mentioned above. The proposed project activity is listed at S. No. 3 (a) under Category “A” of the schedule of the EIA notification, 2006 being appraised at Central Level.

40.9.2 Name of the EIA Consultant: M/s. Pioneer Enviro Consultants Pvt. Ltd. [NABET certificate vide no. NABET/EIA/2225/RA 0282 valid till 21.09.2025.

**Details submitted by Project proponent**

40.9.3 The project of M/s. Rama Metals and Energy Pvt. Ltd. located at Mohbhatta Village, Simga Tehsil, Balodabajar - Bhatapara District, Chhattisgarh is for establishment of a Greenfield Steel Plant including I/O Beneficiation-1.5 MTPA (throughput), Pellet Plant-0.8 MTPA, DRI Kilns-2x600 TPD (Sponge Iron-396000 TPA), Power generation-60 MW (WHRB-2 x 15MW+CFBC-1 x 30 MW), IFs (4x20 T)+CCM & LRF (Hot Billets/Billets-264000 TPA), Billet Caster-253400 TPA, Rolling Mill with RHF (TMT bars/Wire rod/re-rolled products-250000 TPA, Oxygen Plant-17000 TPA, SEAFs 2x9 MVA (FeSi-14,000 TPA/FeMn-50,400 TPA/SiMn-28,800 TPA/FeCr-30,000 TPA/Pig iron-50,400 TPA, Coal Gasifier-17,100 Nm<sup>3</sup>/Hr, Fly Ash Bricks-18.15 Million/Annum.

40.9.4 Environmental site settings:

S. No.	Particulars	Details	Remarks
i.	Total Land	90.306 Ha. (223.15 acres)	---
ii.	Land acquisition details as per MoEF&CC O.M. dated 7/10/2014	<p>Land acquisition : Total land envisaged for the proposed project is 90.306 Ha. (223.15 Acres),</p> <p>Registered Land : 27.345 Ha. Agreements entered : 24.453 Ha. Agreements under process : 38.508 Ha.</p> <p>Note: 57.3 % of Total land is either registered &amp; agreements entered</p>	<p>1) MOU has been signed with state Govt.</p> <p>2) Letter has been issued by State SIPB, Govt. of Chhattisgarh, vide dt. No. 963/SIPB/2021/286, dated 26-05-2023, stating Govt. of Chhattisgarh will extend complete cooperation in obtaining all the statutory approval such as land diversion, water draw approval, providing</p>

S. No.	Particulars	Details	Remarks																																																																		
			all necessary infrastructural facilities such as laying or new road, strengthening of existing roads etc.																																																																		
iii.	Existence of habitation & involvement of R & R, if any	No habitation exists in project site; Hence no R & R is involved.	---																																																																		
iv.	Latitude and Longitude of the project site	Latitude and Longitude of the project site: <table border="1"> <thead> <tr> <th>Point</th> <th>Latitude</th> <th>Longitude</th> </tr> </thead> <tbody> <tr><td>Point # 1</td><td>21°40'07.70"N</td><td>81°51'09.50"E</td></tr> <tr><td>Point # 2</td><td>21°40'46.23"N</td><td>81°51'35.54"E</td></tr> <tr><td>Point # 3</td><td>21°40'42.09"N</td><td>81°51'52.71"E</td></tr> <tr><td>Point # 4</td><td>21°40'16.23"N</td><td>81°51'53.03"E</td></tr> <tr><td>Point # 5</td><td>21°40'16.44"N</td><td>81°51'42.54"E</td></tr> <tr><td>Point # 6</td><td>21°40'14.25"N</td><td>81°51'42.93"E</td></tr> <tr><td>Point # 7</td><td>21°40'15.34"N</td><td>81°51'28.95"E</td></tr> <tr><td>Point # 8</td><td>21°40'10.84"N</td><td>81°51'28.03"E</td></tr> <tr><td>Point # 9</td><td>21°40'10.86"N</td><td>81°51'27.13"E</td></tr> <tr><td>Point #10</td><td>21°40'08.08"N</td><td>81°51'27.16"E</td></tr> <tr><td>Point #11</td><td>21°40'07.86"N</td><td>81°51'29.83"E</td></tr> <tr><td>Point # 12</td><td>21°40'06.52"N</td><td>81°51'29.53"E</td></tr> <tr><td>Point # 13</td><td>21°40'06.12"N</td><td>81°51'34.83"E</td></tr> <tr><td>Point # 14</td><td>21°40'03.87"N</td><td>81°51'34.62"E</td></tr> <tr><td>Point # 15</td><td>21°40'03.77"N</td><td>81°51'36.20"E</td></tr> <tr><td>Point # 16</td><td>21°39'58.50"N</td><td>81°51'36.07"E</td></tr> <tr><td>Point # 17</td><td>21°39'58.41"N</td><td>81°51'38.95"E</td></tr> <tr><td>Point # 18</td><td>21°39'56.89"N</td><td>81°51'34.61"E</td></tr> <tr><td>Point # 19</td><td>21°40'03.62"N</td><td>81°51'21.57"E</td></tr> <tr><td>Point # 20</td><td>21°40'01.66"N</td><td>81°51'13.27"E</td></tr> <tr><td>Point # 21</td><td>21°40'06.35"N</td><td>81°51'13.42"E</td></tr> </tbody> </table>	Point	Latitude	Longitude	Point # 1	21°40'07.70"N	81°51'09.50"E	Point # 2	21°40'46.23"N	81°51'35.54"E	Point # 3	21°40'42.09"N	81°51'52.71"E	Point # 4	21°40'16.23"N	81°51'53.03"E	Point # 5	21°40'16.44"N	81°51'42.54"E	Point # 6	21°40'14.25"N	81°51'42.93"E	Point # 7	21°40'15.34"N	81°51'28.95"E	Point # 8	21°40'10.84"N	81°51'28.03"E	Point # 9	21°40'10.86"N	81°51'27.13"E	Point #10	21°40'08.08"N	81°51'27.16"E	Point #11	21°40'07.86"N	81°51'29.83"E	Point # 12	21°40'06.52"N	81°51'29.53"E	Point # 13	21°40'06.12"N	81°51'34.83"E	Point # 14	21°40'03.87"N	81°51'34.62"E	Point # 15	21°40'03.77"N	81°51'36.20"E	Point # 16	21°39'58.50"N	81°51'36.07"E	Point # 17	21°39'58.41"N	81°51'38.95"E	Point # 18	21°39'56.89"N	81°51'34.61"E	Point # 19	21°40'03.62"N	81°51'21.57"E	Point # 20	21°40'01.66"N	81°51'13.27"E	Point # 21	21°40'06.35"N	81°51'13.42"E	-
Point	Latitude	Longitude																																																																			
Point # 1	21°40'07.70"N	81°51'09.50"E																																																																			
Point # 2	21°40'46.23"N	81°51'35.54"E																																																																			
Point # 3	21°40'42.09"N	81°51'52.71"E																																																																			
Point # 4	21°40'16.23"N	81°51'53.03"E																																																																			
Point # 5	21°40'16.44"N	81°51'42.54"E																																																																			
Point # 6	21°40'14.25"N	81°51'42.93"E																																																																			
Point # 7	21°40'15.34"N	81°51'28.95"E																																																																			
Point # 8	21°40'10.84"N	81°51'28.03"E																																																																			
Point # 9	21°40'10.86"N	81°51'27.13"E																																																																			
Point #10	21°40'08.08"N	81°51'27.16"E																																																																			
Point #11	21°40'07.86"N	81°51'29.83"E																																																																			
Point # 12	21°40'06.52"N	81°51'29.53"E																																																																			
Point # 13	21°40'06.12"N	81°51'34.83"E																																																																			
Point # 14	21°40'03.87"N	81°51'34.62"E																																																																			
Point # 15	21°40'03.77"N	81°51'36.20"E																																																																			
Point # 16	21°39'58.50"N	81°51'36.07"E																																																																			
Point # 17	21°39'58.41"N	81°51'38.95"E																																																																			
Point # 18	21°39'56.89"N	81°51'34.61"E																																																																			
Point # 19	21°40'03.62"N	81°51'21.57"E																																																																			
Point # 20	21°40'01.66"N	81°51'13.27"E																																																																			
Point # 21	21°40'06.35"N	81°51'13.42"E																																																																			
v.	Elevation of the project site	MSL of the Project area – 96 m to 103.5 m	---																																																																		
vi.	Involvement of Forest land, if any	No Forest land is involved in the project site.	---																																																																		
vii.	Water body (Rivers, Lakes, Pond, Nala, Natural Drainage, Canal etc.) exists within the project site as well as study area	<b>Project site:</b> Nil  <b>Study area:</b> <table border="1"> <thead> <tr> <th>Water Body</th> <th>Distance</th> <th>Direction</th> </tr> </thead> <tbody> <tr> <td>Marrakohi Distributory canal*</td> <td>Passing through the site</td> <td>---</td> </tr> <tr> <td>Silari Nala</td> <td>1.8 Kms.</td> <td>W</td> </tr> <tr> <td>Mahanadi Canal</td> <td>2.2 kms.</td> <td>E</td> </tr> </tbody> </table>	Water Body	Distance	Direction	Marrakohi Distributory canal*	Passing through the site	---	Silari Nala	1.8 Kms.	W	Mahanadi Canal	2.2 kms.	E	*Application has been Submitted to Water resources department , Govt. of Chhattisgarh for diversion of canal peripherally within the plant area.  <b>Accordingly Site Inspection has been</b>																																																						
Water Body	Distance	Direction																																																																			
Marrakohi Distributory canal*	Passing through the site	---																																																																			
Silari Nala	1.8 Kms.	W																																																																			
Mahanadi Canal	2.2 kms.	E																																																																			

S. No.	Particulars	Details			Remarks				
		JamuniyaNadi	7.1 Kms.	SE	carried out by the Water Resources Department, govt. of Chhattisgarh.				
		Sivnath River	8.7 Kms.	N					
		ChitwarNala	9.1 Kms.	SSW					
viii.	Existence of ESZ/ESA/National Park/Wildlife Sanctuary/Biosphere Reserve/Tiger Reserve/Elephant Reserve etc. if any within the study area	Study Area: Ni.  <b>List of Reserved and protected forests:</b> <table border="1" style="margin-left: 20px;"> <thead> <tr> <th>Name</th> <th>Distance</th> </tr> </thead> <tbody> <tr> <td>Bilari Ghughua RF</td> <td>8.6 Kms.- WSW</td> </tr> </tbody> </table>			Name	Distance	Bilari Ghughua RF	8.6 Kms.- WSW	There are no notified National Park / Wild life sanctuary / Biosphere reserve /Tiger reserve with in 10 Km. radius of the project site.
Name	Distance								
Bilari Ghughua RF	8.6 Kms.- WSW								

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

S. No.	Units (Products)	Plant configuration	Production Capacity
1.	Iron ore Beneficiation plant (I/O Concentrate)	1x1.5 MTPA	1.5MTPA (1.0 MTPA I/O Concentrate)
2.	Pellet plant	1x0.8 MTPA	0.8 MTPA
3.	DRI Kilns (Sponge Iron)	2 x600 TPD	3,96,000 TPA
4.	Power generation through WHRB (Electricity)	2x15MW	30MW
5.	Power generation through CFBC (Electricity)	1x30.0MW	30MW
6.	Induction Furnaces (Hot Billets/MS Billets/Ingots)	4 x 20 T	2,64,000 TPA
7.	Billet Caster	1x2 Strand	2,53,400 TPA
8.	Rolling Mill (TMT bars/Structural Steel) (85% Hot charging with Hot Billets and remaining 15% through RHF with LDO as fuel)	0.25 MTPA	2,50,000TPA
9.	Oxygen Plant	17,000 TPA	17,000 TPA
10.	Ferro Alloys	2 x9 MVA	FeSi– 14,000TPA(or) SiMn–28,800 TPA (or) FeMn – 50,400 TPA (or) FeCr–30,000TPA (or) Pig iron – 50,400 TPA
11	Coal gasifier plant	3 x 5700 NM <sup>3</sup> /Hr	17,100 NM <sup>3</sup> /Hr
12	Briquetting Plant	1x200 Kg/Hr	200 Kg/Hr
13	Fly Ash Brick making unit	55,000 Bricks	18.15 Million

S. No.	Units (Products)	Plant configuration	Production Capacity
		/day	Bricks/Annum

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

Plant	Raw Material	Quantity (TPA)	Source	Distance from site (Kms.)	Mode of Transportation
Beneficiation Plant (1.5 MTPA)	Iron ore	1,503,759	Chhattisgarh	350	By Rail / Road
Pellet Plant (0.8 MTPA)	Iron ore conc. Pellet feed	872,000	Inhouse	0	----
	Lime	40,000	Chhattisgarh	110	By Road
	Dolomite	8,000	Kachchh, Gujarat	1300	By Road
	Bentonite	7,200	Chhattisgarh	350	Rail / Road
	Coal	36,000	Imported, Domestic & Govt. Linkage	600 350	By Ship/Rail /Road By Rail / Road
DRI Plant (3,96,000 TPA)	Pellet	5,94,000	Inhouse	0	
	Coal	5,94,000	Imported, Domestic & Govt. Linkage	600 350	By Ship/Rail /Road By Rail / Road
	Dolomite	27,700	Kachchh, Gujarat	1300	By Road
Induction Furnace (2,64,000 TPA)	DRI	257,100	Inhouse	0	
	Pig Iron	15,700	Inhouse/ Chhattisgarh	225	By Road
	Purchased Scrap	28,300	Chhattisgarh	225	By Road
	Return Scrap	12,500	Inhouse	0	
Submerged Arc Furnace (2x9 MVA)	Mn Ore	124,975	MOIL / OMC	350	By Road
	Coke Breeze	94,025	Imported, Domestic & Govt. Linkage	~ 600 ~ 500	From Port By Road (through covered Trucks) By road (through covered trucks)
	Chrome ore	80,000	Sukinda (Odisha)	225	By Road
	Quartz	24,700	Chhattisgarh / Andhra	1300	By Road

Plant	Raw Material	Quantity (TPA)	Source	Distance from site (Kms.)	Mode of Transportation
			Pradesh		
	Electrode Paste	11,340	Maharashtra / West Bengal	200	By Road
	Slag	18,000	In house	200	By Road
Tapping Ladle	Liquid Steel	2,64,000	Inhouse	0	----
	Ferro alloys for TL	3,000	Inhouse	0	----
	Oxygen Plant	17000	Inhouse	0	----
Ladle Furnace	Liquid Steel	2,66,850	Inhouse	0	----
	Ferro Alloys for LF	700	Inhouse	0	----
	Lime	2,700	Chhattisgarh	230	By Road
Billet caster (2,53,400 TPA)	Liquid Steel	2,67,515	Inhouse	0	----
Rolling Mill (2,50,000 TPA)	Billets	2,57,732	Inhouse	0	----
	LDO/LSHS	5,600	IOCL, C.G	100	By Road
Power Plant (1x30 MW)	Indian Coal (or) Imported coal	146,400	Domestic & Govt. Linkage	350	By Rail / Road
		63,726	Imported	600	By Ship/Rail /Road
	Char to CFBC	101,000	Inhouse	0	----
Producer Gas Plant (3x5700 NM <sup>3</sup> /Hrs.)	Indian Coal (or) Imported coal	51,800	Domestic & Govt. Linkage	350	By Rail / Road
		33,152	Imported	600	By Ship/Rail / Road

40.9.7 Water required for the proposed project will be 3974 KLD. Water required for proposed project will be source Shivnath River (which is at a distance of 8.9Kms. from the project site). NOC from Water drawl permission from Water Resources Department, Govt. of Chhattisgarh will be obtained after receipt of TOR.

40.9.8 Power required for the entire project will be approx. 84.3 MW and which will be sourced from 54 MW Captive Power Plant & remaining 30.3 MW from the State Grid.

40.9.9 The capital cost of the project is Rs. 1,133.10 Crores and Capital Cost for Environmental Protection Measures is Rs. 144 Crores. Employment generation from proposed project will be 756 nos. through direct employment and 500 nos. through indirect employment.

40.9.10 It is reported that there is no violation is done under EIA Notification 2006/court case/show cause/direction related to the project.

40.9.11 Proposed Terms of Reference (Baseline data collection period): Collected 1<sup>st</sup> March to 31<sup>st</sup> May 2023.

Attributes	Sampling		Remarks
	No. of Stations	Frequency	
<b>1) Air</b>			
i) Meteorological parameters	1	On hourly basis for one season	<ul style="list-style-type: none"> <li>• Wind Speed</li> <li>• Wind Direction</li> <li>• Temperature</li> <li>• Relative Humidity</li> <li>• Rainfall</li> </ul>
ii) AAQ parameters	8	24 hourly Twice a week for 3 months (One Season)	Parameters to be Monitored: <ul style="list-style-type: none"> <li>• PM<sub>2.5</sub>,</li> <li>• PM<sub>10</sub>,</li> <li>• SO<sub>2</sub>,</li> <li>• NOx,</li> <li>• CO</li> </ul>
<b>2) Noise</b>	8	On hourly basis for 24 Hrs. at each station	Parameters to be Monitored: <ul style="list-style-type: none"> <li>• Day equivalent</li> <li>• Night equivalent</li> </ul>
<b>3) Water</b>			
i) Ground Water	8	One sample at each of the locations	Parameters will be Monitored: as per IS: 10500
ii) Surface Water	3	One sample at each of the locations	Parameters will be Monitored: as per BIS: 2296
<b>4) Land</b>			
i) Soil quality	8	One sample at each of the locations	Parameters will be Monitored: Texture, infiltration rate, SAR bulk density, CEC, pH, Ca, Mg, Na, K, Zn, Mn
ii) Land use	--	--	LU map will be prepared by concerned FAE for study area
<b>5) Biological</b>			
i) Aquatic	--	Once in Season	---
ii) Terrestrial	--	Once in Season	---
<b>6) Socio economic parameters</b>	--	Once in Season	Social Impact Assessment will be carried out by concerned FAE for study area
<b>7) Traffic Density</b>	--	Once in Season	Vehicular traffic study will be carried out at Transportation route.

40.9.12 M/s. Rama Metals and Energy Pvt. Ltd. had earlier applied vide proposal no. IA/CG/IND1/429200/2023 dated 7<sup>th</sup> June 2023 and the proposal was considered during 37<sup>th</sup> meeting of the EAC for Industry-I sector held on 26<sup>th</sup> June, 2023 wherein after deliberations,

the proposal was returned in present form due to technical shortcomings. The deliberations and recommendations of EAC are as follows:

**Deliberations by the Committee (EAC during 26<sup>th</sup> June, 2023)**

The Committee noted the following:

1. The EAC noted that total land envisaged for the proposed project is 90.306 Ha. (223.15 Acres), out of which Registered Land is 3.545 Ha, land for agreements entered is 35.846 Ha and the land for which Agreements is yet to be made is 50.915Ha. 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.
2. The EAC further noted that there is a Marrakohi Distributary Canal passing through the site. PP has reported that application has been submitted to Water Resources Department , Govt. of Chhattisgarh for diversion of canal peripherally within the plant area. Since this is a greenfield project, PP shall submit the justification for choosing the site along with requisite permission/NOC from the Water Resources Department , Govt. of Chhattisgarh.
3. The committee noted that water balance diagram needs to be revisited for proper distribution facility wise including greenbelt.
4. The Committee observed that there is a school at a distance of 150 m from the project site and good strength of students from the nearby villages' studies in the said school, as reported by the PP. The proposed project will have a large impact on this Ecologically Sensitive Area (ESA).
5. The EAC deliberated on the layout plan and the greenbelt shown and is of the opinion that the plan needs to be revised considering three tier system in the greenbelt development along the periphery of the project boundary.
6. The EAC also opined that as per the existing layout plan, the entry gate has been shown near to the school. Also the parking inside the plant premises has been provided towards the school. The PP needs to rework on the plant layout and resubmit the proposal.
7. In view of the same, the Committee is of the view that being a greenfield project, the PP shall consider to shift the project to an alternate site where there is no such ESA nearby.

**Recommendations of the Committee (EAC during 26<sup>th</sup> June, 2023)**

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 above.

40.9.13 M/s. Rama Metals and Energy Pvt. Ltd. has again made an application online vide proposal no. IA/CG/IND1/435946/2023 vide dated 10<sup>th</sup> July, 2023 addressing the issues raised during the 37<sup>th</sup> EAC meeting as below.

1.	<b>Current status of Acquisition of Land. Credible document showing the status of land acquisition shall be provided.</b>																														
Reply	<p>Total land earmarked for the project is 90.306 Ha. (223.15 Ac.).</p> <p>The following are the Khasra nos. of the total land : 302/162, 302/163, 302/26/D, 302/26/Gh, 362/11, 362/13, 362/14, 362/5, 368/1, 368/2 (368/3), 368/4, 372/1, 372/10, 372/11, 372/12, 372/2, 372/4, 372/5, 372/7, 372/8, 372/9, 373/1, 373/10, 373/11, 373/12, 373/13, 373/14, 373/2, 373/3, 373/4/क, 373/4/ख, 373/5, 373/6, 373/6, 373/7, 373/9, 374/1, 374/2, 375/1, 375/2, 375/3, 375/4, 380/101, 380/102, 380/104, 380/105, 380/127, 380/128, 380/133, 380/28, 380/30, 380/32/क, 380/32/ख, 380/33, 380/36, 380/36, 380/37, 380/37, 380/38, 380/39, 380/82, 380/88, 380/89, 380/90, 380/91.</p> <table border="1" data-bbox="347 853 1409 1294"> <thead> <tr> <th>S. No.</th> <th>ITEM</th> <th>Area (in Ha.)</th> <th>Area (in Ac.)</th> <th>Current Status of land Acquisition</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>Private Land</td> <td>90.306</td> <td>223.153</td> <td>Registered Land :27.345 Ha.</td> </tr> <tr> <td>2</td> <td>Govt. Land</td> <td>NIL</td> <td>NIL</td> <td>Agreements entered : 24.453 Ha.</td> </tr> <tr> <td>3</td> <td>Forest Land</td> <td>NIL</td> <td>NIL</td> <td>Agreements under process :38.508 Ha.</td> </tr> <tr> <td>4</td> <td>Industrial Land</td> <td>NIL</td> <td>NIL</td> <td></td> </tr> <tr> <td></td> <td>Total land</td> <td>90.306</td> <td>223.153</td> <td>Note: 57.3 % of Total land is either registered &amp; agreements entered</td> </tr> </tbody> </table> <p>Copy of Registered Sale Deeds are uploaded along with the Application for 27.345 Ha.</p>	S. No.	ITEM	Area (in Ha.)	Area (in Ac.)	Current Status of land Acquisition	1	Private Land	90.306	223.153	Registered Land :27.345 Ha.	2	Govt. Land	NIL	NIL	Agreements entered : 24.453 Ha.	3	Forest Land	NIL	NIL	Agreements under process :38.508 Ha.	4	Industrial Land	NIL	NIL			Total land	90.306	223.153	Note: 57.3 % of Total land is either registered & agreements entered
S. No.	ITEM	Area (in Ha.)	Area (in Ac.)	Current Status of land Acquisition																											
1	Private Land	90.306	223.153	Registered Land :27.345 Ha.																											
2	Govt. Land	NIL	NIL	Agreements entered : 24.453 Ha.																											
3	Forest Land	NIL	NIL	Agreements under process :38.508 Ha.																											
4	Industrial Land	NIL	NIL																												
	Total land	90.306	223.153	Note: 57.3 % of Total land is either registered & agreements entered																											
2.	<b>The EAC further noted that there is a Marrakohi Distributory Canal passing through the site. PP has reported that application has been submitted to Water Resources Department, Govt. of Chhattisgarh for diversion of canal peripherally within the plant area. Since this is a green field project, PP shall submit the justification for choosing the site along with requisite permission/NOC from the Water Resources Department , Govt. of Chhattisgarh.</b>																														
Reply	<ul style="list-style-type: none"> <li>• Marrakohi Distributory canal is passing through the site.</li> <li>• PP has submitted Application to Water resources department, Govt. of Chhattisgarh for diversion of canal peripherally within the plant area.</li> <li>• Accordingly Site Inspection has been carried out by the Water Resources Department (WRD) on 21-06-2023. A copy of the WRD letter has been uploaded.</li> <li>• PP also submitted that Water resources department has earlier approved the diversion of the same canal at the same site in the year 2018 to M/s. Prakash</li> </ul>																														

	<p>Industries Ltd. PP also confirm that they have purchased some portion of land from M/s. Prakash Industries Ltd. through which canal was passing. A copy of the same has been uploaded.</p> <ul style="list-style-type: none"> <li>• Lawns with shrubs will be developed in the 10 m width on either side of the canal to prevent soil erosion. This ensures no adverse impact on canal due to the proposed project.</li> <li>• Ash generated will be stored in Silos &amp; the ash from the proposed plant will be utilized in own Fly Ash Brick making plant to be established within the plant premises.</li> <li>• Garland drains will be constructed around the storage yards to prevent any run off from the storage yards entering into the water bodies.</li> <li>• Effluent will be treated and after ensuring compliance with SPCB norms, it will be utilized for dust suppression, ash conditioning and for greenbelt development.</li> <li>• There will not be any effluent discharge outside the premises. ZLD will be followed.</li> </ul>
3.	<b>The committee noted that water balance diagram needs to be revisited for proper distribution facility wise including greenbelt.</b>
Reply	PP have revised the Water Balance for proper facility wise distribution.
4.	<b>The Committee observed that there is a school at a distance of 150 m from the project site and good strength of students from the nearby villages' studies in the said school, as reported by the PP. The proposed project will have a large impact on this Ecologically Sensitive Area. PP as a precautionary measure shall change the layout and its inside elements in such a way that no manufacturing process/unit shall fall in the said area which cause harm to the school.</b>
Reply	<p>PP will provide the following Environment Protection measures</p> <ul style="list-style-type: none"> <li>• Primary school, Mohbhata (0.15 Km- North) is situated near to the site.</li> <li>• 100 m to 350 m wide green belt will be developed inside the project area towards the Primary school, Mohbhata (0.15 Km- North).</li> <li>• <b>As advised by the Hon'ble EAC, PP propose to shift the Main Entrance Gate from North Direction to South-West direction. Accordingly, the school will be 1.5 Kms. away from the Main Gate.</b></li> <li>• Moreover, no Industrial activity is proposed in 500 m on the side of the School and same will be utilized for greenbelt &amp; other non-process activity.</li> <li>• PP also propose to develop plantation within the School premises.</li> <li>• All required environmental protection measures such as ESPs (with high efficiency Rigid discharge electrodes with transformer), Bagfilters (PTFE membrane bagfilters), covered conveyers, dust suppression systems, pucca internal roads (designed as per IRC - 37), mechanical dust sweepers, Water cannon spray systems, Dry fog system will be provided and operated duly ensuring compliance with the particulate emission norms of 30 mg/Nm<sup>3</sup>.</li> <li>• Interlocking system will be provided to ESPs and whenever the particulate emission exceeds the emission norm, the raw material feed to the unit will stop. Consequently, there will be no production in the unit till the ESP is rectified.</li> <li>• Ash is will be stored in silos only and there will not be any open storage of ash.</li> <li>• Rain guns will be provided for dust suppression.</li> <li>• All transport vehicles will be with PUC certification.</li> </ul>

	<ul style="list-style-type: none"> <li>• Zero Liquid discharge will be maintained.</li> <li>• Wheel washing facility is provided at entry and exit gates.</li> </ul> <p><b>With the aforementioned measures, there will not be any adverse impact on school &amp; surrounding environment due to the proposed project.</b></p>
5.	<b>The EAC deliberated on the layout plan and the greenbelt shown and is of the opinion that the plan needs to be revised considering three tier system in the greenbelt development along the periphery of the project boundary.</b>
Reply	<ul style="list-style-type: none"> <li>• PP proposed to shift the internal Road in the western direction to further inside the plant so as to provide 80 M wide greenbelt in western direction</li> <li>• PP have also proposed to develop 100 m to 350 m wide greenbelt in Northern direction. Plant layout uploaded.</li> <li>• As advised by Hon'ble EAC , PP will develop 3-tier plantation peripherally within the premises.</li> </ul>
6.	<b>The EAC also opined that as per the existing layout plan, the entry gate has been shown near to the school. Also, the parking inside the plant premises has been provided towards the school. The PP needs to rework on the plant layout and resubmit the proposal along with detailing of area statement, Indexing, Green Belt area calculations, Contours with Drainage drawings etc</b>
Reply	<p>PP propose to shift the Main Entrance Gate from North Direction to South-West direction.</p> <ul style="list-style-type: none"> <li>• Accordingly, the school will be 1.5 Kms. away from the Main Gate. More over there will not be any Industrial activity within 500 m from the school.</li> <li>• Also PP have shifted the Truck parking from Northern side to Southern side so that no Industrial activity will be within 500 m from the school.</li> <li>• Plant layout has been uploaded.</li> </ul>

40.9.14 Based on the above submission in the new application, the proposal has been considered during 40<sup>th</sup> meeting of the EAC for Industry-I sector held on 19<sup>th</sup> -21<sup>st</sup> July, 2023. The deliberations and recommendations of EAC are as follows:

**Written representations:**

40.9.15 During the meeting, based on the deliberations made by the EAC, the project proponent vide letter dated 20.07.2023 through email dated 20.07.2023 submitted the following.

- a) Copy of NOC issued by the Gram Panchayat of Mohbhata including Khasra no of the proposed project.
- b) The project boundary will be shifted in such a way the proposed deviation of the canal will be outside the boundary.

**Deliberation by the Committee**

40.9.16 The Committee noted the following:

- i. The instant proposal is for establishment of a Greenfield Steel Plant including I/O Beneficiation-1.5 MTPA (throughput), Pellet Plant-0.8 MTPA, DRI Kilns-2x600 TPD (Sponge Iron-396000 TPA), Power generation-60 MW (WHRB-2 x 15MW+CFBC-1 x 30 MW), IFs (4x20 T)+CCM & LRF (Hot Billets/Billets-264000 TPA), Billet Caster-253400 TPA, Rolling Mill with RHF (TMT bars/Wire rod/re-rolled products-250000

TPA, Oxygen Plant-17000 TPA,SEAFs 2x9 MVA (FeSi-14,000 TPA/FeMn-50,400 TPA/SiMn-28,800 TPA/FeCr-30,000 TPA/Pig iron-50,400 TPA,Coal Gasifier-17,100 Nm<sup>3</sup>/Hr, Fly Ash Bricks-18.15 Million/Annum.

- ii. PP submitted that the total land envisaged for the proposed project is 90.306 Ha. (223.15 Acres) which is a private land, out of which Registered Land is 27.345 Ha, land for agreements entered is 24.453 Ha and the land for which Agreements is yet to be made is 38.508 Ha. Overall, 57.3 % of Total land is either registered & agreements entered. PP has further reported that MOU has been signed with State Govt. and Letter has been issued by State SIPB, Govt. of Chhattisgarh, vide dt. No. 963/SIPB/2021/286, dated 26-05-2023, stating Govt. of Chhattisgarh will extend complete cooperation in obtaining all the statutory approval such as land diversion, water draw approval providing all necessary infrastructural facilities such as laying or new road, strengthening of existing roads etc. PP has also submitted Copy of NOC issued by the Gram Panchayat of Mohbhatta including Khasra no of the proposed project.
- iii. Based on the submission of additional information, the proposal was re-deliberated by the EAC in its 40<sup>th</sup> meeting held during 19<sup>th</sup>-21<sup>st</sup> July, 2023 and the PP has made the detailed presentation on the proposal.
- iv. The EAC further noted that there is a Marrakohi Distributary Canal passing through the site. PP has reported that application has been submitted to Water Resources Department, Govt. of Chhattisgarh for diversion of canal peripherally within the plant area. Accordingly Site Inspection has been carried out by the Water Resources Department (WRD) on 21.06.2023. A copy of the WRD letter has been submitted. PP also submitted that Water resources department has earlier approved the diversion of the same canal at the same site in the year 2018 to M/s. Prakash Industries Ltd. PP also confirm that they have purchased some portion of land from M/s. Prakash Industries Ltd. through which canal was passing. PP has submitted an action plan for conservation of the canal as follows:
  - Lawns with shrubs will be developed in the 10 m width on either side of the canal to prevent soil erosion. This ensures no adverse impact on canal due to the proposed project.
  - Ash generated will be stored in Silos & the ash from the proposed plant will be utilized in own Fly Ash Brick making plant to be established within the plant premises.
  - Garland drains will be constructed around the storage yards to prevent any run off from the storage yards entering into the water bodies.
  - Effluent will be treated and after ensuring compliance with SPCB norms, it will be utilized for dust suppression, ash conditioning and for greenbelt development.
  - There will not be any effluent discharge outside the premises. ZLD will be followed.The EAC deliberated on the same and is of the opinion that action plan shall be strictly implemented.
- v. The Committee observed that there is a school at a distance of 150 m from the project site and good strength of students from the nearby villages' studies in the said school,

as reported by the PP. PP has further submitted an action plan to minimise the impact. As a precautionary measure PP has changed the layout and it's inside elements in such a way that no manufacturing process/unit shall fall in the said area which cause harm to the school. No Industrial activity shall be proposed in 500 m on the side of the School and same shall be utilized for greenbelt & other non-process activity. 100 m to 350 m wide green belt will be developed inside the project area towards the Primary school. The EAC deliberated on the plan proposed and is of the opinion that action plan shall be strictly implemented and all additional possible measures shall be undertaken to minimise the impacts of the project activities.

- vi. The EAC noted that as per the revised layout plan the Main Entrance Gate shifted from North Direction to South-West direction. Accordingly, the school will be 1.5 Kms. away from the Main Gate.
- vii. As reported, Silari Nala is at a distance of 1.8 km in West direction of the project site, Mahanadi Canal at 2.2 km in East and other water bodies within the study area.
- viii. The water requirement for the proposed project is estimated as 3974 KLD, which is proposed to be obtained from the Shivnath River.
- ix. Since there is a Marrakohi Distributary Canal passing through the site, PP has committed that the project boundary will be shifted in such a way the proposed deviation of the canal will be outside the boundary. PP shall submit with EIA/EMP report, the NOC obtained from Water Resources Department, Govt. of Chhattisgarh for diversion of canal, if any. Further PP shall also include the action plan for conservation of the canal in the EIA/EMP Report.
- x. The EAC deliberated on the reply submitted by the project proponent in reference to other queries raised in the previous application and found it satisfactory.
- xi. The EAC also deliberated on the written submission by the project proponent and found it satisfactory.

### **Recommendations of the Committee**

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

- (i) The PP shall complete acquisition of proposed project land along with conversion for industrial purpose and submit the documents with the EIA/EMP Report.
- (ii) Since there is a Marrakohi Distributary Canal passing through the site, PP has committed that the project boundary will be shifted in such a way the proposed deviation of the canal will be outside the boundary. PP shall submit with EIA/EMP report, the NOC obtained from Water Resources Department, Govt. of Chhattisgarh for diversion of canal, if any. Further PP shall also include the action plan for conservation of the canal in the EIA/EMP Report.

- (iii) There is a school nearby of the boundary of the project area and good strength of students from the nearby villages' studies in the said school, as reported by the PP. Project Proponent shall prepare an action plan for environmental safeguard measures to minimise the impact. The company shall also include these locations in its environmental monitoring programme.
- (iv) No Industrial activity shall be proposed in 500 m on the side of the School and same shall be utilized for greenbelt & other non-process activity.
- (v) As reported, Silari Nala is at a distance of 1.8 km in West direction of the project site, Mahanadi Canal at 2.2 km in East and other water bodies within the study area. The PP shall include in the EIA/EMP report suitable steps /conservation plan along with contouring (close intervals), Run -off calculations, disposal etc. A robust and full proof Drainage Conservation scheme to protect the natural drainage and its flow parameters; along with Soil conservation scheme and multiple Erosion control measures shall be prepared and included in EIA/EMP Report.
- (vi) Water requirement of 3974 KLD is proposed to be met from Shivnath River. PP shall obtain necessary permission from the Competent Authority.

\*\*\*

## **DAY-3: JULY 21, 2023 [FRIDAY]**

### **Consideration of Environmental Clearance Proposals**

#### **Agenda No. 40.10**

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

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

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

40.10.2 Name of the EIA consultant: M/s Centre for Envotech & Management Consultancy Pvt. Ltd. [S. No. 102, List of ACOs with their Certificate no. NABET/EIA/2124/RA/ 0243, and valid up to 18th March 2024].

40.10.3 The detail of the ToR is furnished as below:

<b>Date of application</b>	<b>Consideration</b>	<b>Details</b>	<b>Date of accord</b>	<b>ToR Validity</b>
21.12.2021	51 <sup>st</sup> meeting of the Re-constituted EAC (Industry-I) held on 11-12 <sup>th</sup> January 2022.	Terms of Reference	27.01.2022	26.01.2026

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

## **Deliberations by the Committee**

40.10.5 The Committee noted the following:

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

## **Recommendations of the Committee**

40.10.6 In view of the foregoing and after detailed deliberations, the committee recommended to **defer the proposal** to address the shortcomings enumerated at para 40.10.5 above. The proposal may be considered after submission of the requisite information.

**\*\*\***

**Agenda No. 40.11**

**40.11 Expansion of existing Sponge iron/DRI From 90,000 to 1,25,000 TPA, Induction Furnace and Billet Caster from 2 x 12 T (300 TPD) to 1 x 12 T, 1 x 15 T (416 TPD), Captive Power Plant from 12 to 12.5 MW, addition of Hot Rolling Mill including galvanizing 425 TPD and Fly Ash Brick Manufacturing Unit 30 TPD to 40 TPD (i.e., 35000 Bricks/day, 7000 Blocks/day) by M/s Goa Sponge & Power Limited, located at EY NOS. 58/1, 59/1, 60/1 (Part) of Santona Village, Sanguem Taluka, South Goa District, Goa- Consideration of Environmental Clearance under SOP dated 07.07.2021 [Violation case]**

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

40.11.1 M/s. Goa Sponge and Power Limited has made an application online vide proposal no. IA/GA/IND1/435814/2023 dated 06.07.2023 along with EIA/EMP report, prescribed format (CAF, Form – I Part A, B and C) and certified compliance report seeking Environmental Clearance (EC) under the provisions of the EIA Notification, 2006. The proposed project activity is listed at schedule no. 3(a) Metallurgical Industries (ferrous and non-ferrous), and 1(d) Thermal power plant under Category “A” of the schedule of the EIA Notification, 2006 and appraised at Central Level.

40.11.2 Name of the EIA consultant: TEAM LABS AND CONSULTANTS, Hyderabad. [NABET Accreditation No. NABET/EIA/2124/RA 0242 Valid till 24.09.2024].

40.11.3 The detail of the ToR is furnished as below

<b>Date of Application</b>	<b>Consideration</b>	<b>Details</b>	<b>Date of accord</b>	<b>ToR validity</b>
04.06.2018	33 <sup>rd</sup> meeting of EAC (Industry - 1) held on 9 -11, July 2018	Terms of Reference	30.07.2018	29.07.2023
30.12.2022	23 <sup>rd</sup> meeting of EAC (Industry - 1) held on 14 -15, February 2023  Further considered on 24 <sup>th</sup> meeting of the	Modification in TOR and violation under SOP dt. 07.07.2021	22.03.2023	29.07.2023

	EAC for Industry-I sector held on 28 <sup>th</sup> February – 1 <sup>st</sup> March, 2023 for factual correction in MoM.			
--	--	--	--	--

40.11.4 M/s. Goa Sponge and Power Limited located at Survey Nos. 58/1, 59/1, 60/1 (Part) of Santana Village, Sanguem Taluka, South Goa District, Goa State is proposed to expand Sponge Iron Plant From 90,000 to 1,25,000 TPA, Induction Furnace and Billet Caster from 2 x 12 T (300 TPD) to 1 x 12 T, 1 x 15 T (416 TPD), Captive Power Plant from 12 to 12.5 MW, addition of Hot Rolling Mill including galvanizing 425 TPD and Fly Ash Brick Manufacturing Unit 30 TPD to 40 TPD (i.e., 35000 Bricks/day, 7000 Blocks/day).

**Deliberations by the Committee**

40.11.5 The Committee noted the following:

1. The EAC noted that Bhagwan Mahavir Wildlife Sanctuary is at a distance of 1.19 km in the East direction and Netravali Wildlife Sanctuary (Sindh Dongar) is at a distance of 6.45 Km in SE direction. The PP reported that the instant proposed project is outside of the notified ESZ. However, on deliberation the EAC opined that as per ToR condition PP needs to submit the certificate certifying the distance of Wildlife Sanctuaries and their ESZ from the project site along with the authenticated map from State Forest Department and also ensuring the coordinates of the project site are mentioned in the certificate. Further, the State Forest Department shall also ensure that ESZ of any other national park/ wildlife sanctuary/ biosphere reserve/ tiger reserve/ elephant reserve do not fall within the project as per the notification / guidelines.
2. The EAC observed that Guddemal RF (0.025 km, NW), Ambeudeak RF (0.50 km, N), Kashti RF (0.60 km, SE), Periudak RF (1.0 km, N), Dakarkond RF (1.0 km, NE) and Bandoli RF (2.40 km, NW) and other Reserved Forest are falling adjacent /within the study area of the project site. PP needs to obtain NOC from the State Forest Department / Competent Authority and also needs to submit an action plan for minimising the impact of the project activities on these ESA's.
3. There is a village at a distance of 0.25 km from the project site. Further, there are number of ESA's including schools, hospitals, places of worship in the vicinity within the study area of the project site. Project Proponent needs to submit revised action plan for environmental safeguard measures to minimise the impact on the habitation of the locals.
4. The EAC noted that the SPCB has not taken credible action/filing of Court case under the provisions of SOP dated 07.07.2021 and the E (P), Act, 1986. In this regard, PP mentioned that the case is under filling by the SPCB as per provisions of SOP dated 07.07.2021.
5. The PP shall submit all the compliances as per the Ministry's SOP dated 07.07.2021.

6. In view of above facts, EAC advised PP to revise the EIA/EMP report covering all the desired information for further consideration.
7. 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**

- 40.11.6 In view of the foregoing and after detailed deliberations, the committee recommended to **defer the proposal** to address the shortcomings enumerated at para 40.11.5 above. The proposal may be considered after submission of the requisite information.

**\*\*\***

### **Consideration of Amendment in Environmental Clearance**

#### **Agenda 40.12**

- 40.12 Proposed expansion (14,400 MT/month to 20,800 MT/month) of existing Low Ash Metallurgical Coke manufacturing Unit by M/s Shreeji Coke and Energy Private Limited (Originally granted to M/s Global Coke Limited), located at R.S. No. 5, Plot No. 1, Village Khiri, Tal Jodia, District Jamnagar, Gujarat – Amendment in Environmental Clearance**

**[Proposal No. IA/GJ/IND1/432005/2023; File No. IA-J-11011/314/2010-IA-II(IND-I)]  
[Consultant: Excel Enviro Tech; Valid upto : 06.03.2026]**

- 40.12.1 M/s Shreeji Coke and Energy Private Limited has made an online application vide proposal No. IA/GJ/IND1/432005/2023 dated 29.06.2023 along with Form 4 and addendum EIA report sought for amendment in Environment Clearance accorded by the Ministry vide letter no. J-11011/314/2010-IA.II(I) dated 29.03.2011 which was initially issued in the name of M/s. Global Coke Limited and subsequently transferred in the name of M/s. Shreeji Coke and Energy Private Limited vide letter dated 07.01.2022.

#### **Details submitted by Project proponent**

- 40.12.2 M/s. Global Coke Limited was initially accorded Environment Clearance by the Ministry vide letter No. J-11011/314/2010-IA.II(I) dated 29.03.2011 for proposed expansion (14,400 MT/moth to 20,800 MT/month) of existing Low Ash Metallurgical Coke manufacturing unit at R.S. No. 5, Plot No. 1, Village Khiri, Tal Jodia, district Jamnagar, Gujarat. The said EC was later transferred in the name of M/s. Shreeji Coke and Energy Private Limited by the Ministry vide letter J-11011/314/2010-IA.II(I) dated 07.01.2022 under the provisions of EIA Notification 2006.

40.12.3 The instant proposal is for seeking amendment in EC dated 29.03.2011 and subsequent transfer dated 07.01.2022 w.r.t. the following as detailed below:

S. No.	Para of EC issued by MoEF&CC	Details as per the EC	To be revised/ read as	Justification/ reasons
1.	EC Condition No. Sub	Proposed expansion (14,000 MT/month to 20,800 MT/month of existing low Ash Metallurgical Coke manufacturing Unit at R.S. No 5, Plot. 1, Village Khiri, Tal Jodia, District Jamnagar, Gujarat by M/S Global Coke Limited- regarding Environment Clearance.	Proposed expansion (14,000 MT/month to 20,800 MT/month of existing low Ash Metallurgical Coke manufacturing Unit at, survey nos. 68,69,70,71,72,73,74,75), Village Khiri, Tal Jodia, District Jamnagar, Gujarat by M/S Global Coke Limited- regarding Environment Clearance.	During occupancy of Global Coke Ltd, the plant could not be operated at full-fledged capacity and hence CTO from GPCB (for full capacity) could not be obtained. Now, Current CTO is valid for 14400 MT/month (pre-EC) and EC obtained for expansion 6400 MT/month (total capacity 20800 MT/month) was started; CTO applied during 2011-2014, but not granted. In other words, expansion (for which EC obtained) was started and CTO applied, but could not be granted due to some other non-compliances.
2.	EC Condition No. 2	The Ministry of Environment and Forest has examined your application. It is noted that M/s Global Coke Limited have proposed for expansion from 14,000 MT/month to 20,800 MT/month of existing low Ash Metallurgical Coke manufacturing Unit at Village Khiri,		Further, upon review new management came to know that one piece of land (old Survey no. 12, new survey number 68 admeasuring around 9 Acres) had been part of the layout at time of TOR, Public Hearing and EC applications. The land area of both

S. No.	Para of EC issued by MoEF&CC	Details as per the EC	To be revised/ read as	Justification/ reasons
		Taluka Jodia, District Jmanagar in Gujarat. No forest land requires for the proposed expansion is 36 acers, Which is already acquired. Low Ash Coal(28,500 MTPM) will be imported from china, Australia and other countries through Jamnagar/ Kutch Ports and brought to the plant site by road and unloaded at coal storage yard. To mitigate the pollution, based heat recovery power plant will be installed. It is proposed to install 12MW capative power plant in near future. Existing coke oven batteries will be faced out. Rs. 2.5 Crores and Rs 1.0 lakha/year will be earmarked towards the capital cost and recurring cost/ annum for environmental pollution control measures		survey numbers was also mentioned in EC. As per all documents, land is 36 Acres ( <u>27 Acres Existing and 9 Acres proposed</u> ), which comprise of <u>27 Acre S. no. 5 (New survey no. 69,70,71,72,73,74,75)</u> and <u>9 Acres is addition (Old s. no. 12 – new S. no. 68).</u>

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

**Deliberations by the Committee:**

40.12.5 The Committee noted the following:

1. The EAC noted that M/s. Global Coke Limited was initially accorded Environment Clearance by the Ministry vide letter No. J-11011/314/2010-IA.II(I) dated 29.03.2011 for proposed expansion (14,400 MT/moth to 20,800 MT/month) of existing Low Ash Metallurgical Coke manufacturing unit at R.S. No. 5, Plot No. 1, Village Khiri, Tal Jodia, district Jamnagar, Gujarat. The said EC was later transferred in the name of M/s. Shreeji Coke and Energy Private Limited by the Ministry vide letter J-11011/314/2010-

IA.II(I) dated 07.01.2022 under the provisions of EIA Notification 2006. Further, PP has sought amendment in the said EC as detailed in para 40.12.3 above. The EAC during deliberated observed that the PP is able to present clearly the amendments/modifications sought in the instant proposal and needs to come with the revised proposal clearly stating the amendment/modifications sought for each point in a tabular form along with proper justification for each point where amendment is required. PP shall also compare what was given as per TOR, Draft EIA report and in EIA report against each point for which amendment is sought.

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

#### **Recommendations of the Committee:**

- 40.12.6 In view of the foregoing and after detailed deliberations, the committee recommended to **defer the proposal** due to certain deficiencies in the proposal and sought requisite information on the points referred at para no. 40.12.5 above. The proposal shall be considered after submission of requisite information and updating the Report on Parivesh Portal.

**\*\*\***

#### **Consideration of ToR Proposal**

##### **Agenda 40.13**

- 40.13 Regularization of existing rolling mill in Compliance of Notification S.O. 3250(E) dt. 20.07.2022 for manufacturing of TMT Bars, CTD Bars, Re Bars and Angles (50 TPD) by M/s. Garg Steels Udyog India Pvt. Ltd., Unit – II, located at Sy. Nos. 296/7/3, 296/7/2, 296/7, Bollaram, Jinnaram Mandal, Sangareddy District, Telangana - Consideration of TOR as per Ministry's Notification dated 20.07.2022**

**[Proposal No. IA/TG/IND1/430584/2023, File No. IA-J-11011/214/2023-IA-II(IND-I)  
[Consultant: Team Labs And Consultants; Valid upto 09.12.2025]**

- 40.13.1 M/s. Garg Steels Udyog India Pvt. Ltd., Unit – II has made an application online vide proposal No. IA/TG/IND1/430584/2023 dated 25.05.2023 along with Form I, pre-feasibility report, proposed ToR for undertaking EIA study for appraisal of Regularization of existing rolling mill in Compliance of Notification S.O. 3250(E) dt. 20.07.2022 for manufacturing of TMT Bars, CTD Bars, Re Bars and Angles (50 TPD) Terms of Reference (ToR) in the MoEF&CC. 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 attracts general condition due to the site is located in critically polluted area of Patancheru - Bollaram and appraised at Central Level.
- 40.13.2 Name of the EIA consultant: TEAM LABS AND CONSULTANTS, Hyderabad. [NABET Accreditation No. NABET/EIA/2124/RA 0242 Valid till 24.09.2024].
- 40.13.3 The project of M/s. Garg Steels Udyog India Pvt. Ltd., Unit – II located at Sy. Nos. 296/7/3, 296/7/2, 296/7, Bollaram, Jinnaram Mandal, Sangareddy District, Telangana – 502325 is for Regularization (as per new Notification S.O. no. 3250 (E) dated 20<sup>th</sup> July 2022) of existing rolling mill for manufacturing of TMT Bars, CTD Bars, Re Bars and Angles (50 TPD) in the existing plant area of 0.81 ha (2 acres or 8093.71 m<sup>2</sup>). No additional land is required.
- 40.13.4 Environmental site settings

S. No	Particulars	Details		
i.	Total Land	The total plant area is 0.81 ha (2 acres or 8093.71 m <sup>2</sup> ). No additional land is required.		
ii.	Land acquisition details as per MoEF&CC O.M. dated 7/10/2014	M/s. Garg Steels Udyog India Pvt. Ltd., Unit – II is an existing industrial unit located at Sy. Nos. 296/7/3, 296/7/2, 296/7, Bollaram, Jinnaram Mandal, Sangareddy District, Telangana – 502325.		
iii.	Existence of habitation & involvement of R & R, if any	R&R is not involved  <b>Nearest Habitation:</b> KBR colony (Bollaram municipality) - 0.35 km - N direction		
iv.	Latitude and Longitude of the project site	<b>Point</b>	<b>Latitude</b>	<b>Longitude</b>
		A	17°33'13.79"N	78°20'0.31"E
		B	17°33'12.34"N	78°20'0.10"E
		C	17°33'12.01"N	78°20'2.15"E
		D	17°33'11.74"N	78°20'4.29"E
		E	17°33'11.54"N	78°20'5.79"E
		F	17°33'12.98"N	78°20'6.30"E
		G	17°33'13.27"N	78°20'4.20"E
H	17°33'13.61"N	78°20'1.79"E		
v.	Elevation of the project site	569 – 582 m above mean sea level		
vi.	Involvement of Forest	No Forest land is involved in the project site.		

S. No	Particulars	Details											
	land, if any												
vii.	Water body (Rivers, Lakes, Pond, Nala, Natural Drainage, Canal etc.) exists within the project site as well as study area	<b>Project Site:</b> Nil <b>Study Area:</b> <table border="1"> <thead> <tr> <th>Water body</th> <th>Distance (Km)</th> <th>Direction</th> </tr> </thead> <tbody> <tr> <td>Nearest tank</td> <td>0.07</td> <td>S</td> </tr> <tr> <td>Pamula Vagu</td> <td>3.61</td> <td>E</td> </tr> </tbody> </table>			Water body	Distance (Km)	Direction	Nearest tank	0.07	S	Pamula Vagu	3.61	E
Water body	Distance (Km)	Direction											
Nearest tank	0.07	S											
Pamula Vagu	3.61	E											
viii.	Existence of ESZ/ESA/National Park/ Wildlife Sanctuary / Biosphere Reserve/Tiger Reserve etc. if any within the study area	Nil  <b>List of PF/RF:</b> Kazipalli RF – 1.97 km - NE direction											
ix.	CPA/SPA	The site is located in critically polluted area of Patancheru, CEPI action plan and compliance of ministry OM included in EIA report.											

40.13.5 Existing project was accorded consent for establishment for manufacturing TMT Bars, CTD Bars, Re Bars and Angles (50 TPD) vide order no. BOL-138/PCB/ZO/RCP/CFE/2005-573 dt: 04.10.2005 in the name of M/s. L.N. Ispat Pvt. Ltd., subsequently obtained consent for operation vide Order No. APPCB/ZO/RCP/BLRM/138/W & A/2007-1241, dated 09.02.2007 in the name of M/s. Garg Steels Unit-II. The unit had consent & authorization order (renewal) vide Order No. TSPCB/ZO/RCP/BLRM/138/CFO/2023-230824192286, dated 25.05.2023 in the name of M/s. Garg Steels Udyog India Pvt. Ltd., Unit – II (Formerly M/s. Garg Steels) valid till 20.07.2023.

40.13.6 Implementation status of the existing CFE/CFO

S. No.	Consent	Production Capacity
1	Consent for establishment vide Order No. BOL-138/PCB/ZO/RCP/CFE/2005-573 dt: 04.10.2005 in the name of M/s. L.N. Ispat Pvt. Ltd.	TMT Bars, CTD Bars, Re Bars and Angles: 50 TPD
2	Consent for operation clarification vide Lr. No. BLRM-138/PCB/ZO/RCP/2007-1167 dt. 22.01.2007	CFO Clarification regarding change of fuel from furnace oil to coal.
3	Consent for operation vide Order No. APPCB/ZO/RCP/BLRM/138/W & A/2007-1241, dated 09.02.2007 in the name of M/s. Garg Steels Unit-II	TMT Bars, CTD Bars, Re Bars and Angles: 50 TPD
4	Consent for operation vide Order No. APPCB/ZO/RCP/BLRM/138/W & A/2008-399, dated 26.12.2008 in the name of M/s. Garg Steels Unit-II	TMT Bars, CTD Bars, Re Bars and Angles: 50 TPD
5	Consent for operation vide Order No. APPCB/ZO/RCP/BLRM/138/HWM/2012-, dated 21.06.2012 in the name of M/s. Garg Steels Unit-II	TMT Bars, CTD Bars, Re Bars and Angles: 50 TPD

S. No.	Consent	Production Capacity
6	Consent for operation vide Order No. TSPCB/ZO/RCP/BLRM/138/W & A/2015-1035, dated 19.05.2015 in the name of M/s. Garg Steels Unit-II	TMT Bars, CTD Bars, Re Bars and Angles: 50 TPD
7	Consent for operation vide Order No. TSPCB/ZO/RCP/BLRM/138/CFO/2017-2184, dated 19.12.2017 valid till 30.11.2022 in the name of M/s. Garg Steels Udyog India Pvt. Ltd., Unit – II	TMT Bars, CTD Bars, Re Bars and Angles: 50 TPD
8	Consent and Authorization order for renewal vide Order No. TSPCB /ZO/ RCP/BLRM/ 138/CFO/2023-230824192286, dated 25.05.2023 valid till 20.07.2023 in the name of M/s. Garg Steels Udyog India Pvt. Ltd., Unit – II.	TMT Bars, CTD Bars, Re Bars and Angles: 50 TPD

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

Product	Existing Quantity (TPD)
TMT Bars, CTD Bars, Re Bars and Angles	50
<b>Configuration</b>	
Re heating furnace	10

40.13.8 The details of the raw material requirement for the existing project along with its source, distance and mode of transportation is given as below.

Description	Units	Quantity	Source of raw material	Distance, km	Mode of transport
M.S. Billets	TPD	53	From IDA bollaram IF units	5	Road
Furnace Oil	KLPD	2.0	Hyderabad	24	Road

40.13.9 Existing water requirement is 5 KLD and same is drawn from bore well. Water is only used for cooling and domestic purpose.

40.13.10 Existing power requirement of 800 KVA is sourced from Telangana state southern power distribution company Limited (TSSPDCL).

40.13.11 Capital incurred for the existing project is Rs. 67.6 lakhs. The existing employment is 50 nos.

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

40.13.13 Proposed Terms of Reference [Baseline data collection period: March – May 2023]

S. No.	Attribute	Parameters	Remark
--------	-----------	------------	--------

S. No.	Attribute	Parameters	Remark
1	Meteorology	Wind Speed and Direction, Temperature, Relative Humidity and Rainfall	Hourly recording at project site
2	Ambient air quality	RSPM(PM <sub>10</sub> ), PM <sub>2.5</sub> , SO <sub>2</sub> , NO <sub>2</sub> and CO	<b>8 locations</b> 24 hourly sampling twice a week for PM <sub>10</sub> , PM <sub>2.5</sub> , SO <sub>2</sub> and NO <sub>2</sub> . Other parameters and Heavy metals monitored once in a month.
3	Water quality	Physical, Chemical and Bacteriological Parameters as per APHA and IS standards	<b>10 locations (GW-8, SW-2)</b>
4	Noise levels	Noise levels in dB(A)	Once during study period at <b>8 locations</b>
5	Soil characteristics	Soil profile, characteristics, soil type and texture, NKP value etc.	Once during study period at <b>8 locations</b>
6	Socio-economic aspects	Socio-economic characteristics	Secondary data from Census-2011 and other agencies Primary data based on survey
7	Ecology	Existing terrestrial flora and fauna	Through field visit and secondary data
8	Land use	Land use for different categories (Satellite Imagery and Ground truthing)	Based on satellite data for core and buffer zone.

#### 40.13.14 CEPI Action Plan

Environment	Mitigation Measures		Compliance
Air	i	Stack emissions levels should be stringent than the existing standards in terms of the identified critical pollutants	Stack emissions from the reheating furnace of rolling mill being/will be maintained within 115 mg/Nm <sup>3</sup> .  Wet scrubber is used as an air pollution control equipment for the reheating furnace for control of the dust emissions generated in the rolling mill.
	ii	CEMS may be installed in all large/ medium red category industries (air polluting) and	The unit is a small-scale industry. Third party monitoring is adopted.

Environment	Mitigation Measures		Compliance
		connected to SPCB and CPCB server	
	iii	Effective fugitive emission control measures should be imposed in the process, transportation, packing etc.	<ul style="list-style-type: none"> <li>• Water sprinkling systems for dust suppression are provided to control fugitive air pollution</li> <li>• Good housekeeping practices are maintained.</li> <li>• Every possible effort being done to conserve the raw materials, energy and water resource.</li> </ul>
	iv	Transportation of materials by rail/conveyor belt, wherever feasible	MS Billets from the nearby SMS units within IDA bollaram are used in rolling mill.
	v	Encourage use of cleaner fuels (pet coke/furnace oil/ LSHS may be avoided)	Furnace oil is used as fuel in reheating furnace at a low quantity.
	vi	Best Available Technology may be used. For example, usage of EAF/SAF/IF in place of Cupola furnace. Usage of Supercritical technology in place of sub-critical technology.	Not Applicable.
	vii	Increase of green belt cover by 40% of the total land area beyond the permissible requirement of 33%, wherever feasible.	Green belt area of 0.271 ha (33%) of total area shall be developed within the plant boundary. Avenue plantation along the connecting roads will be implemented to achieve balance 7% greenbelt area.
	viii	Stipulation of greenbelt outside the project premise such as avenue plantation, plantation in vacant areas, social forestry, etc.	Avenue plantation in vacant area will be implemented as a part of corporate environment responsibility (CER).
	ix	Assessment of carrying capacity of transportation load on roads inside the industrial premises. If the roads required to be widened, shall be prescribed as condition.	There is no additional traffic anticipated due to this project and the proposal is for regularization of existing rolling mill.
<b>Water</b>	i	Reuse/recycle of treated wastewater, wherever feasible.	No trade effluent.

<b>Environment</b>	<b>Mitigation Measures</b>		<b>Compliance</b>
	ii	Continuous monitoring of effluent quality/quantity in large and medium Red Category Industries (water polluting)	The unit is a small-scale industry. Third party monitoring is adopted.
	iii	A detail water harvesting plan may be submitted by the project proponent.	No water harvesting was allowed in critically polluted area by Telangana State Pollution Control Board (TSPCB). However, it is proposed to store storm water runoff in 20 m <sup>3</sup> sump.
	iv	Zero liquid discharge wherever techno-economically feasible.	No trade effluent
	v	In case, domestic wastewater generation is more than 10 KLD, the industry shall install ETP.	Domestic wastewater (capacity 3.5 KLD) is sent to septic tank followed by soak pit.
<b>Land</b>	i	Increase of greenbelt cover by 40% of the total land area beyond the permissible requirement of 33%, wherever feasible for new projects.	Green belt area of 0.271 ha (33%) of total area shall be developed within the plant boundary. Avenue plantation along the connecting roads will be implemented to achieve balance 7% greenbelt area.
	ii	Stipulation of greenbelt outside the project premise such as avenue plantation, plantation in vacant areas, social forestry, etc.	Avenue plantation in vacant area will be implemented as a part of corporate environment responsibility (CER).
	iii	Dumping of waste (fly ash, slag, red mud, etc.) may be permitted only at designated locations approved by SPCBs/PCCs.	Mill scale is sent to Induction furnace units/Sinter plants for reuse Waste oil is sent to Authorized recyclers/ Reprocessors Scrap is sent to recyclers.
	iv	More stringent norms for management of hazardous waste. The waste generated should be preferably utilized in co-processing.	Waste oil is stored in drums and sold to authorized recyclers
<b>Other Condition (Additional)</b>	i	Monitoring of compliance of EC conditions may be submitted with third party audit every year.	Not Applicable
	ii	The % of the CER may be at least 1.5 times the slabs given in the OM dated 01.05.2018 for SPA and 2 times for CPA in case of Environment Clearance.	The total existing project cost is Rs. 67.6 lakhs. CER budget will be detailed in EIA report.

### **Written representations:**

40.13.15 During the meeting, based on the deliberations made by the EAC, the project proponent vide email dated 21.07.2023 submitted the CEPI action plan as updated at para 40.13.14 above.

### **Deliberation by the Committee**

40.13.16 The Committee noted the following:

- i. The instant proposal is for regularisation (as per new Notification S.O. no. 3250 (E) dated 20<sup>th</sup> July 2022) of existing rolling mill for manufacturing of TMT Bars, CTD Bars, Re Bars and Angles (50 TPD) in the existing plant area of 0.81 ha (2 acres or 8093.71 m<sup>2</sup>).
- ii. The Industry was accorded Consent for Establishment for manufacturing TMT Bars, CTD Bars, Re Bars and Angles (50 TPD) vide order no. BOL-138/PCB/ZO/RCP/CFE/2005-573 dated 04.10.2005 in the name of M/s. L.N. Ispat Pvt. Ltd., subsequently obtained consent for operation vide Order No. APPCB/ZO/RCP/BLRM/138/W & A/2007-1241, dated 09.02.2007 in the name of M/s. Garg Steels Unit-II. The unit had consent & authorization order (renewal) vide Order No. TSPCB/ZO/RCP/BLRM/138/CFO/2023-230824192286, dated 25.05.2023 in the name of M/s. Garg Steels Udyog India Pvt. Ltd., Unit – II (Formerly M/s. Garg Steels) valid till 20.07.2023.
- iii. The site is located in critically polluted area of Patancheru. In pursuance to MoEF&CC OMs dated 31st October, 2019 & 30<sup>th</sup> 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 prepared and included in EIA/EMP report.
- iv. PP submitted that total land area is 0.81 ha (2 acres or 8093.71 m<sup>2</sup>) which is under the possession of the company and is already converted for industrial purpose. No additional land is required.
- v. The nearest habitation is KBR colony (Bollaram municipality) at a distance of 0.35 km in the North of the the project site. The EAC is of the opinion that PP shall strictly implement the environmental safeguard measures proposed to minimise the impact on the habitation of the locals.
- vi. The water requirement for the project is 5 KLD which is met from bore well.

### **Recommendations of the Committee**

40.13.17 After deliberations, the Committee **recommended** the project proposal for prescribing following specific ToRs for undertaking detailed EIA and EMP study without Public Hearing [As per Ministry's Notification dated 20.07.2022] in addition to the generic ToRs enclosed at **Annexure-1** read with additional ToRs at **Annexure-2**:

- (i) In pursuance to MoEF&CC OMs dated 31<sup>st</sup> October, 2019 & 30<sup>th</sup> 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 prepared and included in EIA/EMP report.

- (ii) The nearest habitation is KBR colony (Bollaram municipality) at a distance of 0.35 km in the North of the the project site. Project Proponent shall take appropriate environmental safeguard measures to minimise the impact on the habitation of the locals. PP needs to strengthen green belt all around the plant area to reduce the dust pollution. The PP shall also include this location in its environmental monitoring programme.
- (iii) Water requirement of 5 KLD is met from Bore Well. PP shall also explore the possibility for alternate source of water to reduce dependency on ground water.
- (iv) The PP shall do large Container type of and Vertical garden type of green belt models with tall, evergreen, broad leaved trees all along the boundary of the project.

\*\*\*

### **Consideration in Environment Clearance Proposal**

#### **Agenda no 40.14**

**40.14 Expansion in Ferro Alloy (24,000 TPA to 28,800 TPA) & Billet Production (36,000 TPA) by M/s Aryavarta Khanija Private Limited, located at Village & Post - Hat Ashuria, Mauza – Basudevpur, P.S. - Barjora, District - Bankura, Pin - 722204, State- West Bengal, India. – Consideration of Environmental Clearance under the provisions of para 7(ii) of EIA Notification, 2006.**

**[Proposal No. IA/WB/IND1/411238/2022; File No. IA-J-11011/410/2019-IA-II(IND-I)]  
[Consultant: Chandigarh Pollution Testing Laboratory –EIA Division; Valid upto 12.02.2025]**

40.14.1 M/s Aryavarta Khanija Private Limited has made an online application vide proposal No-IA/WB/IND1/411238/2022 dated 21<sup>st</sup> May, 2022 along with copy of EIA/EMP report, in prescribed format (CAF, Form – I Part A, B &C) and certified compliance report seeking Environment Clearance (EC) under the provisions of para 7(ii) of the EIA Notification, 2006 for the project mentioned above. The proposed project activity is listed at S. No. 3(a) Metallurgical industries (ferrous & non-ferrous) under Category “A” of the schedule of the EIA Notification, 2006 and appraised at Central Level.

40.14.2 Name of the EIA consultant: M/s. Chandigarh Pollution Testing Laboratory –EIA Division [List of ACOs with their Certificate / Extension Letter no. NABET/EIA/2225/RA 0250; Valid up to 12.02.2025, as on May 31, 2023].

#### **Details submitted by Project proponent**

40.14.3 The details of the ToR are furnished as below:

<b>Date of Application</b>	<b>Consideration</b>	<b>Details</b>	<b>Date of Accord</b>	<b>ToR Validity</b>
26.11.2019	Reconstitute Expert Appraisal Committee (Industry-I) during its 14 <sup>th</sup> meeting held on 23-24 <sup>th</sup> December, 2019.	Terms of Reference	21.01.2020	20.02.2024

40.14.4 The project of M/s. Aryavarta Khanija Private Limited located at Village & Post - Hat Ashuria, Mauza – Basudevpur, P.S. - Barjora, District - Bankura, West Bengal is for expansion in Ferro Alloy from 24,000 TPA to 28,800 TPA Product Mix of Silico Manganese, Ferro Manganese and Ferro Silicon with 2 nos. of Submerged Arc Furnace (2 x 9 MVA) and 36,000 TPA Billets with 1 no. of Induction Furnace of 15 Ton Capacity under the provisions of para 7(ii) of the EIA Notification, 2006.

40.14.5 **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:

<b>Sr. No.</b>	<b>Conditions</b>	<b>Compliance</b>
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.	The public hearing of M/s. Aryavarta Khanija Pvt. Ltd. was held on 27.01.2021 for 24,000 TPA of Product Mix of Silico Manganese/ Ferro Manganese /Ferro Silicon with 2 Nos. of Sub – Merged Arc Furnace (2 X 9 MVA) and 36,000 TPA of Billets with 1 no. of Induction Furnace (1 X 15 TPH)
2.	There should not be change in Category of the project from 'B2' to 'B1' or 'A' due to proposed modernization or expansion.	There is no change in the Category of the project due to proposed expansion. It is a Category-A project.
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-à-vis the area mentioned in the EC, based on which public hearing has been held earlier.	There is no additional land acquisition or forest land diversion involved for the proposed expansion. The land area for which EC was granted of the proposed project was 3.877ha. However, the land under actual possession with the promoter company is 3.359 ha.
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 proposed expansion is 20% of the previous approved capacity of 24,000 TPA Ferro alloys, i.e. 28,800 TPA. The billet production will be same as previous approved EC.
5.	Predicted environmental quality parameters arising out of proposed expansion/modernization shall be within	Predicted environmental quality parameters arising out of proposed expansion are within the prescribed norms

<b>Sr. No.</b>	<b>Conditions</b>	<b>Compliance</b>
	the prescribed norms and the same shall be maintained as per prescribed norms.	and the same shall be maintained as per prescribed norms in future also.
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 does not result in reduction in the greenbelt area; they are going to develop 36.6% of the area as green belt which comes as 1.23 Ha. Earlier the total plot area was 3.877ha and green area was 1.28ha i.e.33% of the total area. But now after acquisition, the total area reduced to 3.359ha and green area is increased to 1.23ha i.e. 36.6% of the total plot area.
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.	Integrated Regional Office, MoEFCC, Kolkata visited the project area on 1st Sept 2022. Only the construction of the administrative building, furnace shed foundation, weighbridge, one 132 KV Line Tower and Toilet is under process. Company has also obtained Consent to Establish from West Bengal Pollution Control Board (WBPCB) vide memo no. 614-2N-35/2020 (E) dated 8th September, 2021. As the project has not been set up, EC stipulated conditions for the last EC could not be verified.
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.	The proposed expansion is 20% of the previous approved capacity of 24,000 TPA Ferro alloys, i.e. 28,800 TPA. Therefore, Public Consultation is not applicable in this case.
9.	Effluent monitoring including air quality monitoring systems as specified in the existing EC, if stipulated, should have been installed.	There is no generation of liquid effluent, hence no online monitoring system is to be required. The air quality monitoring systems will be installed as per the requirement.

#### 40.14.6 Environmental site settings

<b>S. No.</b>	<b>Particulars</b>	<b>Details</b>	<b>Remarks</b>
i.	Total land	The proposed expansion will be carried out in land having area 3.359 ha and the same is under possession of the promoter. Earlier, EC was granted for an area measuring 3.877 ha, which was not completely under possession. Thus, now there is proposal that the unit will set up in area of 3.359 ha (which is completely under the possession of the	Acquired

S. No.	Particulars	Details	Remarks				
		promoter) which is sufficient to carry out expansion. The land was Agriculture Land and converted to Industrial purpose.					
ii.	Land acquisition Details as per MoEF&CC O.M. dated 7/10/2014	Land acquisition is completed.					
iii.	Existence of habitation & involvement of R&R, if any.	The villages and their inhabitants at the project site will not be disturbed from their settlements due to the proposed project. Therefore, neither villages nor any part of village or any hamlet will be disturbed during the project. As the project operations will not disturb or relocate any village or settlement, no adverse impact is anticipated on any human settlement.  Nearest Habitation: Songram – 1.0 km WNW					
iv.	Latitude and Longitude of the project site	<table border="1"> <tr> <td><b>Latitude</b></td> <td>23°24'36.33"N, 23°24'33.01"N, 23°24'29.44"N, 23°24'32.28"N, 23°24'34.88"N</td> </tr> <tr> <td><b>Longitude</b></td> <td>87°17'49.01"E, 87°17'56.36"E, 87°17'54.48"E, 87°17'45.68"E, 87°17'46.74"E</td> </tr> </table>	<b>Latitude</b>	23°24'36.33"N, 23°24'33.01"N, 23°24'29.44"N, 23°24'32.28"N, 23°24'34.88"N	<b>Longitude</b>	87°17'49.01"E, 87°17'56.36"E, 87°17'54.48"E, 87°17'45.68"E, 87°17'46.74"E	
<b>Latitude</b>	23°24'36.33"N, 23°24'33.01"N, 23°24'29.44"N, 23°24'32.28"N, 23°24'34.88"N						
<b>Longitude</b>	87°17'49.01"E, 87°17'56.36"E, 87°17'54.48"E, 87°17'45.68"E, 87°17'46.74"E						
v.	Elevation of the project site	76.2 m AMSL					
vi.	Involvement of Forest land if any.	No forest land is involved.					
vii.	Water body exists within the project site as well as study area	<u>Project site:</u> Nil  <u>Study area:</u> Damodar River– 5.0 km, Kanjor Reservoir– 3.12 km,					
viii.	Existence of ESZ/ESA/national park/wildlife sanctuary/biosphere reserve/tiger reserve/elephant reserve etc. if any within the study area	<u>Study area:</u>  No national park/wildlife sanctuary/biosphere reserve/tiger reserve/elephant reserve etc. are reported to be located in the core and buffer zone of the project.					

40.14.7 The existing project was accorded environmental clearance vide letter no. J-11011/410/2019-IA II(I) dated 06<sup>th</sup> August, 2021. Earlier the project report was prepared on less capacity by the CA and submitted the same to MoEF&CC for EC. After realizing the mistake, it was submitted the project for expansion without implementing the earlier EC completely and the same was also discussed during EAC meeting on dated 03/11/2022, and as per Minutes of

MoEF&CC also agreed to increase the capacity for 40% of the existing capacity of 24,000 in two parts. So, PP has applied for first 20% of the capacity increase. (24000 X 20% = 4,800 = 28,800 TPA). Also, another reason for not implementing the earlier EC was COVID. Now PP has started Civil Foundations of the First Phase (1x9 MVA Ferro Alloys Unit) of the Project, PP is going to complete the First Phase on or before November 2023.

40.14.8 Implementation status of existing EC:

Facilities envisaged	Consent Status (CTE/CFO)	Implementations on status	Production details	Details of Violation, if any
2 x 9 MVA SAF	CTE obtained on Dated 08.09.2021	<b>Partially implemented</b>	24,000 TPA Ferro Alloy	NO
Induction Furnace (1x15 TPH)	CTE on Dated 08.09.2021	<b>Partially implemented</b>	36,000 TPA Billets	NO
<i>No construction work was started till April 2022, however, construction of the administrative building, furnace shed foundation, weighbridge, one 132 KV Line Tower and Toilet was started w.e.f. 1st May 2022 onwards</i>				

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

S. No.	Name	Existing Units		Proposed Units		After Expansion	
		Configuration	Production TPA	Configuration	Production TPA	Configuration	Production TPA
1.	Ferro alloys (FeMn, SiMn, FeSi)	<b>Submerged Arc Furnace</b> 9 MVA x 2 Nos  <b>Induction Furnace</b> 1x15 TPH	24,000	<b>Submerged Arc Furnace</b> 9 MVA x 2 Nos  <b>Induction Furnace</b> 1x15 TPH	4800	<b>Submerged Arc Furnace</b> 9 MVA x 2 Nos  <b>Induction Furnace</b> 1x15 TPH	28,800
2.	Billets	<b>Induction Furnace</b> 1x15 TPH	36000	<b>Induction Furnace</b> 1x15 TPH	0	<b>Induction Furnace</b> 1x15 TPH	36000

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

**Material Balance for Making 28,800 TPA Ferro Manganese**

Input	QTY/TPA	Output	QTY/TPA
Manganese Ore	65,008	Ferro Manganese	28,800
Coke	16,854.4	FeMnSlag	23,712
Dolomite	18,057.6	Bag Filter Dust	12,520
Carbon Paste	616	LOI	35,504
Total	1,00,536	Total	1,00,536

**Material Balance for Silico Manganese (TPA)**

Input	QTY/TPA	Output	QTY/TPA
Manganese Ore	63,162	Silico Manganese	28,800
Ferro Manganese Slag	14,355	Slag	28,800
Quartz	17,226	Bag Filter Dust	14,414.2
Dolomite	11,484	Oxidation/Burning Losses	54,884
Coke	20,097		
Carbon Paste	574.2		
Total	1,26,898.2	Total	1,26,898.2

**Material Balance for Ferro Silicon (TPA)**

Input	QTY/TPA	Output	QTY/TPA
Charcoal	29,700 (1.8)	Ferro Silicon	16,500
Quartz	28,050 (1.7)	Slag Crust	3,690
MS Scrap	3,300 (0.2)	Bag Filter dust	5,230
Carbon Paste	495 (0.03)	Oxidation/ Burning losses	36,125
Total	61,545	Total	61,545

**Source and Mode of Transportation**

Source	Distance from Site	Mode of transportation
Local and International markets	100 Km	By Road

40.14.11 The total water requirement of the project is estimated at 96 KLD. Domestic water requirement is 16.0 KLD and for cooling purposes is 80 KLD. The daily requirement of water will be sourced from Damodar River supplied by DVC & permission for the same has been obtained vide letter dated 07.01.2021 for drawl of 0.021 MGD from River Damodar D/S of Maithon & Panchet Reservoir.

40.14.12 The total power requirement for the proposed project is estimated as 25 MW. The demand of electricity will be sourced from Damodar Valley Corporation. DG Set of 500 KVA will be used for power backup in case of power failure. Diesel for D.G. sets required is @ 50 L/hr.

40.14.13 Baseline Environmental Studies

Period	December, 2019 – March, 2020
AAQ parameters at 8 locations	<ul style="list-style-type: none"> <li>• PM2.5 = 24.20 to 34.80 µg/m<sup>3</sup></li> <li>• PM10 = 52.5 to 64.50 µg/m<sup>3</sup></li> <li>• SO2 = &lt;4.0 to 10.14 µg/m<sup>3</sup></li> <li>• NO2 = 11.80 to 25.05 µg/m<sup>3</sup></li> </ul>
AAQ modelling (Incremental GLC)	<p><b><u>For PM</u></b> The maximum predicted GLC for 24 hourly average concentrations before the proposed expansion at site shall be 0.5 ug/m<sup>3</sup>. The maximum predicted concentration of PM10 after unit operation will be <b>65.0 ug/m<sup>3</sup></b> which is below the prescribed standard of 100 ug/m<sup>3</sup>.</p> <p><b><u>For SOx</u></b> The maximum predicted GLC for 24 hourly average concentrations before</p>

	<p>the proposed expansion at site shall be 0.1 ug/m<sup>3</sup>. The maximum predicted concentration of SO<sub>x</sub> after unit operation will be <b>10.24 ug/m<sup>3</sup></b> which is below the prescribed standard of 80 ug/m<sup>3</sup>.</p> <p><b><u>For NO<sub>x</sub></u></b></p> <p>The maximum predicted GLC for 24 hourly average concentrations before the proposed expansion at site shall be 0.2 ug/m<sup>3</sup>. The maximum predicted concentration of SO<sub>x</sub> after unit operation will be <b>25.25 ug/m<sup>3</sup></b> which is below the prescribed standard of 80 ug/m<sup>3</sup>.</p>
Period	<b>February, 2023</b>
AAQ parameters at 8 locations	<ul style="list-style-type: none"> <li>• PM<sub>2.5</sub> = 15.0 to 39.0 µg/m<sup>3</sup></li> <li>• PM<sub>10</sub> = 40.0 to 91.0 µg/m<sup>3</sup></li> <li>• SO<sub>2</sub> = 4.0 to 16µg/m<sup>3</sup></li> <li>• NO<sub>x</sub> = 18 to 45 µg/m<sup>3</sup></li> <li>• CO = 0.3 to 1.1 mg/m<sup>3</sup></li> </ul>
AAQ modelling (Incremental GLC)	<p><b><u>For PM</u></b></p> <p>The maximum predicted GLC for 24 hourly average concentrations after the proposed expansion at site shall be 1.54 ug/m<sup>3</sup>. The maximum predicted concentration of PM<sub>10</sub> after unit operation will be <b>92.54 ug/m<sup>3</sup></b> which is below the prescribed standard of 100 ug/m<sup>3</sup>.</p> <p><b><u>For SO<sub>x</sub></u></b></p> <p>The maximum predicted GLC for 24 hourly average concentrations after the proposed expansion at site shall be 2.81 ug/m<sup>3</sup>. The maximum predicted concentration of SO<sub>x</sub> after unit operation will be <b>18.81 ug/m<sup>3</sup></b> which is below the prescribed standard of 80 ug/m<sup>3</sup>.</p> <p><b><u>For NO<sub>x</sub></u></b></p> <p>The maximum predicted GLC for 24 hourly average concentrations after the proposed expansion at site shall be 1.55 ug/m<sup>3</sup>. The maximum predicted concentration of SO<sub>x</sub> after unit operation will be <b>46.55 ug/m<sup>3</sup></b> which is below the prescribed standard of 80 ug/m<sup>3</sup></p>
Ground water quality at 8 locations	<p><b><u>7th December, 2019 – 6th March, 2020</u></b></p> <ul style="list-style-type: none"> <li>• pH varies from to 6.82 to 6.92.</li> <li>• Total Hardness varies from 180 to 268 mg/l.</li> <li>• Total Dissolved Solids varies from 640 to 720 mg/l.</li> <li>• Fluoride varies from 0.5 mg/l to 0.6 mg/l</li> <li>• Nitrate varies from 3.87 mg/l to 7.21 mg/l</li> <li>• Sulphate varies from 42.8 mg/l to 62.4 mg/l</li> <li>• Calcium varies from 43.29 mg/l to 62.52 mg/l</li> <li>• Magnesium varies from 17.28 mg/l to 26.88 mg/l</li> <li>• Iron varies from 0.76 mg/l to 0.93 mg/l</li> <li>• Heavy metals is &lt;2 mg/l</li> <li>• Total Coliform is absent</li> </ul> <p><b><u>February, 2023</u></b></p> <ul style="list-style-type: none"> <li>• pH varies from 6.59 to 7.45</li> <li>• Total Dissolved Solids varies from 168 to 580 mg/l.</li> <li>• Fluoride varies from 0.14 to 0.25 mg/l</li> <li>• Nitrate varies from 1.2 to 5.5 mg/l</li> <li>• Sulphate varies from 18 to 104 mg/l</li> <li>• Calcium varies from 28 to 97 mg/l</li> </ul>

	<ul style="list-style-type: none"> <li>• Magnesium varies from 8 to 36 mg/l</li> <li>• Iron varies from 0.15 to 0.72 mg/l</li> <li>• Heavy metals &lt;2 mg/l</li> <li>• Total Coliform is absent</li> </ul>
Surface water quality at 2 locations	<p><b><u>7th December, 2019 – 6th March, 2020</u></b></p> <ul style="list-style-type: none"> <li>• pH varies from to 7.23 to 7.5</li> <li>• Dissolved Oxygen varies from 5.8 to 6.7 mg/l.</li> <li>• Total Dissolved Solids varies from 165 to 228 mg/l.</li> <li>• Chloride varies from 11.98 mg/l to 31.80 mg/l</li> <li>• Nitrate varies from 2.30 mg/l to 4.79 mg/l</li> <li>• Sulphate varies from 14.60 mg/l to 28.60 mg/l</li> <li>• Calcium varies from 14.03 mg/l to 18.84 mg/l</li> <li>• Magnesium varies from 2.88 mg/l to 7.68 mg/l</li> <li>• Iron varies from 0.05 mg/l to 0.15 mg/l</li> <li>• Heavy metals is &lt;2 mg/l</li> <li>• Total Coliform varies from <math>1.1 \times 10^3</math> MPN/100 ml to <math>1.8 \times 10^3</math> MPN/100 ml</li> </ul> <p><b><u>February, 2023</u></b></p> <ul style="list-style-type: none"> <li>• pH -7.14-7.42</li> <li>• Total Hardness – 60-102 mg/l</li> <li>• Total Dissolved Solids- 128-244 mg/l.</li> <li>• Chloride-20-38 mg/l</li> <li>• Nitrate -2.5-4.5 mg/l</li> <li>• Sulphate – 19-41 mg/l</li> <li>• Calcium – 16-28 mg/l</li> <li>• Magnesium varies – 5-8 mg/l</li> <li>• Iron- &lt;0.05-0.16 mg/l</li> <li>• Heavy metals &lt;2 mg/l</li> </ul>
Noise levels at 8 locations	<p><b><u>7<sup>th</sup> December 2019 to 7<sup>th</sup> March 2020</u></b></p> <p>The baseline noise levels have been monitored at different locations as indicated in the Table 3.5 and graphical representation is given in Figure: 3.5 (a). Day time noise levels of residential area ranging between 45.36 to 52.47 dB (A). Whereas the night equivalents were in the range of 35.94 to 43.1 dB (A). Day equivalents and the Night equivalents were within the Ambient Noise standards of residential areas.</p> <p><b><u>February, 2023</u></b></p> <p>Day time noise levels of residential area ranging between 52.6 to 65.2 dB (A). Whereas the night equivalents were in the range of 46.2 to 56.2 dB (A). Day equivalents and the Night equivalents were within the Ambient Noise standards of residential areas.</p>
Traffic assessment study findings	<p>43 number of trucks will be used to transport raw material and finished products amounting to 215 PCU/day. Additionally, 99 vehicles (cars, two vehicles etc.) having 54.5 PCU/day will be used by the employees. The existing approach road from Metsil plant to our project site (500 m) will be strengthened to 6.0 m wide by the project proponent. Summarized Traffic</p>

	Data on Hatasuria-Sahebdihi-Pakhanna Road.				
	<b>Existing Traffic Scenario &amp; LOS</b>				
	Road	V (Volume in PCU/day)	C (Capacity in PCU/day)	Existing V/C Ratio	LOS
	MDR Intermediate lane road	1016	6000	0.17	A
	<b>Existing and Proposed Operation phase PCU's/day</b>				
	Operation Phase PCU's		Sahebdihi to Hatashuria Mor Road		
	Existing PCU/day		1016		
	Proposed PCU/day		539		
	Total PCU/day		1555		
	Carrying capacity of the MDR		6000		
	<b>LOS study of Proposed Project</b>				
	Road	Volume (PCU/day)	Capacity	V/C ratio	LOS
	Sahebdihi to Hatshuria Mor	1555	6000	0.25	B
Flora and fauna	No Schedule-I species found within the study area.				

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

S. No.	Waste	Source	Quantity	Disposal
1	Furnace Slag	Induction Furnace	23,712 TPA	Part of ferromanganese slag will be used as raw material for making Silico Manganese. The solid wastes are not hazardous. Slag will be crushed and after metal recovery, will be sold to contractors for use in road making and land filling.
2.	Dust	Bag Filters	12,520 TPA	Dust will be utilized for land filling.
3	Used Oil	DG sets	0.5 KI/Annum	Spent /used oil and grease from plant equipment and machineries will be collected in drums and sold to authorized re-processors

40.14.15 **Public Consultation:** (Earlier PH during EC dated 06.08.2021)

Details of advertisement given	The Public notice for public hearing held on 27.01.2021 was advertised in newspaper of Times of India, Kolkata Edition and local newspaper Bartaman on 21.12.2020
Date of public consultation	Public hearing was conducted at project site on 27.01.2021.

Venue	Village & Post - Hat Ashuria, Mauza – Basudevpur, P.S. - Barjora, District - Bankura, Pin - 722204, West Bengal
Presiding Officer	Additional District Magistrate (General). Bankura
Major issues raised	<ol style="list-style-type: none"> <li>1. Development of approach road from Metsil plant to proposed plant (500 m)</li> <li>2. Giving slag to local contractors and panchayats for road development</li> <li>3. Employment to local people</li> <li>4. Development of facilities in school, drinking water facility</li> <li>5. Concern about Health of local people</li> </ol>

**Action Plan as per Ministry's OM dated 30.9.2020**

Sl. No.	Issue raised	Action Plan with Time Frame	Budget
1.	Employment	Willing and employable youths will be identified in consultation with gram panchayat of Hat Asuria (25 Nos). They will be trained in Baljora ITI for trades namely electrician, fitters, welders, painters, and civil construction work, etc. Fees will be paid by us. Scholarship of Rs. 2500/-per month will be given to the trainees for the entire duration. After successful completion of training, the youths will be offered employment in company.	Rs.31.50 Lacs A) Stipend - Rs.9.00 Lacs (Rs.12,000 Stipend to 75 Persons) in Seven Years period. B) ITI Fee - Rs.22.50 Lacs (Rs.30,000 yearly fee for 75 Persons) in Seven Years period
2.	Infrastructure Development for Local Schools	PP will make separate toilets for boys and girls (in 3 local schools around the project, Hatasuria (2 schools) and Mandabani), kitchen in 3 local schools supplying mid-day meals, providing furniture, computers and colour printers	Rs.40.00 Lacs 24 Toilets - 4 Lacs 12 Kitchen - 6 Lacs 1,600 Tables & Chairs - 12.00 Lacs 48 Computers - 12 Lacs 12 Colour Printers 6 Lacs
3.	Drinking Water supply in nearby areas	Company will make bore wells, with pump, piping and RO system in 10 surrounding villages.	Rs.30.00 Lacs Bore with Pump & 20 Lacs RO - 0.5 Lacs (20 sets)
4.	Rain water Harvesting System	Company will make 10 recharge type shafts for ground water recharging in 2 nearby panchayat bhawans and community centres	Rs.20.00 Lacs Rs.2.50 Lacs each for 8 Panchayat Bhawans
5.	Health of Local People	Donate medical equipment like Beds, Stretcher, Oxygen Cylinder, Oxygen Concentrator, Air Purifier, AC in Health centre of Hatashuria & other villages	Rs.28.50 Lacs 20 Beds each Rs.1.00 Lac - Rs.20 Lacs

Sl. No.	Issue raised	Action Plan with Time Frame	Budget
			40 - Oxygen Cylinders - Rs.4.00 Lac Concentrator - Rs.3.00_Lacs 3 Nos of A.C. Rs.1.50 Lacs

40.14.16 The capital cost of the project is Rs. 110.35 Crores including the cost of expansion and the capital cost for environmental protection measures is proposed as Rs 342 Lakhs. The annual recurring cost towards the environmental protection measures is proposed as Rs 92 Lakhs. The proposed project will provide employment to total 99 numbers of people. The details of cost for environmental protection measures is as follows:

S. No.	Particulars	Existing (Rs. In lakhs)		Proposed (Rs. In lakhs)	
		Capital	Recurring	Capital	Recurring
1.	Pollution Control during construction stage (barricading around stockpiles, covers for aggregates and sand, water sprinkling system, smog gun, and wheel cleaning arrangement, pucca roads, and wastewater treatment systems.	10	--	10	--
2.	Air Pollution Control Systems (FES, Bag Filters, Chimney)	85	20	105	40
3.	Rainwater Harvesting System inside plant	15	5	20	5
4.	Wastewater Treatment & Recycling Systems	15	5	15	5
5.	Environment Management Department	35	20	35	20
6.	Environment Monitoring Instruments - CEMS (2), AAQ monitoring Instruments, Stack Monitoring Kit, Fine Dust samplers, RDS, Noise meter, Water testing devices, Piezometers.	50	7	80	8
7.	Noise Abatement Measures (acoustic enclosures, vibration free foundation)	10	1	10	1
8.	Occupational Health Management (basic instruments and ambulance)	20	5	20	5
9.	Green Belt Development	10	2	12	2
10.	Risk Mitigation Measures and PPEs	35	5	35	5
	<b>Total (Rs. in lakhs)</b>	<b>285</b>	<b>70</b>	<b>342</b>	<b>92</b>

40.14.17 The Greenbelt and plantation area will be developed in 1.23 ha/12290 m<sup>2</sup> of the total plant area i.e. 36.60 % so as to mitigate the effects of emissions from the plant. The main objective of the greenbelt is to provide a barrier between the plant and the surrounding areas. The treated wastewater from the plant will be utilized for the greenbelt development. Roads for vehicular movement will be paved and adequate mitigation measures will be provided to prevent fugitive emissions. The species selection will depend upon type of soil and local

species with good survival rate will be selected. The Fruit bearing/ Medicinal plants and local species will be planted for greenbelt development. Tree density of 2500 trees per hectare with local board leaf specification will be planted.

40.14.18 It has been reported that following will be resource consumption after the proposed change:

<b>Particulars</b>	<b>As per previous EC 06<sup>th</sup> August, 2021</b>	<b>After proposed change under para 7 (ii)</b>	<b>% increase</b>
Land	3.877 ha	3.359 ha (Land under actual possession)	13.36 % decrease
Green Belt	12794 sqm (33%)	12290 sqm (36.60%)	3.6 % Increase
<b>Production Capacity:</b> Ferro Alloys plant (Product Mix of Ferro Manganese, Silico Manganese, & Ferro Silicon)	24,000 TPA	28,800 TPA	20 % Increase
Induction Furnace (Product-MS Billets)	36,000 TPA	36,000 TPA	No increase or decrease
Total water requirement (KLD)	96	96	No increase or decrease
Power Supply	25 MW	25 MW	No increase or decrease
Project Cost	Rs. 67.60 Crores	Rs. 110.35 Crore	63.24% Increase

40.14.19 Pollution load assessment-

<b>Particulars</b>	<b>As per previous EC 06<sup>th</sup> August, 2021</b>	<b>After proposed change under para 7(ii)</b>	<b>% increase</b>
Air	PM <sub>10</sub> max GLC- 0.5µg/m <sup>3</sup> SO <sub>x</sub> max GLC- 0.1 µg/m <sup>3</sup> NO <sub>x</sub> max GLC- 0.2 µg/m <sup>3</sup>	PM <sub>10</sub> max GLC- 1.54 µg/m <sup>3</sup> SO <sub>x</sub> max GLC- 2.81 µg/m <sup>3</sup> NO <sub>x</sub> max GLC- 1.55 µg/m <sup>3</sup>	
Water (domestic effluent)	12.8 KLD	12.8 KLD	No increase or decrease
Solid and Hazardous waste	a. Dust -10,000 TPA b. Used oil/Spent oil- 0.5 kl/annum c. Furnace Slag-	a. Dust – 12,520 TPA b. Used oil/Spent oil- 0.5 kl/annum c. Furnace Slag- 23,712	a. Dust – 25.2 % Increase b. Used oil/Spent oil- No Increase/decrease c. Furnace Slag- 1.2%

Particulars	As per previous EC 06 <sup>th</sup> August, 2021	After proposed change under para 7(ii)	% increase
	24,000		decrease
Traffic load	484 PCU will be added due to the proposed project. The total PCU will be less than 1500	539 PCU will be added due to the proposed project. The total PCU will be less than 1555	11.4 % increase

40.14.20 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, MoEFCC**

40.14.21 The status of compliance of earlier EC was obtained from Integrated Regional office, Kolkata vide letter no. 102-688/22EPE/390 dated 14.09.2022 in the name of M/s Aryavarta Khanija Private Limited. The IRO has informed that the project has not been set up A boundary wall is present on the premises. As the project has not been set up, EC stipulated conditions for the EC dated 2021 could not be verified.

40.14.22 The proposal was initially considered during 32<sup>nd</sup> meeting of the EAC for Industry-I sector held on 26<sup>th</sup> – 29<sup>th</sup> May, 2023 wherein after deliberations, the Committee deferred the proposal. The deliberations and recommendations of the EAC are as follows:

### **Deliberations by the Committee (EAC during 26<sup>th</sup> – 29<sup>th</sup> May, 2023)**

The Committee noted the following:

1. The EAC noted that PP/Consultant were unable to present their proposal due to their unpreparedness. Therefore, the technical deliberations on the proposal could not be made by the EAC.
2. The EAC further advised that PP/Consultant shall read all the documents properly before appearing before the EAC for appraisal of the proposal.
3. In view of above, the PP/ Consultant accepted the mistake and requested for one more opportunity for presenting the proposal before the EAC meeting.

### **Recommendations of the Committee (EAC during 26<sup>th</sup> – 29<sup>th</sup> May, 2023)**

In view of the foregoing and after detailed deliberations, the committee recommended to **defer the proposal** and is of the view that the proposal shall be considered once the PP/Consultant are fully prepared and only after receiving the formal request of the project proponent, the proposal shall be placed before the EAC.

40.14.23 The PP vide letter dated 20.06.2023 and 04.07.2023 submitted the following information:

Sl. No.	Observation of EAC/ Ministry	Reply of PP
1.	The proposal shall be considered once the PP/Consultant are fully prepared and only after receiving the formal request of the project proponent, the proposal shall be placed before the EAC	It is requested that PP/Consultant are fully prepared. One of the Board of Directors from PP side will attend the meeting. A formal request is sent through email in same day of meeting 29.05.2023 to Hon'ble committee.
2.	The application has been examined and it is noted that the PP has not revised/updated the application on portal. Please revise the application on portal and upload all the details on portal as the whole process is online on portal. [For ex. In form 19.3 it is mentioned that Details on procedure to report observation of Environmental Management Cell to Project Head will be provided later on]. This reply should be corrected.	Complied. The EMC Looks after environmental, safety & Occupational health for the management of entire plant and surrounding environment. The following procedure will be in place for reporting to GM Works by Environment Management Cell. The Monthly compliance report during the operation phase of the project will be prepared by EMC and submitted to GM works. Any non-Compliance in respect of prescribed standards and environmental violation if any are involved in the report. The reporting mechanism will follow as: - GM Work – Head EMC – Team Member EMC

40.14.24 Based on the above submission of PP, the proposal was reconsidered during the 40th meeting of the EAC for Industry-I sector held during 19th - 21st July, 2023. The deliberations and recommendations of the EAC are as follows:

**Written representations:**

40.14.25 During the meeting, based on the deliberations made by the EAC, the project proponent submitted the Revised Action Plan to address socio-economic needs of the nearby area along with an undertaking dated 21.07.2023. The same is updated in para 40.14.15 above.

**Deliberations by the Committee**

40.14.26 The Committee noted the following:

1. The instant proposal is for expansion in Ferro Alloy from 24,000 TPA to 28,800 TPA Product Mix of Silico Manganese, Ferro Manganese and Ferro Silicon with 2 nos. of Submerged Arc Furnace (2 x 9 MVA) and 36,000 TPA Billets with 1 no. of Induction Furnace of 15 Ton Capacity under the provisions of para 7(ii) of the EIA Notification, 2006.

2. The EAC, constituted under the provision of the EIA Notification, 2006 comprising Expert Members/domain experts in various fields, examined the proposal submitted by the Project Proponent in desired format along with addendum to the EIA/EMP reports prepared and submitted by the Consultant accredited by the QCI/ NABET on behalf of the Project Proponent.
3. The EAC noted that the Project Proponent has given an undertaking that the data and information given in the application and enclosures are true to the best of his knowledge and belief and no information has been suppressed in the reports. If any part of data/information submitted is found to be false/ misleading at any stage, the project will be rejected and Environmental Clearance given, if any, will be revoked at the risk and cost of the project proponent.
4. The PP reported the following w.r.t. instant proposal:
  - EC for manufacturing capacity of 24,000 TPA of Product Mix of Silico Manganese/ Ferro Manganese /Ferro Silicon with 2 Nos. of Sub – Merged Arc Furnace (2 X 9 MVA) and 36,000 TPA with 1 No. of Induction Furnace (1 X 15 TPH) was granted by MOEF&CC on 6<sup>th</sup> August 2021.
  - After receiving EC, the promoter company applied for obtaining Consent to Establish (CTE), which was granted on 8<sup>th</sup> September 2021.
  - In the meantime 3<sup>rd</sup> wave of Covid started, so the promoter company could not hire any consultant related to Ferro Alloys Project.
  - The promoter company after hiring the consultant, showed the EC Letter and Construction Clearing Certificate to him and he pointed that the production capacity for which EC has been granted, is on very lower side. It was due to the fact that the project report on the basis of which EC has been obtained, was prepared by the Chartered Accountant, who was not having sufficient knowledge related to production capacity of Ferro Alloys and more over this is first green project of the group, so PP was also not aware of the technicalities of the ferro alloys project.
  - However, the consultant engaged afresh has assessed that with the same Submerged Arc Furnaces (2X9 MVA) without change in the configuration and technology of the furnace will lead to the production of Ferro alloys to the tune of 28,800 TPA.
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 vide letter no. J-11011/410/2019-IA II(I) dated 06<sup>th</sup> August, 2021. Earlier the project report was prepared on less capacity by the CA and submitted the same to MoEF&CC for EC.

After realizing the mistake, it was submitted the project for expansion without implementing the earlier EC completely and the same was also discussed during EAC meeting on dated 03/11/2022, and as per Minutes of MoEF&CC also agreed to increase the capacity for 40% of the existing capacity of 24,000 in two parts. So, PP has applied for first 20% of the capacity increase. ( $24000 \times 20\% = 4,800 = 28,800$  TPA). Also, another reason for not implementing the earlier EC was COVID. Now PP has started Civil Foundations of the First Phase (1x9 MVA Ferro Alloys Unit) of the Project, PP is going to complete the First Phase on or before November 2023.

7. The proposed expansion will be carried out in land having area 3.359 ha and the same is under possession of the promoter. Earlier, EC was granted for an area measuring 3.877 ha, which was not completely under possession. Thus, now there is proposal that the unit will set up in area of 3.359 ha (which is completely under the possession of the promoter) which is sufficient to carry out expansion. The land was Agriculture Land and converted to Industrial purpose.
8. The nearest habitation to plant is Songram village located at 1 km away from the project site boundary in the WNW direction.
9. Kanjor Reservoir (3.12 km) and Damodar River (5 km) are flowing within study area 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.
10. The total water requirement of the project is estimated at 96 KLD. Domestic water requirement is 16.0 KLD and for cooling purposes is 80 KLD. The daily requirement of water will be sourced from Damodar River.
11. The Committee deliberated on the baseline data previously collected (7<sup>th</sup> December, 2019 – 6<sup>th</sup> March, 2020) at the time of EC dated 6<sup>th</sup> August 2021 and the fresh baseline data collected (February, 2023) during the instant application and observed that though the collected data shows that the incremental GLC has increased, however, the values are below the NAAQ standards. 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 the Greenbelt and plantation area will be developed in 1.23 ha/12290 m<sup>2</sup> of the total plant area i.e. 36.60 % so as to mitigate the effects of emissions from the plant. Tree density of 2500 trees per hectare with local board leaf specification will be planted. The EAC deliberated on the greenbelt development plan and found it satisfactory.
13. The committee deliberated details of carbon foot prints and carbon sequestration study w.r.t. proposed project and found them to be satisfactory.
14. 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 strictly 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.
18. The EAC also reviewed the EC conditions (specific and general) pertaining to Industry-I projects and observed that some of the specific conditions stipulated so far in the previously recommended EC projects are common and applicable to most of the projects in general. In view of the same, the General Conditions (in case of EC projects) have been revised through reallocation of these common conditions from specific to General Conditions (in case of EC projects). Accordingly, the instant project is also being stipulated with the modified General conditions.

#### **Recommendations of the Committee:**

40.14.27 In view of the foregoing and after detailed deliberations, the committee **recommended** the instant proposal for grant of Environment Clearance **subject to uploading the written submission on portal** under the para 7(ii) of EIA Notification, 2006 and subject to the stipulation of following specific conditions and general conditions:

#### **A. Specific Condition:**

- i. The project proponent shall comply with all the environmental protection measures and safeguards proposed in the documents submitted to the Ministry. All the recommendations made in the EIA/EMP in respect of environmental management, and risk mitigation measures relating to the project shall be implemented.
- ii. The project proponent shall utilize modern technologies for capturing of carbon emitted and shall also develop carbon sink/carbon sequestration resources capable of capturing more than emitted. The implementation report shall be submitted to the IRO, MoEF&CC in this regard.

- iii. The nearest human settlement from the project site is Songram village located at 1 km away from the project site boundary in the WNW direction. Project Proponent shall take appropriate environmental safeguard measures to minimise the impact on the habitation of the locals. PP needs to strengthen green belt all around the plant area to reduce the dust pollution. The PP shall also include this location in its environmental monitoring programme.
- iv. Kanjor Reservoir (3.12 km) and Damodar River (5 km) are flowing within study area 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.
- v. The water requirement of 96 m<sup>3</sup>/day shall be sourced from Damodar River after obtaining necessary permission from the Competent Authority. Ground water abstraction shall not be permitted.
- vi. Three tier Green Belt shall be developed and maintained in at least 33% of the project area with native species all along the periphery of the project site of adequate width and tree density shall not be less than 2500 per ha. Survival rate of green belt developed shall be monitored on periodic basis to ensure that damaged plants are replaced with new plants in the subsequent years. PP shall also develop greenbelt in the form of shelter belt comprising of total of 6 rows of 2x2 m plantation with tall trees & broad leaves with thick canopy along with windshield inside the plant premises to act as green barrier for air pollution & noise levels towards Songram Village. Compliance status in this regard, shall be submitted to concerned Regional Office of the MoEF&CC.
- vii. All the commitments made towards socio-economic development of the nearby villages shall be satisfactorily implemented. The action plan based on the social impact assessment study of the project as per the EMP in accordance to the Ministry's OM dated 30.09.2020 shall be strictly implemented and progress shall be submitted to the Regional Office of MoEF&CC.
- viii. PP shall adopt undertake village adoption programme, prepare and implement the action plan to develop them into model villages.
  - ix. All roads shall be made Pucca and a vacuum cleaner shall be used to clean the roads.
  - x. Parking area for trucks/dumpers shall be provided within the unit.
  - xi. Slag crusher of 2.5 TPH shall be installed to process the slag to recover metallics, flux and aggregate for recycle/reuse. Various slags generated in the plant shall be recycled/Reused/sold for brick manufacturing and/or cement making. Storage of solid waste will not be allowed for more than 90 days.
- xii. 600 m long road from Metsil factory to Aryavrata shall be widened (6m) and maintained by project proponent.

**B. General conditions:**

**I. Statutory compliance:**

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

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

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

## **II. Air quality monitoring and preservation**

- i. The project proponent shall install 24x7 continuous emission monitoring system at process stacks to monitor stack emission as well as Continuous Ambient Air Quality Station (CAAQMS) for monitoring AAQ parameters with respect to standards prescribed in Environment (Protection) Rules 1986 as amended from time to time. The CEMS and CAAQMS shall be connected to SPCB and CPCB online servers and calibrate these systems from time to time according to equipment supplier specification through labs recognized under Environment (Protection) Act, 1986 or NABL accredited laboratories.
- ii. The project proponent shall carryout Continuous Ambient Air Quality monitoring for common/criterion parameters relevant to the main pollutants released (e.g. PM<sub>10</sub> and PM<sub>2.5</sub> in reference to PM emission, and SO<sub>2</sub> and NO<sub>x</sub> in reference to SO<sub>2</sub> and NO<sub>x</sub> emissions) within and outside the plant area (at least at four locations one within and three outside the plant area at an angle of 120° each), covering upwind and downwind directions.
- iii. The project proponent shall monitor fugitive emissions in the plant premises at least once in every quarter through laboratories recognized under Environment (Protection) Act, 1986 or NABL accredited laboratories.
- iv. Sampling facility at process stacks shall be provided as per CPCB guidelines for manual monitoring of emissions.
- v. Appropriate Air Pollution Control (APC) system shall be provided for all the dust generating points including fugitive dust from all vulnerable sources, so as to comply prescribed stack emission and fugitive emission standards.
- vi. The project proponent shall provide leakage detection and mechanized bag cleaning facilities for better maintenance of bags.
- vii. Sufficient number of mobile or stationery vacuum cleaners shall be provided to clean plant roads, shop floors, roofs, regularly.
- viii. Ensure covered transportation and conveying of raw material to prevent spillage and dust generation. The project proponent use leak proof trucks/dumpers carrying coal and other raw materials and cover them with tarpaulin.
- ix. Recycle and reuse iron ore fines, coal and coke fines, lime fines and such other fines collected in the pollution control devices and vacuum cleaning devices in the process after briquetting/ agglomeration.
- x. The project proponent shall provide primary and secondary fume extraction system at all heat treatment furnaces.
- xi. Wind shelter fence and chemical spraying shall be provided on the raw material stock piles.

- xii. Design the ventilation system for adequate air changes as per prevailing norms for all tunnels, motor houses, Oil Cellars.
- xiii. Pollution control system in the plant shall be provided as per the CREP Guidelines of CPCB.
- xiv. The project proponent shall adopt the Clean Air practices like mechanical collectors, wet scrubbers, fabric filters (bag houses), electrostatic precipitators, combustion systems (thermal oxidizers), condensers, absorbers, adsorbers, and biological degradation. Controlling emissions related to transportation shall include emission controls on vehicles as well as use of cleaner fuels. Sufficient numbers of additional truck mounted Fog/Mist water cannons shall be procured and operated regularly inside the project premises and also in the surrounding villages to arrest suspended dust in the atmosphere.
- xv. Bag filters shall be cleaned regularly and efficiency of bag filter system shall be monitored at regular intervals.
- xvi. Water Sprinklers/Water mist system shall be installed near raw material yards, operational units and other strategic locations to control fugitive emissions from the plant.
- xvii. The particulate matter emissions from the process stacks shall be less than 30 mg/Nm<sup>3</sup> and measures shall be undertaken as per the submitted action plan. Efficient Air monitoring equipment shall be installed.
- xviii. Following additional arrangements to control fugitive dust shall be provided:
  - a. Fog / Mist Sprinklers at all on bulk raw material storage area (at the transfer points) like Iron Ore, Coal and for Fly Ash and similar solid waste storage areas.
  - b. Proper covered vehicle shall be used while transport of materials.
  - c. Wheel washing mechanism shall be provided in entry and exit gates with complete recirculation system.
- xix. Briquetting and Jigging plant shall be installed in Ferro Alloys Plant.
- xx. The PP shall minimize the evaporation losses in jigging operation to less than 10% using suitable advanced process.
- xxi. The 4<sup>th</sup> hole extraction system shall be provided in the Sub Merged Arc Furnaces.
- xxii. Industry is going to use silica quartz in large quantities and going to produce Silico Manganese and Ferro Silicon alloy steel. Therefore, it is necessary to control silica/quartz exposures at production Departments, not only emission norms as per Indian Factories Act. The permissible limit for silica/quartz should be within 10 mg/m<sup>3</sup> for total dust as per Indian Factories Act. Therefore, it is recommended to monitor personal and area exposures for silica quartz dust in the process plants.
- xxiii. No Ferro-chrome production shall be carried out without prior Environmental clearance from MOEF&CC.
- xxiv. Online stack monitoring system for Induction Furnace shall be installed and monitoring report shall be submitted to the concerned Regional Office of the MoEF&CC along with the six monthly compliance report.

### **III. Water quality monitoring and preservation**

- i. The project proponent shall install 24x7 continuous effluent monitoring system with respect to standards prescribed in Environment (Protection) Rules 1986 as amended from time to time and connected to SPCB and CPCB online servers and calibrate these system from time to time according to equipment supplier specification through labs recognized under Environment (Protection) Act, 1986 or NABL accredited laboratories.
- ii. The project proponent shall monitor regularly ground water quality at least twice a year (pre- and post-monsoon) at sufficient numbers of piezometers/sampling wells in the plant and adjacent areas through labs recognized under Environment (Protection) Act, 1986 and NABL accredited laboratories.
- iii. Garland drains and collection pits shall be provided for each stock pile to arrest the run-off in the event of heavy rains and to check the water pollution due to surface run off.
- iv. Water meters shall be provided at the inlet to all unit processes in the plants.
- v. The project proponent shall make efforts to minimise water consumption in the plant complex by segregation of used water, practicing cascade use and by recycling treated water.
- vi. The proposed project shall be designed as "Zero Liquid Discharge" Plant. ETP shall be installed and there shall be no discharge of effluent from the plant. Domestic effluent shall be treated in Sewage Treatment Plant. Suitable measures shall be adopted for sewage water handling to ensure no contamination of any kind of water body.
- vii. All stockyards shall have impervious flooring and shall be equipped with water spray system for dust suppression. Stock yards shall also have garland drains and catch pits to trap the run off material and shall be implemented as per the action plan submitted in EIA/EMP report.
- viii. Rain water harvesting shall be implemented to recharge/harvest water as per the action plan submitted in the EIA/EMP report.

#### **IV. Noise monitoring and prevention**

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

#### **V. Energy Conservation measures**

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

#### **VI. Waste management**

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

## **VII. Green Belt**

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

## **VIII. Public hearing and Human health issues**

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

- ii. The project proponent shall carry out heat stress analysis for the workmen who work in high temperature work zone and provide Personal Protection Equipment (PPE) as per the norms.
- iii. Provision shall be made for the housing of construction labour within the site with all necessary infrastructure and facilities such as fuel for cooking, mobile toilets, mobile STP. Safe drinking water, medical health care, creche etc. The housing may be in the form of temporary structures to be removed after the completion of the project.
- iv. Occupational health surveillance of the workers shall be done on a regular basis and records maintained.

## **IX. Environment Management**

- i. The project proponent shall comply with the provisions contained in this Ministry's OM vide F.No. 22-65/2017-IA.III dated 30/09/2020. As part of Corporate Environment Responsibility (CER) activity, company shall adopt nearby villages based on the socio-economic survey and undertake community developmental activities in consultation with the village Panchayat and the District Administration as committed.
- ii. The company shall have a well laid down environmental policy duly approve by the Board of Directors. The environmental policy should prescribe for standard operating procedures to have proper checks and balances and to bring into focus any infringements/deviation/violation of the environmental / forest / wildlife norms / conditions. The company shall have defined system of reporting infringements / deviation / violation of the environmental / forest / wildlife norms / conditions and / or shareholders / stake holders. The copy of the board resolution in this regard shall be submitted to the MoEF&CC as a part of six-monthly report.
- iii. A separate Environmental Cell both at the project and company head quarter level, with qualified personnel shall be set up under the control of senior Executive, who will directly to the head of the organization.
- iv. Performance test shall be conducted on all pollution control systems every year and report shall be submitted to Integrated Regional Office of the MoEF&CC.

## **X. Miscellaneous**

- i. The project proponent shall make public the environmental clearance granted for their project along with the environmental conditions and safeguards at their cost by prominently advertising it at least in two local newspapers of the District or State, of which one shall be in the vernacular language within seven days and in addition this shall also be displayed in the project proponent's website permanently.
- ii. The copies of the environmental clearance shall be submitted by the project proponents to the Heads of local bodies, Panchayats and Municipal Bodies in addition to the relevant offices of the Government who in turn has to display the same for 30 days from the date of receipt.
- iii. The project proponent shall upload the status of compliance of the stipulated environment clearance conditions, including results of monitored data on their website and update the same on half-yearly basis.

- iv. The project proponent shall monitor the criteria pollutants level namely; PM10, SO2, NOx (ambient levels as well as stack emissions) or critical sectoral parameters, indicated for the projects and display the same at a convenient location for disclosure to the public and put on the website of the company.
- v. Action plan for developing connecting and internal road in terms of MSA as per IRC guidelines shall be implemented
- vi. The project proponent shall submit six-monthly reports on the status of the compliance of the stipulated environmental conditions on the website of the ministry of Environment, Forest and Climate Change at environment clearance portal.
- vii. The project proponent shall submit the environmental statement for each financial year in Form-V to the concerned State Pollution Control Board as prescribed under the Environment (Protection) Rules, 1986, as amended subsequently and put on the website of the company.
- viii. The project proponent shall inform the Regional Office as well as the Ministry, the date of financial closure and final approval of the project by the concerned authorities, commencing the land development work and start of production operation by the project.
- ix. The project proponent shall abide by all the commitments and recommendations made in the EIA/EMP report, commitment made during Public Hearing and also that during their presentation to the Expert Appraisal Committee.
- x. The recommendations of the approved Site-Specific Wildlife Management Plan (in case of involvement of Schedule-I species) shall be implemented in consultation with the State Forest Department. The implementation report shall be furnished along with the six-monthly compliance report to the concerned Regional Office of the MoEF&CC.
- xi. The PP shall put all the environment related expenditure, expenditure related to Action Plan on the PH issues, and other commitments made in the EIA/EMP Report etc. in the company web site for the information to public/public domain. The PP shall also put the information on the left over funds allocated to EMP and PH as committed in the earlier ECs and shall be carried out and spent in next three years, in the company web site for the information to public/public domain.
- xii. No further expansion or modifications in the plant shall be carried out without prior approval of the Ministry of Environment, Forests and Climate Change (MoEF&CC).
- xiii. Concealing factual data or submission of false/fabricated data may result in revocation of this environmental clearance and attract action under the provisions of Environment (Protection) Act, 1986.
- xiv. The Ministry may revoke or suspend the clearance, if implementation of any of the above conditions is not satisfactory.
- xv. The Ministry reserves the right to stipulate additional conditions if found necessary. The Company in a time bound manner shall implement these conditions.
- xvi. The Regional Office of this Ministry shall monitor compliance of the stipulated conditions. The project authorities should extend full cooperation to the officer (s) of the Regional Office by furnishing the requisite data / information/monitoring reports.

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

**\*\*\***

#### **Agenda 40.15**

#### **40.15 Integrated Steel Plant 3.5 MTPA Including Captive by M/s AARESS Iron and Steel Limited, located at Villages- Halavarthi, Basapura, koppal, kidadal, Ginigera, Tehsil and District - Koppal, Karnataka - Consideration of Amendment in Environmental Clearance**

**[Proposal No. IA/KA/IND/297905/2023; File No. J-11011/161/2015-IA(I)]**

- 40.15.1 Consideration of the proposal was **deferred** as the Project Proponent did not attend the meeting. The Member Secretary apprised the Committee that the PP/Consultant vide email dated 21.07.2023 informed that they will not be able to attend the meeting due to unavoidable circumstances. Taking into consideration the communication from the PP/Consultant, EAC is of the view that PP/Consultant have simply wasted the time of the EAC and therefore, EAC further advised the Ministry to place the proposal in the EAC meeting only after receiving further request/communication from project proponent.

**\*\*\***

#### **Any Other item with permission of the Chair**

#### **Agenda 40.16**

#### **40.16 Expansion of Steel Plant–Sponge Iron from 1,20,000 TPA to 4,17,000 TPA, MS Ingots/Hot Billets from 90,000 TPA to 2,38,500 TPA, TMT bars/Rolled products from 90,000 TPA to 2,55,000 TPA (or) MS Strip Mill of 1,65,000 TPA (or) MS Pipe Mill of 1,65,000 TPA, WHRB Power from 8.0 MW to 28 MW, FBC Power from 4 MW to 14MW, Ferro Alloys 2 x 9 MVA (FeSi-14,000 TPA/FeMn-50,400 TPA / SiMn–28,800 TPA/Fecr30,000 TPA/Pig Iron–50,400 TPA), New Briquetting Plant (200 Kg/hr) & Fly Ash Brick Making unit (55,000 B) by M/s. Raigarh Ispat and Power Private Limited, located at Delari & Saraipali Villages, Tehsil: Raigarh, District: Raigarh, Chhattisgarh- Consideration of Terms of Reference under SOP dated 07.07.2021.**

**[Proposal No. IA/CG/IND1/415808/2023; File No. IA-J-11011/45/2023-IA-II(IND-I)]**

**[Consultant: Pioneer Enviro Consultants Private Limited; Valid upto 06.06.2023]**

- 40.16.1 M/s Raigarh Ispat and Power Private Limited has made ToR application online vide proposal no. IA/CG/IND1/415808/2023 dated 20<sup>th</sup> April 2023 along with the application in prescribed format (CAF, Form – I Part A & B), copy of pre-feasibility report and proposed ToRs for

undertaking detailed EIA study as per the EIA Notification, 2006 for the project mentioned above. The proposed project activity is listed at S. No. 3(a), Metallurgical Industry (Ferrous & Non-Ferrous) and 1(d) Thermal Power Plant, under Category ‘A’ of the schedule of the EIA Notification, 2006 and appraised at the Central Level. The PP has also reported that the company has installed Rolling mill plant and obtained CTO from CECB vide no. 2736/TS/CECB/ 2022 dated 15/07/2022 which is after expiry of existing EC. Therefore the proposal to be appraised under violation category as per the provisions contained in the MoEF&CC Standard Operating Procedure dated 07.07.2021.

40.16.2 The proposal cited above was considered during the 29<sup>th</sup> meeting of Expert Appraisal Committee held on 1<sup>st</sup> May, 2023. After detailed deliberation, the Committee recommended to defer the proposed project and recommended for site visit of the proposed project area by a sub-committee of EAC Industry-1 members.

40.16.3 Accordingly, the EAC (Industry-1) sub-committee site visit to Raigarh Ispat and Power Private Limited located at Delari & Saraipali Villages, Tehsil: Raigarh, District: Raigarh, Chhattisgarh was undertaken on 20/03/2023.

40.16.4 Name of the EIA consultant: M/s. Pioneer Enviro Consultants Private Limited [List of ACOs with their Certificate / Extension Letter No: QCI/NABET/ENV/ACO/23/2699 valid till 06.06.2023, as on April 29, 2023].

#### **Details submitted by Project proponent**

40.16.5 The project of M/s. Raigarh Ispat and Power Private Limited, located at Delari & Saraipali Villages, Tehsil: Raigarh, District: Raigarh, Chhattisgarh is for Expansion of Steel Plant– Sponge Iron from 1,20,000 TPA to 4,17,000 TPA, MS Ingots/Hot Billets from 90,000 TPA to 2,38,500 TPA, TMT bars/Rolled products from 90,000 TPA to 2,55,000 TPA (or) MS Strip Mill of 1,65,000 TPA (oR) MS Pipe Mill of 1,65,000 TPA, WHRB Power from 8.0 MW to 28 MW, FBC Power from 4 MW to 14MW, Ferro Alloys 2 x 9 MVA (FeSi-14,000 TPA/FeMn-50,400 TPA / SiMn-28,800 TPA/Fecr30,000 TPA/Pig Iron-50,400 TPA), New Briquetting Plant (200 Kg/hr) & Fly Ash Brick Making unit (55,000 B). The PP has also reported that the company has installed Rolling mill plant and obtained CTO from CECB vide no. 2736/TS/CECB/ 2022 dated 15/07/2022 which is after expiry of existing EC. Therefore the proposal to be appraised under violation category as per the provisions contained in the MoEF&CC Standard Operating Procedure dated 07.07.2021.

40.16.6 Environmental site settings:

<b>S.No.</b>	<b>Particulars</b>	<b>Details</b>	<b>Remarks</b>
i.	Total land	Total land: 34.5 Ha. (85.25 Acres) Existing Land: 22.72 Ha. (56.15 Acres) Additional Land: 11.78 Ha. (29.10 Acres)	Land use: Industrial Land
ii.	Land acquisition details as per MoEF&CC O.M dated 7/10/2014	Total 34.5 Ha. (85.25 Acres) • Registered land– 27.404 Ha. (67.72 Ac.)	--

		<ul style="list-style-type: none"> <li>✓ Diverted Land – 21.525 Ha.</li> <li>✓ Un-diverted Land – 5.879 Ha.</li> <li>• Agreements entered – 7.096 Ha. (17.53 Ac.)</li> </ul>																																																													
iii.	Existence of habitation & involvement of R & R, if any.	<p><u>Plant site:</u> No habitation exists in plant site; Hence no R &amp; R is involved.</p> <p><u>Study area:</u> Nearest habitation: Delari – 0.3Kms. (SEE)</p>	---																																																												
iv.	Latitude and Longitude of the plant site	<p>Latitude and Longitude of the plantsite:</p> <table border="1"> <thead> <tr> <th>Point</th> <th colspan="2">Coordinates</th> </tr> </thead> <tbody> <tr><td>1</td><td>22° 0'39.68"N</td><td>83°19'41.59"E</td></tr> <tr><td>2</td><td>22° 0'39.74"N</td><td>83°19'47.14"E</td></tr> <tr><td>3</td><td>22° 0'31.99"N</td><td>83°19'47.45"E</td></tr> <tr><td>4</td><td>22° 0'31.54"N</td><td>83°19'47.74"E</td></tr> <tr><td>5</td><td>22° 0'29.81"N</td><td>83°19'54.07"E</td></tr> <tr><td>6</td><td>22° 0'27.30"N</td><td>83°19'54.20"E</td></tr> <tr><td>7</td><td>22° 0'27.22"N</td><td>83°19'55.35"E</td></tr> <tr><td>8</td><td>22° 0'24.95"N</td><td>83°19'54.94"E</td></tr> <tr><td>9</td><td>22° 0'25.08"N</td><td>83°19'58.63"E</td></tr> <tr><td>10</td><td>22° 0'22.18"N</td><td>83°19'59.54"E</td></tr> <tr><td>11</td><td>22° 0'22.80"N</td><td>83°19'56.46"E</td></tr> <tr><td>12</td><td>22° 0'23.14"N</td><td>83°19'56.56"E</td></tr> <tr><td>13</td><td>22° 0'23.35"N</td><td>83°19'54.26"E</td></tr> <tr><td>14</td><td>22° 0'23.15"N</td><td>83°19'54.23"E</td></tr> <tr><td>15</td><td>22° 0'34.13"N</td><td>83°19'26.26"E</td></tr> <tr><td>16</td><td>22° 0'22.29"N</td><td>83°19'54.35"E</td></tr> <tr><td>17</td><td>22° 0'22.41"N</td><td>83°19'53.39"E</td></tr> <tr><td>18</td><td>22° 0'20.19"N</td><td>83°19'52.53"E</td></tr> <tr><td>19</td><td>22° 0'18.28"N</td><td>83°19'53.52"E</td></tr> </tbody> </table>	Point	Coordinates		1	22° 0'39.68"N	83°19'41.59"E	2	22° 0'39.74"N	83°19'47.14"E	3	22° 0'31.99"N	83°19'47.45"E	4	22° 0'31.54"N	83°19'47.74"E	5	22° 0'29.81"N	83°19'54.07"E	6	22° 0'27.30"N	83°19'54.20"E	7	22° 0'27.22"N	83°19'55.35"E	8	22° 0'24.95"N	83°19'54.94"E	9	22° 0'25.08"N	83°19'58.63"E	10	22° 0'22.18"N	83°19'59.54"E	11	22° 0'22.80"N	83°19'56.46"E	12	22° 0'23.14"N	83°19'56.56"E	13	22° 0'23.35"N	83°19'54.26"E	14	22° 0'23.15"N	83°19'54.23"E	15	22° 0'34.13"N	83°19'26.26"E	16	22° 0'22.29"N	83°19'54.35"E	17	22° 0'22.41"N	83°19'53.39"E	18	22° 0'20.19"N	83°19'52.53"E	19	22° 0'18.28"N	83°19'53.52"E	---
Point	Coordinates																																																														
1	22° 0'39.68"N	83°19'41.59"E																																																													
2	22° 0'39.74"N	83°19'47.14"E																																																													
3	22° 0'31.99"N	83°19'47.45"E																																																													
4	22° 0'31.54"N	83°19'47.74"E																																																													
5	22° 0'29.81"N	83°19'54.07"E																																																													
6	22° 0'27.30"N	83°19'54.20"E																																																													
7	22° 0'27.22"N	83°19'55.35"E																																																													
8	22° 0'24.95"N	83°19'54.94"E																																																													
9	22° 0'25.08"N	83°19'58.63"E																																																													
10	22° 0'22.18"N	83°19'59.54"E																																																													
11	22° 0'22.80"N	83°19'56.46"E																																																													
12	22° 0'23.14"N	83°19'56.56"E																																																													
13	22° 0'23.35"N	83°19'54.26"E																																																													
14	22° 0'23.15"N	83°19'54.23"E																																																													
15	22° 0'34.13"N	83°19'26.26"E																																																													
16	22° 0'22.29"N	83°19'54.35"E																																																													
17	22° 0'22.41"N	83°19'53.39"E																																																													
18	22° 0'20.19"N	83°19'52.53"E																																																													
19	22° 0'18.28"N	83°19'53.52"E																																																													
v.	Elevation of the plant site	MSL of the plant area – 94.5 m to 109.5 m	---																																																												
vi.	Involvement of Forest land if any.	No Forest land is involved in the plant site. Status of Stage I Forest Clearance: <b><i>Not applicable</i></b>	---																																																												
vii.	Water body exists within the project site as well as study area	<p><b>Project site:</b> Nil</p> <p><b>Study area:</b></p> <table border="1"> <thead> <tr> <th>Water Body</th> <th>Distance</th> <th>Direction</th> </tr> </thead> <tbody> <tr><td>Banjari nallah</td><td>0.2 Kms.</td><td>S</td></tr> <tr><td>Kelo River</td><td>5.7 Kms.</td><td>E</td></tr> <tr><td>Dewanmunda nallah</td><td>3.0 Kms</td><td>N</td></tr> <tr><td>Korpali Nallah</td><td>2.6 Kms</td><td>N</td></tr> <tr><td>Barade Nallah</td><td>3.7 Kms</td><td>NWW</td></tr> <tr><td>Rabo DAM catchment area</td><td>8.7Kms</td><td>NWW</td></tr> </tbody> </table>	Water Body	Distance	Direction	Banjari nallah	0.2 Kms.	S	Kelo River	5.7 Kms.	E	Dewanmunda nallah	3.0 Kms	N	Korpali Nallah	2.6 Kms	N	Barade Nallah	3.7 Kms	NWW	Rabo DAM catchment area	8.7Kms	NWW	---																																							
Water Body	Distance	Direction																																																													
Banjari nallah	0.2 Kms.	S																																																													
Kelo River	5.7 Kms.	E																																																													
Dewanmunda nallah	3.0 Kms	N																																																													
Korpali Nallah	2.6 Kms	N																																																													
Barade Nallah	3.7 Kms	NWW																																																													
Rabo DAM catchment area	8.7Kms	NWW																																																													

viii.	Existence of ESZ / ESA / National Park / Wildlife sanctuary / Biosphere reserve / Tiger reserve / Elephant reserve, etc. if any within the study area	Nil.  <b>List of Reserved and protected forests:</b> <table border="1" data-bbox="639 338 1238 683"> <thead> <tr> <th>Name</th> <th>Distance</th> <th>Direction</th> </tr> </thead> <tbody> <tr> <td>Unnamed PF</td> <td>0.1 Kms.</td> <td>NWW</td> </tr> <tr> <td>Urdana RF</td> <td>0.6 Kms.</td> <td>S</td> </tr> <tr> <td>Taraimal RF</td> <td>2.4 Kms</td> <td>N</td> </tr> <tr> <td>Barkachhar PF</td> <td>8.5 Kms</td> <td>E</td> </tr> <tr> <td>Khardungari PF</td> <td>8.0 Kms</td> <td>E</td> </tr> <tr> <td>Rabo RF</td> <td>2.4 Kms</td> <td>W</td> </tr> <tr> <td>Samaruma RF</td> <td>8.5 Kms</td> <td>N</td> </tr> </tbody> </table>	Name	Distance	Direction	Unnamed PF	0.1 Kms.	NWW	Urdana RF	0.6 Kms.	S	Taraimal RF	2.4 Kms	N	Barkachhar PF	8.5 Kms	E	Khardungari PF	8.0 Kms	E	Rabo RF	2.4 Kms	W	Samaruma RF	8.5 Kms	N	<i>There are no notified National Park / Wild life sanctuary / Biosphere reserve /Tiger reserve with in 10 Km. radius of the project site.</i>  <i>Based on secondary sources, movement of Elephants has been observed within the study area of the plant.</i>
Name	Distance	Direction																									
Unnamed PF	0.1 Kms.	NWW																									
Urdana RF	0.6 Kms.	S																									
Taraimal RF	2.4 Kms	N																									
Barkachhar PF	8.5 Kms	E																									
Khardungari PF	8.0 Kms	E																									
Rabo RF	2.4 Kms	W																									
Samaruma RF	8.5 Kms	N																									

40.16.7 The existing project was initially accorded Consent to Establish (CTE) vide letter No. 442/TS/CECB/2005, dated 25.01.2005 for installation of 2x100 TPD DRI Kilns for production of 60,000 TPA of Sponge Iron. The company then obtained Environment Clearance from MoEF&CC vide letter dated J-11011/1040/2007/IA.II.(I) dated 27.01.2010 for Expansion of Sponge Iron Plant (2x,100 TPD) to Integrated Steel plant [Sponge Iron Plant (2x100 TPD), Steel Melting Shop (Billets, 300 TPD), Roiling Mill (TMT Bars, 300 TPD), Ferro Alloy Plant (100 TPD), Coal Washery (1.0 MTPA) and Captive Power Plant (WHRB, 8 MW; FBC, 46 MW). Latest Consent to Operate has been granted vide letter No. 2736/TS/CECB/2022 dated 15.07.2022 for Sponge Iron Plant (4x100 TPD – 1,20,000 TPA), Induction Furnace (90000 TPA), WHRB – 8 MW, APFB – 4 MW and Hot Charging Rolling Mill – 90000 TPA. The validity of CTO is upto 29.02.2024 except Hot Charging Rolling Mill which was up to 28.02.2023. The chronology of the permissions (EC/CTE) obtained along with status of implementation is as follows:

S. No.	EC/CTE /EC Extension Permissions	Units permitted	Date of permission	Units implemented (CTO)	Date of 1 <sup>st</sup> CTO obtained from SPCB	Remarks
1	CTE No. 442/TS/CEC B/2005, Raipur	1 <sup>st</sup> & 2 <sup>nd</sup> DRI Kilns– 60,000 TPA (2x100 TPD)	25-01-2005	1 <sup>st</sup> CTO 1 <sup>st</sup> DRI Unit – 30,000 TPA (1x100 TPD) Vide No. 5303/TS/CECB/2005,	16.11.2005	----
2	--Same as	1 <sup>st</sup> & 2 <sup>nd</sup> DRI	25-01-	1 <sup>st</sup> CTO	20.06.2008	----

	above--	<b>Kilns</b> – 60,000 TPA (2x100 TPD)	2005	<b>2<sup>nd</sup>DRI Unit</b> – 30,000 TPA (1x100 TPD) <b>Vide No.</b> <b>3232/CECB/2008</b>		
3	<b>EC (expansion) Issued by MOE&amp;F</b> Vide no. J-11011/1040/2007/ IA II (I)	<b>3<sup>rd</sup>&amp; 4<sup>th</sup>DRI Kilns</b> – 60,000 TPA (2x100 TPD) <b>CPP:</b> 54 MW CPP (WHRB – 4x2.0 MW + FBC – 46 MW) <b>SMS:</b> 90,000 TPA (3 x 10 T) Induction Furnace with CCM <b>Rolling Mill</b> 90,000 TPA (1x300 TPD) <b>Ferro Alloys</b> 30,000 TPA (3x9 MVA) <b>Coal Washery</b> 1.0 MTPA	27-01-2010	<b>1<sup>st</sup> CTO 3<sup>rd</sup>DRI Kiln</b> – 30,000 TPA (1x100 TPD) <b>Vide No.</b> <b>7371/TS/CECB/2018</b>	21.03.2018	<b>After obtaining Extension validity of E.C. dated 06-08-2015</b>
4	<b>CTE (prior to EC)</b> No. 2433/TS/CECB/2010, Raipur	<b>3<sup>rd</sup>&amp; 4<sup>th</sup>DRI Kilns</b> – 60,000 TPA (2x100 TPD) <b>CPP:</b> 54 MW CPP (WHRB – 4x2.0 MW + FBC – 46 MW) <b>SMS:</b> 90,000 TPA (3 x 10 T) Induction Furnace with CCM <b>Rolling Mill</b> 90,000 TPA (1x300 TPD) <b>Ferro Alloys</b> 30,000 TPA (3x9 MVA) <b>Coal Washery</b> 1.0 MTPA	26.07.2010	<b>1<sup>st</sup> CTO 3<sup>rd</sup>DRI Kiln</b> – 30,000 TPA (1x100 TPD) <b>Vide No.</b> <b>7371/TS/CECB/2018</b>	21.03.2018	<b>After obtaining Extension validity of E.C. &amp; CTE dated 06-08-2015 &amp; 24-12-2016</b>
5	<b>EC</b>	<b>3<sup>rd</sup>&amp; 4<sup>th</sup>DRI</b>	27-01-	<b>1<sup>st</sup> CTO</b>	07.09.2018	<b>After</b>

	(expansion) Issued by MOE&F Vide no. J- 11011/1040/ 2007/ IA II (I)	<b>Kilns</b> – 60,000 TPA (2x100 TPD) <b>CPP:</b> 54 MW CPP (WHRB – 4x2.0 MW + FBC – 46 MW) <b>SMS:</b> 90,000 TPA (3 x 10 T) Induction Furnace with CCM <b>Rolling Mill</b> 90,000 TPA (1x300 TPD) <b>Ferro Alloys</b> 30,000 TPA (3x9 MVA) <b>Coal Washery</b> 1.0 MTPA	2010	<b>4<sup>th</sup>DRI Kiln</b> – 30,000 TPA (1x100 TPD) <b>Vide No.</b> <b>4872/TS/CECB/20</b> <b>18</b>		obtaining Extension validity of E.C. & CTE dated 06-08-2015 & 24-12- 2016
6	<b>EC</b> (expansion) Issued by MOE&F Vide no. J- 11011/1040/ 2007/ IA II (I)	<b>3<sup>rd</sup>&amp; 4<sup>th</sup>DRI</b> <b>Kilns</b> – 60,000 TPA (2x100 TPD) <b>CPP:</b> 54 MW CPP (WHRB – 4x2.0 MW + FBC – 46 MW) <b>SMS:</b> 90,000 TPA (3 x 10 T) Induction Furnace with CCM <b>Rolling Mill</b> 90,000 TPA (1x300 TPD) <b>Ferro Alloys</b> 30,000 TPA (3x9 MVA) <b>Coal Washery</b> 1.0 MTPA	27-01- 2010	<b>1<sup>st</sup> CTO</b>  <b>SMS:</b> 90,000 TPA (3 x 10 T) Induction Furnace with CCM  <b>CPP:</b> 12 MW CPP (WHRB – 4x2.0 MW + FBC – 4.0 MW)	04.03.2020  (application submitted for CTO on 10- 12-2019)	After obtaining Extension validity of E.C. dated 14-07-2017
7	<b>EC</b> (expansion) Issued by MOE&F Vide no. J- 11011/1040/ 2007/ IA II	<b>3<sup>rd</sup>&amp; 4<sup>th</sup>DRI</b> <b>Kilns</b> – 60,000 TPA (2x100 TPD) <b>CPP:</b> 54 MW CPP (WHRB – 4x2.0	27-01- 2010	<b>1<sup>st</sup> CTO</b> <b>Hot Charging</b> <b>Rolling Mill</b> 90,000 TPA (1x300 TPD)	15.07.2022	<u>Which was</u> <u>implemente</u> <u>d</u> <u>aterExptiy</u> <u>of E.C.</u> <u>extension.</u>

	(I)	<b>MW + FBC – 46 MW)</b> <b>SMS:</b> 90,000 TPA (3 x 10 T) Induction Furnace with CCM <b>Rolling Mill</b> 90,000 TPA (1x300 TPD) <b>Ferro Alloys</b> 30,000 TPA (3x9 MVA) <b>Coal Washery</b> 1.0 MTPA				
8	----do---	----do---	---do---	<b>Current CTO</b> <b>DRI Kilns–</b> 1,20,000 TPA (4x100 TPD) <b>CPP:</b> 12 MW CPP <b>(WHRB – 4x2.0 MW + FBC – 4.0 MW)</b> <b>SMS:</b> 90,000 TPA (3 x 10 T) Induction Furnace with CCM <b>Rolling Mill</b> 90,000 TPA (1x300 TPD)	15-07-2022 Valid upto 29-02-2024	-----

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

S. No.	Units (Products)		Capacities as per CTE & E.C. dt 27/01/2010	CTO obtained from CECB vide dt 15/07/2022 (in TPA)	Proposed Expansion (in TPA)	Production Capacity After Expansion (in TPA)
1.	DRI Kilns (Sponge Iron)		1,20,000 (4 x 100 TPD)	1,20,000 (4 x 100 TPD)	2,97,000 (2 x 350 TPD + 1 x 200 TPD)	4,17,000 (4 x 100 TPD + 2 x 350 TPD + 1 x 200 TPD)
2.	Induction Furnace (M.S. Billets/ Hot Billets)		90,000 (3 x 10 T IF)	90,000 (3 x 10 T IF)	1,48,500 (3 x 15 T)	2,38,500 (3 x 10 T + 3 x 15 T)
3.	Rolling Mill (85 % Hot	Rolling Mill(TMT bars	90,000 (1 x 300	90,000* (1 x 300 TPD)	1,65,000 (1 x 500	2,55,000 (1x300 TPD +

S. No.	Units (Products)		Capacities as per CTE & E.C. dt 27/01/2010	CTO obtained from CECB vide dt 15/07/2022 (in TPA)	Proposed Expansion (in TPA)	Production Capacity After Expansion (in TPA)
	charging and remaining 15% through RHF with LDO)	/ Rolled products)	TPD)		TPD)	1 x 500 TPD)
					(or)	(or)
		MS Strip Mill	----	----	1,65,000 (1 x 500 TPD)	1,65,000 (1 x 500 TPD)
		MS Pipe Mill	----	----	1,65,000 (1 x 500 TPD)	1,65,000 (1 x 500 TPD)
4.	Ferro Alloys Unit (FeSi / FeMn / SiMn / FeCr/ pig Iron)		30,000 TPA (2 x 9 MVA)	Not Implemented as EC lapsed	2 x 9 MVA FeSi- 14,000 TPA / FeMn- 50,400 TPA / SiMn – 28,800 TPA / Fecr- 30,000 TPA / Pig Iron – 50,400 TPA	2 x 9 MVA FeSi- 14,000 TPA / FeMn- 50,400 TPA / SiMn – 28,800 TPA / Fecr- 30,000 TPA / Pig Iron – 50,400 TPA
5.	BRIQUETTING PLANT		----	----	200 Kg/hr	200 Kg/hr
6.	Fly Ash Brick Manufacturing Unit		---	----	55,000 Brick/day	18.15Million Bricks/ Annum
7.	Power Plant	WHRB Power Plant	8.0 MW (4 x 2 MW)	8.0 MW (4 x 2 MW)	20 MW (2x8 MW + 1 x 4 MW)	28 MW (4 x 2 MW + 2x8 MW + 1 x 4 MW)
		FBC Power Plant	46 MW	4.0 MW (1x4 MW) (Remaining EC lapsed)	10 MW (1 x 10 MW)	14 MW (1x4 MW+ 1 x 10 MW)
<b>Note:* PP has implemented 90,000 TPA of Rolling Mill after expiry of Environment Clearance (hence they are applying a Fresh Application for E.C. under Violation)</b>						

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

S. No.	Raw Material	Quantity (TPA)	Source	Distance (in Km)	Mode of Transport
1	Iron ore	4,75,200	Barbil, Odisha	~ 500	By rail & road (through covered trucks)
2	Dolomite	23,418	Chhattisgarh	~ 500	By road (through covered trucks)
3	LDO / LSHS	800 KL/Annum	Nearby IOCL	~ 100	By road

S. No.	Raw Material	Quantity (TPA)	Source	Distance (in Km)	Mode of Transport
			Depot		(through Tankers)
4	MS Scrap / Pig Iron	22,000	Chhattisgarh	~ 100	By road (through covered trucks)
5	Indian Coal	4,30,650	MCL Odisha / SECL Chhattisgarh	~ 500	By rail & road (through covered trucks)
6	Imported Coal	2,75,616	Indonesia / South Africa / Australia	~ 600 Kms. (from Vizag Port)	Through sea route, rail route & by road (through covered trucks)
7	Ferro alloys	7,000	Own generation	---	By road (through covered trucks)
8	Quartz	21,280	Chhattisgarh / Andhra Pradesh	~ 500	By road (through covered trucks)
9	Manganese Ore	1,14,660	Odisha / Chhattisgarh	~ 300	By Rail & Road (through covered trucks)
10	LAM Coke	24,444	Chhattisgarh / Bihar Imported from Australia, China	~ 100 Kms. ~ 480 Kms. (from Vizag Port)	By Road (Covered trucks) From Vizag Port by Road (Covered Trucks)
11	Mill scales	7,560	Inhouse Generation	---	By road (through covered trucks)
12	Electrode Paste	900	Maharashtra / West Bengal	~ 300	By road (through covered trucks)
13	Chrome Ore	60,000	Sukinda, Odisha Import, South Africa	~ 500 Kms. ~ 600 Kms. (from Vizag Port)	By road (through covered trucks) From Port By Road (through covered Trucks)
14	Magnetite / Bauxite	5,070	Chhattisgarh / Maharashtra	~ 500 Kms.	By road (through covered trucks)
15	Iron Ore / Sinter	74,340	Barbil, Odisha NMDC, Chhattisgarh	~ 500 Kms.	By Road (Covered trucks)

40.16.10 The total water requirement for existing plant is 450 KLD and was sourced from Ground water river. The total water requirement for the expansion project is estimated as 1360 KLD, which will be sourced from the Kelo River. Water drawl permission for expansion proposal from Water Resource Department, Chhattisgarh will be obtained after receipt of TOR letter for proposed expansion project.

40.16.11 Total power consumption after expansion will be 52.1 MW, out of which 42 MW from Captive power plant & remaining 10.1 MW will be sourced from state grid.

40.16.12 The capital cost of the project is Rs. 489 Crores. Employment generation from proposed project will be 250 nos. through direct employment and 500 nos. through indirect employment.

40.16.13 **Violation Details:**

The company has installed Rolling mill plant and obtained CTO from CECB vide no. 2736/TS/CECB/ 2022 dated 15/07/2022 which is after expiry of E.C.

**Present status of Rolling mill:**

- Installation of Rolling mill has been completed.
- Production is yet to be started

40.16.14 Proposed Terms of Reference (Baseline data collection period): Collected during 1st December 2022 to 28th February 2023

Attributes	Sampling		Remarks
	No. of Stations	Frequency	
<b>1) Air</b>			
i) Meteorological parameters	1	On hourly basis for one season	<ul style="list-style-type: none"> <li>• Wind Speed</li> <li>• Wind Direction</li> <li>• Temperature</li> <li>• Relative Humidity</li> <li>• Rainfall</li> </ul>
ii) AAQ parameters	8	24 hourly Twice a week for 3 months (One Season)	Parameters were Monitored: <ul style="list-style-type: none"> <li>• PM<sub>2.5</sub>,</li> <li>• PM<sub>10</sub>,</li> <li>• SO<sub>2</sub>,</li> <li>• NO<sub>x</sub>,</li> <li>• CO,</li> </ul>
<b>2) Noise</b>	8	On hourly basis for 24 Hrs. at each station	Parameters were Monitored: <ul style="list-style-type: none"> <li>• Day equivalent</li> <li>• Night equivalent</li> </ul>
<b>3) Water</b>			
i) Ground Water	8	One sample at each of the locations	Parameters was Monitored: as per IS: 10500
ii) Surface Water	3	One sample at each of the locations	Parameters were s Monitored: as per BIS: 2296
<b>4) Land</b>			
i) Soil quality	8	One sample at each of the locations	Parameters were Monitored: Texture, infiltration rate, SAR bulk density, CEC, pH, Ca, Mg, Na, K, Zn, Mn
ii) Land use	--	--	LU map was prepared by concerned FAE for study area
<b>5) Biological</b>			
i) Aquatic	--	Once in Season	---
ii) Terrestrial	--	Once in Season	---
<b>6) Socio economic parameters</b>	--	Once in Season	Social Impact Assessment was carried out by concerned FAE for study area

Attributes	Sampling		Remarks
	No. of Stations	Frequency	
7) Traffic Density	--	Once in Season	Vehicular traffic study was carried out at Transportation route.
<b>8) As the Plant is submitted under Violation. The following additional studies will be carried out</b> <ul style="list-style-type: none"> <li>• Assessment ecological damage</li> <li>• Preparation of Remediation Plan</li> <li>• Preparation of Natural resource and community resource augmentation plan</li> </ul>			
9) Measures that will be undertaken to minimize the impact on Protected Forest			
10) Measures that will be undertaken to minimize the impact on Delari village			

**Observation of Sub-committee:**

40.16.15 The Sub-Committee noted the following:

- i. The sub-committee observed that the validity of earlier EC was up to 27.01.2010. Incidentally, CECB has issued CTE/CTO, even after expiry of EC validity period. PP/consultant explained that Rolling Mill was under construction during the EC validity period and completed up to 80% up to 27.01.2020. However, they further continued with the CTE of CECB. The Rolling Mill is not under operation/production. A certificate of percentage of completion submitted by the PP/Consultant is enclosed.
- ii. The housekeeping of the industry poor and needs substantial improvement.
- iii. The project area was not surrounded by the permanent boundary wall completely. Around 30 % is having permanent boundary wall and remaining are fenced with barbed wire. PP stated that they want to purchase/acquire some more land and that is why permanent boundary has not been constructed. However, after discussion with the committee, PP assured to complete the boundary wall within 2 months from the date of site visit.
- iv. There was poor development of water conservation plan. It was observed that the rain water harvesting system has not been executed in a proper way in the plant premises.
- v. A Village (Delari) is close to the project site.
- vi. Banjarin Nallah was at adequate distance from the project site and was not impacted by the industry. The pp stated that ZLD is ensured and no discharge is going to Nala.
- vii. There is a Govt. primary schools in Delari Village which is close to the project site.
- viii. The sub-committee met with some villagers of Delari Village and it was observed that villagers carry good opinion about the PP and their work for the village.
- ix. Water sprinkler and mechanical sweeping system was present.
- x. There was poor development of Green Belt. The green belt was not developed up to the required standard. The PP admitted this fact and committed to develop green belt properly as desired by the Sub-Committee within September, 2023.
- xi. ETP/STP was under construction stage.

- xii. It was observed that the ecological/environmental sensitivity of the Plant site/area need certain improvement as mentioned in the recommendation part.

### **Deliberation by the Committee**

40.16.16 The Committee noted the following:

1. The instant project is for expansion of Steel Plant–Sponge Iron from 1,20,000 TPA to 4,17,000 TPA, MS Ingots/Hot Billets from 90,000 TPA to 2,38,500 TPA, TMT bars/Rolled products from 90,000 TPA to 2,55,000 TPA (or) MS Strip Mill of 1,65,000 TPA (or) MS Pipe Mill of 1,65,000 TPA, WHRB Power from 8.0 MW to 28 MW, FBC Power from 4 MW to 14MW, Ferro Alloys 2 x 9 MVA (FeSi-14,000 TPA/FeMn-50,400 TPA / SiMn-28,800 TPA/Fecr30,000 TPA/Pig Iron-50,400 TPA), New Briquetting Plant (200 Kg/hr) & Fly Ash Brick Making unit (55,000 B).
2. The existing project was initially accorded Consent to Establish (CTE) vide letter No. 442/TS/CECB/2005, dated 25.01.2005 for installation of 2x100 TPD DRI Kilns for production of 60,000 TPA of Sponge Iron. The company then obtained Environment Clearance from MoEF&CC vide letter dated J-11011/1040/2007/IA.II.(I) dated 27.01.2010 for Expansion of Sponge Iron Plant (2x,100 TPD) to Integrated Steel plant [Sponge Iron Plant (2x100 TPD), Steel Melting Shop (Billets, 300 TPD), Roiling Mill (TMT Bars, 300 TPD), Ferro Alloy Plant (100 TPD), Coal Washery (1.0 MTPA) and Captive Power Plant (WHRB, 8 MW; FBC, 46 MW). Latest Consent to Operate has been granted vide letter No. 2736/TS/CECB/2022 dated 15.07.2022 for Sponge Iron Plant (4x100 TPD – 1,20,000 TPA), Induction Furnace (90000 TPA), WHRB – 8 MW, APFB – 4 MW and Hot Charging Rolling Mill – 90000 TPA. The validity of CTO is upto 29.02.2024 except Hot Charging Rolling Mill which was up to 28.02.2023. The chronology of the permissions (EC/CTE) obtained along with status of implementation.
3. The PP has also reported that the company has installed Rolling mill plant and obtained CTO from CECB vide no. 2736/TS/CECB/ 2022 dated 15/07/2022 which is after expiry of existing EC. Therefore, the proposal has been applied to be appraised under violation category as per the provisions contained in the MoEF&CC Standard Operating Procedure dated 07.07.2021.
4. The EAC noted that the company has been running its operations for a very long time and amidst having the understanding of the provisions of EIA Notification, still committed violation by installing Rolling Mill beyond the expiry of the validity of EC. Further, the justification provided by the project proponent does not justify. Also, it is observed that a lot of cases from Chhattisgarh State are coming up before the EAC (Industry-1) for appraisal under violation category. In this regard, sub-Committee of the EAC has visited the site.
5. As reported, Delari Village is at a distance of 0.3 km in SE direction of the project site and Banjarin Nallah at 0.2 km in South of project site. Also, on perusal of kml file, it appears that there is no. of ESAs nearby within the study area.

6. The EAC also noted that Protected and Reserve Forest are adjacent to the project site. It is required to understand the measures undertaken by PP to minimise the impact of the project activities on these PF/RF.
7. The existing water requirement of 450 KLD is being sourced from Ground water. The EAC deliberated on existing water withdrawal and is of the view that PP has not complied with the EC condition wherein it was desired that *“efforts shall be made to make use of rain water harvested. If needed, capacity of the reservoir shall be enhanced to meet the maximum water requirement. Only balance water shall be met from other sources.”*
8. The PP shall submit the compliance status of earlier commitments and its implementation status along with details of expenditures on the issues raised during the PH while granting the previous EC.
9. On perusal of the kml file, it is observed that greenbelt is not developed properly along the project boundary. The Committee deliberated that existing project has been running for so long and still the greenbelt development is very poor. The GB width along plot boundary is too small. It must be around 40 m to incorporate 3 tier GB design.
10. It has been observed that Rolling Mill has been constructed beyond EC validity period. As stated by PP/Consultant, up to validity period of EC, about 80 % activities were completed and rest they did with the CTE after the EC validity. Therefore, it attracts violation as per the Notification of the Ministry.

### **Recommendations of the Committee**

- 40.16.17 After deliberations, the Committee **recommended** the project proposal for prescribing following specific ToRs for undertaking detailed EIA and EMP study under violation category as per the provisions contained in the MoEF&CC Standard Operating Procedures dated 07/07/2021 pertaining to consideration of violation cases, in addition to the generic ToRs enclosed at **Annexure-1** read with additional ToRs at **Annexure-2**:
- i. The State Government/SPCB shall take action against the project proponent under the provisions of the Environment (Protection) Act, 1986, and further no consent to operate to be issued till the project is granted EC.
  - ii. Assessment of ecological damage with respect to air, water, land and other environmental attributes. The collection and analysis of data shall be done by an environmental laboratory duly notified under the Environment (Protection) Act, 1986, or an environmental laboratory accredited by NABL, or a laboratory of a Council of Scientific and Industrial Research (CSIR).
  - iii. Preparation of EMP comprising remediation plan and natural and community resource augmentation plan corresponding to the ecological damage assessed and economic benefits derived due to violation.
  - iv. The remediation plan and the natural and community resource augmentation plan to be prepared as an independent chapter (13) in the EIA report by the accredited consultants.

- v. Budget of remediation plan and natural and community resource augmentation plan corresponding to the ecological damage shall be completed within three years and to be prepared accordingly.
- vi. The project proponent shall require to submit a bank guarantee equivalent to the amount of remediation plan and natural and community resource augmentation plan with the SPCB prior to the grant of EC. The quantum shall be recommended by the EAC and finalized by the regulatory authority.
- vii. Project proponent shall implement penalty provisions i.e., 1% of project cost attributable to the expansion, incurred up to the date of filing of application along with the EIA/EMP report as contained in the paragraph 12 of the Standard Operating Procedure dated 7/07/2021 shall be complied with.
- viii. The project proponent shall obtain name change in Consents (CTE/CTO) for the existing project in the name of M/s. Bihar Foundry and Castings Limited.
- ix. The PP shall submit the Action Plan as per Ministry's OM dated 30.09.2020 on the issues raised during the PH. In this instant case the PH was already conducted by the SPCB as per provisions of the EIA Notification, 2006.
- x. Housekeeping of the industry has to be improved immediately.
- xi. Mobile type mist cannon/ dry fog type dust suppression (two numbers) system may be engaged immediately for fugitive dust emission control.
- xii. The whole area of the industry has to be protected by the permanent boundary wall and it has to be completed within 2 months from the date of site visit by the committee.
- xiii. The rainwater harvesting system should be developed/improved. A proper plantation is required to be done around the rainwater harvesting pond.
- xiv. ETP/STP, which is under construction stage, should be completed as soon as possible.
- xv. Considering the fact regarding the existence of the school, a dense vegetation/plantation must be developed in-/out-side the school. It is recommended to construct boundary wall, plantation, painting of school building etc within 2 months and PP has agreed to carry out the same also.
- xvi. Proper plantation shall be done at every possible place in the Delari Village.
- xvii. Green belt development/plantation shall be done in this monsoon season only.
- xviii. A MoU has to be made with Brick manufacturing unit for continuous disposal of fly ash/waste till making their own unit.
- xix. Complete concreting of all internal roads has to be carried out. Greening and paving has to be made properly.
- xx. During the operation phase, PP is advised to conduct air monitoring in the vicinity of adjoining schools and human habitations to assess environmental/ecological impact. The PP should implement a project specific AQMP (Air Quality Management Plan) with best practices.

- xxi. PP shall develop green belt around the school boundary/premises and shall provide basic facilities to the nearby School.

\*\*\*

## **Additional Item with the permission of the Chair**

### **Agenda No. 40.17**

**40.17 Setting up of a Greenfield Integrated Steel Plant of capacity 13.2 MTPA Crude Steel with 10 MTPA Cement grinding unit & 900 MW Captive Power Plant by M/s. JSW Utkal Steel Limited, located at Polanga, BayanalaKandha, Gobindapur, Dthinkia, Nuagaon and Jatadhara villages, Ersama Tehsil, Jagatsinghpur District, Odisha.**

**[Order of Hon'ble NGT dated 20.03.2023 in the matter of Appeal No. 21 of 2022/EZ [I.A. No. 167/2022/EZ] and Others titled Prafulla Samantray Vs. Union of India & Ors. Regarding]**

**[Proposal No. IA/OR/IND/74396/2018; File No. J-11011/524/2017-IA.II (I)]**

The Member Secretary informed the EAC on 21.7.2023 during the Physical meeting held at MoEFCC, New Delhi that the Ministry has received a notice vide letter dated 17.07.2023 in reference to the order of Hon'ble Supreme Court of India, [CA No 3657-58 of 2023]. The Hon'ble Apex Court in its order dated 15.05.2023, directed the Appellant to file representation before the Expert Appraisal Committee, within 3 weeks from the date from passing of the said Order.

The appellant in its covering letter of the above notice has also mentioned that they have forwarded the representation on 29.05.2023 by speed post addressed to EAC (Industry-1) and EAC (Infra-1), New Delhi. Copy of representation has also been forwarded by the Appellant in its covering letter/notice.

Surprisingly, this said representation was never received by Chairman / Members / Member Secretary of EAC-Industry-1 Sector and it was brought to Notice to EAC on 21<sup>st</sup> July, 2023 during 40<sup>th</sup> EAC meeting held in Delhi on 19-21 July 2023.

In fact, EAC-Industry-1 Sector critically re-examined this case and send its recommendations to MoEFCC during its 36<sup>th</sup> EAC meeting held on 7<sup>th</sup> June 2023. However, after seeing this representation for the first time on 21<sup>st</sup> July, 2023, the EAC decided to re-examine the case in the best interests of environment and local community in compliance to the order of Hon'ble Supreme Court of India dated 15<sup>th</sup> May, 2023.

After detailed deliberations, the EAC accordingly **recommended** as follows:-

- (i) The copy of representation should be circulated to all EAC members for its detailed examination.
- (ii) The copy of representation may be forwarded to the PP for their response, if any.
- (iii) The earlier recommendation of 36<sup>th</sup> EAC meeting held on 7<sup>th</sup> June, 2023 of this particular agenda must be put on hold till Committee decides otherwise.

All above three actions should be immediately implemented.

The meeting ended with thanks to the Chair.

\*\*\*

**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 consist 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 8<sup>th</sup> 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 8<sup>th</sup> 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	
<b>A. Air Environment</b>			
<b>Micro-Meteorological</b> <ul style="list-style-type: none"> <li>• Wind speed (Hourly)</li> <li>• Wind direction</li> <li>• Dry bulb temperature</li> <li>• Wet bulb temperature</li> <li>• Relative humidity</li> <li>• Rainfall</li> <li>• Solar radiation</li> <li>• Cloud cover</li> <li>• Environmental Lapse</li> </ul>	Minimum 1 site in the project impact area	1 hourly continuous	<ul style="list-style-type: none"> <li>• IS 5182 Part 1-20</li> <li>• Site specific primary data is essential</li> <li>• Secondary data from IMD, New Delhi</li> <li>• CPCB guidelines to be considered.</li> </ul>

Attributes	Sampling		Remarks
	Network	Frequency	
Rate			
<b>Pollutants</b> <ul style="list-style-type: none"> <li>• PM<sub>2.5</sub></li> <li>• PM<sub>10</sub></li> <li>• SO<sub>2</sub></li> <li>• NO<sub>x</sub></li> <li>• CO</li> <li>• HC</li> <li>• Other parameters relevant to the project and topography of the area</li> </ul>	At least 8-12 locations	As per National Ambient Air Quality Standards, CPCB Notification.	<ul style="list-style-type: none"> <li>• Sampling as per CPCB guidelines</li> <li>• Collection of AAQ data (except in monsoon season)</li> <li>• Locations of various stations for different parameters should be related to the characteristic properties of the parameters.</li> <li>• 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,</li> <li>• 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.</li> </ul>

Attributes	Sampling		Remarks
	Network	Frequency	
<b>B. Noise</b>			
<ul style="list-style-type: none"> <li>Hourly equivalent noise levels</li> </ul>	At least 8-12 locations	As per CPCB norms	-
<b>C. Water</b>			
<b>Parameters for water quality</b> <ul style="list-style-type: none"> <li>pH, temp, turbidity, magnesium hardness, total alkalinity, chloride, sulphate, nitrate, fluoride, sodium, potassium, salinity</li> <li>Total nitrogen, total phosphorus, DO, BOD, COD, Phenol</li> <li>Heavy metals</li> <li>Total coliforms, faecal coliforms</li> <li>Phyto-plankton</li> <li>Zoo-plankton</li> <li>Microalgae/microalgal bloom</li> </ul>	Samples for water quality should be collected and analyzed as per: <ul style="list-style-type: none"> <li>IS: 2488 (Part 1-5) methods for sampling and testing of Industrial effluents</li> <li>Standard methods for examination of water and wastewater analysis published by American Public Health Association.</li> </ul>		
<b>For River Bodies</b> <ul style="list-style-type: none"> <li>Total Carbon</li> <li>pH</li> <li>Dissolved Oxygen</li> <li>Biological Oxygen Demand</li> <li>Free NH<sub>4</sub></li> <li>Boron</li> <li>Sodium Absorption Ratio</li> <li>Electrical Conductivity</li> <li>TDS</li> </ul>	<ul style="list-style-type: none"> <li>Surface water quality of the nearest River (60m upstream and downstream) and other surface water bodies</li> </ul>	<ul style="list-style-type: none"> <li>Yield of water sources to be measured during critical season</li> <li>Standard methodology for collection of surface water (BIS standards)</li> </ul>	
<b>For Ground Water</b>	<ul style="list-style-type: none"> <li>Ground water monitoring data should be collected at minimum of 8 locations (from existing wells /tube wells/existing current records) from the study area</li> </ul>		

Attributes	Sampling		Remarks
	Network	Frequency	
	and shall be included.		
<b>D. Traffic Study</b>			
<ul style="list-style-type: none"> <li>Type of vehicles</li> <li>Frequency of vehicles for transportation of materials</li> <li>Additional traffic due to proposed project</li> <li>Parking arrangement</li> </ul>	-		
<b>E. Land Environment</b>			
<b>Soil</b> <ul style="list-style-type: none"> <li>Particle size distribution</li> <li>Texture</li> <li>pH</li> <li>Electrical conductivity</li> <li>Cation exchange capacity</li> <li>Alkali metals</li> <li>Sodium Absorption Ratio (SAR)</li> <li>Permeability</li> <li>Water holding capacity</li> <li>Porosity</li> </ul>	Soil samples be collected as per BIS specifications		
<b>Land use/Landscape</b> <ul style="list-style-type: none"> <li>Location code</li> <li>Total project area</li> <li>Topography</li> <li>Drainage (natural)</li> <li>Cultivated, forest, plantations, water bodies, roads and settlements</li> </ul>	-		
<b>E. Biological Environment</b>			
<b>Aquatic</b> <ul style="list-style-type: none"> <li>Primary productivity</li> <li>Aquatic weeds</li> <li>Enumeration of phyto plankton, zoo plankton and benthos</li> </ul>	<ul style="list-style-type: none"> <li>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</li> </ul>		

Attributes	Sampling		Remarks
	Network	Frequency	
<ul style="list-style-type: none"> <li>• Fisheries</li> <li>• Diversity indices</li> <li>• Trophic levels</li> <li>• Rare and endangered species</li> <li>• Marine Parks/ Sanctuaries/ closed areas /coastal regulation zone (CRZ)</li> </ul> <p><b>Terrestrial</b></p> <ul style="list-style-type: none"> <li>• Vegetation-species list, economic importance, forest produce, medicinal value</li> <li>• Importance value index (IVI) of trees</li> <li>• Fauna</li> <li>• Avi fauna</li> <li>• Rare and endangered species</li> <li>• Sanctuaries / National park / Biosphere reserve</li> <li>• Migratory routes</li> </ul>			<p>would result in to any adverse effect on any species.</p> <ul style="list-style-type: none"> <li>• Samples to collect from upstream and downstream of discharge point, nearby tributaries at downstream, and also from dug wells close to activity site.</li> <li>• For forest studies, direction of wind should be considered while selecting forests.</li> <li>• Secondary data to collect from Government offices, NGOs, published literature.</li> </ul>
<b>F. Socio-economic</b>			
<ul style="list-style-type: none"> <li>• Demographic structure</li> <li>• Infrastructure resource base</li> <li>• Economic resource base</li> <li>• Health status: Morbidity pattern</li> <li>• Cultural and aesthetic attributes</li> <li>• Education</li> </ul>			<ul style="list-style-type: none"> <li>• Socio-economic survey is based on proportionate, stratified and random sampling method.</li> <li>• Primary data collection through questionnaire</li> <li>• Secondary data from census records, statistical hard books, topo sheets, health records and relevant official records available with Govt. agencies</li> </ul>

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	1 <sup>st</sup>	2 <sup>nd</sup>	3 <sup>rd</sup>	


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.

\*\*\*\*\*

**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/Nm<sup>3</sup> 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<sub>10</sub> and P<sub>2.5</sub>) present in the ambient air must be analysed for source analysis – natural dust/RSPM generated from plant operations (trace elements) of PM<sub>10</sub> 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<sub>10</sub> and PM<sub>2.5</sub>) present in the ambient air must be analysed for source analysis – natural dust/RSPM generated from plant operations (trace elements) of PM<sub>10</sub> 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/Nm<sup>3</sup> 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/Nm<sup>3</sup> shall be furnished.
16. Action plan for 100 % solid waste utilization shall be submitted.
17. PM (PM<sub>10</sub> and P<sub>2.5</sub>) present in the ambient air must be analysed for source analysis – natural dust/RSPM generated from plant operations (trace elements) of PM<sub>10</sub> to be carried over.

\*\*\*\*\*

#### **Standard ToRs FOR PULP AND PAPER INDUSTRY [5(i)]**

1. A note on pulp washing system capable of handling wood pulp shall be included.
2. Manufacturing process details for the existing and proposed plant shall be included. Chapter on Pulping & Bleaching shall include: no black liquor spillage in the area of pulp mill; no use of elemental chlorine for bleaching in mill; installation of hypo preparation plant; no use of potcher washing and use of counter current or horizontal belt washers. Chapter on Chemical Recovery shall include: no spillage of foam in

chemical recovery plant, no discharge of foul condensate generated from MEE directly to ETP; control of suspended particulate matter emissions from the stack of fluidized bed recovery boiler and ESP in lime kiln

3. Studies shall be conducted and a chapter shall be included to show that Soda pulping process can be employed for Eucalyptus/Casuarina to produce low kappa (bleachable) grade of pulp.
4. Commitment that only elemental Chlorine-free technology will be used for the manufacture of paper and existing plant without chemical recovery plant will be closed within 2 years of issue of environment clearance.
5. A commitment that no extra chlorine base bleaching chemicals (more than being used now) will be employed and AOx will remain within limits as per CREP for used based mills. Plan for reduction of water consumption.
6. Undertaking to comply with the norms stipulated in the S.O. 3187 (E) dated 7/10/2016 for the projects located in Ganga basin.
7. Action plan for the stock piles with impervious floor, provision of garland drains and catch pits to trap run off material shall be submitted.
8. Action plan to limit the particulate matter emission from all the stacks below 30 mg/Nm<sup>3</sup> 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/Nm<sup>3</sup> 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/Nm<sup>3</sup> 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/Nm<sup>3</sup> shall be furnished.
9. Action plan for 100 % solid waste utilization shall be submitted.
10. PM (PM<sub>10</sub> and P<sub>2.5</sub>) 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 PM<sub>10</sub> to be carried over.
11. Action plan for the stock piles with impervious floor, provision of garland drains and catch pits to trap run off material shall be submitted.

## **Standard ToRs FOR IRON ORE BENEFICIATION PLANT [2 (b)]**

1. Details regarding pollution control measures to be adopted in the mineral handling area, loading and unloading areas including all transfer points shall be submitted.
2. The Project proponent shall submit action plan for conditioning of the ore with water to mitigate fugitive dust emission, without affecting flow of ore in the ore processing and handling areas.
3. Treatment details regarding effluent generated from the ore beneficiation plant and the mode of transportation of tailing slurry shall be submitted.
4. Separate chapter on slime management shall be submitted.
5. Action plan for regular monitoring of ground water level and quality in and around the project area of beneficiation plant and tailing/slime pond shall be submitted by establishing a network of existing wells and constructing new piezometers.
6. Details regarding lining of the tailing/slime pond to be provided shall be submitted in order to ensure that there is no leaching from the tailing/slime pond.
7. Details regarding establishment of garland drain around the tailing/slime pond and the quantity of decanted water to be re-circulated from the tailing/slime pond shall be submitted along with complete water balance.
8. Technology to be adopted for maximum recovery of ore in order to reduce slurry discharge and to increase the life of the tailing/slime pond shall be submitted.
9. Action plan for 100 % solid waste utilization shall be submitted.
10. Action plan for the stock piles with impervious floor, provision of garland drains and catch pits to trap run off material shall be submitted.

\*\*\*\*\*

### **Executive Summary**

#### **Executive summary of the report in about 8/10 pages incorporating the following:**

- i. Project name and location (Village, Dist, State, Industrial Estate (if applicable))
- ii. Products and capacities. If expansion proposal, then existing products with capacities and reference to earlier EC.
- iii. Requirement of land, raw material, water, power, fuel, with source of supply (Quantitative)
- iv. Process description in brief, specifically indicating the gaseous emission, liquid effluent and solid and hazardous wastes. Materials balance shall be presented.
- v. Measures for mitigating the impact on the environment and mode of discharge or disposal.
- vi. Capital cost of the project, estimated time of completion
- vii. Site selected for the project – Nature of land – Agricultural (single/double crop), barren, Govt/private land, status of its acquisition, nearby (in 2/3 km.) water body, population,

- with in 10km other industries, forest, eco/sensitive zones, accessibility, (note – in case of industrial estate this information may not be necessary)
- viii. Baseline environmental data – air quality, surface and ground water quality, soil characteristic, flora and fauna, socio/economic condition of the nearby population
  - ix. Identification of hazards in handling, processing and storage of hazardous material and safety system provided to mitigate the risk.
  - x. Likely impact of the project on air, water, land, flora/fauna and nearby population
  - xi. Emergency preparedness plan in case of natural or in plant emergencies
  - xii. Issues raised during public hearing (if applicable) and response given
  - xiii. CSR plan with proposed expenditure.
  - xiv. Occupational Health Measures
  - xv. Post project monitoring plan

\*\*\*\*\*

### **ANNEXURE-3**

#### **List of the Expert Appraisal Committee (Industry-1) members participated during Physical/VC meeting**

<b>S. No.</b>	<b>Name</b>	<b>Position</b>	<b>19.07.2023</b>	<b>20.07.2023</b>	<b>21.07.2023</b>
1.	Shri Rajive Kumar	Chairman	<i>Present</i>	<i>Present</i>	<i>Present</i>
2.	Dr. Dipankar Shome	Vice Chairman	<i>Present</i>	<i>Present</i>	<i>Present</i>
3.	Dr. S. Ranganathan	Member	<i>Present</i>	<i>Present</i>	<i>Present</i>
4.	Dr. Ranjit Prasad	Member	<i>Present</i>	<i>Present</i>	<i>Present</i>
5.	Dr. S. K. Singh	Member	<i>Present</i>	<i>Present</i>	<i>Present</i>
6.	Dr. Tejaswini Ananthkumar	Member	<i>Present</i>	<i>Present</i>	<i>Present</i>
7.	Dr. Hemant Sahasrabuddhe	Member	<i>Present</i>	<i>Present</i>	<i>Present</i>
8.	Dr. Jai Krishna Pandey	Member	<i>Present</i>	<i>Present</i>	<i>Present</i>
9.	Dr. E V R Raju	Member	<i>Present</i>	<i>Present</i>	<i>Present</i>

<b>S. No.</b>	<b>Name</b>	<b>Position</b>	<b>19.07.2023</b>	<b>20.07.2023</b>	<b>21.07.2023</b>
10.	Dr. S K Chaturvedi, Actg. DG, (Representatives of NCCBM)	Member	<i>Absent</i>	<i>Absent</i>	<i>Absent</i>
11.	Shri Nazimuddin, Scientist 'F' (Representative of CPCB)	Member	<i>Present</i>	<i>Present</i>	<i>Present</i>
12.	Dr. S. Raghavan, Scientist 'D' (Representative of National Institute of Occupational Health (NIOH))	Member	<i>Present</i>	<i>Present</i>	<i>Present</i>
13.	Dr. Sanjay Bist, Scientist 'E' (Representative of Indian Meteorological Department)	Member	<i>Present</i>	<i>Present</i>	<i>Present</i>
14.	Dr. R.B. Lal, Scientist F, MoEFCC	Member Secretary	<i>Present</i>	<i>Present</i>	<i>Present</i>
<b>MoEFCC</b>					
15.	Dr R P Rastogi	Scientist C	<i>Present</i>	<i>Present</i>	<i>Present</i>
16.	Dr Sandeepan BS	Scientist B	<i>Present</i>	<i>Present</i>	<i>Present</i>

**\*\*\***

**Approval of EAC Chairman**

**Email**

**Director MoEFCC Dr R B LAL**

**Re: Approval of Draft minutes of the 40th EAC Meeting held on 19-21 July 2023 by the Chairman-Regarding**

**From :** chairman eac ind 1  
<chairman.eac.ind.1@gmail.com> Mon, Jul 31, 2023 04:21 PM

**Subject :** Re: Approval of Draft minutes of the  
40th EAC Meeting held on 19-21 July  
2023 by the Chairman-Regarding

**To :** Director MoEFCC Dr R B LAL  
<rb.lal@nic.in>

**Cc :** rajivekumar1983@gmail.com,  
ranganathan metals  
<ranganathan.metals@gmail.com>,  
ranjitnitj@gmail.com,  
rajuevr60@gmail.com,  
sksinghdce@gmail.com,  
dshome61@gmail.com, tejaswini acf  
<tejaswini.acf@gmail.com>,  
sshemant 801  
<sshemant\_801@rediffmail.com>,  
NCCBM DIRECTOR GENERAL  
<dg@ncbindia.com>, Nazimuddin  
<nazim.cpcb@nic.in>, Raghavan S  
<raghuharihar@gov.in>,  
raghuharihar@yahoo.co.in, Sanjay Bist  
<sanjay.bist@imd.gov.in>, drjkpandey  
eac industry1  
<drjkpandey.eac.industry1@gmail.co  
m>, RAJESH PRASAD RASTOGI  
<rp.rastogi@gov.in>, sandeepan  
<sandeepan.bs@gov.in>

Dear Dr. Lal,

The minutes are approved. Kindly do the needful.

Regards

Rajive Kumar

Chairman-Industry-1

**\*\*\***