

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

Dated: 17.07.2023

Date of Zero Draft MoM sent to EAC: 13.07.2023

Approval by Chairman: 16.07.2023

Uploading on PARIVESH: 17.07.2023

MINUTES OF THE 39TH EXPERT APPRAISAL COMMITTEE
(INDUSTRY-1 SECTOR) MEETING HELD ON 6TH -7TH JULY, 2023

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

Time: 10:30 AM onwards

DAY-1: JULY 6, 2023 [THURSDAY]

(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.

Details of the proposals considered during the 39th meeting **conducted** through **Video Conferencing**, deliberations made and the recommendations of the Committee are explained in the respective agenda items as under:

Consideration of Environmental Clearance Proposals

Agenda No. 39.1

39.1 Expansion of Steel Plant by Increasing the existing 100 TPD Sponge Iron production from 30,000 TPA to 33,000 TPA by increase in operating days from 300 to 330, establishment of new DRI Kiln of 1 x 100 TPD for Sponge Iron production of 33,000 TPA, WHRB based Power Plant of 4.0 MW & AFBC based Power Plant of 6.0 MW, Ferro Alloys Unit of 1 x 10 MVA to produce SiMn – 16,500 TPA (or) FeMn– 23,760 TPA (or) FeSi – 8,250 TPA (or) Pig Iron – 26,730 TPA]&Briquetting plant – 100 Kg/Hr. by M/s. Airan Steel & Power Pvt. Ltd., located at Plot No. 27-28, Silpahari Industrial Area, Village Hardikala, Tehsil Bilha, District Bilaspur, Chhattisgarh- Consideration of Environmental Clearance

**[Proposal No. IA/CG/IND1/419260/2023; File No. IA-J-11011/159/2021-IA-II(I)]
[Consultant: M/s. Pioneer Enviro Consultants Pvt. Ltd.; Valid up to 21.09.2025]**

39.1.1 M/s. Airan Steel & Power Pvt. Ltd. has made an online application vide proposal no. IA/CG/IND1/419260/2023 dated 17th June 2023 along with copy of EIA report, Forms (Part A, B and C) and certified compliance report seeking Environment Clearance (EC) under the provisions of the EIA Notification, 2006 for the project mentioned above. The proposed project activity is listed at S. No. 3(a) Metallurgical Industries (ferrous & non-ferrous) and 1(d) Thermal Power Plants under Category “A” of the schedule of the EIA Notification, 2006 and being appraised at Central Level.

39.1.2 Name of the EIA consultant: M/s. Pioneer Enviro Consultants Pvt. Ltd. [List of ACOs with their Certificate / Extension Letter no. NABET/EIA/2225/RA 0282; valid upto 21.09.2025, as on June 30, 2023].

Details submitted by Project proponent

39.1.3 The details of the ToR are furnished as below:

Date of Application	Consideration	Details	Date of Accord	ToR Validity
20.04.2021	Standard ToR was issued by MoEF&CC	Standard Terms of Reference	23.04.2021	22.04.2025

39.1.4 The project of M/s. Airan Steel & Power Pvt. Ltd., located at Plot No. 27-28, Silpahari Industrial Area, Village Hardikala, Tehsil Bilha, District Bilaspur, Chhattisgarh is for expansion of Steel Plant by Increasing the existing 100 TPD Sponge Iron production from 30,000 TPA to 33,000 TPA by increase in operating days from 300 to 330, establishment of new DRI Kiln of 1 x 100 TPD for Sponge Iron production of 33,000 TPA, WHRB based Power Plant of 4.0 MW & AFBC based Power Plant of 6.0 MW, Ferro Alloys Unit of 1 x 10 MVA to produce SiMn – 16,500 TPA (or) FeMn– 23,760 TPA (or) FeSi – 8,250 TPA (or) Pig Iron – 26,730 TPA]&Briquetting plant – 100 Kg/Hr.

39.1.5 Environmental site settings:

S.No.	Particulars	Details	Remarks																		
1.	Total land	7.62 Ha. (18.82 Acres) [Entire land is allotted by Chhattisgarh State Industrial Development Corporation (CSIDC).]	Land use: Existing plant is located 7.62 Ha. (18.82 acres) of land and the entire Land is allotted by Chhattisgarh State Industrial Development Corporation Ltd. (CSIDC Ltd.) in the name of Airan Steel & Power Pvt. Ltd., vide letter dt. 30.04.2004. It is already industrial land. Hence Land diversion is not required.																		
2.	Land acquisition details as per MoEF&CC, O.M. dated 7/10/2014.	Entire land of 7.62 Ha (18.82 Acres) has been allotted by Chhattisgarh State Industrial Development Corporation Ltd. (CSIDC Ltd.) in the name of Airan Steel & Power Pvt. Ltd., vide letter dt. 30.04.2004.	Land is allotted by Chhattisgarh State Industrial Development Corporation Ltd. (CSIDC Ltd.) in the name of Airan Steel & Power Pvt. Ltd., vide letter dt. 30.04.2004.																		
3.	Existence of habitation & involvement of R&R, if any.	Project site: No habitation exists in the plant site Study Area: <table border="1"> <thead> <tr> <th>Habitation</th> <th>Distance</th> <th>Direction</th> </tr> </thead> <tbody> <tr> <td>Silpahari</td> <td>1.0 kms.</td> <td>SE</td> </tr> </tbody> </table>	Habitation	Distance	Direction	Silpahari	1.0 kms.	SE	No R & R applicable												
Habitation	Distance	Direction																			
Silpahari	1.0 kms.	SE																			
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>Coordinates</th> </tr> </thead> <tbody> <tr> <td>Point # 1</td> <td>22° 1'13.87"N 82°10'52.81"E</td> </tr> <tr> <td>Point # 2</td> <td>22° 1'14.48"N 82°11'01.38"E</td> </tr> <tr> <td>Point # 3</td> <td>22° 1'04.59"N 82°11'02.22"E</td> </tr> <tr> <td>Point # 4</td> <td>22° 1'03.95"N 82°10'53.43"E</td> </tr> </tbody> </table>	Point	Coordinates	Point # 1	22° 1'13.87"N 82°10'52.81"E	Point # 2	22° 1'14.48"N 82°11'01.38"E	Point # 3	22° 1'04.59"N 82°11'02.22"E	Point # 4	22° 1'03.95"N 82°10'53.43"E	--								
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5.	Elevation of the project site	97 m to 100 m	--																		
6.	Involvement of Forest Land, if any	Nil	--																		
7.	Water body (Rivers, Lakes, Pond, Nala, Natural Drainage, Canal etc.) exists within the project site as well as study area	Project Site: Nil. Study area: <table border="1"> <thead> <tr> <th>Water body</th> <th>Distance (kms.)</th> <th>Direction</th> </tr> </thead> <tbody> <tr> <td>Gokenah Nalla</td> <td>0.4</td> <td>N</td> </tr> <tr> <td>Limtori Village Pond</td> <td>3.0</td> <td>SSE</td> </tr> <tr> <td>Arpa river</td> <td>4.5</td> <td>E</td> </tr> <tr> <td>Kurung River</td> <td>5.5</td> <td>NE</td> </tr> <tr> <td>Bandhwa Pond</td> <td>7.8</td> <td>SW</td> </tr> </tbody> </table>	Water body	Distance (kms.)	Direction	Gokenah Nalla	0.4	N	Limtori Village Pond	3.0	SSE	Arpa river	4.5	E	Kurung River	5.5	NE	Bandhwa Pond	7.8	SW	--
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S.No.	Particulars	Details			Remarks
		Kurung Left Bank Canal	8.3	E	
8.	Existence of ESZ / ESA / National Park / Wildlife Sanctuary / Biosphere Reserve / Tiger Reserve / Elephant Reserve etc. if any within the study area	Nil.			--

39.1.6 The existing plant has obtained CTE from Chhattisgarh Environment Conservation Board (CECB) vide 3937/TS/CECB/2004 Raipur dt. 04th October 2004 for establishment of 1x100 TPD sponge iron plant. The PP reported that the EC was not applicable, as consent has been obtained prior to EIA notification 2006 & its subsequent amendments. As per EIA 1994 notification also EC was not applicable as the project cost is less than Rs 100 Crores. Existing 2 x 2.04 TPH (29,400 TPA) Induction Furnaces has obtained CTE from CECB vide letter no. 6135/TS/CECB/2009 Raipur dt. 17th November 2009 (EC was not applicable - as per EIA notification 2006 & its subsequent amendments, as Secondary metallurgical activities of capacity less than 30,000 TPA, does not require EC). Now 2 x 2.04 TPH Induction Furnace is under shut down and will be removed after obtaining EC for the present proposal. The same is indicated in plant configuration table also. CTO has been issued by CECB vide letter no. 3648/TS/CECB/2021 Naya Raipur dt. 26th August 2021 for 1 x 100 TPD Sponge Iron plant and same is valid till 31/08/2024.

Details of Permissions obtained along with justification for not obtaining EC for existing plant:

- CTE for establishment of 1 x 100 TPD Sponge Iron plant has been obtained from Chhattisgarh Environment Conservation Board (CECB) vide no. 3937/TS/CECB/2004 Raipur dt. 04th October 2004. **Project Cost as mentioned in CTE is Rs. 10 Crores (at Point No. 18, Page no. 4 of CTE dt. 04th October 2004)**. EC was not applicable, as CTE has been obtained prior to EIA notification 2006 & its subsequent amendments thereof. Even as per EIA notification 1994 also EC was not applicable **as the project cost is Rs. 10 Crores** which is less than Rs. 100 Crores for Greenfield projects.
- 1st CTO for 1 x 100 TPD Sponge Iron plant has been issued by CECB vide order 4558/TS/CECB/2005 dated 28th September 2005.
- Another CTE for establishment of 2 x 2.04 TPH Induction Furnaces to produce Billets of 29,400 TPA capacity has been obtained from Chhattisgarh Environment Conservation Board (CECB) vide 4614/TS/CECB/2009 dt. 15th September 2009. As per EIA notification 2006 and its subsequent amendments thereof for Secondary Metallurgical industries, EC was applicable for production capacities more than 30,000 TPA. As per CTE order dated

15th September 2009, Billets production capacity is 29,400 TPA only which is within 30,000 TPA capacity. Hence EC was not applicable for the proposal as per EIA Notification 2006.

- 1st CTO for Induction furnace units has been obtained from CECB vide no. 6137/TS/CECB/2009 Raipur order dated 17th November 2009.
- With effect from August 2020, Induction Furnaces have been stopped lack of demand. In the latest CTO issued by CECB vide dated 26th August 2021 also Induction Furnaces are not covered.
- Latest CTO granted by CECB for 1 x 100 TPD Sponge Iron plant for production of 30,000 TPA vide order no. 3648/TS/CECB/2021 dated 26th August 2021 is valid till 31st August 2024.

39.1.7 Implementation status of the existing CTE/CTO:

S. No.	Facilities	Units	Permitted Capacities as per Consents	Implementation Status	Remarks
1	DRI Plant	Sponge Iron	30,000 TPA (1 x 100 TPD)	30,000 TPA (1 x 100 TPD)	In operation, CTO obtained and same valid till 31/08/2024.
2	Induction Furnaces *	MS Billets / Ingots	29,400 TPA	29,400 TPA	Now 2 x 2.04 TPH Induction Furnaces are under shut down and will be removed after obtaining EC for the present proposal. In the latest CTO also Ifs are not mentioned.

***Note:** Induction furnace for production of 29,400 TPA of Billets will be removed after grant of EC for Expansion proposal.

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

S.No.	Units (Products)	Existing Capacity (in Operation)	Expansion capacity	After proposed expansion
1.	DRI Kiln (Sponge Iron)	30,000 TPA (1x100 TPD)	Increase in production from 30,000 TPA 33,000 TPA by increase in the no. of operating days from 300 to 330 in the existing 1x100 TPD kiln)	66,000 TPA (2x100 TPD)

S.No.	Units (Products)	Existing Capacity (in Operation)	Expansion capacity	After proposed expansion
			New kiln - 1 x 100 TPD (33,000 TPA)	
2.	Induction Furnaces * (MS Billets / Ingots)	2 x 2.04 TPH (29,400 TPA)	Will be removed after grant of EC	---
3.	Submerged Electric Arc Furnace (SEAF)	---	1 x 10 MVA (SiMn – 16,500 TPA / FeMn– 23,760 TPA / FeSi – 8,250 TPA / Pig Iron – 26,730 TPA)	1 x 10 MVA (SiMn – 16,500 TPA / FeMn– 23,760 TPA / FeSi – 8,250 TPA / Pig Iron – 26,730 TPA)
4.	Briquetting plant	---	100 Kg/Hr.	100 Kg/Hr.
5.	Power Plant (Electricity)	---	10 MW (WHRB – 4 MW + AFBC- 6 MW)	10 MW (WHRB – 4 MW + AFBC- 6 MW)
*Note: Induction furnace for production of 29,400 TPA of Billets will be removed after grant of EC for Expansion proposal.				

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

S.No.	Raw Material	Quantity (TPA)	Sources	Mode of Transport	
1.	For DRI Kilns (Sponge Iron) – 66,000 TPA (2 x 100 TPD)				
a)	Iron ore	99,000	Barbil, Orissa NMDC, Chhattisgarh	By rail & road (through covered trucks)	
b)	Coal	Indian	85,800	SECL Chhattisgarh / MCL Odisha	By rail & road (through covered trucks)
		(or)		Indonesia / South Africa / Australia	Through sea route, rail route & by road
c)	Dolomite	3,300	Chhattisgarh	By road (through covered trucks)	
2.	For AFBC Boiler [Power Generation - 6.0 MW]				
a)	Indian Coal (100 %)	36,500	SECL Chhattisgarh/ MCL Odisha	By rail & road (through covered trucks)	
OR					
b)	Imported Coal (100 %)	24,000	Indonesia / South Africa / Australia	Through sea route, rail route & by road	
OR					
c)	Dolochar + Indian Coal	Dolochar	13,200	In plant generation	through covered conveyors
		Indian Coal	30,000	SECL Chhattisgarh / MCL Odisha	By rail & road (through covered trucks)
OR					
d)	Dolochar	13,200	In plant generation	through covered conveyors	

S.No.	Raw Material		Quantity (TPA)	Sources	Mode of Transport
	Dolochar + Imported Coal	Imported Coal	16,700	Indonesia / South Africa / Australia	Through sea route, rail route & by road.
3.	For Ferro Alloys (1 x 10 MVA)				
3 (i)	For Ferro Silicon – 8,250 TPA				
a)	Quartz		14,625	Chhattisgarh / Andhra Pradesh	By road (through covered trucks)
b)	LAM Coke		10,600	Andhra Pradesh	By road (through covered trucks)
c)	MS Scrap / Mill scales		3,500	Chhattisgarh	By road (through covered trucks)
d)	Electrode paste		500	Bihar / West Bengal	By road (through covered trucks)
e)	Bagfilter dust		810	In plant generation	---
	(or)				
3 (ii)	For Ferro Manganese – 23,760 TPA				
a)	Manganese Ore		53,580	MOIL / OMC	By Rail & Road (through covered trucks)
b)	LAM coke		11,700	Andhra Pradesh	By road (through covered trucks)
c)	Dolomite		8,200	Chhattisgarh / Andhra Pradesh	By road (through covered trucks)
d)	Coal		4,680	SECL Chhattisgarh/ MCL Odisha	By rail & road (through covered trucks)
e)	Electrode Paste		470	Bihar / West Bengal	By road (through covered trucks)
f)	Bagfilter dust		2,340	In plant generation	---
	(or)				
3 (iii)	For Silico Manganese – 16,500 TPA				
a)	Manganese Ore		37,375	MOIL / OMC	By Rail & Road (through covered trucks)
b)	LAM Coke		7,300	Andhra Pradesh	By road (through covered trucks)
c)	FeMn. Slag		22,230	In house generation	----
d)	Dolomite		6,500	Chhattisgarh / Andhra Pradesh	By road (through covered trucks)
e)	Electrode paste		400	Bihar / West Bengal	By road (through covered trucks)
f)	Quartz		1,100	Chhattisgarh / Andhra Pradesh	By road (through covered trucks)
g)	Coal		6,500	SECL Chhattisgarh / MCL Odisha	By rail & road (through covered trucks)
h)	Bagfilter dust		1,625	In plant generation	---
	(or)				
3 (iv)	For Pig Iron – 26,730 TPA				
a)	Iron ore		37,000	Barbil, Odisha NMDC, Chhattisgarh	By road (through covered trucks)

S.No.	Raw Material	Quantity (TPA)	Sources	Mode of Transport
b)	LAM Coke	11,900	Chhattisgarh / Andhra Pradesh	By road (through covered trucks)
c)	Coal	7,900	SECL Chhattisgarh / MCL Odisha	By rail & road (through covered trucks)
d)	Dolomite	7,900	Chhattisgarh / Andhra Pradesh	By road (through covered trucks)
e)	Mill scale	26,350	Chhattisgarh / Andhra Pradesh	By road (through covered trucks)
f)	Electrode paste	525	Bihar / West Bengal	By road (through covered trucks)
g)	Limestone	9,250	Chhattisgarh / Andhra Pradesh	By road (through covered trucks)
h)	Bag filter dust	263	In plant generation	---

39.1.10 Existing Water requirement is 60 m³/day and water drawl permission (NOC) for the same has been obtained from Central Ground Water Authority (CGWA). Water requirement for the proposed expansion project is estimated as 300 m³/day. Total water requirement after expansion will be 360 m³/day, which will be sourced from Podi Anicut on Arpa River which is at a distance of 6.6 (Kms. by road) from the plant site. Recommendation Letter has been issued by State Investment Promotion Board, (SIPB), Chhattisgarh, for allocation of 0.12045 MCM (i.e. 365 KLD) of water from Podi Anicut on Arpa River.

39.1.11 Power required for the CTO permitted operating units is 0.30 MW and is being sourced from the State Grid. Power required for the proposed expansion project will be 12.35 MW and will be sourced Captive Power Plant and the state grid. Total Power Requirement after proposed expansion will be 12.65 MW and same will be sourced from State Grid & Captive Power Plant.

39.1.12 Baseline Environmental Studies

Period	1 st March 2021 to 31 st May 2021
AAQ parameters at 8 locations	<ul style="list-style-type: none"> • PM_{2.5} = 21.5 to 39.4 µg/m³ • PM₁₀ = 36.5 to 65.7 µg/m³ • SO₂ = 10.3 to 17.3 µg/m³ • NO₂ = 12.1 to 23.7 µg/m³ • CO = 532 to 1121 µg/m³
AAQ modelling	<ul style="list-style-type: none"> • PM₁₀ = 0.44 µg/m³ • SO₂ = 4.34 µg/m³ • NO₂ = 2.57 µg/m³ • CO = 0.48 µg/m³

Ground water quality at 8 locations	Parameter	:	Range of Concentration		
	pH	:	7.4 to 7.8		
	TSS (in mg/l)	:	1.2 to 1.8		
	TDS (in mg/l)	:	353 to 531		
	Total Hardness (in mg/l)	:	219 to 259		
	Chlorides (in mg/l)	:	179 to 277		
	Fluoride (in mg/l)	:	0.49 to 0.74		
	Iron (in mg/l)	:	0.16 to 0.25		
Surface water quality at 3 locations	Parameters	:	Range of Concentration		
	pH	:	7.3 to 7.5		
	DO (in mg/l)	:	4.3 to 6.2		
	BOD (in mg/l)	:	2.2 to 3.0		
	COD (in mg/l)	:	10 to 12		
	TDS (in mg/l)	:	136 to 155		
	Sulphates (in mg/l)	:	45 to 56		
	Chlorides (in mg/l)	:	69 to 73		
Noise levels	The equivalent day-night noise levels in the study zone are ranging from 45.0 dBA to 69.12 dBA.				
Traffic assessment study findings	Plant site is well connected to National Highway # 130 (By pass) and is capable of absorbing additional truck movement due to proposed project.				
	Existing PCU is 628 PCU/hr. on NH # 130 and existing Level of Service (LOS) is :				
	Road	V (Volume in PCU/hr.)	C (Capacity in PCU/hr.)	Proposed V/C Ratio	LOS
	Baseline	628	2900	0.21	B
	During operation of the proposed expansion project	789 (628+ 161)	2900	0.27	B
	Level of Service (LOS) of the Road as per IRC				
	V/C	LOS	Performance		
	0.0 – 0.2	A	Excellent		
	0.2 – 0.4	B	Very Good		
	0.4 – 0.6	C	Good		
	0.6 – 0.8	D	Fair/ Average		
	0.8 – 1.0	E	Poor		
	1.0 & Above	F	Very Poor		
	V = Volume in PCU's /hr, C= Capacity PCU's /hr, LOS = Level of Service				
	<ul style="list-style-type: none"> V/C after proposed expansion project will be 0.27. Hence LOS will be 'B' (VERY GOOD). Hence the existing road is capable of taking the additional vehicular traffic due to the proposed expansion project 				
Flora and fauna	No schedule - 1 fauna present within 10 Kms. radius of the study area. Hence conservation plan is not required.				

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

S.No.	Waste	Quantity (TPA)			Method of disposal
		Existing	Proposed	After Expansion	
1	Ash from DRI	5,400	6,480	11,880	Will be given to Cement Plants & Brick manufacturers.
2	Dolochar	6,000	7,200	13,200	Will be used in FBC power plant as fuel.
3	Kiln Accretion Slag	300	360	660	Will be used in road construction & given to brick manufacturers.
4	Wet Scraper Sludge	1,500	1,800	3,300	Will be used in road construction & given to brick manufacturer.
5	SMS Slag	2,940	---	---	Induction furnace will be removed after grant of EC for Expansion proposal.
6	Ash from Power Plant (with Indian Coal + dolochar)	---	21,420	21,420	Ash generated will be given to Cement Plants / Brick Manufacturers.
7	Slag from FeMn	---	22,230	22,230	Will be reused in manufacture of SiMn as it contains high SiO ₂ and Silicon.
8	Slag from FeSi	---	325	325	Will be given to Cast iron foundries
9	Slag from SiMn	---	14,625	14,625	will be used for Road construction / will be given to slag cement manufacturing
10	Slag from Pig Iron	---	9,200	9,200	Will be given to slag cement manufacturing
11	Dust from SEAF	---	2,340	2,340	Will be briquetted and reused in SEAF.

NOTE: Solid wastes such as dolochar, accretion slag, granulated slag will be stored in designated storage yard. Ash generated will be stored in silos only. There will not be any open storage of fly ash. Trace metal analysis & TCLP analysis will be carried out upon commencement of production.

However, upon commencement of production, TCLP will be conducted and based on the result the slag will be disposed in accordance with the MoEF&CC/CPCB/SPCB norms.

Hazardous waste generation, storage & disposal:

1.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/reprocessors.

2.Used Batteries

Used batteries will be given back to the supplier under buy back agreement with supplier.

39.1.14 Public Consultation:

Date of advertisement	01.07.2022
Name of newspapers	1. Dainik Bhaskar, Bilaspur 2. The Times of India” New Delhi
Date on which Public Hearing conducted	18.08.2022 at 11:00 AM
Venue	Public Hearing has been conducted at Sub Station of State Electricity Board, Silpahari Complex, Village -Hardikala, Tehsil- Bilha, District- Bilaspur, Chhattisgarh.
Chaired by	Additional District Magistrate
Major issues raised	<ul style="list-style-type: none"> • Impart training to the local villagers for skill development. • Plantation in nearby villages & along the Roads • Providing water facility by Digging of borewells in Hardikala, Silpahari, Dhuma villages • Road widening of Bilaspur – Silpahari Road (1200 m). • Speed breakers, Boards on the rods for speed reduction will be provided at vulnerable points in Hardikala, Silpahari, Kormi, Basiya Villages. • Construction of class rooms in school Silpahari. • Providing furniture, computers, library, etc. for local schools

Action plan as per MoEFCC O.M. dated 30/09/2020

S. NO.	MAJOR ACTIVITY HEADS		YEAR OF IMPLEMENTATION			TOTAL EXPENDITURE (Rs. in Lakhs)
			1 st Year (Rs. in Lakhs)	2 nd Year (Rs. in Lakhs)	3 rd Year (Rs. in Lakhs)	
A). Need Based & SIA Study						
Community & Infrastructure Development Programmes						
1	Providing LED Street lighting with solar panels	Physical Nos. & village	5 nos. in Hardikala (v), 5 nos. in Silpahari (v)	5 nos. in Kormi (v) & 5 Nos. in Basiya (v)	-	6.0
		Budget in Lakhs	3.0	3.0		
					TOTAL (A)	6.0
B). Based on Public Consultation/Hearing						
1	Impart training to the local villagers	Physical Nos. & village	One DISHA centre in Silpahari Village			

S. NO.	MAJOR ACTIVITY HEADS	YEAR OF IMPLEMENTATION			TOTAL EXPENDITURE (Rs. in Lakhs)	
		1 st Year (Rs. in Lakhs)	2 nd Year (Rs. in Lakhs)	3 rd Year (Rs. in Lakhs)		
	for skill development. a)DISHA Centre” along with necessary infrastructure for various vocational training program for employment generation in association with National Skill Development Mission (Automobile Repair, Welding, Electrical, Computer Hardware, Soft skills like computer programs etc.)	Budget in Lakhs	20.0	20.0	13.0	53.0
2	Plantation in nearby villages & along the Roads.	Physical Nos. & village	1000 nos. in Hardikala (v), 1000 nos. in Silpahari (v), 1000 nos. in Dhuma (v)	-	-	15.0
		Budget in Lakhs	15.0			
3	Providing water facility by drilling borewells in Hardikala, Silpahari, Dhuma villages	Physical Nos. & village	2 nos. in Hardikala (v), 2 nos. in Silpahari (v) & 2 nos. in Dhuma (v)	-	-	6.0
		Budget in Lakhs	6.0			
4	Road widening of Bilaspur – Silpahari Road (1200m). (it will be done in consultation with other industries in	Physical Nos. & village	-	-	Bilaspur to Silpahari (Contribution of Airen Steel)	5.0

S. NO.	MAJOR ACTIVITY HEADS		YEAR OF IMPLEMENTATION			TOTAL EXPENDITURE (Rs. in Lakhs)
			1 st Year (Rs. in Lakhs)	2 nd Year (Rs. in Lakhs)	3 rd Year (Rs. in Lakhs)	
	Silpahari Industrial Area)					
		Budget in Lakhs			5.0	
5	Speed breakers, Boards on the rods for speed reduction will be provided at vulnerable points in Hardikala, Silpahari, Kormi, Basiya Villages.	Physical Nos. & village	-	Hardikala (v), Silpahari (v), Basiya (v), Kormi (v)	-	4.0
		Budget in Lakhs		4.0		
6	Construction of class rooms in school Silpahari	Physical Nos. & village	-	-	2 nos. of rooms each of size 8m x 5m x 3m in Silpahari (v)	8.0
		Budget in Lakhs			8.0	
7	Providing furniture, computers, library, etc. for local schools		-	-	Hardikala (v), Dhuma (v) & Kormi (v)	
		Budget in Lakhs			5.0	5.0
		Total (B)	41.0	24.0	31.0	96.0
		TOTAL (A+B)	44.0	27.0	31.0	102.0
Grand Total (A+B)						102.0
APART FROM ABOVE, Recurring expenditures under CSR as per companies Act 2014						
<ul style="list-style-type: none"> Health checkup will be carried out periodically in surrounding villages i.e. Hardikala, Silpahari, Kormi, Basiya, Dhuma villages @ Rs 5.0 Lakhs every year. 						

39.1.15 The capital cost of the expansion project is Rs. 68 Crores and the capital cost for environmental protection measures with SID is proposed as Rs. 12.79 Crores. The annual recurring cost towards the environmental protection measures is proposed as Rs.1.84 Crores. The employment generation from the proposed expansion project is 230 direct & 400 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 Crores)
1	Air Emission Management		
	• Electro Static Precipitators (ESP) - DRI & Power plant	3.00	0.80
	• Fume Extraction system with bag filters	2.00	0.10
	• other APCS & Conveyor systems	1.00	0.10
	• Stacks	1.00	0.01
	• Mechanical Dust sweepers	0.10	0.01
	• Water Sprinklers	0.20	0.01
2	Wastewater Management		
	• for New ETP	0.20	0.03
	• for STP	0.30	0.05
	• for Garland drains	0.15	0.01
3	Solid waste Management		
	• Fly Ash Handling & disposal	0.70	0.20
	• Slag Handling & Disposal	0.10	0.10
	• Hazardous waste storage & disposal	0.05	0.05
	• Municipal solid waste storage & disposal	0.05	0.02
4	Greenbelt development	0.05	0.01
5	Noise Management	0.10	0.01
6	RWH in Plant	0.10	0.01
7	Fire Safety Systems	0.50	0.05
8	Environmental Monitoring		
	• CEMS	0.15	0.01
	• CAAQMS	1.60	0.10
	• Environment Monitoring	0	0.03
9	Occupational Health & Safety		
	• Dispensary with Ambulance	0.30	0.05
	• Personal Protective Equipment's (PPEs)	0.10	0.05
	TOTAL	11.77	1.84

39.1.16 Greenbelt has been developed in the existing plant with 6250 nos. of plants existing in a total land of 2.54 Ha. Always 1000 nos. of plants per acre i.e. 6200 plants will be maintained in the plant premises at any point of time to further mitigate the emissions.

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

Certified Compliance Report from Regional Office, SPCB

39.1.18 The status of the compliance report of conditions in earlier CTO was issued by Chhattisgarh Environment Conservation Board (CECB), Chhattisgarh vide letter No. 1592/RO/CECB/2021 dt. 18.10.2022 The Regional Office, CECB has visited the Plant site on 18.10.2022. As per the report all conditions have been complied.

Written representations:

39.1.19 During the meeting, based on the deliberations made by the EAC, the project proponent vide letter dated 06.07.2023 through email dated 06.07.2023 submitted the following information:

S.No.	Details sought	Reply by PP
1.	Justification for not obtaining EC for existing plant	<ul style="list-style-type: none"> • CTE for establishment of 1 x 100 TPD Sponge Iron plant has been obtained from Chhattisgarh Environment Conservation Board (CECB) vide no. 3937/TS/CECB/2004 Raipur dt. 04th October 2004. Project Cost as mentioned in CTE is Rs. 10 Crores (at Point No. 18, Page no. 4 of CTE dt. 04th October 2004). Copy of the CTE is submitted. EC was not applicable, as CTE has been obtained prior to EIA notification 2006 & its subsequent amendments thereof. Even as per EIA notification 1994 also EC was not applicable as the project cost is Rs. 10 Crores which is less than Rs. 100 Crores for Greenfield projects. • 1st CTO for 1 x 100 TPD Sponge Iron plant has been issued by CECB vide order 4558/TS/CECB/2005 dated 28th September 2005. Copy of the 1st CTO for Sponge Iron plant is submitted. • Another CTE for establishment of 2 x 2.04 TPH Induction Furnaces to produce Billets of 29,400 TPA capacity has been obtained from Chhattisgarh Environment Conservation Board (CECB) vide 4614/TS/CECB/2009 dt. 15th September 2009 and same is submitted. As per EIA notification 2006 and its subsequent amendments thereof for Secondary Metallurgical industries, EC was applicable for production capacities more than 30,000 TPA. As per CTE order dated 15th September 2009, Billets production capacity is 29,400 TPA only which is within 30,000 TPA capacity. Hence EC was not applicable for the proposal as per EIA Notification 2006. • 1st CTO for Induction furnace units has been obtained from CECB vide no. 6137/TS/CECB/2009 Raipur order dated 17th November 2009. Copy of 1st CTO is submitted. • With effect from August 2020, Induction Furnaces have been stopped lack of demand. In

S.No.	Details sought	Reply by PP
		<p>the latest CTO issued by CECB vide dated 26th August 2021 also Induction Furnaces are not covered.</p> <ul style="list-style-type: none"> • Latest CTO granted by CECB for 1 x 100 TPD Sponge Iron plant for production of 30,000 TPA vide order no. 3648/TS/CECB/2021 dated 26th August 2021 is valid till 31st August 2024. Copy of the latest CTO is submitted.
2.	Revised Plant Layout drawing, Greenbelt and road network drawing, Contour map	PP has submitted the Revised Plant Layout drawing, Revised Greenbelt and road network drawing and Revised Contour map.
3.	Revised PH action Plan	Revised PH action Plan has been submitted and updated at para 39.1.14 above.
4.	Proposed mitigation measures for Gokena Nalla	<p>The following mitigation measures have been proposed for protection of Gokena nalla</p> <ul style="list-style-type: none"> • Gokena nalla is at a distance of 0.4 kms. from the boundary of the plant. • There is one industrial unit by name M/s. Vilsons Roofing in between Airan Steel & Power Pvt Ltd. and Gokena nalla. • Effluent generated from the plant will be treated in Effluent treatment plant (ETP) and after ensuring compliance with the SPCB norms, the treated effluent will be utilised for dust suppression, ash conditioning and for greenbelt development. Zero Liquid discharge is maintained in existing plant and similar practice will be maintained after expansion also. • Sanitary waste water will be treated in Sewage Treatment Plant (STP) and the treated sewage after ensuring compliance with the norms will be utilised for greenbelt development. • Zero Liquid discharge (ZLD) will be maintained in the plant and no effluent will be discharged outside the plant premises. • All required Air pollution control measures such as ESPs, Bagfilters, covered conveyers, mechanical dust sweepers, dust suppression system, mist cannon sprayers, Wheel washing facility at the inlet and outlet, etc. will be provided and operated duly ensuring compliance with the norms. • All solid waste utilization / disposal will be in accordance with the permitted procedures such as utilisation of dolochar as fuel in FBC Boiler, Briquetting plant for effective dust management.

S.No.	Details sought	Reply by PP
		<ul style="list-style-type: none"> • Greenbelt of 68 m wide will be maintained within the premises in North direction towards Gokena Nalla. • With all these mitigation measures there will not be any adverse impact on Gokena Nalla due to the present proposal.
5.	Proposed Housekeeping measures	<p>As advised by the Hon'ble EAC we propose the following better housekeeping practices.</p> <ul style="list-style-type: none"> • Ash will be stored in silos only. • Closed shed will be provided for coal storage. • Mechanical dust sweeper will be provided for effective housekeeping. • Wheel washing facility will be provided at entry and exit gates. • Periodical maintenance of Air emission control equipment. • Avenue plantation will be taken up on either side of internal roads.

Deliberations by the Committee

39.1.20 The Committee noted the following:

1. The instant proposal is for expansion of Steel Plant by Increasing the existing 100 TPD Sponge Iron production from 30,000 TPA to 33,000 TPA by increase in operating days from 300 to 330, establishment of new DRI Kiln of 1 x 100 TPD for Sponge Iron production of 33,000 TPA, WHRB based Power Plant of 4.0 MW & AFBC based Power Plant of 6.0 MW, Ferro Alloys Unit of 1 x 10 MVA to produce SiMn – 16,500 TPA (or) FeMn– 23,760 TPA (or) FeSi – 8,250 TPA (or) Pig Iron – 26,730 TPA]&Briquetting plant – 100 Kg/Hr.
2. The EAC, constituted under the provision of the EIA Notification, 2006 comprising Expert Members/domain experts in various fields, examined the proposal submitted by the Project Proponent in desired format along with EIA/EMP reports prepared and submitted by the Consultant accredited by the QCI/ NABET on behalf of the Project Proponent.
3. The EAC noted that the Project Proponent has given an undertaking that the data and information given in the application and enclosures are true to the best of his knowledge and belief and no information has been suppressed in the EIA/EMP reports. If any part of data/information submitted is found to be false/ misleading at any stage, the project will be rejected and Environmental Clearance given, if any, will be revoked at the risk and cost of the project proponent.
4. The Committee noted that the EIA reports are in compliance of the ToR issued for the project, reflecting the present environmental status and the projected scenario for all the environmental components. The Committee deliberated on the proposed mitigation measure towards Air, Water, Noise and Soil pollutions. The Committee suggested that the storage of toxic/explosive raw materials/products shall be undertaken with utmost precautions and following the safety norms and best practices.

5. The existing plant has obtained CTE from Chhattisgarh Environment Conservation Board (CECB) vide 3937/TS/CECB/2004 Raipur dt. 04th October 2004 for establishment of 1x100 TPD sponge iron plant. EC was not applicable, as consent has been obtained prior to EIA notification 2006 & its subsequent amendments. As per 1994 EIA notification also EC was not applicable as the project cost is less than Rs 100 Crores). Existing 2 x 2.04 TPH (29,400 TPA) Induction Furnaces has obtained CTE from CECB vide letter no. 6135/TS/CECB/2009 Raipur dt. 17th November 2009 (EC was not applicable - as per EIA notification 2006 & its subsequent amendments, as Secondary metallurgical activities of capacity less than 30,000 TPA, does not require EC). Now 2 x 2.04 TPH Induction Furnace is under shut down and will be removed after obtaining EC for the present proposal. The same is indicated in plant configuration table also. CTO has been issued by CECB vide letter no. 3648/TS/CECB/2021 Naya Raipur dt. 26th August 2021 for 1 x 100 TPD Sponge Iron plant and same is valid till 31/08/2024.
6. The total project area is 7.62 Ha. (18.82 Acres) which is allotted by Chhattisgarh State Industrial Development Corporation Ltd. (CSIDC Ltd.) in the name of M/s. Airan Steel & Power Pvt. Ltd., vide letter dt. 30.04.2004. Land is already Industrial in nature due to existing operations of the plant. Proposed expansion will take place in the existing land and no additional area is required for the expansion project.
7. The nearest habitation is Silpahari Village which is at a distance of 1 km in South-East direction of the project site. The EAC is of the opinion that PP shall strictly implement the environmental safeguard measures proposed to minimise the impact on the habitation of the locals.
8. Gokenah Nala is at a distance of 0.4 km in North of the project site. Also, there are other water bodies such as pond, river, and canal within the study area of 10 km of the project site. The EAC is of the opinion that water bodies shall not be disturbed. Mitigation measures w.r.t. safeguarding the water bodies shall be implemented.
9. Existing Water requirement is 60 m³/day which is obtained from is obtained from ground water. Total water requirement after expansion will be 360 m³/day, which will be sourced from Podi Anicut on Arpa River which is at a distance of 6.6 (Kms. by road) from the plant site.
10. The Committee has deliberated on the baseline data and incremental GLC due to the proposed project and found it satisfactory.
11. The PP has submitted that existing greenbelt has been developed in the existing plant with 6250 nos. of plants existing in a total land of 2.54 Ha. Always 1000 nos. of plants per acre i.e. 6200 plants will be maintained in the plant premises at any point of time to further mitigate the emissions. The EAC deliberated on the greenbelt action plan and found it satisfactory.
12. The committee deliberated details of carbon foot prints and carbon sequestration study w.r.t. proposed project and found them to be satisfactory.

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

Recommendations of the Committee:

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

A. Specific Condition:

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

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

- iii. The nearest habitation is Silpahari Village which is at a distance of 1 km in South-East direction 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 this location in its environmental monitoring programme.
- iv. Gokenah Nala is at a distance of 0.4 km in North of the project site. Also, there are other water bodies such as pond, river, and canal within the study area of 10 km of the project site. A robust and full proof Drainage Conservation scheme to protect the natural drainage and its flow parameters; along with Soil conservation scheme and multiple Erosion control measures shall be implemented.
- v. The water requirement of 360 m³/day shall be sourced from Podi Anicut on Arpa River after obtaining necessary permission from the Competent Authority. No ground water extraction is 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 Silpahari Village. Compliance status in this regard, shall be submitted to concerned Regional Office of the MoEF&CC.
- vii. All the commitments made towards socio-economic development of the nearby villages shall be satisfactorily implemented. The action plan based on the social impact assessment study of the project as per the EMP in accordance to the Ministry's OM dated 30.09.2020 amounting to Rs. 1.2 Crores shall be strictly implemented and progress shall be submitted to the Regional Office of MoEF&CC.
- viii. The PP shall adopt undertake village adoption programme, prepare and implement the action plan to develop them into model villages.
- ix. The PP shall improve the housekeeping at the project site as per the submitted plan.

B. General Conditions

I. Statutory compliance:

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

II. Air quality monitoring and preservation

- i. The project proponent shall install 24x7 continuous emission monitoring system at process stacks to monitor stack emission as well as 02 Nos. Continuous Ambient Air Quality Station (CAAQMS) for monitoring AAQ parameters with respect to standards prescribed in Environment (Protection) Rules 1986 as amended from time to time. The CEMS and CAAQMS shall be connected to SPCB and CPCB online servers and calibrate these systems from time to time according to equipment supplier specification through labs recognized under Environment (Protection) Act, 1986 or NABL accredited laboratories.
- ii. The project proponent shall carryout Continuous Ambient Air Quality monitoring for common/criterion parameters relevant to the main pollutants released (e.g. PM₁₀ and PM_{2.5} in reference to PM emission, and SO₂ and NO_x in reference to SO₂ and NO_x 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/Nm³ 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 4th hole extraction system shall be provided in the Sub Merged Arc Furnaces and EAF.
 - xxii. Industry is going to use silica quartz in large quantities and going to produce Silico Manganese and Ferro Silicon alloy steel. Therefore, it is necessary to control silica/quartz exposures at production Departments, not only emission norms as per Indian Factories Act. The permissible limit for silica/quartz should be within 10 mg/m³ for total dust as per Indian Factories Act. Therefore, it is recommended to monitor personal and area exposures for silica quartz dust in the process plants.
 - xxiii. No Ferro-chrome production shall be carried out without prior Environmental clearance from MOEF&CC.
 - xxiv. 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.
 - xxv. The coal dust should be monitored at coal unloading, crushing, furnace areas and should be within 2 mg/m³, respirable dust fraction containing less than 5% quartz as per Indian Factories Act, 1948.
 - xxvi. The Project proponent shall fix carbon monoxide detectors with critical alarms at strategic locations inside the Plant.

III. Water quality monitoring and preservation

- i. The project proponent shall install 24x7 continuous effluent monitoring system with respect to standards prescribed in Environment (Protection) Rules 1986 as amended from time to time and connected to SPCB and CPCB online servers and calibrate these system from time to time according to equipment supplier specification through labs recognized under Environment (Protection) Act, 1986 or NABL accredited laboratories.
- ii. The project proponent shall monitor regularly ground water quality at least twice a year (pre- and post-monsoon) at sufficient numbers of piezometers/sampling wells in the plant

and adjacent areas through labs recognized under Environment (Protection) Act, 1986 and NABL accredited laboratories.

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

IV. Noise monitoring and prevention

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

V. Energy Conservation measures

- i. Use torpedo ladle for hot metal transfer as far as possible. If ladles not used, provide covers for open top ladles.
- ii. Restrict Gas flaring to < 1%.
- iii. Provide solar power generation on roof tops of buildings, for solar light system for all common areas, street lights, parking around project area and maintain the same regularly;
- iv. Provide LED lights in their offices and residential areas.
- v. The project proponent shall provide waste heat recovery system on the DRI Kilns.
- vi. The dolochar generated shall be used for power generation.
- vii. 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.
- viii. 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. Oil collection trays shall be provided under coils on saddles in cold rolled coil storage area.
- ii. Kitchen waste shall be composted or converted to biogas for further use.
- iii. 100% utilization of fly ash shall be ensured. All the fly ash shall be provided to cement and brick manufacturers for further utilization and Memorandum of Understanding in this regard shall be submitted to the Ministry's Regional Office.
- iv. The Plastic Waste Management Rules 2016, inter-alia, mandated banning of identified Single Use Plastic (SUP) items with effect from 01/07/2022. In this regard, CPCB has issued a direction to all the State Pollution Control Boards (SPCBs)/Pollution Control Committees (PCCs) on 30/06/2022 to ensure the compliance of Notification published by Ministry on 12/08/2021. The technical guidelines issued by the CPCB in this regard is available at <https://cpcb.nic.in/technical-guidelines-3/>. All the project proponents are hereby requested to sensitize and create awareness among people working within the Project area as well as its surrounding area on the ban of SUP in order to ensure the compliance of Notification published by this Ministry on 12/08/2021. A report, along with photographs, on the measures taken shall also be included in the six monthly compliance report being submitted by the project proponents.
- v. 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. 39.2

39.2 Greenfield Project for Installation of Steel plant having production capacity of M.S Billets of 3,56,400 TPA with facility of two Induction furnace of 30 Ton each, Rolling Mill of 3,37,000 TPA for manufacturing of TMT Bar/Rolled Project/Structural Steel and Zinc Recovery Plant of capacity 6 TPD by M/s SBF Rapid Industries Private Limited, located at plot no. SP- 4-317, Karoli Industrial Area, Village: Karoli, Tehsil: Tijara, District- Alwar, Rajasthan– Consideration of Environmental Clearance.

**[Proposal No. IA/RJ/IND1/432306/2023; File No. IA-J-11011/514/2022-IA-II(IND-I)]
[Consultant: Grass Roots Research and Creation India (P) Ltd.; Valid upto 15.02.2024]**

39.2.1 M/s. SBF Rapid Industries Private Limited has made an online application vide proposal No-IA/RJ/IND1/432306/2023, dated 22.06.2023 along with copy of EIA report, Forms (Part A, B and C) seeking Environment Clearance (EC) under the provisions of the EIA Notification, 2006 for the project mentioned above. The proposed project activity is listed at S. No.3(a) Metallurgical Industries (Ferrous and Non/ferrous) under Category “A” of the schedule of the EIA Notification, 2006 and attracts general condition due to Interstate Boundary of Rajasthan – Haryana at a distance of 4.5 km and also the project lies in critically polluted area (CPA-Khushkhera), therefore, appraised at Central Level.

39.2.2 Name of the EIA consultant: M/s. Grass Roots Research and Creation India (P) Ltd [List of ACOs with their Certificate / Extension Letter no. NABET/EIA/2124/RA 0213; valid upto 15.02.2024, as on June 30, 2023].

Details submitted by Project proponent

39.2.3 The details of the ToR are furnished as below:

Date of Application	Consideration	Details	Date of Accord	ToR Validity
17.01.2023	Standard ToR was issued by MoEF&CC	Standard Terms of Reference	24.01.2023	23.01.2027

39.2.4 The project of M/s SBF Rapid Industries Private Limited, located at plot no. SP- 4-317, Karoli Industrial Area, Village: Karoli, Tehsil: Tijara, District- Alwar, Rajasthan is a Greenfield Project for Installation of Steel plant having production capacity of M.S Billets of 3,56,400 TPA with facility of two Induction furnace of 30 Ton each, Rolling Mill of 3,37,000 TPA for manufacturing of TMT Bar/Rolled Project/Structural Steel and Zinc Recovery Plant of capacity 6 TPD.

39.2.5 Environmental site settings:

S.No	Particulars	Details	Remarks
1	Total Land	6.22 ha [Govt land]	Industrial land as situated in

S.No	Particulars	Details	Remarks															
			RIICO industrial area.															
2	Land acquisition details as per MoEF&CC O.M dated 7/10/2014	The land has been allotted to M/S SBF Rapid Industries Private limited from Rajasthan State Industrial Development and Investment Corporation Ltd (RIICO) vide letter no. 2985 on dated 21.11.2022																
3	Existence of habitation & involvement of R&R, if any.	Nil																
4	Latitude and Longitude of the project site	<table border="1"> <thead> <tr> <th>S. no</th> <th>Latitude</th> <th>Longitude</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>28°6'21.92"N</td> <td>76°47'34.18"E</td> </tr> <tr> <td>2</td> <td>28°6'21.90"N</td> <td>76°47'39.37"E</td> </tr> <tr> <td>3</td> <td>28°6'8.02"N</td> <td>76°47'39.72"E</td> </tr> <tr> <td>4</td> <td>28°6'8.01"N</td> <td>76°47'34.46"E</td> </tr> </tbody> </table>	S. no	Latitude	Longitude	1	28°6'21.92"N	76°47'34.18"E	2	28°6'21.90"N	76°47'39.37"E	3	28°6'8.02"N	76°47'39.72"E	4	28°6'8.01"N	76°47'34.46"E	
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3	28°6'8.02"N	76°47'39.72"E																
4	28°6'8.01"N	76°47'34.46"E																
5	Elevation of the project site	283 Meter above the sea level																
6	Involvement of Forest land if any.	Nil																
7	Water body exists within the project site as well as study area	Project Site – Nil Study Area <table border="1"> <thead> <tr> <th>Water Body</th> <th>Distance</th> <th>Direction</th> </tr> </thead> <tbody> <tr> <td>Sahibi River</td> <td>4.2 km</td> <td>West</td> </tr> <tr> <td>Chaondi Nadi</td> <td>6.5 km</td> <td>South</td> </tr> </tbody> </table>	Water Body	Distance	Direction	Sahibi River	4.2 km	West	Chaondi Nadi	6.5 km	South							
Water Body	Distance	Direction																
Sahibi River	4.2 km	West																
Chaondi Nadi	6.5 km	South																
8	Existence of ESZ / ESA/national park /wildlife sanctuary /biosphere reserve /tiger reserve /elephant reserve etc. if any within the study area	Nil																

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

Facility	Configuration	Total Capacity
Billets Production		
Induction Furnaces	2 No. (+1 Crucible standby)	3,56,400 TPA
Melting Capacity of Induction Furnace	30 tonne each	
No of Heat per Day per Furnace	18	
Production capacity per day	1080 TPD	
No. of days operation per annum	330	
Installed Capacity Per annum	3,56,400 TPA	

Facility	Configuration	Total Capacity
Ladle refining furnace	Compatible	
VD Unit (Optional)	Compatible	
Compatible Continuous Casting facility	3,56,400 TPA	
Rolling Mill		
Production capacity per day	1021 TPD	3,37,000 TPA
No. of days operation per annum	330 days	
Installed Capacity Per annum	3,37,000 TPA	
Zinc Recovery Plant	6 TPD	

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

Sl. No.	Raw Material	Quantity (TPA)	Source	Distance (w.r.t. Plant)	Mode of transport
A. SMS Unit					
1.	MS Scrap / Pig Iron	3,59,964	Outsourced/ Local	20-30 km	By Road
2.	Sponge Iron	53,995	Outsourced/ Local	25-40 km	By Road
3.	Ferro Alloys	17,998	Outsourced/Local	25-40 km	By Road
B. Rolling Mill					
1.	MS billets	3,56,400	In-house	--	Direct Charging
C. Zinc Metal					
1.	APCD dust (in-house)	1650	Inhouse	--	Conveyor belt
2.	APCD dust (Out-source)	3300	Outsourced/ Local	10-20 km	By Road
3	Ammonia Chloride (Outsource)	1650	Outsourced/ Local	10-20 km	By Road

39.2.8 The water requirement for the project is estimated as 95 m³/day, which will be met through 2 nos. bore-wells. NOC for Ground Water Abstraction has been obtained from CGWA vide NOC No. CGWA/NOC/IND/ORIG/2023/18305, dated 21.04.2023. Permission for use of treated water for greenbelt has been obtained from Bhiwadi Jal Pradushan Nivaran Association vide letter No. BJPNA/2022-23/46, dated 16.11.2022.

39.2.9 The power requirement for the proposed project is estimated as 35 MW. The power will be sourced from Jaipur Vidyut Vitran Nigam Limited (JVVNL).

39.2.10 Baseline Environmental Studies

Period	Pre-Monsoon Season: December 2022 to February 2023
AAQ parameters at 08 Locations	<ul style="list-style-type: none"> • PM₁₀ – 70.8 to 103.2 µg/m³ • PM_{2.5}- 38.6 to 60.5 µg/m³ • SO₂- 7.4 to 16.3 µg/m³

	<ul style="list-style-type: none"> • NO₂- 13.9 to 38.5 µg/m³ 																											
AAQ modelling	<p>Incremental GLCs due to the proposed proposal:</p> <ul style="list-style-type: none"> • PM₁₀ =1.0 µg/m³ • PM_{2.5} = 0.94 µg/m³ • SO₂ = 2.68 µg/m³ • NO₂ = 0.2 µg/m³ • CO= 0.02 µg/m³. 																											
Ground water quality at 08 locations	<ul style="list-style-type: none"> • pH: 7.67-7.93. • Total Hardness: 393-456 mg/l • Chlorides: 200-252 mg/l, • Fluoride: 0.5 mg/l to 1.5 mg/l 																											
Surface water quality at 8 locations	<ul style="list-style-type: none"> • pH: 7.35-7.61, • DO: 3.1 – 5.2 mg/l. • BOD: 3.6 – 18.7 mg/l • COD : 18 – 72 mg/l 																											
Noise levels	<ul style="list-style-type: none"> • 44.8 to 63.9 dBA – day time • 35.7 To 50.7 dBA – Night time. 																											
Traffic assessment study findings	<p>Traffic study has been conducted at SH#25 which is at 3.4 km from the project site.</p> <p>Transportation of raw material, fuel & furnished product will be done maximum by road.</p> <p>Existing PCU is 2448 PCU/hr on SH#25 and existing level of services (LOS) is:</p> <table border="1"> <thead> <tr> <th>Road</th> <th>V (Volume in PCU/hr.)</th> <th>C (Capacity In PCU/hr.)</th> <th>Existing V/C Ratio</th> <th>LOS</th> </tr> </thead> <tbody> <tr> <td>SH#25</td> <td>2448</td> <td>5400</td> <td>0.45</td> <td>C</td> </tr> </tbody> </table> <p>PCU load after proposed Project will be 2448 (Existing)+32 (Proposed) = 2489 PCU/hr and level of Services (LOS) will be:</p> <table border="1"> <thead> <tr> <th rowspan="2">Road</th> <th colspan="3">V (Volume in PCU/hr.)</th> <th rowspan="2">C(Capacity In PCU/hr.)</th> <th rowspan="2">Proposed V/C Ratio</th> <th rowspan="2">LOS</th> </tr> <tr> <th>Existing</th> <th>Proposed</th> <th>Total</th> </tr> </thead> <tbody> <tr> <td>NH#2</td> <td>2448</td> <td>32</td> <td>2489</td> <td>5400</td> <td>0.46</td> <td>C</td> </tr> </tbody> </table> <p>Note: Capacity as per IRC 106:1990 guidelines for capacity for roads.</p> <p>Conclusion:</p> <p>The modified LOS on SH#25 will be remained “C”, i.e. Good. Therefore, there will be no change in LOS after completion of the project.</p>	Road	V (Volume in PCU/hr.)	C (Capacity In PCU/hr.)	Existing V/C Ratio	LOS	SH#25	2448	5400	0.45	C	Road	V (Volume in PCU/hr.)			C(Capacity In PCU/hr.)	Proposed V/C Ratio	LOS	Existing	Proposed	Total	NH#2	2448	32	2489	5400	0.46	C
Road	V (Volume in PCU/hr.)	C (Capacity In PCU/hr.)	Existing V/C Ratio	LOS																								
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	Existing	Proposed	Total																									
NH#2	2448	32	2489	5400	0.46	C																						
Flora and fauna	No schedule I fauna and endangered Flora reported in study area.																											

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

Plant	Name	Quantity (TPA)	Utilization
SMS Unit	Slag	73,987	Slag will be crushed and after recovery of metal it will be utilized for base material in road construction and given to civil Contractor.
Rolling Mill	End Cutting	8,522	Reused in IF
	Mill Scales	10,878	Reused in IF
From Pollution devices	Haz. Dust	1650	APCD dust will be processed in the plant for Zinc extraction and the balance dust, being hazardous, will be sent to TSDF as per Hazardous and Other Wastes (Management and Transboundary Movement) Rules, 2016, as amended.
Domestic waste	Solid waste	13.2	Solid waste will be properly collected and segregated into bio-degradable and non-biodegradable waste. The solid waste will be disposed off as per Solid Waste Management Rules 2016.
Electronic waste	Computers and telecommunications equipment, Consumer electronic devices and, LED bulbs etc.	0.5	The solid waste will be disposed off as per E-Waste Management Rules 2022.
Waste oil	From plant and machineirs	0.30 KL/Annum	This will be stored in covered HDPE drums in a designated area and will be given to RJSPCB approved vendors of Hazardous Waste.
Construction debris	generated during construction phase	Cannot be quantified	Used for landfill within the plant site to the extent possible and recyclables will be given to authorized recyclers.

39.2.12 Public Consultation:

Details of advertisement given	14.04.2023
Date of public consultation	23.05.2023
Venue	Gram Panchayat, Maheshra, Tehsil:- Tapukda. Dist:- Alwar, Rajasthan
Presiding Officer	Additional District Magistrate, Bhiwadi,
Major issues raised	Air & water pollution control Employment to local people Concern about Health of local people

Action plan as per MoEFCC O.M. dated 30/09/2020

S. No.	Issue Raised during PH	Physical activity and action plan	Budget	1 st Year	2 nd Year
1.	Adoption of village	<p>PP has proposed to adopt 1 village i.e. Kamalpur village. Formulate village development program under consultation with local Panchayat and district administration for need-based community development activities which would be in addition to the development plans being undertaken by state and central government.</p> <ol style="list-style-type: none"> 1. Development of smart class, distribution of benches, Fans, RO water System, Upgradation of sanitary facility, Distribution of IT gadgets, Printers, Computers in schools present in Kamalpur village. 2. Installation of Solar light on streets. 3. Upgradation of village roads. 4. Plantation in Kamalpur Village. 5. Upgradation of Medical facility. 6. Upgradation of existing infrastructure in village, 	<p>A budget of 50 lakhs has been proposed.</p> <ol style="list-style-type: none"> 1. A budget of Rs. 10 Lakhs has been proposed for providing Drinking water facility. 2. A budget of Rs.5 lakhs has been proposed for Solar system to schools. 3. A budget of Rs. 25 lakhs has been proposed for providing Medical Facility. 4. A budget of Rs. 10 lakhs has been proposed for sports kits for kids and maintenance of playground. 	30 Lakhs	20 Lakhs
2.	Pollution control measure & Environment norms	<ol style="list-style-type: none"> 1. Tree Plantation will be developed in nearby villages (Karoli, Budhi Bawal, Maheshra & Nasopur) in consultation with the authority. 2. Water sprinkling on road for air dust dispersion controls in nearby villages (Karoli, Budhi Bawal, Maheshra & Nasopur) 3. Solar street lights will be provided in nearby vilages (Karoli, Budhi Bawal, Maheshra & Nasopur). 	<p>100 Lakhs</p> <ol style="list-style-type: none"> 1. A budget of Rs 20.0 Lakhs has been proposed for Development of green belt in nearby villages. 14000 numbers of trees will be planted. 2. A budget of Rs. 10 lakhs has been proposed for dust dispersion control measure. 3. A budget of Rs. 30 lakhs has been proposed for Solar street lights. 	52 Lakhs	48 Lakhs

S. No.	Issue Raised during PH	Physical activity and action plan	Budget	1 st Year	2 nd Year
1.	Adoption of village	<p>PP has proposed to adopt 1 village i.e. Kamalpur village. Formulate village development program under consultation with local Panchayat and district administration for need-based community development activities which would be in addition to the development plans being undertaken by state and central government.</p> <ol style="list-style-type: none"> 1. Development of smart class, distribution of benches, Fans, RO water System, Upgradation of sanitary facility, Distribution of IT gadgets, Printers, Computers in schools present in Kamalpur village. 2. Installation of Solar light on streets. 3. Upgradation of village roads. 4. Plantation in Kamalpur Village. 5. Upgradation of Medical facility. 6. Upgradation of existing infrastructure in village, 	<p>A budget of 50 lakhs has been proposed.</p> <ol style="list-style-type: none"> 1. A budget of Rs. 10 Lakhs has been proposed for providing Drinking water facility. 2. A budget of Rs. 5 lakhs has been proposed for Solar system to schools. 3. A budget of Rs. 25 lakhs has been proposed for providing Medical Facility. 4. A budget of Rs. 10 lakhs has been proposed for sports kits for kids and maintenance of playground. 	30 Lakhs	20 Lakhs
		Installation of 10 Air purifiers at 5 nearby schools	A budget of Rs. 40 Lakhs has been proposed for air purifier.		
3.	Infrastructure development in Locality & Villages	Company will develop the infrastructure, Playground, maintenance in schools (Govt Secondary School Nasopur, Govt Upper Primary School Rabarka, Government School Kamalpur) building in nearby villages (Karoli, Budhi Bawal, Maheshra & Nasopur) & school building.	<p>50 Lakhs</p> <p>4 Kitchen – 2 Lakhs</p> <p>400 Tables & Chairs – 4 Lakhs</p> <p>40 Computer – 20 Lakhs</p> <p>20 Colour printer – 5 Lakhs</p> <p>Upgradation of sanitation facility – 5 Lakhs</p>	30 lakhs	20 lakhs

S. No.	Issue Raised during PH	Physical activity and action plan	Budget	1 st Year	2 nd Year
1.	Adoption of village	<p>PP has proposed to adopt 1 village i.e. Kamalpur village. Formulate village development program under consultation with local Panchayat and district administration for need-based community development activities which would be in addition to the development plans being undertaken by state and central government.</p> <ol style="list-style-type: none"> 1. Development of smart class, distribution of benches, Fans, RO water System, Upgradation of sanitary facility, Distribution of IT gadgets, Printers, Computers in schools present in Kamalpur village. 2. Installation of Solar light on streets. 3. Upgradation of village roads. 4. Plantation in Kamalpur Village. 5. Upgradation of Medical facility. 6. Upgradation of existing infrastructure in village, 	<p>A budget of 50 lakhs has been proposed.</p> <ol style="list-style-type: none"> 1. A budget of Rs. 10 Lakhs has been proposed for providing Drinking water facility. 2. A budget of Rs. 5 lakhs has been proposed for Solar system to schools. 3. A budget of Rs. 25 lakhs has been proposed for providing Medical Facility. 4. A budget of Rs. 10 lakhs has been proposed for sports kits for kids and maintenance of playground. 	30 Lakhs	20 Lakhs
			Construction and maintenance of play ground -14Lakhs		
4.	Employment to local people	<p>Willing and employable youths will be identified in consultation with gram Panchayat of nearby villages (Karoli, Budhi Bawal, Maheshra & Nasopur). They will be provided training for trades namely electrician, fitters, welders, painters, and civil construction work, etc. After successful completion of training, the youths will be offered employment in company in suitable grade.</p>	<p>15 Lakhs Stipend – 5 Lakh (12500/- stipend per year to 40 persons for 1 year)</p> <p>ITI Fee – 10 Lakhs (20000/- yearly fee for 50 persons)</p>	10 Lakhs	5 Lakhs
5.	Road Development and maintenance work in	<p>Company will construct the road in nearby villages (Karoli, Budhi Bawal, Maheshra & Nasopur) Continuous maintenance work.</p>	<p>45 Lakhs Road development works in nearby villages in consultation with local authority.</p>	25 lakhs	20 Lakhs-

S. No.	Issue Raised during PH	Physical activity and action plan	Budget	1 st Year	2 nd Year
1.	Adoption of village	<p>PP has proposed to adopt 1 village i.e. Kamalpur village. Formulate village development program under consultation with local Panchayat and district administration for need-based community development activities which would be in addition to the development plans being undertaken by state and central government.</p> <ol style="list-style-type: none"> 1. Development of smart class, distribution of benches, Fans, RO water System, Upgradation of sanitary facility, Distribution of IT gadgets, Printers, Computers in schools present in Kamalpur village. 2. Installation of Solar light on streets. 3. Upgradation of village roads. 4. Plantation in Kamalpur Village. 5. Upgradation of Medical facility. 6. Upgradation of existing infrastructure in village, 	<p>A budget of 50 lakhs has been proposed.</p> <ol style="list-style-type: none"> 1. A budget of Rs. 10 Lakhs has been proposed for providing Drinking water facility. 2. A budget of Rs. 5 lakhs has been proposed for Solar system to schools. 3. A budget of Rs. 25 lakhs has been proposed for providing Medical Facility. 4. A budget of Rs. 10 lakhs has been proposed for sports kits for kids and maintenance of playground. 	30 Lakhs	20 Lakhs
	Locality & Villages				
6.	Concern about health of local people	Arrangement of Patient beds, oxygen cylinders, air purifiers and other medical facilities in Govt. Hospital Tapukara & Government Hospital Near Industrial Area Kushkhera	<p>40 Lakhs</p> <p>40 Patient Bed - 20 Lakhs</p> <p>400 O₂ Cylinder – 6 Lakh</p> <p>20 - Oxygen Concentrator – 10 Lakh</p> <p>8 Air Purifier – 2 Lakh</p> <p>Sanitizer, stretcher, surgical gloves and Mask – 2 lakh</p>	22 Lakhs	18 lakhs
Total			300 Lakhs	170 Lakhs	130 Lakhs

39.2.13 The capital cost of the project is INR 150 Cr and the capital cost for environmental protection measures is proposed as INR 8.0 Cr. The annual recurring cost towards the environmental protection measures is proposed as Rs 1.72 Cr. The total employment generation from the proposed project is 400. The details of cost for environmental protection measures is as follows:

S. No	Activity	Capital Cost (In Cr)	Recurring expenses proposed/annum (In Cr)
1	Air Emission Management		
	➤ Fume Extraction system with bag filters	4.2	1.2
	➤ Stacks	0.7	
	➤ Water Sprinklers	0.2	
2	Wastewater Management		
	➤ for STP	0.5	0.15
	➤ for Garland drains	0.4	
3	Solid waste Management		
	➤ Slag Handling & Disposal	0.5	
	➤ Hazardous waste storage & disposal	0.1	
	➤ Municipal solid waste storage & disposal	0.2	
4	Greenbelt development, Landscaping, Noise Management, RWH etc.	0.3	
5	Environmental Monitoring		
	➤ AAQMS	0.2	0.12
	➤ CEMS	0.2	0.08
	➤ Third party Monitoring	--	0.12
6	Occupational Health & Safety		
	➤ PHC	0.1	0.05
	➤ PPEs	0.1	
	➤ Ambulance (additional)	0.1	
	➤ Fire Safety Systems	0.2	
Total		8	1.72

39.2.14 Proposed greenbelt will be developed in 2.49 ha which is about 40% of the total project area. A 10 m wide greenbelt, consisting of at least 3 tiers around plant boundary will be developed as greenbelt and green cover as per CPCB/MoEF&CC, New Delhi guidelines. Local and native species will be planted with a density of 2500 trees per hectare. Total no. of 6300 saplings will be planted and nurtured in 2.49 hectares.

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

39.2.16 The project falls under CPA (Khushkhera). The Mitigation Action Plans submitted by the project proponent are as follows:

I. Compliance To Direction Under Section 12 of Commission or Air Quality Management in National Capital Region and Adjoining Areas Act, 2021 for effective

control of Air Pollution In Delhi-Ncr- Regulations For Use Of Dg Sets Greater Than 800 Kiv Capacity (Direction No. 68)

Condition		Status of compliance	
Such DG sets are mandatorily run on a dual fuel mode in areas where PNG infrastructure and supply is available and shall be permitted to run for maximum 2 hours a day to take care of Production/technical exigencies owing to regular power supply failures.		The DG sets will be run on a dual fuel mode and will run for maximum 2 hours a day to take care of Production/technical exigencies owing to regular power supply failures.	
In areas where gas infrastructure and supply is not available, the 800 KW and above capacity DG sets may be permitted to run only for maximum 1 hour on a daily basis.		Not applicable as DG set will run on dual fuel i.e. PNG and Diesel.	
The stack emissions from such >800 KW capacity DG sets shall conform to the following:		Agreed. The PM, NO _x and CO emission from DG will be kept below 50 mg/Nm ³ . The stack height of the DG will be kept 30m.	
S. no.	Parameter		Standard
i.	PM (at 15% O ₂)		50 mg / Nm ³
ii.	Nox (at 15% O ₂)		50 mg / Nm ³
iii.	CO (at 15% O ₂)		50 mg / Nm ³
iv.	Stack height	<p>Maximum of the following (in mtr)</p> <p>a) Minimum 6 m above the building where DG set is installed.</p> <p>b) 30 m.</p> <p>Note: For example, if the building height where such DG sets are installed, is 20 mtrs., the minimum stack height for the DG sets should be 30 mtrs. from the ground level.</p> <p align="center">And</p> <p>If the building height itself is 27 mtrs., the minimum stack height for the DG sets should be 33 mtrs. from the ground level.</p>	

II. District Environment Plan for Alwar District

Environment	Action Plan	Implementation Period	
Industries and DG sets	Area and road in front of the industry should be the responsibility of the industry	Immediate	Nearby roads in front of the industry will be maintained by company. Regular water sprinkling will be done to prevent dust emissions on truck moment root and transportation root. We will also 1000 no. of trees all along the road abating to our project site.
	Multi-cyclones should be replaced by baghouses. Ensure installation and operation of air pollution control devices in industries.	2 years	PP has proposed Doghouse type suction hood, based on modern technology to extract and prevent fumes emitted in work zone during charging of scrap, melting and tapping of liquid steel from the induction furnaces. For control of air pollution, doghouse type suction hood will be provided. The suction from the doghouses will be taken to a PTFE bag house which will reduce the PM emission to less than 30 mg/Nm ³ as needed for CEPI areas.
	Recommended Fume gas capturing hood followed by Baghouse should be used to control air pollution	--	For control of air pollution, doghouse type suction hood will be provided. The suction from the doghouses will be taken to a PTFE bag house which will reduce the PM emission to less than 30 mg/Nm ³ as needed for CEPI areas. An ID fan of suitable capacity will be connected to the bag house and the fume will be emitted by a 30m high stack for better dispersion.
	Renewable energy should be used to cater the need of	2 years	20 % of the total power requirement will be

Environment	Action Plan	Implementation Period	
	office requirement in the absence of power failure to stop the use of DG Set		fulfilled by in-house solar power plant.

III. Action Plan and compliance with regards to CEPI Guidelines as per MoEFCC OM of 2019:

Environment	Condition	Status of compliance
	Mitigation Measures	
	Stack emission levels should be stringent than the existing standards in terms of the identified critical pollutants.	<p>Doghhouse type suction hood, based on modern technology to extract and prevent fumes emitted in work zone during charging of scrap, melting and tapping of liquid steel from the induction furnaces will be provided. Such hoods are more efficient than swiveling hoods normally installed above induction furnaces as it cannot control emissions during charging and tapping.</p> <p>The doghouse covers both side and top of the furnaces.</p> <p>The suction from the doghouses will be taken to a bag house which will reduce the PM emission to less than 30 mg/Nm³ as needed for CEPI areas.</p> <p>An ID fan of suitable capacity will be connected to the bag house and the fume will be emitted by a 30m high stack for better dispersion.</p>
	CEMS may be installed in all large/medium red category industries (air polluting) and connected to SPCB and CPCB server.	<p>Continuous Emission Monitoring System (CEMS) for all process Stacks will be provided which will be connected to SPCB and CPCB servers.</p> <p>Also, a Continuous Weather Monitoring Station will be provided.</p>
	Effective fugitive emission control measures should be imposed in the process, transportation, packing etc.	<p>The leaching tank, purification tank and electrolysis tanks will be provided with suction hood, where chemical and acid mist emissions are captured to control fugitive emissions.</p> <p>Also, all material handling systems and stock yards of solid materials will be provided with dust suppression systems to prevent fugitive dust emissions.</p>
	Transportation of materials by rail/ conveyor belt, wherever feasible.	No rail and conveyor transfer of raw materials are feasible as there are no nearby railway tracks.

Environment	Condition	Status of compliance
	Mitigation Measures	
		<p>The raw material required for the project is available near to the project site and transportation of materials will be by trucks after taking proper control of preventing dust during transportation.</p> <p>All the trucks used for the transport of raw materials, products and wastes will be completely covered with tarpaulin and ensure that no spillage occurs during transportation. Internal roads in the proposed project will be made pucca.</p>
	Encourage use of cleaner fuels (pet coke/ furnace oil/ LSHS may be avoided).	<p>Agreed. The furnaces are run by electric power.</p> <p>Only emergency DG sets will run on low sulphur diesel and PNG as dual fuel.</p>
	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.	<p>Induction furnaces are considered as an environmental friendly furnace as no fuels are required.</p> <p>For extraction of zinc from dust collected in bag filters, Zinc Recovery plant will be used. This will reduce the quantum of dust to be disposed off.</p>
	Increase of green belt cover by 40% of the total land area beyond the permissible requirement of 33%, wherever feasible.	<p>Agreed and complied.</p> <p>In 40% of plot area, greenbelt and plantation will be developed with 2500 trees per hectare. Thus, 6300 trees will be planted in phases. The plantation will start during construction phase itself.</p>
	Stipulation of greenbelt outside the project premises such as avenue plantation, plantation in vacant areas, social forestry, etc.	Agreed.
	Assessment of carrying capacity of transportation load on roads inside the industrial premises. If the roads required to be widened, shall be prescribed as a condition.	Presently, about 2248 PCU/ hr. is the load on existing SH 25. After expansion, only 32 additional PCU/HR will be added. The LOS will remain as C, which is considered as Good.
Water	Reuse/recycle of treated wastewater, wherever feasible.	<p>There is no wastewater discharge from the plant. Cooling water will be recycled after cooling in the Cooling Towers. Wastewater from blow down of cooling towers will be used for slag cooling and dust suppression.</p> <p>The treated sewage from STP will be used for irrigation.</p>

Environment	Condition	Status of compliance
	Mitigation Measures	
		Zero discharge shall be maintained for the proposed plant.
	Continuous monitoring of effluent quality/quantity in large and medium Red Category Industries (water polluting).	Continuous effluent monitoring systems shall be provided at inlet and outlet of STP.
	A detailed water harvesting plan may be submitted by the project proponent	Rainwater harvesting reservoir has been proposed to store rainwater for its use. Harvesting plan is mentioned in the EIA. The reservoir size is 50mx50mx3m deep.
	Zero-liquid-discharge wherever techno economically feasible.	There is no wastewater discharge from the plant. Cooling water will be recycled after cooling in the Cooling Towers. Wastewater from blow down of cooling towers will be used for slag cooling and dust suppression. The treated sewage from STP will be used for irrigation. Zero discharge shall be maintained for the proposed plant.
	In case, domestic wastewater generation is more than 10 KLD, the industry may install STP.	Sanitary wastewater will be treated in STP of capacity 25 KLD and after treatment water will be used in greenbelt and for toilet flushing.
Land	Increase of green belt cover by 40% of the total land area beyond the permissible requirement of 33%, wherever, feasible for new projects.	40% of plot area greenbelt will be developed by planting 6300 nos of trees with a density of 2500 trees/ha. These trees will be planted during construction phase itself.
	Stipulation of greenbelt outside the project premises such as avenue plantation, plantation in vacant areas, social forestry, etc.	40% of plot area greenbelt will be developed by planting 6300 nos of trees with a density of 2500 trees/ha. around the boundary and along avenues. These trees will be planted during construction phase itself.
	Dumping of waste (fly ash, slag, red mud, etc.) may be permitted only at designated locations approved by SPCBs/ PCCs.	SMS unit: Slag will be crushed and after recovery of metal it will be utilized for base material in road construction and given to civil Contractor. Zinc will be extracted from dust collected from baghouse. Rolling Mill: End Cutting and Mill scales will be reused in Induction Furnace. Domestic waste: Solid waste will be properly collected and segregated into bio-degradable and non-biodegradable waste. The solid waste will be disposed off as per Solid Waste Management Rules 2016. Electronic waste: The solid waste will be disposed off as per E-Waste Management Rules 2022.

Environment	Condition	Status of compliance
	Mitigation Measures	
		<p>Waste Oil: This will be stored in covered HDPE drums in a designated area and will be given to RJSPCB approved vendors of Hazardous Waste.</p> <p>Construction debris: Used for landfill within the plant site to the extent possible and recyclables will be given to authorized recyclers.</p>
	More stringent norms for management of hazardous waste. The waste generated should be preferably utilized in co-processing	APCD dust will be processed in the plant for Zinc extraction and the balance dust, being hazardous, will be sent to TSDF as per Hazardous and Other Wastes (Management and Transboundary Movement) Rules, 2016, as amended.
Other condition (Additional)	Monitoring of compliance of EC conditions may be submitted with third party audit every year.	The Environment Policy prepared covers the regular compliance of EC conditions by an Environment Management Cell.
	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.	A total budget of 3.0 Crores i.e., 2% of the total project cost has been proposed in Action plan for CER which is 2 times of the OM figure as our site is 0.48 km away from CEPI boundary.

Written representations:

39.2.17 During the meeting, based on the deliberations made by the EAC, the project proponent vide letter dated 06.07.2023 through email dated 06.07.2023 submitted the following information:

S. No	Comments/Query	Reply by the PP
i.	PP should submit revised action plan w.r.t. conditions mentioned in NGLT order for industries located in close proximity of CPA/SPA.	As per suggestion of hon'ble committee, revised action plan has been submitted and updated at para 39.2.16 above.
ii.	PP should submit air dispersion modelling details w.r.t. CO.	Air dispersion modelling has been carried for the proposed project. The GLC for CO is found to be 0.02 µg/m ³ . The isopleths for CO are submitted.
iii.	PP should submit the revised layout plan showing road network, contour details and EV charging points	As per suggestion of hon'ble committee, all plans has been revised as per the Hon'ble committee and submitted.
iv.	PP should submit the revised action plan for addressing PH issues.	PH action plan has been revised as per suggestions and updated at para 39.2.12 above.
v.	PP should follow the conditions as mentioned in the Direction no. 68 and District Environment Plan for Alwar District.	The PP assures to comply with all the conditions mentioned in Direction 68 by Commission For Air Quality Management and District Environment Plan for Alwar district. Action plan for compiling with the conditions mentioned in Direction 68 by Commission For Air Quality Management and District Environment

S. No	Comments/Query	Reply by the PP
		Plan for Alwar district are submitted and updated at para 39.2.16 above.

Deliberations by the Committee

39.2.18 The Committee noted the following:

1. The instant proposal is a Greenfield Project for Installation of Steel plant having production capacity of M.S Billets of 3,56,400 TPA with facility of two Induction furnace of 30 Ton each, Rolling Mill of 3,37,000 TPA for manufacturing of TMT Bar/Rolled Project/Structural Steel and Zinc Recovery Plant of capacity 6 TPD.
2. 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.
3. The EAC, constituted under the provision of the EIA Notification, 2006 comprising Expert Members/domain experts in various fields, examined the proposal submitted by the Project Proponent in desired format along with EIA/EMP reports prepared and submitted by the Consultant accredited by the QCI/ NABET on behalf of the Project Proponent.
4. The EAC noted that the Project Proponent has given an undertaking that the data and information given in the application and enclosures are true to the best of his knowledge and belief and no information has been suppressed in the EIA/EMP reports. If any part of data/information submitted is found to be false/ misleading at any stage, the project will be rejected and Environmental Clearance given, if any, will be revoked at the risk and cost of the project proponent.
5. The Committee noted that the EIA reports are in compliance of the ToR issued for the project, reflecting the present environmental status and the projected scenario for all the environmental components. The Committee deliberated on the proposed mitigation measure towards Air, Water, Noise and Soil pollutions. The Committee suggested that the storage of toxic/explosive raw materials/products shall be undertaken with utmost precautions and following the safety norms and best practices.
6. The 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 39.2.16 above. The EAC is of the opinion that the mitigation plans shall be strictly implemented.
7. The total project area is 6.22 ha which is a government land and has been allotted to M/s. SBF Rapid Industries Private limited from Rajasthan State Industrial Development and Investment Corporation Ltd (RIICO) vide letter no. 2985 on dated 21.11.2022. Land is already Industrial in nature.
8. The Sahibi River and other water bodies exists nearby of the project site. Also, there are other water bodies within the study area of 10 km of the project site. The EAC is of the

opinion that water bodies shall not be disturbed. Mitigation measures w.r.t. safeguarding the water bodies shall be implemented.

9. The water requirement for the project is estimated as 95 m³/day, which will be met through 2 nos. bore-wells. NOC for Ground Water Abstraction has been obtained from CGWA vide NOC No. CGWA/NOC/IND/ORIG/2023/18305, dated 21.04.2023. Permission for use of treated water for greenbelt has been obtained from Bhiwadi Jal Pradushan Nivaran Association vide letter No. BJPNA/2022-23/46, dated 16.11.2022. The EAC deliberated on the water requirement and found it satisfactory.
10. The Committee has deliberated on the baseline data and incremental GLC due to the proposed project and is of the opinion that PP shall strictly implement the mitigation measures as per the submitted action plans to minimise the pollution.
11. The PP has submitted that greenbelt will be developed in 2.49 ha which is about 40% of the total project area. Total no. of 6300 saplings will be planted and nurtured in 2.49 hectares. The EAC deliberated on the greenbelt action plan along with the budget earmarked and found it satisfactory.
12. The committee deliberated details of carbon foot prints and carbon sequestration study w.r.t. proposed project and found them to be satisfactory.
13. The Committee also deliberated on the public hearing issues along with revised action plan submitted by the proponent to address the issues as per socio economic survey for development of nearby area 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:

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

A. Specific Condition:

- i. The project proponent shall comply with all the environmental protection measures and safeguards proposed in the documents submitted to the Ministry. All the recommendations made in the EIA/EMP in respect of environmental management, and risk mitigation measures relating to the project shall be implemented.
- ii. The project proponent shall utilize modern technologies for capturing of carbon emitted and shall also develop carbon sink/carbon sequestration resources capable of capturing more than emitted. The implementation report shall be submitted to the IRO, MoEF&CC in this regard.
- iii. The PP shall strictly comply with the Direction issued by the Commission for Air Quality Management in National Region and Adjoining Areas.
- iv. In pursuance to MoEF&CC OMs dated 31st October, 2019 & 30th December, 2019 issued in compliance of the order of Hon'ble NGT in OA No. 1038/2018 dated 19th August, 2019, the compliance of all the conditions applicable to CEPI shall be implemented as per the submitted plan. PP shall strictly implement the Action Plan/Mitigation measures as prescribed for the CPA, as the Unit is located in CPA.
- v. The industry shall use CETP treated waste water for industrial processes to reduce the stress on Ground water resource as and when made available.
- vi. The water requirement of 95 m³/day to be met from ground water only after obtaining necessary permission from the Competent Authority. PP shall explore the possibility of shifting to alternative source of water to meet the water requirement needs.
- vii. 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.
- viii. The Sahibi River and other water bodies exists nearby of the project site. Also, there are other water bodies within the study area of 10 km of the project site. A robust and full proof Drainage Conservation scheme to protect the natural drainage and its flow parameters; along with Soil conservation scheme and multiple Erosion control measures shall be implemented.
- ix. Three tier Green Belt shall be developed in at least 40% of the project area all along 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. 3 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.

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. PM₁₀ and PM_{2.5} in reference to PM emission, and SO₂ and NO_x in reference to SO₂ and NO_x emissions) within and outside the plant area (at least at four locations one within and three outside the plant area at an angle of 120° each), covering upwind and downwind directions.
- iii. The project proponent shall monitor fugitive emissions in the plant premises at least once in every quarter through laboratories recognized under Environment (Protection) Act, 1986 or NABL accredited laboratories.
- iv. Sampling facility at process stacks shall be provided as per CPCB guidelines for manual monitoring of emissions.
- v. Appropriate Air Pollution Control (APC) system shall be provided for all the dust generating points including fugitive dust from all vulnerable sources, so as to comply prescribed stack emission and fugitive emission standards.
- vi. The project proponent shall provide leakage detection and mechanized bag cleaning facilities for better maintenance of bags.

- vii. Sufficient number of mobile or stationery vacuum cleaners shall be provided to clean plant roads, shop floors, roofs, regularly.
- viii. Ensure covered transportation and conveying of raw material to prevent spillage and dust generation. The project proponent use leak proof trucks/dumpers carrying coal and other raw materials and cover them with tarpaulin.
- ix. The project proponent shall provide primary and secondary fume extraction system at all heat treatment furnaces.
- x. Wind shelter fence and chemical spraying shall be provided on the raw material stock piles.
- xi. Design the ventilation system for adequate air changes as per prevailing norms for all tunnels, motor houses, Oil Cellars.
- xii. Pollution control system in the plant shall be provided as per the CREP Guidelines of CPCB.
- xiii. The project proponent shall adopt the Clean Air practices like mechanical collectors, wet scrubbers, fabric filters (bag houses), electrostatic precipitators, combustion systems (thermal oxidizers), condensers, absorbers, adsorbers, and biological degradation. Controlling emissions related to transportation shall include emission controls on vehicles as well as use of cleaner fuels. Sufficient numbers of additional truck mounted Fog/Mist water cannons shall be procured and operated regularly inside the project premises and also in the surrounding villages to arrest suspended dust in the atmosphere.
- xiv. Bag filters shall be cleaned regularly and efficiency of bag filter system shall be monitored at regular intervals.
- xv. Water Sprinklers/Water mist system shall be installed near raw material yards, operational units and other strategic locations to control fugitive emissions from the plant.
- xvi. The particulate matter emissions from the process stacks shall be less than 30 mg/Nm³ and measures shall be undertaken as per the submitted action plan. Efficient Air monitoring equipment shall be installed.
- xvii. Following additional arrangements to control fugitive dust shall be provided:
 - a. Fog / Mist Sprinklers at all on bulk raw material storage area (at the transfer points) like Iron Ore, Coal and for Fly Ash and similar solid waste storage areas.
 - b. Proper covered vehicle shall be used while transport of materials.
 - c. Wheel washing mechanism shall be provided in entry and exit gates with complete recirculation system.
- xviii. Online stack monitoring system for 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.
- xix. Low NOx Burners will be installed at Reheating Furnace for control of Gaseous emissions generated while using PNG.

III. Water quality monitoring and preservation

- i. The project proponent shall install 24x7 continuous effluent monitoring system with respect to standards prescribed in Environment (Protection) Rules 1986 as amended from time to time and connected to SPCB and CPCB online servers and calibrate these system

from time to time according to equipment supplier specification through labs recognized under Environment (Protection) Act, 1986 or NABL accredited laboratories.

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

IV. Noise monitoring and prevention

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

V. Energy Conservation measures

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

VI. Waste management

- i. Oil Collection pits shall be provided in oil cellars to collect and reuse/recycle spilled oil.

- ii. Kitchen waste shall be composted or converted to biogas for further use.
- iii. 100% utilization of fly ash shall be ensured. All the fly ash shall be provided to cement and brick manufacturers for further utilization and Memorandum of Understanding in this regard shall be submitted to the Ministry's Regional Office.
- iv. The Plastic Waste Management Rules 2016, inter-alia, mandated banning of identified Single Use Plastic (SUP) items with effect from 01/07/2022. In this regard, CPCB has issued a direction to all the State Pollution Control Boards (SPCBs)/Pollution Control Committees (PCCs) on 30/06/2022 to ensure the compliance of Notification published by Ministry on 12/08/2021. The technical guidelines issued by the CPCB in this regard is available at <https://cpcb.nic.in/technical-guidelines-3/>. All the project proponents are hereby requested to sensitize and create awareness among people working within the Project area as well as its surrounding area on the ban of SUP in order to ensure the compliance of Notification published by this Ministry on 12/08/2021. A report, along with photographs, on the measures taken shall also be included in the six monthly compliance report being submitted by the project proponents.
- v. A proper action plan must be implemented to dispose of the electronic waste generated in the industry.
- 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 report 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. 39.3

- 39.3 Existing Rolling mill for manufacturing of MS Steel Bars (HSD) of 1,20,000 TPA (400TPD) (Installed Capacity 2,40,000TPA) and Re-Heating Furnace-25TPH” by M/s Shri Rathi Steel (Dakshin) Limited, Located at Plot No. SP-A/1, RIICO Industrial Area, Khushkhera, Tehsil- Tijara, District- Alwar, Rajasthan - Consideration of Environmental Clearance as per provisions of Notification dated 20.07.2022.**

**[Proposal No. IA/RJ/IND1/428036/2023; File No. IA-J-11011/203/2022-IA-II(IND-I)]
[Consultant:Enkay Enviro Services Pvt. Ltd.; Valid upto 12.12.2023]**

- 39.3.1 Consideration of the proposal was **deferred** as the Project Proponent did not attend the meeting. The Member Secretary appraised the Committee that initially the PP/Consultant informed vide email dated 03.07.2023, their consent to attend the meeting and also sent the desired documents for consideration of proposal. Further vide letter dated 06.07.2023 sent through email 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 this is very unprofessional on the part of PP/Consultant as they have initially given their consent and based on the same Committee members made efforts to go through the documents sent by the PP/Consultant. 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.

Agenda No. 39.4

- 39.4 Greenfield Project for Production Facilities of Pelletization Plant (0.60 MTPA), DRI Plant (0.42 MTPA), SMS with Caster (0.25 MTPA), Captive Power Plant of 85 MW (WHRB#32 MW & Coal & Dolochar based#53 MW), Rolling Mill (0.20 MTPA), Pig Iron (0.26 MTPA), Sinter Plant (0.40 MTPA), DIP Plant (0.24 MTPA), PGP of 8000 Nm³/hr & Coal Washery Unit (0.98 MTPA)” at Village-Kesda, Tehsil-Simga, District-Balodabazar-Bhatapara, Chhattisgarh by M/s Swadesh Metallics Pvt Ltd.- Consideration of Environmental Clearance.**

**[Proposal No. IA/CG/IND1/430633/2023; F. No. IA-J-11011/46/2021-IA-II(I)]
[Consultant: Grass Roots Research and Creation India (P) Ltd.; Valid upto 15.02.2024]**

- 39.4.1 M/s. Swadesh Metallics Private Limited has made an online application vide proposal No-IA/CG/IND1/430633/2023, dated 15.06.2023 along with copy of EIA report and Forms (Part A, B and C) seeking Environment Clearance (EC) under the provisions of the EIA Notification, 2006 for the project mentioned above. The proposed project activity is listed at 3(a) Metallurgical industries (ferrous & non-ferrous), 1(d) Thermal Power Plants and 2(a) Coal Washery under Category “A” of the schedule of the EIA Notification, 2006 being appraised at Central Level.

39.4.2 Name of the EIA consultant: M/s. Grass Roots Research and Creation India (P) Ltd [List of ACOs with their Certificate / Extension Letter no. NABET/EIA/2124/RA 0213; valid upto 15.02.2024, as on June 30, 2023].

Details submitted by Project proponent

39.4.3 The details of the ToR are furnished as below:

Date of Application	Consideration	Details	Date of Accord	ToR Validity
06.09.2021	45 th meeting of the EAC (Industry-I) held during 27-29 th September, 2021.	Terms of Reference	13.10.2021	13.10.2025
31.03.2023	26 th meeting of the EAC (Industry-I) held during 12-13 th and 17 th April, 2023.	Amendment in ToR	18.05.2023	13.10.2025

39.4.4 The project of M/s Swadesh Metallics Private Limited, located in Village-Kesda, Tehsil-Simga, District-Balodabazar-Bhatapara-493332 (Chhattisgarh) is for setting up of a Greenfield Project for Installation of Iron Ore Pellet Plant (0.6 MTPA), DRI Plant (0.42 MTPA), SMS with Caster (0.25 MTPA), Rolling Mill (0.20 MTPA), Pig Iron Plant (0.26 MTPA), Sinter Plant (0.40 MTPA), DIP Plant (0.24 MTPA), Coal Washery Unit (0.98 MTPA) with Captive Power Plant (85 MW) for producing TMT bar, wire rods, steel bar coils and de-coiled bars and Ductile Iron Pipes with PGP of 8000 Nm³/hr.

39.4.5 Environmental Site Settings:

S.No	Particulars	Details			Remarks
1	Total Land	58.68 ha [Private: 39.66 ha; Govt.: 4.04 ha; Sale Agreement Executed :- 14.98 ha]			Land use: Land will be diverted for industrial use.
2	Land acquisition details as per MoEF&CC O.M dated 7/10/2014	Approx. 39.66 ha land is under the possession of the company and entire land will be diverted for industrial purposes. Agreement is signed with land owners for 14.98 ha. Also signed the MoU with the state government for setting up industry.			
3	Existence of habitation & involvement of R&R, if any.	Nil			
4	Latitude and Longitude of the project site	S. No	Latitude	Longitude	
		1	21°36'34.96"N	81°49'30.17"E	
		2	21°36'29.15"N	81°49'33.65"E	
		3	21°36'26.20"N	81°49'42.23"E	
		4	21°36'16.78"N	81°49'46.55"E	

S.No	Particulars	Details			Remarks												
		5	21°35'59.34"N	81°49'49.54"E													
		6	21°35'58.94"N	81°49'52.28"E													
		7	21°35'55.69"N	81°49'56.84"E													
		8	21°35'56.99"N	81°49'45.60"E													
		9	21°35'56.89"N	81°49'48.67"E													
		10	21°36'0.81"N	81°49'48.62"E													
		11	21°36'2.13"N	81°49'43.12"E													
		12	21°36'5.86"N	81°49'43.52"E													
		13	21°36'6.36"N	81°49'38.99"E													
		14	21°36'3.59"N	81°49'30.91"E													
		15	21°36'9.70"N	81°49'26.59"E													
		16	21°36'12.43"N	81°49'18.31"E													
		17	21°36'17.65"N	81°49'11.14"E													
		18	21°36'23.03"N	81°49'26.88"E													
		19	21°36'29.07"N	81°49'22.40"E													
5	Elevation of the project site	303 meter above the mean sea level															
6	Involvement of Forest land if any.	Nil															
7	Water body exists within the project site as well as study area	Project Site – Nil Study Area <table border="1"> <thead> <tr> <th>Water Body</th> <th>Distance</th> <th>Direction</th> </tr> </thead> <tbody> <tr> <td>Jamuniya Seasonal Naala</td> <td>1.2 km</td> <td>East</td> </tr> <tr> <td>Ghughua Tank</td> <td>5.2 km</td> <td>West</td> </tr> <tr> <td>Manpur Dam</td> <td>7.0 km</td> <td>SE</td> </tr> </tbody> </table>			Water Body	Distance	Direction	Jamuniya Seasonal Naala	1.2 km	East	Ghughua Tank	5.2 km	West	Manpur Dam	7.0 km	SE	
Water Body	Distance	Direction															
Jamuniya Seasonal Naala	1.2 km	East															
Ghughua Tank	5.2 km	West															
Manpur Dam	7.0 km	SE															
8	Existence of ESZ / ESA/national park /wildlife sanctuary /biosphere reserve /tiger reserve /elephant reserve etc. if any within the study area	Nil															

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

S. No	Description	Configuration	Final Capacity (MTPA)
1	Iron Ore Pelletization Plant (With Grinding Unit)	0.60 MTPA	0.60
2	DRI Plant (Sponge Iron)	4 x 350 TPD Kiln	0.42
3	SMS with Caster (With Caster 6 x 11, 3 strands)	IF - 6 x 15 tonnes	0.25
4	Rolling Mill	0.20 MTPA	0.20
6	Blast Furnace (Pig Iron)	250 m ³	0.26
7	Sinter Plant	45 m ²	0.40
8	DIP Plant	3 x 10 ton	0.24
9	Coal Washery	0.98 MTPA	0.98

10	Captive Power Plant	32 MW (4 x 36 TPH WHRB Boiler & 53 MW CFBC based on dolochar and coal (2 x 110 TPH CFBC Boiler))	85 MW
11	Producer Gas	8000 Nm ³ /hr.	8000 Nm ³ /hr.

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

S.No	Raw Material	Quantity (TPA)	Sources	Distance (w.r.t. Plant)	Mode of Transport
A. Pellet Plant (0.60 MTPA)					
1	Iron ore Concentrate	6,37,500	Mines/Local Market	100-150 km	By Rail & Road (through covered trucks)
2	Bentonite	7875	Gujarat	100-150 km	By Rail & Road (through covered trucks)
3	Lime Powder	3,938	Local Market	20-30 km	By Road (through covered trucks)
4	Coal for Gasifier	23,040	CG	50-60 km	By Rail & Road (through covered trucks)
5	LDO	900 KL/A	IOCL	20-30 km	By Road through tanker
6	Anthracite Coal for Pulverized coal injection	13,200	Paradeep, Indonesia		By Rail & Road (through covered trucks)
B. DRI Plant (0.420 MTPA)					
1	Iron Pellet	609000	In house	--	Internal Movement
2	Coal Indian	546000	CG	20-30 km	Road through covered trucks
3	Dolomite	18,900	Local Purchase	20-30 km	Road through covered trucks
C. SMS Unit (0.25 MTPA)					
1	Sponge Iron	2,40,000	In-house	--	Internal Movement
2	Pig Iron	30,000	In-house	20-30 km	Road through covered trucks
3	MS Scrap	30,000	Local Purchase	20-30 km	Road through covered trucks
4	Ferro Alloys	333	Local Purchase	--	Internal Movement
D. Rolling Mill (0.20 MTPA)					
1.	MS Billets/ Hot Billets	2,10,000	In-house Production	--	Internal Movement

S.No	Raw Material	Quantity (TPA)	Sources	Distance (w.r.t. Plant)	Mode of Transport
E. Blast Furnace (0.26 MTPA)					
1	Iron Ore lump	1,09,460	In-house	--	Internal Movement
2	Sinter	2,77,160	In-house	--	Internal Movement
3	BF Coke	1,58,600	Local Market	20-30 km	Road through covered trucks
4	Coal Dust	13,000	In-house	20-30 km	Road through covered trucks
5	Dolomite	36,400	Local Market	20-30 km	Internal Movement
6	Quartz	13,520	Local Market	20-30 km	Road through covered trucks
F. Sinter Plant (0.40MTPA)					
1	Iron ore Fines	3,80,000	Local Market	20-30 km	Road through covered trucks
2	Limestone Fines	52,000	Local Market	20-30 km	Road through covered trucks
3	Dolomite	52,000	Local Market	20-30 km	Road through covered trucks
4	Coke Fines	40,000	Local Market	20-30 km	Road through covered trucks
5	Pellet Fines	58,000	In-house	--	Internal Movement
6	Mill scales, flue dust, Dust from DRI etc	23,600	In-house	--	Internal Movement
7	Sludge from GCP from MBF	2000	In-house	--	Internal Movement
8	Dust from MBF	1,88,000	In-house	--	Internal Movement
9	Sinter Returns fines	1,40,000	In-house	--	Internal Movement
G. DIP Plant (0.24 MTPA)					
1	Hot Metal from B.F	2,57,143	In-house	--	Internal transfer
2	Mold Powder	651	Local Market	20-30 km	Road through covered trucks covered
3	Refractory (WH-A+K)	1416	Local Market	20-30 km	Road through covered trucks
4	Ferro Silicon	720	Local Market	20-30 km	Road through covered trucks
5	Inoculants	230	Local Market	20-30 km	Road through covered trucks
6	Magnesium	408	Local Market	20-30 km	Road through covered trucks

S.No	Raw Material	Quantity (TPA)	Sources	Distance (w.r.t. Plant)	Mode of Transport
7	Runner Coat	1227	Local Market	20-30 km	Road through covered trucks
8	Slag Coagulant	333	Local Market	20-30 km	Road through covered trucks
9	Zinc	454	Local Market	20-30 km	Road through covered trucks
10	Bituminous Solution	1009 KL/Annum	Local Market	20-30 km	Road through covered trucks
H.	Coal Washery (0.98 MTPA)				
1	RoM Coal	9,80,000	Near-by Coal Mines	30-50 km	Road through covered trucks
I.	Captive Power Plant (53 MW)				
1	Indian Coal	2,23,000	Near-by Mines	30-50 km	Road through covered trucks
2	Dolochar	84,000	In-house	--	Internal transfer

39.4.8 The water requirement for the project is estimated as 3642 m³/day, which will be sourced from Shivnath River. Application for the same has been submitted to competent Authority.

39.4.9 The power requirement for the proposed project is estimated as 85 MW which will be obtained from in house CPP.

39.4.10 Baseline Environmental Studies:

Period	Pre-Monsoon Season: 1 st December 2020 to 28 th February 2021
AAQ parameters at 08 Locations	<ul style="list-style-type: none"> PM_{2.5} = 28.8-40.9 µg/m³ PM₁₀ = 48.2 – 70.5 µg/m³ SO₂ = 5.1 -10.1 µg/m³ NO₂ = 11.7 – 21.7 µg/m³ CO = 210 – 580 µg/m³
AAQ modelling	<ul style="list-style-type: none"> Incremental GLCs due to the proposed proposal: PM₁₀ =6.97 µg/m³ PM_{2.5} = 2.81 µg/m³ SO₂ = 6.13 µg/m³ NO₂ = 7.51 µg/m³
Ground water quality at 08 locations	<ul style="list-style-type: none"> pH: 7.06-7.60. Total Hardness: 210-238 mg/l Chlorides: 142-189 mg/l, Iron: 0.71 mg/l to 0.79mg/l
Surface water quality at 8 locations	<ul style="list-style-type: none"> pH: 6.98-7.95, DO: 3.9-6.1 mg/l. BOD: 4.1-8.7 mg/l COD : 14.9-33.0 mg/l TDS :- 230-385 mg/l
Noise levels	46.6 to 62.7 dB(A) - day time

	33.3 To 52.6 dB(A) - Night time																																								
Traffic assessment study findings	<p>Traffic study has been conducted near Railway Siding and Kapri Village at Tilda-Simga Road.</p> <p>Transportation of raw material, fuel & furnished product will be done maximum by road.</p> <p>Existing PCU at Tilda Sigma road near railway siding is 204 PCU/hr and near Kapri village, it is 195 PCU/hr and existing level of services (LOS) is:</p> <table border="1"> <thead> <tr> <th>Road</th> <th>V (Volume in PCU/hr.)</th> <th>C (Capacity In PCU/hr.)</th> <th>Existing V/C Ratio</th> <th>LOS</th> </tr> </thead> <tbody> <tr> <td>Tilda-Simga Road Near Railway Siding</td> <td>204</td> <td>2000</td> <td>0.102</td> <td>A</td> </tr> <tr> <td>Tilda-Simga Road Near Kapri Village</td> <td>195</td> <td>2000</td> <td>0.097</td> <td>A</td> </tr> </tbody> </table> <p>PCU load after proposed Project near Railway siding will be 204 (Existing)+83 (Proposed) = 287PCU/hr and near Kapri Village, it will be 195 (Existing)+35 (Proposed) = 230 PCU/hr level of Services (LOS) will be:</p> <table border="1"> <thead> <tr> <th rowspan="2">Road</th> <th colspan="3">V (Volume in PCU/hr.)</th> <th rowspan="2">C(Capacity InPCU/hr.)</th> <th rowspan="2">Proposed V/C Ratio</th> <th rowspan="2">LOS</th> </tr> <tr> <th>Existing</th> <th>Proposed</th> <th>Total</th> </tr> </thead> <tbody> <tr> <td>Tilda-Simga Road Near Railway Siding</td> <td>204</td> <td>83</td> <td>287</td> <td>2000</td> <td>0.143</td> <td>A</td> </tr> <tr> <td>Tilda-Simga Road Near Kapri Village</td> <td>195</td> <td>35</td> <td>230</td> <td>2000</td> <td>0.115</td> <td>A</td> </tr> </tbody> </table> <p>Note: Capacity as per IRC 106:1990 guidelines for capacity for roads.</p> <p>Conclusion:</p> <p>The modified LOS on Tilda Simga Road both near Railway Siding and Kapri Village will be remained “A”, i.e. Excellent. Therefore, there will be no change in LOS after completion of the project.</p>		Road	V (Volume in PCU/hr.)	C (Capacity In PCU/hr.)	Existing V/C Ratio	LOS	Tilda-Simga Road Near Railway Siding	204	2000	0.102	A	Tilda-Simga Road Near Kapri Village	195	2000	0.097	A	Road	V (Volume in PCU/hr.)			C(Capacity InPCU/hr.)	Proposed V/C Ratio	LOS	Existing	Proposed	Total	Tilda-Simga Road Near Railway Siding	204	83	287	2000	0.143	A	Tilda-Simga Road Near Kapri Village	195	35	230	2000	0.115	A
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Flora and fauna	No schedule I fauna and endangered Flora reported in study area.																																								

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

S. No	Unit	Name	Qty, TPA	Utilization
1	Pellet Plant	Iron Ash	11,940	Re-use Process.
2	DRI Plant	DRI Char	84,000	Re-use in CFBC Power Plant.
		Ash from ESP/Bagfilter	75,600	Will be utilized in our proposed brick making unit.
		Wet Scraper sludge	18,810	Will be given to nearby Brick manufacturing
		Accretion Slag	7,560	Will be utilized in road construction /given to road contractors
3	SMS Unit	Slag	45,000	Will be used for road Filling
4	CPP	Fly Ash	1,59,895	Will be given to brick Plant
5	Rolling Mill	End cutting	5,800	Re use in induction Furnace
		Mill Scale	4,200	Will be supplied to Ferro Alloy unit
6	Blast Furnace	Granulated slag	81000	Will be given to Cement Plant
7	Sinter Plant	Sinter fines	1,40,000	Re use in process
8	DIP	Core Sand & Slag	7200	Will be used for land filling
		Cement Slurry	5022	Will be Sold to brick manufacturing
		Dust & Sludge	5762	Will be used in sinter plant
9	Coal Washery	Reject	3,90,000	Will be re-used in In-house Power Plant (CFBC Boiler)
10	PGP	Cinders (Ash)	2304 TPA	Sold to nearby brick plant
		Phenolic Water	515 KL/annum	Will be Treated and used in process. Hence no Phenolic water will be discharged
		Tar from Gasifier	691 KL/annum	Will be Treated and used in process. Hence no Phenolic water will be discharged

39.4.12 Public Consultation:

Details of advertisement given	09.10.2022
Date of public consultation	10.11.2022

Venue	Secondary School, Village-Newdha, Tehsil- Simga, Baloda Bazar, Chhattisgarh
Presiding Officer	Mr. Rajendra Kumar Gupta Additional District Magistrate Balodabazar-Bhatapara District, Chhattisgarh
Major issues raised	Steps to be taken against air & water pollution control Land Infertility and Garbage Dumping Health of local people Employment opportunities for the local peoples. Road Infrastructure of nearby villages

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

S. No.	Issue Raised during PH	Physical activity and action plan	Budget	1st Year (2023-2024)	2nd Year (2024-2025)
1.	Development of Nearby Areas	PP will Formulate village development program for development in village Kesda, Newdha, Ringni & Hathbandh under consultation with local panchayat and district administration for need-based community development activities which would be in addition to the development plans being undertaken by state and central government.	A budget of 5.50 Cr. has been proposed.	2.75 Cr. Budget of 0.5 Cr. has been proposed for construction and maintainance of village roads. (Kesda & Newdha) Budget of 0.75 Cr. has been proposed for providing Drinking water facility. (Kesda & Newdha) Budget of Rs. 0.75 Cr has been proposed for installation of Solar Lights. (Kesda & Newdha) Community halls will be constructed in the villages of Kesda and Newdha in consultation	2.75 Cr. A budget of 0.5 Cr. has been proposed for construction and maintainance of village roads. (Ringni & Hathbandh) A budget of Rs 0.5 Cr has been Proposed for providing Drinking water facility. (Ringni & Hathbandh) A budget of Rs. 0.75 Cr has been proposed fo r installation of Solar Lights. (Ringni & Hathbandh) A community hall will be

S. No.	Issue Raised during PH	Physical activity and action plan	Budget	1st Year (2023-2024)	2nd Year (2024-2025)
				with local authorities. Budget of Rs. 0.75 Cr has been proposed.	constructed in the village Ringni and Hathbandh in consultation with local authorities. Budget of Rs. 0.75 Cr has been proposed.
2.	Air Pollution Control Measures	<p>PP will install Continuous Ambient Air Quality Monitoring system in Village Kesda, Newdha, Ringni & Hathbandh.</p> <p>Tree plantation drive (25000 No's with tree guard) will be done in nearby villages Kesda, Newdha, Ringni & Hathbandh.</p> <p>Water sprinkling on road for air dust dispersion control in nearby villages in consultation with the authority. (4 Mobile Water sprinklers)</p>	<p>4.5 Cr</p> <p>CAQMS = 4 x 50 Lakhs = 2 Cr</p> <p>1.5 Cr (600 per Tree including maintenance)</p> <p>1 Cr (Mobile water sprinkler)</p>	<p>2.25 Cr</p> <p>1 Cr for CAAQMS in Kesda & Newdha Village.</p> <p>0.75 Cr (For 12,500 No's Trees in Village Kesda & Newdha)</p> <p>0.50 Cr (2 Mobile water sprinkler in village Kesda &, Newdha)</p>	<p>2.25 Cr</p> <p>1 Cr for CAAQMS in Ringni & Hathbandh</p> <p>0.75 Cr (For 12,500 No's Trees in Village Ringni & Hathbandh)</p> <p>0.50 Cr (2 Mobile water sprinkler in Ringni & Hathbandh)</p>
3.	Water Pollution Control Measures	<p>Upgradation of sanitation facility by construction of Community toilets (separate for male and female) in village Kesda, Newdha, Ringni and Hathbandh.</p> <p>Natural ponds (in Kesda, Newdha, Ringni and</p>	<p>2.5 Cr</p> <p>1 Cr (Construction of 50 Toilets)</p> <p>1 Cr (Development and beautification cost of four pond)</p> <p>0.50 Cr Construction of garland</p>	<p>1.25 Cr</p> <p>0.5 Cr (Construction of 25 Public Toilets & Toilets in surrounding Schools and Anganwadi in village Kesda, Newdha)</p> <p>0.5 Cr</p>	<p>1.25 Cr</p> <p>0.5 Cr (Construction of 25 Public Toilets & Toilets in surrounding Schools and Anganwadi in village Ringni and Hathbandh)</p> <p>0.5 Cr (Development and</p>

S. No.	Issue Raised during PH	Physical activity and action plan	Budget	1st Year (2023-2024)	2nd Year (2024-2025)
		Hathbandh) will be adopted and developed & Maintenance by the proponent. Garland drains will be constructed, and drainage system will be updated in consultation with local authority.	drain & Upgradation of existing drainage system.	(Development and Beautification of Pond in Village Kesda, Newdha. 0.25 Cr Construction of garland drain & Upgradation of existing drainage ssysyem in in Village Kesda , Newdha	Beautification of Pond in Village Ringni and Hathbandh. 0.25 Cr Construction of garland drain & Upgradation of existing drainage system in in Village Ringni and Hathbandh.
4.	Employment for the locals	Willing and employable youths will be identified in consultation with gram panchayat of Kesda, Newdha, Ringni and Hathbandh (100 No's). They will be trained in nearby ITI for trades namely electrician, fitters, welders, painters, and civil construction work, etc. Fees will be paid by PP. After successful completion of training, the youths will be offered employment in company	0.90 Cr Stipend-0.6 Cr (5000/- stipend to 100 persons for 1 year) ITI Fee – 0.30 Lakhs (30000/- yearly fee for 100 persons)	0.45 Cr Training of 50 persons will be completed in 1st year	0.45 Cr Training of 50 persons will be completed in 2nd year
5.	Road Safety Measures	PP will install traffic signal lights at Kesda, Newdha, Ringni and Hathbandh. (04 No's) A traffic	0.60 Cr 0.50 Cr (12.5 lakhs per signal lights)	0.30 Cr 0.25 Cr (02 Lights in Village Kesda & Newdha)	0.30 Cr 0.25 Cr (02 Lights in Village Kesda & Newdha)

S. No.	Issue Raised during PH	Physical activity and action plan	Budget	1st Year (2023-2024)	2nd Year (2024-2025)
		<p>Awareness programme will be conducted in villages Kesda, Newdha and Ringni.</p> <ul style="list-style-type: none"> ❖ Training on traffic rules ❖ Maintenance of vehicles ❖ Supply of fluorescent jackets ❖ Speed breakers etc. 	0.10 Cr (Traffic Awareness programme)	0.05 Cr Traffic Awareness programme will be conducted in villages Kesda & Newdha	0.05 Cr Traffic Awareness programme will be conducted in villages Kesda & Newdha
6.	Concern about health of local people	<p>Mobile health/ medical camps shall be organized in future. The frequency shall be twice in a year or as on when required and distribution of medicines in Villages Kesda, Newdha, Ringni and Hathband. Arrangement of 4 Modern Ambulance with Life Support system with necessary Medical Staff in Villages Kesda, Newdha, Ringni and Hathband. Provide the Medical equipment to Government Hospital / Health Centre at Tilda (Beds, Oxygen Cylinder, Oxygen Concentrator, AC, Air Purifier). Celebration of Various days / events.</p>	<p>2.20 Cr</p> <p>0.20 Cr For conducting health/medical camps in village Kesda, Newdha, Ringni and Hathband.</p> <p>1 Cr Arrangement of four ambulance in village Kesda, Newdha, Ringni and Hathband.</p> <p>1 Cr Provide the medical equipment to Government Hospital / Health Centre at Tilda town (Beds,</p>	<p>1.10 Cr</p> <p>0.10 Cr Health checkup and distribution of medicines in Villages Kesda & Newdha.</p> <p>0.50 Cr Arrangement of Ambulance in Villages Kesda & Newdha.</p> <p>0.50 Cr Provide the medical equipment to Government Hospital / Health Centre at Tilda town (Beds, Oxygen Cylinder, Oxygen Concentrator, AC, Air Purifier)</p>	<p>1.10 Cr</p> <p>0.10 Cr Health checkup and distribution of medicines in Villages Ringni and Hathband.</p> <p>0.50 Cr Arrangement of Ambulance in Villages Ringni and Hathband.</p> <p>0.50 Cr Provide the medical equipment to Government Hospital / Health Centre at Tilda town (Beds, Oxygen</p>

S. No.	Issue Raised during PH	Physical activity and action plan	Budget	1st Year (2023-2024)	2nd Year (2024-2025)
			Oxygen Cylinder, Oxygen Concentrator, AC, Air Purifier)		Cylinder, Oxygen Concentrator, AC, Air Purifier)
7.	Ground Water Level Issue	Rainwater Harvesting structures will be constructed in Village Kesda, Newdha, Ringni & Hathband Awareness programme for conservation of water will be conducted.	0.50 Cr 0.34 Cr has been proposed for construction of RWH structure. 0.16 Cr has been proposed for awareness programme for conservation of water.	0.25 Cr 0.17 Cr has been proposed for construction of RWH structure in Kesda & Newdha 0.08 Cr has been proposed for awareness programme for conservation of water in Kesda & Newdha.	0.25 Cr 0.17 Cr has been proposed for construction of RWH structure in Ringni & Hathband 0.08 Cr has been proposed for awareness programme for conservation of water Ringni & Hathbandh.
8.	Livelihood & Women Empowerment Program	Need assessment – market assessment shall be done for nearby villages and based on the outcome of the suitable training for skill development and employability shall be given. The training shall be technical training on LMV/HMV Motor driving, motor windings, electrical fittings, a/c – refrigerator repairing, two-four-wheeler servicing and repairing, meson work, plumbing, bar windings, stitching & designing course for females, computer course etc.	0.50 Cr	0.25 Cr	0.25 Cr

S. No.	Issue Raised during PH	Physical activity and action plan	Budget	1st Year (2023-2024)	2nd Year (2024-2025)
9.	Concern about agricultural productivity & region.	Company will monitor Environmental performance in Kesda and Newdha village as per approved monitoring schedule. Company will provide training to farmers and local people regarding modern agriculture techniques.	0.50 Cr	0.25 Cr	0.25 Cr
10.	Infrastructure development of local School	PP will make pucca kitchen with fume exhaust, mid-day meals to students, provide furniture, computers, fans, tables, Upgradation of sanitation facility and colour printers in local schools at Village-Bilandi & Kapri Kalan, Newdha & Kesda	1 Cr 4 Kitchen – 0.10 Cr 800 Tables & Chairs – 0.10 Cr 40 Computer– 0.45 Cr 40 Colour printer – 0.10 Cr Upgradation of sanitation facility-0.25 Cr	0.50 Cr We will complete work in Village-Newdha & Kesda schools (2 schools)	0.50 Cr We will complete work in school Village-Bilandi & Kapri Kalan (2 School)
11.	Garbage dumping	The company will make arrangements for proper disposal of garbage. Proper Segregation of waste would be done by installing separate dustbins for separate waste. Awareness programme for color coding of dustbins and segregation of waste will be conducted.	0.30 Cr 0.15 Cr 1000 dustbins of 120 lt. capacity and 500 dustbins of 240 lt. would be provided in nearby villages. 0.15 Cr	0.15 Cr 500 dustbins of 120 lt. capacity and 250 dustbin of 240 lt. would be provided in nearby villages	0.15 Cr 500 dustbins of 120 lt. capacity and 250 dustbin of 240 lt. would be provided in nearby villages

S. No.	Issue Raised during PH	Physical activity and action plan	Budget	1st Year (2023-2024)	2nd Year (2024-2025)
			Company will conduct awareness programme proper waste disposal of municipal solid waste in nearby villages.		
12.	PP has also proposed to adopt one Village namely Newdha village. Formulate village development program under consultation with local panchayat and district administration for need-based community development activities which would be in addition to the development plans being undertaken by state and central government.		1 Cr	0.50 Cr	0.50 Cr
	<p>1. Development of smart class, distribution of benches, Fans, RO water System, Upgradation of sanitary facility, Distribution of IT gadgets, Printers, Computers in schools present in Newdha.</p> <p>2. Installation of Solar Penal</p> <p>3. Installation of AAQMS.</p> <p>4. Plantation in Newdha Village.</p> <p>Upgradation of Medical facility.</p> <p>Upgradation of existing infrastructure in village.</p>				
Total			20 Cr	10 Cr	10 Cr

39.4.13 The capital cost of the project is INR 1221 Crores and the capital cost for environmental protection measures is proposed as INR 24 Crores. The annual recurring cost towards the environmental protection measures is proposed as Rs 3.65 Crores. The total employment generation from the proposed project is 2150. The details of cost for environmental protection measures is as follows:

S. No	Activity	Capital Cost (In Crores)	Recurring expenses proposed/annum (In Crores)
1	Air Emission Management		
	➤ Electrostatic Precipitators (ESP)	12	
	➤ Fume Extraction system with bag filters	1	

S. No	Activity	Capital Cost (In Crores)	Recurring expenses proposed/annum (In Crores)
	➤ Dust catcher followed by Venturi scrubber	1	2
	➤ Bag filters & others	1	
	➤ Stacks	1	
	➤ Water Sprinklers	0.50	
2	Wastewater Management		
	➤ for ETP & STP	0.50	0.25
	➤ for Garland drains	0.20	
3	Solid waste Management		
	➤ Fly Ash Handling & disposal	1.0	0.50
	➤ Slag Handling & Disposal	0.50	
	➤ Hazardous waste storage & disposal	0.20	
	➤ Municipal solid waste storage &	0.30	
4	Greenbelt development, Land scaping, Noise Management, RWH etc.	0.50	0.50
5	Environmental Monitoring		
	➤ AAQMS	1	0.10
	➤ CEMS	1	0.10
	➤ Third party Monitoring	--	0.50
6	Occupational Health & Safety		
	➤ PHC	0.75	0.20
	➤ PPEs	0.25	
	➤ Ambulance (additional)	0.30	
	➤ Fire Safety Systems	1	
Total		24	3.65
Extended EMP (Corporate Environment Responsibility)		20	Nil

39.4.14 Proposed greenbelt will be developed in 21.12 ha which is about 33% of the total project area. 10 m wide greenbelt, consisting of at least 3 tiers around plant boundary will be developed as greenbelt and green cover as per CPCB/MoEF&CC, New Delhi guidelines. Local and native species will be planted with a density of 2500 trees per hectare. Total 53,000 nos. of saplings will be planted and nurtured in 21.12 ha.

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

Deliberations by the Committee

39.4.16 The Committee noted the following:

1. The instant proposal is for setting up of a Greenfield Project for Installation of Iron Ore Pellet Plant (0.6 MTPA), DRI Plant (0.42 MTPA), SMS with Caster (0.25 MTPA), Rolling Mill (0.20 MTPA), Pig Iron Plant (0.26 MTPA), Sinter Plant (0.40 MTPA), DIP Plant (0.24 MTPA), Coal Washery Unit (0.98 MTPA) with Captive Power Plant (85 MW) for

producing TMT bar, wire rods, steel bar coils and de-coiled bars and Ductile Iron Pipes with PGP of 8000 Nm³/hr.

2. The PP reported that the total land involved in the proposed project is 58.68 ha [Private: 39.66 ha; Govt.: 4.04 ha] out of which approx. 39.66 ha land is under the possession of the company and entire land will be diverted for industrial purposes. Agreement is signed with land owners for 14.98 ha. Also signed the MoU with the state government for setting up industry. The EAC deliberated on the land acquisition status and is of the view that the land status is not very clear and still not completely transferred in the name of PP.
3. The EAC observed that a road is passing through the project site. In this regard, the EAC deliberated on the submission of PP and layout plan and is of the view that the submission of PP is not conclusive enough to understand the ground reality and permission for diversion of road is not available. The EAC is of the opinion that since this is a greenfield project, it is pertinent to understand the ground through a site visit of a sub-committee.
4. Newdha is at a distance of 0.5 km towards East direction of the project Site. There are approx. Total 56 villages and 1 town is present in 10 km radius study area of the project site. Considering the Environmental Sensitivity to the habitation in the area, the EAC opined that it is prudent to inspect the area for understanding the ground reality as the area appears to have rich habitation.
5. Jamuniya Seasonal Nala is present at a distance of 1.2 km in the East of the plant site. Other water bodies are also present are within the study area. The EAC is of the opinion that water bodies are required to be conserved. Drainage Conservation scheme to protect the natural drainage and its flow parameters; along with Soil conservation scheme and multiple Erosion control measures is not submitted. Further during preparation of drainage conservation plan, PP shall prepare a contour map showing contour interval, proper Bench Mark, Drainage disposal with design and calculations, Rain Water Harvesting Plan with design and calculation including the invert level of disposal point in order to achieve ZLD.
6. PP shall undertake village adoption and formulate Village Adoption program consisting of need-based community development activities, to develop them into model villages. PP shall submit details of the villages to be adopted.
7. The Committee deliberated on the incremental GLC due to the proposed project and observed that incremental GLC for CO has not been submitted in the brief. In this regard, the EAC is of the opinion complete information in this regard shall be submitted.
8. The water requirement for the project is estimated as 3642 m³/day, which will be sourced from Shivnath River. The EAC noted that water permission has not been obtained and application for the same has been submitted to Competent Authority.
9. Details of railway siding permission and its status needs to be submitted.
10. The PP/Consultant has to revise the EIA/EMP Report along with all the details as per the provisions of the EIA Notification, 2006.
11. Thus, in view of the above observations the EAC is of the opinion that it is pertinent to undertake site visit of the sub-committee of the EAC to understand the ecological/environmental sensitivity of the area/ complexity of the project/ size of the

project and the various other issues involved in the project as mentioned above. In view of the same, the EAC is suggested to conduct the site visit with sub-committee involving the representatives of EAC and MoEFCC so that all the issues are addressed accordingly for this project.

Recommendations of the Committee:

- 39.4.17 In view of the foregoing and after deliberations, the Committee recommended **to defer the proposed project and recommended for site visit** of the proposed project area by a sub-committee of EAC Industry-1 members comprising of Dr. S.K. Singh, Dr. Sanjay Bist (Representative of Indian Meteorological Department & EAC member) and Representative of MoEFCC, New Delhi to conduct the site visit and submit the factual Report covering all the issues. The proposal shall be appraised based on the findings of the sub-committee and deliberation of EAC.

Consideration of Terms of Reference

Agenda No. 39.5

- 39.5 Proposed Enhancement of Ferro Alloys Plant from 26400 to 179000 TPA(Max) with change in product mix Installation of Production facilities for 198000TPA MS/SS Billets, Rolling Mill for 300000TPA MS/SS Rolled products, Production of 3600 TPA(Max) Noble Ferro Alloys(Fe-Mn or Fe-Cr or Fe-V or Fe-Mo or combination of any), 175000TPA Cr Ore Briquette Plant 120000TPA, Mn Ore Sinter plant along with 20TPH Jigging Plant by M/s Gajanan Ferro Pvt Ltd., located at Village Kadambada, Dist. East Singhbhum, Jharkhand – Consideration of TOR**

[Proposal No. IA/JH/IND1/429095/2023; File No. J-11011/156/2010-IA-II(IND-I)]

[Consultant: Vardan Environet ; Valid upto; May 04, 2026]

- 39.5.1 M/s Gajanan Ferro Pvt Ltd. have made an application online vide proposal no. IA/JH/IND1/429095/2023 dated 22.06.2023 along with the application in prescribed format (CAF, Form – I Part A & B), copy of pre-feasibility report and proposed ToRs for undertaking detailed EIA study as per the EIA Notification, 2006 for the project mentioned above. The proposed project activity is listed at S. No. 3(a) Metallurgical Industries (Ferrous & Nonferrous) under Category ‘A’ of the schedule of the EIA Notification, 2006 and being appraised at the Central Level.
- 39.5.2 Name of the EIA consultant: M/s. Vardan Environet [List of ACOs with their Certificate / Extension Letter no. NABET/EIA/2326/RA 0284; Valid up to 04.05.2026, as on June 30, 2023].

Details submitted by Project proponent

39.5.3 The project of M/s Gajanan Ferro Pvt Ltd. is located in Kadambeda Village, East Singhbhum District, Jharkhand is for enhancement of Ferro Alloys Plant from 26,400 to 179,000 TPA (Max) with change in product mix, setting up of Production facilities for 198,000 TPA MS / SS Billets, Rolling Mill for Production of 300,000 TPA MS / SS Rolled products, Production of 3,600 TPA (Max) Noble Ferro Alloys (Fe-Mn or Fe-Cr or Fe-V or Fe-Mo or combination of any), 175,000 TPA Chrome Ore Briquette Plant, 120,000 TPA Mn Ore Sinter plant along with 20 TPH Jigging Plant.

39.5.4 Environmental site settings:

Sl. No.	Particulars	Details			Remarks																																																			
i	Total land	10.74 ha [Private land]			Land use: Existing - Industrial																																																			
ii	Land Acquisition Details as per MoEFCC OM dated 7/10/2014	Land has been acquired and is in Possession.																																																						
ii	Existence of habitation & involvement of R&R, if any.	Project Site: Nil. Study Area: <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>Nutangarh village</td> <td>0.52 km</td> <td>North</td> </tr> <tr> <td>Amda village</td> <td>0.40 km</td> <td>South</td> </tr> <tr> <td>Kadambera village</td> <td>0.36 km</td> <td>SE</td> </tr> </tbody> </table>			Habitation	Distance	Direction	Nutangarh village	0.52 km	North	Amda village	0.40 km	South	Kadambera village	0.36 km	SE	R&R is not involved																																							
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iv	Elevation of the project site	122 meters			AMSL																																																			
v	Involvement of Forest land, if any.	No involvement of Forest Land																																																						
vi	Water body exists within the project	Project site: No water body within the plant area. Study area: <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th>Water Body</th> <th>Distance</th> <th>Direction</th> </tr> </thead> <tbody> </tbody> </table>			Water Body	Distance	Direction	-																																																
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Sl. No.	Particulars	Details			Remarks
	site as well as study area	Subarnarekha River	3.24 km	SW	
		Kharsoti Nadi	8.48 km	NW	
		Sankh Nadi	7.55 km	W	
		Sindura nadi	5.95 km	SE	
vii	Existence of ESZ/ ESA/ national park/ wildlife sanctuary/ biosphere reserve/tiger reserve/elephant reserve etc. if any within the study area	<p>Study area: Nil.</p> <p>List of Reserve and Protected Forest Narsingharh RF is at 0.22 km in ENE direction. Basajhor RF is at 9.2 km in NNE direction Sosodih PF at 5.64 km in NE direction Mohanpur PF at 6.88 km in NNW direction</p>			-

39.5.5 The existing project was accorded environmental clearance vide Ir.no. J-11011/156/2010-IA-II(I) on 16.02.2012. Consent to Operate for the existing unit was accorded by Jharkhand State Pollution Control Board vide Ref No. JSPCB/HO/RNC/CTO-13718371/2022/1403 dated 30.09.2022. The validity of CTO is up to 31.12.2024.

39.5.6 Implementation status of the existing EC:

Sl. No.	Facilities	Units	As per EC dated 16.02.2012	Implementation status	Production as per CTO
1	4x5 MVA Submerged Arc Furnaces	Ferro alloy plant	Si-Mn - 26,400 Or Fe-Si - 14,400 or in combination of any	Implemented and Operational	Si-Mn - 26,400 Or Fe-Si - 14,400 or in combination of any

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

Sl. No.	Plant Equipment/ Facility	Existing Facilities as per EC dated 18.06.2010								Proposed Units		Final (Existing+ Violation + Proposed)	
		Total (A+B)		Implemented (A)		Unimplemented (B)		As per CTO		Config	Cap.	Config	Cap.
		Config	Cap.	Config	Cap.	Config	Cap.	Config	Cap.				
1	Ferro Alloy Plant – Submerged Arc Furnace	4x5 MVA	Si-Mn - 26,400 Or Fe-Si - 14,400 or in combination of any	4x5 MVA	Si-Mn - 26,400 Or Fe-Si - 14,400 or in combination of any	-	-	4x5 MVA	Si-Mn - 26,400 Or Fe-Si - 14,400 or in combination of any	4x12 MVA Submerged Arc Furnaces	Si-Mn- 79,500 Or Fe-Mn - 110,000 Or Fe-Si - 38,000 Or Fe-Cr- 79,500 Or Pig Iron- 127,000 Or in combination of any	4x5 MVA + 4x12 MVA Submerged Arc Furnaces	Si-Mn - 102,900 Or Fe-Mn- 156,300 Or Fe-Si -52,400 Or Fe-Cr - 112,700 TPA Or Pig Iron- 179,000 Or in combination of any
										Addl. Products Fe-Mn, Fe-Cr. and Pig Iron from the existing 4x5 MVA SAFs on either / or / in combination basis with the existing products	Fe-Mn – 46,300 Or Fe-Cr. – 33,200 Or Pig Iron – 52,000 Or in combination of any		
2	Chrome Ore Briquetting Plant	-	-	-	-	-	-	-	-	1x20 TPH	1,58,000	1x20 TPH	1,58,000
3	Mn Ore Sinter Plant	-	-	-	-	-	-	-	-	20 TPH	1,20,000	20 TPH	1,20,000
4	Noble Alloys through Alumino	-	-	-	-	-	-	-	-	• Reaction Vessel / M.S Crucible–	3,600 LC/MC Ferro Manganese Or	• Reaction Vessel / M.S Crucible– 16	3,600 LC/MC Ferro Manganese Or

Sl. No.	Plant Equipment/ Facility	Existing Facilities as per EC dated 18.06.2010								Proposed Units		Final (Existing+ Violation + Proposed)	
		Total (A+B)		Implemented (A)		Unimplemented (B)		As per CTO		Config	Cap.	Config	Cap.
		Config	Cap.	Config	Cap.	Config	Cap.	Config	Cap.				
	Thermite Process									16 nos. • Jaw Crusher 500 kg – 1 no. • Pulverizer 1000 kg. – 1 no. • Rotary Mixer 1000 kg – 1 no. Roaster – 500 kg/hr.	3,600 LC/MC Ferro Chrome Or 1,800 Ferro Vanadium Or 1,800 Ferro Molybdenum	nos. • Jaw Crusher 500 kg – 1 no. • Pulverizer 1000 kg. – 1 no. • Rotary Mixer 1000 kg – 1 no. Roaster – 500 kg/hr.	3,600 LC/MC Ferro Chrome Or 1,800 Ferro Vanadium Or 1,800 Ferro Molybdenum
5	Jigging Plant	-	-	-	-	-	-	-	-	2x10 TPH	--	2x10 TPH	--
6	Induction Furnaces	-	-	-	-	-	-	-	-	2x30 Ton	198,000 MS or SS Billets	2x30 Ton	198,000 MS or SS Billets
7	Argon Oxygen Decarburization (AOD)	-	-	-	-	-	-	-	-	1x30 Ton		1x30 Ton	
8	Continuous Casting M/c	-	-	-	-	-	-	-	-	Billet Casters (2x6/11m)		Billet Casters (2x6/11m)	
9	Reheating Furnace	-	-	-	-	-	-	-	-	1x30 TPH	--	1x30 TPH	--
10	Rolling Mill	-	-	-	-	-	-	-	-	925 TPD	3,00,000 MS or SS Rolled products Or in combination of any	925 TPD	3,00,000 MS or SS Rolled products Or in combination of any

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

Sl. No.	Raw Material	Quantity (TPA)			Source	Distance from Site (km)	Mode of Transportation
		Existing	Proposed	Total			
1	Manganese Ore	47,520	365,088	412,608	Sundargarh Odisha	400 km	By Rail till Dhalbhumgarh RS and then by road (3 km) to plant site in covered trucks
2	Quartz	25,200	71,520	96,720	Mosabani Mines, Barajamda, East Singhbhum	70 km	By road in covered trucks
3	Coal	10,560	57,060	67,620	Jadugoda mines, Bhatin mines, East Singhbhum	20 km	By road in covered trucks
4	Coke	10,560	114,480	125,040	Paschim Bardhaman, WB	120 km	By road in covered trucks
5	Coke Breeze	--	9,504	9,504	Local market	30 km	By road in covered trucks
6	Charcoal	14,400	39,440	53,840	Local market	30 km	By road in covered trucks
7	Dolomite	6,600	52,290	58,890	Jamshedpur	55 km	By road in covered trucks
8	Limestone	--	87,388	87,388	Hazaribagh and East Singhbhum	80 km	By road in covered trucks
9	Calcined Lime	--	9,090	9,090	Local market	30 km	By road in covered trucks
10	Chrome Ore Fines	--	165,900	165,900	Jajpur Mines, Odisha	250 kms.	By road in covered trucks
11	Chrome Ore	--	6,480	6,480	Jajpur Mines, Odisha	250 kms.	By road in covered trucks
12	Chrome Ore (Friable)	--	39,445	39,445	Jajpur Mines, Odisha	250 kms.	By road in covered trucks
13	Chrome Ore Briquettes	--	214,130	214,130	Inhouse + Purchased	--	--

Sl. No.	Raw Material	Quantity (TPA)			Source	Distance from Site (km)	Mode of Transportation
		Existing	Proposed	Total			
14	Magnesite	--	5,635	5,635	Kumoan, Uttarakhand	1500 km	By road in covered trucks
15	Iron Ore	---	232,700	232,700	West Singhbhum	100 km	By road in covered trucks
16	Fe-Mn Slag	12,672	41424	54,096	Inhouse	--	--
17	EC paste	720	2,406	3,126	Local market	20 km	By road in covered trucks
18	Mill Scale	5,760	15,902	21,662	Inhouse	--	--
19	Sponge Iron	--	198,000	198,000	Jamshedpur, Ramgarh	60 km	By road in covered trucks
20	Scrap	--	59,517	59,517	Inhouse + Purchased (Local Market)	20 km	By road in covered trucks
21	Pig Iron	--	14,850	14,850	Inhouse	--	--
22	Ferro Alloys	--	43,870	43,870	Inhouse	--	--
23	Hydrated Lime	--	5,530	5,530	Local market	20 km	By road in covered trucks
24	Molasses	--	8,690	8,690	Local Market	20 km	By road in covered trucks
25	Aluminum	--	2,268	2,268	Jamshedpur	50 km	By road in covered trucks
26	Aluminum Shots	--	900	900	Jamshedpur	50 km	By road in covered trucks
27	Fluorspar	--	432	432	Jamshedpur	50 km	By road in covered trucks
28	Sodium Nitrate/ Barium peroxide	--	504	504	Local Market	100 km	By road in covered trucks
29	Molybdcic Oxide	--	1,836	1,836	Imported (Germany)	230 km	Through Haldia Port and then by road in covered trucks
30	Iron Nails	--	288	288	Local Market	20 kms.	By road in covered truck
31	Vanadium Pentoxide	--	1,854	1,854	Imported (Russia)	230 km	Through Haldia Port and then by road in covered trucks

- 39.5.9 Existing Water requirement is 22.5 KLD which is obtained from Ground and permission for the same has been obtained from CGWA vide letter no CGWA/NOC/IND/ORIG/2023/18425 dated 02.05.2023. The total fresh water requirement after the expansion will be 450 KLD. The permission for drawl of ground water will be obtained.
- 39.5.10 Existing power requirement of 20 MW is obtained from Jharkhand Bijli Vitaran Nigam Ltd (JBVNL). The power requirement for the proposed project is estimated as 80 MW, which will also be obtained from the Jharkhand Bijli Vitaran Nigam Ltd. Total power requirement after expansion will be 100 MW.
- 39.5.11 The capital cost of the project is envisaged as Rs 200.7 Crores (total cost after expansion will be Rs.250 Crores including existing project cost of Rs. 49.3 Crores). The capital cost for environmental protection measures is proposed as Rs 24.49 Crores. The employment generation from the proposed expansion is 400.
- 39.5.12 It is reported that there is no violation under EIA, 2006/court case/show cause/direction if any, related to the project under consideration.
- 39.5.13 Proposed Terms of Reference: [Baseline data collection period: March to May, 2023]

Attributes	Parameters	Sampling		Remarks
		No. of stations	Frequency	
A. Air				
a. Meteorological parameters	Temp., Relative Humidity, Wind Speed, Wind Direction, Rainfall	1 Location	24-hourly sampling for three months	Secondary data from IMD, New-Delhi for the nearest IMD station
b. AAQ parameters	PM ₁₀ , PM _{2.5} , SO ₂ , NO _x , CO	8 Locations	24-hourly sampling, twice a week for 12 weeks	Monitoring Network: 2 locations in upwind side, 2 locations in downwind side / impact zone. All the sensitive receptors are covered
B. Noise				
	Leq (Day & Night), Lmax (Day & Night), Lmin (Day & Night)	8 Locations	24-hourly sampling, twice in a week (working and non-working day) for 3 months	Monitoring Network: 2 locations near to project site, 5 locations in impact zones. All the sensitive receptors are covered
C. Water				
a. Surface water quality parameters	pH, EC, NO ₃ , Na, K, Fe, Al, Ca, Cl, Cr, Mg, TDS, TSS, DO, SO ₄ , F, BOD, COD, Zn,	8 Locations	Once in a day in each month for one season	One grab sample per location

Attributes	Parameters	Sampling		Remarks
		No. of stations	Frequency	
	Cu, Mn, Cd, Turbidity, Odour			
b. Ground water quality parameters	pH, Ca, Cl, Mg, TDS, SO4, F, NO3, Fe, Al, Zn, Cu, Mn, Cd, Pb, Hg, EC, Turbidity, Odour	8 Locations	Once in a day in each month for one season	One grab sample per location
<i>D. Land</i>				
a. Soil quality	pH, Conductivity, Soil Texture, Water Holding Capacity, Cl, Ca, Na, K, Organic matter, Mg, N, Zn, Mn, Phosphorus, Pb, Cd, Cr, Cu	8 Locations	Once in a day in each month for one season	One surface sample from project site, Agriculture, forest, water body and prime villages.
<i>E. Biological</i>				
a. Aquatic	Species of Plants and Avifauna	10 km Radius study area	One season	Secondary data to collect from Government offices, NGOs, published literature
b. Terrestrial	Species of Flora and Fauna	10 km Radius study area	One season	Secondary data to collect from Government offices, NGOs, published literature
<i>F. Socio-economic parameters</i>	Demographic details and Occupational details	10 km Radius study area	One season	Secondary data from census records, statistical hard books, topo-sheets, health records and relevant official records available with Govt. agencies

Written representations:

39.5.14 During the meeting, based on the deliberations made by the EAC, the project proponent vide letter dated 06.07.2023 through email dated 06.07.2023 submitted the following information:

S. N.	Additional Information required	Reply
1	Project authorities shall submit latest submitted EC compliance report	The latest EC Compliance submitted to RO, dated 03.06.2023 is submitted.
2	Project Authorities shall submit Affidavit for completing and implementing the	The Affidavit by Project authorities for completing and implementing all the

S. N.	Additional Information required	Reply
	previous EC conditions within three months	conditions of EC file no. J-11011/156/2010-IA-II(I) dated 16.02.2012 is submitted.

Deliberation by the Committee

39.5.15 The Committee noted the following:

- i. The instant proposal is for enhancement of Ferro Alloys Plant from 26,400 to 179,000 TPA (Max) with change in product mix, setting up of Production facilities for 198,000 TPA MS / SS Billets, Rolling Mill for Production of 300,000 TPA MS / SS Rolled products, Production of 3,600 TPA (Max) Noble Ferro Alloys (Fe-Mn or Fe-Cr or Fe-V or Fe-Mo or combination of any), 175,000 TPA Chrome Ore Briquette Plant, 120,000 TPA Mn Ore Sinter plant along with 20 TPH Jigging Plant.
- ii. The existing project was accorded environmental clearance vide lr.no. J-11011/156/2010-IA-II(I) on 16.02.2012. Consent to Operate for the existing unit was accorded by Jharkhand State Pollution Control Board vide Ref No. JSPCB/HO/RNC/CTO-13718371/2022/1403 dated 30.09.2022. The validity of CTO is up to 31.12.2024.
- iii. PP submitted that total land for the project is 10.74 ha area which is Private Land which has been acquired and under the possession of the company.
- iv. The nearest habitation is Nutangarh village (0.52 km, North), Amda village (0.40 km, South) and Kadambera village (0.36 km, SE) of the project site. The EAC is of the opinion that PP shall strictly implement the environmental safeguard measures proposed to minimise the impact on the habitation of the locals.
- v. As reported, Subarnarekha River is at a distance of 3.24 km in SW direction of the project site, Also, there are other water bodies within the study area of 10 km of the project site. The EAC is of the opinion that water bodies shall not be disturbed. Mitigation measures w.r.t. safeguarding the water bodies shall be prepared and submitted.
- vi. PP has reported that Narsingharh RF is at 0.22 km in ENE direction of the project site. The EAC opined that PP shall submit mitigation measures to minimise the impact on the RF.
- vii. The total fresh water requirement after the expansion will be 450 KLD. The permission for drawl of ground water shall be obtained.
- viii. The EAC also deliberated on the submitted written representation of project proponent and found it satisfactory.

Recommendations of the Committee

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

- (i) The nearest habitation is Nutangarh village (0.52 km, North), Amda village (0.40 km, South) and Kadambra village (0.36 km, SE) 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 some of these locations in its environmental monitoring programme.
- (ii) As reported, Subarnarekha River is at a distance of 3.24 km in SW direction of the project site, Also, there are other water bodies within the study area of 10 km of the project site. The PP shall include in the EIA/EMP report suitable steps /conservation plan along with contouring (close intervals), Run -off calculations, disposal etc. A robust and full proof Drainage Conservation scheme to protect the natural drainage and its flow parameters; along with Soil conservation scheme and multiple Erosion control measures shall be prepared and included in EIA/EMP Report.
- (iii) PP has reported that Narsingharh RF is at 0.22 km in ENE direction of the project site. PP shall submit mitigation measures to minimise the impact on the RF.
- (iv) Water requirement of 450 KLD is proposed to be met from ground water PP shall obtain necessary permission form the Competent Authority. PP shall also explore the possibility for alternate source of water to reduce dependency on ground water.

DAY-2: JULY 7, 2023 [FRIDAY]

Consideration in Environmental Clearance Proposals

Agenda No. 39.6

39.6 Installation of Ferro-Alloy Plant (SAF 2x9 MVA) and Chrome Ore Briquette Plant (10 TPH) by M/s. Satvik Enterprises Limited located at Mouza: Sahebdihi, PS: Barjora, District: Bankura, West Bengal – Consideration for Environmental Clearance

[Proposal No. A/WB/IND1/433174/2023, File No. IA-J-11011/154/2022-IA-II(IND-I)]

[Consultant: Vardan Environet ; Valid upto; May 04, 2026]

39.6.1 M/s Satvik Enterprises Ltd. has made an online application vide Proposal No. IA/WB/IND/286081/2022 dated 5th August, 2022 along with copy of EIA report, Forms (Part A, B and C) seeking Environment Clearance (EC) under the provisions of the EIA Notification, 2006 for the project mentioned above. The proposed project activity is listed at S. No. 3(a) Metallurgical Industries (ferrous & non-ferrous) under Category “A” of the schedule of the EIA Notification, 2006 and being appraised at Central Level.

39.6.2 Name of the EIA consultant: M/s. Vardan Environet [List of ACOs with their Certificate / Extension Letter no. NABET/EIA/2326/RA 0284; Valid up to 04.05.2026, as on June 30, 2023].

Details submitted by Project proponent

39.6.3 The details of the ToR are furnished as below:

Date of Application	Consideration	Details	Date of Accord	ToR Validity
05.08.2022	Standard ToR was issued by MoEF&CC	Standard Terms of Reference	18.08.2022	17.08.2026

39.6.4 The project of M/s. Satvik Enterprises Limited located at Mouza: Sahebdihi, PS: Barjora, District: Bankura, West Bengal is for installation of Ferro-Alloy Plant (SAF 2x9 MVA) and Chrome Ore Briquette Plant (10 TPH).

39.6.5 Environmental site settings:

Sl. No.	Particulars	Details	Remarks
i.	Total land	The proposed project will be installed on total 2.18 hectares (5.38 acres) of land, which has been acquired and is in possession of the Company.	Land use: Industrial land.
ii.	Land acquisition details as per MoEF&CC O.M.	2.18 hectares (5.38 acres)	The land for the proposed project is already under

Sl. No.	Particulars	Details	Remarks
		dated 7/10/2014	the possession of the Company.
iii.	Existence of habitation & involvement of R&R, if any.	The proposed project will be installed on total 2.18 hectares (5.38 acres) of land, which has been acquired and is in possession of the Company.	Total land is under the possession of the company. No additional land is involved in the project. Hence, R & R issue is not applicable.
iv.	Latitude and Longitude of the project site	Latitude: 23°23'54.60"N to 23°24'59.32"N & Longitude: 87°17'15.69"E to 87°17'24.19"E	-
v.	Elevation of the project site	Above Mean Sea Level (AMSL): 272 ft (83m)	-
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	Project site: No water body exists within the project site Study area : (1) River Damodar – 6.7 km from project site in NE direction.	-
viii.	Existence of ESZ/ ESA/ national park/ wildlife sanctuary/ biosphere reserve/ tiger reserve/ elephant reserve etc. if any within the study area	Nil.	-

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

Sl. No.	Units	Capacity
1.	Submerged Arc Furnaces (2x9 MVA)	32,800 TPA Si-Mn (High, Medium or Low Carbon grades) or 44,400 TPA Fe-Mn (High, Medium or Low Carbon grades) or 15,200 TPA Fe-Si or 33,600 TPA Fe-Cr
2.	Ferro-Chrome Briquetting Plant	10 TPH

Note: Depending on market demand, M/s. Satvik Enterprises Limited may produce MC/LC grades of Silico Manganese or MC/LC grades Ferro Manganese (Using Converter by blowing Oxygen), without any additional impact on environment.

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

Sl No.	Items	Source	Distance (w.r.t. Plant) (in km)	Raw Material Requirement (MT)	Mode of Transportation
A	FOR PRODUCTION OF SILICO MANGANESE				
1	Manganese Ore	Imp: Australia / South Africa Dom: Balaghat / Barbil	1000/270	55,760	Road
2	Fe - Mn Slag	Own Generation / W Bengal	50	22,960	Road
3	Coal	W Bengal / Jharkhand	100	13,120	Road
4	Coke	W Bengal / Jharkhand	100	13,120	Road
5	Quartz	W Bengal / Andhra Pradesh	100	6,560	Road
B	FOR PRODUCTION OF FERRO MANGANESE				
1	Manganese Ore	Imp: Australia / South Africa	1000/270	1,15,440	Road
2	Coal	W Bengal / Jharkhand	100	17,760	Road
3	Coke	W Bengal / Jharkhand	100	17,760	Road
		Imp: China	270		
4	Dolomite	Dom: W Bengal / Jharkhand / Assam	100	1,332	Road
C	FOR PRODUCTION OF FERRO SILICON				
1	Quartz	W Bengal / Andhra Pradesh	100	25,840	Road
2	Mill Scrap	W Bengal / Jharkhand	50	6,536	Road
3	M S Scrap	W Bengal / Jharkhand	50	304	Road
4	Charcoal	Andhra Pradesh / Tamilnadu	1500	13,680	Road
5	Lam Coke	Imp: China Dom: W Bengal / Jharkhand	100	8,360	Road
		W Bengal / Andhra Pradesh	100		
D	FOR PRODUCTION OF FERRO CHROME				
1	Chrome Ore	Orissa	370	87,360	Road

2	Coke	Imp: China Dom: W Bengal / Jharkhand	100	13,440	Road Road
3	Coal	W Bengal / Jharkhand	100	6,048	Road
4	Quartz	W Bengal	100	672	Road
5	Dolomite	Orissa / Chhatisgarh	400/800	672	Road
6	Lime	Orissa / Chhatisgarh	400/800	840	Road
7	Molasses	Uttar Pradesh	1500	2,016	Road

39.6.8 The fresh water requirement for the proposed project is estimated as 70 m³ /day, which will be met from the water supply of Barjora Gram Panchayat Samity. The permission for drawl of groundwater is obtained from Barjora Gram Panchayat Samity Vide Memo No. 183/B PS/22 Dated 22nd December 2022.

39.6.9 The power requirement for the proposed project is estimated as 16 MVA, which will be sourced from DVC (Damodar Valley Corporation).

39.6.10 Baseline Environmental Studies

Period	March, 2022 - May, 2022
AAQ parameters at 8 locations	<ul style="list-style-type: none"> • PM_{2.5} = 17 - 45 µg/m³ • PM₁₀ = 55 - 92 µg/m³ • SO₂ = 5 - 19 µg/m³ • NO₂ = 12 - 36 µg/m³ • CO = 0.153 - 1.222 mg/m³
AAQ Modelling (Incremental GLCs) Model Used : ISCST3	<ul style="list-style-type: none"> • PM = 2.68 µg/m³ (0.5 km in N) • SO₂ = 2.68 µg/m³ (0.5 km in N) • NO_x = 1.36 µg/m³ (0.5 km in N) • CO = 0.22 µg/m³ (0.5 km in N)
Ground water quality at 9 locations	<ul style="list-style-type: none"> • pH: 7.15 – 7.78, • Total Hardness: 146 – 238 mg/l, • Chlorides: 75 - 126 mg/l, • Fluoride: 0.15 - 0.34 mg/l, • Iron: 0.21 – 0.42 mg/l, • TDS: 314 – 583 mg/l
Surface Water Quality at 10 Locations (2 locations at Damodar River & 8 locations for pond water)	<p><u>Damodar River Water</u> pH: 7.2 & 7.3, DO: 6.8 & 7.1 mg/l, BOD: 2 & 3 mg/l, Conductivity: 251 & 292 mg/l, Boron: <0.02, NH₃-N: <0.05, SAR : 0.7 & 0.9</p> <p><u>Pond Water</u> pH: 7.1 - 7.6, DO: 5.8 - 6.6 mg/l, BOD: 2 - 7 mg/l, Conductivity: 389 - 636 mg/l, Boron: <0.02, NH₃-N: <0.05, SAR : 0.9 - 2.0</p>
Noise Levels at 10 Locations	45.8 - 67.3 dBA for day time and 38.3 - 54.6 dBA for night time.
Traffic assessment study findings	A Traffic density was monitored at :

	<ul style="list-style-type: none"> Location T1: at Hat Asuria More on Durgapur-Bankura, State Highway - 9 Location T2: at Metsil More on Hat Asuria - Pakhanna Road Existing PCU is 5101 per day at Location T1, & 2324 per day at Location T2 and existing level of service (LOS) for all the two Locations are presented below: 				
	Road (Location)	Volume PCU/day	Capacity	Existing V/C	LOS
	T1: at Hat Asuria More on Durgapur-Bankura, State Highway - 9	5101	15000	0.34	B
	T2: at Metsil More on Hat Asuria - Pakhanna Road	2324	15000	0.15	A
	<ul style="list-style-type: none"> Incremental PCU Load per day for the proposed project is 124. PCU load per day after proposed project will be 5225 at Location T1 & 2448 at Location T2 and level of service (LOS) at 2 Locations are presented below: 				
	Road (Location)	Volume PCU/day	Capacity	V/C	LoS
	T1: at Hat Asuria More on Durgapur-Bankura, State Highway - 9	5225	15000	0.35	B
	T2: at Metsil More on Hat Asuria - Pakhanna Road	2448	15000	0.16	A
	<ul style="list-style-type: none"> Conclusion: The level of service will be B” in Location T1 and “A” in Location T2 including additional traffic due to proposed project. 				
	V/C ratio		LOS	Performance	
0.0-0.2		A	Excellent		
0.2-0.4		B	Very Good		
0.4-0.6		C	Good		
0.6-0.8		D	Fair/Average		
0.8-1.0		E	Poor		
>1.0		F	Very Poor		
Flora and fauna	Nil				

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

Sl. No.	Solid Waste	Proposed Quantity (TPA)	Utilization or Management
1	Ferro Manganese Slag	44,400	Will be used as a raw material for Silico Manganese Production
2	Silico Manganese Slag	29,520	Will be used for road construction or land filling purposes
3	Ferro Silicon Slag	1,217	Will be used for cement industries as a raw material & used for medium carbon silico manganese production purpose.
4	Ferro Chrome Slag	26,880	Will be used for road construction or land filling purposes after chrome recovery through Jigging Process and after TCLP test.

39.6.12 Public Consultation:

Details of advertisement given	14 th October, 2022 in Bengali newspaper “Ajkal”, English newspaper “Millennium Post” and Hindi news paper “Sanmarg”
Date of Public Consultation	25 th November, 2022 at 12.00 hrs.
Venue	“Barjora Panchayat Samity Meeting Hall”, PS - Barjora, Dist.:- Bankura, West Bengal
Presiding Officer	Additional District Magistrate, Bankura
Major issues raised	<ul style="list-style-type: none"> • Generation of employment for the local people and youths • Development of road, educational institutions • Betterment of water supply system • Extend financial help to poors for the education of their children • Steps to be taken to control environmental pollution especially operation of Air Pollution Control Device during operation of the unit

Action plan as per MoEFCC O.M. dated 30/09/2020

It has been decided to develop one nearby village namely Hat Asuria by addressing the socio-economic needs of the villagers. The point-wise compliance to the issues, raised during PH meeting along with the action plan and budgetary provision has been presented as follows:

Public Hearing related						
Concerns raised during Public Hearing	Physical Activity and Action Plan	Particulars	YEAR OF IMPLEMENTATION			Total Expenditure (Rs. in Lakhs)
			1 st Year	2 nd Year	3 rd Year	
• Generation of employment for the local people and youths	In the proposed project, top most priority will be given to the local people of Hat-Asuria village based on their academic qualification.	Physical Target (2 Years)	Construction of a 2 – room building (total carpet area: 1200 sqft.) at Hat-Asuria with infrastructure development like installation of 4 sewing machines, 4 computer systems &			20

Public Hearing related						
Concerns raised during Public Hearing	Physical Activity and Action Plan	Particulars	YEAR OF IMPLEMENTATION			Total Expenditure (Rs. in Lakhs)
			1 st Year	2 nd Year	3 rd Year	
	Skill development to unemployed local youths through National Skill Development Corporation, Govt. of India Scheme. Construction of a building along with the necessary infrastructures for this purpose like different machinery for industries.		2 machines for making hand craft items along with necessary raw materials for training purpose.			
		Budget in Lakhs	10	10	-	
• Hat Asuria School development work	Financial support will be given to the Hat Asuria School for the renovation / repairing work through extension of building / class room/ development of libraries / provision of computers for educational development purpose.	Physical Target (3 years)	Development of existing building by creating extra space of 500 sq.ft at village Hatasuria school	Development of library in the Hat Asuria School.	Supply of 30 nos. of computers with printers to Hat Asuria School	17
		Budget in Lakhs	5	3	9	
• Local road development work	Construction of metal road (2 km) (@Rs. 24,00,000/- per Km) in the Hat asuria village.	Physical Target (2 years)	Development of 1 km metal road at Hat-Asuria	Development of 1 km metal road at Hat-Asuria	-	48
		Budget in Lakhs	24	24	-	
• Extend financial help to poor for the education of their children	• Scholarship will be given to the meritorious and needy students of Hat-Asuria Village.	Physical Target : every year	Scholarship will be given to the economically poor students by sponsoring them for education after conducting competitive examination			-
		Budget	Shall be included in the CSR budget of the company			
• Steps to be taken to control	• Adequate control measures like installation of ESP, Bag	Physical Target	The physical Target for the entire activities shall be achieved in 3 years.			-

Public Hearing related						
Concerns raised during Public Hearing	Physical Activity and Action Plan	Particulars	YEAR OF IMPLEMENTATION			Total Expenditure (Rs. in Lakhs)
			1 st Year	2 nd Year	3 rd Year	
environmental pollution especially operation of Air Pollution Control Device during operation of the unit	<p>filters, dust suppression system, sprinklers & stacks of adequate height at relevant places will be installed.</p> <ul style="list-style-type: none"> • Air borne dust shall be controlled by mobile water tanker inside the plant premises. • Maintenance of air pollution control equipment shall be done at regular intervals. • All roads shall be paved on which movement of raw materials or products will take place inside the plant premises. • No waste water will be discharged outside the plant area. The plant is designed as a zero-discharge plant. The entire wastewater will be recirculated and recycled. • The equipment shall comply with the Statutory limit of 85 dB(A) (at 1 m. from the source). Noise Reduction Systems will be provided. 	Budget in Lakhs	Included in the EMP Cost.			
• Betterment of Water Supply	Development of Drinking Water Infrastructure - 6 numbers Tube well / Hand Pump in nearby villages (@ Rs. 50,000/- per Tube Well / Hand Pump).	Physical Target (3 years)	Providing 2 nos. Tubewell at village Hat Asuria	Providing 2 nos. Tubewell at village Hat Asuria	Providing 2 nos. Tubewell at village Hat Asuria	3
		Budget in Lakhs	1	1	1	
Total Budget - Public Hearing related: Rs. 88 Lakhs						

Need based Activities					
Need based Activities	Particulars	Year of Implementation			Total Expenditure (Rs. in Lakhs)
		1 st Year	2 nd Year	3 rd Year	
Providing Dustbins (300 nos @Rs. 1000/- per unit) in nearby villages (under Swachh Bharat Scheme) for waste segregation and handling	Physical Target: 3 years	100 nos. Dustbins at village Hat-Asuria	100 nos. Dustbins at village Ghutgoria	100 nos. Dustbins at village Bishanpur	3
	Budget : Rs. 3.0 Lakhs	Rs. 1 Lakhs	Rs. 1 Lakhs	Rs.1 Lakhs	
Rain Water Harvesting ponds in nearby villages (2 nos. @ Rs. 5 Lakhs per pond).	Physical Target: 2 years	1 Rain Water Harvesting Pond at village Hat-Asuria	1 Rain Water Harvesting Pond at village Ghutgoria	-	10
	Budget : Rs. 10 Lakhs	Rs. 5 Lakhs	Rs. 5 Lakhs	-	
Construction of 4 no of ground water Recharging system for rainwater in nearby villages (@ Rs. 2.5 lakhs per system).	Physical Target: 2 years	2 nos. of ground water Recharging system at village Hat-Asuria	2 nos. of ground water Recharging system at village Hat-Asuria	-	10
	Budget : Rs. 10 Lakhs	Rs. 5 Lakhs	Rs. 5 Lakhs	-	
Street Lighting (Solar) provision at suitable public places in and around the nearby villages (15 numbers, @ Rs. 20,000/- per Solar Light)	Physical Target: 2 years	Providing 5 nos. Solar light at village Hat-Asuria	Providing 5 nos. Solar light at village Hat-Asuria	Providing 5 nos. Solar light at village Harirampur	3
	Budget in Lakhs	1	1	1	
Total Budget - Need based activities : Rs. 26 Lakhs					
Overall Budget (Pubic Hearing related + Need based Activities): Rs. 114 Lakhs					

39.6.13 The capital cost of the project is Rs.36.53 Crores and the capital cost for environmental protection measures is proposed as Rs. 3.76 Crores. The annual recurring cost towards the environmental protection measures is proposed as Rs. 26 Lakhs. The employment generation from the expansion is 180. The details of cost for environmental protection measures is as follows:

Items	Capital Cost (in Crores)	Recurring Cost (in Lakhs)
Cost of Air Pollution Control Systems	2.1	21
Cost of Water conservation & Pollution Control	0.12	1.2
Cost of Solid /Hazardous Waste Management System	0.1	1
Green belt development	0.0216 *	-
Noise Reduction Systems	0.06	0.6

Items	Capital Cost (in Crores)	Recurring Cost (in Lakhs)
Occupational Health Management	0.08	0.8
Risk Mitigation & Safety Plan	0.05	0.5
Environmental Management Department	0.09	0.9
Total Budget - Public Hearing related	1.14	-
GRAND TOTAL	3.76	26
*(considering 3 lakhs/hectare with 10 years maintenance cost)		

39.6.14 M/s Satvik Enterprises Limited has earmarked 0.72 Hectares (1.78 acres) of land (33% of 2.18 hectares/5.38 acres) for Green Belt Development within its proposed plant site at Mouza: Basudevpur (North), PO: Hat Asuria, PS: Barjora, District Bankura in West Bengal. Around 1800 number of trees (@2500 nos. of tree per hectares) has been considered under plantation programme in greenbelt development and the greenbelt development will be completed with the commissioning of the project.

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

Written representations:

39.6.16 During the meeting, based on the deliberations made by the EAC, the project proponent vide letter dated 07.07.2023 through email dated 07.07.2023 submitted the following information:

S. No.	Additional Details required	Reply submitted
1.	The Committee observed that predicted GLCs of SO ₂ , NO _x , & CO has not been provided. The EAC desired that the GLC values for all the parameters shall be submitted	Apart from PM, predicted GLCs of SO ₂ , NO _x , & CO have been calculated for the proposed project and the same have been submitted and updated above at para 39.6.10 above.
2.	On perusal of the kml file, it is observed that there are two schools and one ITI college nearby the project site. PP shall submit the mitigation measures to minimise the impacts of the project on these institutions.	There are two schools in the nearby areas namely Hat Ashuria HighSchool & Suripara Primary School which are located around 0.8 kms and 1.03 kms. distance from the project site in E & SE direction respectively. There is also an ITI college located at a distance of 0.2 km in NE direction. The mitigation measures that will be undertaken to minimise the impacts of the project on these institutions have been submitted.
3.	General Plant Lay out, Green belt Plant Lay out and Road network and drainage network Plant Lay out along with proper road circulation plan shall be submitted.	General Plant Lay out, Green belt Plant Layout and Road network and drainage network Plant Lay out along with proper road circulation plan have been prepared and submitted.

Deliberations by the Committee

39.6.17 The Committee noted the following:

1. The instant proposal is for installation of Ferro-Alloy Plant (SAF 2x9 MVA) and Chrome Ore Briquette Plant (10 TPH).
2. The EAC, constituted under the provision of the EIA Notification, 2006 comprising Expert Members/domain experts in various fields, examined the proposal submitted by the Project Proponent in desired format along with EIA/EMP reports prepared and submitted by the Consultant accredited by the QCI/ NABET on behalf of the Project Proponent.
3. The EAC noted that the Project Proponent has given an undertaking that the data and information given in the application and enclosures are true to the best of his knowledge and belief and no information has been suppressed in the EIA/EMP reports. If any part of data/information submitted is found to be false/ misleading at any stage, the project will be rejected and Environmental Clearance given, if any, will be revoked at the risk and cost of the project proponent.
4. The Committee noted that the EIA reports are in compliance of the ToR issued for the project, reflecting the present environmental status and the projected scenario for all the environmental components. The Committee deliberated on the proposed mitigation measure towards Air, Water, Noise and Soil pollutions. The Committee suggested that the storage of toxic/explosive raw materials/products shall be undertaken with utmost precautions and following the safety norms and best practices.
5. The total project area is 2.18 ha (5.38 acres) which has been acquired and is in possession of the Company. Land has been converted for industrial use.
6. There are two schools in the nearby areas namely Hat Ashuria HighSchool & Suripara Primary School which are located around 0.8 kms and 1.03 kms. distance from the project site in E & SE direction respectively. There is also an ITI college located at a distance of 0.2 km in NE direction and Harirampur Kali Temple at a distance of 1.5 in WSW direction. The EAC is of the opinion that PP shall strictly implement the environmental safeguard measures proposed to minimise the impact on these ESA's.
7. The fresh water requirement for the proposed project is estimated as 70 m³ /day, which will be met from the water supply of Barjora Gram Panchayat Samity.
8. The Committee has deliberated on the baseline data and incremental GLC due to the proposed project and found it satisfactory.
9. M/s Satvik Enterprises Limited has earmarked 0.72 Hectares (1.78 acres) of land (33% of 2.18 hectares/5.38 acres) for Green Belt Development within its proposed plant site. Around 1800 number of trees (@2500 nos. of tree per hectares) has been considered under plantation programme in greenbelt development and the greenbelt development will be completed with the commissioning of the project. 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 completed in the monsoons of 2023.
10. The committee deliberated details of carbon foot prints and carbon sequestration study w.r.t. proposed project and found them to be satisfactory.

11. The Committee also deliberated on the public hearing issues along with action plan submitted by the proponent to address the issues raised during the public hearing and found it satisfactory.
12. The EAC also deliberated on the submitted written representation of project proponent and found it satisfactory.
13. The EAC deliberated on the proposal with due diligence in the process as notified under the provisions of the EIA Notification, 2006, as amended from time to time and accordingly made the recommendations to the proposal. The Experts Members of the EAC found the proposal in order and recommended for grant of environmental clearance.
14. The environmental clearance recommended to the project/activity is strictly under the provisions of the EIA Notification 2006 and its subsequent amendments. It does not tantamount/construe to approvals/consent/permissions etc. required to be obtained or standards/conditions to be followed under any other Acts/ Rules/ Subordinate legislations, etc., as may be applicable to the project. The project proponent shall obtain necessary permission as mandated under the Water (Prevention and Control of Pollution) Act, 1974 and the Air (Prevention and Control of Pollution) Act, 1981, as applicable from time to time, from the State Pollution Control Board, prior to construction & operation of the project.
15. 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:

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

A. Specific Condition:

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

- iii. There are two schools in the nearby areas namely Hat Ashuria High School & Suripara Primary School which are located around 0.8 kms and 1.03 kms. distance from the project site in E & SE direction respectively. There is also an ITI college located at a distance of 0.2 km in NE direction and Harirampur Kali Temple at a distance of 1.5 in WSW direction. Project Proponent shall take appropriate environmental safeguard measures to minimise the impact on these ESA's. PP needs to strengthen green belt all around the plant area to reduce the dust pollution. The PP shall also include some of these locations in its environmental monitoring programme.
- iv. The water requirement of 70 m³/day shall be obtained from from the water supply of Barjora Gram Panchayat Samity after obtaining necessary permission from the Competent Authority. No ground water extraction is permitted.
- v. Three tier Green Belt shall be developed in at least 33% of the project area in the monsoons of 2023 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 ESA's. The Unit shall also provide green belt around the two educational institutions in the close vicinity of the industry. Compliance status in this regard, shall be submitted to concerned Regional Office of the MoEF&CC.
- vi. All the commitments made towards socio-economic development of the nearby villages shall be satisfactorily implemented. The action plan based on the social impact assessment study of the project as per the EMP in accordance to the Ministry's OM dated 30.09.2020 amounting to Rs. 1.14 Crores shall be strictly implemented and progress shall be submitted to the Regional Office of MoEF&CC.
- vii. As committed, PP shall adopt Hatsuria Village and prepare and implement the action plan to develop it into model village.

B. General Conditions

I. Statutory compliance:

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

II. Air quality monitoring and preservation

- i. The project proponent shall install 24x7 continuous emission monitoring system at process stacks to monitor stack emission as well as 02 Nos. Continuous Ambient Air Quality Station (CAAQMS) for monitoring AAQ parameters with respect to standards prescribed

- in Environment (Protection) Rules 1986 as amended from time to time. The CEMS and CAAQMS shall be connected to SPCB and CPCB online servers and calibrate these systems from time to time according to equipment supplier specification through labs recognized under Environment (Protection) Act, 1986 or NABL accredited laboratories.
- ii. The project proponent shall carry out Continuous Ambient Air Quality monitoring for common/criterion parameters relevant to the main pollutants released (e.g. PM₁₀ and PM_{2.5} in reference to PM emission, and SO₂ and NO_x in reference to SO₂ and NO_x 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/Nm³ 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 4th hole extraction system shall be provided in the Sub Merged Arc Furnaces and EAF.
- xxii. Industry is going to use silica quartz in large quantities and going to produce Silico Manganese and Ferro Silicon alloy steel. Therefore, it is necessary to control silica/quartz exposures at production Departments, not only emission norms as per Indian Factories Act. The permissible limit for silica/quartz should be within 10 mg/m³ for total dust as per Indian Factories Act. Therefore, it is recommended to monitor personal and area exposures for silica quartz dust in the process plants.
- xxiii. No Ferro-chrome production shall be carried out without prior Environmental clearance from MOEF&CC.
- xxiv. The Project proponent shall fix carbon monoxide detectors with critical alarms at strategic locations inside the Plant.

III. Water quality monitoring and preservation

- i. The project proponent shall install 24x7 continuous effluent monitoring system with respect to standards prescribed in Environment (Protection) Rules 1986 as amended from time to time and connected to SPCB and CPCB online servers and calibrate these system from time to time according to equipment supplier specification through labs recognized under Environment (Protection) Act, 1986 or NABL accredited laboratories.
- ii. The project proponent shall monitor regularly ground water quality at least twice a year (pre- and post-monsoon) at sufficient numbers of piezometers/sampling wells in the plant and adjacent areas through labs recognized under Environment (Protection) Act, 1986 and NABL accredited laboratories.
- iii. Garland drains and collection pits shall be provided for each stock pile to arrest the run-off in the event of heavy rains and to check the water pollution due to surface run off.
- iv. Water meters shall be provided at the inlet to all unit processes in the plants.
- v. The project proponent shall make efforts to minimise water consumption in the plant complex by segregation of used water, practicing cascade use and by recycling treated water.
- vi. The proposed project shall be designed as "Zero Liquid Discharge" Plant. ETP shall be installed and there shall be no discharge of effluent from the plant. Domestic effluent shall

be treated in Sewage Treatment Plant. Suitable measures shall be adopted for sewage water handling to ensure no contamination of any kind of water body.

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

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 No. 39.7

39.7 Existing Rolling Mill having TMT Bars Capacity of 1,79,100 MTPA (597 TPD), Reheating Furnace- 20TPH” located at Plot No. A-47 & 50, RIICO Industrial Area, Kaharani, Bhiwadi(Extn.), Tehsil- Tijara, District- Alwar, Rajasthan by Ashiana Manufacturing India Ltd. - Consideration of Environmental Clearance as per provisions of Notification dated 20.07.2022.

**[Proposal No. IA/RJ/IND1/426696/2023, File No. IA-J-11011/208/2022-IA-II(IND-I)]
[Consultant: Enkay Enviro Services Pvt. Ltd.; Valid Upto: 12.12.2023]**

39.7.1 M/s. Ashiana Manufacturing India Limited has made an application online vide proposal no. IA/RJ/IND1/426696/2023 dated 20.06.2023 along with copy of EIA report, Forms (Part A, B and C) and certified compliance report seeking Environment Clearance (EC) under the provisions of the EIA Notification, 2006 for the project mentioned above. The proposed project activity is listed at S. No.3(a) Metallurgical Industries (Ferrous and Non/ferrous) under Category “A” of the schedule of the EIA Notification, 2006 and attracts general condition due to Inter-state boundary of Rajasthan & Haryana lies at a distance 1.27 Km, East and also the project lies in critically polluted area, therefore, appraised at Central Level.

39.7.2 Name of the EIA consultant: M/s. Enkay Enviro Services Pvt. Ltd. [List of ACOs with their Certificate / Extension Letter no. NABET/EIA/2023/RA 0183; valid upto 12.12.2023, as on June 30, 2023].

Details submitted by Project proponent

39.7.3 The details of the ToR are furnished as below:

Date of Application	Consideration	Details	Date of Accord	ToR Validity
17.06.2022	Standard Terms of Reference issued	Terms of Reference	19.08.2022	18.08.2026

39.7.4 The project of M/s. Ashiana Manufacturing India Limited located at Plot No. A-47 & 50, RIICO Industrial Area, Kaharani, Bhiwadi (Extn.), Tehsil- Tijara, District- Alwar, Rajasthan is for Regularization of existing Rolling Mill having TMT Bars Capacity of 1,79,100 MTPA (597 TPD), Reheating Furnace- 20TPH.

39.7.5 Environmental site settings:

S. No.	Particulars	Details	Remarks						
1.	Total land	Total plot Area is 20,000 Sq.m. (2.0Ha) -RIICO Industrial land.	Industrial land. There is no change in land use.						
	S. No.	Land Use	Area (Sq.m) Existing Area Total area Percentage (%)						
	1.	Plant Area	10761.0 10761.0 53.80						
	2.	Paved Area (Road, Corridor)	8220 8220 41.10						
	3.	Plantation	1019.0 1019.0 5.10						
		Total	20,000 20,000 100.0						
	Note*: The green area inside the premises is 5.10% (1019Sq.m.) due to land constraint. The unit has already made an agreement with RIICO plantation. The rest 34.90% (7500Sq.m.) area is planted outside the plant premises along the park of RIICO industrial area in the impact zone of the project. The RIICO has given permission for maintenance of park/plantation vide letter no. U (5) I/2022-23/2234 dated 28.07.2022.								
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, Kaharani, Bhiwadi(Extn.)						
3.	Existence of habitation & involvement of R&R, if any.	<p>Project site: RIICO Industrial Area, Kaharani</p> <p>Study Area:</p> <table border="1"> <thead> <tr> <th>Habitation</th> <th>Distance (km)</th> <th>Direction</th> </tr> </thead> <tbody> <tr> <td>Kaharani</td> <td>1.3 Km, SSW</td> <td>& Mundana Meo- 0.27 Km, E</td> </tr> </tbody> </table> <p>Status of R&R :Not applicable</p>	Habitation	Distance (km)	Direction	Kaharani	1.3 Km, SSW	& Mundana Meo- 0.27 Km, E	Status of R&R: Not applicable as land is already converted for industrial use. (RIICO Industrial Area) there is no habitation in the existing area, therefore rehabilitation &
Habitation	Distance (km)	Direction							
Kaharani	1.3 Km, SSW	& Mundana Meo- 0.27 Km, E							

S. No.	Particulars	Details			Remarks	
					resettlement plan is not required/ applicable.	
4.	Latitude and Longitude of all corners of the Project site.	S.No.	Latitude	Longitude	--	
		A.	28°11'14.30"N	76°52'40.50"E		
		B.	28°11'15.42"N	76°52'43.22"E		
		C.	28°11'22.78"N	76°52'39.36"E		
		D.	28°11'21.67"N	76°52'36.76"E		
5.	Elevation of the project site	The Highest elevation– 271 MSL; Lowest elevation– 268MSL.			--	
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 (Rivers,Lakes, Pond,Nala,Natural Drainage,Canal etc.) exists within the project site as well as study area	Project site: No natural water bodies exist within the project site.			--	
		Study Area:				
		S. No.	Particulars	Distance (Km)		Direction
		(From Project Boundary)				
		Water Bodies				
1.	Sare Khurd Canal	3.72	SSE			
2.	Indori Nala	3.83	ENE			
3.	Pond N/V Sare Khurd	7.60	SE			
8.	Existence of ESZ/ ESA/ national park/ wildlife sanctuary/ biosphere reserve/ tiger reserve/ elephant reserve etc. if any within the study area	Study area:				
		Nil				
		List of Reserved and protected forests: Are given in the following table.				
		S. No.	Particulars	Distance (Km)		Direction
		(From Project Boundary)				
		Forests				
		1.	Gondhan Protected Forest	1.70		SSW
		2.	Banvan Protected Forest	3.07		SSW
		3.	Chaupanki Protected Forest	4.54		SSE
		4.	Sarekalan Protected Forest	6.02		SSE
5.	Indaur Reserved Forest	6.77	SSE			
6.	Khorikalan Protected Forest	6.96	S			
7.	Guwalda Protected Forest	8.48	S			

S. No.	Particulars	Details				Remarks
		8.	Rangala Reserved Forest	3.82	N	
		9.	Rahna Protected Forest	9.77	ESE	
		10.	Tapkan Protected Forest	9.45	ESE	
		11.	Nurpur Protected Forest	9.83	SE	
		12.	Kulawat Protected Forest	9.70	SE	
		13.	Choharpur Protected Forest	9.80	SE	

39.7.6 The existing project was initially accorded Consent to Establish vide letter no. F(Tech)/Alwar(Tijara)/137(1)/ 2009-2010/6679-6681 dated 26.03.2010. The proposal is applied first time for obtaining Environmental Clearance as previously the project of Rolling Mill was not covered under the purview of Environmental Clearance under EIA Notification 2006. (Secondary metallurgical processing industries with Production \leq 60,000 TPA). Latest Consent to Operate (Latest) for the existing unit was accorded by Rajasthan State Pollution Control Board vide letter noF(HDF)/Alwar(Tijara)/6979(1)/2022-2023/5567-5569 dated 06.01.2023. The validity of CTO is up to 31.08.2027.

39.7.7 Implementation status of the existing CTE/CTO:

Parameters	Document No.	Issued Date	Validity	Implementation Status
CONSENT TO ESTABLISH	F(Tech)/Alwar(Tijara)/137(1)/ 2009-2010/6679-6681	26.03.2010	23.02.2010 – 31.01.2013	M.S. TMT Bars (29,000 MTPA)
	F(Tech)/Alwar(Tijara)/137(1)/ 2009-2010/1105-1108	06.06.2012	27.07.2011 – 30.06.2014	Coal Gasification unit for Heating furnace (1.50 Ton/Hr)
	F(Tech)/Alwar(Tijara)/137(1)/ 2009-2010/4750-4752	07.09.2012	05.04.2012 – 31.03.2015	M.S. TMT Bars - 29,000 MTPA (97 TPD) to 1,19,100 MTPA (397 TPD)
	F(CPM)/Alwar(Tijara)/3911(1)/2016-2017/3691-3693	30.08.2018	01.02.2018 – 31.01.2023	M.S. TMT Bars - 1,19,100 MTPA (397 TPD) to 1,79,100 MTPA (597 TPD)
	F(Tech)/Alwar(Tijara)/137(1)/ 2009-2010/944-946	02.11.2010	15.09.2010 – 31.08.2011	Granted for M.S. TMT Bars (29,000 MTPA)

Parameters	Document No.	Issued Date	Validity	Implementation Status
CONSENT TO OPERATE	F(Tech)/Alwar(Tijara)/137(1)/ 2009-2010/1194-1197	07.06.2012	01.09.2011 – 31.08.2013	Granted renewal for M.S. TMT Bars (29,000 MTPA)
	F(Tech)/Alwar(Tijara)/137(1)/ 2009-2010/5065-5068	24.09.2013	01.09.2013 – 31.08.2016	Granted For expansion in capacity from 29,000 MTPA to 1,19,100 MTPA of M.S. TMT Bars
	F(CPM)/Alwar(Tijara)/3911(1)/2016-2017/7922-7924	26.10.2016	01.09.2016 – 31.08.2019	Granted renewal for M.S. TMT Bars (1,19,100 MTPA)
	F(CPM)/Alwar(Tijara)/3911(1)/2016-2017/5965-5967	25.09.2017	13.09.2017 – 31.08.2022	Granted renewal for M.S. TMT Bars (1,19,100 MTPA)
	F(HDF)/Alwar(Tijara)/33(1)/ 2020-2021/556-558	20.05.2020	15.02.2019 – 31.01.2024	Granted For expansion in capacity from 1,19,100 MTPA to 1,79,100 MTPA of M.S. TMT Bars
	F(HDF)/Alwar(Tijara)/6979(1)/2022-2023/5567-5569	06.01.2023	01.09.2022 to 31.08.2027	Granted For renewal in capacity 1,79,100 MTPA (597TPD) of M.S. TMT Bars

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

S. No.	Product	Existing Quantity (TPA)	Total Capacity (TPA)
1.	TMT Bars	1,79,100 MTPA (597 TPD)	1,79,100 MTPA (597 TPD)
2.	Reheating Furnace – 20 TPH		

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

S. No.	Raw Material	Existing	Total	Source	Mode of transport
		Consumption			
1.	MS Billets	625.130 MT/ Day	625.130 MT/ Day	Domestic Market	Transported by Trucks
2.	Fuel-LSHS	10 KL/ day	10 KL/ day	Reliance Industries Ltd.	Transported by Tankers

39.7.10 Existing one time Water requirement is 50m³/day, out of which 2 m³/day of fresh water is obtained from RIICO water supply & 18 m³/day is drawn from ground water with permission from CGWA and recycled water will be 30 m³/day. Renewal of CGWA NOC dated 02.05.2023 with a validity upto 02.01.2025 for a quantity of 18 m³/day.

39.7.11 Existing power requirement of 2,700 kVA (3938KW Sanctioned capacity) is obtained from JVVNL, Alwar from nearest GSS Ajanta Chowk Bhiwadi-220KV from the project site & 500Kw Solar plant installed within the project site.

39.7.12 Baseline Environmental Studies

PERIOD	March, April & May-2022										
AAQ parameters at 9 locations	<ul style="list-style-type: none"> PM₁₀- 74.1 to 188.7µg/m³ PM_{2.5}- 45.0 to 119.1 µg/m³ SO₂- 8.1 to 39.1 µg/m³ NO₂- 14.1 to 68.7 µg/m³ CO- 802 to 2062 µg/m³ 										
Incremental GLC level	<ul style="list-style-type: none"> PM-0.0028 to 0.61 µg/m³ (Level at 1.22 Km in ESE Direction) SO₂-0.00974 to 0.33 µg/m³ (Level at 1.22Km in ESE Direction) NO_x-0.005 to 1.1 µg/m³ (Level at 1.22Km in ESE Direction) CO-0.00 to 0.00025 µg/m³ (Level at project site) 										
Ground Water Quality at 11 locations	<ul style="list-style-type: none"> pH: 6.84-7.75; Total Hardness: 136 to 376mg/l, Chlorides: 33.99 to 339.88 mg/l, Fluoride: 0.11 to 0.78 mg/l. Heavy metals <0.001mg/l. 										
Surface Water Quality at 1 locations	Surface water was found in the study area <ul style="list-style-type: none"> pH: 7.78; DO-2.9mg/l; COD-16.8mg/l; BOD-35.2mg/l, 										
Noise Levels at 11 locations	50.0 to 67.0 dBA for day time and 42.3 to 55.6 dBA for night time.										
Traffic assessment study findings	<ul style="list-style-type: none"> Traffic study has been conducted at SH-25 which is approximately 4.11Km, WSW from the plant site. Transportation of raw material, fuel & finished product will be done 100% by road. Existing PCU is 808.25PCU/hr on SH-25 and existing level of service (LOS) is Good/Average/Fair (V/C=0.538). <table 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>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>D</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	D
Road	(V) Volume in PCU/Hr	C Capacity in PCU/Hr	V/C*	LOS							
SH-25	808.25	1500	0.538	D							

	<ul style="list-style-type: none"> 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) 				
	Road	(V) Volume in PCU/Hr	C Capacity in PCU/Hr	V/C*	LOS
	SH-25	827.25	1500	0.55	D
Flora and fauna	Presence of schedule I fauna and endangered Flora if any: No Schedule – I Species was found within the study area.				

39.7.13 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	Source	Quantity	
Municipal Solid Waste (0.125Kg/ day)	Bio-degradable	Domestic	18.75 Kg/day	Sent to Municipal Council Bhiwadi, Rajasthan.
Sludge	STP Sludge	from STP	0.150 TPA	Used as manure for plantation
	Settling tank Sludge	--	--	Settling tank sludge is non-hazardous in nature and will sent for land filling.
Mill waste / Miss Roll	Solid waste	Production	2344 TPA	Sold to authorized vendor within the Local Market.
Plant return scrap	Solid waste	Production	4220 TPA	Sold to authorized vendor within the Local Market.

39.7.14 **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 MoEFCC O.M. dated 30/09/2020

Activity under CER	Location	Action Plan with Budget in (Capital Cot-in Lakhs)			Recurring (In Lakh)
		I st year	II nd Year	III rd Year	
Construction of 3.0 Nos. Rain water Harvesting structure	Govt. Upper Primary School-Bahadari, Govt. Senior Secondary School-Subasheri, Govt. Upper Primary School-Bandpur	3.5	5.0	3.5	1.0

Activity under CER	Location	Action Plan with Budget in (Capital Cot-in Lakhs)			Recurring (In Lakh)
		I st year	II nd Year	III rd Year	
R.O with Water cooler	Govt. Upper Primary School-Bahadari, Govt. Senior Secondary School-Subasheri, Govt. Upper Primary School-Bandpur	3.0	4.0	3.0	0.6
Solar light on Street	Mandana, Gadpur	2.5	3.0	3.0	0.25
Plantation & Tree Guard nearby villages	Village Gadpur & Mandana	3.0	3.0	3.0	1.0
Medical checkup camps	Village Gadpur, Mandana, Bandpur	3.5	4.0	3.5	1.0
Awareness program regarding organic manure use for agriculture, hygiene, sanitation	Villages Subasheri, Bahadri and Bandpur	3.0	3.5	2.0	1.0
Distribution of Computer in Govt. Schools.	Govt. Upper Primary School - Bahadari, Govt. Senior Secondary School-Subasheri, Govt. Upper Primary School-Bandpur	2.0	4.0	2.0	1.0
Woman skill development Programme.	Villages Gadpur & Mandana	3.0	3.0	--	1.0
Total capital Cost (73.0 Lakhs)		23.5	29.5	20.0	6.85

39.7.15 The capital cost of the existing project is Rs 3736.48 Lacs and the capital cost for environmental protection measures is proposed as Rs. 235.5 lacs. The annual recurring cost towards the environmental protection measures is proposed as Rs. 21.8 Lacs. The employment generation from the proposed project is 150. 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 (In Lacs)	Total Existing +proposed Recurring Cost (In Lacs)	Remarks
1	Air Pollution Control/ Noise	60.0	6.0	70.0	2.00	130.0	8.0	Proposed CEMS installation

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 (In Lacs)	Total Existing +proposed Recurring Cost (In Lacs)	Remarks
								& Wet Scrubber Installation
2	Water Pollution Control	12.0	1.0	10.0	0.30	22.0	1.3	STP already Installed
3	Environmental Monitoring and Management	-	0.30	-	1.00	--	1.3	--
4	Plantation Development	0.50	0.25	6.00	1.0	6.5	1.25	--
	RWH (Flow meter etc.) (Maintenance)	3.00	3.0	--	--	3.00	3.0	--
5	Occupational Health	1.00	0.10	--	--	1.00	0.1	--
6.	CER Activity	--	--	73.0	6.85	73.0	6.85	--
	Total	76.50	10.65	159.0	11.15	235.5	21.8	--

39.7.16 Existing green belt has been developed in 0.1019 Ha (Existing) & 0.0904 Ha area which is about 5.1% of the total project area of 2.0Ha with total sapling of 118 plants and 0.1370 Ha (582 Plants) developed within the RIICO Park. Thus, total of 0.85 Ha area (42.6% of total project area) will be developed as plantation. A 1m wide one row plantation, co is being developed as plantation at plant boundary and green cover as per CPCB/MoEF&CC, New Delhi guidelines. Local and native species will be planted with a density of 2500 trees per hectare. Total no. of 700 saplings will be planted and nurtured in 0.85 hectares as causality replacement in 2 years.

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

Certified Compliance Report from SPCB

39.7.18 The verification cum compliance report of CTO is received from Regional Office of RSPCB, Bhiwadi vide letter no. RPCB/RO/BWD-1237/22 dated 06.04.2023. As per observations of RO, the conditions have been complied with.

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

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

Guideline for very poor (ambient PM_{2.5} or PM₁₀ value is between 121-250 µg/m³ or 351-430 µg/m³ respectively)	Implementation Plan by Industry	Action undertaken/Planned
Stop use of Diesel Generator sets	Will use DG set after conversion on LSHS or permitted fuel as and when.	Stopped Currently.
Enhance Parking Fee by 3-4 times	To reduce traffic, Vehicle Pooling will be implemented	The same is encouraged in the unit.
Stop use of Coal	Coal usage is already discontinued.	Industry is currently using LSHS.
Stringently enforce/ Stop garbage burning	Domestic solid waste is already sent to Municipal Council, Bhiwadi, and Rajasthan.	The same practice is/will be adopted in the unit.
Fugitive Dust	Efforts are being made to keep good housekeeping to reduce the dust generation. The roads and unpaved areas is being/will be moistened frequently.	The same is being/will be constantly maintained by the unit.
Plantation Development	40% green area development is envisaged with proper action plan within unit and outside along avenue plantation on all approach roads with min. 2 rows within the RIICO Park is being planted.	The green area inside the premises is 5.10% (1019Sq.m.) due to land constraint. The unit has already made an agreement with RIICO plantation. The rest 34.90% (7500Sq.m.) area is planted outside the plant premises along the park of RIICO industrial area in the impact zone of the project. The RIICO has given permission for maintenance of park/plantation at G1-67-70 I/A Kaharani (Bhiwadi) vide letter no. U(5)I/2022-23/2234 dated 28.07.2022.

II. Action Plan as per Ministry's OM dated 28th January 2021

Environmental Attributes	Mitigation Measure
Air	<ul style="list-style-type: none"> • The coal usage is already discontinued and industry is already switch over to LSHS as per issued guideline. • Wet Scrubber is proposed to be installed to control the Dust/ Particulate matter from the Reheating Furnace and in existing condition is being routed to stack height of 30m. • Stack monitoring is being carried out and quarterly submission is being done to RSPCB.

Environmental Attributes	Mitigation Measure
	<ul style="list-style-type: none"> • CEMS will be installed within six month & connected to SPCB & CPCB Server. • All the material transfer point will be covered and storage on cooling beds. • Best available technology is being used for Reheating Furnace • 40% plantation is being/will be done inside and outside the premises. Plantation outside the project premises such as avenue plantation, plantation in vacant areas, social forestry etc. • Strength internal roads such as widening, pavement etc. • The green area inside the premises is 5.10% (1019Sq.m.) due to land constraint. The unit has already made an agreement with RIICO plantation. The rest 34.90% (7500Sq.m.) area is planted outside the plant premises along the park of RIICO industrial area in the impact zone of the project. The RIICO has given permission for maintenance of park/plantation at G1-67-70 I/A Kaharani (Bhiwadi) vide letter no. U(5)I/2022-23/2234 dated 28.07.2022.
Water	<ul style="list-style-type: none"> • Continuous monitoring of effluent quality will be done. • 2Nos. of Rain Water harvesting storage and recharge the bore well is already exists in the plant premises. • No waste water is being/ will be discharged outside the plant premises. • Industry is being/will install STP of 10 KLD for the treatment of domestic waste water.
Land	<ul style="list-style-type: none"> • Strengthen the plantation is being/will be done to at plant premises. • Plantation developed at plant premises to reduce the carbon emission and contain the emission at plant site.
Other Condition (additional)	<ul style="list-style-type: none"> • Monitoring of compliance of EC conditions will be submitted with third party audit every year • 1.5 % of the CER 2 times for CPA.

III. Action Plan and compliance with regards to CEPI Guidelines:

S. No.	Objective	Environmental Benefits	Suggested Action	Remark	Action Plan
1.	Separation of industrial effluent, domestic effluent and storm water	The provision will have low-cost treatment and segregation will add to better recovery of treated w/w.	Separate ETP/STP and RWH network	ETP based on physicochemical treatment (Settling Tank/ Neutralization Tank) capacity of 10 KLD is in function and STP of 10KLD is already established. The RWH is as per norm of CGWA is installed.	The cost incurred on the Settling Tank/ Neutralization Tank / RWH is 9.0 Lacs. STP is already implemented cost is 10 Lacs. Settling Tank/ Neutralization Tank / RWH is already executed.

S. No.	Objective	Environmental Benefits	Suggested Action	Remark	Action Plan
2.	Treated effluent from CETP in Bhiwadi to be used by Industries.	Main environmental benefit is the reduction in groundwater extraction.	CETP Treated water is not available within the Industrial Area, Kaharani, Bhiwadi (Extn.)	There is no availability of CETP water within the Kaharani Industrial area, Bhiwadi (extn.).	--
3.	Regulation/ restriction on groundwater abstraction by the industries Bhiwadi.	Prevent over-exploitation of groundwater resources. Main Environmental benefit is to encourage water conservation, water reuse/ recycling.	CETP Treated water is not available within the Industrial Area, Kaharani, Bhiwadi (Extn.)	There is no availability of CETP water within the Kaharani Industrial area, Bhiwadi(extn.).	--
4	Monitoring of groundwater quality in Bhiwadi	The ground water quality will be monitored regularly as per CGWA.	The nearby wells within 5.0 Km. 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 7658.13 m ³ /Annum of rain water is being/will be collected and recharged.	About 82.26 % of the fresh water will be recharged.	About 2 Nos. of Rain water harvesting pits with the volume of 56.54 m ³ (2 Nos. Rain water harvesting pits of having sizes of 3m wide diameter with 4m. deep having bore well of diameter of 250mm.* 50 ft. depth respectively) to collect the storm water.
6	Establishment of zero liquid discharge (ZLD)	Main environmental benefit is the prevention of land and groundwater pollution.	The unit has ZLD already maintained.	ETP based on physicochemical treatment The Settling Tank/ Neutralization Tank of is being 84% of treated/ recycled back for quenching and cooling. The STP will be installed and will have 90 % of treated w/w used for plantation purposes. Thus, the status of ZLD will be maintained.	Already implemented with ETP based on physicochemical treatment Settling Tank/ Neutralization Tank and STP installed.

S. No.	Objective	Environmental Benefits	Suggested Action	Remark	Action Plan
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, Wet Scrubber has been proposed for installation controlling particulate emissions. The emissions from stack attached is ranging up to 103 mg/Nm ³	The emission standards laid down by RSPCB are adhered from time to time.	Already implemented. The emissions from stack attached is ranging up to 103 mg/Nm ³
8	Reduction emissions from Reheating furnaces	Main environmental benefits will be in occupational safety and the improvement of ambient air quality	Wet scrubber is to be install and it reduces the Particulate matter emission due to fuel change (LSHS is used) (103 mg/Nm ³)	The control equipment's are being monitored from time to time.	CEMS will be installed within 6 months.
9	Reduction of fugitive emissions from industrial premises	Main environmental benefits will be the improvement of ambient air quality.	The interval roads are already paved and will be spread on bare land within industrial premises. Planting of vegetation on bare land within industrial premises.	Provisions of paved area in the movement and transportation will be done	Already Implemented
10	Controlling emissions of road dust in the industrial area	Volunteered measures will be adopted by indulging in mass campaign of clean and green	Covered shed storage of industrial waste within industrial premises. Covered storage of loose debris and construction material within industrial premises as applicable will be done.	Action of campaign of clean and green area will be done in association with Industrial Association and monitored every six monthly for effectiveness.	Action with corrective measures will be done.
11	Strict surveillance to monitor all illegal activities contributing	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.

S. No.	Objective	Environmental Benefits	Suggested Action	Remark	Action Plan
	to air pollution in the industrial area				

Written representations:

39.7.20 During the meeting, based on the deliberations made by the EAC, the project proponent vide letter dated 07.07.2023 through email dated 07.07.2023 submitted the following information:

- Affidavit dated 07.07.2023 by Project Proponent regarding reduction in air quality emissions.
- Renewal of CGWA NOC dated 02.05.2023 with a validity upto 02.01.2025 for a quantity of 18 m³/day.
- Revised budget on Socio-economic needs based assessment which is updated at para 39.7.14 above.

Deliberations by the Committee

39.7.21 The Committee noted the following:

1. The instant proposal is for regularization of existing Rolling Mill having TMT Bars Capacity of 1,79,100 MTPA (597 TPD), Reheating Furnace- 20TPH.
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 20th 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 19th 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(Tech)/Alwar(Tijara)/137(1)/ 2009-2010/6679-6681 dated 26.03.2010. The proposal is applied first time for obtaining Environmental Clearance as previously the project of Rolling Mill was not covered under the purview of Environmental Clearance under EIA Notification 2006. (Secondary metallurgical processing industries with Production \leq 60,000 TPA). Latest Consent to Operate (Latest) for the existing unit was accorded by Rajasthan State Pollution Control Board vide letter noF(HDF)/Alwar(Tijara)/6979(1)/2022-2023/5567-5569 dated 06.01.2023. The validity of CTO is up to 31.08.2027.
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 39.7.19 above. The EAC is of the opinion that the mitigation plans shall be strictly implemented.
10. The total project area is 20,000 Sq.m. (2.0Ha) which is under the possession of the project proponent. Land is already Industrial in nature due to existing operations of the plant.
11. The nearest habitation are Kaharani - 1.3 Km, SSW & Mundana Meo- 0.27 Km, E of the project site. The EAC is of the opinion that PP shall strictly implement the environmental safeguard measures proposed to minimise the impact on the habitation of the locals.
12. The Sare Khurd Canal (3.72 km, SSE), Indori Nala (3.83 km, ENE) and Pond N/V Sare Khur (7.60 km, SE) exists within the study area of the project site. The EAC is of the opinion that water bodies shall not be disturbed. Mitigation measures w.r.t. safeguarding the water bodies shall be implemented.
13. Total one time Water requirement is 50 m³/day, out of which 2 m³/day of fresh water is obtained from RIICO water supply & 18 m³/day is drawn from ground water with permission from CGWA and recycled water will be 30 m³/day. Renewal of CGWA NOC dated 02.05.2023 with a validity upto 02.01.2025 for a quantity of 18 m³/day.

14. 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.
15. The PP has submitted that Existing green belt has been developed in 0.1019 Ha (Existing) & 0.0904 Ha area which is about 5.1% of the total project area of 2.0Ha with total sapling of 118 plants and 0.1370 Ha (582 Plants) developed within the RIICO Park. Thus, total of 0.85 Ha area (42.6% of total project area) will be developed as plantation. Total no. of 700 saplings will be planted and nurtured in 0.85 hectares as causality replacement in 2 years. 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 shall be maintained in atleast 40% of project area.
16. The committee deliberated details of carbon foot prints and carbon sequestration study w.r.t. proposed project and found them to be satisfactory.
17. 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.
18. The EAC deliberated on certified compliance report on CTO and its Action Plan obtained from SPCB and found it satisfactory.
19. The EAC also deliberated on the submitted written representation of project proponent and found it satisfactory.
20. 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.
21. 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.
22. 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:

39.7.22 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. 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. PP shall strictly comply with the Direction issued by the Commission for Air Quality Management in National Region and Adjoining Areas.
- iv. In pursuance to MoEF&CC OMs dated 31st October, 2019 & 30th December, 2019 issued in compliance of the order of Hon'ble NGT in OA No. 1038/2018 dated 19th August, 2019, the compliance of all the conditions applicable to CEPI shall be implemented as per the submitted plan. PP shall strictly implement the Action Plan/Mitigation measures as prescribed for the CPA, as the Unit is located in CPA.
- v. The industry shall use CETP treated waste water for industrial processes to reduce the stress on Ground water resource as and when made available.
- vi. The water requirement of 50 m³/day shall be obtained from RIICO water supply (2 m³/day), ground water (18 m³/day) and recycled water (30 m³/day) after obtaining necessary permission from the Competent Authority. PP shall explore the possibility of shifting to alternative source of water to meet the water requirement needs.
- vii. 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.
- viii. The nearest habitation are Kaharani - 1.3 Km, SSW & Mundana Meo- 0.27 Km, E 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.
- ix. The Sare Khurd Canal (3.72 km, SSE), Indori Nala (3.83 km, ENE) and Pond N/V Sare Khur (7.60 km, SE) exists within the study area of the project site. A robust and full proof Drainage Conservation scheme to protect the natural drainage and its flow parameters; along with Soil conservation scheme and multiple Erosion control measures shall be implemented.
- x. 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 Kaharani and Mundana Meo Village. Compliance status in this regard, shall be submitted to concerned Regional Office of the MoEF&CC.

- xi. 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. 0.73 Crores shall be strictly implemented and progress shall be submitted to the Regional Office of MoEF&CC.
- xii. The PP shall adopt undertake village adoption programme, prepare and implement the action plan to develop them into model villages.
- xiii. The PP shall install digital display Board for environmental monitoring data in front of the factory's main gate within a month.
- xiv. 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. 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. PM₁₀ and PM_{2.5} in reference to PM emission, and SO₂ and NO_x in reference to SO₂ and NO_x emissions) within and outside the plant area (at least at four locations one within and three outside the plant area at an angle of 120° each), covering upwind and downwind directions.

- iii. The project proponent shall monitor fugitive emissions in the plant premises at least once in every quarter through laboratories recognized under Environment (Protection) Act, 1986 or NABL accredited laboratories.
- iv. Sampling facility at process stacks shall be provided as per CPCB guidelines for manual monitoring of emissions.
- v. Appropriate Air Pollution Control (APC) system shall be provided for all the dust generating points including fugitive dust from all vulnerable sources, so as to comply prescribed stack emission and fugitive emission standards.
- vi. The project proponent shall provide leakage detection and mechanized bag cleaning facilities for better maintenance of bags.
- vii. Sufficient number of mobile or stationery vacuum cleaners shall be provided to clean plant roads, shop floors, roofs, regularly.
- viii. Ensure covered transportation and conveying of raw material to prevent spillage and dust generation. The project proponent use leak proof trucks/dumpers carrying coal and other raw materials and cover them with tarpaulin.
- ix. The project proponent shall provide primary and secondary fume extraction system at all heat treatment furnaces.
- x. Wind shelter fence and chemical spraying shall be provided on the raw material stock piles.
- xi. Design the ventilation system for adequate air changes as per prevailing norms for all tunnels, motor houses, Oil Cellars.
- xii. Pollution control system in the plant shall be provided as per the CREP Guidelines of CPCB.
- xiii. The project proponent shall adopt the Clean Air practices like mechanical collectors, wet scrubbers, fabric filters (bag houses), electrostatic precipitators, combustion systems (thermal oxidizers), condensers, absorbers, adsorbers, and biological degradation. Controlling emissions related to transportation shall include emission controls on vehicles as well as use of cleaner fuels. Sufficient numbers of additional truck mounted Fog/Mist water cannons shall be procured and operated regularly inside the project premises and also in the surrounding villages to arrest suspended dust in the atmosphere.
- xiv. Bag filters shall be cleaned regularly and efficiency of bag filter system shall be monitored at regular intervals.
- xv. Water Sprinklers/Water mist system shall be installed near raw material yards, operational units and other strategic locations to control fugitive emissions from the plant.
- xvi. The particulate matter emissions from the process stacks shall be less than 30 mg/Nm³ and measures shall be undertaken as per the submitted action plan. Efficient Air monitoring equipment shall be installed.
- xvii. Following additional arrangements to control fugitive dust shall be provided:
 - a. Fog / Mist Sprinklers at all on bulk raw material storage area (at the transfer points) like Iron Ore, Coal and for Fly Ash and similar solid waste storage areas.
 - b. Proper covered vehicle shall be used while transport of materials.
 - c. Wheel washing mechanism shall be provided in entry and exit gates with complete recirculation system.

- xviii. Online stack monitoring system for 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.
- xix. Low NO_x 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.

Consideration in Terms of Reference Proposal

Agenda No. 39.8

39.8 Expansion of M/s Minera Steel and Power Private Limited from 0.15 MTPA to 0.65 MTPA capacity and Captive Power Plant (18 MW to 46 MW) at Yerabanahalli Village, Sandur Taluk in Ballari District of Karnataka – Consideration of TOR.

[Proposal No. IA/KA/IND1/432994/2023; File No. J-11011/1166/207-IA.II(IND-I)]

39.8.1 M/s. Minera Steel and Power Private Limited has made an application online vide proposal no. IA/KA/IND1/432994/2023 dated 13.06.2023 along with the application in prescribed format (CAF, Form – I Part A & B), copy of pre-feasibility report and proposed ToRs for undertaking detailed EIA study as per the EIA Notification, 2006 for the project mentioned above. The proposed project activity is listed at S. No. 3(a) Metallurgical Industries (Ferrous & Nonferrous) under Category ‘A’ of the schedule of the EIA Notification, 2006 and being appraised at the Central Level.

Details submitted by the project proponent

39.8.2 The project of M/s. Minera Steel and Power Private Limited located in Yerabanahalli Village, Sandur Taluk in Ballari District of Karnataka is for enhancement of production from 0.15 MTPA to 0.65 MTPA capacity and Captive Power Plant (18 MW to 46 MW).

39.8.3 The proposal was considered during the 39th meeting of the EAC for Industry-I sector held on 6-7th July, 2023. The deliberations and recommendations of EAC are as follows:

Deliberations by the Committee

39.8.4 The Committee noted the following:

1. The EAC observed that PP has not prepared and presented the Drone survey of the project site during the appraisal of the project although the same has been clearly mentioned in the agenda of the meeting. In view of the same, the EAC advised Project proponent to present the drone survey during appraisal of the proposal. The EAC advised the Project proponent to read the instructions/guidelines given in the Agenda before coming to the EAC meeting.
2. The PP agreed to the suggestions of EAC and requested EAC to allow reappear after the revision of the application with the desired information.

Recommendations of the Committee:

- 39.8.5 In view of the foregoing and after detailed deliberations, the committee recommended to **defer the proposal** to address the shortcomings enumerated at para no. 39.8.4 above. The proposal may be considered after submission of the requisite information.

Consideration in Environmental Clearance Proposals [Parivesh 1.0]

Agenda No. 39.9

- 39.9 Expansion cum modification of existing steel plant to final capacity of Pellets – 8,00,000 TPA, Sponge Iron – 3,72,900 TPA, Rolled Products – 2,70,000 TPA, Captive Power – 58 MW and Slag Cement – 4,16,000 TPA by M/s GM Iron & Steel Company Ltd., located at Village Kulei, Parjang in Dhenkanal District, Odisha– Consideration for Environmental Clearance (From Parivesh 1)**

**[Proposal No. IA/OR/IND1/417729/2023; File No. IA-J-11011/286/2020-IA-II(IND-I)]
[Consultant: M/s. Envirotech East Pvt. Ltd.; Valid upto :12.09.2025]**

- 39.9.1 M/s GM Iron & Steel Company Ltd. has made an online EC application vide proposal no. IA/OR/IND1/417729/2023 dated 23rd June, 2023 along with copy of EIA report and Forms (Part A, B and C) and certified compliance report seeking Environment Clearance (EC) under the provisions of the EIA Notification, 2006 for the project mentioned above. The proposed project activity is listed at S. No. 3(a) Metallurgical Industries (Ferrous & Nonferrous), 3(b) Cement Plants and 1(d) Thermal Power Plants under Category “A” of the schedule of the EIA Notification, 2006 being appraised at Central Level.
- 39.9.2 Name of the EIA consultant: M/s. Envirotech East Pvt. Ltd. [List of ACOs with their Certificate / Extension Letter no. NABET/EIA/2225/RA 0279; valid upto 12.09.2025, as on June 30, 2023].

Details submitted by Project proponent

- 39.9.3 The details of the ToR are furnished as below:

Date of Application	Consideration	Details	Date of Accord	ToR Validity
17.11.2020	ToR was issued by MoEF&CC	Terms of Reference	24.11.2020	23.11.2024

- 39.9.4 The project of M/s. GM Iron & Steel Company Ltd., located at Village Kulei, Parjang in Dhenkanal District, Odisha is for expansion cum modification of existing steel plant to final capacity of Pellets – 8,00,000 TPA, Sponge Iron – 3,72,900 TPA, Rolled Products – 2,70,000 TPA, Captive Power – 58 MW and Slag Cement – 4,16,000 TPA.

39.9.5 Environmental Site Settings:

S. N.	Particulars	Details submitted by the PP		
i.	Total land	Total land involved in the project is 43.1 ha (106.50 Acre). Govt. Land – 32.94 Acre (13.33 Ha) 1. Forest land- 29.29 Acre (11.85 Ha) 2. Non-forest land- 3.65 Acre (1.48 Ha) Private land - 73.56 Acre (29.77 Ha) 1. Tenanted land- 25.90 Acre (10.48 Ha) 2. Existing land- 47.66 Acre (19.29 Ha)		
ii.	Land acquisition details as per MoEF&CC O.M. dated 7/10/2014	Existing land of 47.66 Acre (19.29 Ha) has been purchased through SARFAESI Act from Bank for industrial purpose. Govt. land of 32.94 (13.33 Ha) Acre has been allotted in favour of the project by IPICOL, Odisha vide letter No. CGM/SLNA/GM Iron & Steel-239/20 dtd. 10.11.2020 and 239/20 dtd. 09.01.2023 and IDCO, Bhubaneswar has been interested to acquire the said land. Forest diversion proposal for diversion of 29.29 acre (11.853 ha) under FC Act has been submitted vide Proposal No. FP/OR/IND/145106/2021. Now, the proposal is under scrutiny at the State Govt. Level.		
iii.	Existence of habitation & involvement of R&R, if any	There is no habitation and no involvement of R&R.		
iv.	Latitude and Longitude of all corners of the project site.	POINT	LATITUDE	LONGITUDE
		1	20°59'11.12"N	85°16'10.59"E
		2	20°59'11.13"N	85°16'27.64"E
		3	20°59'08.18"N	85°16'44.94"E
		4	20°58'53.80"N	85°16'48.37"E
		5	20°58'51.85"N	85°16'33.00"E
		6	20°59'02.35"N	85°16'18.17"E
v.	Elevation of the project site	64 m - 70 m above mean sea level.		
vi.	Involvement of Forest land if any.	Forest diversion proposal for diversion of 29.29 acre (11.853 ha) under FC Act has been submitted vide Proposal No. FP/OR/IND/145106/2021. Now, the proposal is under scrutiny at the State Govt. Level.		
vii.	Water body (Rivers, Lakes, Pond, Nala, Natural Drainage, Canal etc.) exists within the project site as well as study area.	Project Site: No water body in the project site. Study area: River Brahmani - 0.9 km from the project site boundary on the western side.		

S. N.	Particulars	Details submitted by the PP
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	The Odisha SPCB, vide letter no. 8339/Ind1-Con-4699 (Vol.III), dated 25.05.2023 has confirmed that the instant Unit is located outside of critically polluted area of Angul-Talchar Industrial cluster.

39.9.6 The existing steel plant was implemented by M/s. Rana Sponge Ltd. after getting NOC from State Pollution Control Board, Orissa vide Letter No. 29790/Ind-II-NOC dated 04.10.2004 and Letter No. 14933/IND-II-NOC-3435 dated 09.05.2005 as per the prevailing notification of MoEF&CC, as per which Environmental Clearance (EC) was not applicable for the project as the project cost was less than Rs. 50 Crores. (The project cost was 48.52 Crores). The plant was shut down from 2016 and went bankrupt. The unit was put to auction by the bank and it was purchased by M/s GM Iron and Steel Company Limited (GMISCL) from State bank of India under section 5 of the SARFAESI Act, 2002 on 17.03.2019. M/s GMISL was granted Consent to Operate on the basis of Consent to Establish issued to M/s. Rana Sponge Ltd. without enhancement. Subsequently, CTO in the name of M/s. GMISCL was obtained for the above mentioned units vide Memo. No. 5331/IND-I-CON-4699 dated 31.03.2023 and valid upto 31.03.2024.

39.9.7 Implementation status of the existing clearances

Sl. No.	Certificate Obtained	Memo No.	Date of Issue	Name of Unit	Obtained from	Violation, if any
1	Consent to Establish	29790/Ind-II-NOC	04.10.2004	<ul style="list-style-type: none"> • DRI Kilns (1x100 TPD + 1x350 TPD) • 2x10 T Induction Furnaces • 12 MW CPP Project Cost – Rs. 48.52 Crores	State Pollution Control Board, Orissa	No
2	Consent to Establish	-	09.05.2005	<ul style="list-style-type: none"> • Rolling Mill - 30,000 TPA 	State Pollution Control Board, Orissa	No
3	Consent to Operate	5331/IND-I-CON-4699	31.03.2023	<ul style="list-style-type: none"> • DRI Kilns (1x100 TPD + 1x350 TPD) • 2x10 T Induction Furnaces • 12 MW CPP (8 MW WHRB + 4 MW 	State Pollution Control Board, Orissa	No

				AFBC) • CCM - 75,000 TPA • Rolling Mill - 30,000 TPA		
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39.9.8 The unit configuration and capacity of existing and proposed project is given as below:

Name of the Units	Production Capacity as per CTE & CTO	By Modernization, Argumentation & increasing annual working days	New Installation	Ultimate Capacity
Pellet Plant	-	-	1 x 0.8 MTPA (8,00,000 TPA)	8,00,000 TPA Pellets
Sponge Iron Plant	1x100 TPD 1x350 TPD (1,35,500 TPA)	Capacity Enhancement from 100 TPD to 130 TPD & 350 TPD to 450 TPD (1,91,400 TPA)	1x550 TPD (1,81,500 TPA)	1x130 TPD 1x450 TPD 1x550 TPD (3,72,900 TPA Sponge Iron)
Induction Furnaces with matching LRF & CCM	2x10 T (75,000 TPA)	Capacity Enhancement to 2x12 T (88,500 TPA)	3x20 T (1,81,500 TPA)	2x12 T 3x20 T (2,77,200 TPA liquid steel)
AOD	-	-	1x20 T	1x20 T
Rolling Mill	30,000 TPA TMT bar / Structurals	1,05,000 TPA Replaced with higher capacity	-	2,70,000 TPA (Rolled Products)
Wire Rod mill	-	-	1,65,000 TPA	
Captive Power Plant	12 MW CPP (8 MW WHRB + 4 MW AFBC)	-	46 MW CPP (10 MW WHRB + 36 MW AFBC)	58 MW CPP (18 MW WHRB + 40 MW AFBC)
Cement Grinding Unit	-	-	4,16,000 TPA (2x500 TPD 1x300 TPD)	4,16,000 TPA Slag Cement

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

Sl. No	Raw Material	Annual Requirement (in TPA)			Source	Distance (in km)	Quantities and Transportation type		
		Existing	Proposed	Total			Internal	Rail	Road
PELLET PLANT (8,00,000 TPA)									
1	Iron ore Fines	-	840000	840000	Captive iron ore mines located at Badampahar mines	180	-	840000	-
2	Limestone	-	12000	12000	Rourkela	190	-	-	12000
3	Bentonite	-	4000	4000	Rourkela	190	-	-	4000
4	Coal	-	12000	12000	Mahanadi Coalfields, Talcher	25	-	12000	
SPONGE IRON PLANT (3,72,900 TPA)									
1	Pellet	217000	380000	597000	In-House	-	597000	-	-

Sl. No	Raw Material	Annual Requirement (in TPA)			Source	Distance (in km)	Quantities and Transportation type		
		Existing	Proposed	Total			Internal	Rail	Road
2	Coal	176200	308600	484800	Mahanadi Coalfields, Talcher	25	-	484800	-
3	Dolomite	6800	12000	18800	Raipur CG	450	-	-	18800
					Katni MP	770			
STEEL MELTING SHOP (2,77,200 TPA)									
1	Sponge Iron	60000	192000	252000	In-house Conveyor	-	252000	-	-
2	Pig Iron	10000	32000	42000	Rourkela	190	-	-	42000
3	Scraps	14000	44800	58800	Local market	100	-	-	58800
4	Ferro Alloys	520	1650	2170	Rourkela	190	-	-	2170
CAPTIVE POWER PLANT (40 MW AFBC)									
1	Coal	45900	183500	229400	Mahanadi Coalfields, Talcher	25	-	2,29,400	-
2	Coal Fines	3800	14800	18600	Mahanadi Coalfields, Talcher	25	-	18600	-
3	Dolomite	8475	76275	84750	In-House	-	84,750	-	-
TOTAL		542695	2113625	2656320			933750	1584800	137770
Percentage (%)							35.2%	59.7%	5.2%
No. of Rakes / Trucks per Year								397	6889
								(@ 33 Rakes per Month)	(@ 19 Trucks per Day i.e. 1 Truck/Hr)

39.9.10 The PP reported that as per an initial estimate make up water to the tune of 120.45 m³/day will be needed for the entire project (for Existing units - 28 m³/day + for Proposed units - 92.45 m³/day). The raw water will be sourced from Brahmani River. No ground water shall be abstracted.

39.9.11 Total Power Requirement for the entire Project : 63 MW (for Existing Units : 17.7 MW + Proposed Units : 45.3 MW). Power will be sourced from Proposed 58 MW capacity Captive Power Plant and GRIDCO.

39.9.12 Baseline Environmental Studies:

Period	December, 2021-February 2021 & December 2022
AAQ parameters at 8 locations	<ul style="list-style-type: none"> • PM_{2.5} = 22 - 50 µg/m³ • PM₁₀ = 42 - 88 µg/m³ • SO₂ = 5 - 15 µg/m³ • NO₂ = 10 - 33 µg/m³ • CO = 0.104 - 0.783 mg/m³
AAQ Modelling (Incremental GLCs)	<ul style="list-style-type: none"> • PM = 3.19 µg/m³ (0.8 km in SE) • SO₂ = 1.56 µg/m³ (1.2 km in SE)

Model Used : ISCST3	<ul style="list-style-type: none"> • NO_x = 1.56 µg/m³ (1.2 km in SE) 																														
Ground water quality at 8 locations	<ul style="list-style-type: none"> • pH: 5.84 – 7.45, • Total Hardness: 92 – 502 mg/l, • Chlorides: 25 – 116 mg/l, • Fluoride: 0.42 - 1.2 mg/l, • Iron: 0.12 – 2.1 mg/l, • TDS: 138 – 763 mg/l 																														
Surface water quality at 10 locations (2 different locations from the River Brahmani, 1 canal water, 1 reservoir water, 1 jor water and 3 different nala water)	<p>River Water pH: 7.59 and 7.53, DO: 7.3 & 6.9 mg/l, BOD: 2 & 2 mg/l, COD: 20 & 26 mg/l, Fe: 0.18 & 0.18 mg/l, Coliform: 630 - 790 MPN/100ml, TDS: 196 & 210 mg/l, Chloride: 15 & 14 mg/l</p> <p>Nala Water pH: 7.49 - 8.17, DO: 5.9 - 6.8 mg/l, BOD: 2 - 3 mg/l, COD: 9 - 24 mg/l, Fe: 0.12 - 0.39 mg/l, Coliform: 1010 - 2400 MPN/100ml, TDS: 220 - 455 mg/l, Chloride: 13 – 22 mg/l</p>																														
Noise Levels at 10 Locations	48.5 – 70.1 dBA for day time and 39.7 – 63.1 dBA for night time.																														
Traffic assessment study findings	<p>A Traffic density was monitored at 2 different locations respectively:</p> <ul style="list-style-type: none"> • NH-200 near Pitri Square • Banarpal - Pallahara Road <p>• Existing PCU and existing level of service (LOS) for the 2 Locations are presented below:</p> <table border="1"> <thead> <tr> <th>Road (Location)</th> <th>Volume PCU/day</th> <th>Capacity PCU/day</th> <th>Existing V/C</th> <th>LoS</th> </tr> </thead> <tbody> <tr> <td>NH-200 near Pitri Square</td> <td>9222</td> <td>86,400</td> <td>0.106</td> <td>A</td> </tr> <tr> <td>Banarpal - Pallahara Road</td> <td>4036</td> <td>15,000</td> <td>0.27</td> <td>B</td> </tr> </tbody> </table> <p>• Incremental PCU Load per day for the proposed project is 441. PCU load per day after proposed expansion project and level of service (LOS) at the 2 Locations are presented below:</p> <table border="1"> <thead> <tr> <th>Road (Location)</th> <th>Volume PCU/day</th> <th>Capacity</th> <th>V/C</th> <th>LoS</th> </tr> </thead> <tbody> <tr> <td>NH-200 near Pitri Square</td> <td>9663</td> <td>86,400</td> <td>0.11</td> <td>A</td> </tr> <tr> <td>Banarpal - Pallahara Road</td> <td>4972</td> <td>15000</td> <td>0.33</td> <td>B</td> </tr> </tbody> </table> <p>* Note: Capacity as per IRC 64-1990 Guide line recommended design service is 86,400 PCU/day for 4 lane divided two way roads and 15,000 PCU/day for 2 lane roads respectively.</p>	Road (Location)	Volume PCU/day	Capacity PCU/day	Existing V/C	LoS	NH-200 near Pitri Square	9222	86,400	0.106	A	Banarpal - Pallahara Road	4036	15,000	0.27	B	Road (Location)	Volume PCU/day	Capacity	V/C	LoS	NH-200 near Pitri Square	9663	86,400	0.11	A	Banarpal - Pallahara Road	4972	15000	0.33	B
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	<ul style="list-style-type: none"> Conclusion: The level of service will be “A” in Location T1 and B in Location T2 including additional traffic due to proposed expansion cum modification project. 																					
	<table border="1"> <thead> <tr> <th>V/C ratio</th> <th>LOS</th> <th>Performance</th> </tr> </thead> <tbody> <tr> <td>0.0-0.2</td> <td>A</td> <td>Excellent</td> </tr> <tr> <td>0.2-0.4</td> <td>B</td> <td>Very Good</td> </tr> <tr> <td>0.4-0.6</td> <td>C</td> <td>Good</td> </tr> <tr> <td>0.6-0.8</td> <td>D</td> <td>Fair/Average</td> </tr> <tr> <td>0.8-1.0</td> <td>E</td> <td>Poor</td> </tr> <tr> <td>>1.0</td> <td>F</td> <td>Very Poor</td> </tr> </tbody> </table>	V/C ratio	LOS	Performance	0.0-0.2	A	Excellent	0.2-0.4	B	Very Good	0.4-0.6	C	Good	0.6-0.8	D	Fair/Average	0.8-1.0	E	Poor	>1.0	F	Very Poor
V/C ratio	LOS	Performance																				
0.0-0.2	A	Excellent																				
0.2-0.4	B	Very Good																				
0.4-0.6	C	Good																				
0.6-0.8	D	Fair/Average																				
0.8-1.0	E	Poor																				
>1.0	F	Very Poor																				
Flora and fauna	Presence of schedule I fauna if any. If yes, status of site-specific wildlife conservation plan - Not Applicable.																					

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

Sl. No.	Type	Quantity in TPA (Total)	Utilization
1	Dolochar from Sponge Iron Plant	84,750	100% to be used in AFBC boiler of CPP.
2	Slag from Induction Furnaces	24,800	<p>The slag generated from the furnaces shall be 24,800 TPA considering 100% production in the furnaces. After metal recovery about 10% metal shall be recovered from the total slag and the balance 22,320 TPA (as stone chips / road construction materials) shall be used for road construction & repairing / land filling purposes.</p> <p>Considering 7 m width & depth 12 inch (0.3 m) of the road and density of the slag as 3.5 ton/cum, 7,350 T slag may be consumed for 1.0 km stretch. Therefore, the entire quantity of slag generated in a year (22,320 TPA) shall be utilized for the construction of around 3 km roads.</p> <p>As per an estimate, it was found that around 300 km undeveloped (Kuchha) road is existing in the surrounding villages in the 10 km radius area. Hence, there is lot of potential of slag utilisation during construction of these roads.</p>
3	End Cuts, Scale & Scrap from CCM & Rolling Mill	8,100	100% to be used in Induction Furnaces.
4	Fly Ash from CPP	57,500	100% to be utilized in the captive cement plant.
5	Bottom Ash from CPP	14,500	100% to be utilised for road making / land filling purposes.

39.9.14 Public Consultation:

Details of advertisement given	27 th September, 2021
Date of Public Consultation	3 rd November, 2021
Venue	Rajiv Gandhi Seva Kendra, Under Gengutia GP, Parjang Tehsil, District - Dhenkanal, Odisha
Presiding Officer	Sri Sashank Sekhar Dash, Additional District Magistrate, Dhenkanal District
Major issues raised	<ul style="list-style-type: none"> • Air, Noise and Water Pollution Control • Afforestation programme • Local employment opportunity based on Educational Qualification • Employment Opportunity to Land Affected Family Members • Provision of Health checkup camp at different villages on yearly basis • Provision for repair and maintenance of village roads with street light facility • No discharge of wastewater to perennial nallah adjacent to factory premises • Peripheral development in nearby areas / villages • Demand for equal salary for equal work • Provision of drinking water supply during summer time

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

Concerns raised during Public Hearing	Physical Activity and Action Plan	Particulars	YEAR OF IMPLEMENTATION			Total Expenditure (Rs. in Lakhs)
			1 st Year	2 nd Year	3 rd Year	
Air, Noise and Water Pollution Control	<ul style="list-style-type: none"> • Adequate control measures like installation of ESP, Bag filters, dust suppression system & stacks of adequate height at relevant places. • Air borne dust shall be controlled by mobile water tanker inside the plant premises. • Maintenance of air pollution control equipment shall be done regularly. • All roads shall be paved on which movement of raw materials or products will take place inside the plant premises. • No waste water will be discharged outside the plant area. The plant is designed as a zero discharge plant. The entire wastewater will be recirculated and recycled. • The equipment shall comply with the Statutory limit of 85 dB(A) (at 1 m. from the source). Noise 	<p>Physical Target</p> <p>Budget in Lakhs</p>	<p>The physical Target for the entire activities shall be achieved in 3 years.</p> <p>Included in the EMP Cost. (Total EMP Cost Capital - Rs. 52.07 Crores Recurring - Rs. 5.00 Crores / annum)</p>			-

Concerns raised during Public Hearing	Physical Activity and Action Plan	Particulars	YEAR OF IMPLEMENTATION			Total Expenditure (Rs. in Lakhs)
			1 st Year	2 nd Year	3 rd Year	
	Reduction Systems will be arranged.					
Afforestation programme	Proper plantation of trees will be done inside the plant premises. 40% of the total project area shall be covered under Breen Belt.	Physical Target	The physical Target for the entire activities shall be achieved in 3 years.			
		Budget in Lakhs	Green Belt cost is included in the EMP cost (Total EMP Cost Capital - Rs. 52.07 Crores Recurring - Rs. 5.00 Crores / annum)			
Employment of local people	In the proposed project, top most priority will be given to the local people based on their academic qualification. Skill development for unemployed local youths through National Skill Development Corporation, Govt. of India Scheme. Construction of a building along with the necessary infrastructure for this purpose.	Physical Target	Construction of 4- room training building (3000 sq.ft area) and installation of 8 sewing machines, 8 computer systems & 4 machines for making hand craft items along with necessary raw materials, based on the need of the local people			92
		Budget in Lakhs	40	40	12	
Organizing Health Checkup Camps at different villages on yearly basis	Health camps shall be organized in the surrounding villages for health check-up of the local villagers.	Physical Target	It will be done on regular basis.			
		Budget in Lakhs	Adequate fund will be allocated under CSR budget			-
Maintenance & Repairing of roads in the surrounding areas (*)	Repairing of the local connecting road to NH and repairment of road with land (12 km) at Kulej village (@Rs. 18,00,000/- per Km) in the nearby villages	Physical Target	Repairing of the 4 km local connecting road to NH	4 km road at Kulei village	4 km road at Kulei village	216
		Budget in Lakhs	72	72	72	
Street lighting facility for the roads	Street Lighting (Solar) provision at suitable public places in and around the nearby villages (90 numbers, @ Rs. 20,000/- per Solar Light)	Physical Target	Providing 90 nos. Solar light at village Kulei			18
		Budget in Lakhs	18	-	-	
No discharge of wastewater to perennial nallah adjacent to factory premises	The plant is designed as a zero discharge plant. The water will be recirculated through cooling and treatment. The entire waste water will be recycled for various purposes inside the plant. Domestic wastewater will be treated in Sewage Treatment Plant (STP). Nallah protection plan has also been formulated.	Physical Target	The physical Target for the entire activities shall be achieved in 3 years.			
		Budget in Lakhs	Included in the EMP Cost. (Total EMP Cost Capital - Rs. 48.7 Crores Recurring - Rs. 5.00 Crores / annum)			
Peripheral development in nearby areas / villages	Maintenance of local schools building, playground, class rooms, library facilities, green belt development and providing computers in the Local Schools.	Physical Target	Repairing of school building and constructing 4 extra class rooms and green belt development in Kualo ASVN	Supplying desks, benches, chairs, blackboards in Paramhanspur Primary School and UP School Kulei.	Development of library and providing books and Providing 10 nos. of computers to Paramhanspur UP School	35

Concerns raised during Public Hearing	Physical Activity and Action Plan	Particulars	YEAR OF IMPLEMENTATION			Total Expenditure (Rs. in Lakhs)
			1 st Year	2 nd Year	3 rd Year	
			(High School), Nodal Primary school Kualo and Taleswar Vidyapith, Kulei		and UP School Gengutia.	
		Budget in Lakhs	20	10	5	
Peripheral development in nearby areas / villages	Development and maintenance of existing ponds in the local villages	Physical Target:	Dev. & maintenance of 2 ponds at village Kulei	Dev. & maintenance of 1 pond at village Gengutia	Dev. & maintenance of 2 ponds at village Kualo	18
		Budget in Lakhs	6	6	6	
	Providing green and blue Dustbins in the surrounding villages (under Swach Bharat Scheme) for waste segregation and handling	Physical Target:	Providing 300 green dustbins and 300 blue dustbins at four villages namely Khalapal, Gengutia, Kulei & Kualo	-	-	6
		Budget in Lakhs	6	-	-	
Provision of Drinking Water supply during summer time	Drinking water shall be supplied through tanker and tubewells shall be installed for drawing drinking water. 12 numbers Tube well / Hand Pump in nearby villages (@ Rs. 50,000/- per Tube Well / Hand Pump). Construction of 4 no of ground water Recharging system for rainwater in nearby villages (@2.5 lakhs per system). Rain Water Harvesting ponds in nearby villages (2 nos. @ Rs. 5 Lakhs per pond).	Physical Target	Procurement of 2 tankers	Development of 6 tube wells at Kulei village	Development of 6 tube wells at Gengutia village	22
		Budget in Lakhs	16	3	3	
		Physical Target	Construction of 1 Rain Water storage pond and 2 rainwater recharge structures at Kulei village	Construction of 1 Rain Water storage pond and 1 rainwater recharge structure at Gengutia village	Construction of 1rainwater recharge structure at Kualo village	20
		Budget in Lakhs	10	7.5	2.5	
Total Budget - Public Hearing related: Rs. 427 Lakhs						

Need based Activities	Particulars	Year of Implementation		
		1 st Year	2 nd Year	3 rd Year
Construction of W/C/Toilet (2) each - 9 numbers (@ Rs. 3.00 Lakhs per set of 2 Toilets).	Physical Target:	Construction of 6 nos. Toilets 02 each at Gengutia, Kulei& Kualo	Construction of 3 nos. Toilets 01 each at Gengutia, Kulei& Kualo	-
	Budget: Rs. 27.0 Lakhs	Rs. 18 Lakhs	Rs. 9 Lakhs	-
Creation of irrigation and	Physical Target:	Supplying crop harvesting machines	Supplying pest control machines	Supplying tractors to farmers

other agricultural infrastructures in the peripheral villages and conservation of nearby forest. (*)	Budget: Rs. 55 Lakhs	Rs. 15 Lakhs	Rs. 10 Lakhs	Rs. 30 Lakhs
Drainage Development & maintenance - Side drains & Culvert	Physical Target:	Development & maintenance of drains & Culvert on drainage in adjacent villages	Development & maintenance of drains & Culvert on drainage in adjacent villages	Development & maintenance of drains & Culvert on drainage in adjacent villages
	Budget: Rs. 75 Lakhs	Rs. 25 Lakhs	Rs. 25 Lakhs	Rs. 25 Lakhs
Providing transportation to school students of nearby villages	Physical Target:	Provision of bus	Provision of bus	Provision of bus
	Budget : Rs. 30 Lakhs	Rs. 10 Lakhs	Rs. 10 Lakhs	Rs. 10 Lakhs
Total Budget - Need based activities : Rs. 187 Lakhs				
Overall Budget (Public Hearing related + Need based Activities): Rs. 614 Lakhs				
Note: It has been decided to develop three nearby villages namely Kulei, Gengutia and Kualo by addressing the socio-economic needs of the villagers and issues raised during the Public Hearing. Adequate fund will be allocated for village road maintenance, medical facilities for villagers, educational support, drinking water supply etc. under CSR of the company. Adequate fund will be allocated for conservation of nearby forests under CSR of the company.				

39.9.15 The capital cost of the proposed expansion project is Rs. 607.52 Crores and the capital cost for environmental protection measures is proposed as Rs. 48.7 Crores. The annual recurring cost towards the environmental protection measures is proposed as Rs. 5 Crores. The employment generation from the proposed expansion project is 592 persons. The details of cost for environmental protection measures is as follows:

SL. NO.	ENVIRONMENT / SOCIAL CONTROL MEASURE	PROPOSED	
		CAPITAL (in Crores)	RECURRING (PER ANNUM) (in Crores)
1	Cost of Air Pollution Control Systems	20.0	2.25
2	Cost of Water conservation & Pollution Control	6.5	0.68
3	Cost of Solid Waste Management System	5.6	0.50
4	Green belt development	0.5	0.05
5	Noise Reduction Systems	3.5	0.35
6	Occupational Health Management	2.2	0.22
7	Risk Mitigation & Safety Plan	4.2	0.42
8	Environmental Management Department	5.3	0.53
9	Total Budget - Public Hearing related	0.9	-
	GRAND TOTAL	48.7	5.0

39.9.16 Existing green belt has been developed in 2.9 ha area which is about 6.7% of the total project area of 43.1 ha with total sapling of 7250 Trees. Thus total of 17.24 ha area (40% of total project area) will be developed as greenbelt. A 15 m wide greenbelt, consisting of at least 3 tiers around plant boundary will be developed as greenbelt and green cover as per CPCB/MoEF&CC, New Delhi guidelines. Local and native species will be planted with a density of 2500 trees per hectare. Total no. of 43,100 saplings will be planted and nurtured in 17.24 hectares in 3 years.

39.9.17 Summary of court case/show cause/direction related to the project under consideration:

Details of Show cause Notice issued by SPCB, Odisha

A show cause notice was issued under section 33A of the Water (PCP) Act, 1974 and 31A of the Air (PCP) Act, 1981 by the State Pollution Control Board, Odisha vide letter No. 8501/IND-I-CON-4699 dated 18.05.2022. The compliance report of the show cause notice has been submitted by the PP vide letter No. GMISCL/ SPCB / 004 / 2022-23 dtd. 01.06.2022 in this respect. Inspection was carried out by State Pollution Control Board, Odisha on 29.04.2023 and report was given vide letter No. 8024/IND-I-CON-4699 dated 20.05.2023. According to the report the proponent has complied or is in the process of complying to the conditions laid down.

Details of Court Case

A complaint has been filed by one villager of Santhapada under Angul district in the National Green Tribunal, Kolkata vide OA No 45 of 2022. The Tribunal constituted a committee and directed to submit their report regarding allegations made in the OA. In accordance with the directions of the Tribunal, a committee chaired by the Collector, Dhenkanal inspected the unit and submitted its inspection reports before the Tribunal. The final post monsoon inspection report was submitted before the Tribunal on dt. 15.04.2023. The case was scheduled for hearing on 08.05.2023 which was adjourned to 26.05.2023. The case has further been adjourned to date 26.07.2023. However, the Project Proponent undertakes to comply the final order of the Tribunal in this OA .

Certified compliance report from IRO, SPCB

39.9.18 The Status of compliance of CTO was obtained from State Pollution Control Board, Odisha vide letter no. 8024/IND-I-CON-4699 dated 20.05.2023 in the name of M/s. GM Iron & Steel Company Ltd. As per the observations of RO, all the conditions have been complied with.

Written representations:

39.9.19 During the meeting, based on the deliberations made by the EAC, the project proponent vide letter dated 07.07.2023 through email dated 07.07.2023 submitted the following information:

Sl. No.	Queries raised by EAC	Reply of PP
1.	The Committee asked for a justification for not obtaining Environmental Clearance(EC) for the existing project.	The existing steel plant at Village Kulei, Parjang in Dhenkanal District, Odisha, was implemented by M/s. Rana Sponge Ltd. after getting NOC from State Pollution Control Board, Orissa vide Letter No. 29790/Ind-II-NOC dated 04.10.2004 and Letter No. 14933/IND-II-NOC-3435 dated 09.05.2005 as per the prevailing notification of MoEF&CC, as per which Environmental Clearance (EC) was not applicable for the project as the project cost was less than Rs. 100 Crores. (The project cost was 48.52 Crores). Copy of CTEs are submitted.

Sl. No.	Queries raised by EAC	Reply of PP
2.	The maximum value of PM during baseline data is recorded too high. Submit justification for the same.	<ul style="list-style-type: none"> • The values of PM₁₀ are within the prescribed limits but quite on the higher side. • The maximum value of PM₁₀ i.e. 98.1 µg/m³ was observed at Talcher during baseline data generation, only once during the monitoring period from December, 2020 to February, 2021. • This can be attributed to the presence of Lingaraj Opencast Mines close to the monitoring location and regular plying of vehicles carrying raw materials & products on the SH-149 which is about 110 m from the monitoring location. • Baseline data was again collected in the month of December, 2022. The maximum value of PM₁₀ was observed to be 88 µg/m³ which was much lower. • Upon enquiry it was found out that the Lingaraj Opencast Mines were not in operation at that point of time and the mines have been almost saturated. <p>Mitigation Measures</p> <ul style="list-style-type: none"> • Compliance to the CEPI guidelines shall be done. • Sufficient APC measures like Bag Filters, ESPs, stack of adequate height will be installed to control the emission levels. • CEMS has already been installed for the existing units and connected to SPCB and CPCB servers. Same practice shall be followed for the proposed units. • The company has earmarked 17.24 ha (42.6 acres) of land i.e. 40% of the total project area for Green Belt Development within its plant site.
3.	The committee asked the proponent and the consultant to explore options to reduce the LOS values.	The revised traffic load calculations have been submitted and updated at para 39.9.12 above. After the final calculations, the level of service will be “A” on NH-200 near Pitri Square and “B” on Banarpal - Pallahara Road including additional traffic due to proposed expansion cum modification project.
4.	Public Hearing action plan including more details regarding the CER and CSR activities to be carried out.	It has been decided to develop three nearby villages namely Kulei, Gengutia and Kualo by addressing the socio-economic needs of the villagers and issues raised during the Public Hearing. Adequate fund will be allocated for village road maintenance, medical facilities for villagers, educational support, drinking water supply etc. under CSR of the company. Adequate fund will be allocated for conservation of nearby forests under CSR of the company. Details of CER activities / Point-wise Compliance to the issues raised during Public Hearing along with action plan as per MoEF&CC O.M. dated 30/09/2020 has been submitted and updated at para 39.9.14 above.

Sl. No.	Queries raised by EAC	Reply of PP
5.	Details of the ongoing NGT case were asked to be provided.	Summary of the case proceedings along with the case order, inspection report by SPCB, Odisha and last hearing notice has been submitted and updated at para 39.9.17 above.
6.	Revised Carbon sequestration calculation	Revised Carbon footprint and Carbon sequestration calculation has been submitted.
7.	Recent status of Forest Clearance application	PP has submitted the letter vide No. 10396 9F(Ind) 379/2022 dated 30.05.2023 from PCCF & HoFF, Odisha to The Additional Chief Secretary to Government, Govt. of Odisha for consideration of proposal for diversion of 11.853 ha forest land.
8.	An affidavit declaring that no violation has been done in case of the existing plant.	The units with rated capacity for which CTE and CTO was granted has only been established and are under operation at present. The production capacity is within the quantities permitted. An affidavit dated 07.07.2023 stating the details has been submitted. Copies of the CTEs and valid CTO have been submitted.

Deliberations by the Committee

39.9.20 The Committee noted the following:

1. The instant proposal is for expansion cum modification of existing steel plant to final capacity of Pellets – 8,00,000 TPA, Sponge Iron – 3,72,900 TPA, Rolled Products – 2,70,000 TPA, Captive Power – 58 MW and Slag Cement – 4,16,000 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 steel plant was implemented by M/s. Rana Sponge Ltd. after getting NOC from State Pollution Control Board, Orissa vide Letter No. 29790/Ind-II-NOC dated 04.10.2004 and Letter No. 14933/IND-II-NOC-3435 dated 09.05.2005 as per the prevailing notification of MoEF&CC, as per which Environmental Clearance (EC) was

not applicable for the project as the project cost was less than Rs. 50 Crores. (The project cost was 48.52 Crores). The plant was shut down from 2016 and went bankrupt. The unit was put to auction by the bank and it was purchased by M/s GM Iron and Steel Company Limited (GMISCL) from State bank of India under section 5 of the SARFAESI Act, 2002 on 17.03.2019. M/s GMISL was granted Consent to Operate on the basis of Consent to Establish issued to M/s. Rana Sponge Ltd. without enhancement. Subsequently, CTO in the name of M/s. GMISCL was obtained for the above mentioned units vide Memo. No. 5331/IND-I-CON-4699 dated 31.03.2023 and valid upto 31.03.2024.

6. Total land involved in the project is 43.1 ha (106.50 Acre) [*Govt. Land – 32.94 Acre (13.33 Ha) : Forest land- 29.29 Acre (11.85 Ha), Non-forest land- 3.65 Acre (1.48 Ha)*] and { *Private land - 73.56 Acre (29.77 Ha) : Tenanted land- 25.90 Acre (10.48 Ha), Existing land- 47.66 Acre (19.29 Ha)*}. Existing land of 47.66 Acre (19.29 Ha) has been purchased through SARFAESI Act from Bank for industrial purpose. Govt. land of 32.94 (13.33 Ha) Acre has been allotted in favour of the project by IPICOL, Odisha vide letter No. CGM/SLNA/GM Iron & Steel-239/20 dtd. 10.11.2020 and 239/20 dtd. 09.01.2023 and IDCO, Bhubaneswar has been interested to acquire the said land.
7. Forest diversion proposal for diversion of 29.29 acre (11.853 ha) under FC Act has been submitted vide Proposal No. FP/OR/IND/145106/2021. Now, the proposal is under scrutiny at the State Govt. Level. As reported PCCF & HoFF, Odisha vide letter No. 10396 9F(Ind) 379/2022 dated 30.05.2023 has sent the proposal to The Additional Chief Secretary to Government, Govt. of Odisha for consideration for diversion of 11.853 ha forest land. The EAC is of the view that as per the Ministry's OM, EC may be issued after Stage I FC.
8. The EAC noted that the Odisha SPCB, vide letter no. 8339/Ind1-Con-4699 (Vol.III), dated 25.05.2023 has confirmed that the instant Unit is located outside of critically polluted area of Angul-Talchar Industrial cluster.
9. As per an initial estimate make up water to the tune of 120.45 m³/day will be needed for the entire project (for Existing units - 28 m³/day + for Proposed units - 92.45 m³/day). The raw water will be sourced from Brahmani River. No ground water shall be abstracted.
10. The PP submitted that existing green belt has been developed in 2.9 ha area which is about 6.7% of the total project area of 43.1 ha with total sapling of 7250 Trees. Thus, total of 17.24 ha area (40% of total project area) will be developed as greenbelt. Total no. of 43,100 saplings will be planted and nurtured in 17.24 hectares in 3 years. The EAC deliberated on the greenbelt action plan and opined that greenbelt remaining greenbelt shall be completed in the period of 1 year.
11. The Committee has found that the baseline data and revised incremental GLC due to the proposed project and observed that PM₁₀ and PM_{2.5} values are recorded high. The EAC opined that PP shall strictly implement the mitigation measures submitted to minimise the same.
12. The committee deliberated details of carbon foot prints and carbon sequestration study w.r.t. proposed project and found them to be satisfactory.
13. The Committee also deliberated on the public hearing issues along with revised action plan submitted by the proponent to address the issues raised during the public hearing along with the village adoption plan and found it satisfactory.

14. PP also reported a show cause notice issued under section 33A of the Water (PCP) Act, 1974 and 31A of the Air (PCP) Act, 1981 by the State Pollution Control Board, Odisha vide letter No. 8501/IND-I-CON-4699 dated 18.05.2022. Further, a complaint has been filed by one villager of Santhapada under Angul district in the National Green Tribunal, Kolkata vide OA No 45 of 2022.
15. The EAC deliberated on the certified compliance report and its Action Plan on CTO and found it satisfactory.
16. The EAC deliberated on the written submission of project proponent and found it satisfactory.
17. The EAC deliberated on the proposal with due diligence in the process as notified under the provisions of the EIA Notification, 2006, as amended from time to time and accordingly made the recommendations to the proposal. The Experts Members of the EAC found the proposal in order and recommended for grant of environmental clearance.
18. The 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.
19. The environmental clearance recommended to the project/activity is strictly under the provisions of the EIA Notification 2006 and its subsequent amendments. It does not tantamount/construe to approvals/consent/permissions etc. required to be obtained or standards/conditions to be followed under any other Acts/ Rules/ Subordinate legislations, etc., as may be applicable to the project. The project proponent shall obtain necessary permission as mandated under the Water (Prevention and Control of Pollution) Act, 1974 and the Air (Prevention and Control of Pollution) Act, 1981, as applicable from time to time, from the State Pollution Control Board, prior to construction & operation of the project.

Recommendations of the Committee

39.9.21 In view of the foregoing and after detailed deliberations, the committee **recommended** the instant proposal for grant of Environment Clearance **subject to uploading the written submission on portal** under the provisions of EIA Notification, 2006 subject to 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 subject to grant of Forest Clearance under the provisions of the FC Act, 1980 for the 29.29 acre (11.853 ha) involved in the proposed expansion 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.**
- (iii) The PP shall comply with all the environmental protection measures and safeguards proposed in the documents submitted to the Ministry. All the recommendations made in the EIA/EMP in respect of environmental management, and risk mitigation measures relating to the project shall be implemented.
- (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) The PP shall strictly implement the Action Plan/Mitigation measures as prescribed in the EIA/EMP Report to address the emissions due to high AAQ values.
- (vi) The PP shall complete the acquisition of the proposed project land prior to commencement of proposed expansion project.
- (vii) The water requirement of 120.45 m³/day (for Existing units - 28 m³/day + for Proposed units - 92.45 m³/day), shall be met from Brahmani River. Necessary permission shall be obtained from the Competent Authority. No ground water abstraction is permitted.
- (viii) Three tier Green Belt shall be developed in atleast 40% of project area in a period of 1 year with native species all along the periphery of the project site of adequate width and tree density shall not be less than 2500 per ha. Survival rate of green belt developed shall be monitored on periodic basis to ensure that damaged plants are replaced with new plants in the subsequent years. PP shall develop greenbelt in the form of shelter belt comprising of total of 6 rows of 2x2 m plantation with tall trees & broad leaves with thick canopy along with windshield inside the plant premises to act as green barrier for air pollution & noise levels towards nearby ESA's. 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. 6.14 Crores shall be strictly implemented and progress shall be submitted to the Regional Office of MoEF&CC.
- (x) As committed, the PP shall adopt three nearby villages namely Kulei, Gengutia and Kualo and implement the Village Adoption program consisting of need-based community development activities, to develop them into model villages.

B. General Conditions

I. Statutory compliance:

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

II. 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. PM₁₀ and PM_{2.5} in reference to PM emission, and SO₂ and NO_x in reference to SO₂ and NO_x 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/Nm³ 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. Provide Low NO_x burners as primary measures and SCR /NSCR technologies as secondary measure to control NO_x emissions.
 - xx. The emission norms applicable for the cement plant shall be adhered to.
 - xxi. Dioxin and Furan monitoring shall be carried out once in six months at cement kiln stack.
 - xxii. DeSO_x system shall be provided dry type. NO_x level shall be maintained below 600 mg/Nm³ by using best available technology.
 - xxiii. Petcoke dosing shall be controlled automatically to control SO₂ emission from chimney within the prescribed limits.
 - xxiv. PP shall identify the Source of fluoride emissions and action plan to mitigate the same shall be implemented.
 - xxv. Pollution control system in the cement plant shall be provided as per the CREP Guidelines of CPCB.
 - xxvi. 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.
 - xxvii. The coal dust should be monitored at coal unloading, crushing, furnace areas and should be within 2 mg/m³, respirable dust fraction containing less than 5% quartz as per Indian Factories Act, 1948.
 - xxviii. 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.
 - xxix. Low NO_x 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. Use torpedo ladle for hot metal transfer as far as possible. If ladles not used, provide covers for open top ladles.
- ii. Restrict Gas flaring to < 1%.
- iii. Provide solar power generation on roof tops of buildings, for solar light system for all common areas, street lights, parking around project area and maintain the same regularly;
- iv. Provide LED lights in their offices and residential areas.
- v. The project proponent shall provide waste heat recovery system (pre-heating of combustion air) at the flue gases of reheating furnaces.
- vi. Practice hot charging of slabs and billets/blooms as far as possible.

- vii. Ensure installation of regenerative type burners on all reheating furnaces.
- viii. The project proponent shall provide waste heat recovery system on the DRI Kilns.
- ix. The dolochar generated shall be used for power generation.
- x. 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.
- xi. The PP shall implement the guidelines on sponge iron plants issued by the CPCB/SPCB in this regard.
- xii. The project proponent make efforts to achieve power consumption less than 65 units/tonne for Portland Pozzolona Cement (PPC) and 85 units/tonne for Ordinary Portland Cement (OPC) production and thermal energy consumption of 670 Kcal/Kg of clinker.
- xiii. Maximize utilization of fly ash, slag and sweetener in cement blend as per BIS standards.
- xiv. Maximize utilization of alternate fuels and Co-processing to achieve best practice norms.
- xv. Waste heat recovery system shall be provided for kiln and cooler.

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. 39.10

39.10 Expansion & Modernization of Integrated Steel Plant-Blast Furnace - 0.75 MTPA to 2.00 MTPA (0.75 MTPA to 1 MTPA through modernization) Sinter Plant - 0.80 MTPA to 2.80 MTPA, Pellet Plant -1.5 MTPA to 3.0 MTPA, Coke Oven -0.20 MTPA to 1.10 MTPA, Air Separation unit (Oxygen Plant) - 510 TPD to 1500 TPD, Steel Melt Shop -1.20 MTPA to 2.40 MTPA, Rolling Mill - 1.20 MTPA to 2.40 MTPA, Cement Grinding unit-2.40 MTPA, Producer Gas Plant - 1,16,000 Nm³/hr., Power Plant - 26 MW to 130 MW (Proposed 104 MW-BF GAS and COKE OVEN GAS) DRI Plant (350 TPD + 500 TPD) - 0.27 MTPA(0.12 +0.15) to 0.35 MTPA (Under CTE/CTO Now), Power plant - 30 MW (2x 15 MW Turbine - WHRB and AFBC, Operating Under CTE/CTO) by M/s Jayaswal Neco Industries Limited, located at Siltara Industrial Growth Center, Siltara, Sankra, Giroud, Dhaneli (V), Raipur (D & T), Chhattisgarh - Re-Consideration of Environmental Clearance

**[Proposal No. IA/CG/IND1/419709/2023; File No. J-11011/883/2008-IA.II(I)]
[Consultant : Pioneer Enviro Consultants Pvt. Ltd.; Valid upto: 21.09.2025]**

- 39.10.1 M/s. Jayaswal Neco Industries Limited has made an online application vide proposal no. Proposal No. IA/CG/IND1/419709/2023; dated 11.03.2023 along with copy of EIA/EMP report, Forms (Part A, B and C) and certified compliance report seeking Environment Clearance (EC) under the provisions of the EIA Notification, 2006 for the project mentioned above. The proposed project activity is listed at S. No. 3(a) Metallurgical industries (ferrous & non-ferrous) and 1(d) Thermal Power Plants under Category "A" of the schedule of the EIA Notification, 2006 and appraised at Central Level.
- 39.10.2 Name of the EIA consultant: M/s Pioneer Enviro Laboratories & Consultants Pvt. Ltd. [List of ACOs with their Certificate / Extension Letter no. NABET/EIA/2225/RA 0282; valid upto 21.09.2025, as on June 30, 2023].

Details submitted by Project proponent

39.10.3 The details of the ToR are furnished as below:

Date of application	Consideration	Details	Date of accord	ToR Validity
6 th November 2021	Standard ToR Granted	TOR issued	10 th November 2021	9 th November 2025

39.10.4 The project of M/s. Jayaswal Neco Industries Limited located in Siltara Growth Center, Siltara, Sankra, Giroud, Dhaneli Villages, Raipur (District and Tehsil), Chattisgarh State is for expansion and Modernization of its existing Integrated Steel Plant from 1.2 MTPA to 2.4 MTPA. Further, PP has requested for Consolidated Environmental Clearance after having acquired the projects of M/s. Abhijeet Infrastructure Limited & M/s. Corporate Ispat Alloys Limited which were running on the basis of CTE/CTO.

39.10.5 Environmental Site Settings:

S.No.	Particulars	Details	Remarks																								
1.	Total land	481.292 Ha. (1189.3 Acres)	Located in Siltara Growth Centre																								
2.	Land acquisition details as per MoEF&CC, O.M.dated7/10/2014.	<table border="1"> <thead> <tr> <th>Particular of land</th> <th>Area in Hectare</th> </tr> </thead> <tbody> <tr> <td>CSIDC Leased Land (lease)</td> <td>417.35</td> </tr> <tr> <td>Land came in possession due to merger of adjoining assets vide high court order</td> <td>35.721</td> </tr> <tr> <td>Private land (acquired)</td> <td>28.221</td> </tr> <tr> <td>Total</td> <td>481.292</td> </tr> </tbody> </table>	Particular of land	Area in Hectare	CSIDC Leased Land (lease)	417.35	Land came in possession due to merger of adjoining assets vide high court order	35.721	Private land (acquired)	28.221	Total	481.292	Entire land is in possession														
Particular of land	Area in Hectare																										
CSIDC Leased Land (lease)	417.35																										
Land came in possession due to merger of adjoining assets vide high court order	35.721																										
Private land (acquired)	28.221																										
Total	481.292																										
3.	Existence of habitation & involvement of R&R, if any.	No habitation exists, no R&R involved, as the plant is in Declared Industrial Area. There is no increase in land area.	The plant had been commissioned in the year 1994-1996 on CSIDC leased land which is in the Declared Industrial Area. No additional land is required for expansion.																								
4.	Latitude and Longitude of all corners of the project site	<p>The following are the Coordinates of the Plant site</p> <table border="1"> <thead> <tr> <th>S.no</th> <th>Latitude</th> <th>Longitude</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>21°20'45.93"N</td> <td>81°39'23.27"E</td> </tr> <tr> <td>2</td> <td>21°20'51.61"N</td> <td>81°40'13.71"E</td> </tr> <tr> <td>3</td> <td>21°20'33.46"N</td> <td>81°40'6.08"E</td> </tr> <tr> <td>4</td> <td>21°20'28.22"N</td> <td>81°40'2.18"E</td> </tr> <tr> <td>5</td> <td>21°20'25.50"N</td> <td>81°40'10.13"E</td> </tr> <tr> <td>6</td> <td>21°20'20.69"N</td> <td>81°40'10.12"E</td> </tr> <tr> <td>7</td> <td>21°20'23.46"N</td> <td>81°40'24.45"E</td> </tr> </tbody> </table>	S.no	Latitude	Longitude	1	21°20'45.93"N	81°39'23.27"E	2	21°20'51.61"N	81°40'13.71"E	3	21°20'33.46"N	81°40'6.08"E	4	21°20'28.22"N	81°40'2.18"E	5	21°20'25.50"N	81°40'10.13"E	6	21°20'20.69"N	81°40'10.12"E	7	21°20'23.46"N	81°40'24.45"E	--
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S.No.	Particulars	Details			Remarks																								
		8	21°20'38.26"N	81°40'24.29"E																									
		9	21°20'37.77"N	81°40'28.52"E																									
		10	21°20'42.08"N	81°40'29.08"E																									
		11	21°20'43.14"N	81°40'15.11"E																									
		12	21°20'51.04"N	81°40'14.67"E																									
		13	21°20'57.61"N	81°40'37.80"E																									
		14	21°20'44.00"N	81°41'8.81"E																									
		15	21°21'14.48"N	81°40'56.05"E																									
		16	21°21'41.59"N	81°40'56.32"E																									
		17	21°21'56.20"N	81°40'19.36"E																									
		18	21°21'48.71"N	81°39'53.69"E																									
		19	21°21'15.22"N	81°39'36.47"E																									
		20	21°20'54.45"N	81°39'28.95"E																									
5.	Elevation of the project site	272 m to 298 m			--																								
6.	Involvement of Forest Land, if any	None			Located in Siltara Growth Centre																								
7.	Water body (Rivers, Lakes, Pond, Nala, Natural Driange, Canal etc.) exists within the project site as well as study area	<p>Project Site: The Canal which is passing through the southern boundary</p> <p>Study area:</p> <table border="1"> <thead> <tr> <th>Habitation</th> <th>Distance</th> <th>Direction</th> </tr> </thead> <tbody> <tr> <td>Kharun River</td> <td>5.0 Kms.</td> <td>NW</td> </tr> <tr> <td>Mandhar Branch Canal</td> <td>0.3 kms.</td> <td>East</td> </tr> <tr> <td>Siltara Village Pond</td> <td>0.35 Kms.</td> <td>North</td> </tr> <tr> <td>Giroud village Pond</td> <td>0.7 Kms.</td> <td>South</td> </tr> <tr> <td>Dhaneli Village Pond</td> <td>0.6 Kms.</td> <td>South</td> </tr> <tr> <td>Mandhar Village Pond</td> <td>0.5 Kms.</td> <td>SE</td> </tr> <tr> <td>Sankara Village Pond</td> <td>0.15 Kms.</td> <td>W</td> </tr> </tbody> </table>			Habitation	Distance	Direction	Kharun River	5.0 Kms.	NW	Mandhar Branch Canal	0.3 kms.	East	Siltara Village Pond	0.35 Kms.	North	Giroud village Pond	0.7 Kms.	South	Dhaneli Village Pond	0.6 Kms.	South	Mandhar Village Pond	0.5 Kms.	SE	Sankara Village Pond	0.15 Kms.	W	Obtained NOC from the office of Water Resources Department, Govt. of Chhattisgarh vide letter No. 17534/Work/3401 Raipur, Dated 09.05.2023
Habitation	Distance	Direction																											
Kharun River	5.0 Kms.	NW																											
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Sankara Village Pond	0.15 Kms.	W																											
8.	Existence of ESZ / ESA / National Park / Wildlife Sanctuary / Biosphere Reserve / Tiger Reserve / Elephant Reserve etc. if any within the study area	Nil.			--																								

39.10.6 EC was initially granted vide letter No. J-11011/11/94-IA.II(I) dated 26.05.1995 for installation of blast furnace (600 m³) to produce 3,50,000 TPA of pig iron along with 8 MW CPP based on blast furnace gas in the name of Nagpurt Alloys Castings Ltd. Subsequently various amendments

had been made in EC by adding capacities and additional facilities, the last amendment in EC was granted vide No. J-11011/883/2008-IA-II (I) dated 26.03.2009. Two Units of DRI Plant and Associated power plant which were operating under CTO granted by the SPCB in the name of two group companies namely M/s. Abhijeet Infrastructure Limited & M/s. Corporate Ispat Alloys Limited who have installed 350 TPD DRI plant and 15 MW (7.5 MW AFBC + 7.5 MW WHRB) power plant and 500 TPD DRI plant and 15 MW (12 MW WHRB + 3 MW AFBC) power plant respectively in the year 2006 and 2007. The same have been demerged from those respective group companies and had been merged with Jayaswal Neco Industries Limited vide High Court order dated 13th November 2009.

The PP has further reported that after merger, the company had approached MOEF&CC vide letter dated 20.02.2014 for amendment in EC by addition of the DRI plants and Power Plants of the merged unit. During the presentation on 25.02.2015, it was advised that there is no such provisions of merging the units which are operating under CTO, and the request was rejected without any direction. Again the company approached MOEF on 07.12.2019 for issuance of fresh TOR for merger of the units with Jayaswal Neco Industries Limited. However the proposal was returned back with a direction “to integrate the proposal by consolidating all the existing units”. Since the current EC had expired after the validity of 10 years hence it was advised to file for fresh TOR incorporating all the Expansion and Modernisation program along with the DRI plant and Power plant which had come as merger.

The current status of CTO is as under:

- CTO for Steel complex vide order no. 7303/TS/CECB/2022 dated 12/01/2022 (valid up to 31/12/2024),
- CTO for Pellet plant capacity enhancement vide no. 8386 /TS/CECB/2022 dated 18/02/2022 (valid up to 31/12/2024)
- CTO for 350 TPD (1,20,000 TPA) DRI unit & power plant vide order no. 2558 /TS/CECB/2022 DATED 07-07-2022 (valid up to 31-07-2024)
- CTO for 500 TPD (1,50,000 TPA) DRI unit & power Plant vide order no. 3107 /TS/CECB/2022 DATED 27-07-2022 (valid up to 30-09-2024).

Chronology of Permission obtained:

Date	EC / CTE order Reference	Facilities
26-05-1995	J-11011/11/94-IA-II(I) (M/s. Nagpur Alloys Castings Ltd.)	Blast Furnace (600 M ³) to produce 3,50,000 TPA Pig Iron along with 8 MW CPP.
08-01-1998	J-11011/11/96-IA-II(I) (M/s. Nagpur Alloys Castings Ltd.)	2,68,110 TPA Coke Oven Plant (recovery type)
14-05-2004	J-11011/22/ 2004- IA-II (I) (M/s. Jayaswal Neco Ltd.)	Sinter Plant:- 2400 TPD Steel Melting Shop (SMS):- 1200 TPD Rolling Mill:- 1200 TPD Oxygen Plant:- 110 TPD Stand By Boiler :- 30 TPH
27-12-2004	J-11011/3/96-IA-II (I) - EC amendment	2,68,110 TPA for Coke Oven Plant (Amended to Non-Recovery type)

Date	EC / CTE order Reference	Facilities
	(M/s. Jayaswal Neco Ltd.)	
08-09-2008	J-11011/809/2007-IA-II (I) – E.C. Expansion (M/s. Jayaswal Neco Ltd.)	Enhancement of Blast Furnace from 0.35 MTPA to 0.65 MTPA and additional of 1 MTPA New blast furnace total capacity 1.65 MTPA Iron Ore Beneficiation of Pellet Plant – 2.5 MTPA Expansion of Sinter Plant from 2400 TPD to 8400 TPD Expansion of Coke Oven Non Recovery from 0.268 to 0.868 MTPA Enhancement of Oxygen Plant from 110 TPD to 510 TPD Expansion of Steel Melting Shop from 1200 TPD to 7200 TPD Expansion of rolling mill from 1200 TPD to 7200 TPD Cement Grinding Unit:- 2.4 MTPA Captive power Plant:- 107 MW
26-3-2009	J-11011/883/ 2008-IA-II (I)- E.C. for Renovation cum Modernization (M/s. Jayaswal Neco Industries Ltd.)	Renovation and Modernization of Blast Furnace and Increase of capacity from 0.65 to 0.75 MTPA
26-09-2014	J-11011/809/ 2007-IA-II (I)- EC Extension for EC dated 08-09-2008 (M/s. JNIL)	Validity extension of EC by another 5 years + 5 years till 07-09-2018. (10 years)
03-02-2015	J-11011/883/ 2008-IA-II (I)- EC Extension for EC dated 26-03-2009 (M/s. JNIL)	Validity extension of the EC.
18-05-2015	J-11011/809/ 2007-IA-II (I)- Corrigendum for EC dated 08-09-2008 (M/s. JNIL)	Corrigendum Issued by Separating beneficiation and pellet plant. Beneficiation Plant 3.00 MTPA and Pellet Plant 2.50 MTPA.
31-08-2005	3053 / TS / CECB / 2005 dated (CTE issued in the Name of Abhijeet Infrastructure Ltd.)	1 x 350 TPD DRI Kiln, 7.5 MW WHRB, 7.5 MW AFBC power plant (prior to EIA Notification 2006 and also investment is less than Rs.100 crores accordingly E.C. not required as per EIA notification 1994 also)
13-11-2009	Vide High Court order the 350 TPD DRI plant and 15 MW Power plant (7.5 MW WHRB + 7.5 MW AFBC) the units of M/s. Abhijeet Infrastructure Limited was demerged and merged with Jayaswal Neco Industries Limited. The unit was operating under CTO Granted by CECB. Effective date of merger was 01/04/2008. The company had valid CTO No. 2558 /TS/CECB/2022 DATED 07-07-2022 (valid up to 31-07-2024)	
02-05-2006	2292 / TS / CECB / 2006 (CTE issued in the Name of	1x500 TPD DRI Kiln, 12 MW WHRB, 3 MW AFBC (prior to EIA Notification 2006 and also investment is less than Rs.100 crores accordingly E.C. not required as per EIA notification 1994 also)

Date	EC / CTE order Reference	Facilities
	Corporate Ispat Alloys Ltd.)	
13-11-2009	Vide High Court order the 500 TPD DRI plant and 12 MW Power plant units of M/s. Corporate Ispat Alloys Limited was demerged and merged with Jayaswal Neco Industries Limited. The unit was operating under CTO Granted by CECB. Effective date of merger was 01/04/2008. The company had valid CTO No. 3107 /TS/CECB/2022 Dated 27-07-2022 (valid up to 30-09-2024).	

39.10.7 Implementation status of the existing EC:

S. No	Facility	Units	As per E.C. dated J-11011/883/2008-IA-II (I) dated 26-03-2009	Implementation Status as On date	Production as per CTO
1	Blast Furnace	MTPA	1.75 (0.65+0.10+1.00)	Partially implemented	0.75 MTPA
	BF Gas based Power Plant	MW	44	Partially Implemented	8 MW + 6 MW
2	Sinter plant	MTPA	2.8	Partially implemented	0.8 MTPA
3	Pellet Plant	MTPA	2.5	Partially implemented	1.5 MTPA
4	Coke Oven	MTPA	0.868	Partially implemented	0.20 MTPA
	Coke oven heat based Power Plant	MW	63	Partially implemented	12 MW (WHRB) (2 x 6 MW)
5	Air Separation unit (Oxygen plant)	TPD	510	Fully Implemented	510 TPD
6	Steel Melting Shop	MTPA	2.4	Partially Implemented	1.2 MTPA
7	Rolling Mill	MTPA	2.4	Partially implemented	1.2 MTPA
8	DRI &	MTPA	Not in EC	Fully Implemented	0.12 + 0.15 MTPA (350 TPD + 500 TPD)
	Power Plant	MW	Not in EC	Partially Implemented	15 + 12 MW

S. No	Facility	Units	As per E.C. dated J-11011/883/2008-IA-II (I) dated 26-03-2009	Implementation Status as On date	Production as per CTO
					(7.5 +12 MW WHRB and 7.5 MW AFBC)
9	Cement Grinding Unit	MTPA	2.4	Not implemented	-----
10	Gasifier plant	Nm3/Hr	Not in EC	Not implemented	-----

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

S. No	Facility (Product)	Existing Capacity (in operation)	Proposed Capacity	Capacity after Expansion
1	Blast Furnace & BF Gas based Power Plant (Pig iron/Hot Metal) (Electricity) Associated BF Gas based power plant (Additional 30 TPH AFBC Boiler Standby boiler)	0.75 MTPA (0.65 MTPA + 0.1 MTPA)	0.25 MTPA (with modernization)+ 1.00 MTPA (1x 1000 M ³)	2.0 MTPA (750 M ³ + 1000 M ³)
		8 MW + 6 MW (BF Gas Based)	04+24 MW (BF Gas Based)	42 MW (BF Gas Based)
2	Sinter plant (Sinters)	0.8 MTPA (2 x36 M ²)	2.0 MTPA (5 x36 M ²)	2.8 MTPA (2 x36 M ² + 5 x36 M ²)
3	Pellet Plant (Pellets)	1.5 MTPA	1.5 MTPA	3.0 MTPA (2 x 1.5 MTPA)
4	Coke Oven & Power Plant (Coke) (Electricity)	0.2 MTPA 4 set of batteries consisting of 11 ovens	0.9 MTPA 18 set of batteries consisting of 11 ovens	1.10 MTPA 22 set of batteries consisting of 11 ovens
		12 MW (WHRB) 2 x 6 MW	76 MW (WHRB) 6 x 6 MW + 2 x20 MW	88 MW (WHRB) 8 x 6 MW + 2x 20 MW
5	Oxygen plant (Oxygen)	510 TPD	990 TPD	1500 TPD
6	Steel Melting Shop- EAF (Hot Billets / MS Billets / Slabs)	1.2 MTPA (1 x 50 TPH + 1 x 80 TPH)	1.2 MTPA (2 x 70 T)	2.4 MTPA (1 x 50 TPH + 1 x 80 TPH + 2 x 70 TPH)
7	Rolling Mill (Bright Bar / BSM/ Wire Rod/ Rolled Products)	1.2 MTPA 1 x 25 TPH + 1 x 50 TPH + 1 x 90 TPH	1.2 MTPA (2 x 90 TPH)	2.4 MTPA 1 x 25 TPH + 1 x 50 TPH + 2 x 90 TPH

S. No	Facility (Product)	Existing Capacity (in operation)	Proposed Capacity	Capacity after Expansion
8	DRI & Power Plant (Sponge Iron) (Electricity turbine 2 x 15 MW)	0.12* + 0.15** MTPA (350 TPD + 500 TPD)	0.08 MTPA (Change in fuel under modernization)	0.35 MTPA
	Power Plant	1 x 7.5 MW WHRB 1 x 7.5 MW AFBC (1 x 15 MW Turbine) 1 x 12 MW WHRB (1 x 15 MW Turbine)	-----	30 MW (1 x 7.5 MW AFBC + 1 x 7.5 MW WHRB + 1 x 15 MW WHRB) (2 x 15 MW Turbine)
9	Cement Grinding Unit (Cement)	-----	2.4 MTPA	2.4 MTPA
10	Gasifier (Producer Gas plant) (as a fuel, substitute of FO)	-----	1,16,000 Nm ³ /hrs (29 x 4000 Nm ³ /hrs)	1,16,000 Nm ³ /hrs (29 x 4000 Nm ³ /hrs)
<p># Pellet plant capacity enhancement from 1.2 MTPA to 1.5 MTPA obtained under No increase in Pollution load., CTO is amended accordingly.</p> <p>For 350 TPD DRI Plant + 15 MW power plant and 500 TPD DRI Plant and 15 MW Power plant had been operating under the CTE/CTO granted by CECB in the name of Abhijeet Infrastructure Limited and Corporate Ispat Alloys Limited. Vide High Court Bombay order dated 13-11-2009, Both the plants demerged from those respective company and merged with M/s. Jayaswal Neco Industries Limited. These plants are adjoining plants.</p>				

39.10.9 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.	Name of Raw Material	Quantity in TPA			Source	Mode of Transportation
		Existing	Expansion	After expansion		
1	Iron ore	553500	267500	8,21,000	Own Mines (Metabodeli, Chhotedongar iron Ore Mines)	By Road (covered Trucks)
2	Iron Ore fines	2244380	32,44,320	54,88,700	Own Mines (Metabodeli, Chhotedongar iron Ore Mines)	By Road (covered Trucks)
3	LAM coal (coking Coal)	290720	1308240	1598960	Imported (South Africa, Indonesia, Australia)	By Ship, By Road (covered Trucks)

S. No.	Name of Raw Material	Quantity in TPA			Source	Mode of Transportation
		Existing	Expansion	After expansion		
4	Pulverized Coal (PCI)	87000	145000	232000	Imported (South Africa, Indonesia, Australia)	By Ship, By Road (covered Trucks)
5	Imported High Grade Coal	3,78,000	----	3,46,500	Imported (SA, Indonesia, Aus)	By ship and Road (covered Trucks)
6	Indian Coal	120000	400000	520000	SECL /local	By Rail & Road (covered Trucks)
7	Quartzite	7500	12500	20000	Open Market	By Road (covered Trucks)
8	Bentonite	10950	10950	21900	Local Market	By Road (covered Trucks)
9	Clinker	-	1560000	1560000	Local Market	By Rail & Road (covered Trucks)
10	Gypsum +Other Waste	-	96200	96200	Own Generation /Local Plant	By Road (covered Trucks)
11	Lime Stone	138370	296650	435020	Local Market	By Road (covered Trucks)
12	Dolomite	10,800	----	10,500	Local market	By Road (covered Trucks)
13	LDO	23100	23100	46200	Local Market /own Plant	By Road (covered Trucks)

39.10.10 Existing Water requirement is 15,000 m³/day, water requirement is obtained from River Kharoon wherein an anicut had been constructed by JNIL with CSIDC. The unit had sanction for 8 MGD drawl from the same from WRD GOC wide letter dated S.No.5323/29/14/M/31/01 dated 28-10-2002.The water requirement for the proposed expansion project is estimated at 12,646 m³/day and will also be sourced from the anicut at River Kharoon.Total requirement of water with the expansion is 27,646 m³/day which is equivalent to 6.30 MGD. The company holds a sanction of 8 MGD from WRD GOC, and had constructed an anicut to meet its total requirement. Hence no additional water permission is required for the expansion project.

39.10.11 Power required for the Existing Plant & CTO permitted units is 161.3 MW and is being sourced from 56 MW Captive Power plant & remaining from State Grid. Power required for the proposed expansion project will be 191.4 MW out of which 104 MW is from Captive Power plant& remaining from State Grid. Total power requirement after expansion is 352.7 MW . Out of which

160 MW will be sourced from captive power plant and remaining will be sourced from the state grid.

39.10.12 Baseline Environmental Studies:

Period	15 th October 2021 to 15 th January 2022																																			
AAQ parameters at 8 locations	<ul style="list-style-type: none"> • PM_{2.5}= 26.4 to 48.6 µg/m³ • PM₁₀= 45.8 to 83.8 µg/m³ • SO₂= 9.0 to 24.5 µg/m³ • NO₂= 10.1 to 38.4 µg/m³ • CO= 544 to 1658 µg/m³ • Other Parameters such as O₃, Arsenic, Nickel, Lead, Ammonia, Benzene, BaP was found BDL 																																			
AAQ modelling	<ul style="list-style-type: none"> • PM₁₀= 4.5 µg/m³ (1400 m) • SO₂= 11.3 µg/m³(1650 m) • NO₂= 20.6 µg/m³(1480 m) • CO= 4.8 µg/m³ 																																			
Ground water quality at 8 locations	<ul style="list-style-type: none"> • pH : 7.15 to 7.57 • TDS : 363 to 1064 mg/l • TSS : 0.22 to 0.88 mg/l • Chlorides : 124 to 509 mg/l • Total Hardness : 268 to 420 mg/l • Fluoride : 0.2 to 0.54 (in mg/l) • Heavy metals (Iron -Fe) : 0.12 to 0.26 mg/l 																																			
Surface water quality at 5 locations	pH : 6.85 to 7.41; DO (in mg/l) : 4.0 to 6.9; TDS (in mg/l) : 253 to 689, Sulphates (in mg/l) : 86 to 234, Chlorides (in mg/l) : 129 to 352																																			
Noise levels	50.40 dBA to 66.90 dBA for day time and 49.08 to 65.01 dBA for night time.																																			
Traffic assessment study findings	<p>Traffic study has been conducted at NH # 30 (Raipur to Bilaspur), which is Adjacent to the plant site. Transportation of raw material, fuel& finished product will be done 60% by road. Existing PCU is 1559.5 PCU/hr on NH # 30 and existing Level of Service(LOS) is :</p> <table border="1"> <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 # 30</td> <td>1559.5</td> <td>2900</td> <td>0.54</td> <td>C</td> </tr> </tbody> </table> <p>PCU load after proposed project will be 1559.5 (Existing) + 220 (Additional) and Level of Service (LOS) will be</p> <table border="1"> <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 # 30</td> <td>1559.5 + 220</td> <td>2900</td> <td>0.61</td> <td>D</td> </tr> </tbody> </table> <p>Note: Capacity as per IRC-106-1990 Guide line for capacity for roads.</p> <p>Level of Service (LOS) of the Road as per IRC 73: 1980</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> <tr> <td>0.2 – 0.4</td> <td>B</td> <td>Very Good</td> </tr> <tr> <td>0.4 – 0.6</td> <td>C</td> <td>Good</td> </tr> </tbody> </table>				Road	V(Volume in PCU/hr)	C(Capacity in PCU/hr)	Proposed V/C Ratio	LOS	NH # 30	1559.5	2900	0.54	C	Road	V(Volume in PCU/hr)	C(Capacity in PCU/hr)	Proposed V/C Ratio	LOS	NH # 30	1559.5 + 220	2900	0.61	D	V/C	LOS	Performance	0.0 – 0.2	A	Excellent	0.2 – 0.4	B	Very Good	0.4 – 0.6	C	Good
Road	V(Volume in PCU/hr)	C(Capacity in PCU/hr)	Proposed V/C Ratio	LOS																																
NH # 30	1559.5	2900	0.54	C																																
Road	V(Volume in PCU/hr)	C(Capacity in PCU/hr)	Proposed V/C Ratio	LOS																																
NH # 30	1559.5 + 220	2900	0.61	D																																
V/C	LOS	Performance																																		
0.0 – 0.2	A	Excellent																																		
0.2 – 0.4	B	Very Good																																		
0.4 – 0.6	C	Good																																		

	0.6 – 0.8	D	Fair/ Average
	0.8 – 1.0	E	Poor
	1.0 &Above	F	Very Poor
	<p>Conclusion: 1) The level of service is categorised under ‘D’, which implies “Fair/ Average” After including additional traffic due to proposed project.</p> <p>2) NH#30 is being upgraded to 6-lane road . With that LOS will be 1779.5/4300 : 0.42 (“GOOD”)</p> <p>Hence the existing road is capable of taking the additional traffic load.</p>		
Flora and fauna	No schedule I fauna and endangered Flora found within the study area of the project.		

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

S. No.	Name of Waste	Quantity in TPA		Mode of Treatment / Utilization / Method of disposal
		Existing	After expansion	
Blast Furnace				
	Capacity	7,50,000 (6,50,000 + 1,00,000)	20,00,000	
1	BF Slag	2,62,500	8,00,000	Will be used as Raw material for cement making in proposed Cement Grinding unit.
2	Flue Dust	7,800	20,800	Is being / will be reused in sinter plant.
3	GCP Sludge	3,450	9,200	
Sinter Plant				
	Capacity	8,00,000	28,00,000	
1	ESP DUST	34,000	1,03,480	Is being / will be reused in Sinter plant
Coke Oven				
	Capacity	2,00,000	11,00,000	
1	Coke Breeze	10,617	43,560	Is being / will be used in pellet plant
2	Coke Dust	4,424	18,150	Is being / will be reused in Sinter plant
Steel Melting Shop				
	Capacity	12,00,000	24,00,000	
1	Slag	1,24,000	2,48,000	After metal recovery it will be utilized for Road construction & used in own fly ash brick making.
3	Flue Dust	31,200	62,400	Is being / will be used in sinter plant
Rolling Mill				
	Capacity	12,00,000	24,00,000	
1	Mill Scales	12000	24,000	are being / will be reused in Sinter plant
Pellet Plant				

S. No.	Name of Waste	Quantity in TPA		Mode of Treatment / Utilization / Method of disposal
		Existing	After expansion	
	Capacity	15,00,000	30,00,000	
1	Dust	56,250	1,12,500	Flue dust to be recycled back to pellet plant.
Cement Plant				
	Capacity	0.0	24,00,000	
1	Dust from APCS	--	7200	Will be totally recycled in the process for Cement manufacturing.
Power Plant				
	Capacity	15 MW	--	
1	Bottom Ash	13,247	8,333	Road construction and low laying area felling.
2	Fly Ash	54,247	34,183	Used in own fly ash Brick Making unit & proposed to use in Cement Plant
DRI Plant				
	Capacity	2,70,000	3,50,000	
1	Char/Dolochar	94,500	42,000	Using in AFBC for Power Generation
2	ESP Dust	56,700	42,000	Used in own fly ash Brick Making unit & low laying area filling
Producer Gas Plant				
	Capacity	--	1,16,000 Nm³/Hrs	
1	Ash	--	160000 TPA	For road construction and low laying area.

Hazardous waste generation, storage & disposal:

Waste Oil: 30 KL / Annum

This will be stored in covered HDPE drums in a designated area and will be sold to SPCB approved vendors/recyclers.

Used Batteries

Used batteries will be given back to the supplier under buy back agreement with supplier.

39.10.14 Public Consultation:

Details of advertisement given	Dainik Bhaskar & Punjab Kesari News Papers on 24 th April 2022 in
Date of public consultation	25 th May 2022
Venue	Open Ground closed to the JNIL Plant, Dhaneli Village, Dharsiwa Tehsil, Raipur District (C.G)
Presiding Officer	Additional District Magistrate
Major issues raised	<ul style="list-style-type: none"> • Developmental activities • Employment to Local unemployed youth • Support to Merit students • Infrastructure facilities • Environment Protection measures

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

Action Plan for Social & Infrastructural Developmental activities in the adjoining 10 villages are prepared with a total budget of Rs.63.71 Crores. Villages considered for adoption are Siltara, Sankara, Girod, Dhaneli, Mandhar, Charoda, Murethi, Tekari, Nimora and Akoli.

S.NO.	MAJOR ACTIVITY HEADS	YEAR OF IMPLEMENTATION					TOTAL EXPENDITURE (Rs. in Lakhs)	
		1 st Year	2 nd Year	3 rd Year	4 TH Year	5 TH Year		
		(Rs. in Lakhs)	(Rs. in Lakhs)	(Rs. in Lakhs)	(Rs. in Lakhs)	(Rs. in Lakhs)		
A). Based on SIA Study								
1	Community & Infrastructure Development							
	i) Impart technical training to the local youth and women for skill development through skill development council.	100 per year covering 10 villages	100 nos of local youth and women will be imparted training for skill development from 2 nos of villages i.e. Giroud & Sankra	100 nos of local youth and women will be imparted training for skill development from 2 nos of villages i.e. Siltara & Dhaneli	100 nos of local youth and women will be imparted training for skill development from 2 nos of villages i.e. Mandhar & Charoda	100 nos of local youth and women will be imparted training for skill development from 2 nos of villages i.e. Murethi & Tekari	100 nos of local youth and women will be imparted training for skill development from 2 nos of villages i.e. Nimora & Sondra	1000
		Budget in Lakhs	200	200	200	200	200	
	ii) Construction of public toilets in nearby villages	120 toilets in 10 villages	20 nos- Giroud	10 nos- Siltara	30 nos- Mandhar	5 nos- Murethi	5 nos- Nimora	360
			10 nos- Sankra	10 nos- Dhaneli	10 nos - Charoda	10 nos- Tekari	10 nos- Akoli	
		Budget in Lakhs	90	60	120	45	45	
	iii) Installation of tube well with solar panel and water storage overhead tank.	10 villages	2 nos - Giroud	1 no- Siltara	2 no- Mandhar	1 no- Murethi	1 no- Nimora	570
		12 sets	1 no- Sankra	1 no- Dhaneli	1 no- Charoda	1 no- Tekari	1 no- Akoli	
		Budget in Lakhs	120	100	150	100	100	
	iv) Street Lighting (Solar) provision at suitable public	10 Villages	30 nos- Giroud	20 nos- Siltara	30 nos- Mandhar	20 nos- Murethi	20 nos- Nimora	55
210 Numbers		20 nos- Sankra	20 nos- Dhaneli	20 nos- Charoda	20 nos- Tekari	20 nos- Akoli		

S.NO.	MAJOR ACTIVITY HEADS		YEAR OF IMPLEMENTATION					TOTAL EXPENDITURE (Rs. in Lakhs)
			1 st Year	2 nd Year	3 rd Year	4 TH Year	5 TH Year	
			(Rs. in Lakhs)	(Rs. in Lakhs)	(Rs. in Lakhs)	(Rs. in Lakhs)	(Rs. in Lakhs)	
	places in and around the nearby villages	Budget in Lakhs	12.5	10	12.5	10	10	
	v) Repair and maintenance of existing village roads	Physical No. & Village	2 nos Giroud 2 nos. Sankara	2 nos Siltara 2 nos. Dhaneli	2 nos Mandhar 2 nos. Charoda	2 nos Murethi 2 nos. Tekari	2 nos Nimora 2 nos. Akoli	500
		Budget in Lakhs	100	100	100	100	100	
	vi)Development of mini stadium in existing play ground of villages	Physical Nos.	01 No. at Siltara	01 No. at Murethi	01 No. at Dharsiwa	01 No. at Dhaneli	01 No. at Mandhar	400
		Budget in Lakhs	80	80	80	80	80	
	YEAR WISE EXPENDITURE (A)		602.5	550	662.5	535	535	2885
	Education							
	i) Providing Sports kits to Schools/ Sports club	Physical Nos. & village	1 no- Giroud 1 no- Sankara	1 no- Siltara 1 no- Dhaneli	1 no- Mandhar 1 no- Charoda	1 no- Murethi 1 no- Tekari	1 no- Nimora 1 no- Akoli	15
		Budget in Lakhs	3	3	3	3	3	
2	ii) Support State Govt. for development of Atmanand School/Existing School which includes Building, furniture, Digital education,library, classroom, computer, etc.	Physical Nos. & village	During 1st Year Giroud & Dhaneli village	During 2nd Year Siltara & Sankara village	During 3rd Year Mandhar & Tekari village	During 4th Year Murethi & Charoda village	During 5th Year Nimora & Akoli village	500
		Budget in Lakhs	100	100	100	100	100	

S.NO.	MAJOR ACTIVITY HEADS		YEAR OF IMPLEMENTATION					TOTAL EXPENDITURE (Rs. in Lakhs)
			1 st Year	2 nd Year	3 rd Year	4 TH Year	5 TH Year	
			(Rs. in Lakhs)	(Rs. in Lakhs)	(Rs. in Lakhs)	(Rs. in Lakhs)	(Rs. in Lakhs)	
	iii) Development work in local schools, provision of study material & scholarships to be provided to meritorious students	Physical Nos. & village	Study material & scholarships to be provided to meritorious students and coaching support to be provided to meritorious students for competitive exams i.e. JEE, NEET, PET, PAT & PPT etc. to 10 nos. nearby villages.					150
		Budget in Lakhs	30	30	30	30	30	
	YEAR WISE EXPENDITURE (B)		133	133	133	133	133	665
3	Health Facilities							
	i) Regular health camps for local inhabitants specially for women & children. Outside workers would be tested for communicable disease.	Physical Nos. & village	Health checkup camps shall be organized at regular interval in 10 nos. nearby villages for general body, eyes, blood test, vaccination etc. For this purpose, one doctor along with 2 – 3 assistants shall be deputed.					500
		Budget in Lakhs	100	100	100	100	100	
	ii) Sanitation facility in existing schools, and other public places i.e. panchayat bhawan, pds center etc.	Physical Nos. & village	Sanitation facilities to be provided to the village Giroud & Dhaneli during 1st Year.	Sanitation facilities to be provided to the village Siltara & Sankara during 2nd Year.	Sanitation facilities to be provided to the village Mandhar & Tekari during 3rd Year.	Sanitation facilities to be provided to the village Murethi & Charoda during 4 th Year.	Sanitation facilities to be provided to the village Nimora & during 5 th Year.	205
	Budget in Lakhs	50	50	50	30	25		
	iii) Sanitary Napkins Vending	Physical Nos. & village	Machines will be installed in schools of	Machines will be installed in schools of	Machines will be installed in schools of	Machines will be installed in schools of village	--	25

S.NO.	MAJOR ACTIVITY HEADS		YEAR OF IMPLEMENTATION					TOTAL EXPENDITURE (Rs. in Lakhs)
			1 st Year	2 nd Year	3 rd Year	4 TH Year	5 TH Year	
			(Rs. in Lakhs)	(Rs. in Lakhs)	(Rs. in Lakhs)	(Rs. in Lakhs)	(Rs. in Lakhs)	
	Machine in High Schools.		village Giroud and Dhaneli during 1 st year	village Giroud and Dhaneli during 2 nd Year.	village Mandhar & Tekari during 3 rd Year.	Charoda during 4 th Year.		
		Budget in Lakhs	7	7	7	4	0	
	iv) Drainage Network for Domestic sewage in Villages	Physical Nos. & village	During 1 st Year drainage network to be made/ strengthen in 2 nos of village i.e Giroud and Dhaneli	During 2 nd Year drainage network to be made/ strengthen in 2 nos of village i.e Siltara and Sankra	During 3 rd Year drainage network to be made/ strengthen in 2 nos of Mandhar and Tekari	During 4 th Year drainage network to be made/ strengthen in 2 nos of Charoda and Murethi	During 5 th Year drainage network to be made/ strengthen in 2 nos of village i.e Nimora and Akoli	280
		Budget in Lakhs	60	60	60	60	40	
	YEAR WISE EXPENDITURE (C)		217	217	217	194	165	1010
	Environment							
4	Water Conservation	Physical Nos. & village	1 no. in Govt. Primary School in Dhaneli (V)	1 no. at Anganwadi Kendra of Sankra (V)	1 no. in Govt. Primary School in Girod (V)	1 no. in Govt. Primary School in Murethi and	1 no. in Govt. Middle School in Nimora and	50
	i) RWH pits in the surrounding villages		2 nos. in Pre-Sec. school in Siltara (V)	1 no. at Anganwadi Kendra of Murethi	1 no. at Anganwadi Kendra of Akoli	1 no. in Govt Primary School in Charoda	1 no. in Govt. Primary School in Akoli	
		Budget in Lakhs	10	10	10	10	10	
	ii) Water Body renovation (De-siltation and	Physical No. & Village	01 No. Pond in Girod (V) &	01 No. Pond in Nimora (V) &	01 No. Pond in Tekari (V) &	01 No. in Sankra (V) &	01 No. in Murethi (V) &	500

S.NO.	MAJOR ACTIVITY HEADS		YEAR OF IMPLEMENTATION					TOTAL EXPENDITURE (Rs. in Lakhs)
			1 st Year	2 nd Year	3 rd Year	4 TH Year	5 TH Year	
			(Rs. in Lakhs)	(Rs. in Lakhs)	(Rs. in Lakhs)	(Rs. in Lakhs)	(Rs. in Lakhs)	
	Conservation of pond)		01 No. Pond in Dhaneli (V) & Mandhar Branch Canal	01 No.pond in Akoli (V)	01 No. Pond and in Mandhar (V)	01 No. in Siltara (V)	01 No. in Sondra (V)	
		Budget in Lakhs	100	100	100	100	100	
	iii) Development of Krishnkunj (block plantation) in villages	Physical No. & Village	Village Giroud and Dhaneli during 1st Year	Village Siltara and Sankra during 2nd Year	Village Mandhar and Tekari during 3 rd Year	Village Murethi & Charoda during 4 th Year	Village Nimora and Akoli during 5 th Year	100
		Budget in Lakhs	20	20	20	20	20	
	iv) Tree Plantation in water body bunds @2000 Nos. in each village	Physical No. & Village	Village Giroud and Dhaneli during 1st Year	Village Siltara and Sankra during 2nd Year	Village Mandhar and Tekari during 3 rd Year	Village Murethi & Charoda during 4 th Year	Village Nimora and Akoli during 5 th Year	100
		Budget in Lakhs	20	20	20	20	20	
	(IV) Development of local village roads	Physical No. & Village	In Giroud and Dhaneli village during 1st Year	In Siltara and Sankra village during 2nd Year	In Mandhar and Tekari village during 3 rd Year	In Murethi & Charoda village during 4 th Year	In Nimora and Akoli village during 5 th Year	625
		Budget in Lakhs	125	125	125	125	125	
YEAR WISE EXPENDITURE (E)			275	275	275	275	275	1375
LIVELIHOOD								
1	Promotion and Assitance for Cottage Industres. Dairy, Dona Pattal, Nursery, Pottery,	Physical No. 10 Villages	Dhaneli, Tekari, Siltara, Mandhar, Girod, Sankra, Murethi, Akoli, Charoda, Nimora	Dhaneli, Tekari, Siltara, Mandhar, Girod, Sankra, Murethi, Akoli, Charoda, Nimora	Dhaneli, Tekari, Siltara, Mandhar, Girod, Sankra, Murethi, Akoli,	Dhaneli, Tekari, Siltara, Mandhar, Girod, Sankra, Murethi, Akoli, Charoda, Nimora	Dhaneli, Tekari, Siltara, Mandhar, Girod, Sankra, Murethi, Akoli, Charoda, Nimora	750

S.NO.	MAJOR ACTIVITY HEADS		YEAR OF IMPLEMENTATION					TOTAL EXPENDITURE (Rs. in Lakhs)
			1 st Year	2 nd Year	3 rd Year	4 TH Year	5 TH Year	
			(Rs. in Lakhs)	(Rs. in Lakhs)	(Rs. in Lakhs)	(Rs. in Lakhs)	(Rs. in Lakhs)	
	Badi Papad Achar etc.				Charoda, Nimora			
		Budget in Lakhs	150	150	150	150	150	
2	Maa Usha Noni Yojna for marriage of Girls	Physical No. 10 Villages	Dhaneli, Tekari, Siltara, Mandhar, Girod, Sankra, Murethi, Akoli, Charoda, Nimora	Dhaneli, Tekari, Siltara, Mandhar, Girod, Sankra, Murethi, Akoli, Charoda, Nimora	Dhaneli, Tekari, Siltara, Mandhar, Girod, Sankra, Murethi, Akoli, Charoda, Nimora	Dhaneli, Tekari, Siltara, Mandhar, Girod, Sankra, Murethi, Akoli, Charoda, Nimora	Dhaneli, Tekari, Siltara, Mandhar, Girod, Sankra, Murethi, Akoli, Charoda, Nimora	505
		Budget in Lakhs	101	101	101	101	101	
3	Organization of Krishi mela and development of Certified Seed Center for Farmers	Physical No. & village	01 Nos. in Dhaneli (V)	01 Nos. in Sankra (V)	01 Nos. in Girod (V)	01 Nos. in Siltara (V)	01 Nos. in Dharsiva (V)	500
		Budget in Lakhs	100	100	100	100	100	
4	Promotion and organization the local game i.e. Khokho, Kabaddi for youth	Physical No. & village	01 No. in Nimora (V) & 01 No in Dhaneli (V)	01 No. in Tekari (V) & 01 No in Siltara (V)	01 No. in Girod (V) & 01 No in Sankra (V)	01 No. in Murethi(V) & 01 No in Akoli (V)	01 No. in Mandhar (V) & 01 No in Charoda(V)	100
		Budget in Lakhs	20	20	20	20	20	
YEAR WISE EXPENDITURE (E)			371	371	371	371	371	1855
B). Based on Public Hearing								
1	Providing LED Street lighting with solar panels	Physical Nos. & village	20 nos. in Girod (V)	10 nos. Siltara (V)	10 nos. in Dhaneli (V)	10 nos. in Mandhar (V)	10 nos. in Sankara (V)	30
		Budget in Lakhs	10	5	5	5	5	

S.NO.	MAJOR ACTIVITY HEADS		YEAR OF IMPLEMENTATION					TOTAL EXPENDITURE (Rs. in Lakhs)
			1 st Year	2 nd Year	3 rd Year	4 TH Year	5 TH Year	
			(Rs. in Lakhs)	(Rs. in Lakhs)	(Rs. in Lakhs)	(Rs. in Lakhs)	(Rs. in Lakhs)	
2	Construction of drains	Physical Nos. & village	2 nos. Siltara (V)	3 nos. in Girod (V)	2 nos. Dhaneli (V)	2 nos. in Sankara (V)	1 nos. in Mandhar (V)	250
		Budget in Lakhs	50	75	50	50	25	
3	Provision of Drinking water (Installation of tube well with solar panel and water storage overhead tank)	Physical Nos. & village	1 no in Girod (V)	1 no in Dhaneli (V)	1 no in Sankra (V)	1 no in Siltara (V)	1 no in Mandhar (V)	300
		Budget in Lakhs	60	60	60	60	60	
4	Impart training to the local villagers for skill development.	Physical Nos. & village	For 25 nos. unemployed youth in Dhaneli (V)	For 50 nos. unemployed youth in Girod (V)	For 50 nos. unemployed youth in Siltara (V)	For 50 nos. unemployed youth in Sankra (V)-	For 25 nos. unemployed youth in Mandhar (V)	40
		Budget in Lakhs	5	10	10	10	5	
5	Establishment of Open Gym and garden in School	Physical No. & Village	01 Nos. in Government School in Dhaneli (V)	01 Nos. in Government School Sankra (V)	01 Nos. in Government school in Girod (V)	01 Nos. in Government school in Siltara (V)	01 Nos. in Government school in Tekari (V)	150
		Budget in Lakhs	30	30	30	30	30	
YEAR WISE EXPENDITURE (E)			155	180	155	155	125	770
YEARWISE GRAND TOTAL (A+B+C+D+E)			1753.5	1726	1813.5	1663	1604	8560

39.10.15 The capital cost of the expansion project is Rs.8,560 Crores and the capital cost for environmental protection measures is proposed as Rs.236.51Crores. The annual recurring cost towards the environmental protection measures is proposed as Rs.17.5 Crores. The employment generation from the proposed expansion project is 2000 nos. direct & 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 Crores)
1	Air Emission Management		
	• Electro Static Precipitators (ESP) - PELLET	12.0	1.2
	• Electro Static Precipitators (ESP) - Sinter	40.0	4.0
	• Baghouse + Bag filter -Cement Grinding unit	12.0	1.2
	• Fume Extraction system with bag filters - EAF	8.0	0.8
	• Dust catcher followed by Venturi scrubber	10.0	1.0
	• other APCS & Conveyor systems	25.0	0.75
	• Stacks	42.00	0.35
	• Mechanical Dust sweepers	0.60	0.06
	• Water Sprinklers	1.0	0.01
2	Wastewater Management		
	• for upgradation of ETP	1	0.20
	• for New ETP	7	0.60
	• for STP	3.2	0.64
	• for Garland drains	5	0.05
	• for Settling ponds	1	0.06
3.	Water management (Reservoir, Cooling tower etc)	30	0.50
4.	Solid waste Management		
	• Fly Ash Handling & disposal	5	2.00
	• Solid waste Handling & Disposal	10	0.25
	• Hazardous waste storage & disposal	0.3	0.15
	• Municipal solid waste storage & disposal	0.1	0.05
5	Greenbelt development, Land scaping	1.0	0.30
6	Noise Management	2	0.88
7	RWH in Plant	1	0.05
8	Fire Safety Systems	10	0.50
9	Environmental Monitoring		
	• CEMS	2.8	0.01
	• CAAQMS	0.0	0.16
	• Environment Monitoring	1.5	0.38
	• Performance monitoring of APCS	0	0.025
10	Occupational Health & Safety		
	• Dispensary with Ambulance	0.5	0.125
	• Personal Protective Equipment's (PPEs)	1.2	1.20
	TOTAL	233.20	17.5

S.No	Particulars	Capital Cost (Rs.in Crores)	Recurring Cost / Annum (Rs.in Crores)
11	Addressal of Public Consultation concerns (Social infrastructural Development)	3.31	---
	GRAND TOTAL	236.51	17.5

39.10.16 Existing green belt has been developed in 189 Ha. area which is about 39% of the Existing plant area of 481.292 Ha. with total 4,87,264 Trees. Proposed additional greenbelt will be 3.5 Ha. which is about 1% of the total area. Thus total of 192.5 Ha. area (40% of total project area) will be developed as greenbelt. 10 m to 100 m wide greenbelt, consisting of at least 3 tiers around plant boundary has been developed as greenbelt and green cover as per CPCB/MoEF&CC, New Delhi guidelines. Local and native species planted with a density of 2500 trees per hectare. Additional 10,000 nos. of plants will be planted and nurtured in 2 years time upon receipt of E.C.

39.10.17 It has been reported by PP that, there is no violation under EIA Notification, 2006/court case/show cause/direction related to the project under consideration.

Certified compliance report from CPCB

39.10.18 The Status of compliance of earlier EC was obtained from Regional Office, Raipur vide letter no. 5-187/2009 (ENV)/724 Dated 20.05.2022 in the name of M/s. Jayaswal Neco Industries Limited. The Action taken report regarding the partially/non-complied condition was submitted to Regional officer MoEF&CC, Raipur vide letter dated 16.06.2022. MoEF&CC (RO), Raipur evaluated the same and has issued letter no.5-187/2009 (ENV)/1235 dated 03.02.2023. The details of the observations made by RO in the report dated 03.02.2023 along with its re-assessment / present status as furnished by the PP is given as below:

S. No.	Non-compliances details	Observation of RO (abridged)	Condition no.			Re-assessment by RO /Response by PP
			EC date	Specific	General	
1	Specific Condition (IX) A perspective plant for 100% utilization of slag should be within Six months for approval. The project authorities in their own interest should have a long-term tie-up with the user industry like cement. (J-11011 / 1194 – IA - II(I), dated	Huge Amount of slag was observed in different areas in the plant on the day of the monitoring. Project Authorities are directed to submit and ATR in this regard as per the stipulated condition and reason for the dumping of slag in open area to this office.	26-05-1995	(IX)	----	It was informed by PP that the accumulated slag is being sent to cement Industries and to clear the backlog along with the current generation and it will take around 12 months. PP has submitted dolochar utilization details specifying the balance quantity to this office. PP has also submitted slag

	26-05-1995					generation and disposal quantity till January 2023 and balance quantity to this office.
2	Specific Condition (VII) A greenbelt of adequate width and density should be developed in an area of 74 Ha. within and around the plant premises as per CPCB guidelines. (J-11011 / 22 / 2004-IA II(I), dated 14-05-2004	Project Authorities are directed to submit the existing plant lay out plan in which it shows greenbelt was developed in (33%) to this office	14-05-2004	VII	----	PP has submitted layout plant of plant indicating the greenbelt area to this office
3	Specific Condition (IV) The Suspended particulate emission from the Coke oven shall not exceed 50 mg/Nm ³ (J-11011/3/96-IA II(I), dated 27-12-2004	Project authorities are directed to submit monitoring reports with respect to suspended particulate matter during charging and coke pushing to this office.	27-12-2004	IV	----	PP has submitted in-house monitoring report of suspended particulate matter during charging and coke pushing to this office.
4	General Condition (X) The project Authorities should inform the Regional office as well as the ministry, the date of financial closure and final approval of the project (J-11011/22/2004-IA II(I), dated 14-05-2004	Project authorities are directed to submit the details of date of financial closure and final approval of the project to this office	14-05-2004	----	X	PP has submitted the details of financial closure to this office.
5	Specific condition (XII) A time bound action plan shall be submitted to reduce solid waste, its proper	Project authorities are directed to submit a time bound action plan to reduce solid waste ,and its proper utilization and disposal as per	26.03.2009	XII	----	PP has submitted solid waste generation and its utilization and its disposal details for last 3 years to this office.

	utilization and disposal. (J-11011/809/2007-IA .II (I) dated 26.03.2009	stipulated condition to this office				
6	Specific condition (XIV) Efforts shall be made to use low grade lime, more fly ash and solid waste in the Cement manufacturing (J-11011 / 809 / 2007 - IA II (I) dated 08.09.2008)	Project authorities are directed to submit the details as per the stipulated condition to this office	08.09.2008	XIV	----	It was informed by PP that they have not installed Cement grinding unit in its plant premises and hence this conditions are not applicable to the unit.
7	General condition (XIV) Project authorities shall inform the Regional Office as well as the Ministry, the date of Financial closure and Final approval of project General condition (XIII) Project authorities shall inform the Regional Office as well as the Ministry, the date of Financial closure and Final approval of project (J-11011 / 809 / 2007-IA II (I) dated 08.09.2008 & J-11011/883/2008-IA .II(I), dated 26.03.2009	Project authorities are directed to submit the details of date financial closure and final approval of the project to his office	08.09.2008 & 26.03.2009	----	XIV & XIII	PP has submitted the comprehensive details of financial closure of projects to this office
8	Specific condition (XV)	Project authorities are directed to	08.09.2008	XV	----	It was observed on the day of

	Proper utilization of Fly ash shall be submitted to reduce solid waste, its proper utilization and disposal. (J-11011 / 809 / 2007-IA II (I) dated 08.09.2008)	submit a copy of fly ash utilization certificated for the last 3 financial years to this office				monitoring that they have installed fly ash brick plant of capacity 3x200 TPD inside the plant premises to utilize the fly ash.
10	Specific condition (VII & VIII) Prior permission for the drawl of 162 m ³ /hr water from Kharoon River from the concerned department should be obtained. (J-11011 / 883 / 2008-IA. II (I), dated 26.03.2009	PP has submitted water balance sheet. However, there is no clarity of water requirement from Kharoon river. It has been informed by PP that permission is available to draw water from The Kharoon river. Project authorities are directed to submit an approval copy for drawl of 162 m³/hr water from Kharoon river to this office	26.03.2009	VII & VIII	----	PP has submitted the Water Allocation letter issued by Water Resource Department to this office.
11	General	On the day of monitoring, it has been observed that adjacent to plant premises one biomass based power plant and one DRI unit has been found installed authorities and are operational. Project authorities are directed to clarify whether the both plants have been installed in the same existing land (plant layout) in addition to that the relevant approvals obtained from different authorities for establishing this two units shall be submitted 10 this office.	---	----	----	It was informed by PP that the units were merged with JNIL by High Court Bombay order dated 13.11.2009. The copy of the order dated 13.11.2009 has been submitted to this office.

39.10.19 The proposal was initially considered in 25th meeting of the EAC for Industry-I sector held on 21st – 23rd March, 2023, and was deferred for want of additional information. The deliberations and recommendations of EAC are as follows:

Deliberations by the Committee (EAC during 21st – 23rd March, 2023)

The Committee noted the following:

1. The instant proposal is for expansion and Modernization of its existing Integrated Steel Plant from 1.2 MTPA to 2.4 MTPA. Further, PP has requested for Consolidated Environmental Clearance after having acquired the projects of M/s. Abhijeet Infrastructure Limited & M/s. Corporate Ispat Alloys Limited which were running on the basis of CTE/CTO.
2. The EAC noted that EC was initially granted vide letter No. J-11011/11/94-IA.II(I) dated 26.05.1995 for installation of blast furnace (600 m³) to produce 3,50,000 TPA of pig iron along with 8 MW CPP based on blast furnace gas in the name of Nagpurt Alloys Castings Ltd. Subsequently various amendments had been made in EC by adding capacities and additional facilities, the last amendment in EC was granted vide No. J-11011/883/2008-IA-II (I) dated 26.03.2009. Two Units of DRI Plant and Associated power plant which were operating under CTO granted by the SPCB in the name of two group companies namely M/s. Abhijeet Infrastructure Limited & M/s. Corporate Ispat Alloys Limited who have installed 350 TPD DRI plant and 15 MW (7.5 MW AFBC + 7.5 MW WHRB) power plant and 500 TPD DRI plant and 15 MW (12 MW WHRB + 3 MW AFBC) power plant respectively in the year 2006 and 2007. The same have been demerged from those respective group companies and had been merged with Jayaswal Neco Industries Limited vide High Court order dated 13th November 2009. The EAC opined that PP shall submit the chronology of all the EC's and subsequent amendments obtained so far in a tabular format along with the details of the facilities and details of amendments obtained. PP shall also include the details of the facilities acquired from M/s. Abhijeet Infrastructure Limited & M/s. Corporate Ispat Alloys Limited in the same table.
3. The EAC noted that a canal which is passing through the southern boundary of the project site. PP shall submit the NOC from the Competent Authority in this regard and measures that will be undertaken for conservation of the canal.
4. Mandhar Branch Canal (0.3 km, East), Siltara Village Pond (0.35 km, North), Giroud village Pond (0.7 km, South), Dhaneli Village Pond (0.6 km, South), Mandhar Village Pond (0.5 km, SE) and Sankara Village Pond (0.15 km, W) also exist within the study area of the project site. The EAC is of the opinion that water bodies are required to be conserved. Drainage Conservation scheme to protect the natural drainage and its flow parameters; along with Soil conservation scheme and multiple Erosion control measures shall be submitted. Further during preparation of drainage conservation plan, PP shall prepare a contour map showing contour interval, proper Bench Mark, Drainage disposal with design and calculations, Rain Water Harvesting Plan with design and calculation including the invert level of disposal point in order to achieve ZLD.

5. The EAC deliberated on the implementation status of existing EC along with unit configuration and capacity of existing and proposed project submitted in the instant application and compared it with the details submitted in PFR at the time of ToR and observed that there is mismatching in details of some of the units such as Blast Furnace, Pellet Plant and Coke Oven Plant. The EAC is of opinion that PP shall revisit the information submitted in PFR (submitted at the time of TOR) and EIA/EMP (submitted in the instant application) and provide justification for the changes. PP shall also confirm the exact status of the facilities envisaged in the EC and the implementation status as on date and submit the revised information. The PP shall also submit an affidavit confirming that they have not made any violation pertaining to this project.
6. The Committee deliberated on the baseline data and incremental GLC due to the proposed project and observed that maximum values of PM₁₀ and PM_{2.5} are found to be on a higher side. Also the incremental GLC for SO₂ and NO₂ are also high. In this regard, the EAC is of the opinion PP shall revisit the GLC values of each parameter and also submit the mitigation measures that will be undertaken to improve the ambient air quality.
7. The EAC further noted that the maximum values of noise are also very high and PP shall submit the mitigation measures to minimise the same.
8. The Committee deliberated on the public hearing issues along with action plan submitted by the proponent to address the issues raised during the public hearing and is of the view that the submitted action is not sufficient to address all the issues. The EAC advised PP to revise the action plan as per Ministry's O.M. dated 30.09.2020. Also, the EAC advised to quantify the written and oral representation received during the public hearing. EAC is of the view that the PP has made a vague plan.
9. The EAC deliberated on the certified compliance report (CCR) of IRO dated 20.05.2022 wherein non-compliance / partial compliance were observed by the IRO. On the ATR dated 16.06.2022 submitted by project proponent, IRO has submitted a review report, however, closure report after site verification by IRO has not been obtained by the project proponent. The EAC advised PP/Consultant needs to obtain the closure report on the non-complied / partially complied conditions from IRO after site verification.
10. The Committee advised PP to also submit the CCR (along with closure report for non-compliances, if any) obtained from the SPCB pertaining to units acquired by the company and running on the basis of CTE/CTO.
11. The PP shall prepare 3 separate drawings as a layout details. In Drg 1 PP shall cover Road networking, Plan Layout, Parking along with area statement showing % of all ingredients i.e. roads, Buildings, Parking, with indexing, scale of drawing etc. In no case road shall be abruptly terminated at any point. It shall have proper looping. PP also to show traffic flow in the drawing along road with entry and exit. In drg 2 PP shall show a layout indicating road networking, Existing Green belt and proposed Green Belt with its % against plot area including no of species WRT 2500 density per ha. In drg3 PP shall show contour map with Bench mark, Road network and drainage network along road side with drainage flow, disposal of drainage flow at lowest point with invert level etc. Further PP to show RWH details in the same drawing with calculations.
12. The project falls under Critically Polluted area of Raipur District of Chhattisgarh. PP shall submit the compliance to the CEPI Guidelines as per CPCB recommendations.

13. PP shall undertake village adoption and formulate Village Adoption program consisting of need-based community development activities, to develop them into model villages. PP shall submit details of the villages to be adopted.
14. PP needs rework on the proposed water requirement for the project and revise the water balance as deliberated during the meeting.
15. Action Plan for fire fighting system including provision for flame detectors, temperature actuated heat detectors with alarms, automatic sprinkler system, fixing the location of fire water tanks, separate power system for fire fighting, involvement of qualified and trained fire personnel, nearest fire station & time required to reach the proposed site shall be submitted.
16. The PP/Consultant has to revise the EIA/EMP Report along with all the details as per the provisions of the EIA Notification, 2006.
17. The PP/Consultant agreed to the suggestions of EAC and requested EAC to allow reappear after the revision of the application incorporating the desired information.

Recommendations of the Committee (EAC during 21st – 23rd March, 2023)

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

39.10.20 The proponent submitted the ADS reply vide letter dated 5th June 2023 uploaded on PARIVESH on 5th June,2023 Point-wise reply of ADS is given as below:

S. No.	ADS Point	Reply / Response of PP
1	The EAC opined that PP shall submit the chronology of all the EC's and subsequent amendments obtained so far in a tabular format along with the details of the facilities and details of amendments obtained. PP shall also include the details of the facilities acquired from M/s. Abhijeet Infrastructure Limited & M/s. Corporate Ispat Alloys Limited in the same table.	Chronology of all the EC's along with amendments made and the units acquired under Hon'ble High court Order pertaining to M/s Abhijeet Infrastructure Limited (AIL) and Corporate Ispat Alloys Limited (CIAL) working under CTO. The same is updated at para 39.10.6 above.
2	The EAC noted that a canal which is passing through the southern boundary of the project site. PP shall submit the NOC from the Competent Authority in this regard and measures that will be undertaken for conservation of the canal.	PP obtained NOC issued vide letter No. 17534/Work/3401 Raipur Dt 9.05.2023 from the office of Water Resources Department, Govt. of Chhattisgarh. <u>Measures to be adopted for Protection of Canal Passing through the Plant Site</u> <ul style="list-style-type: none"> • The canal is protected and fenced from both the sides. Culvert for crossing is built with permission from Irrigation department. • This canal is not connected with any waste water from either plant or residential area, hence it is also protected from that angle.

		<ul style="list-style-type: none"> Since the expansion proposed is away from the canal and have nil impact on the same, we will ensure that in future also.
3	<p>Mandhar Branch Canal (0.3 km, East), Siltara Village Pond (0.35 km, North), Giroud village Pond (0.7 km, South), Dhaneli Village Pond (0.6 km, South), Mandhar Village Pond (0.5 km, SE) and Sankara Village Pond (0.15 km, W) also exists within the study area of the project site. The EAC is of the opinion that water bodies are required to be conserved. Drainage Conservation scheme to protect the natural drainage and its flow parameters; along with Soil conservation scheme and multiple Erosion control measures shall be submitted. Further during preparation of drainage conservation plan, PP shall prepare a contour map showing contour interval, proper Bench Mark, Drainage disposal with design and calculations, Rain Water Harvesting Plan with design and calculation including the invert level of disposal point in order to achieve ZLD.</p>	<p><u>Measures to be adopted for Protection of near by Ponds:</u></p> <ul style="list-style-type: none"> Green belt is already developed on both sides of the Mandhar Branch Canal. Regular cleaning of bunds / village ponds will be ensured and proper bund will be / had been developed to ensure that no flowing water gets inside and the soil erosion is also protected. Form inside the plant premises no water flows down directly save and except during rainy season. Adequate water management facility had been created inside the plant premises to ensure reutilization of water back in the system. <p>With the aforementioned measures there will not be any adverse impact on water bodies due to the proposed Expansion project.</p>

RAINWATER HARVESTING

5 nos. of Rainwater Harvesting pits & 5 nos. RWH ponds provided at favorable places spread over the plant site to store / recharge to the precious ground water.

Run-off water calculation

The following is the Plan for rain water harvesting measure at plant site.

Average annual rainfall = 1323 mm

Quantum of Rain water that can be harvested from the premises

- Average annual rainfall = 1.323 m
- Runoff co-efficient

Runoff co-efficient for Water Reservoir	= 100%
Runoff co-efficient for Roof area	= 85%
Runoff co-efficient for Roads and Paved area	= 65%
Runoff co-efficient for Open area	= 20%
Runoff co-efficient for Green belt area	= 15%

DETAILS OF RAIN WATER HARVESTING POTENTIAL

S no.	Manufacturing unit	Total Area (m ²)	Runoff Co-efficient	Rainfall in m	Rainwater Collection Potential /Annum (m ³)
1	Roof top area (plant facilities & Storage sheds)	972000	0.85	1.323	1093062.6

2	Internal roads	80000	0.65	1.323	68796.0
3	Greenbelt	1890000	0.15	1.323	375070.5
4	Water reservoir / Rain water Storage	150000	1.00	1.323	198450.0
5	Parking area, Switch yard	922920	0.20	1.323	244204.6
	TOTAL	4014920			19,79,583.7

Drainage Disposal System / Storm Water Management Plan

The entire plant layout had drainage system to collect the water and put it inside the reservoir. Roof top collection system had been defined separately and the same gets connected to drainage system and then to the underground pits after primary treatment. collection centers are connected to drains

Adequate and proper drainage system is developed across the plant premises for management of storm wter. These large drainage system are connected to the local nullah through which it goes to the nearby river. The overflow of drainage during monsoon goes to the nearby nullah and once the monsoon recedes the overflow water stops flowing.

DRAIN SIZE CALCULATION TO COPE WITH THE DESIGN PEAK RUNOFF RATE

The following empirical formula has been used for calculating the discharge through the drain

$$Q = 1000 \times (A \times R)^{0.67} \times (S)^{0.5} / N$$

Q : the capacity of discharge of the drain (in l/s)

A : the cross section of the flow (in m²)

R : the hydraulic radius of the drain

S : the gradient of the drain

N : Manning's roughness coefficient: 0.015 for cement mortar drains,

Considering size of the drain as 2.0 m (a) x 2.5 m (b)

A : 2.0 m x 2.5 m : 5.0 Sqm

R : surface area of cross section of the flow /total length of contact between water and drain : (a x b)/(a + b + c) : (2.0 x 2.5)/(2.0+2.5+2.5) : 0.714

S : gradient of the drain : 0.005

N : 0.015 for cement mortar drains

$$Q : 1000 \times (A \times R)^{0.67} \times (S)^{0.5} / N$$

$$: 1000 \times (5.0 \times (0.714)^{0.67} \times (0.005)^{0.5}) / 0.015$$

$$: 1000 \times (5.0 \times 0.7979 \times 0.07) / 0.015$$

$$: 18813 \text{ litres/sec i.e. } 18.813 \text{ cum/s}$$

Whereas peak run-off flow 16,828.6 m³/15 mins.

$$: 16,828.6 \text{ m}^3 / (15 \times 60 \text{ sec}) : 18.7 \text{ m}^3 / \text{sec}$$

The design flow rate of the drain is more than the peak run-off flow rate .

Hence a drain of size 2.0 m x 2.5 m has been provided.

The drain / Channels to carry the water which are lined with cement mortar. Few Metal mesh traps have been provided to arrest the dry leaf / litter to the harvesting tank. These should be periodically maintaining at least once in a week during monsoon.

Contour map submitted showing contour interval, drainage disposal, RWH design calculations have been are enclosed along with EIA report.

SOIL CONSERVATION SCHEME:

	<ul style="list-style-type: none"> • The proposed expansion will be taken up within the existing plant premises only. At the time of construction during expansion, there will be some quantity of soil and debris. • Top soil will be stored and utilized for greenbelt development. • The disturbed slopes will be well stabilized before the onset of the monsoon. The levelling operation will also involve piling up of backfill materials. • Use of dust suppressant spraying to minimize fugitive dust during construction activities is recommended. <p>In the existing plant premises, more than 1/3rd of the total plant area has already been developed with greenbelt development. Greenbelt and lawns will help in conservation of soil.</p>	
4	<p>The EAC deliberated on the implementation status of existing EC along with unit configuration and capacity of existing and proposed project submitted in the instant application and compared it with the details submitted in PFR at the time of ToR and observed that there is mismatching in details of some of the units such as Blast Furnace, Pellet Plant and Coke Oven Plant. The EAC is of opinion that PP shall revisit the information submitted in PFR (submitted at the time of TOR) and EIA/EMP (submitted in the instant application) and provide justification for the changes. PP shall also confirm the exact status of the facilities envisaged in the EC and the implementation status as on date and submit the revised information. The PP shall also submit an affidavit confirming that they have not made any violation pertaining to this project.</p>	<p>Capacity of pellet plant had been increased from 1.2 to 1.5 post filing of application for TOR for this current expansion under no increase in pollution load status. CTO was amended on 18/02/2022. Blast furnace Capacity had been enhanced in 2009, this increase is due to modernization of furnace, for which EC was amended on 26th March, 2009. However the amendment in CTO could not done due to embargo of using coal is imposed on this area. Hence the operation had been restricted to the extend of CTO. Since the modernization of furnace had been carried out in 2009 and completed in 2009 itself PP thought it appropriate to mention the enhanced capacity in the EIA. In TOR it was skipped due to oversight. Please note there is no violation as PP has not crossed the threshold limit of production as per the approved capacity in CTO.</p> <p>An affidavit confirming that no violations have been made pertaining to this project and the Affidavit is submitted with EIA report.</p>
5	<p>The Committee deliberated on the baseline data and incremental GLC due to the proposed project and observed that maximum values of PM₁₀ and PM_{2.5} are found to be on a higher side. Also the incremental GLC for SO₂ and NO₂ are also high. In this regard, the EAC is of the opinion PP shall revisit the GLC values of each parameter and also submit the mitigation measures that will be undertaken to improve the ambient air quality.</p>	<ul style="list-style-type: none"> • The plant is situated in Siltara Growth Centre, Siltara, Giroud, Sankra & Dhaneli Villages, Raipur Tehsil & District, Chhattisgarh, adjacent to National Highway No 30 which is a six lane road. • NH # 30 (Raipur to Bilaspur) – Adjacent to the plant, its a six lane road connecting Korba to Raipur. Heavy movement of vehicles (Mostly coal and Cement) is the main source of increase in PM₁₀ & PM_{2.5} of Ambient Air. However as a part of mitigation measures we will take up the plantation in the villages. • Steel plant is fully equipped with all Environmental protection measures such as ESPs, Bagfilters, covered conveyers, dry fog system, dust suppression system, mechanical dust sweepers, Zero liquid discharge system, solid waste utilization/disposal as per permitted procedures, greenbelt covering 39 % of total area, are

		<p>complying with all the stipulated norms. Periodical maintenance will be maintained.</p> <ul style="list-style-type: none"> • 189 Ha. Of Greenbelt has already been developed in the plant premises, which is about 39 % of the plant area i.e., 481.292 Ha. It is proposed to develop additional greenbelt over an extent of 3.5 Ha. with 10,000 nos. of plants. Hence total greenbelt will be 40% of the total area. • Development of Krishnkunj i.e. block plantation in 10 nos. of villages with 10,000 nos. of Plants. • Tree Plantation along the bund of water bodies @2000 Nos. in each village i.e. total of 20,000 nos. of plants. • These measures helps in further improvement in Ambient air quality. 																																					
<p>As per the advice of the Hon'ble EAC, PP has re-verified the incremental GLCs of PM_{2.5}, PM₁₀, SO₂ and NO₂ in AAQ. modelling and the following are the revised incremental GLCs.</p>																																							
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6	<p>The EAC further noted that the maximum values of noise are also very high and PP shall submit the mitigation measures to minimize the same.</p>	<p>Ambient Noise levels at all monitoring locations is ranging from 44.6 dBA to 66.9 dBA.. CPCB had fixed 75 dBA as the outer limit in day time for the industrial area.</p> <ul style="list-style-type: none"> • NH # 30 is passing just adjacent to the plant boundary, which is a six lane road with two service lane on both sides which is catering to the local industrial area. Heavy movement of traffic is also the major cause of increase in the ambient Noise Levels. • In plant on all those noisy place acoustic enclosures have been provided to attenuate the 																																					

		<p>noise level in existing noise generating equipment's (Turbine Generator, Compressor, DG), and the same will be provided in proposed expansions also.</p> <ul style="list-style-type: none"> • 39 % of the total plant area has already been developed with plantation. Now as part of expansion the over all greenbelt will become 40%. This will help in further attenuation of the noise levels. These measures will help in further mitigation of noise levels. 								
7	<p>The Committee deliberated on the public hearing issues along with action plan submitted by the proponent to address the issues raised during the public hearing and is of the view that the submitted action is not sufficient to address all the issues. The EAC advised PP to revise the action plan as per Ministry's O.M. dated 30.09.2020. Also, the EAC advised to quantify the written and oral representation received during the public hearing. EAC is of the view that the PP has made a vague plan.</p>	<p>The revised Action Plan for Social & Infrastructural Development, budget Rs 63.71 Crores is earmarked to address the all issues raised during public hearing as per Ministry's O.M. dated 30.09.2020 is submitted.</p>								
8	<p>The EAC deliberated on the certified compliance report (CCR) of IRO dated 20.05.2022 wherein non-compliance / partial compliance were observed by the IRO. On the ATR dated 16.06.2022 submitted by project proponent, IRO has submitted a review report, however, closure report after site verification by IRO has not been obtained by the project proponent. The EAC advised PP/Consultant needs to obtain the closure report on the non-complied / partially complied conditions from IRO after site verification.</p>	<p>Closure report has been issued vide letter no. 5-187/2009 (ENV)/1235 dated 03.02.2023 for the observations.</p>								
<p>The details of the observations made by RO in the report dated 03-02-2023 along with its re-assessment / present status is furnished below.</p> <table border="1"> <thead> <tr> <th>S.No.</th> <th>Non- compliances details</th> <th>Observation of RO 25-03-2022</th> <th>Re-assessment by RO on 02-02-2023 & 16-06-2022 / Response by PP</th> </tr> </thead> <tbody> <tr> <td>1</td> <td> <p>Specific Condition (IX) A perspective plant for 100% utilization of slag should be within Six months for approval. The project authorities in their own interest should have a long term tie-up with the user industry</p> </td> <td> <p>Huge Amount of slag was observed in different areas in the plant on the day of the monitoring. Project Authorities are directed to submit and ATR in this regard as per the stipulated condition and</p> </td> <td> <p>It was informed by PP that the accumulated slag is being sent to cement Industries and to clear the backlog along with the current generation and it will take around 12 months. PP has submitted dolochar utilization details specifying</p> </td> </tr> </tbody> </table>			S.No.	Non- compliances details	Observation of RO 25-03-2022	Re-assessment by RO on 02-02-2023 & 16-06-2022 / Response by PP	1	<p>Specific Condition (IX) A perspective plant for 100% utilization of slag should be within Six months for approval. The project authorities in their own interest should have a long term tie-up with the user industry</p>	<p>Huge Amount of slag was observed in different areas in the plant on the day of the monitoring. Project Authorities are directed to submit and ATR in this regard as per the stipulated condition and</p>	<p>It was informed by PP that the accumulated slag is being sent to cement Industries and to clear the backlog along with the current generation and it will take around 12 months. PP has submitted dolochar utilization details specifying</p>
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	like cement. (J-11011 / 1194 – IA - II(I), dated 26-05-1995	reason for the dumping of slag in open area to this office.	the balance quantity to this office. PP has also submitted slag generation and disposal quantity till January 2023 and balance quantity to this office.
2	Specific Condition (VII) A greenbelt of adequate width and density should be developed in an area of 74 Ha. within and around the plant premises as per CPCB guidelines. (J-11011 / 22 / 2004-IA II(I), dated 14-05-2004	Project Authorities are directed to submit the existing plant lay out plan in which it shows greenbelt was developed in (33%) to this office	PP has submitted layout plant of plant indicating the greenbelt area to this office
3	Specific Condition (IV) The Suspended particulate emission from the Coke oven shall not exceed 50 mg/Nm ³ (J-11011/3/96-IA II(I), dated 27-12-2004	Project authorities are directed to submit monitoring reports with respect to suspended particulate matter during charging and coke pushing to this office.	PP has submitted in-house monitoring report of suspended particulate matter during charging and coke pushing to this office.
4	General Condition (X) The project Authorities should inform the Regional office as well as the ministry, the date of financial closure and final approval of the project (J-11011/22/2004-IA II(I), dated 14-05-2004	Project authorities are directed to submit the details of date of financial closure and final approval of the project to this office	PP has submitted the details of financial closure to this office.
5	Specific condition (XII) A time bound action plan shall be submitted to reduce solid waste, its proper utilization and disposal. (J-11011/809/2007-IA .II (I) dated 26.03.2009	Project authorities are directed to submit a time bound action plan to reduce solid waste ,and its proper utilization and disposal as per stipulated condition to this office	PP has submitted solid waste generation and its utilization and its disposal details for last 3 years to this office.
6	Specific condition (XIV) Efforts shall be made to use low grade lime, more fly ash and solid waste in	Project authorities are directed to submit the details as per the stipulated condition to this office	It was informed by PP that they have not installed Cement grinding unit in its plant premises and hence this conditions are not applicable

		the Cement manufacturing (J-11011 / 809 / 2007 - IA II (I) dated 08.09.2008)		to the unit.
7	General condition (XIV) Project authorities shall inform the Regional Office as well as the Ministry, the date of Financial closure and Final approval of project General condition (XIII) Project authorities shall inform the Regional Office as well as the Ministry, the date of Financial closure and Final approval of project (J-11011 / 809 / 2007-IA II (I) dated 08.09.2008 & J-11011/883/2008-IA .II(I), dated 26.03.2009	Project authorities are directed to submit the details of date financial closure and final approval of the project to his office	PP has submitted the comprehensive details of financial closure of projects to this office	
8	Specific condition (XV) Proper utilization of Fly ash shall be submitted to reduce solid waste, its proper utilization and disposal. (J-11011 / 809 / 2007-IA II (I) dated 08.09.2008)	Project authorities are directed to submit a copy of fly ash utilization certificated for the last 3 financial years to this office	It was observed on the day of monitoring that they have installed fly ash brick plant of capacity 3x200 TPD inside the plant premises to utilize the fly ash.	
10	Specific condition (VII & VIII) Prior permission for the drawl of 162 m ³ /hr water from Kharoon River from the concerned department should be obtained. (J-11011 / 883 / 2008-IA. II (I), dated 26.03.2009	PP has submitted water balance sheet. However, there is no clarity of water requirement from Kharoon river. It has been informed by PP that permission is available to draw water from The Kharoon river. Project authorities are directed to submit an approval copy for drawl	PP has submitted the Water Allocation letter issued by Water Resource Department to this office.	

			of 162 m ³ /hr water from Kharoon river to this office	
	11	General	On the day of monitoring, it has been observed that adjacent to plant premises one biomass based power plant and one DRI unit has been found installed authorities and are operational. Project authorities are directed to clarify whether the both plants have been installed in the same existing land (plant layout) in addition to that the relevant approvals obtained from different authorities for establishing this two units shall be submitted 10 this office.	It was informed by PP that the units were merged with JNIL by Hon'ble High Court of Bombay vide order dated 13.11.2009. The copy of the order dated 13.11.2009 has been submitted to this office.
9.	The Committee advised PP to also submit the CCR (along with closure report for non- compliances, if any) obtained from the SPCB pertaining to units acquired by the company and running on the basis of CTE/CTO.		CCR obtained for units acquired by the company and running on the basis of CTE/CTO on 25.07.2022 Non-compliance was given for non submission of Environment audit report and Compliance of consent conditions carried out by third party. However PP submitted the Environment audit report and Compliance of consent conditions report conducted and prepared by the NABL accredited consultant on 17.08.2022. Closure report issued by CECB vide letter no. 1253/CECB/2023 DATED 26.05.2023 is submitted with Revised EIA report	
10.	The PP shall prepare 3 separate drawings as a layout details. In Drg 1 PP shall cover Road networking, Plan Layout, Parking along with area statement showing % of all ingredients i.e. roads, Buildings, Parking, with indexing, scale of drawing etc. In no case road shall be abruptly terminated at any point. It shall have proper looping. PP also to show traffic flow in the drawing along road with entry and exit. In drg 2 PP shall show a layout indicating road networking, Existing		Three separate drawings as per the requirement had been prepared and submitted along with revised EIA report.	

	Green belt and proposed Green Belt with its % against plot area including no of species WRT 2500 density per ha. In drg3 PP shall show contour map with Bench mark, Road network and drainage network along road side with drainage flow, disposal of drainage flow at lowest point with invert level etc. Further PP to show RWH details in the same drawing with calculations.	
11.	The project falls under Critically Polluted area of Raipur District of Chhattisgarh. PP shall submit the compliance to the CEPI Guidelines as per CPCB recommendations.	Compliance of CEPI guidelines as per Ministry's OM of 2019 had been submitted along with the final EIA report. The EAC deliberated the Action plan on the CPA and tabulated herewith.
12.	PP shall undertake village adoption and formulate Village Adoption program consisting of need-based community development activities, to develop them into model villages. PP shall submit details of the villages to be adopted.	Action Plan for Social & Infrastructural Developmental activities in the adjoining 10 villages are prepared with a total budget of Rs.63.71 Crores. Villages are considered for adoption are 1)Siltara, 2)Sankara, 3)Girod, 4)Dhaneli, 5)Mandhar, 6)Charoda, 7)Murethi, 8)Tekari, 9)Nimora and 10) Akoli.
13.	PP needs rework on the proposed water requirement for the project and revise the water balance as deliberated during the meeting.	The consumption of water per ton of steel which is being done is already on lower side, however PP has minimized it further by recirculation the waste water back to the system after RO treatment. Presently we are consuming 15000 KLD for production of around 1 MTPA which is equivalent to 5.4 KL per Ton which includes power generation, Coke quenching for 0.20 MTPA and Plantation watering on a 189 Hectare land. Total water requirement post expansion will be 27646 KLD, which is equivalent to 10090790 KL/PA. This is for 2.4 MTPA production and 160 MW of Power along with 1.10 MTPA coke oven. From 5.4 KL/Ton the consumption will come down to 4.2 KL/Ton. There is a substantial decrease in water consumption. Hence the total water requirement will remain the same i.e 27,646 KLD (for Existing – 15,000 KLD & Expansion Project – 12,646 KLD) as PP has considered on lower side only.
15.	Action Plan for fire fighting system including provision for flame detectors, temperature actuated heat detectors with alarms, automatic sprinkler system, fixing the location of fire water tanks,	The following Fire Protection systems which is already existent in the plant. :- <ul style="list-style-type: none"> Hydrant system covering the entire plant including all important auxiliaries and buildings. The system

	separate power system for fire fighting, involvement of qualified and trained fire personnel, nearest fire station & time required to reach the proposed site shall be submitted.	<p>is complete with piping, valves, instrumentation, hoses, nozzles and hydrants, etc.</p> <ul style="list-style-type: none"> • Sprinkler system for cable galleries / vaults / spreader room etc. • High velocity water system for LDO storage tanks. • Portable fire extinguishers such as pressurized water type, carbon dioxide type and foam type are located at strategic locations throughout the plant. • Modular type carbon dioxide panel injection fire extinguishing system are provided in control equipment room, cable space below control room and at other unmanned electrical and electronic equipment room. • One fire tender is always stationed in the premises fully loaded checked and configured for immediate operation. • Separate fire department is maintained in the plant premises which are manned with highly skilled personnel.
16.	The PP/Consultant has to revise the EIA/EMP Report along with all the details as per the provisions of the EIA Notification, 2006.	The PP/Consultant has submitted the Revised EIA/EMP Report prepared along with reply to ADS.

39.10.21 **Compliance on CEPI Guidelines [OM of 2019]:** As the Plant area falls in the Siltara Industrial Area which is Critically Polluted Area as categorized by CPCB with CEPI of – 79.94. Proposed mitigation measures are being taken up as per CEPI guidelines.

Table: Mitigation measures implemented/being implemented as per Ministry’s OM on CEPI 2019

Environment	Stipulation of Conditions	Compliance of Mitigation measures	Remarks
Air	<p>CECB has already stringent particulate matter emission limit to 50 mg/Nm³. However, units shall adhere to stringent air pollutants standards i.e. 60 % of existing flue gas and process emission standards. Particulate matter emission limit may be prescribed as 30 mg/Nm³ for new and expansion / diversification activities.</p> <p>For expansion or diversification activity, the pollution load shall not exceed the existing load for which consent has been granted. If any industrial group has another unit(s) in the critically polluted area, then</p>	The PP is maintaining the limit of particulate matter emission below prescribed standard. Noted for compliance.	Complied

	reduction in pollution load form both units together may be considered.		
	Large and medium red category industries shall install and commission Continuous Emission Monitoring System- CEMS (as per CPCB guidelines for relevant parameters) which shall be connected with CECB/CPCB server.	CEMS installed in stack of all Units and connected with CECB/CPCB Server.	Complied
	Units shall adhere to sector specific guidelines / SOP published by CPCB from time to time for effective fugitive emission control.	Transportation of raw materials/ solid wastes is ensured through covered trucks only.	Complied.
	The raw materials, solid fuels, products (which have tendency to generate dust while handling / transportation) and solid wastes shall be stored in covered shed with arrangement of water sprinkling / dust suppression systems.	Water Sprinkling system has been provided at all places where handling is required.	Complied.
	Conveying system / conveyor belt shall be completely closed. All transfer points / junction points shall be fitted with dust suppression system followed by bag filter.	Major raw material to be kept in closed shed All conveyor belt is completely closed and Bag filters installed at all transfer points/junction points.	Complied. Complied
	Vehicle movement areas / roads within premises shall be made pucca from drain to drain to avoid dusting.	All vehicle movements roads within all premises are pucca and regular road sweeping is being carried through road sweeping machine.	Complied.
	Odour generating unit shall take adequate measures to control odour nuisance from the industrial activities which may include measures like - use of masking agent with atomizer system (water curtain), closed / automatic material handling system, containment of the odour Vulnerable areas etc. Units shall provide wheel wash system at entry and exit point of plant to control wheel generated dust.	Not applicable. Wheel washing system has been installed and is operational.	-- Complied
	Transportation of raw materials, solid fuels, products (which have tendency	All the material transportation by road is	Complied.

	to generate dust while handling / transportation) and solid wastes shall be transported through mechanically covered / properly covered vehicles.	done through fully covered truck.	
	Units shall not use coal, pet-coke, furnace oil, LSHS as a fuel for new And expansion / diversification activities.	Noted.	Complied.
	Units shall adopt sectorial Best Available Technology - BAT (Like use of induction Furnace, Electric Arc Furnace instead of Cupola furnace, Caustic Recovery System in Cotton Textile units etc.)	Not applicable.	Not applicable.
	Units shall provide green belt of 40% of the total plot area. In case there is restriction of land available within plant premises for 40 % green belt development, then the unit shall carry out balance plantation within 05 km radius from its premises to achieve the required plantation of 40%.	189 Ha. Of Greenbelt is already been developed in the plant premises, which is about 39 % of the plant area i.e., 481.292 Ha. It is proposed to develop additional greenbelt over an extent of 3.5 Ha. with 10,000 nos. of plants. JNIL has already planted 4,87,264 nos. of trees in the premises. Additional 10,000 nos. will be planted as part of Expansion project to comply 40% as per CPA guideline.	Being Complied
	Development of green belt /plantation outside project premises in adjacent areas such as avenue plantation, plantation in vacant areas, social forestry, etc. shall be ensured.	Avenue plantation/road side has been carried under the Harihar Chhattisgarh Scheme.	Complied
Air	Units situated in the industrial areas shall submit certificate regarding adequacy of roads based on carrying capacity of transportation load on roads from CSIDC. Units situated other than industrial areas shall submit certificate regarding adequacy of roads based on carrying capacity of transportation load on roads from concerning EE, PWD / Concerned Authority of Government of Chhattisgarh.	Our plant is situated on National Highway hence, no roads of CSIDC are used for transportation.	Complied
Water	Units shall only use treated effluent for preparation of lime /neutralization slurry / other slurry for use in ETP.	Noted for compliance. Treated effluent is being used for make-up of cooling	Complied Complied

	No fresh water shall be utilized for such purposes. Units shall use treated effluent for make-up of cooling water / process water as maximum as possible.	water / process water as maximum as possible.	
	Large and Medium Red category industries shall install system for continuous monitoring of effluent quality / quantity as per CPCB guidelines for relevant parameters (like pH, Flow, Temperature' TOC/COD etc.) and shall be connected to CECB server. Unit shall also install flow meter.	Continuous effluent quality monitoring system and Flow meter have been installed.	Complied
	No ground water withdrawal shall be allowed without permission of CGWA. Units shall use harvested rainwater in the process as maximum as possible. Units shall submit calculation regarding total storm water received in the premises, potential of rain water harvesting and quantity to be harvested along with details of proposed structures.	Permission obtained from CGWA of 195 KLD for domestic use and is valid till 30-06-2025. 05 nos. Roof Top rain water harvesting structures have been developed and 04 Nos. of rain Water storage reservoir have been made with total water storage capacity 9,46,400 M ³ .	Complied Complied
	Units shall ensure recharging of ground water by rainwater harvesting of at-least double the quantity of water use by them, which shall be done within or outside the premises.	Being done through aforementioned rain water harvesting structure.	Complied
	Units shall explore Techno-Economic feasibility of Zero Liquid Discharge (ZLD) and if feasible, ZLD should be adopted.	ZLD maintained.	Complied
	Units having domestic waste water generation more than 10 KLPD shall install STP of adequate capacity and treated effluent shall be reused /recycled within plant premises.	Adequate capacity of STPs have been installed and treated water is being used for greenbelt development.	Complied
Land	Units shall provide green belt of 40% of the total plot area. In case there is restriction of land available within plant premises for green belt development, and then the unit shall carry out balance 40 % plantation within 05 km radius from its premises	40 % of the land area is covered with green belt.	Being Complied

	to achieve the required plantation of 40%.		
	Development of green belt / plantation outside project premises in adjacent areas such as avenue plantation, plantation in vacant areas, social forestry, etc. shall be ensured.	Avenue plantation/road side plantation has been carried under the Harihar Chhattisgarh Scheme.	Complied
	Units shall strictly carry out handling, storage and disposal of fly-ash, slag, red-mud, sludge etc. (High Volume-Low Effect Wastes) as per prevailing guidelines and its disposal at designated locations approved by the Board.	Fly ash is consumed in Fly ash brick plant installed within the premises. BF Slag is being sold to the cement industries. SMS slag is being used for road construction. No solid wastes is disposed outside.	Complied
	Units shall dispose its hazardous wastes through co-processing, preprocessing to the extent possible prior its disposal to incineration/landfill as per provisions of Hazardous and Other Wastes (Management and Transboundary Movement) Rules, 2016.	The unit is followed the guidelines of Hazardous and other wastes (Management and Transboundary Movement) rules, 2016. Noted for compliance.	Complied.
	Units shall strictly comply with all the measures specified in guidelines for spent solvent management, spent acid management, and other guidelines / directions published from time to time by CECB / CPCB / MoEF&CC.	Being Followed.	Complied.
	Units shall carry out transportation of hazardous wastes through GPS mounted vehicles only		Complied.
Other Condition (Additional)	All Environmental Clearance granted units shall submit report of compliance of the conditions of EC every year to the Board prepared by third party.	Being Done	Complied
	New and expansion / diversification units which will obtain Environmental Clearance shall enhance CER fund allocation to 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.	Noted for Compliance.

39.10.22 Based on the above submission of PP, the proposal has been re-considered during 39th meeting of the EAC for Industry-I sector held on 6-7th July, 2023. The deliberations and recommendations of EAC are as follows:

Written representations:

39.10.23 During the meeting, based on the deliberations made by the EAC, the project proponent vide letter dated 07.07.2023 through email dated 07.07.2023 submitted the Revised Budget and Action plan for Social & Infrastructure Development with a revised budget of 1% of Expansion Project cost i.e. Rs. 85.60 Crores which is updated at para 39.10.14 above.

Deliberations by the Committee

39.10.24 The Committee noted the following:

1. The instant proposal is for expansion and Modernization of its existing Integrated Steel Plant from 1.2 MTPA to 2.4 MTPA. Further, PP has requested for Consolidated Environmental Clearance after having acquired the projects of M/s. Abhijeet Infrastructure Limited & M/s. Corporate Ispat Alloys Limited which were running on the basis of CTE/CTO.
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. EC was initially granted vide letter No. J-11011/11/94-IA.II(I) dated 26.05.1995 for installation of blast furnace (600 m³) to produce 3,50,000 TPA of pig iron along with 8 MW CPP based on blast furnace gas in the name of Nagpurt Alloys Castings Ltd. Subsequently various amendments had been made in EC by adding capacities and additional facilities, the last amendment in EC was granted vide No. J-11011/883/2008-IA-II (I) dated 26.03.2009. Two Units of DRI Plant and Associated power plant which were operating under CTO granted by the SPCB in the name of two group companies namely M/s. Abhijeet Infrastructure Limited & M/s. Corporate Ispat Alloys Limited who have installed 350 TPD DRI plant and 15 MW (7.5 MW AFBC + 7.5 MW WHRB) power

plant and 500 TPD DRI plant and 15 MW (12 MW WHRB + 3 MW AFBC) power plant respectively in the year 2006 and 2007. The same have been demerged from those respective group companies and had been merged with Jayaswal Neco Industries Limited vide High Court order dated 13th November 2009. The current status of CTO is as under:

- CTO for Steel complex vide order no. 7303/TS/CECB/2022 dated 12/01/2022 (valid up to 31/12/2024),
 - CTO for Pellet plant capacity enhancement vide no. 8386 /TS/CECB/2022 dated 18/02/2022 (valid up to 31/12/2024)
 - CTO for 350 TPD (1,20,000 TPA) DRI unit & power plant vide order no. 2558 /TS/CECB/2022 DATED 07-07-2022 (valid up to 31-07-2024)
 - CTO for 500 TPD (1,50,000 TPA) DRI unit& power Plant vide order no. 3107 /TS/CECB/2022 DATED 27-07-2022 (valid up to 30-09-2024).
6. The total plant area is 481.292 ha (1189.3 Acres) which includes CSIDC Leased Land (lease) (417.35 ha), Land came in possession due to merger of adjoining assets vide high court order (35.721 ha) and Private land (acquired) (28.221 ha). The plant had been commissioned in the year 1994-1996 on CSIDC leased land which is in the Declared Industrial Area. No additional land is required for expansion.
 7. The EAC noted that a canal which is passing through the southern boundary of the project site. PP has obtained NOC from the office of Water Resources Department, Govt. of Chhattisgarh vide letter No. 17534/Work/3401 Raipur, Dated 09.05.2023 and has also submitted measures to be adopted for Protection of Canal Passing through. The EAC is of the view that the stringent mitigation measures shall be undertaken for conservation of the canal.
 8. Mandhar Branch Canal (0.3 km, East), Siltara Village Pond (0.35 km, North), Giroud village Pond (0.7 km, South), Dhaneli Village Pond (0.6 km, South), Mandhar Village Pond (0.5 km, SE) and Sankara Village Pond (0.15 km, W) also exists within the study area of the project site. PP has submitted the measures to be adopted for Protection of near by Ponds. The EAC is of the opinion that stringent mitigation measures shall be undertaken for conservation of the water bodies.
 9. The total water requirement after the proposed expansion is estimated as 27,646 m³/day which is equivalent to 6.30 MGD which is proposed to be obtained from River Kharoon wherein an anicut had been constructed by JNIL with CSIDC. The unit had already obtained sanction for 8 MGD drawl from WRD GOC vide letter dated S.No.5323/29/14/M/31/01 dated 28-10-2002 for the existing project. No additional water permission is required for the expansion project.
 10. The PP submitted that existing green belt has been developed in 189 Ha. area which is about 39% of the Existing plant area of 481.292 Ha. with total 4,87,264 Trees. Proposed additional greenbelt will be 3.5 Ha. which is about 1% of the total area. Thus total of 192.5 Ha. area (40% of total project area) will be developed as greenbelt. Additional 10,000 nos. of plants will be planted and nurtured in 2 years time upon receipt of E.C. The EAC deliberated on the greenbelt action plan and opined that remaining greenbelt shall be completed in a period of 1 year.
 11. The Committee has found that the baseline data and revised incremental GLC due to the proposed project and observed that PM₁₀ and PM_{2.5} values are recorded very high. Also

the incremental GLC for SO₂ and NO₂ are also high. Further, it was noted that the maximum values of noise are also very high. The EAC opined that PP shall strictly implement the mitigation measures submitted to minimise the same.

12. The committee deliberated details of carbon foot prints and carbon sequestration study w.r.t. proposed project and found them to be satisfactory.
13. The Committee also deliberated on the public hearing issues along with revised action plan submitted by the proponent to address the issues raised during the public hearing along with the village adoption plan and found it satisfactory.
14. The Committee deliberated on the certified compliance report of previous EC obtained from IRO, MoEFCC along with the ATR and review report of IRO, MoEFCC and is of the opinion that PP shall strictly comply with the observations of IRO as per the submitted ATR.
15. The EAC deliberated on the submitted ADS reply of project proponent and found it satisfactory.
16. The EAC deliberated the detailed Action Plan on the compliance of CEPI guidelines as per Ministry's OM of 2019. The PP has submitted the detailed action plan in the EIA/EMP report. The EAC deliberated the Action plan on the CPA and found satisfactory.
17. The EAC also deliberated on the submitted written submission of project proponent and found it satisfactory.
18. The EAC deliberated on the proposal with due diligence in the process as notified under the provisions of the EIA Notification, 2006, as amended from time to time and accordingly made the recommendations to the proposal. The Experts Members of the EAC found the proposal in order and recommended for grant of environmental clearance.
19. The environmental clearance recommended to the project/activity is strictly under the provisions of the EIA Notification 2006 and its subsequent amendments. It does not tantamount/construe to approvals/consent/permissions etc. required to be obtained or standards/conditions to be followed under any other Acts/ Rules/ Subordinate legislations, etc., as may be applicable to the project. The project proponent shall obtain necessary permission as mandated under the Water (Prevention and Control of Pollution) Act, 1974 and the Air (Prevention and Control of Pollution) Act, 1981, as applicable from time to time, from the State Pollution Control Board, prior to construction & operation of the project.
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

- 39.10.25 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 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 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 comply with all the environmental protection measures and safeguards proposed in the documents submitted to the Ministry. All the recommendations made in the EIA/EMP in respect of environmental management, and risk mitigation measures relating to the project shall be implemented.
- (iii) The project proponent shall utilize modern technologies for capturing of carbon emitted and shall also develop carbon sink/carbon sequestration resources capable of capturing more than emitted. The implementation report shall be submitted to the IRO, MoEF&CC in this regard.
- (iv) In pursuance to MoEF&CC OMs dated 31st October, 2019 & 30th December, 2019 issued in compliance of the order of Hon'ble NGT in OA No. 1038/2018 dated 19th August, 2019, the compliance of all the conditions applicable to CEPI shall be implemented as per the submitted plan. PP shall strictly implement the Action Plan/Mitigation measures as prescribed for the CPA, as the Unit is located in CPA.
- (v) The PP shall strictly implement the additional Environmental safe guards as proposed to address the emissions due to high AAQ and noise values.
- (vi) The Sahibi River and other water bodies exists nearby of the project site. Also, there are other water bodies within the study area of 10 km of the project site. A robust and full proof Drainage Conservation scheme to protect the natural drainage and its flow parameters; along with Soil conservation scheme and multiple Erosion control measures shall be implemented.
- (vii) The total water requirement after the proposed expansion of 27,646 m³/day (equivalent to 6.30 MGD) shall be obtained from River Kharoon (wherein an anicut had been constructed by JNIL with CSIDC). Necessary permission shall be obtained from the Competent Authority.
- (viii) Three tier Green Belt shall be developed in atleast 40% of project area in ia period of 1 year with native species all along the periphery of the project site of adequate width and tree density shall not be less than 2500 per ha. Survival rate of green belt developed shall be monitored on periodic basis to ensure that damaged plants are replaced with new plants in the subsequent years. PP shall develop greenbelt in the form of shelter belt comprising of total of 6 rows of 2x2 m plantation with tall trees & broad leaves with thick canopy alongwith windshield inside the plant premises to act as green barrier for air pollution & noise levels towards nearby ESA's. 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. 85.60 Crores shall be strictly implemented and progress shall be submitted to the Regional Office of MoEF&CC.

- (x) As committed, the PP shall adopt 10 villages naming Siltara, Sankara, Girod, Dhaneli, Mandhar, Charoda, Murethi, Tekari, Nimora and Akoli and implement the Village Adoption program consisting of need-based community development activities, to develop them into model villages.
- (xi) PP shall strictly comply with the observations of IRO in the certified compliance report as per the submitted ATR.

B. General Conditions

I. Statutory compliance:

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

II. Air quality monitoring and preservation

- i. The project proponent shall install 24x7 continuous emission monitoring system at process stacks to monitor stack emission as well as 06 Nos. Continuous Ambient Air Quality Station (CAAQMS) for monitoring AAQ parameters with respect to standards prescribed in Environment (Protection) Rules 1986 as amended from time to time. The CEMS and CAAQMS shall be connected to SPCB and CPCB online servers and calibrate these systems from time to time according to equipment supplier specification through labs recognized under Environment (Protection) Act, 1986 or NABL accredited laboratories.
- ii. The project proponent shall carryout Continuous Ambient Air Quality monitoring for common/criterion parameters relevant to the main pollutants released (e.g. PM₁₀ and PM_{2.5} in reference to PM emission, and SO₂ and NO_x in reference to SO₂ and NO_x 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/Nm³ 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. Dry quenching (CDQ) system shall be installed along with power generation facility from waste heat recovery from hot coke
- xx. Facilities for spillage collection shall be provided for coal and coke on wharf of coke oven batteries (Chain conveyors, land based industrial vacuum cleaning facility). Land-based APC system shall be installed to control coke pushing emissions.
- xxi. Monitor CO, HC and O₂ in flue gases of the coke oven battery to detect combustion efficiency and cross leakages in the combustion chamber.

- xxii. Vapor absorption system shall be provided in place of vapour compression system for cooling of coke oven gas in case of recovery type coke ovens.
- xxiii. The coke oven gas shall be subjected to desulphurization if the sulphur content in the coal exceeds 1%.
- xxiv. Provide Low NO_x burners as primary measures and SCR /NSCR technologies as secondary measure to control NO_x emissions.
- xxv. The emission norms applicable for the cement plant shall be adhered to.
- xxvi. Dioxin and Furan monitoring shall be carried out once in six months at cement kiln stack.
- xxvii. DeSO_x system shall be provided dry type. NO_x level shall be maintained below 600 mg/Nm³ by using best available technology.
- xxviii. Petcoke dosing shall be controlled automatically to control SO₂ emission from chimney within the prescribed limits.
- xxix. PP shall identify the Source of fluoride emissions and action plan to mitigate the same shall be implemented.
- xxx. Pollution control system in the cement plant shall be provided as per the CREP Guidelines of CPCB.
- xxxi. During operational phase at Captive Power Plant, Action Plan to monitor coke/coal dust exposures in different process plants using personal and area air samplers and to compare with permissible limits as per Indian Factories Act, 1948 shall be implemented.
- xxxii. The coal dust should be monitored at coal unloading, crushing, furnace areas and should be within 2 mg/m³, respirable dust fraction containing less than 5% quartz as per Indian Factories Act, 1948.
- xxxiii. Basic Oxygen Furnace (BOF) gas shall be cleaned dry.
- xxxiv. Online stack monitoring system for IF and RHF shall be installed and monitoring report shall be submitted to the concerned Regional Office of the MoEF&CC along with the six monthly compliance report.
- xxxv. Low NO_x Burners will be installed at Reheating Furnace for control of Gaseous emissions generated while using PNG.
- xxxvi. The Project proponent shall fix carbon monoxide detectors with critical alarms at strategic locations inside the Plant.

III. Water quality monitoring and preservation

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

- v. The project proponent shall make efforts to minimise water consumption in the plant complex by segregation of used water, practicing cascade use and by recycling treated water.
- vi. The proposed project shall be designed as "Zero Liquid Discharge" Plant. ETP shall be installed and there shall be no discharge of effluent from the plant. Domestic effluent shall be treated in Sewage Treatment Plant. Suitable measures shall be adopted for sewage water handling to ensure no contamination of any kind of water body.
- vii. All stockyards shall have impervious flooring and shall be equipped with water spray system for dust suppression. Stock yards shall also have garland drains and catch pits to trap the run off material and shall be implemented as per the action plan submitted in EIA/EMP report.
- viii. Rain water harvesting shall be implemented to recharge/harvest water as per the action plan submitted in the EIA/EMP report.
- ix. The project proponent shall provide the ETP for effluents of rolling mills to meet the standards prescribed in G.S.R 277 (E) 31st March 2012 (applicable to IF/EAF) as amended from time to time.
- x. The project proponent shall provide appropriate ETP for effluents discharged from coke oven and by-product to meet the standards prescribed in G.S.R 277 (E) 31st March 2012 (applicable to Coke oven plants) as amended from time to time.
- xi. Treated water from ETP of COBP shall not be used for coke quenching.
- xii. Air Cooled condensers shall be used in the captive power plant.

IV. Noise monitoring and prevention

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

V. Energy Conservation measures

- i. Use torpedo ladle for hot metal transfer as far as possible. If ladles not used, provide covers for open top ladles.
- ii. Restrict Gas flaring to < 1%.
- iii. Provide solar power generation on roof tops of buildings, for solar light system for all common areas, street lights, parking around project area and maintain the same regularly;
- iv. Provide LED lights in their offices and residential areas.
- v. The project proponent shall provide waste heat recovery system (pre-heating of combustion air) at the flue gases of reheating furnaces.
- vi. Practice hot charging of slabs and billets/blooms as far as possible.
- vii. Ensure installation of regenerative type burners on all reheating furnaces.

- viii. Blast Furnaces shall be equipped with Top Recovery Turbine, dry gas cleaning plant, stove waste heat recovery, cast house and stock house ventilation system and slag granulation facility.
- ix. Coke Dry Quenching (CDQ) shall be provided for coke quenching for both recovery and non-recovery type coke ovens.
 - x. The project proponent shall provide waste heat recovery system on the DRI Kilns.
 - xi. The dolochar generated shall be used for power generation.
- xii. Tar shall be recovered from producer gas and shall be sold to registered processors and phenolic water shall be incinerated in After Burn Chamber (ABC) of DRI kilns.
- xiii. The PP shall implement the guidelines on sponge iron plants issued by the CPCB/SPCB in this regard.
- xiv. The project proponent make efforts to achieve power consumption less than 65 units/tonne for Portland Pozzolona Cement (PPC) and 85 units/tonne for Ordinary Portland Cement (OPC) production and thermal energy consumption of 670 Kcal/Kg of clinker.
- xv. Maximize utilization of fly ash, slag and sweetener in cement blend as per BIS standards.
- xvi. Maximize utilization of alternate fuels and Co-processing to achieve best practice norms.
- xvii. Waste heat recovery system shall be provided for kiln and cooler.

VI. Waste management

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

- vii. SMS slag after metal recovery in waste recycling facility shall be conditioned and used for road making, railway track ballast and other applications. The project proponent shall install a waste recycling facility to recover metallic and flux for recycle to sinter plant. The project proponent shall establish linkage for 100% reuse of rejects from Waste Recycling Plant.
- viii. Carbon recovery plant to recover the elemental carbon present in GCP slurries for use in Sinter plant shall be installed.
- ix. Waste recycling Plant shall be installed to recover scrap, metallic and flux for recycling to sinter plant and SMS.
- x. In case of Non-Recovery coke ovens, the gas main carrying hot flue gases to the boiler, shall be insulated to conserve heat and to maximise heat recovery.
- xi. Tar Sludge and waste oil shall be blended with coal charged in coke ovens (applicable only to recovery type coke ovens).

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 report 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.

Any other item with permission of the Chair.

Agenda No. 39.11

39.11 Proposed 1X18 MVA (Submerged Arc Furnace) Silico-Manganese (25,000 TPA) ferro-alloys production plant by M/s MOIL Limited, located at Plot No.: 50, 59, 60, 61/1, 61/2, 61/3, 61/4, 61/5, 63, Gumgaon Mines, Village – Ranjhana, Khapa; Tehsil-Saoner, Dist. - Nagpur; Maharashtra – Consideration of Environmental Clearance.

[Proposal No. IA/MH/IND1/407743/2022; File No. J-11011/79/2021-IA.II(I)]

[Consultant: Ultra-Tech ; Valid upto 06.06.2023]

- 39.11.1 M/s MOIL Limited has made an online application vide proposal No-IA/MH/IND1/407743/2022 dated 21st April, 2023 along with copy of EIA report and Forms (Part A, B and C) seeking Environment Clearance (EC) under the provisions of the EIA Notification, 2006 for the project mentioned above. The proposed project activity is listed at S. No. 3(a) Metallurgical industries (ferrous & non-ferrous) under Category “A” of the schedule of the EIA Notification, 2006 and being appraised at Central Level.
- 39.11.2 The proposal was considered during the 30th EAC meeting held on 15th May, 2023 wherein the EAC recommended the proposal for grant of Environment Clearance.
- 39.11.3 The file was processed in the Ministry wherein the Competent Authority pointed out that since the project is almost at the river edge, therefore, PP may be asked to submit the compliance to the Ministry's O.M. dated 14.02.2022 w.r.t. siting industries which are in close proximity with the river.
- 39.11.4 The Ministry raised ADS and vide email dated 12th June 2023, requested PP to submit the requisite information with compliance to the Ministry's O.M. dated 14th February, 2022.
- 39.11.5 PP submitted its response by uploading the information on 16.06.2023 on Parivesh portal along with the letter issued by the Irrigation Department, Nagpur, Maharashtra vide dated 30.04.2023 stating that Elevation of the proposed project site ranges from 304 m MSL to 314 m MSL. Also available map of blue line, in that site red level (100 yrs flood) is 308.60 meter, and Blue level (25 yrs flood) is 303.58 meter. Also it is seen that the flood level is 305.36. It also stated that, as the flood level of the lines has been fixed taking in to consideration possible floods, no opinion can be given as to whether the proposed construction will be affected by future floods or not.
- 39.11.6 The submission of PP was put up for consideration of Competent Authority of Ministry and it was further observed that Irrigation department has not given any NoC nor they have given any opinion regarding the suitability of site for siting the industry. However, it is clear that site is close to 25 years flood and also very much within the flood level. PP has also not given any defense / justification on the findings of Irrigation deptt. In view of the same, Competent Authority advised that EAC may re-examine the suitability of site for proposed project in the present form.

39.11.7 Accordingly, on advise of the Competent Authority, the proposal was again placed before the EAC in its 39th meeting held on 6-7th July, 2023 wherein the EAC examined the information submitted by the project proponent. The deliberations and recommendations of the EAC are as follows:

Written representations:

39.11.8 During the meeting, based on the deliberations made by the EAC, the project proponent vide letter dated 07.07.2023 through email dated 07.07.2023 submitted the following information:

- As per the lay out plan of site submitted, the blue contour line of 303.38 meter indicates HFL contour of past 25 years and the red contour line of 308.60 meter indicates HFL contour of past 100 years.
- Since the proposed project area falls outside of blue HFL line and inside of red HFL line, hence, the demarcated area (Green hatch) will not be considered for the utility/manufacturing of any process and no project activity will be done in that ar

Deliberations by the Committee

39.11.9 The Committee noted the following:

1. The instant proposal is for Proposed 1X18 MVA (Submerged Arc Furnace) Silico-Manganese (25,000 TPA) ferro-alloys production plant.
2. The proposal was considered and recommended for grant of EC during the 30th EAC meeting held on 15th May, 2023.
3. During processing of the proposal, the Competent Authority of MoEF&CC raised ADS w.r.t. compliance to the Ministry's O.M. dated 14.02.2022 pertaining to siting industries which are in close proximity with the river as the instant project is falling almost at the river edge.
4. As per the suggestions of the Ministry, the said proposal has been placed for re-consideration based on the submission of Project proponent.
5. The EAC took into consideration the information furnished by the project proponent and further written submission of project proponent wherein PP has undertaken that since the proposed project area falls outside of blue HFL line and inside of red HFL line, hence, the demarcated area (Green hatch) will not be considered for the utility/manufacturing of any process and no project activity will be done in that area.

Recommendations of the Committee

39.11.10 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 stipulation of 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 as detailed in the minutes of 30th EAC meeting held on 15th May, 2023.

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 8th June, 2022 on the status of compliance of conditions stipulated in all the existing environment clearances including amendments shall be provided. A Certified Compliance Report (CCR) issued by the concerned Authority shall be valid for a period of one year from the date of inspection.

- d. In case the existing project has not obtained Environment Clearance, reasons for not taking EC under the provisions of the EIA Notification 1994 and/or EIA Notification 2006 shall be provided. A proper justification needs to be submitted along with documentary proof. Copies of Consent to Establish/No Objection Certificate and Consent to Operate (in case of units operating prior to EIA Notification 1994 or 2006, CTE and CTO of FY 2005-2006) obtained from the SPCB shall be submitted. Further, compliance report to the conditions of CTO from the Regional Office of the SPCB shall be submitted, as per OM No. IA3-22/10/2022-IA.III [E 1772581], dated 8th June, 2022. CCR on CTO conditions issued by the concerned SPCBs/PCCs shall be valid for a period of one year from the date of inspection of the project.

3. Description of the Environment

- i. Study period
- ii. Approach and methodology for data collection as furnished below.

Attributes	Sampling		Remarks
	Network	Frequency	
A. Air Environment			
Micro-Meteorological <ul style="list-style-type: none"> • Wind speed (Hourly) • Wind direction • Dry bulb temperature • Wet bulb temperature • Relative humidity • Rainfall • Solar radiation • Cloud cover • Environmental Lapse Rate 	Minimum 1 site in the project impact area	1 hourly continuous	<ul style="list-style-type: none"> • IS 5182 Part 1-20 • Site specific primary data is essential • Secondary data from IMD, New Delhi • CPCB guidelines to be considered.
Pollutants <ul style="list-style-type: none"> • PM_{2.5} • PM₁₀ • SO₂ • NO_x • CO • HC 	At least 8-12 locations	As per National Ambient Air Quality Standards, CPCB Notification.	<ul style="list-style-type: none"> • Sampling as per CPCB guidelines • Collection of AAQ data (except in monsoon season) • Locations of various stations for different

Attributes	Sampling		Remarks
	Network	Frequency	
<ul style="list-style-type: none"> Other parameters relevant to the project and topography of the area 			<p>parameters should be related to the characteristic properties of the parameters.</p> <ul style="list-style-type: none"> The monitoring stations shall be based on the NAAQM standards as per GSR 826(E) dated 16/11/2009 and take into account the predominant wind direction, population zone and sensitive receptors including reserved forests, Raw data of all AAQ measurement for 12 weeks of all stations as per frequency given in the NAAQM Notification of 16/11/2009 along with min., max., average and 98% values for each of the AAQ parameters from data of all AAQ stations should be provided as an annexure to the EIA Report.
B. Noise			
<ul style="list-style-type: none"> Hourly equivalent noise levels 	At least 8-12 locations	As per CPCB norms	-
C. Water			

Attributes	Sampling		Remarks
	Network	Frequency	
<p>Parameters for water quality</p> <ul style="list-style-type: none"> pH, temp, turbidity, magnesium hardness, total alkalinity, chloride, sulphate, nitrate, fluoride, sodium, potassium, salinity Total nitrogen, total phosphorus, DO, BOD, COD, Phenol Heavy metals Total coliforms, faecal coliforms Phyto-plankton Zoo-plankton Microalgae/microalgal bloom 	<p>Samples for water quality should be collected and analyzed as per:</p> <ul style="list-style-type: none"> IS: 2488 (Part 1-5) methods for sampling and testing of Industrial effluents Standard methods for examination of water and wastewater analysis published by American Public Health Association. 		
<p>For River Bodies</p> <ul style="list-style-type: none"> Total Carbon pH Dissolved Oxygen Biological Oxygen Demand Free NH₄ Boron Sodium Absorption Ratio Electrical Conductivity TDS 	<ul style="list-style-type: none"> Surface water quality of the nearest River (60m upstream and downstream) and other surface water bodies 	<ul style="list-style-type: none"> Yield of water sources to be measured during critical season Standard methodology for collection of surface water (BIS standards) 	
<p>For Ground Water</p>	<ul style="list-style-type: none"> Ground water monitoring data should be collected at minimum of 8 locations (from existing wells /tube wells/existing current records) from the study area and shall be included. 		
<p>D. Traffic Study</p>			
<ul style="list-style-type: none"> Type of vehicles Frequency of vehicles for transportation of materials 	-		

Attributes	Sampling		Remarks
	Network	Frequency	
<ul style="list-style-type: none"> Additional traffic due to proposed project Parking arrangement 			
E. Land Environment			
Soil <ul style="list-style-type: none"> Particle size distribution Texture pH Electrical conductivity Cation exchange capacity Alkali metals Sodium Absorption Ratio (SAR) Permeability Water holding capacity Porosity 			Soil samples be collected as per BIS specifications
Land use/Landscape <ul style="list-style-type: none"> Location code Total project area Topography Drainage (natural) Cultivated, forest, plantations, water bodies, roads and settlements 			-
E. Biological Environment			
Aquatic <ul style="list-style-type: none"> Primary productivity Aquatic weeds Enumeration of phyto plankton, zoo plankton and benthos Fisheries Diversity indices Trophic levels Rare and endangered species Marine Parks/ Sanctuaries/ closed 			<ul style="list-style-type: none"> Detailed description of flora and fauna (terrestrial and aquatic) existing in the study area shall be given with special reference to rare, endemic and endangered species. Indicator species which indicate ecological and environment degradation should be identified and included to clearly state whether the proposed project would result in to any adverse effect on any species. Samples to collect from upstream and downstream of discharge point, nearby tributaries at downstream, and also from dug wells close to activity site. For forest studies, direction of wind should be considered while selecting forests.

Attributes	Sampling		Remarks
	Network	Frequency	
areas /coastal regulation zone (CRZ) Terrestrial <ul style="list-style-type: none"> • Vegetation-species list, economic importance, forest produce, medicinal value • Importance value index (IVI) of trees • Fauna • Avi fauna • Rare and endangered species • Sanctuaries / National park / Biosphere reserve • Migratory routes 			<ul style="list-style-type: none"> • Secondary data to collect from Government offices, NGOs, published literature.
F. Socio-economic			
<ul style="list-style-type: none"> • Demographic structure • Infrastructure resource base • Economic resource base • Health status: Morbidity pattern • Cultural and aesthetic attributes • Education 			<ul style="list-style-type: none"> • Socio-economic survey is based on proportionate, stratified and random sampling method. • Primary data collection through questionnaire • Secondary data from census records, statistical hard books, topo sheets, health records and relevant official records available with Govt. agencies

iii. Interpretation of each environment attribute shall be enumerated and summarized as given below:

- Ambient air quality
- Ambient Noise quality
- Surface water quality
- Ground water quality
- Soil quality
- Biological Environment
- Land use
- Socio-economic environment

4. Anticipated Environment Impacts and mitigation measures (In case of expansion, cumulative impact assessment shall be carried out)

- i. Identification of potential impacts in the form of a **matrix** for the construction and operation phase for all the environment components

Activity	Environment	Ecological	Socio-economic
Construction phase			
Operation phase			

- ii. Impact on ambient air quality (Sources; Embedded control measures; Assessment; Mitigation measures; Residual impact)

a. Construction phase

b. Operation phase

- Details of stack emissions from the existing as well as proposed activity.
- Assessment of ground level concentration of pollutants from the stack emission based on AQIP Modelling The air quality contours shall be plotted on a location map showing the location of project site, habitation nearby, sensitive receptors, if any along with wind rose map for respective period
- Impact on ground level concentration, under normal, abnormal and emergency conditions. Measures to handle emergency situations in the event of uncontrolled release of emissions.

- iii. Impact on ambient noise quality (Sources; Embedded control measures; Assessment; Mitigation measures; Residual impact)

a. Construction phase

b. Operation phase

- iv. Impact on traffic (Sources; Embedded control measures; Assessment; Mitigation measures; Residual impact)

a. Construction phase

b. Operation phase

- v. Impact on soil quality (Sources; Embedded control measures; Assessment; Mitigation measures; Residual impact)

a. Construction phase

b. Operation phase

- vi. Impact on land use (Sources; Embedded control measures; Assessment; Mitigation measures; Residual impact)

a. Construction phase

b. Operation phase

- vii. Impact on surface water resource and quality (Sources; Embedded control measures; Assessment; Mitigation measures; Residual impact)

a. Construction phase

b. Operation phase

- viii. Impact on ground water resource and quality (Sources; Embedded control measures; Assessment; Mitigation measures; Residual impact)

a. Construction phase

- b. Operation phase
- ix. Impact on terrestrial and aquatic habitat (Sources; Embedded control measures; Assessment; Mitigation measures; Residual impact)
 - a. Construction phase
 - b. Operation phase
- x. Impact on socio-economic environment (Sources; Embedded control measures; Assessment; Mitigation measures; Residual impact)
 - a. Construction phase
 - b. Operation phase
- xi. Impact on occupational health and safety (Sources; Embedded control measures; Assessment; Mitigation measures; Residual impact)
 - a. Construction phase
 - b. Operation phase

5. Analysis of Alternatives (Technology & Site)

- i. No project scenario
- ii. Site alternative
- iii. Technical and social concerns
- iv. Conclusion

6. Environmental Monitoring Program

- i. Details of the Environment Management Cell
- ii. Performance monitoring schedule for all pollution control devices shall be furnished.
- iii. Corporate Environment Policy
 - a. Does the company have a well laid down Environment Policy approved by its Board of Directors? If so, it may be detailed in the EIA report.
 - b. Does the Environment Policy prescribe for standard operating process / procedures to bring into focus any infringement / deviation / violation of the environment or forest norms / conditions? If so, it may be detailed in the EIA.
 - c. What is the hierarchical system or Administrative order of the company to deal with the environment issues and for ensuring compliance with the environment clearance conditions? Details of this system may be given.
 - d. Does the company have system of reporting of non compliances / violations of environment norms to the Board of Directors of the company and / or shareholders or stakeholders at large? This reporting mechanism shall be detailed in the EIA report
- iv. Action plan for **post-project environment monitoring matrix:**

Activity	Aspect	Monitoring Parameter	Location	Frequency	Responsibility
Construction phase					
Operation phase					

7. Additional Studies

- i. Project proponent shall submit a study report on Decarbonisation program, which would essentially consist of company's carbon emissions, carbon budgeting/ balancing, carbon sequestration activities and carbon capture, use and storage after offsetting strategies. Further, the report shall also contain time bound action plan to reduce its carbon intensity of its operations and supply chains, energy transition pathway from fossil fuels to Renewable energy etc. All these activities/ assessments should be measurable and monitorable with defined time frames.
- ii. Details of adoption/ implementation status/plan to achieve the goal of Glasgow COP26 Climate Submit with regard to enhance the non-fossil energy, use of renewable energy, minimization of net carbon emission and carbon intensity with long-term target of "net Zero" emission.
- iii. Implementation status/measures adopted for avoiding the generation of single used plastic waste.
- iv. In cases the project is located in Critically and Severely Polluted Areas, additional mitigation measures adopted and detailed action plan to be submitted in the EIA/EMP Report as per MoEF&CC O.M. No. 22-23/2028-IA.III dated 31/10/2019 and MoEF&CC O.M. No. 22-23/2028-IA.III dated 5/07/2022 has to be submitted.
- v. Public consultation details (Entire proceedings as separate annexure along with authenticated English Translation of Public Consultation proceedings).
- vi. As part of Corporate Environment Responsibility (CER) activity, company shall adopt nearby villages based on the socio-economic survey and undertake community developmental activities in consultation with the village Panchayat and the District Administration. In this regard, time bound action plan as per the MoEF&CC Office Memorandum dated 30/09/2020 shall be submitted.
- vii. Summary of issues raised during public consultation along with action plan to address the same as per MoEF&CC O.M. dated 30/09/2020

S No	Physical activity and action plan		Year of implementation (Budget in INR)			Total Expenditure (Rs. in Crores)
	Name of the Activity	Physical Targets	1 st	2 nd	3 rd	

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/Nm³ shall be furnished.
14. PP shall explore the possibility of plastic waste utilization in the Plant/Unit process.
15. Action plan for 100 % solid waste utilization shall be submitted.
16. PM (PM₁₀ and P_{2.5}) present in the ambient air must be analysed for source analysis – natural dust/RSPM generated from plant operations (trace elements) of PM₁₀ 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 (PM₁₀ and PM_{2.5}) present in the ambient air must be analysed for source analysis – natural dust/RSPM generated from plant operations (trace elements) of PM₁₀ to be carried over.
6. All stock piles will have to be on top of a stable liner to avoid leaching of materials to ground water.
7. Plan for the implementation of the recommendations made for the steel plants in the CREP guidelines.
8. Plan for slag utilization
9. Plan for utilization of energy in off gases (coke oven, blast furnace)
10. System of coke quenching adopted with justification.
11. Trace metals Mercury, arsenic and fluoride emissions in the raw material.
12. Trace metals in waste material specially in slag.
13. Trace metals in water
14. Details of proposed layout clearly demarcating various units within the plant.
15. Complete process flow diagram describing each unit, its processes and operations, along with material and energy inputs and outputs (material and energy balance).
16. Details on design and manufacturing process for all the units.
17. Details on environmentally sound technologies for recycling of hazardous materials, as per CPCB Guidelines, may be mentioned in case of handling scrap and other recycled materials.
18. Details on requirement of energy and water along with its source and authorization from the concerned department. Location of water intake and outfall points (with coordinates).
19. Details on toxic metal content in the waste material and its composition and end use (particularly of slag).
20. Details on toxic content (TCLP), composition and end use of slag.
21. Fourth Hole fume extraction system shall be provided for submerged Arc Furnace (SAF). Waste heat recovery (WHR) system shall be installed to recover the sensible heat from flue gases of electric arc furnace (EAF).
22. Emission/effluent norms as per G.S.R 894 (E) dated 4/12/2019 [EPA Rules 1986].
23. Action plan for the stock piles with impervious floor, provision of garland drains and catch pits to trap run off material shall be submitted.
24. Action plan to limit the particulate matter emission from all the stacks below 30 mg/Nm³ shall be furnished.
25. Action plan for 100 % solid waste utilization shall be submitted.
26. PP shall explore the possibility of plastic waste utilization in the Plant/Unit process.

Standard ToRs FOR METALLURGICAL INDUSTRY (Ferrous and Non-ferrous)[3(a)]

1. A 3-D view i.e. DEM (Digital Elevation Model) for the area in 10 km radius from the proposal site. MRL details of project site and RL of nearby sources of water shall be indicated.
2. Plan for the implementation of the recommendations made for the proposed Unit in the Corporate Responsibility for Environmental Protection (CREP) guidelines.
3. Plan for solid wastes utilization.

4. Plan for utilization of energy in off gases (coke oven, blast furnace)
5. System of coke quenching adopted with full justification.
6. Details on environmentally sound technologies for recycling of hazardous materials, as per CPCB Guidelines, may be mentioned in case of handling scrap and other recycled materials.
7. Details on toxic metal content in the waste material and its composition and end use (particularly of slag).
8. Details on toxic content using Toxicity Characteristic Leaching Procedure (TCLP), composition and end use of slag.
9. 100 % dolo char generated in the plant shall be used to generate power.
10. Fourth Hole fume extraction system shall be provided for SAF.WHR system shall be installed to recover sensible heat from flue gases of EAF. Provision for installation of jigging and briquetting plant to utilise the fines generated in the process.
11. No tailing pond is permitted for Iron ore slimes. Dewatering and filtration system shall be provided.
12. Emission/effluent norms as per G.S.R 894 (E) dated 4/12/2019 [EPA Rules 1986].
13. Action plan for the stock piles with impervious floor, provision of garland drains and catch pits to trap run off material shall be submitted.
14. Action plan for developing connecting and internal road in terms of MSA as per IRC guidelines shall be submitted.
15. Action plan to limit the particulate matter emission from all the stacks below 30 mg/Nm³ shall be furnished.
16. Action plan for 100 % solid waste utilization shall be submitted.
17. PM (PM₁₀ and P_{2.5}) present in the ambient air must be analysed for source analysis – natural dust/RSPM generated from plant operations (trace elements) of PM₁₀ to be carried over.

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

1. A note on pulp washing system capable of handling wood pulp shall be included.
2. Manufacturing process details for the existing and proposed plant shall be included. Chapter on Pulping & Bleaching shall include: no black liquor spillage in the area of pulp mill; no use of elemental chlorine for bleaching in mill; installation of hypo preparation plant; no use of potcher washing and use of counter current or horizontal belt washers. Chapter on Chemical Recovery shall include: no spillage of foam in chemical recovery plant, no discharge of foul condensate generated from MEE directly to ETP; control of suspended particulate matter emissions from the stack of fluidized bed recovery boiler and ESP in lime kiln
3. Studies shall be conducted and a chapter shall be included to show that Soda pulping process can be employed for Eucalyptus/Casuarina to produce low kappa (bleachable) grade of pulp.
4. Commitment that only elemental Chlorine-free technology will be used for the manufacture of paper and existing plant without chemical recovery plant will be closed within 2 years of issue of environment clearance.

5. A commitment that no extra chlorine base bleaching chemicals (more than being used now) will be employed and AOx will remain within limits as per CREP for used based mills. Plan for reduction of water consumption.
6. Undertaking to comply with the norms stipulated in the S.O. 3187 (E) dated 7/10/2016 for the projects located in Ganga basin.
7. Action plan for the stock piles with impervious floor, provision of garland drains and catch pits to trap run off material shall be submitted.
8. Action plan to limit the particulate matter emission from all the stacks below 30 mg/Nm³ shall be furnished.
9. Action plan for 100 % waste utilization shall be submitted.

Standard ToRs FOR LEATHER/SKIN/HIDE PROCESSING INDUSTRY [4(f)]

1. Justification for engaging a particular type of process (raw hide/skin into semi finishing or finished leather, semi-finished leather to finished leather, dry finishing operations, chrome/vegetable tanning, etc.).
2. Details regarding complete leather/ skin/ hide processing including the usage of sulphides, nitrogen compounds, chromium or other tanning agents, post-tanning chemicals, biocides, etc., along with the material balance shall be provided.
3. In case of chrome tanning, details of the chrome recovery plant, management of shavings/solid waste including safe disposal.
4. Details on reuse of soak liquor / saline stream from membrane system, if applicable, to the extent possible in pickling activity after required treatment. Also, mention the salt recovery measures.
5. Action plan to limit the particulate matter emission from all the stacks below 30 mg/Nm³ shall be furnished.
6. Action plan for 100 % waste utilization shall be submitted.

Standard ToRs FOR COKE OVEN PLANT [4(b)]

1. Justification for selecting recovery/non-recovery (beehive) type batteries with the proposed unit size.
2. Details of proposed layout clearly demarcating various facilities such as coal storages, coke making, by-product recovery area, etc within the plant.
3. Details of coke oven plant (recovery/non-recovery type) including coal handling, coke oven battery operations, coke handling and preparation.
4. Scheme for coal changing, charging emission centre, Coke quenching technology, pushing emission control.
5. Scheme for coke oven effluent treatment plant details including scheme for meeting cyanide standard.
6. Emission/effluent norms as per G.S.R 894 (E) dated 4/12/2019. Provision of CDQ in case of coke oven plant of 0.8 MTPA and above.

7. Action plan to limit the particulate matter emission from all the stacks below 30 mg/Nm³ shall be furnished.
8. Action plan for 100 % solid waste utilization shall be submitted.
9. Action plan for the stock piles with impervious floor, provision of garland drains and catch pits to trap run off material shall be submitted.

Standard ToRs FOR ASBESTOS MILLING AND ASBESTOS BASED PRODUCTS[4(c)]

1. Type of fibres used (Asbestos and others) and preference of selection from techno-environment angle should be furnished
2. As asbestos is used in several products and as the level of precautions differ from milling to usage in cement products, friction products gasketing, textiles and also differ with the process used, it is necessary to give process description and reasons for the choice for selection of process
3. Technology adopted, flow chart, process description and layout marking areas of potential environment impacts
4. National standards and codes of practice in the use of asbestos particular to the industry should be furnished
5. In case of newly introduced technology, it should include the consequences of any failure of equipment/ technology and the product on environment status.
6. In case of expansion project asbestos fibre to be measured at stack emission and work zone area, besides base line air quality.
7. In case of green field project asbestos fibre to be measured in the ambient air.
8. Action plan to limit the particulate matter emission from all the stacks below 30 mg/Nm³ shall be furnished.
9. Action plan for 100 % solid waste utilization shall be submitted.
10. PM (PM₁₀ and P_{2.5}) present in the ambient air must be analysed for source analysis – natural dust/RSPM generated from plant operations in case of expansion projects (trace elements /asbestos fibre) of PM₁₀ to be carried over.
11. Action plan for the stock piles with impervious floor, provision of garland drains and catch pits to trap run off material shall be submitted.

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

1. Details regarding pollution control measures to be adopted in the mineral handling area, loading and unloading areas including all transfer points shall be submitted.
2. The Project proponent shall submit action plan for conditioning of the ore with water to mitigate fugitive dust emission, without affecting flow of ore in the ore processing and handling areas.
3. Treatment details regarding effluent generated from the ore beneficiation plant and the mode of transportation of tailing slurry shall be submitted.
4. Separate chapter on slime management shall be submitted.

5. Action plan for regular monitoring of ground water level and quality in and around the project area of beneficiation plant and tailing/slime pond shall be submitted by establishing a network of existing wells and constructing new piezometers.
6. Details regarding lining of the tailing/slime pond to be provided shall be submitted in order to ensure that there is no leaching from the tailing/slime pond.
7. Details regarding establishment of garland drain around the tailing/slime pond and the quantity of decanted water to be re-circulated from the tailing/slime pond shall be submitted along with complete water balance.
8. Technology to be adopted for maximum recovery of ore in order to reduce slurry discharge and to increase the life of the tailing/slime pond shall be submitted.
9. Action plan for 100 % solid waste utilization shall be submitted.
10. Action plan for the stock piles with impervious floor, provision of garland drains and catch pits to trap run off material shall be submitted.

Executive Summary

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

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

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

S. No.	Name	Position	06.07.2023	07.07.2023
1.	Shri Rajive Kumar	Chairman	<i>Present</i>	<i>Present</i>
2.	Dr. Dipankar Shome	Vice Chairman	<i>Present</i>	<i>Present</i>
3.	Dr. S. Ranganathan	Member	<i>Present</i>	<i>Present</i>
4.	Dr. Ranjit Prasad	Member	<i>Present</i>	<i>Present</i>
5.	Dr. S. K. Singh	Member	<i>Present</i>	<i>Present</i>
6.	Dr. Tejaswini Ananthkumar	Member	<i>Present</i>	<i>Present</i>
7.	Dr. Hemant Sahasrabuddhe	Member	<i>Present</i>	<i>Present</i>
8.	Dr. Jai Krishna Pandey	Member	<i>Present</i>	<i>Present</i>
9.	Dr. E V R Raju	Member	<i>Present</i>	<i>Present</i>
10.	Dr. S K Chaturvedi, Actg. DG, (Representatives of NCCBM)	Member	<i>Present</i>	<i>Present</i>
11.	Shri Nazimuddin, Scientist 'F' (Representative of CPCB)	Member	<i>Present</i>	<i>Present</i>
12.	Dr. S. Raghavan, Scientist 'D' (Representative of National Institute of Occupational Health (NIOH))	Member	<i>Absent</i>	<i>Absent</i>
13.	Dr. Sanjay Bist, Scientist 'E' (Representative of Indian Meteorological Department)	Member	<i>Present</i>	<i>Present</i>
14.	Dr. R.B. Lal, Scientist F, MoEFCC	Member Secretary	<i>Present</i>	<i>Present</i>
MoEFCC				
15.	Dr R P Rastogi	Scientist C	<i>Present</i>	<i>Present</i>
16.	Dr Sandeepan BS	Scientist B	<i>Present</i>	<i>Present</i>

Approval of EAC Chairman

Re: Approval of Compiled Draft Minutes of 39th EAC Meeting held on 6-7 July 2023-Regarding.

From : chairman eac ind 1
<chairman.eac.ind.1@gmail.com>

Sun, Jul 16, 2023 09:41
PM

Subject : Re: Approval of Compiled Draft
Minutes of 39th EAC Meeting held on
6-7 July 2023-Regarding.

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

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>

Dear Dr Lal,
The minutes are approved.
Kindly do the needful.

Best wishes
Rajive Kumar
Chairman-Industry-1
