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

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Date of Zero draft MoM sent to EAC: 03/06/2022
Approval by Chairman: 07/06/2022
Uploading on PARIVESH: 07/06/2022

Minutes of the 6th Expert Appraisal Committee (Industry-1 Sector) Meeting held on May 30-31, 2022 for Environment Appraisal of Projects constituted under the provisions of Environment Impact Assessment (EIA) Notification, 2006

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

Time: 10:30 AM onwards

DAY-1: MAY 30, 2022 [MONDAY]

(i) Opening Remarks by the Chairman, EAC

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

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

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

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

(iii) Confirmation of the Minutes of the 5th Meeting of the EAC (Industry-1 Sector) held during May 12-13, 2022 at MoEF&CC through VC.

The EAC, having taken note that final minutes were issued after incorporating comments offered by the EAC (Industry-1 Sector) members on the minutes of its **5th Meeting of the EAC (Industry-1 Sector) held during May 12-13, 2022** conducted through Video Conferencing (VC), and noted that no request has been received for modifications/factual correction, in the minutes of the 5th EAC meeting for the project/activities, and confirmed the same.

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

Consideration of Environmental Clearance Proposals

Agenda No. 6.1

6.1 **Expansion of MS Ingot/MS Billet production from 57,600 TPA to 204,200 TPA and Rolled Production from 88,200 TPA to 200,000 TPA by M/s. Kashi Vishwanath Steels Private Limited located at Narain Nagar Industrial Estate, Bazpur Road, Kashipur, District Udham Singh Nagar, Uttarakhand – Consideration of Environmental Clearance.**

[Proposal no. IA/UK/IND/258872/2019; File no. J-11011/195/2019-IA.II(I)]
[Name of Consultant: M/s. Vardan Environet, Gurugram; QCI NABET Accreditation: valid upto 05/05/2023]

6.1.1 M/s. Kashi Vishwanth Steel Private Ltd has made an online application vide proposal no. IA/UK/IND/258872/2019 dated 30.04.2022 along with copy of EIA/EMP report, Form – 2 and Certified CTO compliance report seeking Environment Clearance (EC) under the provisions of the EIA Notification, 2006 for the project mentioned above. The proposed project activity is listed at schedule no. 3(a) Metallurgical Industries (ferrous & non-ferrous) under Category "A" of the schedule of the EIA Notification, 2006 and appraised at Central Level.

6.1.2 Name of the EIA consultant: M/s. Vardan Environet, Gurugram [Sl. No. 38, List of ACOs with their Certificate / Extension Letter no. NABET/EIA/2023/SA 0158; valid upto 05/05/2023, Rev. 23, May 09, 2022].

Details submitted by Project proponent

6.1.3 The details of the ToR are furnished as below:

Date of application	Consideration	Details	Date of accord	Validity of ToR
18.04.2019	7th Meeting of REAC (Industry-1) held on 29th – 31st May, 2019	Terms of Reference	10.07.2019	09.07.2023

6.1.4 The project of M/s Kashi Vishwanth Steel Private Ltd. located in Narain Nagar Industrial Estate, Bazpur Road, Kashipur, District Udham Singh Nagar, Uttarakhand is for expansion of existing plant for Pencil Ingot / MS Billet production from 57,600 TPA to 204,200 TPA and Rolled Production from 88,200 TPA to 200,000 TPA.

6.1.5 Environmental Site Settings:

S. No.	Particulars	Details	Remarks
1	Total land	5.981 ha [Private: 5.981 ha]	Land Use: Industrial
2	Land acquisition details as per MoEF&CC O.M. dated 7/10/2014	No additional land required for the project. Entire existing Land area of 5.981 ha. is in possession of the Project Proponent and documents are provided in the EIA.	
3	Existence of habitation & involvement of R&R, if any.	R&R is not applicable	

<table>
<tr><th>S. No.</th><th>Particulars</th><th>Details</th><th>Remarks</th></tr>
<tr><td></td><td></td><td>Study Area<table><tr><th>Habitation</th><th>Distance</th><th>Direction</th></tr><tr><td>Kashipur</td><td>4.5 km</td><td>NW</td></tr></table></td><td></td></tr>
<tr><td>4</td><td>Latitude and Longitude of all corners of the project site.</td><td><table><tr><th>Point</th><th>Latitude</th><th>Longitude</th></tr><tr><td>A</td><td>29º 11' 25.3" N</td><td>79º 0' 00.3" E</td></tr><tr><td>B</td><td>29º 11' 20.5" N</td><td>79º 0' 01.2" E</td></tr><tr><td>C</td><td>29º 11' 16.0" N</td><td>79º 0' 10.8" E</td></tr><tr><td>D</td><td>29º 11' 19.1" N</td><td>79º 0' 13.4" E</td></tr><tr><td>E</td><td>29º 11' 21.3" N</td><td>79º 0' 09.9" E</td></tr><tr><td>F</td><td>29º 11' 24.7" N</td><td>79º 0' 11.6" E</td></tr></table></td><td></td></tr>
<tr><td>5</td><td>Elevation of the project site</td><td>231 m above mean sea level</td><td></td></tr>
<tr><td>6</td><td>Involvement of Forest land, if any</td><td>No involvement of Forest Land</td><td></td></tr>
<tr><td>7</td><td>Water body (Rivers, Lakes, Pond, Nala, Natural Drainage, Canal etc.) exists within the project site as well as study area</td><td>Project Site: No water bodies within the project site
Study area<table><tr><th>Water Body</th><th>Distance</th><th>Direction</th></tr><tr><td>Bahalla Nadi</td><td>0.19</td><td>W</td></tr><tr><td>River Kosi</td><td>4.74</td><td>SE</td></tr></table></td><td></td></tr>
<tr><td>8</td><td>Existence of ESZ/ ESA/ national park/ wildlife sanctuary/ biosphere reserve/ tiger reserve/ elephant reserve etc. if any within the study area</td><td>None within 10 km radius study area</td><td></td></tr>
</table>

6.1.6 The company was set up in the year 1985 after obtaining NOC from Uttar Pradesh Pollution Control Board on 12.12.1985 for setting up of small Steel Plant for production of 30 TPD Rolled Products (MS Bar. MS Round and Channels). The plant was expanded in 1992 for 100 TPD production after obtaining NOC from Uttar Pradesh Pollution Control Board on 24.06.1992. Again, the plant was expanded for production of 160 TPD after obtaining NOC from Uttarakhand Environment Conservation & Pollution Control Board on 21.12.2005. M/s KVS has further expanded its capacity for the production 245 TPD after obtaining NOC from UECPCB on 26.04.2006. Since, the project cost was less than Rs. 100 / 50 Crores for all above installed CTEs the project didn't fall under the purview of the EIA Notification 1994. Latest CTO has been granted by SPCB vide letter No. UKPCB/HO/Con/K-8/2021/416 dated 29.07.2021.

6.1.7 Implementation status of the existing project operating through CTE/CTO:
The Industry was set up in the year 1985 after obtaining NOC from Uttar Pradesh Pollution Control Board on 12.12.1985 for production of 30 TPD Rolled Products (MS Bar. MS Round and Channels). Subsequently the plant was expanded in 1992, 2005 and 2006 for production of 245 TPD Rolled Products. Since, the project cost was less than 100 / 50 Crores for all above

installed CTEs the project didn't fall under the purview of EIA Notification 1994. The industry is current operating on the basis of Consent to Operate dated 29.07.2021 for the following configuration.

S. No.	Facilities	Units	As per CTE	Implementation Status as on date	Production as per CTO
1	Induction Furnace	2x 5 Tons 2x 4 Tons	Unit was established in 1985 on the basis of CTE and is operating on the basis of CTO dated 29.07.2021	Implemented and Operational	57,600 TPA of MS Ingots / Billets 88,200 TPA of Rolled Products
2	Continuous Casting Machine (CCM) / Ingot Casting	1x 2 Strand, 6/11 m radius			
3	Reheating Furnace	1x45 TPD			
4	Rolling Mill	245 TPD			

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

Plant	Existing				Final (Existing + Proposed)	
	Configu. as per CTE	Capacity TPA as per CTE	Configu. as per CTO	Capacity TPA as per CTO	Configu.	Capacity TPA
Steel Melting Shop						
Induction Furnace	2x 5 Tons 2x 4 Tons	57,600 MS Ingots / Billets	2x 5 Tons 2x 4 Tons	57,600 MS Ingots / Billets	4x 12 Ton	204,200 MS Ingots / Billets
Continuous Casting Machine (CCM) / Ingot Casting	2 Strand, 6/11 m radius		2 Strand, 6/11 m radius		2 Strand, 6/11m radius	
Gas Oxygen Refining Unit	-	-			1 x 20 Ton	-
Producer Gas plant	Existing Producer Gas Plant shall be phased out after the proposed expansion. PNG Gas will be used in Reheating Furnace					
Metal Recovery Plant	--	--	--	--	1	4 TPD
Reheating Furnace	1 x 45 TPD 1 x 200 TPD	-	1 x45 TPD 1 x200 TPD	--	1 x45 TPD 1 x200 TPD	--
Rolling Mill Low Speed Rolling Mill	45 TPD 200 TPD	16,700 71,500	45 TPD 200 TPD	16,700 71,500	120 TPD 452 TPD	41,760 158,240

Plant	Existing				Final (Existing + Proposed)	
	Configu. as per CTE	**Capacity TPA as per CTE**	**Configu. as per CTO**	**Capacity TPA as per CTO**	**Configu.**	**Capacity TPA**
High Speed Rolling Mill						
Total Rolling Mill Production	**245 TPD**	**88,200**	**245 TPD**	**88,200**	**572 TPD**	**200,000**
Cold Drawing Complex	--	--	--	--	20 TPD	7,200
Industry may either roll MS Billets/Ingots produced in the plant or sold it directly in market. In case sufficient Billets / Ingots produced in the plant are not available for rolling, billets / ingots shall be purchased from the market for rolling, within the maximum production of 200,000 TPA.						

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

Sl. No.	Raw Material	Quantity (TPA)		Source of Raw Materials	Type of Storage	Transportation	
		Existing	**Total after the proposed expansion**			**Rail**	**Road**
Steel Melting Shop –Induction Furnace		**LS 58,750**	**LS 207,600**				
1.	Sponge iron	49,247	174,130	Keonjhar, Odisha	Shed	55% within 1300 km	45% within 1300 km
2.	Scrap / Pig Iron	14,410	50,882	Delhi & UP	Shed	--	Within 300 km
3.	Ferro Alloys (FeMn, FeSi, Al)	340	1,130	Raipur & UP	Shed/ Bins	--	Within 1100 km
Total		**63,997**	**226,142**				
Steel Melting Shop – Billet Casting / Ingot Casting		**57,600**	**204,200**				
1	Liquid Steel	**58,750**	**207,600**	In-house	-	--	--
High Speed Rolling Mill		**71,500**	**158,240**				
1	MS Ingots/ MS Billets (In-house)	40,600	161,550	In-house	Shed		

Sl. No.	Raw Material	Quantity (TPA)		Source of Raw Materials	Type of Storage	Transportation	
		Existing	Total after the proposed expansion			Rail	Road
2	MS Ingots/ MSBillets (Purchased)	32,335	-	Open Market	-	--	Within 300 km
Total		**72,935**	**161,550**				
Slow Speed RollingMill		**16,700**	**41,760**				
1	MS Ingots/ MS Billets (In-house)	17,000	42,650	In-house	Finish product Yard	--	---
Total		**17,000**	**42,650**				
Cold Drawing Complex							
1	MS Rod	---	7,200	In-house	Finish product Yard	--	--

6.1.10 Existing water requirement is 105 KLD. The requirement is obtained from deep bore wells. The water requirement for the proposed project is estimated as 190 KLD. Thus the total requirement will be 295 KLD. The permission for drawl of total groundwater of 295 KLD is obtained from CGWA Vide NOC No. CGWA/NOC/IND/ORIG/2021/9772 dated 01.01.2021 valid upto 31.12.2023.

6.1.11 Existing power requirement of 16.5 MW is obtained from Uttarakhand Power Corporation Limited (UPCL). Power requirement for the proposed expansion is estimated as 10 MW which shall also be which shall also be obtained from UPCL.

6.1.12 Baseline Environmental Studies:

Period	1st March 2019 to 31st May 2019
AAQ parameters at 8 Locations (min and max)	$PM_{2.5}$ – 28.4 to 37.4 µg/m3 PM_{10} – 57.3 to 76.9 µg/m3 SO_2 – 8.0 to 13.5 µg/m3 NOx – 16.1 to 22.1 µg/m3 CO – 0.67 to 0.89 mg/m3
Incremental GLC level	$PM_{2.5}$ – 1.56 µg/m3 PM_{10} – 2.95 µg/m3 SO_2 – 2.88 µg/m3 NOx – 3.70 µg/m3 (All incremental values are at Hempur Ismail village which is at a distance of 0.4 km from Project site in SW direction).

<table>
<tr><th>Period</th><th>1st March 2019 to 31st May 2019</th></tr>
<tr><td>Ground water quality at 8 locations</td><td>pH – 7.25 to 7.92, Total Hardness – 180.2 to 315 mg/l, Chlorides – 13 to 21 mg/l, Fluoride – 0.42 to 0.70 mg/l, Zinc – 0.94 to 1.45 mg/l, TDS – 310 to 530 mg/l, Fe – 0.28 to 0.36 mg/l</td></tr>
<tr><td>Surface water quality at 8 locations</td><td>pH - 7.20 to 7.98, DO – 5.0 to 7.2 mg/l, BOD – 4.5 to 18.2 mg/l, COD – 16.1 to 55 mg/l, TSS – 45 to 158 mg/l</td></tr>
<tr><td>Noise levels Leq (Day and Night)</td><td>48.1 to 58.2 dB(A) for day time and 40.0 to 47.2 dB(A) for night time</td></tr>
<tr><td>Traffic assessment study findings</td><td>
• Traffic study has been conducted at NH-74 and NH-121 which are approximately 0.3 from the plant site.
• Transportation of Raw material, Fuel and Finished product will be done by 86% by Road
• Existing PCU is 4874.5 PCU/day on NH-74 and 5622 PCU/day on NH-121 and existing level of service (LOS) is:
<table>
<tr><th>Road</th><th>V (Volume in PCU/day)</th><th>C (Capacity in PCU/day)</th><th>Existing V/C Ratio</th><th>LOS</th></tr>
<tr><td>NH-74</td><td>4874.5</td><td>15000</td><td>0.33</td><td>B</td></tr>
<tr><td>NH-121</td><td>5622</td><td>15000</td><td>0.37</td><td>B</td></tr>
</table>
• PCU load after proposed project will be 5006.5 PCU/day (Existing 4874.5 + Addl. 132) for NH-74 and 5754 PCU/day (Existing 5622 + Addl. 132) for NH-121 and level of service (LOS) will be
<table>
<tr><th>Road</th><th>Volume</th><th>Capacity</th><th>V/C ratio</th><th>LOS</th></tr>
<tr><td>NH-74</td><td>5006.5</td><td>15000</td><td>0.33</td><td>B</td></tr>
<tr><td>NH-121</td><td>5754</td><td>15000</td><td>0.38</td><td>B</td></tr>
</table>
Level of Service will be “B” i.e. Very Good for NH-74 and NH-121 after including additional traffic due to proposed project.
(Capacity as per IRC-64: 1990, Guideline for capacity for road)

Conclusion: Due to the expansion of proposed project the traffic density will increase as all the raw material and finished product will be transported through the road under study. Suitable traffic management plan will be adopted to minimize the impacts on the traffic scenario of the area.
</td></tr>
<tr><td>Flora and fauna</td><td>There is no Schedule-1 Species of Flora and Fauna in the study area</td></tr>
</table>

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

Type of Waste	Source	Quantity generated (Total) in Tons (TPA)	Mode of Treatment	Disposal
IF Slag	Induction Furnace	16,608	Metal recovery of slag	After metal recovery (approx. 10%), remaining slag shall be crushed and will be used as aggregates for road construction
IF Bag Filter Dust	Induction Furnace - Bag Filter	1209	Recovery of Zinc in Metal Recovery Plant	Recovered metal shall be sold.
Scale from CCM	CCM	1,200	It is Non-hazardous and will be temporarily stored on concrete floor	Shall be given to nearby welding electrode shops and foundries
End Cut / Scrap from CCM	CCM	2,200	It is Non-hazardous. No treatment required	Will be reused in Induction Furnace
Mill scale from Rolling Mill	Rolling Mill	1,500	It is Non-hazardous and will be temporarily stored on concrete floor	Shall be given to nearby welding electrode shops and foundries
Cobbles / Rejects	Rolling Mill	2,700	It is Non-hazardous. No treatment required	Will be reused in Induction Furnace
Sludge from Metal Recovery Plant	Metal Recovery Plant	720	TCLP test to determine whether hazardous or non-hazardous	Shall be disposed of suitably as per the applicable rule.

Hazardous Waste Generation & Utilization after Expansion Proposed Plant

Type of Waste	Quantity in Tons (TPA)	Mode of Disposal
Used Oil	3 Kl/year	Will be sold to the registered recyclers

Used Oil shall be temporary stored in barrels on concrete flooring with bund wall all around to contain spillage, if any 'Used Oil' will be sold to the register recycler.

6.1.14 Public Consultation:

Details of advertisement given	Hindustan and The Times of India on 20.11.2020
Date of public consultation	21.12.2020
Venue	Kashi Vishwanath Steels Private Limited located at Narain Nagar Industrial Estate, Bazpur Road, Kashipur, District Udham Singh Nagar, Uttarkhand
Presiding Officer	Additional District Magistrate, Udham Singh Nagar
Major issues raised	Wastewater generation from plant Health effects Water sprinkling on roads Pollution effect on animals

	Cleaning of drain Installation of hand pumps

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

S. No	Activities	Physical Targets	Year of Implementation (Budget in INR)		Total Expenditure (Rs.)
			1st Year	2nd Year	
1	Installation of 150 LPM Medical Oxygen Generation Plant at Kashipur, District Udham Singh Nagar, Uttarakhand	Land Development for installing Oxygen Generation Plant at Kashipur	**7,00,000**	--	**4,200,000**
		Installation and operation of Medical Oxygen Plant	**--**	**3,500,000**	
2	Installation of Hand pumps at Kundeshwara and Hempur Ismile villages, District Udham Singh Nagar, Uttarakhand	Installation of two handpumps along with platform at Kundeshwara village	**50,000**	--	**100,000**
		Installation of two handpumps along with platform at Hempur Ismile village	**--**	**50,000**	
Grand Total in Rs.			**7,50,000**	**3,550,000**	**4,300,000**

Action Plan for Addressing the Public Hearing Issues of Kashi Vishwanath Steel Pvt. Ltd.

S. No	Name & Village of Participant	Issues Raised	Action Plan			
			Commitment	Time Frame	Budget	Implementation Status
1	Shri Santosh Singh, Ward No. 6 Village, Kundewswara, Kashipur	The issue was related to Jindal Plant, demanding for paved road.	• The ADM asked the public to provide questions/queries related to KVS expansion project.	-	-	-
2	Shri Ram Krishna Yadav, Village Kundeshwara Kashipur	Waste water generated from the proposed expansion project	• Since the proposed project is designed as Zero Liquid Discharge therefore there will be no waste water discharge outside the project premises.	24 Months	EMP budget of Rs. 19 lakhs has been kept for the water pollution control measures	**Will be implemented after EC and CTE** Water Pollution Control measures inside the plant (for expansion) will be implemented after Receipt of

						Environmental Clearance and CTE.
3	Shri Prathvinath, Village Kundeshwara	Health Effects from the expansion project	• The health effects from the proposed expansion will be negligible since the project proponents shall implement all necessary control measures to mitigate the pollution after the expansion	24 Months	Budget of Rs. 42 Lakhs (Capital cost) has been kept installation of Medical Oxygen plant to supply oxygen to govt hospitals	**Under Implementation** Medical Oxygen plant has been installed and yet to be operationalized. It will be Operating within next 6 months.
4	Shri Makhan Singh, Village Kanakpura	Generation of Mosquitoes from this expansion	• Expansion project will in no way result in mosquito breeding in the area. However, Pesticide to control mosquito breeding shall be continued to be sprayed in nearby villages as a part of CSR.	8 Months	Budget of Rs. 50,000 per year is kept for mosquito repellent spraying in nearby villages for control of mosquitoes as a part of CSR.	**Being Implemented** The Mosquitoes repellent will be sprayed in the nearby areas for control of mosquitoes in every 6 months.
5	Shri Balkar Singh, Hempur Ismile, Kashipur	Side Effects on Animals Water to be sprinkled on adjacent roads	• There will be no side effects on Animals due to proposed expansion. • Water shall be sprinkled on connecting road of Hempur Ismile and Kundeshwara	24 Months	Budget of Rs. 5.10 Lakhs shall be provided for water sprinkling on connecting road of Hempur Ismile and Kundeshwara as CSR	**Implemented and will be continued** The water sprinkling is regularly carried out on connecting roads of Hempur Ismile and Kundeshwara and will continue to be carried out in future.
6	Shri Ram Pal, Village Kundeshwara	Installation of Hand pumps	• Project Proponent has already provided Hand pumps in village Kundeshwara, M/s KVS has proposed installation of	5 Months	Budget of Rs. 1 lakh has been kept for installation of Hand pumps at Kundeshwa	**Implemented** The Hand pumps are installed at Kundeshwara and Hempur Ismile village

			additional 2 nos. of Hand Pumps in the village Kundeshwara and Hempur Ismile.		ra and Hempur Ismile village Also, budget of Rs. 25,000 has been kept under CSR for maintenanc e & repair of hand pumps.	and same will be maintained in every 6 months.
7	Shri Teg Bahadur Gupta, Himmatpur village	Cleaning of Drain in Village Kundeshwara	• Project proponent has committed to repair and clean the drain (Approx. 2 km in length) at village Himmatpur	5 Months	Budget of Rs. 1.30 Lakhs has been provided for repairing and Cleaning of drain at village Himmatpur as CSR	**Implemented** The drain is being cleaned once in every month and the same will continue in future.

6.1.15 Existing Capital cost of project was Rs. 36 Crores. The capital cost of the proposed expansion project is Rs. 20 Crores and the capital cost for environmental protection measures along with the budget of activities to address Public Hearing issues is proposed as Rs. 3.252 Crores. The annual recurring cost towards the environmental protection measures is proposed as Rs 0.455 Crores. The details of cost for environmental protection measures are as follows:

Sl. No.	Environmental Protection Measures	Capital Cost Rs. In lakhs	Recurring Cost Rs. In lakhs/year
1	Air Pollution Control / Noise Management	178.0	18.5
2	Water Pollution Control Measures	19.0	2.0
3	Storage and Solid Waste Management	13.0	1.5
4.	Environment Monitoring Program	---	7.0
5.	Occupational Health & Safety	11.0	7.5
6.	Rain Water Harvesting	20.0	2.0
7.	Greenbelt Development	41.20	7.0
8.	Addressal of Public Consultation Concern	43.00	--
Total		**325.2**	**45.5**

6.1.16 Existing green belt has been developed in 1.19 ha area which is about 20% of the total project area of 5.981 ha with total sapling of 1132 Trees. Proposed greenbelt will be developed in 0.78 ha which is about 13 % of the total project area. Thus total of 1.97 ha area (33% 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, guidelines. Local and native species will be planted with a density of 2500 trees per hectare. Total no. of 4925 saplings will be planted and nurtured in 1.97 hectares in coming monsoon season by September 2022.

6.1.17 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.

6.1.18 Since, EC was not applicable for the existing plant units, therefore the project proponent has obtained Certified CTO compliance from Uttarakhand Pollution Control Board, vide letter UKPCB/ROK/K-1/22/53 dated 27.04.2022, which reports that there are no Non-Compliances of the CTO Conditions.

Deliberations by the Committee

6.1.19 The Committee noted the following:

1. 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.
2. 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.
3. 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.
4. The Committee has also found that the baseline data and incremental GLC due to the proposed project within NAAQ standards.
5. The Committee deliberated on the action plan and budget allocation for green belt development and noted that as committed by the PP that the green belt development shall be completed within coming monsoon season by September 2022.
6. The Committee deliberated details of carbon foot prints and carbon sequestration study w.r.t. proposed project and found satisfactory.
7. 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.
8. Based on the information submitted by the PP, the Committee noted that the company was set up in the year 1985 after obtaining NOC from Uttar Pradesh Pollution Control Board on 12.12.1985 for setting up of small Steel Plant for production of 30 TPD Rolled Products (MS Bar. MS Round and Channels). The plant was expanded in 1992 for 100 TPD production after obtaining NOC from Uttar Pradesh Pollution Control Board on

24.06.1992. Again, the plant was expanded for production of 160 TPD after obtaining NOC from Uttarakhand Environment Conservation & Pollution Control Board on 21.12.2005. M/s KVS has further expanded its capacity for the production 245 TPD after obtaining NOC from UECPCB on 26.04.2006. Since, the project cost was less than Rs. 100 / 50 Crores for all above installed CTEs the project didn't fall under the purview of the EIA Notification, 1994. Latest CTO has been granted by SPCB, vide letter dated 29.07.2021. The Committee deliberated upon the certified CTO compliance report of SPCB and found it satisfactory.

9. 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.

10. 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:

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

A. <u>Specific Conditions</u>

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 activities and the action plan proposed by the project proponent to address the issues raised during public hearing and socio-economic issues in the study area shall be completed as per the schedule presented before the Committee and as described in the EIA report in letter and spirit.
iv. TCLP analysis of the slag samples shall be carried out periodically. In case of presence of hazardous material, the same shall be sent to TSDF. In case of non-hazardous material, slag shall be utilized at project site for brick manufacturing and construction work after the recovery of metal.
v. 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.

vi. Greenbelt @ 33% will be developed in next three months, i.e. by September 2022 with native species. Tree density will be maintained at 2500 trees per hectare. 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. Additionally, as committed by the PP, the greenbelt/plantation also will be developed in 2.0 ha. land leased for greenbelt development purpose in village Shivlalpur Dallu in next three months, i.e. by September 2022. Compliance status in this regard, shall be submitted to concerned Integrated Regional Office of the MoEF&CC.

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

viii. Online stack monitoring system for IF and RF 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.

ix. Two online Continuous Ambient Air Quality Monitoring station shall be set up. The location of the CAAQMS shall be decided in consultation with the SPCB.

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

xi. 85-90 % of billets shall be rolled directly in hot stage. RHF shall operate using only Light Diesel Oil or LSHS as a fuel.

xii. 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.

xiii. The particulate matter emissions from the process stacks shall be less than 30 mg/Nm^3 and will comply to all Norms and standards as prescribed by Ministry of Environment, Forest and Climate Change and Central Pollution Control Board/State Pollution Control Board.

xiv. 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.

xv. The water requirement after the proposed project is estimated as 295 m^3/day wherein the permission for drawl of total groundwater of 295 KLD is obtained from CGWA vide NOC No. CGWA/NOC/IND/ORIG/2021/9772 dated 01.01.2021.

xvi. PP shall develop rain water harvesting system for their utilization and implement the plan for gradual phase out of ground water extraction. PP may go for surface water utilization to minimize the extraction of ground water. Rain water harvesting shall be implemented to recharge/harvest water as per the action plan submitted in the EIA/EMP report.

xvii. Septic tank shall be replaced by the STP, as committed by the PP.

xviii. Piped Natural Gas (PNG) shall be used as fuel in Reheating Furnace. Producer Gas Plant has been phased out and shall not be implemented in future.

xix. Pollution monitoring should be installed for reheating furnace even if it uses PNG.

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

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

xxii. Project proponent shall ensure that habitations/settlements nearby the Unit shall not be disturbed/affected.

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

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

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 with respect to standards prescribed in Environment (Protection) Rules 1986 as amended from time to time. The CEMS 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 PM2.5 in reference to PM emission, and SO2 and NOx in reference to SO2 and NOx emissions) within and outside the plant area (at least at four locations one within and three outside the plant area at an angle of 120° each), covering upwind and downwind directions.

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

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

vi. The project proponent shall ensure covered transportation and conveying of ore, coal and other raw material to prevent spillage and dust generation.

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

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

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

III. Water quality monitoring and preservation

i. The project proponent shall 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.

ii. Sewage Treatment Plant shall be provided for treatment of domestic wastewater to meet the prescribed standards.

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

V. Energy Conservation measures

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

VI. Waste management

i. Used refractories shall be recycled as far as possible.
ii. Oily scum and metallic sludge recovered from rolling mills ETP shall be mixed, dried, and briquetted and reused melting Furnaces
iii. Kitchen waste shall be composted or converted to biogas for further use.

VII. Green Belt

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

VIII Public hearing and Human health issues

i. Emergency preparedness plan based on the Hazard identification and Risk Assessment (HIRA) and Disaster Management Plan shall be implemented.
ii. The project proponent shall carry out heat stress analysis for the workmen who work in high temperature work zone and provide Personal Protection Equipment (PPE) as per the norms of Factory Act.
iii. Occupational health surveillance of the workers shall be done on a regular basis and records maintained.

IX. Environment Management

i. The project proponent shall comply with the provisions contained in this Ministry's OM vide F.No. 22-65/2017-IA.III dated 30/09/2020. As part of Corporate Environment Responsibility (CER) activity, company shall adopt nearby villages based on the socio-economic survey and undertake community developmental activities in consultation with the village Panchayat and the District Administration as committed.
ii. The company shall have a well laid down environmental policy duly approve by the Board of Directors. The environmental policy should prescribe for standard operating procedures to have proper checks and balances and to bring into focus any infringements/deviation/violation of the environmental / forest / wildlife norms / conditions. The company shall have defined system of reporting infringements / deviation

/ violation of the environmental / forest / wildlife norms / conditions and / or shareholder's / stake holders. The copy of the board resolution in this regard shall be submitted to the MoEF&CC as a part of six-monthly report.

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

X. Miscellaneous

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

Agenda No. 6.2

6.2 **Proposed Greenfield Metallurgical Unit Sponge Iron 1,80,000.00 TPA (DRI Kiln (Coal Fired) 1 X 200 TPD & 1 X 350 TPD), Billets or TMT 2,16,000.00 TPA along with Captive Power Plant 20 MW by M/s. Fuletra Steel LLP located at Village Khijadiya, Tehsil Wankaner, District Morbi, Gujarat – Consideration of Environmental Clearance.**

[Proposal No. IA/GJ/IND/228739/2021; File No. IA-J-11011/40/2009-IA-II(I)]
[Name of Consultant: M/s. Shree Green Consultants; QCI NABET Accreditation: valid upto 24/02/2024]

6.2.1 M/s. Fuletra Steel LLP has made an online application vide proposal no IA/GJ/IND/228739/2021 dated 07/05/2022 along with copy of EIA/EMP report and Form – 2 seeking Environment Clearance (EC) under the provisions of the EIA Notification, 2006 for the project mentioned above. The proposed project activity is listed at schedule 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.

6.2.2 Name of the EIA consultant: M/s. Shree Green Consultants [Sl. No. 31, List of ACOs with their Certificate / Extension Letter no. NABET/EIA/2124/IA0072; valid upto 24/02/2024, Rev. 23, May 09, 2022].

Details submitted by Project proponent

6.2.3 The details of the ToR are furnished as below:

Date of application	Consideration	Details	Date of accord	Validity of ToR
17/09/2021	45th meeting of EAC held on 28-29th September 2021	Terms of Reference	18/10/2021	17/10/2025

6.2.4 The project of M/s. Fuletra Steel LLP located at Village: Khijadiya, Taluka: Wankaner, District: Morbi, State: Gujarat is for proposed Greenfield Metallurgical Unit Sponge Iron 1,80,000.00 TPA (DRI Kiln (Coal Fired) 1 X 200 TPD & 1 X 350 TPD), Billets or TMT 2,16,000.00 TPA along with Captive Power Plant 20 MW.

6.2.5 Environmental Site Settings:

<table>
<tr><th>Sr. No.</th><th>Particulars</th><th>Details</th><th>Remarks</th></tr>
<tr><td>1.</td><td>Total land</td><td>7.4969 ha [Private]<table><tr><th>S. No.</th><th>Land Use</th><th>Area (Ha.)</th></tr></table></td><td>Land use: Industrial Use</td></tr>
</table>

<table>
<tr><th>Sr. No.</th><th>Particulars</th><th>Details</th><th>Remarks</th></tr>
<tr><td></td><td></td><td>
<table>
<tr><td>1</td><td>Plant facilities</td><td>1.6320</td></tr>
<tr><td>2</td><td>Future expansion</td><td>0.5028</td></tr>
<tr><td>3</td><td>Storage yard</td><td>0.7620</td></tr>
<tr><td>4</td><td>Admin building</td><td>0.0763</td></tr>
<tr><td>5</td><td>Storage</td><td>0.1500</td></tr>
<tr><td>6</td><td>ETP</td><td>0.1500</td></tr>
<tr><td>7</td><td>Parking</td><td>0.0763</td></tr>
<tr><td>8</td><td>Green Belt</td><td>2.4740</td></tr>
<tr><td>9</td><td>Internal road</td><td>0.4106</td></tr>
<tr><td>10</td><td>Periphery road</td><td>1.2629</td></tr>
<tr><td colspan="2">Total Area</td><td>7.4969</td></tr>
</table>
</td><td></td></tr>
<tr><td>2.</td><td>Land acquisition details as per MoEF&CC O.M. dated 7/10/2014</td><td>It is a Private Land owned by M/s. Fuletra Steel LLP.</td><td></td></tr>
<tr><td>3.</td><td>Existence of habitation & involvement of R&R, if any.</td><td>Project site: - Nil
Study Area: -
<table>
<tr><th>Habitation</th><th>Distance</th><th>Direction</th></tr>
<tr><td>Juni Kankot</td><td>1.5</td><td>South</td></tr>
</table>
</td><td>There is no R&R activity involved</td></tr>
<tr><td>4.</td><td>Latitude and Longitude of all corners of the project site.</td><td>
<table>
<tr><th>Point</th><th>Latitude</th><th>Longitude</th></tr>
<tr><td>A</td><td>22°30'36.47"N</td><td>70°53'43.79"E</td></tr>
<tr><td>B</td><td>22°30'36.98"N</td><td>70°53'49.12"E</td></tr>
<tr><td>C</td><td>22°30'32.87"N</td><td>70°53'49.80"E</td></tr>
<tr><td>D</td><td>22°30'34.26"N</td><td>70°53'57.11"E</td></tr>
<tr><td>E</td><td>22°30'39.67"N</td><td>70°53'56.44"E</td></tr>
<tr><td>F</td><td>22°30'39.60"N</td><td>70°53'54.99"E</td></tr>
<tr><td>G</td><td>22°30'41.22"N</td><td>70°53'54.99"E</td></tr>
<tr><td>H</td><td>22°30'41.17"N</td><td>70°53'51.82"E</td></tr>
<tr><td>I</td><td>22°30'42.38"N</td><td>70°53'48.02"E</td></tr>
<tr><td>J</td><td>22°30'42.00"N</td><td>70°53'46.33"E</td></tr>
<tr><td>K</td><td>22°30'42.90"N</td><td>70°53'43.01"E</td></tr>
<tr><td>L</td><td>22°30'41.16"N</td><td>70°53'43.16"E</td></tr>
<tr><td>M</td><td>22°30'39.60"N</td><td>70°53'43.92"E</td></tr>
</table>
</td><td></td></tr>
<tr><td>5.</td><td>Elevation of the project site</td><td>54 meter maximum above mean sea level</td><td></td></tr>
<tr><td>6.</td><td>Involvement of Forest land if any.</td><td>No forest land is involved</td><td></td></tr>
<tr><td>7.</td><td>Water body (Rivers, Lakes, Pond, Nala, Natural Drainage, Canal etc.) exists within the project site as well as study area</td><td>Project site: There is no water body present within project site

Study area
<table>
<tr><th>Water body</th><th>Distance</th><th>Direction</th></tr>
<tr><td>Asoy Canal</td><td>510 m</td><td>East</td></tr>
<tr><td>Machhu River</td><td>10 km</td><td>South-East</td></tr>
</table>
</td><td></td></tr>
</table>

Sr. No.	Particulars	Details	Remarks
8.	Existence of ESZ/ ESA/ national park/ wildlife sanctuary/ biosphere reserve/ tiger reserve/ elephant reserve etc. if any within the study area	**Study area** **Name of the ESZ/ ESA:** Rampara Wildlife Sanctuary **<u>Status of Notification:</u>** **Distance of project from ESZ/ESA:** 4.0 km from Rampara Wildlife Sanctuary (Reserve Forest) and 2.6 km from ESZ. **Authenticated map of ESZ projecting distance of ESZ from project site:** Letter vide No. K/JAMA/TE.10/602-03/2021-22 dated 14.09.2021 issued by Deputy Range Forest Officer, Morbi Forest Department.	

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

Sr. No.	Plant Equipment/ Facility	Proposed Unit	
		Configuration	Capacity
1	DRI Kiln (Coal Fired)	1 X 200 TPD & 1 X 350 TPD	180000 TPA (Sponge Iron)
2	Induction Furnace	(15 TPH X 4 Nos)	216000 TPA (Billets or TMT)
3	LRF	(15 TPH x 4 Nos)	
4	Caster	30 T/hr	
5	WHRB	1 X 12 MW	20 MW (Captive Power Plant)
6	AFBC	1 X 8 MW	

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

Sr. No.	Raw Material	Quantity (TPA)	Source	Distance from site (Kms)	Mode of Transportation
1	Iron Ore / Pellet	2,70,000	Karnataka/ Chhattisgarh / Orissa/ Import	950 1150 1500	By Rail/Road/Sea
2	Coal	1,60,000	Indonesia/ South Africa/ Local market	5500 7800 50	By Rail/Road/Sea
3	Metal Scrap	2,40,000	Local Market	50	By Road
4	Dolomite	9,000	Rajasthan/Import	600	By Road/Sea

6.2.8 The water requirement for the proposed project is estimated as 3,966 m3/day, out of which fresh water requirement will be 600 m3/day (450 m3/day will be obtained from borewell and 150 m3/day will be obtained from surface water source). The application for drawl of ground water is made vide Application Number 21-4/8639/GJ/IND/2022, dated 10.03.2022. The permission for drawl of surface water is obtained from Shree Khijadiya-Pipardi Combined Gram Panchayat Office dated 13/09/2021.

6.2.9 The power requirement for the proposed project is estimated as 10 MW which will be obtained from the proposed captive power plant of 20 MW.

6.2.10 Baseline Environmental Studies:

<table>
<tr><th>Period</th><th>1st March 2021 to 31st May 2021</th><th>Additional study [Ambient Air Quality Monitoring for additional one month (1st October 2021 to 31st October 2021)]</th></tr>
<tr><td>AAQ parameters at 8 Locations</td><td>PM2.5 = 15.26 – 47.56 µg/m^3
PM10 = 34.41 – 63.70 µg/ m^3
SO2 = 7.32 – 25.6 µg/m^3
NOx = 10.21 – 30.71 µg/m^3</td><td>PM2.5 = 11.40 – 36.12 µg/m^3
PM10 = 23.60 – 54.74 µg/ m^3
SO2 = 7.12 – 22.40 µg/m^3
NOx = 11.50 – 26.40 µg/m^3

Ambient Air Quality Monitoring was carried out on 18th April 2022 and maximum values are found to be
PM2.5 = 41.4 µg/m^3
PM10 = 65.3 µg/ m^3
SO2 = 22.2 µg/m^3
NOx = 28.5 µg/m^3</td></tr>
<tr><td>Incremental GLC level</td><td>PM10 = 0.241 µg/m^3 (Level at 1.0 km in East Direction)
SO2 = 0.689 µg/m^3 (Level at 1.0 km in East Direction)
NOx = 0.705 µg/m^3 (Level at 1.0 km in East Direction)</td><td>-</td></tr>
<tr><td>Ground water quality at 8 locations</td><td>pH: 7.08 – 7.95, Total Hardness: 287– 528 mg/l, Chlorides: 138 – 518 mg/l, Fluoride: <0.1 mg/l, Heavy metals [Lead: <0.1 mg/l, Mercury: <0.005 mg/l, Nickel: <0.01 mg/l, Arsenic: <0.01 mg/l, Zinc: <0.5 mg/l]</td><td>-</td></tr>
<tr><td>Surface water quality at 8 locations</td><td>pH: 6.98 – 7.62, DO: 2.2 – 3.1 mg/l and BOD: 4.9 – 17.4 mg/l. COD: 24.8 – 57.4 mg/l</td><td>-</td></tr>
<tr><td>Noise levels Leq (Day and Night)</td><td>38.7 to 52.4 for the day time and 31.9 to 40.8 for the Night time</td><td>32.8 to 52.4 for the day time and 28.4 to 43.4 for the Night time</td></tr>
<tr><td>Traffic assessment study findings</td><td colspan="2">Traffic study has been conducted at SH-113 which is approximately 0.2 km from the plant site.
Transportation of raw material, fuel & finished product will be done 50 % by road.
Existing PCU is 262.5 PCU/hr on SH-113 and existing level of service (LOS) is
<table>
<tr><th>Road</th><th>V (Volume In PCU/hr.)</th><th>C (Capacity in PCU/hr.)</th><th>Existing V/C Ratio</th><th>LOS</th></tr>
<tr><td>SH-113</td><td>262.5</td><td>1200</td><td>0.21</td><td>B</td></tr>
</table></td></tr>
</table>

<table>
<tr><td>Period</td><td colspan="2">1st March 2021 to 31st May 2021</td><td>Additional study [Ambient Air Quality Monitoring for additional one month (1st October 2021 to 31st October 2021)]</td></tr>
<tr><td></td><td colspan="3">PCU load after proposed project will be 262.5 (Existing) + 285.0 (Additional) PCU/hr and level of service (LOS) will be:
<table>
<tr><th>Road</th><th>V (Volume In PCU/hr.)</th><th>C (Capacity in PCU/hr.)</th><th>Proposed V/C Ratio</th><th>LOS</th></tr>
<tr><td>SH-113</td><td>547</td><td>1200</td><td>0.45</td><td>C</td></tr>
</table>
Conclusion: The level of service will be “C” Good after including additional traffic due to proposed project.</td></tr>
<tr><td>Flora and fauna</td><td colspan="3">Pea fowl, Eurasian Spoonbill and The Indian Flap Shell Turtle. Conservation plan has been prepared and submitted to Principal Chief Conservator of Forest (PCCF) for approval with a total allocation budget of Rs. 10 Lakhs.</td></tr>
</table>

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

Sr. No.	Type of Waste	Source	Quantity TPA	Mode of treatment and Disposal
1.	Used or Spent Oil	Plant and Machineries	15 KL	Collection, Storage, Transportation, Disposal by reuse in Plant & Machinery as lubricant or sell it to authorized re-refiners/recycler.
2.	Mill scale	Rolling Mill	8400	Collection, Storage, Transportation, and will be sent to Ferro alloys manufacturing units and Brick Manufacturing units.
3.	End Cuts and Cobble Cuts	Process	16800	Dispose for remelting as steel scrap
4	KILN & WHRB FES dust (Fly Ash)	CPP	27000	Collection, Storage, Transportation and disposal by landfilling for TSDF site
5	Char & Dolochar	DRI Kiln	33000	Used in AFBC Boiler for captive power generation
6	Bag Filter dust	DRI Kiln	10200	Sold to the end users
7	AFBC Fly Ash	AFBC boiler	21000	Will be sent to brick manufacturing unit
8.	Slag	Induction furnace	30240	Will be used for road construction/ land filling/paver block/sent to brick/cement manufacturing unit.
9.	ETP sludge	ETP	36630	Collection, Storage, Transportation and final disposal at common TSDF site
10	Wet Scraper sludge	DRI Kiln	9800	Will be sent to brick manufacturing unit

6.2.12 Public Consultation:

Details of advertisement given	Public Hearing Notice published in Newspapers of "Times of India" dated 30.12.2021 in English and in "Sanjh Samachar" dated 30.12.2021 and "Divya Bhaskar" dated 31.12.2021 in Gujarati.
Date of public consultation	31/01/2022
Venue	Survey No 35/P1, 35/P5, 35/P6, 35/P7, 37/P2, 37/P3,Pl, 37/P3,P2, 38/P1, 38/P3, 38/P2 Village: Khijadiya, Taluka: Wankaner, District: Morbi, Gujarat
Presiding Officer	District Collector, District Magistrate Morbi
Major issues raised	Local Employment, Preventive measures for Environmental Pollution, Skill development and Infrastructure development of Village through CER/CSR Activities

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

Sr. No.	Project/ Program	Target / Remarks	Year wise Progress (Amount - Rs. In Lacs)					
			2022	2023	2024	2025	2026	Total
Education								
1	Providing Infrastructure support for schools	Drinking water Facility, Library facility to school at Khijadiya, Kalavadi Juni	30	15	10	10	5	70
Preventive measures for Environmental Pollution								
1	Wind barrier around Plant boundary near Khijadiya Village	Company will put up a wind barrier around the plant boundary	25	25	10	10	10	80
2	Environment Pollution from the Plant	Controlling plant emissions to avoid the pollution in the nearby villages by installing APC measures.	1500	1000	1000	500	500	4500
Employment								
1	Skill Development Center	Company will organize the skill development program to ITI students, Tailoring Institute and other training programs as per the need basis for self-employment	30	20	10	10	5	75
Total Cost (Overall)			**1585**	**1060**	**1030**	**530**	**520**	**4725**

6.2.13 The capital cost of the proposed project is Rs 740.0 Crores and the capital cost for environmental protection measures is proposed as Rs 53.0 Crores. The annual recurring cost towards the environmental protection measures is proposed as Rs 7.23 Crores. The employment generation from the proposed project is 250 Nos. The details of cost for environmental protection measures is as follows:

Sr. No.	Particulars	Amount in INR, Crores	
		Capital Cost	Recurring Cost
1	Air Pollution Control System	45.00	4.05
2	Noise Control System	0.60	0.03
3	Green Belt Development	0.80	0.72
4	Environment Monitoring Program	0.80	0.72
5	Solid and Hazardous Waste Management	3.00	0.30

6	Water Pollution Control System	1.00	0.72
7	Occupational Health & Safety	0.80	0.45
8	Rain Water Harvesting System	0.40	0.10
9	Fire Safety & Equipment	0.60	0.14
Total		**53.00**	**7.23**

6.2.14 Greenbelt will be developed in 2.474 ha which is about 33 % of the total project area. Thus, total of 2.474 ha area (33 % of total project area) will be developed as greenbelt. A 10-20 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 6,245 saplings will be planted and nurtured in 2.474 ha in next 2 years.

6.2.15 The project proponent had earlier applied for EC vide proposal no. IA/GJ/IND/228739/2021 dated 26/03/2022 and the proposal was considered in the 3rd EAC meeting held on 11-12th April 2022 wherein the Committee returned the proposal in its present form on account of violation due to construction activity done without prior EC. The observations and recommendations of the EAC are as follows:

Observations of the Committee (EAC during 11-12th April 2022)

6.2.16 The Committee noted the following:

i. PP/ consultant informed that they have got the CTE for this project and after getting CTE they have constructed the boundary wall and some minor construction for administrative and security purpose.
ii. PP informed that this has been done unintentionally, because after getting CTE they can start some construction work. After knowing the factual situation that without EC they can't start any construction work, they stop the construction, after detail discussion PP/ Consultant decided to come before the committee for this case under violation category as per the provisions contained in the MoEF&CC Standard Operating Procedures dated 07/07/2021 pertaining to consideration of violation cases.

Recommendations of the Committee (EAC during 11-12th April 2022)

6.2.17 In view of the foregoing and after deliberations, the Committee recommended to return the proposal in its present form. Further, the Committee also recommended that following points shall be complied with as per the provisions contained in SOP dated 7/07/2021.

i. The State Government/SPCB shall take action against the project proponent under the provisions of the Environment (Protection) Act, 1986, and further no consent to operate to be issued till the project is granted EC.
ii. Assessment of ecological damage with respect to air, water, land and other environmental attributes. The collection and analysis of data shall be done by an environmental laboratory duly notified under the Environment (Protection) Act, 1986, or an environmental laboratory accredited by NABL, or a laboratory of a Council of Scientific and Industrial Research (CSIR).
iii. Preparation of EMP comprising remediation plan and natural and community resource augmentation plan corresponding to the ecological damage assessed and economic benefits derived due to violation.
iv. The remediation plan and the natural and community resource augmentation plan to be prepared as an independent chapter (13) in the EIA report by the accredited consultants.

v. Budget of remediation plan and natural and community resource augmentation plan corresponding to the ecological damage shall be completed within three years and to be prepared accordingly.

vi. The project proponent shall require to submit a bank guarantee equivalent to the amount of remediation plan and natural and community resource augmentation plan with the SPCB prior to the grant of EC. The quantum shall be recommended by the EAC and finalized by the regulatory authority.

vii. Project proponent shall calculate penalty provisions i.e., 1% of project cost attributable to the expansion, incurred up to the date of filing of application along with the EIA/EMP report as contained in the paragraph 12 of the Standard Operating Procedure dated 7/07/2021 shall be complied with.

Violation aspect

6.2.18 The project proponent has again resubmitted the application for EC vide proposal no. IA/GJ/IND/228739/2021 dated 07/05/2022 addressing the issues in compliance to the EAC recommendation during 11-12th April, 2022 as follows:

Sr. No.	Recommendation of EAC during 3rd EAC held on 11-12th April, 2022	Compliance by PP
i	The State Government/SPCB shall take action against the project proponent under the provisions of the Environment (Protection) Act, 1986, and further no consent to operate to be issued till the project is granted EC.	In compliance to the same, PP has submitted a letter dated 06/05/2022 to Gujarat Pollution Control Board (received on 07/05/2022) intimating about the violation committed in the instant proposal and requested to take legal action against them under the provisions of Environment (Protection) Act, 1986. The action from the SPCB is awaited.
ii	Assessment of ecological damage with respect to air, water, land and other environmental attributes. The collection and analysis of data shall be done by an environmental laboratory duly notified under the Environment (Protection) Act, 1986, or an environmental laboratory accredited by NABL, or a laboratory of a Council of Scientific and Industrial Research (CSIR).	After completion of Public Hearing for the proposed project, minor construction activities have been carried out like construction of boundary wall, tree plantation activity, sanitary facilities for workers, admin building, strengthening and levelling of ground, and sheds for storage of materials. The project location being at a remote place, basic amenities and storage facility are in need for the safety and security of items. PP has submitted that no building for manufacturing activity is constructed or under construction. The undertaking for the same in an India non judicial stamp vide Certificate No. IN-GJ31335627811337U dated 25.03.2022 is incorporated in the EIA report. The ecological damage assessment for the proposed project with respect to air, water, land and other environmental attributes is done and the remediation plan for the same is suggested in the EIA report.

Sr. No.	Recommendation of EAC during 3rd EAC held on 11-12th April, 2022	Compliance by PP
iii	Preparation of EMP comprising remediation plan and natural and community resource augmentation plan corresponding to the ecological damage assessed and economic benefits derived due to violation.	Economic benefits from any project can only be derived when the operation of the plant starts and the products of the plant are used. Since, no construction of any production unit of the plant was started till date, therefore, no economic benefits have been derived from the violation activity. The mitigation measures undertaken during the construction activity to avoid any negative impact on the surrounding environment.
iv	The remediation plan and the natural and community resource augmentation plan to be prepared as an independent chapter (13) in the EIA report by the accredited consultants.	The remediation plan and natural and community resource augmentation plan corresponding to the ecological damage assessment is prepared and incorporated in the EIA report as a Chapter 13.

(A) Summary of Damage Assessment and Remediation Plan along with Yearly Budget for Remediation Plan:

Sr. No	Environment Component	Activity Description	Villages Identified	Total Budgetary Provision in Rs.			
				1st Year	2nd Year	3rd Year	Total
1	Land Environment	Assistance to farmers by providing seeds, manure and biofertilizers	Kalavadi Juni, Rampara, Pipaliya Agabhi, Juna Kankot, Ghiyavad, Sindhavadar, Vanzara	10,000	10,000	5,000	25,000
2	Air Environment	Avenue plantation in the nearby village		25,000	25,000	25,000	75,000
3	Water Environment	Providing drinking water purifiers (RO system) for schools in nearby villages		15,000	15,000	10,000	40,000
4	Noise Environment	Distribution of Hearing aids to the nearby needy people, i.e. locals, senior citizens		20,000	15,000	15,000	50,000
5	Ecology & Biodiversity	Contribution to NGOs, working for the betterment of Animals.		20,000	15,000	15,000	50,000
6	Socio Economic Environment	Providing vehicle for ambulance facilities to primary health centers in Khijadiya village.	Khijadiya	-	4,88,000	-	4,88,000
Total				**90,000**	**5,68,000**	**70,000**	**7,28,000**

Through the summary of budgetary allocation with respect to violation activity and remediation measures suggested/recommended, the impact on the environment and its relative damages are very low. As far as the impacts due to the future operation of the plant are concerned, the cumulative impact of implementation of the latest State-of-the-art technologies in the plant will bring an overall improvement in the environmental quality of the area. This plan will be implemented in three years after obtaining all necessary clearances.

(B) Summary of Natural Resource Augmentation Plan along with budget:

Sr. No.	Proposed Activities	Villages Identified	Budget (Rs.)			
			1st Year	2nd Year	3rd Year	Total

Sr. No.	Recommendation of EAC during 3rd EAC held on 11-12th April, 2022		Compliance by PP			
1	Rain water harvesting pond in nearby village	Kalavadi Juni, Rampara, Ghiyavad, Sindhavadar, Vanzara	75,000	75,000	75,000	2,25,000
2	Solar Street lights in nearby villages		50,000	50,000	50,000	1,50,000
	Total		**1,25,000**	**1,25,000**	**1,25,000**	**3,75,000**

(C) Summary of Community Resource Augmentation Plan along with budget:

Sr. No.	Proposed Activities	Villages Identified	Budget (Rs.)			
			1st Year	2nd Year	3rd Year	Total
1	Providing medical supplies to a veterinary hospital in nearby village	Rampara	50,000	50,000	50,000	1,50,000
2	Supply of Agriculture water pump sets for local farmers	Kalavadi Juni and Khijadiya	25,000	25,000	25,000	75,000
	Total		**75,000**	**75,000**	**75,000**	**2.25,000**

Cumulative Remediation Plan, Natural Resource Augmentation Plan and Community Resource Augmentation Plan

Sr. No.	Aspects	Budget (Rs. in Lakhs)
1.	Estimated Cost on remediation plan based on the damage assessment due to violation for 3 years	7,28,000
2.	Natural resource augmentation plan for 3 years	3,75,000
3.	Community resource augmentation plan for 3 years	2,25,000
	Total	**13,28,000**

As far as the impacts due to the future operation of the plant are concerned, the cumulative impact of implementation of the latest State-of-the-art technologies in the plant will bring an overall improvement in the environmental quality of the area. The total amount to be spent on Remediation plan and Natural Resource Augmentation Plan and Community Resource Augmentation Plan in worst case scenario will be **Rs. 13.28 Lakhs**. This plan will be implemented in three years after obtaining all necessary clearances.

v	Budget of remediation plan and natural and community resource augmentation plan corresponding to the ecological damage shall be completed within three years and to be prepared accordingly.	The budgetary allocation as per the ecological damage assessment is carried out and action plan for its implementation and completion in next three years is evaluated and incorporated in the EIA report.
vi	The project proponent shall require to submit a bank guarantee equivalent to the amount of remediation plan and natural and community resource augmentation plan with the SPCB prior to the grant of EC. The quantum shall be recommended by the EAC and finalized by the regulatory authority.	Point noted. The bank guarantee equivalent to the amount of remediation plan and natural and community resource augmentation plan will be submitted with the SPCB prior to the grant of EC, after the quantum recommended by the EAC and finalized by the regulatory authority.
vii	Project proponent shall calculate penalty provisions i.e., 1% of project cost attributable to the expansion, incurred up to the date of filing of application along with the EIA/EMP	As per the CA certificate issued by CA firm M/s S. Popat and Associates dated 30.04.2022, the cost incurred in construction was around Rs. 82 lakhs and as per penalty provisions i.e., 1% of project cost incurred, Rs. 82,000/- is the

Sr. No.	Recommendation of EAC during 3rd EAC held on 11-12th April, 2022	Compliance by PP
	report as contained in the paragraph 12 of the Standard Operating Procedure dated 7/07/2021 shall be complied with.	penalty and the project proponent are ready to pay the same and made the commitments.

6.2.19 The proposal with revised EIA/EMP Report including violation aspects was considered in the 6th EAC meeting held on 30-31st May, 2022. The deliberations and recommendations of the EAC are as follows:

Deliberations by the Committee

6.2.20 The EAC has made detailed deliberations on the proposal and observed the following:

i. PP informed that they have got the CTE for the instant project and after getting CTE they have constructed the boundary wall and some minor construction for administrative and security purpose. The construction work was started for strengthening and levelling of ground, construction of a shed for storage of construction materials, sanitary facilities for workers, admin building, security cabin and toilet blocks was done after obtaining CTE from State Pollution Control Board. PP further informed that this has been done unintentionally, because after getting CTE they can start some construction work. After knowing the factual situation that without EC they can't start any construction work, they stop the construction.

ii. PP decided to come before the committee for this case under violation category as per the provisions contained in the MoEF&CC Standard Operating Procedures dated 07/07/2021 pertaining to consideration of violation cases.

iii. PP has submitted a letter dated 06/05/2022 to Gujarat Pollution Control Board (received on 07/05/2022) intimating about the violation committed in the instant proposal and requested to take legal action against them under the provisions of Environment (Protection) Act, 1986.

iv. The EAC also deliberated upon the findings of Damage Assessment, Remediation Plan, Natural Resource Augmentation Plan and Community Resource Augmentation Plan total (budget amounting to) and found it satisfactory.

v. The project proponent is required to deposit a bank guarantee equivalent to the amount of remediation plan and Natural and Community Resource Augmentation Plan Rs. 13.28 Lakhs to the SPCB prior to the grant of EC.

vi. The EAC, in earlier meeting held in April 11-12, 2022, instructed to PP that they shall calculate penalty provisions i.e., 1% of project cost attributable to the expansion, incurred up to the date of filing of application along with the EIA/EMP report as contained in the paragraph 12 of the Standard Operating Procedure dated 7/07/2021 shall be complied with. In this regard, the Project proponent informed that as per the CA certificate issued by CA firm M/s S. Popat and Associates, dated 30.04.2022, the cost incurred in construction was around Rs. 82 lakhs and as per penalty provisions i.e., 1% of project cost incurred, Rs. 82,000/- is the penalty and the project proponent is ready to pay the same and made the commitments. The EAC, after detailed deliberations, recommended Rs. 82,000 towards penalty provisions i.e., 1% of project cost attributable to the expansion, as per SOP dated 07.07.2021.

vii. Asoy canal exists at a distance of 510 m from the project site. Detailed mitigation measures to prevent any impacts on the canal needs to be implemented.

viii. The Rampara Wildlife Sanctuary (Reserve Forest) is at a distance of 4km from the project site. ESZ is at 2.6 km from the project site. Detailed mitigation measures to prevent any impacts on the Rampara Wildlife Sanctuary needs to be implemented.

ix. There are 3 nos. of Schedule - I species reported in study area, namely Pea fowl, Eurasian Spoonbill and The Indian Flap Shell Turtle. Conservation plan has been prepared and submitted to Principal Chief Conservator of Forest (PCCF).

x. 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.

xi. 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.

xii. 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.

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

xiv. The Committee deliberated on the action plan and budget allocation for green belt development and noted that as committed by the PP the green belt development shall be completed within one year.

xv. The committee deliberated details of carbon foot prints and carbon sequestration study w.r.t. proposed project and found satisfactory.

xvi. 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.

xvii. 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.

xviii. 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

6.2.21 In view of the foregoing and after detailed deliberations, the committee **recommended** the instant proposal for grant of Environment Clearance under the provisions of EIA Notification,

2006 and SOP dated 07.07.2021 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 pertaining to integrated steel plants based on project specific requirements.

A. Specific conditions

i. The company 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 activities and the action plan proposed by the project proponent to address the issues raised during public hearing and socio-economic issues in the study area shall be completed as per the schedule presented before the Committee and as described in the EIA report in letter and spirit.

iv. The total amount of **Rs. 13.28 Lakhs** shall be spent on Remediationplan and Natural Resource Augmentation Plan and Community Resource Augmentation Plan which shall be implemented in three years as per the action plan details given in EIA Report and summarized below.

(A) Damage Assessment and Remediation Plan along with Yearly Budget for Remediation Plan:

Sr. No	Environment Component	Activity Description	Villages Identified	Total Budgetary Provision in Rs.			
				1st Year	2nd Year	3rd Year	Total
1	Land Environment	Assistance to farmers by providing seeds, manure and biofertilizers	Kalavadi Juni, Rampara, Pipaliya Agabhi, Juna Kankot, Ghiyavad, Sindhavadar, Vanzara	10,000	10,000	5,000	25,000
2	Air Environment	Avenue plantation in the nearby village		25,000	25,000	25,000	75,000
3	Water Environment	Providing drinking water purifiers (RO system) for schools in nearby villages		15,000	15,000	10,000	40,000
4	Noise Environment	Distribution of Hearing aids to the nearby needy people, i.e. locals, senior citizens		20,000	15,000	15,000	50,000

Sr. No	Environment Component	Activity Description	Villages Identified	Total Budgetary Provision in Rs.			
				1st Year	2nd Year	3rd Year	Total
5	Ecology & Biodiversity	Contribution to NGOs, working for the betterment of Animals.		20,000	15,000	15,000	50,000
6	Socio Economic Environment	Providing vehicle for ambulance facilities to primary health centers in Khijadiya village.	Khijadiya	-	4,88,000	-	4,88,000
Total				**90,000**	**5,68,000**	**70,000**	**7,28,000**

(B) Natural Resource Augmentation Plan along with budget:

Sr. No.	Proposed Activities	Villages Identified	Budget (Rs.)			
			1st Year	2nd Year	3rd Year	Total
1	Rain water harvesting pond in nearby village	Kalavadi Juni, Rampara, Ghiyavad, Sindhavadar, Vanzara	75,000	75,000	75,000	2,25,000
2	Solar Street lights in nearby villages		50,000	50,000	50,000	1,50,000
	Total		**1,25,000**	**1,25,000**	**1,25,000**	**3,75,000**

(C) Community Resource Augmentation Plan along with budget:

Sr. No.	Proposed Activities	Villages Identified	Budget (Rs.)			
			1st Year	2nd Year	3rd Year	Total
1	Providing medical supplies to a veterinary hospital in nearby village	Rampara	50,000	50,000	50,000	1,50,000
2	Supply of Agriculture water pump sets for local farmers	Kalavadi Juni and Khijadiya	25,000	25,000	25,000	75,000
	Total		**75,000**	**75,000**	**75,000**	**2.25,000**

Cumulative Remediation Plan, Natural Resource Augmentation Plan and Community Resource Augmentation Plan:

Sr. No.	Aspects	Budget (Rs. in Lakhs)
1.	Estimated Cost on remediation plan based on the damageassessment due to violation for 3 years	7,28,000
2.	Natural resource augmentation plan for 3 years	3,75,000

3.	Community resource augmentation plan for 3 years	2,25,000
	Total	**13,28,000**

v. Project proponent shall be required to submit a bank guarantee for an amount of **Rs. 13.28 Lakhs** to the SPCB prior to the grant of EC. The plan shall be completed in three years whereas the bank guarantee shall be for five years. The bank guarantee shall be released by the SPCB after successful implementation of Remediation plan, Natural Resource Augmentation Plan and Community Resource Augmentation plan.

vi. Project proponent shall be required to submit Rs. 82,000 towards penalty provisions i.e., 1% of project cost attributable to the expansion, as per SOP dated 07.07.2021. to the CPCB prior to the grant of EC.

vii. Asoy canal exists at a distance of 510 m from the project site so a detailed mitigation measures plan to prevent any impacts on the canal needs to be prepared and implemented.

viii. Rampara Wildlife Sanctuary is at a distance of 4 km from the project site. The PP shall prepare detailed mitigation measures to prevent any impacts on the Rampara Wildlife Sanctuary and implement the same in consultation with the State Forest Department. PP shall also take necessary permission from the State Government in this regard.

ix. Three tier Green Belt shall be developed in a time frame of one year with native species all along the periphery of the project site of adequate width and tree density shall not be less than 2500 per ha. Survival rate of green belt developed shall be monitored on periodic basis to ensure that damaged plants are replaced with new plants in the subsequent years. Compliance status in this regard, shall be submitted to concerned Regional Office of the MoEF&CC.

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

xi. Particulate matter emission from all the stacks shall not exceed 30 mg/Nm^3.

xii. Rain water harvesting shall be implemented as per the action plan submitted in the EIA report.

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

xiv. 100 % solid waste and dolochar generated in the facility shall be utilized.

xv. Natural gas shall be used as a fuel. Alternatively, till such time Natural gas is available, LDO shall be used in RHF. DRI kiln shall run on coal.

xvi. Online stack monitoring system for IF and RF 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.

xvii. Two online Continuous Ambient Air Quality Monitoring station shall be set up. The location of the CAAQMS shall be decided in consultation with the SPCB.

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

xix. Slip roads shall be provided at the gates and along crossings on main roads to avoid traffic congestion.

xx. Performance monitoring of all Pollution Control Devices shall be carried out annually and report submitted to MoEF&CC, Regional Office.

xxi. Si-Mn slag shall be used for road construction and cement making. SMS slag shall be crushed for metal and flux recovery and aggregate shall be used for the purposes such as road construction, brick manufacturing and filling up of low-lying area etc.

xxii. Tar generated from Coal gasifier shall be burnt in RHF and phenolic water shall be incinerated in After Burn Chamber (ABC) of DRI kilns.

xxiii. Hot charging shall be achieved up to 85%.

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

xxv. Submerged Arc Furnace and Electric Arc Furnace shall be of closed type with extraction system.

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

xxvii. 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.

xxviii. The recommendations of the approved Site-Specific Conservation Plan / Wildlife Management Plan shall be implemented in consultation with the State Forest Department. The implementation report shall be furnished along with the six-monthly compliance report to the concerned Regional Office of MoEF&CC.

B. General conditions

I. Statutory compliance:

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

II. Air quality monitoring and preservation

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

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

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

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

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

vi. The project proponent shall ensure covered transportation and conveying of ore, coal and other raw material to prevent spillage and dust generation.

vii. The project proponent shall provide primary and secondary fume extraction system at all melting furnaces.

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

III. Water quality monitoring and preservation

i. The project proponent shall install 24x7 continuous effluent monitoring system with respect to standards prescribed in Environment (Protection) Rules 1986 (G.S.R 414 (E) dated 30th May 2008; G.S.R 277 (E) dated 31st March 2012 (applicable to IF/EAF); S.O. 3305 (E) dated 7th December 2015 (Thermal Power Plants) as amended from time to time and connected to SPCB and CPCB online servers and calibrate these system from time to time according to equipment supplier specification through labs recognized under Environment (Protection) Act, 1986 or NABL accredited laboratories.

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

iii. Sewage Treatment Plant shall be provided for treatment of domestic wastewater to meet the prescribed standards.

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

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

IV. Noise monitoring and prevention

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

V. Energy Conservation measures

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

VI. Waste management

i. Used refractories shall be recycled.

ii. Kitchen waste shall be composted or converted to biogas for further use.

VII. Green Belt

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

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 offsetting strategies. Further, the report shall also contain time bound action plan to reduce its carbon intensity of its operations and supply chains, energy transition pathway from fossil fuels to Renewable energy etc. All these activities/ assessments should be measurable and monitorable with defined time frames.

VIII. Public hearing and Human health issues

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

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

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

IX. Environment Management

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

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

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

X. Miscellaneous

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

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

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

iv. The project proponent shall monitor the criteria pollutants level namely; PM_{10}, SO_2, NOx (ambient levels as well as stack emissions) or critical sectoral parameters, indicated for the projects and display the same at a convenient location for disclosure to the public and put on the website of the company.

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

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

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

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

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

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

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

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

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

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

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

Agenda No. 6.3

6.3 Expansion of Integrated Cement Plant - Clinker (6.5 to 10 MTPA), Cement (3.3 to 7.0 MTPA), WHRS (16 to 36 MW) and CPP (80 MW) at Villages: Rawan, Khapradih, Sarseni, Chrurchungpur and Chhirahi, Tehsil: Simga, District: Balodabazar - Bhatapara (Chhattisgarh) by M/s. UltraTech Cement Ltd. (Unit: Rawan Cement Works)– Consideration of Environmental Clearance – regarding.

[Proposal No. IA/CG/IND/259348/2009; File No. J-11011/262/2009-IA.II(I)]
[Name of Consultant: M/s. J.M. EnviroNet Pvt. Ltd., Gurugram; QCI NABET Accreditation: valid upto 07/02/2023]

6.3.1 M/s. UltraTech Cement Ltd. (Unit: Rawan Cement Works) has made an online application *vide* proposal no. IA/CG/IND/259348/2009 dated 10/05/2022 along with copy of EIA/EMP Report, Form - 2 and certified EC compliance report seeking Environment Clearance (EC) under the provisions of the EIA Notification, 2006 for the project mentioned above. The proposed project activity is listed at schedule no. 3(b) Cement Plants under Category "A" of the schedule of the EIA Notification, 2006 and appraised at Central Level.

6.3.2 Name of the EIA consultant: M/s. J.M. EnviroNet Pvt. Ltd., Gurugram [S No 42, List of ACOs with their Certificate / Extension Letter No: NABET/EIA/2023/RA 0186 valid till 07/02/2023; Rev. 23, May 09, 2022].

Details submitted by Project proponent

6.3.3 The details of the ToR are furnished as below:

Date of application	Consideration	Details	Date of accord	Validity of ToR
20/09/2018	36th meeting of REAC held on 9-10th October 2018	Terms of References	09/11/2018	08/11/2022

6.3.4 The project of M/s. UltraTech Cement Ltd. (Unit: Rawan Cement Works) located at Rawan, Khapradih, Sarseni, Chrurchungpur and Chhirahi Villages, Simga Tehsil, Balodabazar-Bhatapara District, Chhattisgarh State is Expansion of Integrated Cement Plant - Clinker (6.5 to 10.0 MTPA), Cement (3.3 to 7.0 MTPA), WHRS (16 to 36 MW) and CPP (80 MW).

6.3.5 Environmental Site Settings:

<table>
<tr><th>S. No.</th><th>Particulars</th><th>Details</th><th>Remarks</th></tr>
<tr><td>i.</td><td>Total land</td><td>388.37 ha (Plant + Colony);</td><td>Land use of the existing land area is already industrial</td></tr>
<tr><td>ii.</td><td>Land acquisition details as per MoEF&CC OM dated 7/10/2014</td><td>Total land is under the possession of the company. Proposed expansion will be done within the existing plant premises.</td><td>-</td></tr>
<tr><td>iii.</td><td>Existence of habitation & involvement of R&R, if any.</td><td>Plant Site: No habitation exists within the plant site and R & R is not applicable.
Study Area:
<table>
<tr><th>Habitation</th><th>Distance (km)</th><th>Direction</th></tr>
<tr><td>Rawan</td><td>~1.0</td><td>West</td></tr>
<tr><td>Khapradih</td><td>~1.15</td><td>North</td></tr>
<tr><td>Sarseni</td><td>~1.90</td><td>East</td></tr>
<tr><td>Chrurchungpur</td><td>~1.45</td><td>East</td></tr>
<tr><td>Chhirahi</td><td>~1.24</td><td>SSE</td></tr>
<tr><td>Phulwari</td><td>~2.04</td><td>South</td></tr>
<tr><td>Newari</td><td>~2.26</td><td>South</td></tr>
<tr><td>Jhipan</td><td>~2.55</td><td>WNW</td></tr>
</table>
There are approx. 65 villages in 10 km radius study area.</td><td>-</td></tr>
<tr><td>iv.</td><td>Latitude and Longitude of all the corners of project site</td><td>
<table>
<tr><th>Point</th><th>Latitude</th><th>Longitude</th></tr>
<tr><td>1.</td><td>21°35'19.64"N</td><td>82° 0'52.39"E</td></tr>
<tr><td>2.</td><td>21°35'15.59"N</td><td>82° 1'2.34"E</td></tr>
<tr><td>3.</td><td>21°34'56.72"N</td><td>82° 1'5.99"E</td></tr>
<tr><td>4.</td><td>21°35'19.83"N</td><td>82° 1'20.38"E</td></tr>
<tr><td>5.</td><td>21°35'10.79"N</td><td>82° 1'23.88"E</td></tr>
<tr><td>6.</td><td>21°34'58.00"N</td><td>82° 1'42.52"E</td></tr>
<tr><td>7.</td><td>21°34'51.77"N</td><td>82° 1'54.04"E</td></tr>
<tr><td>8.</td><td>21°34'47.34"N</td><td>82° 1'57.62"E</td></tr>
<tr><td>9.</td><td>21°34'45.16"N</td><td>82° 1'52.03"E</td></tr>
</table>
</td><td>-</td></tr>
</table>

<table>
<tr><th>S. No.</th><th>Particulars</th><th>Details</th><th>Remarks</th></tr>
<tr><td></td><td></td><td>
<table>
<tr><td>10.</td><td>21°34'37.24"N</td><td>82° 1'50.49"E</td></tr>
<tr><td>11.</td><td>21°34'27.44"N</td><td>82° 1'49.93"E</td></tr>
<tr><td>12.</td><td>21°34'22.43"N</td><td>82° 1'47.80"E</td></tr>
<tr><td>13.</td><td>21°34'15.42"N</td><td>82° 1'50.63"E</td></tr>
<tr><td>14.</td><td>21°33'56.75"N</td><td>82° 1'45.66"E</td></tr>
<tr><td>15.</td><td>21°33'49.53"N</td><td>82° 1'45.33"E</td></tr>
<tr><td>16.</td><td>21°33'40.65"N</td><td>82° 1'38.60"E</td></tr>
<tr><td>17.</td><td>21°33'43.01"N</td><td>82° 1'18.03"E</td></tr>
<tr><td>18.</td><td>21°33'59.03"N</td><td>82° 0'47.96"E</td></tr>
<tr><td>19.</td><td>21°34'2.61"N</td><td>82° 0'46.20"E</td></tr>
<tr><td>20.</td><td>21°34'3.91"N</td><td>82° 0'35.17"E</td></tr>
<tr><td>21.</td><td>21°34'12.30"N</td><td>82° 0'0.06"E</td></tr>
<tr><td>22.</td><td>21°34'14.29"N</td><td>82° 0'0.43"E</td></tr>
<tr><td>23.</td><td>21°34'10.80"N</td><td>82° 0'40.24"E</td></tr>
<tr><td>24.</td><td>21°34'17.02"N</td><td>82° 0'47.35"E</td></tr>
<tr><td>25.</td><td>21°34'33.00"N</td><td>82° 0'46.02"E</td></tr>
<tr><td>26.</td><td>21°34'41.01"N</td><td>82° 0'45.14"E</td></tr>
<tr><td>27.</td><td>21°34'48.01"N</td><td>82° 0'53.66"E</td></tr>
<tr><td>28.</td><td>21°34'51.36"N</td><td>82° 0'56.15"E</td></tr>
<tr><td>29.</td><td>21°34'57.96"N</td><td>82° 1'0.02"E</td></tr>
<tr><td>30.</td><td>21°35'3.70"N</td><td>82° 0'58.98"E</td></tr>
<tr><td>31.</td><td>21°35'11.24"N</td><td>82° 0'54.97"E</td></tr>
<tr><td>32.</td><td>21°35'15.43"N</td><td>82° 0'52.74"E</td></tr>
</table>
</td><td></td></tr>
<tr><td>v.</td><td>Elevation of the project site</td><td>264 to 281 m above mean sea level</td><td>-</td></tr>
<tr><td>vi.</td><td>Involvement of Forest land if any.</td><td>No Forest Land is involved in the plant site.</td><td>-</td></tr>
<tr><td>vii.</td><td>Water body (Rivers, Lakes, Pond, Nala, Natural Drainage, Canal etc.) exists within the project site as well as study area</td><td>Project site: No water body exists within the plant site.
Study area: Following water bodies falls within 10 km radius:
<table>
<tr><th>Water Body</th><th>Approx. Distance</th><th>Direction</th></tr>
<tr><td>Mahanadi Canal</td><td>Adjacent</td><td>East</td></tr>
<tr><td>Banjari Nala</td><td>3.0 km</td><td>NW</td></tr>
<tr><td>Chitawar Nala</td><td>3.5 km</td><td>ENE</td></tr>
<tr><td>Ameri Diversion Canal</td><td>4.5 km</td><td>WNW</td></tr>
<tr><td>Khorsi Nala</td><td>5.0 km</td><td>SSE</td></tr>
<tr><td>Chitawar Nala</td><td>5.5 Km</td><td>South</td></tr>
<tr><td>Jhorki Nala</td><td>5.5 Km</td><td>ESE</td></tr>
<tr><td>Tengna Nala</td><td>6.5 Km</td><td>SSW</td></tr>
<tr><td>Kukardih Talab</td><td>9.5 Km</td><td>NNE</td></tr>
</table>
</td><td>-</td></tr>
</table>

S. No.	Particulars	Details	Remarks
viii.	Existence of ESZ/ ESA/ National Park/ Wildlife Sanctuary/ Biosphere Reserve/ Tiger Reserve/ Elephant Reserve etc. if any within the study area	Nil. List of Reserved & Protected Forest within 10 km radius study area: • Dhabadih RF (~7.0 km in NE direction)	-

6.3.6 The existing project was accorded Environmental Clearance from MoEF&CC, New Delhi for the expansion of Integrated Cement Plant - Clinker (2.1 to 6.5 MTPA), Cement (3.3 MTPA to 6.5 MTPA), CPP (30 to 80 MW) *vide* their letter no. J-11011/262/2009-IA (II) dated 17th March, 2011 in the name of Grasim Industries Ltd; which has been transferred in the name of M/s. UltraTech Cement Ltd. *vide* letter dated 05th Sept., 2016. The company was not able to install cement mill for the proposed expansion within valid EC period; therefore, presently operating at 3.3 MTPA capacity only. Consent to Operate for the existing unit was accorded by CECB v*ide* their letter no. 8943/TS/CECEB/2022 dated 08th March, 2022 for Clinker, CPP & WHRS (which is valid up to 28th Feb., 2026); and *vide* their letter no. 3004/TS/CECB/2021 dated 04th Aug., 2021 for Cement (which is valid up to 31st Aug., 2024).

6.3.7 Implementation status of the existing EC

S. No.	Facilities	Units	As per EC dated 17th March, 2011	Implementation Status as on date	Production as per CTO
1.	Clinker	Million TPA	6.5	Implemented	6.5
2.	Cement	Million TPA	6.5	Not implemented	3.3
3.	CPP	MW	80	Implemented	80
4.	WHRS	MW	16*	Implemented	16*
5.	D.G. Set	MW	12*	Implemented	12*
** As per CTO obtained from CECB, CTE Application for 22 MW WHRS is in process at CECB.*					

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

S. No.	Plant Equipment / Facility	Existing Facilities as per EC dated 17th March, 2011								Proposed Unit*		Final (Existing + Proposed)	
		Total (A + B)		Implemented (A)		Un - implemented (B)		As per CTO					
		Configuration	Capacity	Configuration	Capacity	Configuration	Capacity	Configuration	Capacity	Configuration	Capacity	Configuration	Capacity
1.	Clinker	Kiln: 1 x 5200, 1 x 13700 TPD	6.5 MTPA	Kiln: 1 x 5200, 1 x 13700 TPD	6.5 MTPA	Nil	Nil	Kiln: 1 x 5200, 1 x 13700 TPD	6.5 MTPA	Kiln: 1 x 10608 TPD	3.5 MTPA	Kiln: 1 x 5200, 1 x 13700, 1 x 10608 TPD	10.0 MTPA**
2.	Cement	1 x 415 TPH	3.3 MTPA	1 x 415 TPH	3.3 MTPA	1 x 415 TPH	3.2 MTPA	1 x 415 TPH	3.3 MTPA	2 x 240 TPH (VRM)	3.7 MTPA	1 x 415 TPH	7.0 MTPA

S. No.	Plant Equipment / Facility	Existing Facilities as per EC dated 17th March, 2011								Proposed Unit*		Final (Existing + Proposed)	
		Total (A + B)		Implemented (A)		Un - implemented (B)		As per CTO					
		Configuration	Capacity	Configuration	Capacity	Configuration	Capacity	Configuration	Capacity	Configuration	Capacity	Configuration	Capacity
		(RP + Ball Mill)		(RP + Ball Mill)		(RP + Ball Mill)		(RP + Ball Mill)				(RP + Ball Mill) 2 x 240 TPH (VRM)	
3.	CPP	Boiler capacity 115 TPH & 135 TPH	80 MW	Boiler capacity 115 TPH & 135 TPH	80 MW	Nil	Nil	Boiler capacity 115 TPH & 135 TPH	80 MW	Nil	Nil	Boiler capacity 115 TPH & 135 TPH	80 MW
4.	WHRS	16 MW Turbine	16 MW Turbine	16 MW Turbine	16 MW Turbine	Nil	Nil	16 MW Turbine	16* MW	20 MW Turbine	20 MW	36 MW Turbine	36 MW
** As per CTO obtained from CECB* *** Part of Clinker will also be sent to sister grinding units of UTCL*													

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

S. No.	Name of Raw Material	Quantity (MTPA)			Source	Distance & Mode of Transportation
		Existing	Additional	Total		
1.	Limestone	9.75	5.25	15.0	Captive Mines and other sister units located in Chhattisgarh State;	4.0 km / Covered Conveyor Belt / Road
2.	Iron Ore	0.05	0.03	0.08	Bajrang Power Raipur/ Rashi Steel Bilaspur	100-150 km / Road
3.	Fly ash	1.15	1.30	2.45	CPP, KSK Akaltara, Siltara Area/ Jindal/ Adani GMR	250-300 km / Rail
4.	Gypsum	0.165	0.185	0.35	Coromandal Fertilizer-Vizag / Paradeep Phosphate Ltd- Orissa	650-700 km / Road / Rail
5.	Slag	2.31	2.59	4.90	Bhilai Steel Plant/ Jayswal Neco & Sunflag Bhandara	100-150 km / Road / Rail
6.	Performance Improver	0.16	0.18	0.34	Captive Limestone Mine	3 km / Road

6.3.10 The existing fresh water requirement for Integrated Cement Plant is 3962 KLD; which is being/ will be sourced from Ground Water / Mine sump. Permission for withdrawal of 3962 KLD of Ground Water was obtained from CGWA *vide* letter no. 21-4(II)/NCCR/CGWA/2008-1811 dated 07th Dec., 2015; renewal of the same has been obtained *vide* NOC No.

CGWA/NOC/MIN/REN/2/2022/6750 (valid up to 06th Dec., 2022) for quantity of 1108 m^3/day (Fresh water) and 2854 m^3/day (dewatering). Additional 1000 KLD water will be required for proposed expansion project; which will be sourced from Mine sump water and rainwater harvested in the plant as well as mines area.

6.3.11 Existing power requirement is 59 MW. Additional requirement for proposed expansion project is 44 MW. Thus, the total power requirement after expansion will be approx. 103 MW; which is being / will be sourced from CPP, WHRS & Grid. Excess Power (6 MW) will also be sourced from Sister Unit (Hirmi Cement Works).

6.3.12 Baseline Environmental Studies:

Period	Dec., 2018 to Feb., 2019	Revalidation Period (Jan., 2022)
AAQ parameters at 09 locations and 10 locations in Revalidation Period	$PM_{2.5}$ - 26.1 to 48.5 µg/m^3 PM_{10} - 56.9 to 89.7µg/m^3 SO_2 - 5.5t0 14.6µg/m^3 NO_2 - 11.4to 27.9µg/m^3 CO - BDL to 1.06 mg/m^3	$PM_{2.5}$ - 27.4 to 47.9 µg/m^3, PM_{10} - 57.9 to 88.4 µg/m^3 SO_2 - 5.3 to 15.3 µg/m^3 NO_2 - 11.7 to 28.0 µg/m^3 CO - BDL to 1.09 mg/m^3
AAQ modeling (Incremental GLC)	PM_{10} - 4.10 µg/m^3 (within Plant site in SW direction) SO_2 - 3.12 µg/m^3 (within Plant site in SW direction) NO_x - 4.65 µg/m^3 (within Plant site in SW direction)	
Ground Water Quality at 10 locations	pH - 7.35 to 7.74 Total Hardness - 213.56 to 420.7 mg/l Chloride - 54.6 to 113.24 mg/l Fluoride - 0.43 to 0.91 mg/l TDS - 406 to 666 mg/l	pH - 7.48 to 7.84 Total Hardness - 198.54 to 409.87 mg/l Chloride - 56.32 to 123.27 mg/l Fluoride - 0.46 to 0.91 mg/l TDS - 389 to 658 mg/l
Surface Water Quality at 01 location	pH - 7.32 DO - 6.3 mg/l BOD - 3.7 mg/l COD - 14.2 mg/l	pH - 7.43 DO - 6.7 mg/l BOD - 3.2 mg/l COD - 12.3 mg/l
Noise level Monitoring at 10 Locations	Noise Level During Day Time - 51.6 to 68.3 Leq dB (A) Noise Level During Nighttime - 40.1 to 59.5 Leq dB(A)	Noise Level During Day Time - 51.9 to 67.8 Leq dB(A) Noise Level During Nighttime - 41.0 to 60.1 Leq dB(A)
Traffic assessment study findings	▪ Traffic Study has been conducted at Road connecting to Raipur at 1.5 Km from plant site and Road connecting to Balodabazar (near Village Rawan) in 2.0 Km from Plant site. ▪ Transportation of raw material, fuel and finished product is being/will be done by road and rail except for limestone, which is being / will be transported by covered conveyor belt from captive limestone mine. ▪ Existing PCU is 85.39 PCU/hr. at Road connecting to Balodabazar (near Village Rawan) and 55.70 PCU/hr at Road connecting to Raipur; Existing level of service (LOS) is:	

Road	V	C	Existing	LOS

		(Volume in PCU/hr.)	**(Capacity in PCU/hr.)**	**V/C Ratio**	
	Road connecting to Balodabazar (near Village Rawan)	85.39	625	0.14	A
	Raipur Road	55.70	625	0.089	A

- PCU load after proposed project will be 85.39 (Existing) + 37.125 (Additional) PCU/hr on Road connecting to Balodabazar and 55.70 (Existing) + 33.375 (Additional) at Road connecting to Raipur and level of service (LOS) will be:

Road	**V (Volume in PCU/hr)**	**C (Capacity in PCU/hr)**	**Existing V/C Ratio**	**LOS**
Road connecting to Balodabazar (near Village Rawan)	122.515	625	0.196	A
Raipur road	89.075	625	0.14	A

**Note: Capacity as per IRC - 64- 1990 Guideline for capacity for roads*

Conclusion: The level of service will be "A" i.e. Excellent after including additional traffic due to proposed project.

Flora and fauna	Python *(Pythan molurus)* and Monitor Lizard *(Varanus bengalensis)* were recorded in the study area; which comes in Schedule- I fauna according to (IWPA) Indian Wildlife Protection Act, 1972. Wildlife Conservation Plan for the Schedule - I species found in the study area has been prepared with a budget allocation of Rs. 18 Lakhs (2 years) and authenticated by PCCF, Raipur. Vide letter dated 28/09/2021.

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

Plant Unit	**Section**	**Type of Waste**	**Waste**	**Quantity**			**Treatment / Disposal**
				Existing	**Proposed**	**Total**	
Cement Plant	APCE	SW	Dust	1199 TPD	886 TPD	2085 TPD	Dust collected from various APCEs will be totally recycled into the process.

Plant Unit	Section	Type of Waste	Waste	Quantity			Treatment / Disposal
				Existing	Proposed	Total	
CPP	-	SW	Fly ash	85,000 TPA	Nil	85,000 TPA	Used in manufacturing of PPC grade cement
STP	-	SW	STP Sludge	25 kg/day	5 kg/day	30 kg/day	Used as manure for greenbelt development / plantation
Plant Maintenance	Different sections	HW	Used or Spent oil	143.5 KL / annum	10 KL	155.5 KL/annum	Used in Kiln as co-processing.
			Contaminated cotton rags or other cleaning materials	0.2 TPA	0.1 TPA	0.3 TPA	
			Empty barrels/ containers/ liners	150 Nos/ annum	70 Nos / Annum	220 Nos / Annum	Sold to CPCB registered recycler
			Used Batteries	0.02 TPA	0.015 TPA	0.035 TPA	Sold to CPCB registered recycler
MSW	Plant and Colony	Dry	Bottles, Paper, Cans, Textiles, etc.	0.05 TPA	0.03 TPA	0.08 TPA	Sold to registered recycler.
		Wet	Kitchen and canteen/ Green waste	0.05 TPA	0.02 TPA	0.07 TPA	Organic waste utilized as manure for greenbelt development/ plantation.

6.3.14 Public Consultation:

Details of advertisement given	Public Hearing Notice published in Newspapers the "Hindustan Times", and "Dainik Bhaskar" on 13th November, 2020
Date of Public Consultation	16th December, 2020
Venue	On the ground in front of the water tank at Village: Sarseni, Tehsil: Palari
Presiding Officer	Additional District Magistrate and Additional District Collector, District Balodabazar-Bhatapara
Major issues raised	Employment, Environment & Pollution, Education, Health, Plantation, Socio-economic Development.

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

S. No.	Physical activity to be done	Unit of Measurement			Cost (Rs. Cr.)
		01st Year	02nd Year	03rd Year	
1.	Development of Women Empowerment Centre for Socio economic development	2 nos. (Village Khapradih & Chirahi)	2 nos. (Village Sarseni & Chuchrungpur)	-	0.16
2.	Construction of Vocational Training Centre	-	1 no. (Village Rawan)	-	0.18
3.	Establishment of Farmer Training cum demonstration Centre at Rawan	1 no. (Village Rawan)	-	-	0.065
4.	Hand Cart, Tea Stall, Gumti Project for 75 needy people of selected operational villages	30 nos. (Village Rawan - 15 & Sarseni - 15)	-	45 nos. (Village Chuchrungpur - 15, Khapradih - 15 & Chirahi - 15)	0.1125
5.	Development of Livestock Development Centre	-	1 no. (Village Guma)	-	0.1
6.	Establishment of Organic manure production and demonstration centre	2 nos. (Village Rawan & Chhirahi)	2 nos. (Village Sarseni & Khapradih)	1 nos (Village Chuchrungpur)	0.05
7.	Digital education through development of Furnished Computer Lab	2 nos. (Village Rawan & Guma)	2 nos. (Village Sarseni & Khapradih)	2 nos. (Village Chirahi & Chuchrungpur)	0.3
8.	Construction of Toilet Block for Girls	2 nos. (Village Guma & Chuchrungpur)	2 nos. (Village Rawan & Sarseni)	2 nos. (Village Chirahi & Khapradih)	0.18
9.	Development & modification of Playground and construction of Cultural Programme Stage	2 nos. (Village Guma & Chuchrungpur)	2 nos. (Village Rawan & Sarseni)	2 nos. (Village Chirahi & Khapradih)	0.15
10.	Provide Medical Mobile Van (medicine & checkup) in Village Rawan, Khapradih, Sarseni, Chuchrungpur, Chhirahi	1 no.	-	-	0.15
11.	Renovation of Primary Health Center / Sub Health Centre	2 nos. (Village Rawan & Khapradih)	2 nos. (Village Chhirahi & Guma)	2 nos. (Village Sarseni & Chuchrungpur)	0.2
12.	Provide medical investigating equipment and need based support Material set	2 Centre (Village Rawan & Chuchrungpur	-	3 Centre (Village Khapradih, Sarseni & Chirahi)	0.1

S. No.	Physical activity to be done	Unit of Measurement			Cost (Rs. Cr.)
		01st Year	02nd Year	03rd Year	
13.	Block Plantation (Fencing, Boring, Sapling Plant, Security)	6000 nos. saplings (Village Rawan - 3000 & Sarseni - 3000)	3000 nos. saplings (Village Chuchrungpur - 2000 & Khapradih - 1000)	1000 nos. saplings (Village Chirahi - 1000)	0.36
14.	Tree Guard with Plant	300 Nos. (Village Rawan - 150, Sarseni - 150)	100 Nos. (Village Chuchrugpur)	200 Nos. (Village Chirahi - 100 & Khapradih - 100)	0.078
15.	Installation of Borewell set with Submersible pump and big size Syntax Tank	2 nos. (Village Rawan & Sarseni)	2 nos. (Village Chuchrungpur & Khapradih)	1 no. (Village Chirahi)	0.25
16.	Pond Deepening	1 no. (Village Rawan)	2 nos. (Village Chhirahi & Guma)	1 no. (Village Sarseni)	0.24
17.	Check Dam & Bund construction	1 no. (Village Khapradih)	1 no. (Village Sarseni)	1 no. (Village Guma)	0.15
18.	Rain water harvesting on Govt. School Building	2 nos. (Village Rawan & Sarseni)	1 no. (Village Chuchrungpur) Khapradih and Chirahi	2 nos. (Village Khapradih & Chirahi)	0.1
19.	Establishment of Open Gym and Garden in Schools	2 nos. (Village Sarseni & Chuchrungpur)	2 nos. (Village Rawan & Guma)	-	0.06
20.	Construction of Stop Dam	1 no. (Village Sarseni)	1 no. (Village Khapradih)	-	0.12
21.	CC Road Construction	CC Road at Sarseni – 300 Mtr – 12 Lac (Main Road to Jhabbu Para)	CC Road at Khapradih – 150 Mtr – 6.00 Lac (Main Road to School	-	0.18
	Total cost allocated for the Socio-economic developmental activities				***3.2855***

6.3.15 Existing capital cost of the project was Rs. 950 Crores. The capital cost for the proposed expansion project is Rs. 1800 Crores and the revised capital cost for environmental protection measures is proposed as Rs. 188.96 Crores. The annual recurring cost towards the environmental protection measures for proposed expansion is Rs. 5.0 Crores/ annum. The employment generation from the proposed expansion project is 310 people. The details of cost for environment protection measures is as follows:

DETAILED EMP COST BREAK-UP

S. No.	Particulars	Capital cost (In Crores)	Recurring Cost per annum (In Crores)
1	**Air Pollution Control Measures**	**177.61**	**3.00**
	Air Pollution Monitoring equipment		
	a) Continues emission monitoring system	0.44	
	b) Continuous Ambient Air Quality monitoring system	1.62	
	c) Off line dust emission monitoring system	0.5	
	d) Bag House (3 nos) Raw Mill, Coal Mill and Cement Mill	12.65	
	e) Cooler ESP (1 no)	13.3	
	Fugitive Emission Control Measures		
	a) Bag filter(69 nos)s will be provided at the all transfer points **- Nuisance Bag Filter**	3.5	
	c) Clinker Silo (150000 T), Cement Silo (6 x 2500 T), Fly Silo (5000 T), PSC Silo (12000 T), Slag Silo (2000 T) & Blending Silo (30000 T)	105	
	d) Iron Ore Shed (25000 T), Gypsum (20000 T), Coal Shed (50000 T)	40	
	e) Water sprinkling through fog cannon machines	0.3	
	f) Road sweeping machines	0.3	
2	**Water Pollution Control and Rain Water Harvesting Measures**	**8.00**	**0.70**
	Rain Water Harvesting		
3	**Noise Pollution Control**	**0.25**	**0.10**
	a) Walls and ceilings of the concerned buildings are lines with sound absorbing materials. b) Properly insulated enclosures are provided to staff working close to the high noise sources. c) Noise attenuating devices like ear plugs and ear muffs are provided to the workers exposed to the high noise level. d) Sufficient green belt will be maintained around the cement plant. e) Silencers have also will be provided in the areas generating high noise.		
4	**Environment Monitoring and Management**	**0.50**	**0.20**
5	**Green Belt Development & Drip irrigation system**	**2.60**	**1.00**
	Total	**188.96**	**5.00**
Note: * **Cost of Internal concreted roads and Sewage Treatment plant is included in the existing EMP cost**			

6.3.16 Existing greenbelt has been developed in 155.58 ha which is about 40% of the total project area of 388.37 ha with total sapling of 359670 trees planted @2302 plants/ha. Further, the

greenbelt/plantation will be enhanced by gap filling considering 2500 plants/ ha. Total no. of 29280 saplings will be planted in 6 years.

6.3.17 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.

6.3.18 The Status of compliance of earlier EC was obtained from Integrated Regional Office (IRO), Naya Raipur, Atal Nagar, Chhattisgarh *vide* letter no. 5-25/2011(ENV)/306 dated 11th Oct., 2021 in the name of M/s. UltraTech Cement Ltd. The Action taken report regarding the partially/ non-complied conditions was submitted to IRO, MoEFCC, Naya Raipur, Chhattisgarh *vide* letter no. UTCL/RWCW/Plant L- 3/2021/110 dated 23rd October, 2021. MoEF&CC (IRO), Naya Raipur, Chhattisgarh evaluated the same and has issued letter dated 28th April, 2022. The details of the observations made by IRO in report dated 11th Oct., 2021 along with its re-assessment/ present status as furnished by the PP is given below:

S. No.	Partially / Non-Compliance details	Observation of RO (abridged)	Condition no.			Re-assessment by IRO, MoEFCC, Chhattisgarh
			EC date	Specific	General	
1.	Secondary fugitive emission shall be controlled and shall be within the prescribed limits and regularly monitored. Guidelines / Code of Practice issued by the CPCB in this regard should be followed.	**Partially Complied With:** The following observations have been made in day of monitoring: i. Fugitive emission was observed from the ball mill and cement mill section causing air pollution in the premises. ii. Deposition of heavy dust was observed in the clinker silo section, cement mill hooper area, fly ash changing point causing air pollution problem in the plant premises and surrounding. iii. Huge amount of coal and fly ash inappropriately dumped in the open areas of premises. iv. The solid wastes management system of the industry was not found adequate. Housekeeping was not found satisfactory. Housekeeping was not found satisfactory.	17th March, 2011 and 5th Sept., 2016	(iv)	-	PP has submitted the fugitive emission monitoring reports of 6 locations for the period Sept., 2021. The same has been analyzed and it was observed that the emissions are within prescribed limits.
2.	All the fly ash shall be utilized as per Fly ash Notification, 1999 subsequently amended in 2003/2009. Efforts shall be made to use fly ash maximum in making Pozollana Portland Cement (PPC).	**Not Complied With:** PA has been asked to submit the fly ash utilization certificate for the last three FY to this office.	17th March, 2011 and 5th Sept., 2016	(x)	-	PP has submitted Fly ash annual report of last 03 Financial Year (2018-19, 2019-20 & 2020-21) to this office.
3.	As proposed greenbelt shall be developed in at least 33 % area in and around the cement plant as per the CPCB	**Partially Complied With:** PA has been asked to submit the details of Layout plan of the total area with earmarking the plantation covered with 33% area, details of saplings undertaken including	17th March, 2011 and 5th	(xiii)	-	PP has submitted the layout plan of the total area with earmarking the planation covered

S. No.	Partially / Non-Compliance details	Observation of RO (abridged)	Condition no.			Re-assessment by IRO, MoEFCC, Chhattisgarh
			EC date	Specific	General	
	guidelines to mitigate the effects of air emission in consultation with local DFO.	its area and its survival rate to this office.	Sept., 2016			specifying total plantation done in (Plant & Colony) in 156.234 ha area to this office.
4.	Proper housekeeping and adequate occupational health programme shall be taken up. Occupational Health Surveillance programme shall be done on a regular basis and records maintained properly for at least 30 - 40 years. The programme shall include lung function and sputum analysis tested once in six months. Sufficient preventive measures shall be adopted to avoid direct exposure to dust etc.	**Partially Complied With:** The following observations have been made in day of monitoring: i. Fugitive emission was observed from the ball mills and cement mill section causing air pollution in the premises. ii. Deposition of heavy dust was observed in the clinker silo section, cement mill hooper area, fly ash changing point causing air pollution problem in the plant premises and surroundings. iii. Huge amount of coal and fly ash inappropriately dumped in the open areas of premises. iv. The Solid wastes management system of the industry was not found adequate. Housekeeping was not found satisfactory. Housekeeping was not found satisfactory. Occupational Health Surveillance programme is being carried out on a regular basis and record of the same have been provided by the PA.	17th March, 2011 and 5th Sept., 2016	-	(vi)	PP has submitted Photographs of Cement Mill & Ball mill section, Photographs of Coal shed and a copy of Solid Waste Management Practices (SOP) adopted by the unit to this office.

Deliberations by the Committee

6.3.19 The Committee noted the following:

1. 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.
2. 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.
3. 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.

4. The Committee has found that the baseline data and incremental GLC due to the proposed project within NAAQ standards.
5. The Mahanadi canal along with numerous Nallahs exists within the study area from the project site. PP shall implement the mitigation measures to protect Mahanadi canal along with numerous Nallahs in the study area.
6. There are 2 nos. of Schedule - I species reported in study area, namely Python *(Pythan molurus)* and Monitor Lizard *(Varanus bengalensis)*. Wildlife Conservation Plan for the Schedule - I species found in the study area has been prepared with a budget allocation of Rs. 18 Lakhs (2 years) and authenticated by PCCF, Raipur. vide letter dated 28/09/2021.
7. The Committee noted that there are total 65 villages are existing in the periphery of the project within 10 km radius. As committed by the PP, eleven villages, namely Chhirahi, Chuchurungpur, Sarseni, Guma, Jhipan, Rawan, Khapradih, Padkidih, Tilda Banda, Fulwari, Newarimay be adopted by the company for their socio-economic development.
8. The Committee deliberated on the action plan and budget allocation for green belt development and noted that as committed by the PP the green belt development shall be completed in coming monsoon season.
9. 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.
10. PM_{10} value was observed at near to the standard, the PP shall minimize the particulate concentration by adopting suitable mitigation measures in this regard.
11. The Committee deliberated upon the certified compliance report of IRO, MoEFCC as well as action taken report submitted by PP with respect to the observations reported by IRO, MoEFCC and found it satisfactory.
12. 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.
13. 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.

Information submitted by the PP during EAC Meeting-Written submission: As per suggestion of EAC, following undertakings and additional information has been submitted by the PP

Point-wise Reply of Additional Information		
S. No.	Point	Reply

1	Mitigation measures adopted by unit for control of PM10 emissions and fugitive emissions.	Mitigation measures adopted by the unit for control of PM10 and fugitive emissions is as following- ***1. Measures adopted / to be adopted by Unit for control of PM emissions*** ▪ Clinker transportation to spit located Grinding Units is being / done 100 % by rail only. ▪ Road connecting Plant with Guma - I Mine (1.6 km) will be compacted; and plantation will be done on both side of the road. ▪ Latest technology APCE (RABH - 1 No., Bag House - 2 Nos., ESP (1 Nos.) and Bag filters (69 Nos) to control the emission level as per the prescribed norms and providing the no. of bag filters to covered all the material transfer points to ensure the minimization fugitive emission and maintain the Air Quality within the norms. ▪ Covered Conveyor belts for transfer of raw materials / finished products inside the plant. ▪ Fly ash received through closed bulkers & fed into silo through pneumatic system. ▪ Closed and covered storage facilities for materials and finished product. ▪ Clinker (Silo - 150000), Fly ash (5000) and Cement stored (6 x 25000 tonnes) in the silos. ▪ Gypsum (20,000 tonnes) covered Shed, Coal and Petcoke stored (50,000 tonnes) in the covered sheds. ▪ Water sprinkling to control dust. ▪ All the movement area has been /will be concreted. ▪ Out of the total plant area (i.e., 388.37 ha), about 155.58 ha (i.e., 40% of the total plant area) has already been developed under greenbelt/plantation in plant and colony area with 359670 saplings planted @2302 plants/ha. Further, the greenbelt/plantation will be enhanced by gap filling considering 2500 plants/ ha. ***2. Measures adopted / to be adopted by Unit for control of pollution due to vehicular movement*** ▪ Maximum the rail transportation to reduce the truck movement or internal roads will be concreted. ▪ Vehicles with PUC Certificate are / will be hired. ▪ Using of vacuum cleaning machine. ▪ Increase water tanker for water spray and yards and provide the water continuous spinkers to control the dust emission. ▪ Vehicles is being / will be covered with a tarpaulin and not over loaded ▪ In emergency conditions will covered the raw material during the storage. ▪ Vacuum sweeping machine has been/will be used for better housekeeping. ▪ Proper maintenance of vehicles to reduce gaseous emissions. ▪ Un- necessary blowing of horn is being / will be avoided. ▪ Roads are / will be maintained in good condition.

		▪ Greenbelt of appropriate width has been will be developed along the road connecting plant to main road. Further, the greenbelt / plantation will be enhanced by gap filling considering 2500 plants/ ha. ▪ To avoid accidents, UTCL has adopted very strong safety & Health Management system, special focus on logistic safety. Various initiatives including latest technology are the part of said system and in place to develop safety culture for safe driving. ▪ Regular monitoring will be done for fugitive emission and air quality. ▪ Strictly follow the fugitive emission guidelines issued by CPCB for Cement Plants.
2	Ground Water Leaching study	Ground water leachate study will be done by the company and study report will be submitted within six months
3	Compliance of CTO	

<u>Compliance Status of Consent to Operate</u>

Name & Address of the Industry	**UltraTech Cement Ltd., Unit – Rawan Cement Works, Village – Rawan, Tehsil – Simga, Distt. – Balodabazar – Bhatapara – 493196 (C.G.)**
Consent Reference No.	Air & Water Consent - Clinker Production (6.5 Million Tonnes/Year), captive thermal power plant (80 MW) and 16 MW Waste Heat Recovery Based Captive Power plant vide letter no. 8943/TS/CECB/2022, Raipur dated-08.03.2022

Sr. N0.	**Terms and conditions**	**Compliance status**
	A. Water Consent as per the Water (Prevention & Control of Pollution) Act, 1974	
1	Industry shall operate & maintain fixed water sprinkler system in coal storage yard / area. Clinker silo storage areas shall be made pucca. Industry shall increase the height of the stack(s) attached to the clinker silo(s) or other bag filters / air pollution control systems at least 30 meters; failing which, renewal of consent for further period shall not be considered.	➢ Water sprinkling arrangement is provided around coal storage yard, wagon tippler, before transfer point of belt conveyor. ➢ All areas including clinker silo are concreted. ➢ All the process stacks are designed as per the CPCB guidelines.

	2	Industry shall not use biomass (rice husk) as fuel/raw material in the cement/ power plant in any case.	We are not utilizing Bio-mass as fuel in the unit.
	3	Industry use pet-coke only as feed stock in existing cement kiln for clinker manufacturing.	Pet-coke is being used as feed stock in clinker manufacturing.
	4	Industry shall provide adequate facility for treatment of industrial and domestic effluent to ensure that the treated effluent quality meet the standard prescribed by Board published in Gazette Notification dated: 25/03/1988. All the treated effluent shall be used for dust suppression, green belt development and other plant related activities within plant premises. Domestic effluent shall be treated in sewage treatment plant (STP). Treated domestic effluent after proper disinfection shall be used for greenbelt development within the plant and colony area. Industry shall not discharge any effluent (treated/untreated) outside the factory premises in any circumstances and zero discharge condition shall be maintained all the time.	Cement manufacturing is based on dry process where no waste water is generated during cement manufacturing. However, the Industrial waste water generated from Thermal Power Plant is treated in neutralization pit and reused in ash quenching and road sprinkling. The domestic waste water is treated at the STP and is reused in the greenbelt development in the plant premises. All quality parameters are being monitored and maintained well below the prescribed limits of CECB/CPCB. Unit is maintained zero discharge system as 100% treated waste water is reused in various process.
	5	Industry shall follow the standards prescribed by Ministry of Environment, Forest and Climate Change, Government of India regarding specific water consumption. Industry shall ensure the disposal of fly ash as per the MoEF&CC notification dated 31/12/2021.	➢ Company has installed air cooled condenser instead of water-cooled condenser at the Thermal Power Plant, where water consumption far below the recommended in the unit. ➢ Fly ash is generated from the Thermal Power Plant which is 100% utilized in cement manufacturing in PPC.
	6	Industry shall ensure utilization of least 2% of alternate fuel (waste) for co-processing.	Unit is coprocessing AFR in the kiln. During April, 2022 we have achieved 3.93% TSR.
	7	Industry shall ensure regular running of 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 / CPCB server. Industry shall submit monitoring	We have installed camera and flow meters at the neutralization pit as per the guidelines of CPCB. We are submitting monitoring report to the Board on monthly basis.

		report of effluent regularly. Calibration and validation of data shall be carried out of all CEQMS and industry shall ensure availability of real time data in CECB / CPCB server.	
	8	Industry shall ensure compliance of Plastic Waste Management Rule 2016 (as amended) & seek registration from Central Pollution Control Board, Delhi under the responsibility of Brand Owners specified in Rule 9 (2) of Plastic Waste Management Rule, 2016 (as amended).	We are operating more than two units, hence applied to CPCB for registration under Plastic Waste Management Rules 2016.
	9	Industry shall obtain letter of authorization under Hazardous and Other Wastes (Management and Trans Boundary Movement) Rules, 2016 from the Board and comply with the rule.	Hazardous waste authorization has already been taken from the Board. All the compliance is being done at the unit.
	10	Industry shall provide safe and scientific arrangement for handling, storage, utilization and disposal of all solid wastes such as; ash and dust collected in air pollution control devices etc. Solid wastes/ ash shall not be stored in open areas under any circumstances. The ash shall be stored in silo only and regular use of ash / dust in cement manufacturing shall be ensured.	We are not disposing any waste from the unit. Solid waste generated from the air pollution control equipment's are recycled back in the process. Fly ash generated from Thermal Power Plant is stored in the concrete silo for PPC manufacturing in cement grinding section.
	11	All internal roads shall be maintained pucca. Good housekeeping practices shall be adopted by the industry.	All internal roads in the unit are black topped or concreted. We have deployed 3 road sweeping machines to clean these roads. Man power also deployed in the area where area are not approachable.
	12	Industry shall ensure transportation of raw materials, fuel, dust generating products by properly covered vehicles. Industry shall also ensure use of mechanically covered vehicles for transportation of raw materials, fuel, dust generating products on or before 12/07/2023.	All the raw materials are being received at the unit in covered/tarpaulin covered trucks only. We are finding the best suitable way for transportation of the raw material at the unit. All the raw materials are being transported/transfer through conveyors or pneumatically in the unit.
	13	Industry shall use fly ash brick, fly ash block and fly ash-based products in the construction/repairing activities.	Fly ash bricks and blocks are being used for repairing & construction activities in the unit.

	14	Wide green belt of local plant species shall be maintained all along the boundary of the plant premises. At least 33% area shall be used for green belt development. As far as possible maximum area of open spaces shall be utilized for plantation purposes.	We are maintaining very good green buffer in and around the plant boundary. local plant species have been planted in plant & colony area in consultation with DFO, Raipur. We have planted approx. 358450 plant saplings since plant starting which covered 40% of the plant & township area. However, plantation is our ongoing activity and have developed separate horticulture department to take care the function.
	15	Industry shall enhance the capacity of rainwater harvesting systems to increase the ground water recharge.	5 rain water storage reservoirs with 40.31 lacs m^3 storage capacity in the plant & mine area have been developed to augment the ground water resources. This is our ongoing activity and further will be developed to enhance the ground water recharge.
	16	Industry shall submit Environment Statement to this Board as per provision of Environment (Protection) Amendment Rule, 1993 for the previous year ending 31st March on or before 30th September every year.	Environment statement is being submitted to the Board on regular basis. For FY 2021-22 will be submitted soon.
	17	Industry shall follow the terms and conditions stipulated in the Chhattisgarh Environment Conservation Board's order no. 7261/TS/CECB/2015, Raipur dated 06/02/2015. In case of noncompliance of any terms and conditions mentioned above or mentioned in the above order, this renewal of the consent may be cancelled.	Noted and all the conditions are being complied
	18	This renewal of consent is being issued under the "Scheme of Auto Renewal of Consent" of the Board issued vide office order no. 5937 dated 29/01/2018 as per self-certificate submitted by authorized signatory Mr. Anish Agrawal, Unit Head of M/s UltraTech Cement Limited (Unit Rawan Cement Works), (Formerly Known as M/s Grasim Cement), P.O. – Grasim Vihar, Village – Rawan, Tehsil -	Noted.

		Simga, District - Balodabazar-Bhatapara.	
	19	In case, if the capital investment is increased by such amount that the total investment exceeds the range for which renewal fees has been paid, the industry shall have to pay the difference amount of renewal fees for the corresponding block years.	Noted and agreed.
	20	In case, the prescribed fee payable is amended in future, the industry shall be liable to pay the difference amount for corresponding block years.	Noted and agreed.
	21	Chhattisgarh Environment Conservation Board reserves the rights to revoke the consent / renewal of consent at any time for any violation/non-compliance.	Point noted.
	22	If industry fails to comply any of the above condition(s), the bank guarantee submitted by industry may be forefitted and this renewal of consent may be cancelled without further notice.	Point noted.
	B. Air (Prevention and Control of Pollution) Act, 1981		
	1	Industry shall operate & maintain fixed water sprinkler system in coal storage yard / area. Clinker silo storage areas shall be made pucca. Industry shall increase the height of the stack(s) attached to the clinker silo(s) or other bag filters / air pollution control systems at least 30 meters**;** failing which, renewal of consent for further period shall not be considered.	➢ Water sprinkling arrangement is provided around coal storage yard, wagon tippler, before transfer point of belt conveyor. ➢ All areas including clinker silo are concreted. ➢ All the process stacks are designed as per the CPCB guidelines. ➢ All the process stacks are designed as per the CPCB guidelines.
	2	Industry shall not use biomass (rice husk) as fuel/raw material in the cement/ power plant in any case.	We are not utilizing Bio-mass as fuel in the unit.
	3	Industry use petcoke only as feed stock in existing cement kiln for clinker manufacturing.	Pet-coke is being used as feed stock in clinker manufacturing.
	4	Industry shall provide adequate pollution control arrangements at all	Adequate air pollution control equipment's are installed in the

		points and non point source(s) of emission. Industry shall ensure particulate matter emission below 30 mg/Nm^3 from the point source(s) of cement grinding unit / cement mill and various transfer points. Industry shall ensure particulate matter emission below 50 mg/Nm^3 from other point sources. Industry shall ensure that these are always kept running and in good working order all the time. In case of any failure it shall be immediately rectified or some alternate arrangement be made. Chhattisgarh Environment Conservation Board may further stringent particulate matter emission limit depending upon environmental conditions.	process as well as transfer points. We are maintaining stack emissions below 30 mg/Nm^3 and monitoring reports are being submitted on monthly basis to the CECB office.
	5	Industry shall follow the standards prescribed by Ministry of Environment, Forest and Climate Change, Government of India regarding gaseous emission. Industry shall ensure the disposal of fly ash as per the MoEF&CC notification dated 31/12/2021.	All the gaseous emission standards made by the MOEF&CC are being complied at the Cement & Thermal Power Plant. However, fly ash is generated from the Thermal Power Plant is 100% utilized in cement manufacturing at our grinding section in the same premises.
	6	Industry shall ensure utilization of least 2% of alternate fuel (waste) for co-processing.	Unit is coprocessing AFR in the kiln. During April, 2022 we have achieved 3.93% TSR.
	7	Industry shall ensure regular running of continuous ambient air quality monitoring station for monitoring of ambient air quality and Online Emission Monitoring System(s) for monitoring of pollutant's level in the stack(s). Calibration and validation of data shall be carried out of all CEMS / CAAQMS and industry shall ensure availability of real time data in CECB / CPCB server. Industry shall submit stack and ambient air quality monitoring reports to the Board regularly.	We have installed CAAQMS & CEMS in the unit and ensuring that regular data is being transmitted to the CPCB & CECB server. Calibration & validation of data is being done through NABL accredited third party as per the CPCB guidelines. Ambient Air Quality & Stack Emission monitoring reports are submitted on monthly basis to the Board.
	8	Industry shall ensure compliance of Plastic Waste Management Rule 2016 (as amended) & seek registration from Central Pollution Control Board, Delhi under the responsibility of	We are operating more than two units, hence applied to CPCB for registration under Plastic Waste Management Rules 2016.

		Brand Owners specified in Rule 9 (2) of Plastic Waste Management Rule, 2016 (as amended).	
	9	Industry shall obtain letter of authorization under Hazardous and Other Wastes (Management and Trans Boundary Movement) Rules, 2016 from the Board and comply with the rule.	Hazardous waste authorization has already been taken from the Board & all the conditions are being complied at the unit.
	10	Industry shall provide safe and scientific arrangement for handling, storage, utilization and disposal of all solid wastes such as; ash and dust collected in air pollution control devices etc. Solid wastes/ ash shall not be stored in open areas under any circumstances. The ash shall be stored in silo only and regular use of ash / dust in cement manufacturing shall be ensured.	We are not disposing any waste from the unit. Solid waste generated from the air pollution control equipment's are recycled back in the process. Fly ash generated from Thermal Power Plant is stored in the concrete silo for PPC manufacturing in cement grinding section.
	11	All internal roads shall be maintained pucca. Good housekeeping practices shall be adopted by the industry.	All internal roads in the unit are black topped or concreted. We have deployed 3 road sweeping machines to clean these roads. Man power also deployed in the area where area are not approachable.
	12	Industry shall ensure transportation of raw materials, fuel, dust generating products by properly covered vehicles. Industry shall also ensure use of mechanically covered vehicles for transportation of raw materials, fuel, dust generating products on or before 12/07/2023.	All the raw materials are being received at the unit in covered/tarpaulin covered trucks only. PP are finding the best suitable way for transportation of the raw material at the unit. All the raw materials are being transported/transfer through conveyors or pneumatically in the unit.
	13	Industry shall use fly ash brick, fly ash block and fly ash based products in the construction/repairing activities.	Fly ash bricks and blocks are being used for repairing & construction activities in the unit.
	14	Wide green belt of local plant species shall be maintained all along the boundary of the plant premises. At least 33% area shall be used for green belt development. As far as possible maximum area of open spaces shall be utilized for plantation purposes.	We are maintaining very good green buffer in and around the plant boundary. local plant species have been planted in plant & colony area in consultation with DFO, Raipur . So far, we have planted approx. 358450 plant saplings which covered 40% of the plant & township area.

			However plantation is our ongoing activity and have developed separate horticulture department to take care the function.
	15	Industry shall submit Environment statement to this Board as per provision of Environment (Protection) amendment Rule, 1993 for the previous year ending 31st March on or before 30th September every year.	Environment statement is being submitted to the Board on regular basis. Last environment statement submitted vide our letter no& for FY 2021-22 will be submitted soon.
	16	Industry shall follow the terms and conditions stipulated in the Chhattisgarh Environment Conservation Board's order no. 7261/TS/CECB/2015, Raipur dated 06/02/2015. In case of non-compliance of any terms and conditions mentioned above or mentioned in the above order, this renewal of the consent may be cancelled.	Noted and adhere all the rules and regulations made under the stipulations.
	17	This renewal of consent is being issued under the "Scheme of AutoRenewal of Consent" of the Board issued vide office order no. 5937 dated 29/01/2018 as per self-certificate submitted by authorized signatory Mr. Anish Agrawal, Unit Head of M/s UltraTech Cement Limited (Unit Rawan Cement Works), (Formerly Known as M/s Grasim Cement), P.O. – Grasim Vihar, Village – Rawan, Tehsil - Simga, District - Balodabazar-Bhatapara.	Point Noted.
	18	In case, if the capital investment is increased by such amount that the total investment exceeds the range for which renewal fees has been paid, the industry shall have to pay the difference amount of renewal fees for the corresponding block years.	Noted and agreed.
	19	In case, the prescribed fee payable is amended in future, the industry shall be liable to pay the difference amount for corresponding block years.	Noted and agreed.
	20	Chhattisgarh Environment Conservation Board reserves the	Point noted.

		rights to revoke the consent / renewal of consent at any time for any violation/non-compliance.	
	21	If industry fails to comply any of the above condition(s), the bank guarantee submitted by industry may be forefitted and this renewal of consent may be cancelled without further notice.	Point noted & we are ensuring compliance of the conditions in totality at the unit.
4	Undertaking mentioning that "Development of Greenbelt (gap filling) will be done in the coming monsoon season and the same will be maintained in future".	Submitted	
5	Name of villages to be adopted by the company for making them modal village.	Company will adopt eleven villages, namely Chhirahi, Chuchurungpur, Sarseni, Guma, Jhipan, Rawan, Khapradih, Padkidih, Tilda Banda, Fulwari, Newarimay be adopted by the company for their socio-economic development. Undertaking regarding the same has been submitted	
6	Carbon footprint study to be done by the company.	Carbon footprint study will be done by the reputed institute and study report will be submitted within six months.	
7	Monitoring of Free Silica in cement dust in Cement Plant to be done.	Monitoring of Free Silica in cement dust in Cement Plant will be done by the company within the one month and study report will be submitted along with six monthly compliance report.	

Recommendations of the Committee

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

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

(i) The Canal and Nalahs passing adjacent to project site within the study area shall not be disturbed. Detailed mitigation measures to prevent any impacts on the canal and nallah shall be implemented.

(ii) The company shall comply with all the environmental protection measures and safeguards proposed in the documents submitted to the Ministry. All the

recommendations made in the EIA/EMP in respect of environmental management, and risk mitigation measures relating to the project shall be implemented.

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

(iv) The activities and the action plan proposed by the project proponent to address the issues raised during public hearing and socio-economic issues in the study area shall be completed as per the schedule presented before the Committee and as described in the EIA report in letter and spirit.

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

(vi) Three tier Green Belt shall be developed in a time frame of one year covering 33% of the total land 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.

(vii) 1000 KLD of additional water requirement after the proposed expansion shall be met from Mine sump water and rainwater harvested in the plant as well as mines area. No ground water abstraction is permitted for additional 1000 KLD water required for proposed expansion.

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

(ix) Slip roads shall be provided at the gates and along crossings on main roads.

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

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

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

(xiii) Project proponent shall develop separate drainage system for storm water and industrial waste water and effectively prevent the pollution of natural waterbody.

(xiv) Petcoke dosing shall be controlled automatically to control SO_2 emission from chimney within the prescribed limits.

(xv) Rain water harvesting shall be carried out as per the action plan submitted in the EIA report.

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

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

(xviii) Hydrological study/ ground water leaching study shall be carried out to observe the contamination of Ground water and appropriate mitigation measures shall be adopted.

(xix) PP has to ensure to minimize the Pollution due to vehicular movement.

(xx) All vehicles engaged in road transportation shall be covered to stop the pollution due to dust dispersion.

(xxi) 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. The implementation report shall be submitted to IRO, MoEFCC.

(xxii) As it has been observed that PM10 values are higher and almost near the threshold limit, the PP shall implement a project specific AQMP (Air quality Management Plan) with Best practices; shall determine priority pollutants. Pollution prevention approaches to reduce, eliminate, prevent pollution at its source, should be considered, like (but not limited to) are to use less toxic raw materials or fuels, use a less-polluting industrial process, and to improve the efficiency of the process.

(xxiii) Project proponent shall develop a control strategy and plan that incorporates the pollution control measures. The Clean Air practices shall be adopted like mechanical collectors, wet scrubbers, fabric filters (baghouses), electrostatic precipitators, combustion systems (thermal oxidizers), condensers, absorbers, adsorbers, and biological degradation.

(xxiv) PP shall conduct study relating to assessment of quartz free silica in the SPM/PM10 within 6 months. The implementation report shall be submitted to IRO, MoEFCC.

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

B. <u>General conditions</u>

I. Statutory compliance:

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

II. Air quality monitoring and preservation

i. The project proponent shall install 24x7 Continuous Emission Monitoring System (CEMS) at process stacks to monitor stack emission as well as 4 Nos. Continuous Ambient Air Quality Station (CAAQS) for monitoring AAQ parameters with respect to standards prescribed in Environment (Protection) Rules 1986 as amended from time to time. The CEMS and CAAQMS shall be connected to SPCB and CPCB online servers and calibrate these systems from time to time according to equipment supplier specification through labs recognized under Environment (Protection) Act, 1986 or NABL accredited laboratories.
ii. The project proponent shall monitor fugitive emissions in the plant premises at least once in every quarter through labs recognized under Environment (Protection) Act, 1986.
iii. The project proponent shall provide leakage detection and mechanized bag cleaning facilities for better maintenance of bags.
iv. The project proponent shall ensure covered transportation and conveying of ore, coal and other raw material to prevent spillage and dust generation; Use closed bulkers for carrying fly ash;
v. The project proponent shall provide wind shelter fence and chemical spraying on the raw material stock piles;
vi. Ventilation system shall be designed for adequate air changes as per the prevailing norms for all tunnels, motor houses, and cement bagging plants.

III. Water quality monitoring and preservation

i. The project proponent shall install 24x7 continuous effluent monitoring system with respect to standards prescribed in Environment (Protection) Rules 1986 vide G.S.R. No. 612 (E) dated 25thAugust, 2014 (Cement) and subsequent amendment dated 9thMay, 2016 (Cement) and 10th May, 2016 (in case of Co-processing Cement) as amended from time to time; S.O. 3305 (E) dated 7th December 2015 (Thermal Power Plants) as amended from time to time) and connected to SPCB and CPCB online servers and calibrate these system from time to time according to equipment supplier specification through labs recognized under Environment (Protection) Act, 1986 or NABL accredited laboratories.
ii. The project proponent shall regularly monitor ground water quality at least twice a year (pre- and post-monsoon) at sufficient numbers of piezometers/sampling wells in the plant and adjacent areas through labs recognized under Environment (Protection) Act, 1986 and NABL accredited laboratories.
iii. Sewage Treatment Plant shall be provided for treatment of domestic wastewater to meet the prescribed standards.
iv. Garland drains and collection pits shall be provided for each stock pile to arrest the run-off in the event of heavy rains and to check the water pollution due to surface run off
v. Water meters shall be provided at the inlet to all unit processes in the cement plant.
vi. The project proponent shall make efforts to minimize water consumption in the cement plant complex by segregation of used water, practicing cascade use and by recycling treated water.

IV. Noise monitoring and prevention

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

V. Energy Conservation measures

i. Waste heat recovery system shall be provided for kiln and cooler.
ii. The project proponent makes efforts to achieve power consumption less than 65 units/ton for Portland Pozzolona Cement (PPC) and 85 units/ton for Ordinary Portland Cement (OPC) production and thermal energy consumption of 670 Kcal/Kg of clinker.
iii. Provide solar power generation on roof tops of buildings, for solar light system for all common areas, street lights, parking around project area and maintain the same regularly.
iv. Provide the project proponent for LED lights in their offices and residential areas.

VI. Waste management

i. Used refractories shall be recycled as far as possible.

VII. Green Belt

ii. The project proponent shall prepare GHG emissions inventory for the plant and shall submit the program for reduction of the same including carbon sequestration by trees in the plant premises.
iii. Project proponent shall submit a study report within six months on Decarbonisation program, which would essentially consist of company's carbon emissions, carbon budgeting/ balancing, carbon sequestration activities and carbon offsetting strategies. Further, the report shall also contain time bound action plan to reduce its carbon intensity of its operations and supply chains, energy transition pathway from fossil fuels to Renewable energy etc. All these activities/ assessments should be measurable and monitorable with defined time frames.

VIII. Public hearing and Human health issues

i. Emergency preparedness plan based on the Hazard identification and Risk Assessment (HIRA) and Disaster Management Plan shall be implemented.
ii. The project proponent shall carry out heat stress analysis for the workmen who work in high temperature work zone and provide Personal Protection Equipment (PPE) as per the norms.
iii. Occupational health surveillance of the workers shall be done on a regular basis and records maintained.

IX. Environment Management

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

X. Miscellaneous

i. The project proponent shall make public the environmental clearance granted for their project along with the environmental conditions and safeguards at their cost by prominently advertising it at least in two local newspapers of the District or State, of which one shall be in the vernacular language within seven days and in addition this shall also be displayed in the project proponent's website permanently.
ii. The copies of the environmental clearance shall be submitted by the project proponents to the Heads of local bodies, Panchayats and Municipal Bodies in addition to the relevant offices of the Government who in turn has to display the same for 30 days from the date of receipt.
iii. The project proponent shall upload the status of compliance of the stipulated environment clearance conditions, including results of monitored data on their website and update the same on half-yearly basis.
iv. The project proponent shall monitor the criteria pollutants level namely; PM10, SO2, NOx (ambient levels as well as stack emissions) or critical sectoral parameters, indicated for the projects and display the same at a convenient location for disclosure to the public and put on the website of the company.
v. The project proponent shall submit six-monthly reports on the status of the compliance of the stipulated environmental conditions on the website of the ministry of Environment, Forest and Climate Change at environment clearance portal.
vi. The project proponent shall submit the environmental statement for each financial year in Form-V to the concerned State Pollution Control Board as prescribed under the

Environment (Protection) Rules, 1986, as amended subsequently and put on the website of the company.

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

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

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

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

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

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

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

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

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

Consideration of Validity of Environmental Clearance Proposal

Agenda No. 6.4

6.4 Extension of Validity of Environmental Clearance by M/s Srijan Alloys and Steel Private Limited, located at plot No. 41-C, Silpahari Industrial Area, Bilaspur, Chhattisgarh - Consideration of Extension of Validity of Environmental Clearance.

[Proposal No. IA/CG/IND/272620/2022; J-11011/338/2011-IA.II(I)]
[M/s. Pollution and Ecology Control Services; valid upto 16/10/2022]

6.4.1 M/s. Srijan Alloys and Steel Private Limited has made an online application vide proposal no. IA/CG/IND/272620/2022 dated 17/05/2022 along with Form-6 and sought for Extension of validity of Environment Clearance (EC) accorded by Ministry vide letter no. J-11011/338/2011-IA-II(I) dated 19/05/2014.

6.4.2 Name of the EIA consultant: M/s. Pollution and Ecology Control Services [Sl. No. 74, List of ACOs with their Certificate / Extension Letter no. NABET/EIA/2023/SA 0165; valid upto 16/10/2022, Rev. 23, May 09, 2022].

Details submitted by Project proponent

6.4.3 The project was granted Environmental Clearance vide letter no J-11011/338/2011-IA-II(I) dated 19/05/2014 from MoEF&CC in the name of M/s. Srijan Alloys and Steel Private Limited for Proposed Ferro Alloys manufacturing Plant for production of 29,000 TPA of Ferro Alloys (Si-Mn, Fe-Mn and Fe-Si) using 2 x 6.0 MVA Submerged Arc Furnaces (SAF) and for production of Ferro alloys 6,000 TPA (Medium Carbon Ferro Alloys Si-Mn 2,400 TPA, Low Carbon Ferro Alloys Si-Mn 2,400 TPA, Ferro Molybdenum 400 TPA and Ferro Titanium 800 TPA) using Thermite process.

6.4.4 The unit obtained consent to establish (CTE) vide order no.1992/TS/CECB/2014 dated 02.07.2014 to establish proposed Ferro Alloys Plant 2x6 MVA (Submerged Arc Furnace) – 29000 TPA and Alloys by Thermite Process – 6000 TPA (Medium Carbon Ferro Alloys Si-Mn 2,400 TPA, Low Carbon Ferro Alloys Si-Mn 2,400 TPA, Ferro Molybdenum 400 TPA and Ferro Titanium 800 TPA). Latest CTO has been obtained from CECB vide No. 3668/TS/CECB/2020 dated 21.07.2020 for Ferro Alloys (Submerged Arc Furnace-1x6 MVA) – 14,500 TPA and is valid upto 30.06.2023.

6.4.5 The implementation status of the existing EC is as follows:

Sl. No.	Facilities	Capacity as per EC dated 19.05.2014	Capacity as per CTO dated 21.07.2020	Implementation Status	Remarks
1	Submerged Arc Furnace (Thermite Process) Products - Alloys by Thermite Process	2x6 MVA (29000 TPA) 6000 TPA (Medium Carbon Ferro Alloys Si-Mn 2,400 TPA, Low Carbon Ferro Alloys Si-Mn 2,400 TPA, Ferro Molybdenum 400 TPA and Ferro Titanium 800 TPA)	1x6 MVA (14,500 TPA)	One SAF of 6 MVA commissioned & is in operation	Balance work of installation & commissioning of second SAF of 1 x 6 MVA will be completed by October, 2022 and Thermite Process by March 2023.

6.4.6 **Reasons for delay:** Due to the financial arrangement from Banks, COVID and Market position, as reported by the PP.

6.4.7 In the instant proposal, the project proponent has sought the extension of validity of Environment Clearance order dated 19/05/2014 to implement the remaining unimplemented units for which Environmental Clearance has been accorded.

6.4.8 Project Proponent has submitted that Construction, Installation and commissioning of One SAF of 6 MVA was completed & it is in operation vide order no.3668/TS/CECB/2020 dt 21/07/2020. Work of second SAF of 6 MVA initiated & installation work in going on. Balance work of installation & commissioning of second SAF of 1 x 6 MVA will be completed by October, 2022 and Thermite Process by March, 2023. In this regard, PP has submitted a schedule of completion of second 6 MVA Submerge Arc Furnace and Thermite Process.

6.4.9 PP has also submitted that they have developed greenbelt in 5500 sq.m area and have planted about 1200 trees specifically Neem, Amaltas, Teak etc.

6.4.10 Validity of EC dated 19.05.2014 was up to 18.05.2021 as per EIA Notification, 2006 which further got extended to 18.05.2022 as per the provisions of Ministry Notification no. S.O. 221(E) dated 18/01/2021. Therefore, the proponent has requested for extension of validity of EC for further 3 years i.e. up to 18.05.2025 in line with Ministry's Gazette Notification vide S.O.1807 (E) dated 12th April 2022.

Deliberations by the Committee

6.4.11 The Committee noted the following:

i. Environmental Clearance was granted vide letter no J-11011/338/2011-IA-II(I) dated 19/05/2014.
ii. Validity of EC will expire on 18.05.2022 according to the provision contained in the Ministry Notification no. S.O. 221(E) dated 18/01/2021.
iii. PP in the instant proposal has requested for extension of validity of Environment Clearance order dated 19/05/2014 to implement the remaining unimplemented units for which Environmental Clearance has been accorded.
iv. EAC noted that in reference to EC dated 19.05.2022, the project is nearing completion of facilities as detailed at para 6.4.5 above.
v. Project Proponent has submitted that Construction, Installation and commissioning of One SAF of 6 MVA was completed and is in operation. Work of second SAF of 6 MVA initiated & installation work in going on.
vi. PP has submitted a schedule of completion of second 6 MVA Submerge Arc Furnace and Thermite Process. Balance work of installation & commissioning of second SAF of 1 x 6 MVA will be completed by October, 2022 and Thermite Process by March, 2023.

Recommendations of the Committee

6.4.12 In view of the foregoing and after deliberations, the Committee **recommended** to **extend the validity of Environment Clearance up to 18.05.2025** subject to stipulation of environmental safeguards prescribed in the EC letter no. J-11011/338/2011-IA-II(I) dated 19/05/2014. All the terms and conditions stipulated in EC letter no. J-11011/338/2011-IA-II(I) dated 19/05/2014 shall remain the same.

Consideration of Amendment/Modification in TOR Proposals

Agenda No. 6.5

6.5 Expansion of Integrated Steel Plant from 6 MTPA Liquid Steel To 25.2 MTPA Liquid Steel (24.79 MTPA Crude Steel) and 12.5 MTPA Cement in Angul, Odisha by M/s Jindal Steel & Power Limited - Consideration of modification in TOR

[Proposal No. IA/OR/IND/272707/2022; File No. J-11011/365/2006-IA.II(I)]
[Name of Consultant: M/s. J.M. EnviroNet Pvt. Ltd., Gurugram; QCI NABET Accreditation: valid upto 07/02/2023]

6.5.1 M/s. Jindal Steel & Power Limited has made an application online vide proposal no. IA/OR/IND/272707/2022, dated 13/05/2022 along with Form 3 and sought for amendment in the Terms of Reference accorded by the Ministry vide letter no. J-11011/365/2006- IA.II(I) dated 08/02/2021 and subsequent amendments dated 16.06.2021 and 29.11.2021.

6.5.2 Name of the EIA consultant: M/s. J.M. EnviroNet Pvt. Ltd., Gurugram [S No 42, List of ACOs with their Certificate / Extension Letter No: NABET/EIA/2023/RA 0186 valid till 07/02/2023; Rev. 23, May 09, 2022].

Details submitted by the project proponent

6.5.3 M/s. Jindal Steel and Power Limited was originally accorded environmental clearance vide letter no. J-11011/365/2006 dated 22/02/2007 and amended on 14/11/2008, 08/02/2017, 26/06/2018, 22/01/2019 and 18/01/2021. The EC was accorded for the following product capacities:

S No.	Facilities	Units	Capacity	Implementation status as on 31/12/2020 as reported by the PP
i.	Pellet Plant	MTPA	5.0	Not Implemented
ii.	Coal Gasifier	Nm^3/year	$4000x10^6$	$2100x10^6$
iii.	DRI plant	MTPA	4.0	2.0
iv.	Blast Furnace	MTPA	4.25	4.25
v.	Coke Oven	MTPA	2.0	2.0
vi.	Sinter Plant	MTPA	5.0	5.0
vii.	SMS	MTPA	6.0	6.0
viii.	Rolling mills	MTPA	6.0	2.9
ix.	Ferro-alloy plant	MTPA	0.08	Not Implemented
x.	Lime Dolime plant	TPD	3000	2200
xi.	Process gas/ pressure recovery turbine	MW	62	30.5
xii.	Coal based Power Plant	MW	810	810

6.5.4 M/s. Jindal Steel & Power Limited had applied for grant of ToR for expansion of Integrated Steel Plant from 6.0 MTPA liquid steel to 25.2 MTPA liquid steel (24.79 MTPA Crude Steel) and 12.5 MTPA Cement plant at Village Kerjang, Tehsil Chhendipada, District Angul, Odisha. The proposal was considered in 28th meeting of REAC (Industry- 1) held on 18-20th January, 2021. During consideration of the proposal, the EAC observed that the existing project had obtained Environment Clearance during 22/02/2007 for setting up of 6 MTPA ISP. However,

as per the implementation status furnished by the PP, only 4.5 MTPA ISP has been commissioned. In view of this, EAC recommended that the instant expansion proposal may be titled as expansion from 4.5 to 25.2 MTPA ISP in place of expansion from 6.0 to 25.2 MTPA ISP. Accordingly, the ToR for the expansion of Integrated Steel Plant from 4.5 MTPA Liquid Steel to 25.2 MTPA Liquid Steel (24.79 MTPA crude steel) and 12.5 MTPA Cement plant at village Kerjang, Tehsil Chhendipada, District Angul, Odisha was accorded by MoEF&CC vide letter no. J-11011/365/2006-IA-II(I) dated 08/02/2021 for undertaking detailed EIA/EMP study.

6.5.5 Subsequently, M/s. JSPL submitted a representation to the Ministry on 29/01/2021 stating that in their EC amendment letter accorded on 08/02/2017, MoEF&CC clarified that validity of EC refers to start of production by the project/activity, it does not say start of full production as per the sanctioned environment clearance capacity. In view of this, the environment clearance gets completed if the project starts the production within the validity period. In view of this, PP claimed that they have started the ISP production within the validity period and the query regarding validity period of EC does not arise. By considering these points, PP has requested ToR may be amended for the capacity of 6 to 25.2 MTPA ISP capacity. In view of this, Ministry informed the project proponent to apply for ToR amendment. Accordingly, the PP submitted the ToR amendment application vide proposal no. IA/OR/IND/212826/2021 dated 21/05/2021 wherein the PP included all the unimplemented as well as partly implemented portion of the facilities envisaged under the 6 MTPA EC dated 22/02/2007 under the proposed expansion of ISP from 6 MTPA to 25.2 MTPA. Accordingly, ToR amendment was accorded on 16/06/2021 with a title "Expansion of Integrated Steel Plant from 6 MTPA liquid steel to 25.2 MTPA liquid steel (24.79 MTPA Crude Steel) and 12.5 MTPA Cement plant by M/s. Jindal Steel & Power Limited located at Village Kerjang, Tehsil Chhendipada, District Angul, Odisha" along the following configuration:

S. No.	Plant	As per ToR dated 08/02/2021		As per ToR amendment dated 16/06/2021		Final configuration in the ToR	
		Configuration	Capacity	Proposed Configuration	Proposed Capacity	Final Configuration	Final Capacity
1.	Coal Gasification plant	7x37500 Nm^3/hr	$2100x10^6$ $Nm^3/year$	-	-	7x37500 Nm^3/hr	$2100x10^6$ $Nm^3/year$
2.	DRI Plant	2x2 MTPA 2x2.7 MTPA	9.4 MTPA	-	-	2x2 MTPA 2x2.7 MTPA	9.4 MTPA
3.	Coke Oven	4x72 ovens 2x63 ovens 6x54 ovens	7.6 MTPA	-	-	4x72 ovens 2x63 ovens 6x54 ovens	7.6 MTPA
4.	Sinter Plant	2x490.5 m^2	10.75 MTPA	-	-	2x490.5 m^2	10.75 MTPA
5.	Blast Furnace	1x4554 m^3 1x5400 m^3 2x6000 m^3	18.75 MTPA	-	-	1x4554 m^3 1x5400 m^3 2x6000 m^3	18.75 MTPA
6.	EAF	3x250 T	7.5 MTPA	-	-	3x250 T	7.5 MTPA
7.	BOF	2x250 T 3x380 T	17.7 MTPA	-	-	2x250 T 3x380 T	17.7 MTPA
8.	Plate mill	1x2.0 MTPA	2.0 MTPA	-	-	1x2.0 MTPA	2.0 MTPA
9.	Bar Mill	1x1.4 MTPA	1.4 MTPA	-	-	1x1.4 MTPA	1.4 MTPA
10.	Wire Rod mill	1x1.2 MTPA	1.2 MTPA	-	-	1x1.2 MTPA	1.2 MTPA
11.	Hot Rolling mill	1x3.6 MTPA 3x6 MTPA	21.6 MTPA	**1x3.1 MTPA** 3x6 MTPA	21.6 MTPA	1x3.1 MTPA 3x6 MTPA	21.6 MTPA

S. No.	Plant	As per ToR dated 08/02/2021		As per ToR amendment dated 16/06/2021		Final configuration in the ToR	
		Configuration	Capacity	Proposed Configuration	Proposed Capacity	Final Configuration	Final Capacity
12.	CRM Complex	3x2.5 MTPA	7.5 MTPA	-	-	3x2.5 MTPA	7.5 MTPA
13.	Calcination plant	15x600 TPD 2x500 TPD	10,000 TPD	-	-	15x600 TPD 2x500 TPD	10,000 TPD
14.	Oxygen plant	2x1200 TPD 3x200 TPD 2x2000 TPD 3x3600 TPD	17,800 TPD	2x1200 TPD 6x200 TPD 1x2000 TPD 1x1710 TPD 3x3600 TPD	18,110 TPD	2x1200 TPD 6x200 TPD 1x2000 TPD 1x1710 TPD 3x3600 TPD	18,110 TPD
15.	Power Plant	6x135 MW (coal based) 1x300 MW, 1x250 MW (Gas based)	1360 MW	6x135 MW (Coal based) 1x350 MW, 1x250 MW (Gas based)	1410 MW	6x135 MW (Coal based) 1x350 MW, 1x250 MW (Gas based)	1410 MW
16.	Ferro-alloy plant	1x18 MVA 1x15 MVA 4x45 MVA 1x15 MVA 1x6 MVA	0.376 MTPA	-	-	1x18 MVA 1x15 MVA 4x45 MVA 1x15 MVA 1x6 MVA	0.376 MTPA
17.	Pellet plant	4x 7 MTPA	28 MTPA	3x7 MTPA **1x5 MTPA**	26 MTPA	3x7 MTPA 1x5 MTPA	26 MTPA
18.	Cement plant	3x3.5 MTPA 1x2 MTPA	12.5 MTPA	-	-	3x3.5 MTPA 1x2 MTPA	12.5 MTPA
19.	Iron ore slurry	2x18 MTPA	36 MTPA	-	-	2x18 MTPA	36 MTPA

6.5.6 The project proponent vide online proposal no. IA/OR/IND/228087/2021 dated 17/09/2021 again sought for amendments in the ToR accorded on 8/2/2021 and 16/06/2021 due to Change in Layout of expansion project due to avoiding acquisition of Revenue Forest Land, change in land requirement and minor change in layout. Change in configuration of some facilities in expansion project keeping overall steelmaking capacity at 25.2 MTPA are as given below:

S. No.	Plant/Equipment/ Facility	Configuration as per existing EC	Configuration of expansion project as per approved TOR	Proposed Configuration of expansion project after TOR amendment	Final Configuration after amendment of TOR	Remarks
1.	Coal Gasification plant	4000 million Nm3/year	-	-	4000 million Nm3/year	-
2.	DRI Plant	4 MTPA (2x2 MTPA)	2x2.7 MTPA	2x2.7 MTPA Addition of 0.7 MTPA in existing DRI of 2 MTPA	10.1 MTPA	0.7 MTPA increase within existing DRI
3.	Coke Oven	2.0 MTPA (4x72 ovens)	5.6 MTPA (2x62, 6x54)	5.17 MTPA (2x70, 4x56)	7.17 MTPA (4x72, 2x70, 4x56)	Capacity decrease of 0.43 MTPA
4.	Sinter Plant	5 MTPA ($1x490\ m^2$)	5.75 MTPA ($1x490\ m^2$)	11.5 MTPA ($2x490\ m^2$)	16.5 MTPA ($3x490\ m^2$)	Capacity increase of 5.75 MTPA
5.	Blast Furnace	4.25 MTPA ($1x4554\ m^3$)	14.5 MTPA	14 MTPA	18.25 MTPA	Capacity Decrease

S. No.	Plant/Equipment/ Facility	Configuration as per existing EC	Configuration of expansion project as per approved TOR	Proposed Configuration of expansion project after TOR amendment	Final Configuration after amendment of TOR	Remarks
			(1x5400 m^3, 2x6000 m^3)	(2x5400 m^3, 1x6000 m^3)	(1x4554 m^3, 2x5400 m^3, 1x6000 m^3)	of 0.5 MTPA
6.	EAF	3 MTPA (1x250 T)	4.5 MTPA (2x250 T)	6 MTPA (1x250 T, 1x360 T)	9.0 MTPA (2x250 T, 1x360 T)	Capacity increase of 1.5 MTPA
7.	BoF	3 MTPA (1x250 T)	14.7 MTPA (1x250 T, 3x380 T, 2x250 T)	13.2 MTPA (2x300 T, 2x360 T)	16.2 MTPA (1x250 T, 2x300 T, 2x360 T)	Capacity decrease of 1.5 MTPA
8.	Plate mill	1.5 MTPA	0.5 MTPA	0.5 MTPA	2.0 MTPA	-
9.	Bar Mill	1.4 MTPA	-	-	1.4 MTPA	-
10.	Wire Rod mill	-	1.2 MTPA	1.2 MTPA	1.2 MTPA	-
11.	Hot rolling mill	3.1 MTPA	18 MTPA (3x6 MTPA)	18 MTPA (3x6 MTPA)	21.1 MTPA (1x3.1 MTPA, 3x6 MTPA)	-
12.	CRM Complex	-	7.5 MTPA	7.5 MTPA	7.5 MTPA	-
13.	Calcination plant	3000 TPD (2x600 TPD, 2x500 TPD, 2x400 TPD)	13x600 TPD	12x600 TPD	10200 TPD (14x600 TPD, 2x500 TPD, 2x400 TPD)	Capacity decrease of 1x600 TPD
14.	Oxygen plant	2x1200 TPD, 3x200 TPD, 1x1710 TPD, 3x200 TPD	1x2000 TPD 3x3600 TPD	2x2700 TPD, 2x2800 TPD	2x1200 TPD, 6x200 TPD, 1x1710 TPD, 2x2700 TPD, 2x2800 TPD	Capacity decrease of 1800 TPD
15.	Power Plant	810 MW (6x135 MW)	600 MW (1x350 MW 1x250 MW)	550 MW (2x275 MW)	1360 MW (6x135 MW, 2x275 MW)	Capacity decrease of 50 MW
16.	Ferro alloy plant	0.08 MTPA	0.376 MTPA	0.376 MTPA	0.456 MTPA	-
17.	Pellet Plant	5 MTPA	21 MTPA (3x7 MTPA)	21 MTPA (3x7 MTPA)	26 MTPA (1x5 MTPA, 3x7 MTPA)	-
18.	Cement plant		12.5 MTPA	12.5 MTPA	12.5 MTPA	-
19.	Iron Ore slurry		36 MTPA	36 MTPA	36 MTPA	-

6.5.7 Details of other amendments proposed in the TOR dated 8/2/2021 and 16/06/2021:

Reference of approved TOR	As per approved TOR	Proposed amendment	Remarks
3 (i) of letter dated 08/02/2021	2224.96 ha [1416.06 ha (Existing) + 808.902 ha (Additional)]	2398 ha [1416.06 ha (Existing) + 981.94 ha (Additional)]	Addition of plant area 173.04 ha due to avoiding acquisition of Revenue Forest Land, change in land requirement and minor change in layout.
3(v) of letter dated 08/02/2021	Forest land in existing and expansion project – 190.62 hectares	Forest land in existing project 163 ha and no additional forest land involved in expansion proposal.	No additional forest land in the proposed expansion project

6.5.8 The proposal cited above was considered in 45th meeting of the Re-constituted EAC (Industry-I) held on 28-29th September, 2021. The EAC recommended the following

- Project proponent shall submit additional information regarding production capacities of all the different units envisaged under the EC dated 22/02/2007, inter-alia, EC obtained for the oxygen plant – 5310 TPD capacity along with the implementation status of all the units envisaged under the EC dated 22/02/2007 for further consideration of the proposal.
- **Ministry shall refer the proposal of proponent regarding exclusion of 27 ha of forest land seeking comments/views of the State Government of Odisha on the same along with consequential likely impact due to the proposed expansion. On receipt of the same, the proposal shall be placed before the EAC for consideration.**

6.5.9 M/s. Jindal Steel & Power Limited submitted the ADS reply on 11/10/2021. Reply of ADS given by PP is given as below:

Additional Detail Sought

Project proponent shall submit additional information regarding production capacities of all the different units envisaged under the EC dated 22/02/2007 inter-alia EC obtained for the oxygen plant – 5310 TPD capacity along with the implementation status of all the units envisaged under the EC dated 22/02/2007 for further consideration of the proposal.

Reply Submitted by PP against ADS

The final configuration of the 6 MTPA integrated steel plant as per the said EC and its amendments from time to time along with the implementation status of each unit is given below:

S No	Name of the units	Final production capacity as per EC	Capacities implemented (Implementation Status)
1	Pellet Plant	5.0 MTPA	To be implemented
2	Coal Gasifier	4000 million Nm^3 /year	2100 million Nm^3 /year (Partially implemented)
3	DRI Plant	4.0 MTPA	2.0 MTPA (Partially implemented)
4	Blast Furnace	4.25 MTPA	4.25 MTPA
5	Coke Oven & by product plant	2.0 MTPA	2.0 MTPA
6	Sinter Plant	5.0 MTPA	5.0 MTPA
7	SMS	6.0 MTPA	6.0 MTPA
8	Rolling mill	6.0 MTPA	2.9 MTPA (Partially implemented)
9	Ferro Alloy plant	0.08 MTPA	To be implemented
10	Lime/ Dolime Plant	3000 TPD	2200 TPD (Partially implemented)
11	Process Gas/ pressure recovery turbines	62 MW	30.5 MW (Partially implemented)
12	Coal based Power Plant	810 MW	810 MW

Regarding EC for Oxygen plant, it is submitted that the EIA report submitted for seeking major amendment in EC dated 14/11/2008 included the Oxygen plant of 7200 TPD capacity as one of the proposed facilities in the integrated steel plant. However, the Oxygen plant was not included in the table mentioned in the EC amendment dated 14/11/2008. The reason for excluding the same in the table of configuration of EC may be due to the fact that Oxygen

plant does not require EC. The said oxygen plant has been partially implemented with capacity of 3000 TPD.

6.5.10 Based on the reply of ADS made by PP on 11/10/2021, proposal was reconsidered in 47th Re-constituted Expert Appraisal Committee (Industry 1 sector) held on 28 -29th October, 2021. The observations and recommendations of the EAC is given as below:

Observations of the Committee (EAC during 28 -29th October, 2021)

6.5.11 The EAC noted the following:

i. The proponent has originally obtained EC on 22/02/2007 for setting up of 6 MTPA Integrated Steel Plant Village Kerjang, Tehsil Chhendipada, District Angul, Odisha.

ii. During 8/02/2017, MoEF&CC clarified in the aforementioned project that *validity of EC refers to start of production by the project/activity, it does not say start of full production as per the sanctioned environment clearance capacity. In view of this, the environment clearance gets completed if the project starts the production within the validity period.*

iii. Project proponent applied for expansion of ISP capacity from 6 to 25.2 MTPA. The matter was deliberated upon by the EAC wherein EAC noted that PP has commissioned only 4.5 MTPA against the sanctioned capacity of 6 MTPA. Hence, the EAC has recommended the proposal for grant of ToR from 4.5 to 25.2 MTPA ISP. Accordingly, ToR was accorded on 8/2/2021.

iv. Subsequently, PP sought for amendment in the ToR dated 8/2/2021 (Proposal no. IA/OR/IND/212826/2021 dated 21/05/2021) for change in title of the project from 6 to 25.2 MTPA ISP based on their EC amendment letter accorded to them on 8/2/2017. In the said application, the partly implemented/un implemented facilities inter-alia 5 MTPA pellet plant and 3.1 MTPA Hot strip mill envisaged under the EC dated 22/02/2007 have been incorporated by the PP under the proposed expansion activity. Accordingly, ToR amendment was accorded on 16/06/2021.

v. Instant proposal is for seeking amendment again in the ToR dated 8/2/2021 and 16/06/2021 as the project proponent has inadvertently indicated the units which were either partially implemented (or) yet to be implemented under the existing environment clearance dated 22/02/2007 in the proposed expansion. Besides, the proponent also proposed minor change in configuration in the proposed expansion project without changing the steelmaking capacity.

vi. The Committee noted that as per the EC amendment letter dated 8/02/2017 issued to the proponent, MoEF&CC already clarified that ***validity period of the EC dated 22/02/2007 refers to start of production by the project/activity, it does not say start of full production as per the sanctioned environment clearance capacity. In view of this, the environment clearance gets completed if the project starts the production within the validity period.***

vii. As per the available records, the production capacities (implemented/unimplemented) envisaged under the EC dated 22/02/2007 and its subsequent amendments along with the proposed expansion of ISP from 6.0 to 25.2 MTPA is given as below in the table.

S No	Plant Equipment/ Facility	As per EC dated 22/02/2007 and its subsequent amendments (A = A1+A2)*							As per approved TOR dated 08/02/2021 and amendment dated 16/06/2021		Proposed changes in ToR (B)		Final after amendment of TOR (A+B)		Remarks
		Total (A)		Implemented (A1)		Un-implemented (A2)		As per CTO							
		Configuration	Capacity	Configuration	Capacity	Configuration	Capacity	Capacity	Configuration	Capacity	Configuration	Capacity	Configuration	Capacity	
1.	Coal Gasification Plant	4000 Million Nm^3/year	4000 Million Nm^3/year	2100 Million Nm^3/year	2100 Million Nm^3/year	1900 Million Nm^3/year	1900 Million Nm^3/year	1900 Million Nm^3/year	7x37500 Nm^3/hr	2100x10^6 Nm^3/year	Capacity proposed in the ToR to be deleted.		4000 Million Nm^3/year	4000 Million Nm^3/ year	-
2.	DRI Plant	2x2 MTPA	4 MTPA	1x2 MTPA	2 MTPA	1x2 MTPA	2 MTPA	1.8	2x2 MTPA 2x2.7 MTPA	9.4 MTPA	2x2.7 MTPA + Addition of 0.7 MTPA in 2 MTPA under EC dated 22/02/2007	5.4 MTPA + 0.7 MTPA	1x2 MTPA 3x2.7 MTPA	10.1 MTPA	0.7 MTPA increase within 2 MTPA DRI under EC dated 22/02/07
3.	Coke Oven	4x72 ovens	2 MTPA	4x72 ovens	2 MTPA	-	-	2.0	4x72 ovens 2x63 ovens 6x54 ovens	7.6 MTPA	2x70 ovens, 4x56 ovens	5.17 MTPA	4x72 ovens, 2x70 ovens, 4x56 ovens	7.17 MTPA	Capacity decrease of 0.43 MTPA
4.	Sinter Plant	1x490 m^2	5 MTPA	1x490 m^2	5 MTPA	-	-	4.0	2x490.5 m^2	10.75 MTPA	2x490 m^2	11.5 MTPA	3x490 m^2	16.5 MTPA	Capacity increase

S No	Plant Equipment/ Facility	As per EC dated 22/02/2007 and its subsequent amendments (A = A1+A2)*							As per approved TOR dated 08/02/2021 and amendment dated 16/06/2021		Proposed changes in ToR (B)		Final after amendment of TOR (A+B)		Remarks
		Total (A)		Implemented (A1)		Un-implemented (A2)		As per CTO							
		Configu-ration	Capacity	Configu-ration	Capacity	Configu-ration	Capacity	Capacity	Configu-ration	Capacity	Configu-ration	Capacity	Configu-ration	Capacity	
															of 5.75 MTPA
5.	Blast Furnace	1x4554 m^3	4.25 MTPA	1x4554 m^3	4.25 MTPA	-	-	3.2	1x4554 m^3 1x5400 m^3 2x6000 m^3	18.75 MTPA	2x5400 m^3, 1x6000 m^3	14 MTPA	1x4554 m^3, 2x5400 m^3, 1x6000 m^3	18.25 MTPA	Capacity decrease of 0.5 MTPA
6.	EAF	1x250 T	3 MTPA	1x250 T	3 MTPA	-	-	4.5	3x250 T	7.5 MTPA	1x250 T, 1x360 T	6 MTPA	2x250 T, 1x360 T	9.0 MTPA	Capacity increase of 1.5 MTPA
7.	BoF	1x250 T	3 MTPA	1x250 T	3 MTPA	-	-		2x250 T 3x380 T	17.7 MTPA	2x300 T, 2x360 T	13.2 MTPA	1x250 T, 2x300 T, 2x360 T	16.2 MTPA	Capacity decrease of 1.5 MTPA
8.	Plate Mill	1x1.5 MTPA	1.5 MTPA	1x1.5 MTPA	1.5 MTPA	-	-	2.6	1x2.0 MTPA	2.0 MTPA	-	0.5 MTPA	1x2.0 MTPA	2.0 MTPA	-
9.	Bar Mill	1x1.4 MTPA	1.4 MTPA	1x1.4 MTPA	1.4 MTPA	-	-		1x1.4 MTPA	1.4 MTPA	-	-	1x1.4 MTPA	1.4 MTPA	-
10.	Wire Rod Mill	-	-	-	-	-	-		1x1.2 MTPA	1.2 MTPA	1x1.2 MTPA	1.2 MTPA	1x1.2 MTPA	1.2 MTPA	-

S No	Plant Equipment/ Facility	As per EC dated 22/02/2007 and its subsequent amendments (A = A1+A2)*							As per approved TOR dated 08/02/2021 and amendment dated 16/06/2021		Proposed changes in ToR (B)		Final after amendment of TOR (A+B)		Remarks
		Total (A)		Implemented (A1)		Un-implemented (A2)		As per CTO	Configu-ration	Capacity	Configu-ration	Capacity	Configu-ration	Capacity	
		Configu-ration	Capacity	Configu-ration	Capacity	Configu-ration	Capacity	Capacity							
11.	Hot Rolling Mill	1x3.1 MTPA	3.1 MTPA	-	-	1x3.1 MTPA	3.1 MTPA	-	1x3.1 MTPA 3x6 MTPA	21.6 MTPA	3x6 MTPA	18 MTPA	1x3.1 MTPA 3x6 MTPA	21.1 MTPA	-
12.	CRM Complex	-	-	-	-	-	-	-	3x2.5 MTPA	7.5 MTPA	3x2.5 MTPA	7.5 MTPA	3x2.5 MTPA	7.5 MTPA	-
13.	Calcination Plant	2x600 TPD, 2x500 TPD, 2x400 TPD	3000 TPD	2x600 TPD, 2x500 TPD	2200 TPD	2x400 TPD	800 TPD	1000 TPD	15x600 TPD 2x500 TPD	10,000 TPD	12x600 TPD	7200 TPD	14x600 TPD, 2x500 TPD, 2x400 TPD	10,200 TPD	Capacity decrease of 600 TPD
14.	Oxygen Plant	2x1200 TPD, 3x200 TPD, 1x1710 TPD, 3x200 TPD	5310	2x1200 TPD, 3x200 TPD, 1x1710 TPD, 3x200 TPD	5310	-	-	5310	2x1200 TPD 6x200 TPD 1x2000 TPD 1x1710 TPD 3x3600 TPD	18,110 TPD	2x2700 TPD, 2x2800 TPD	11,000 TPD	2x1200 TPD, 6x200 TPD, 1x1710 TPD, 2x2700 TPD, 2x2800 TPD	16310 TPD	Capacity decrease of 1800 TPD

S No	Plant Equipment/ Facility	As per EC dated 22/02/2007 and its subsequent amendments (A = A1+A2)*							As per approved TOR dated 08/02/2021 and amendment dated 16/06/2021		Proposed changes in ToR (B)		Final after amendment of TOR (A+B)		Remarks
		Total (A)		Implemented (A1)		Un-implemented (A2)		As per CTO	Configu-ration	Capacity	Configu-ration	Capacity	Configu-ration	Capacity	
		Configu-ration	Capacity	Configu-ration	Capacity	Configu-ration	Capacity	Capacity							
15.	Power Plant	6x135 MW	810 MW (coal based)	6x135 MW	810 MW (coal based)	-	-	810	6x135 MW (Coal based) 1x350 MW, 1x250 MW (Gas based)	1410 MW	2x275 MW	550 MW	6x135 MW, 2x275 MW	1360 MW	Capacity decrease of 50 MW
16.	Ferro Alloy Plant	3x24 MVA	0.08 MTPA	-	-	3x24 MVA	0.08 MTPA	-	1x18 MVA 1x15 MVA 4x45 MVA 1x15 MVA 1x6 MVA	0.376 MTPA	0.376 MTPA	0.376 MTPA	3x24 MVA, 1x18 MVA, 2x15 MVA, 4x45 MVA, 1x6 MVA	0.456 MTPA	-
17.	Pellet Plant	1x5 MTPA	5 MTPA	-	-	1x5 MTPA	5 MTPA	-	3x7 MTPA	26 MTPA	3x7 MTPA	21 MTPA	1x5 MTPA	26 MTPA	-

S No	Plant Equipment/ Facility	As per EC dated 22/02/2007 and its subsequent amendments (A = A1+A2)*							As per approved TOR dated 08/02/2021 and amendment dated 16/06/2021		Proposed changes in ToR (B)		Final after amendment of TOR (A+B)		Remarks
		Total (A)		Implemented (A1)		Un-implemented (A2)		As per CTO	Configu-ration	Capacity	Configu-ration	Capacity	Configu-ration	Capacity	
		Configu-ration	Capacity	Configu-ration	Capacity	Configu-ration	Capacity	Capacity							
									1x5 MTPA				3x7 MTPA		
18.	Cement Plant	-	-	-	-	-	-	-	3x3.5 MTPA 1x2 MTPA	12.5 MTPA	3x3.5 MTPA 1x2 MTPA	12.5 MTPA	3x3.5 MTPA 1x2 MTPA	12.5 MTPA	-
19.	Iron ore slurry	-	-	-	-	-	-	-	2x18 MTPA	36 MTPA	2x18 MTPA	36 MTPA	2x18 MTPA	36 MTPA	-

**Note - MoEF&CC vide letter dated 08/02/2017 clarified that validity of EC dated 22/02/2007 refers to start of production by the project/activity, it does not say start of full production as per the sanctioned environment clearance capacity. In view of this, the environment clearance gets completed if the project starts the production within the validity period.*

Recommendation of the Committee (EAC during 28 -29th October, 2021)

6.5.12 In view of the foregoing and after deliberations, the Committee recommended that the unit configuration and production capacities stated in the ToR accorded on 8/02/2021 and 16/06/2021 shall be amended as per the table given at para no. 6.5.11 in light of the Ministry's EC amendment letter dated 08/02/2017. All other terms and conditions stated in the ToR dated 8/02/2021 and its subsequent amendment dated 16/06/2021 shall remain unchanged.

6.5.13 Accordingly, ToR amendment w.r.t. change in configuration of the project was accorded by MoEF&CC vide letter dated 29.11.2021.

Instant proposal for Amendment in ToR [Proposal No. IA/OR/IND/272707/2022 dated 13.05.2022]

6.5.14 Subsequently, in line with the EAC's recommendations during meeting held on 28-29th September as mentioned in para 6.5.8 above and reproduced below,

> *"Ministry shall refer the proposal of proponent regarding exclusion of 27 ha of forest land seeking comments/views of the State Government of Odisha on the same along with consequential likely impact due to the proposed expansion. On receipt of the same, the proposal shall be placed before the EAC for consideration."*

MoEF&CC vide its letter dated 07.02.2022 to the Additional Chief Secretary, Forest, Environment and Climate Change Department, Govt. of Odisha sought comments/views regarding exclusion of Forest land.

6.5.15 The Forest, Environment & Climate Change Department, Govt. of Odisha vide its letter no. FE-DIV-FLD-0156-2021-8819/FE&CC dated 11.05.2022 has furnished its views to MoEF&CC on the exclusion of the Forest land from the proposed expansion project. In the letter, it has been mentioned that The PCCF & HoFF, Odisha basing on the report of DFO, Angul Forest Division has reported that as per map and land schedule submitted by the User Agency duly authenticated by the Tahasildar, Banarpal, 78.47 Ac. (31.755 ha) Revenue Forest land are around the boundary of the project which is proposed for exclusion and it is constituted from 52 nos. of Revenue Forest plots. So, the revenue forest area under consideration is revised to 31.755 ha instead of 27 ha, as proposed earlier by the User Agency. The authenticated land schedule and cadastral maps of Revenue Forest land in this regard is submitted.

Further, the PCCF & HoFF, Odisha has reported the Status of Revenue Forest land in the instant case which includes the following

i. All plots share one or more boundaries with the proposed expansion site as shown in submitted cadastral map.
ii. The excluded forest patches are connected to larger notified forest blocks through series of other interspersed private and Revenue plots.
iii. Excluded forest patches are separated from one another by Private land holdings and also include some human habitation.
iv. The project map showing land types around the expansion site is submitted.
v. Project map with drainage pattern and existing nallah alignment is also submitted.

The exclusion of Revenue Forest land from project expansion and consequential likely impact:

1. Most of the Revenue Forest plots will become inaccessible and fragmented bound by either JSPL boundary/ private holdings after expansion of the project site.
2. Many of the private holdings will become inaccessible except through excluded revenue forest plots after expansion of the project site.
3. Erection of enclosures by the private land holdings by the individual land owner/ tenants will creates several choke points.
4. Combined landscape of excluded forest land and private plots will form a narrow channelized Boma like formation with boundary walls on both sides restricting free movement of wildlife.
5. Wildlife are likely to come in closer proximity due to connectivity to the nearby notified and non-notified forests increasing depredation on the habitations and agricultural field.
6. In the expansion of the project, biotic pressure is likely to increase on the excluded forest patches making their management and re-stocking difficult.
7. There are ample possibilities by posing threat to drainage facilities from the landscape resulting future water logging issues.
8. Rehabilitation and resettlement issues of displaced people from proposed acquisition area need to be resolved.

In the above context, the following actions are suggested for execution by the project proponent if 31.755 ha of Revenue Forest land will be excluded from expansion of the JSPL Plant.

a. That as proposed, the project proponent will ensure not to enclose or in any other way restrict the movement of wildlife. Green Zone should be maintained without any sort of fencing/ boundary wall but by ensuring full proof watch and ward. The User Agency will not change the proposed land use without prior permission of the competent authority.
b. Accessibility to each Revenue Forest patches is to be ensured through non-private plots with at least 5 mtr wide all weather roads all around the boundary of proposed expansion. The proposed road should be handed over to either Revenue or Forest Department for future management.
c. A scheme for conservation, protection and regeneration of Revenue Forest patches and Durgapur Reserve Forest should be implemented by the Forest Department at the project cost. Further, Soil & Water Conservation Plan should be implemented to compensate change in land use and drainage patterns.
d. Integrated Site Specific Wildlife Management Plan will be implemented by the project Proponent including outcome of periodic revision of existing Wildlife Management Plan as per guidelines issued by CWLW related to Site Specific Wildlife Management Plan if required.
e. The User Agency should prepare a plan for existing drainage line to avoid water logging issues in anticipation.
f. The User Agency should resolve rehabilitation and re-settlement issues of displaced peoples from proposed acquisition area.

6.5.16 In the context of above, PP vide Proposal No. IA/OR/IND/272707/2022 dated 13.05.2022 has requested to reconsider amendment in Terms of Reference accorded by the Ministry vide letter no. J-11011/365/2006- IA.II(I) dated 08/02/2021 and subsequent amendments dated 16.06.2021 and 29.11.2021 w.r.t. change in land use due to exclusion of the forest land from the TOR.

Deliberations by the Committee

6.5.17 The Committee noted the following:

i. Instant proposal is for amendment in Terms of Reference accorded by the Ministry vide letter no. J-11011/365/2006- IA.II(I) dated 08/02/2021 and subsequent amendments dated 16.06.2021 and 29.11.2021 w.r.t. change in land use due to exclusion of the forest land from the TOR.

ii. EAC during meeting held on 28-29th September recommended that Ministry shall refer the proposal of proponent regarding exclusion of 27 ha of forest land seeking comments/views of the State Government of Odisha on the same along with consequential likely impact due to the proposed expansion. On receipt of the same, the proposal shall be placed before the EAC for consideration.

iii. MoEF&CC vide its letter dated 07.02.2022 to the Additional Chief Secretary, Forest, Environment and Climate Change Department, Govt. of Odisha sought comments/views regarding exclusion of Forest land.

iv. The Forest, Environment & Climate Change Department, Govt. of Odisha vide its letter no. FE-DIV-FLD-0156-2021-8819/FE&CC dated 11.05.2022 has furnished its views to MoEF&CC on the exclusion of the Forest land from the proposed expansion project.

v. PCCF & HoFF, Odisha has reported the Status of Revenue Forest land in the instant case as detailed in para 6.5.15 above

vi. State Forest Department has also submitted the consequential likely impact on exclusion of Revenue Forest land from project expansion as detailed in para 6.5.15 above

vii. Further, actions have been suggested by the State Forest Department for execution by the project proponent if 31.755 ha of Revenue Forest land is excluded from expansion of the JSPL Plant as mentioned in para 6.5.15 above. EAC noted that PP has agreed to implement the suggestions/recommendations made by the State Forest Department and will submit the detailed action plan while preparing the final EIA/EMP Report.

Recommendations of the Committee

6.5.18 In view of the foregoing and after deliberations, the Committee **recommended** for amendment in ToR dated 08.02.2021 and subsequent amendments dated 16.06.2021 and 29.11.2021 w.r.t. change in land use due to exclusion of the forest land from the TOR **subject to strict execution of actions suggested by the State Forest Department for execution by the project proponent if 31.755 ha of Revenue Forest land is excluded from expansion of the JSPL Plant as mentioned in para 6.5.15 above to the satisfaction of the State Forest Department**. All the terms and conditions stipulated in ToR letter no. J-11011/365/2006- IA.II(I) dated 08/02/2021 and subsequent amendments dated 16.06.2021 and 29.11.2021 shall remain the same with stipulation of the following specific conditions.

(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 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) Conservation plan for the nearby waterbodies/Nalah/ponds shall be implemented ensuring that no contamination/pollutants is going in the waterbodies/Nalah nearby.

(iii) Strict implementation of actions suggested by the State Forest Department for exclusion of 31.755 ha of Revenue Forest land from expansion of the JSPL Plan. PP shall submit the detailed action plan while preparing the final EIA/EMP Report for appraisal of the EAC.

(iv) The PP shall come at the time of EC presentation with adequate EMP cost along with detailed activities for mitigation measures.

(v) The project proponent shall come with the detailed action plan as per the provisions contained in this Ministry's OM vide F.No. 22-65/2017-IA.III, dated 30/09/2020.

***

DAY-2: MAY 31, 2022 [TUESDAY]

Consideration of Environmental Clearance Proposals

Agenda No. 6.6

6.6 **Expansion of existing Integrated steel plant to final capacity of Sponge Iron - 2,054,000 TPA, Billets (Mild & Alloy Steel)- 23,73,566 TPA, Rolled Products - 15,60,000 TPA, Captive Power- 308 MW, Pellets - 30,00,000 TPA, Producer Gas Plant-96,450 Nm3/Hr, Sinter Plant- 5,90,625 TPA, Blast Furnace- 3,93,750 TPA by M/s Shyam Metalics and Energy Limited located at Village - Pandloi, Block-Lapanga, District- Sambalpur, Odisha - Consideration of Environmental Clearance.**

[Proposal no. IA/OR/IND/269835/2020; File no. J-11011/495/2006-IA.II(I)]
[Consultant: M/s. Global Tech Enviro Experts Pvt. Ltd.; valid upto 06/11/2023]

6.6.1 M/s. Shyam Metalics & Energy Ltd., has made an online application vide proposal no. IA/OR/IND/269835/2020 dated 11.05.2022 along with copy of EIA/EMP Report, Form - 2 and Certified EC Compliance Report seeking Environment Clearance (EC) under the provisions of the EIA Notification, 2006 for the project mentioned above. The proposed project activity is listed at schedule no. 3(a) Metallurgical Industries (ferrous & non-ferrous), 2(b) Mineral Beneficiation and 1(d) Thermal Power Plantsunder Category "A" of the schedule of the EIA Notification, 2006 and appraised at Central Level.

6.6.2 Name of the EIA consultant: M/s Global Tech Enviro Experts Pvt. Limited, Bhubaneswar [Sl. No. 101, List of ACOs with their Certificate / Extension Letter no. NABET/EIA/2023/IA0066; valid upto 06.11.2023, Rev. 23, May 09, 2022].

Details submitted by Project proponent

6.6.3 The details of the ToR are furnished as below:

Date of application	Consideration	Details	Date of accord	Validity of ToR
14.12.2020	27th meeting of REAC held on 30-31th December, 2020	Terms of Reference	14.01.2021	13.01.2025
28.03.2022	3rd meeting of EAC held on 11-12th April, 2022	Amendment in ToR	26.05.2022	

6.6.4 The project of M/s. Shyam Metalics & Energy Ltd. located in Village- Pandloi, Block- Lapanga, Tehsil- Rengali, District- Sambalpur, Odisha is for expansion of existing Integrated steel plant to final capacity of Sponge Iron - 2,054,000 TPA, Billets (Mild & Alloy Steel)- 23,73,566 TPA, Rolled Products - 15,60,000 TPA, Captive Power- 308 MW, Pellets - 30,00,000 TPA, Producer Gas Plant-96,450 Nm3/Hr, Sinter Plant- 5,90,625 TPA, Blast Furnace- 3,93,750 TPA.

6.6.5 Environmental Site Settings:

<table>
<tr><th>S. No.</th><th>Particulars</th><th>Details</th></tr>
<tr><td>1.</td><td>Total land</td><td>347.058 ha [Forest land: 46.754 ha.; Govt. land: 64.38 ha; Private Land: 235.924 ha]

<table>
<tr><th>Particulars</th><th>Area</th><th>Involvement of Forest Land</th><th>Status</th></tr>
<tr><td>Existing</td><td>166.269 ha</td><td>38.393 ha.
Forest clearance has been obtained vide letter no. 5-ORC-064/2008- BHU dated 27/01/2010.</td><td>Acquired</td></tr>
<tr><td>Proposed</td><td>180.789 ha</td><td>8.361 ha.
Stage-I Forest Clearance has been obtained vide letter No. 82/19769/F&E dated 9/01/2020.
Stage-II Forest Clearance is in Process.</td><td>Land is allotted by IPICOL, acquisition under process</td></tr>
<tr><td>Total Project Area</td><td>347.058 ha</td><td>46.754 ha</td><td>-</td></tr>
</table>
</td></tr>
<tr><td>2.</td><td>Land acquisition details as per MoEF&CC O.M. dated 7/10/2014</td><td>Existing plant is running on land area of 166.269 ha already in possession.
Additional Land Area of 180.789 ha for expansion is in the process of acquisition by M/s. Shyam Metalics & Energy Limited, Sambalpur.</td></tr>
<tr><td>3.</td><td>Existence of habitation & involvement of R&R, if any.</td><td>There is no existence of habitants identified within the land under acquisition. Hence no R&R issues</td></tr>
<tr><td>4.</td><td>Latitude and Longitude of all corners of the project site</td><td>
<table>
<tr><th>Point</th><th>Latitude</th><th>Longitude</th></tr>
<tr><td>A</td><td>21°41'4.78"N</td><td>84°2'28.93"E</td></tr>
<tr><td>B</td><td>21°40'24.71"N</td><td>84°2'49.39"E</td></tr>
<tr><td>C</td><td>21°39'36.36"N</td><td>84°2'42.91"E</td></tr>
<tr><td>D</td><td>21°40'1.30"N</td><td>84°2'38.09"E</td></tr>
<tr><td>E</td><td>21°40'2.10"N</td><td>84°2'26.20"E</td></tr>
<tr><td>F</td><td>21°39'45.21"N</td><td>84°2'14.29"E</td></tr>
<tr><td>G</td><td>21°40'0.70"N</td><td>84°1'43.51"E</td></tr>
<tr><td>H</td><td>21°40'39.58"N</td><td>84° 2'9.19"E</td></tr>
</table>
</td></tr>
<tr><td>5.</td><td>Elevation of the project site</td><td>195-205 m above mean sea level</td></tr>
</table>

<table>
<tr><th>S. No.</th><th>Particulars</th><th>Details</th></tr>
<tr><td>6.</td><td>Involvement of Forest land if any</td><td>Area of the forest land involved:
8.361ha.

For land under acquisition
Stage 1 forest Clearance has already been approvedvide letter No. 82/19769/F&E dated 9/01/2020 and Stage 2 Forest Clearance is in Process.</td></tr>
<tr><td>7.</td><td>Water body (Rivers, Lakes, Pond, Nala, Natural Drainage, Canal etc.) exists within the project site as well as study area</td><td>Project Site:
5 nos. of manmade pits exist in the proposed site for expansion.

Study Area:
<table>
<tr><th>Water body</th><th>Distance</th><th>Direction</th></tr>
<tr><td>Hirakud Reservoir</td><td>0.67 Km</td><td>NW</td></tr>
<tr><td>Matwali Nala</td><td>0.15 km</td><td>NE</td></tr>
<tr><td>Sankri Nadi</td><td>2.8 km</td><td>S</td></tr>
<tr><td>Makarkusha Nala</td><td>4.1 km</td><td>E</td></tr>
<tr><td>Bhedan Nadi</td><td>9.02 km</td><td>NNW</td></tr>
</table></td></tr>
<tr><td>8.</td><td>Existence of ESZ/ESA/ national park/ wildlife sanctuary/ biosphere reserve/ tiger reserve/ elephant reserve etc. if any within the study area</td><td>Nil

List of Reserved and protected forests:
Ghichamura RF: 4.5km (NE)
Jharghati Garpati RF: 4.6 Km (SE),
Maulabhanja RF: 2.1 Km (W),
Baighara RF: 2.6 Km (SW)
Kilasama RF: 4.7 Km (S)</td></tr>
</table>

6.6.6 The existing project was accorded environmental clearance vide lr. no IA- J-11011/495/2006-IA. II(I) dated 21.05.2019. Consent to Operate for the existing unit was accorded by Odisha State Pollution Control Board vide lr. no. 5128/IND-I-CON-5335; Dt. 26.03.2021 & 13045/IND-I-CON-5335; Dt. 27.08.2021, 7994/IND-I-CON-5335; Dt. 22.06.2021. The validity of all CTO is up to 31.03.2023.

6.6.7 Implementation status of the existing EC

S. No.	Facilities	Units	EC dt. 21.5.2019 & Amendment dt.14.10 2019	Implementation Status	Production as per CTO
1	Sponge Iron	TPA	8,00,000	Implemented	8,00,000
2	Billet Caster	TPA	2,00,000	Implemented	2,00,000
3	Rolling Mill	TPA	6,60,000	4,10,000 Implemented and 2,50,000 under implementation	4,10,000

S. No.	Facilities	Units	EC dt. 21.5.2019 & Amendment dt.14.10 2019	Implementation Status	Production as per CTO
4	Sinter Plant	TPA	8,82,000	Not Implemented	Dropped
5	MBF	TPA	7,42,500	Not Implemented	Dropped
6	Ferro Alloys	TPA	2,50,000	1,33,000 Implemented & 1,17,000 under implementation	1,33,000
7	SMS	TPA	14,44,286	6,33,080 Implemented & 8,11,206 under implementation (CTO Applied)	6,20,080
8	Coke Oven	TPA	5,50,000	Not Implemented	Dropped
9	Beneficiation & Pelletization	TPA	12,00,000	Implemented	12,00,000
10	Coal Washery	TPA	10,00,000	3,00,000 Implemented and 7,00,000 under implementation	3,00,000
11.	Power Plant	MW	158	Implemented	158
12.	Bloom Caster	TPA	3,53,500	Implemented	3,53,500
13.	Lime Plant	TPA	60,000	Under implementation	NA
14.	Producer Gas Plant	$Nm^3/hr.$	48,450	Implemented	48,450

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

Sl. No.	Plant Equipment/ Facility	Existing Facilities as per EC dated 21.5.2019 & and subsequent amendment dated 14.10 2019								Proposed Units		Final (Existing +Proposed)	
		Total (A + B)		Implemented (A)		Un-implemented(B)		As per CTO					
		Config.	Capacity	Config.	Capacity	Config.	Capacity	Config.	Capacity	Config.	Capacity	Config.	Capacity
1.	Sponge Iron	(2x350TPD+2x100 TPD+4x500 TPD)	8,00,000 TPA	(2x350TPD +2x100 TPD+4x500 TPD)	8,00,000 TPA	-	Nil	(2x350TPD +2x100 TPD+4x500 TPD)	8,00,000 TPA	(4x600 TPD &2x700 TPD)	12,54,000 TPA	2x350 TPD+ 2x100 TPD+ 4x500 TPD+ 4x600 TPD+ 2x700 TPD)	20,54,000 TPA
2.	Billet Caster	-	2,00,000 TPA		2,00,000 TPA		Nil	2,00,000 TPA	2,00,000 TPA	-	-	-	2,00,000 TPA
3.	Rolling mill	1,00,000 TMT Rod mill, 1x70,000 TMT Bar Mill, 1x60,000 Structural Mill, 2x2,00,000 Wire Rod Mill, 1x30,000 Pipe Mill	6,60,000 TPA	1x60,000 TMT Rod mill, 1x60,000 TMT Bar Mill, 1x60,000 Structural Mill, 1x2,00,000 Wire Rod Mill, 1x30,000 Pipe Mill	4,10,000 TPA	1x2,00,000TPA Wire rod mill & 1x50,000 TPA R.M	2,50,000 TPA	1x60,000 TMT Rod mill, 1x60,000 TMT Bar Mill, 1x60,000 Structural Mill, 1x2,00,000 Wire Rod Mill, 1x30,000 Pipe Mill	4,10,000 TPA	Other long product 9,00,000 TPA	9,00,000 TPA	1x1,00,000 TMT ROD, 1x70,000 TMT Bar Mill, 1x60,000 Structural Mill, 2x2,00,000 Wire Rod Mill, 1x30,000 Pipe Mill, Other long product 9,00,000 TPA	15,60,000 TPA
4.	Sinter Plant	-	-	-	-	-	-	-	-	65 m^2	5,90,000 TPA	-	5,90,000 TPA
5.	MBF	-	-	-	-	-	-	-	-	450 m^3	3,93,750 TPA (1x450 m^3)		3,93,750 TPA (1x450 m^3)

Sl. No.	Plant Equipment/ Facility	Existing Facilities as per EC dated 21.5.2019 & and subsequent amendment dated 14.10 2019								Proposed Units		Final (Existing +Proposed)	
		Total (A + B)		Implemented (A)		Un-implemented(B)		As per CTO					
		Config.	Capacity	Config.	Capacity	Config.	Capacity	Config.	Capacity	Config.	Capacity	Config.	Capacity
6.	Ferro alloys	(2x6MVA+2x9 MVA+3x11 MVA-Matching capacity for 1,17,000 TPA	2,50,000 TPA	-	1,33,000 TPA		1,17,000 TPA	(3x11 MVA+2x9 MVA+2x6 MVA	1,33,000 TPA	-	-	(2x6MVA+2x9 MVA+3x11 MVA-Matching capacity for 1,17,000 TPA	2,50,000 TPA
7.	SMS	(EAF 1x80T(18H) hot metal route; IF.15x18T+4x12T+.4x8T, IF with matching LF)	14,44,286 TPA	4x8 T/Heat,8x18 T/Heat, 4x12 T/Heat	6,23,080 TPA	-	821206 TPA	4x8 T/Heat,8x18 T/Heat, 4x12 T/Heat	6,23,080 TPA	(16x20T, & 4x8T)	9,29,280 TPA	(1x80T, 15x18T, 4x12T &8x8T) &16x20T)	23,73,286 TPA
8.	Pelletization & beneficiation unit	2x6,00,000 TPA	12,00,000 TPA	(2x6,00,000 TPA)	12,00,000 TPA	-	Nil	(2x6,00,000 TPA)	12,00,000 TPA	2x0.6 MTPA to be modernized to 2x0.9 MTPA+1x1.20 MTPA New)	18,00,000 TPA	(2x0.9MTPA+1x 1.20MTPA	30,00,000 TPA
9.	Coal Washery	1x10,00,000 TPA	10,00,000 TPA	1x3,00,000 TPA	3,00,000 TPA	-	700000 TPA	-	300000 TPA	-	-	1X10,00,000 TPA	10,00,000 TPA
10.	Power Plant	58 MW(WHRB) +100 mw (AFBC	158 MW	58 MW(WHRB) +100 mw (AFBC)	158MW	-	Nil		158MW	88 MW WHRB + 80 MW AFBC + 2.0 MW TRT	170 MW	WHRB- 146 MW AFBC -180 MW TRT -2 MW	328 MW

Sl. No.	Plant Equipment/ Facility	Existing Facilities as per EC dated 21.5.2019 & and subsequent amendment dated 14.10 2019								Proposed Units		Final (Existing +Proposed)	
		Total (A + B)		Implemented (A)		Un-implemented(B)		As per CTO					
		Config.	Capacity	Config.	Capacity	Config.	Capacity	Config.	Capacity	Config.	Capacity	Config.	Capacity
11.	Bloom Caster	-	3,53,000 TPA	-	3,53,000 TPA	-	-	-	3,53,000 TPA	-	-	-	3,53,000 TPA
12.	Lime Plant		60,000 TPA		-	-	60,000 TPA		-	-	-	-	60,000 TPA
13.	Producer Gas Plant	48,450 Nm^3/hr)	48,450 Nm^3/hr	Nm^3/hr)	48,450 Nm^3/hr	-	-	48,450 Nm^3/hr.)	48450 Nm^3/hr	48,000 Nm^3/hr)	48,000 Nm^3/hr	96,450Nm^3/hr)	96,450 Nm^3/hr)

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

Sl. No.	Raw Material	Quantity required in Tons per Annum for expansion			Source	Distance from site (Kms)	Mode of Transportation
		Existing	Expansion	Total			
1	Iron Ore Fines	14,40,000	26,91,562	41,31,562	Khandadhar mines and Gandhamardhan mines	112.6 km & 153.20 km	Rail
2	Coal	12,21,800	13,20,000	25,41,800	Talabira Mines of MCL	20 km	Rail
3	Coke	1,60,200	1,60,200	3,20,400	Jharsuguda/ Sambalpur	30 km	Rail
4	Bentonite	12,000	7,000	19,000	Local Market	105 km	Rail/Road
5	Dolomite Fines	18,000	18,000	36,000	Local Market	105 km	Rail/Road
6	Lime Stone	18,000	18,000	36,000	Local Market	105 km	Rail/Road
7	Chromite Ore	6,00,000	-	6,00,000	Jajpur Sukinda Mines	210 km	Road
Total		**34,70,000**	**42,14,762**	**76,84,762**			

6.6.10 Existing water requirement is 13,644 m^3/day, water requirement is met from Hirakud Reservoir and permission for the same has been obtained from Orissa Department of Water Resources vide letter No. Irr-II-WRC-01/05/1308/WR, dt. 13.04.2005. The water requirement for proposed project is estimated as 9085 m^3/day, which will be met from Hirakud Reservoir also. Thus, Total make up water requirement for the project after expansion will be 22,729 KLD which will be sourced from Hirakud Reservoir. Agreement for drawl of 13,798.68 m^3/day (3 MGD/ 5.64 Cusec) of water was done for a period of 3 years (07.09.2021 to 06.09.2024). PP has received the letter from water resources department Govt. of Orissa for renewal of agreement. For additional requirement of 9,085 m^3/day agreement will be done after the statutory clearances.

6.6.11 Existing power requirement of 175 MW is obtained from CPP, Solar Panel & State grid. The power requirement for the proposed project is estimated as 228.1 MW which will be met from CPP, Solar Panel & State Grid.

6.6.12 Baseline Environmental Studies:

Period	1st December 2020 to 28th February, 2021 & Additional one month AAQ for January,2022
AAQ parameters at 8 locations	PM_{10} = 76.4-52.1μg/m^3 $PM_{2.5}$ = 32.2-20.2 μg/m^3 SO_2 = 14.6-7.9 μg/m^3 NO_2 = 26.4-12.7 μg/m^3 CO = 0.698-0.218 mg/m^3
AAQ modelling (Incremental GLC)	PM_{10} = 3.78 μg/m^3 (1.45km & SSW) SO_2 = 2.257μg/m^3 (1.45km & SW) NOx = 2.541 μg/m^3 (1.45km & SW)

<table>
<tr><td>Ground water quality at 8 locations</td><td>pH: 7.54 to 6.99, Total Hardness: 178 to 62 mg/l, Chlorides: 34.6 to 28.8mg/l & Fluoride: 1.21 to 0.16mg/l. Heavy metals are within the permissible limits</td></tr>
<tr><td>Surface water quality at 8 locations</td><td>pH: 7.72 to 6.6, DO: 8.1 to 6.4 mg/l, BOD: <1.8 mg/l & COD: 14.8 to 8.2 mg/l</td></tr>
<tr><td>Noise levels at 8 Locations</td><td>71.43 to 43.98 dBA for day time and 63.53 to 41 dBA for night time.</td></tr>
<tr><td>Soil at 6 Locations</td><td>pH: 7.18 to 6.92, N (Nitrogen): 4.6 to 0.26 Milligram Per Kg, P (Phosphorus): 0.028 to 0.018 Milligram Per Kg, K (Potassium): 0.058% to 0.042%, Electric Conductivity: 132.6 to 116.2 Millisiemens Per Cm</td></tr>
<tr><td>Traffic assessment study findings</td><td>• Traffic Study has been conducted at SH-10 which is adjacent to the plant site.
• Transportation of raw material, fuel & finished product will be done 10.45% by road.
• Existing max. PCU is 1112 PCU/hr on SH-10 and existing level of service (LOS) is B of total free flow capacity.
Existing PCU details is given below-
<table>
<tr><th>Road</th><th>V (Volumein PCU/hr.)</th><th>C (Capacityin PCU/hr.)</th><th>ExistingV/CRatio</th><th>LOS</th></tr>
<tr><td>SH-10</td><td>1112</td><td>3600</td><td>0.30</td><td>B</td></tr>
</table>
After expansion
<table>
<tr><th>Road</th><th>V (Volume inPCU/hr.)</th><th>C (Capacity inPCU/hr.)</th><th>ExistingV/CRatio</th><th>LOS</th></tr>
<tr><td>SH-10</td><td>1377</td><td>3600</td><td>0.38</td><td>B</td></tr>
</table>
PCU load after proposed project will be 1112(existing)+ 265 (Additional)=1377 PCU/hr and level of service (LOS) will be B(Very Good).
*Note: Capacity as per IRC-73-1980 Guide line for capacity for roads.
**Considering peak hourly volume at 3 locations
Conclusion: The level of service will B(very good) after including additional traffic due to proposed project.</td></tr>
<tr><td>Flora & Fauna</td><td>Python which belongs to the schedule I of fauna is present within the buffer zone.
Wildlife Management Plan with budget allocation of Rs. 70.586 Lakhs was approved vide Letter No. 7752/7WL-FD&WLC-147/2020 Dated. 29th Sept, 2020.</td></tr>
</table>

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

(A) **Solid waste generation and management**

Sl. No	Type of Waste	Source Name	Quantity (TPA)			Treatment before disposal	Method of Disposal
			Existing(TPA)	Proposed(TPA)	Total Quantity (TPA)		
1.	Middling & Rejects	CoalWashery	4,20,000		4,20,000	-	Captive use in FBC boileras fuel
2.	Ashand Accretion	DRI Kilns	11,09,680	16,64,520	27,74,200	-	To be used in Brick Manufacturing plant of M/s. Shyam Metalics
	Dolchar		3,77,040	5,65,560	9,42,600	-	Captive use FBC Boiler as fuel
3.	Dedusting dust	Pellet Plant	82,800	1,24,200	2,07,000	-	Reused in Pellet Plant
4.	Return Sinter Fines	Sinter Plant	-	88,590	88,590	-	Reused in Sinter Plant
5.	BF slag	BlastFurnace	-	1,18,965	1,18,965	-	Used in PSC manufacturing plant–Star Cement Raipur & Dalmia Cement, Jharsuguda.
	BF sludgeand dust		-	1,90,000	1,90,000	-	Reusedin Sinterplant
6.	Tar	PGP Plant	7,875	7,875	15,750	-	Sale to authorizedusers /Recyclers/Re-processors having valid authorization from SPCB, Odisha.
7.	Slag	S M S	2,01,870	1,34,580	3,36,450	Watersprinkling	Land filling in the nearby abandoned mines
	Dust		32,540	19,200	51,740	Watersprinkling	To be used in land filling
8.	FlyAsh	FBC Boiler	1,50,475	1,50,475	3,00,950	AshConditioning	Land filling in approved abandoned stone quarry.
9.	Bag House Dust	Ferro alloy plant	35,000	-	35,000	-	Fe-Mn slag is to be used in Si-Mn production Si-Mn slag is to be used in land filling Fe-Cr slag will be used as aggregate in concrete works
	Slag		2,25,000	-	2,25,000	-	

(B) **Hazardous waste generation and management**

Sl. No.	Waste Description	Source Name	Quantity(TPA)			Treatment before disposal	Mode of Disposal
			Existing Quantity	Proposed Quantity	Total Quantity		
1.	Used Oil	Transformer	8 KLA	12 KLA	20 KLA	-	Storage in

Sl. No.	Waste Description	Source Name	Quantity(TPA)			Treatment before disposal	Mode of Disposal
			Existing Quantity	Proposed Quantity	Total Quantity		
2.	Wastes/ Residues Containing Oil	Plant Machinery	6 KLA	9 KLA	15 KLA	-	containers over the concrete floor under-ventilated covered shed followed by sale to actual users/Recyclers/Re-processors having valid authorization from SPCB, Odisha or disposed to TSDF.
3.	Phenolic water	PGP	13.5 KLD	13.5 KLD	27 KLD	ETP, lime treatment	Reusedinprocess.
4.	Spent resin	DM Plant	-	6 TPA	6 TPA	-	Storage in an impervious containers under well ventilated covershed to be supplied to recyclers authorized.
5.	Tarry residues	PGP	1 TPA	1 TPA	2 TPA	-	Storage in an impervious pit/ container drums for co-incineration in CPP/DRIkiln
6.	Discarded containers	General Store	-	15 TPA	15 TPA	-	Storage in an impervious floor under well ventilated covered shed followed disposal in the Authorized HW Incinerator/Co-processing in authorized Cement Kiln.

6.6.14 Public Consultation:

Details of Advertisement	Odia daily "The Dharitri" and English daily "The Times of India" on 30.07.2021
Date of Public consultation	31.08.2021
Venue	U.P. School Field, Pandloi, District- Sambalpur, State- Odisha.
Presiding Officer	Additional District Magistrate, Sambalpur.
Major issues raised	• Employment opportunity to local people • Integrated development of Education& public Health facility of locality • Repair & Construction of Approach road to plant & village roads • Employment opportunity to local women

	• Street light on approaching road to plant • Major to control Dust emission • Public toilet, tube well & Road facility • Help to needy people • Providing Computers, Table, Chair to village School & financial assistance to private teachers

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

Sl. No.	Physical Activity & Action plan		Year of Implementation			Total Expenditure (Rs. In Lakh)
			1st	2nd	3rd	
1	Employment opportunity to local people	Physical Activity	M/s. Shyam & Energy Limited have a tie up with VEER SURENDRA SAI INDUSTRIAL TRAINING CENTRE (VSSITC) from 2009 and in the process of recruiting fresh ITI pass out students of VSSITC of the nearby villages namely Rengali, Lapanga, Pandloi, Bomaloi, Katarbaga, Khinda, Gurupali, Nishabhanga etc.)	This process will continue..	This process will continue ….	100.00
		Budget in Rs. Lakh	30.00	35.00	35.00	
2	Integrated development of Education& public Health facility of locality	Physical Activity	1.Tie up with Veer Surendra Sai Industrial Training Centre (VSSITC) from 2009. 2. 8 Health Camps per year	This process will continue..	This process will continue..	24.00
		Budget in Rs. Lakh	6.00	9.00	9.00	
3	Repair & Construction of Approach road to plant & village	Physical Activity	1.Maintainance of PCC road of Meherpada 2. Contruction of PCC from Nishanbhanga to Jharmunda	1.Maintainance of PCC road Ganeshnagar	1.Maintainance of PCC road Pandloi Village	180.00
		Budget in Rs. Lakh	80.00	50.00	50.00	
4	Employment opportunity to local women	Physical Activity	56 nos. of local women have been employed in the plant	This process will continue.	This process will continue.	….
		Budget in Rs. Lakh	…	….	…	
5	Solar Street light on approaching road to plant	Physical Activity	Solar light at 10m interval in Village Pandloi	Solar light at 10m interval in Village Nishanbhanga	Solar light at 10m interval in Village	18.00

Sl. No.	Physical Activity & Action plan		Year of Implementation			Total Expenditure (Rs. In Lakh)
			1st	2nd	3rd	
					Jharmunda	
		Budget in Rs. Lakh	6.00	6.00	6.00	
6	Major to control Dust emission	Physical Activity	1.Under Air Pollution control head a budgetary provision of Rs.64.00 Cr.for proposed expansion. Morover heavy road vacuum sweepers have also been used. 2. 5 nos. of Water tankers of 10KLD capacity each have been engaged to sprinkle water on nearby village roads twice a day.	This process will continue….	This process will continue ….	…..
		Budget in Rs. Lakh	….	….	…..	
7	Public toilet, tube well/Drinking water & Road facility	Physical Activity	3 nos. of Purified Drinking Water facilities shall be installed at strategic public locations	2 nos. of Purified Drinking Water facilities shall be installed at strategic public locations	2 nos. of Purified Drinking Water facilities shall be installed at strategic public locations	
		Budget in Rs. Lakh	10.00	10.00	10.00	30.00
	Community based RO Plant	Physical Activity	Every year 1 Nos. of RO Plant shall be installed considering Contamination of Drinking Water	This process will continue….	This process will continue ….	30.00
		Budget in Rs. Lakh	10.00	10.00	10.00	
	Overhead Water Tank (Solar powered) Supported with RO Plant	Physical Activity	1 Overhead Tank within premises for Floating & Commuting population around the plant including maintenance	This process will continue….	This process will continue ….	28.00
		Budget in Rs. Lakh	12.00	8.00	8.00	
8	Help to needy people	Physical Activity	1.Promotion of Income Generation Activities- Kitchen Garden, Leaf plate, Pickle making, NTFP etc.	This process will continue….	This process will continue ….	30.00

Sl. No.	Physical Activity & Action plan		Year of Implementation			Total Expenditure (Rs. In Lakh)
			1st	2nd	3rd	
			(100 interested women beneficiaries within 10 SHG members of nearby GPs shall be trained)			
		Budget in Rs. Lakh	10.00	10.00	10.00	
		Physical Activity	2.Promotion of Income Generation Activities- Mushroom Cultivation, NTFP etc. (100 interested women beneficiaries within 10 SHG members of nearby GP shall be trained)	This process will continue….	This process will continue ….	30.00
		Budget in Rs. Lakh	10.00	10.00	10.00	
		Physical Activity	3.Farmers input support for improving the yield for better return. (100 interested and selective farmers shall be provided with inputs)	This Process will continue…	This Process will continue …	30.00
		Budget in Rs. Lakh	10.00	10.00	10.00	
9	Providing Computers, Table, Chair to village School & financial assistance to private teachers	Physical Activity	Company is in the process of supplying educational aids to schools.	This process will continue….	This process will continue ….	200.00
		Budget in Rs. Lakh	60.00	70.00	70.00	
10	Provision for setting of company's own ITI Centre	Physical Activity	Land, Building, furniture & fixture	Maintenance	Maintenance	400
		Budget in Rs. Lakh	200.00	100	100.00	
11	Adoption of village Bausen	Physical Activity				
		Budget in Rs. Lakh	40.00	40.00	33.00	113.00
		Total	**457.00**	**428.00**	**328**	**1213**

6.6.15 Existing capital cost of project was 1554.00 Crores. The capital cost of the proposed project is Rs 1205.00 Crores and the capital cost for environmental protection measures is proposed as Rs 182.00 Crores. The annual recurring cost towards the environmental protection measures is proposed as Rs 18.00 Crores. The employment generation from the proposed project / expansion is 3270. The details of cost for environmental protection measures is as follows:

Sl. No.	Description of Item	Existing (Rs.InCrores)		Proposed (Rs.In Crores)	
		Capital Cost	Recurring Cost	Capital Cost	Recurring Cost
i.	Air Pollution Control/ Noise Management	27.40	6.90	100.59	10.3
ii.	Water Pollution Control	5.28	0.70	25.80	3.2
iii.	Rain water Harvesting	1.03	0.15	11.86	0.15
iv.	Occupational Health & Safety	3.52	0.51	17.8	1.2
v.	Green Belt Development	0.90	0.45	7.0	1.25
vi.	Solid Waste management	3.65	0.44	13.95	1.5
vii.	Online Monitoring System	1.12	0.20	5.0	0.4
Total		**42.90**	**9.35**	**182.00**	**18.00**
Addressal of Public Consultation concerns		**12.13**			

6.6.16 Existing green belt has been developed in 55.56ha area which is about 33.41% of the total project area of 166.269 ha with total sapling of 1,38,900 trees. Proposed greenbelt will be developed in 80.01 ha which is about 44.25 % of the expansion project area of 180.789ha. Thus total of 135.57 ha area (39.06% of total project area of 347.058 ha) will be developed as greenbelt. A (2x2) m wide greenbelt, consisting of at least 3 tiers around plant boundary will be developed as greenbelt and green cover as per CPCB/MoEF&CC, New Delhi guidelines. Local and native species will be planted with a density of 2,500 trees per hectare. Total no. of 2,00,025 saplings will be planted and nurtured in 80.01 hectares in 3 years.

6.6.17 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 Integrated Regional Office

6.6.18 The status of compliance of earlier EC was obtained from Regional Office, Bhubaneswar vide letter no. 101-258/EPE/1003 dated 30.08.2021 in the name of M/s Shyam Metalics & Energy ltd. The action taken report regarding the partial/non-complied condition was submitted to Regional officer MoEF&CC, Bhubaneswar dated 08.09.2021. MoEF&CC (RO), Bhubaneswar evaluated the same and has issued letter dated 12.09.2021. The details of the observations made by IRO in the report dated 30.08.2021 and issued closure report. 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	Maintenance of the garland drains	It is viewed that regular maintenance of the garland drains should be carried out.	14.10.2019	xiii	-	**Submission of PP:** Garland drains are constructed around the dumps to arrest silt and sediment flows. The drains are connected to a settling tank and accumulated water is

S. No.	Non-compliances details	Observation of RO (abridged)	Condition No.			Re-assessment by RO/Response by PP
			EC date	Specific	General	
						being used for dust: suppression and plantation. De-silting of garland drains is carried out at regular intervals. **Remarks by IRO-Complied**
2	Housekeeping services	The project authorities need to improve housekeeping within the plant premises and a lot of unused scraps within the premises need to be cleared.	14.10.2019	xvii	-	**Submission of PP:** PP has engaged a road sweeping machine to clean all the concrete roads. A housekeeping team has been formed to look after all the issues in different depts. Regular cleaning works of all the areas inside the plant is being carried out by housekeeping team. Now the housekeeping has been comparatively improved. PP has engaged two tractors to collect and shift all the unused scraps to SMS unit to reuse in induction furnaces. Mobile water sprinklers are provided for periodic water sprinkling on haul roads, loading and unloading points, etc. Regular water sprinkling is being carried out by four dedicated mobile water tankers of 20 KL each at fugitive dust emission sources to control dust emissions. **Remarks by IRO-Complied**
3	Solid waste	The project authority need to submit detail information on various solid wastes generated, disposed of recycled and reused by the plant	14.10.2019	xviii	-	**Submission of PP:** The project authorities have submitted information on generation and utilization of solid waste. **Remarks by IRO-Complied**

S. No.	Non-compliances details	Observation of RO (abridged)	Condition No.			Re-assessment by RO/Response by PP
			EC date	Specific	General	
4	Plantation	The project authorities may undertake extensive plantations within and outside the industrial premises along the road for checking and disbursement of dust and fugitive emission in consultation with the concerned DFO.	14.10.2019	xx	-	**Submission of PP:** Till 2020-21 PP has planted 210657 numbers of saplings. PP has planned to plant around 125000-150000 numbers of saplings in the coming 2-3 years. Phase wise plantation is being carried out within and outside the industrial premises along the road for checking and disbursement of dust and fugitive emission. The density of plantation is maintained at around 2500 plants per ha. **Remarks by IRO- Complied**
5	Flora and Fauna	Details on the action taken with respect to conservation of flora and fauna may be intimated to this Regional Office	14.10.2019	xxi	-	**Submission of PP:** Thick plantation using local flora species is being carried out on safety zone, along transport toads and on inactive dumps. Fencing of the plant boundary area is being carried out to avoid inadvertent entry of persons/animals. **Remarks by IRO- The condition may be treated as Complied.**
6	CREP	The detailed information on recommendation made on Corporate Responsibility for Environmental Protection (CREP) for steel sector should be submitted along with the budgetary provision to this office.	14.10.2019	xxiv	-	**Submission of PP:** An amount of Rs. 11.7 Cr. earmarked for CREP shall be implemented within four years. Detailed year wise action plan for implementation of CREP has been submitted and will be implemented within 3 years from the date of project execution. **Remarks by IRO- Complied**
7	CSR	The progress made with regard to establishment of ITI	14.10.2019	xxv	-	**Submission of PP:** Under CSR activities the things will be carried on as and when

S. No.	Non-compliances details	Observation of RO (abridged)	Condition No.			Re-assessment by RO/Response by PP
			EC date	Specific	General	
		may please be intimated to this office				administrations intimate us about the acquisition of land for ITI. **Remarks by IRO-The condition may be treated as "Assured to comply".**
8	Socio-economic	The detailed information on the socio-economic development activities carried out along with the budgetary provisions should be submitted to this office	14.10.2019	x	-	**Submission of PP:** The detailed information on CSR activities along with budgetary allocation has been Submitted. **Remarks by IRO-Complied**

6.6.19 The project proponent had earlier applied for EC vide proposal no. IA/OR/IND/187952/2020 dated 19/02/2022 and the proposal was considered in 2nd meeting of the EAC for Industry-I sector held on 22nd - 23rd March, 2022wherein the Committee returned the proposal in its present form as EAC noted that as per the Form 1&2 application submitted to the Ministry, project proponent had not disclosed the involvement of forest land in the proposed expansion project. Further, EAC recommended that project proponent shall first seek amendment in ToR dated 14/01/2021w.r.t. involvement of forest land in the proposed expansion project.

6.6.20 Accordingly, M/s. Shyam Metalics and Energy Limited applied vide proposal no. IA/OR/IND/264265/2022 dated 29/03/2022 for amendment in Terms of Reference dated 14/01/2021 w.r.t. involvement of forest land in the proposed expansion project and the proposal was considered during 3rd meeting of the EAC for Industry-I sector held on 11 - 12th April, 2022. The EAC noted the following involvement of forest land in the proposed expansion project:

<table>
<tr><th>S No</th><th>Particular</th><th>Description as per Approved ToR</th><th>Description after Amendment</th></tr>
<tr><td>1</td><td>Project area</td><td>Total: 347.058 ha
Forest land: Nil
Non-forest land: 347.058 ha</td><td>Total Area: 347.058 ha
<table>
<tr><th>Particulars</th><th>Area</th><th>Involvement of Forest Land</th><th>Status</th></tr>
<tr><td>Existing</td><td>166.269 ha</td><td>38.393 ha.
Forest clearance has been obtained vide letter no. 5-ORC-064/2008- BHU dated 27/01/2010.</td><td>Acquired</td></tr>
<tr><td>Proposed</td><td>180.789 ha</td><td>8.361 ha.
Stage-I Forest Clearance has been obtained vide letter No. 82/19769/F&E dated 9/01/2020. Stage-II Forest Clearance is in Process.</td><td>Land is allotted by IPICOL, acquisition under process</td></tr>
</table></td></tr>
</table>

S No	Particular	Description as per Approved ToR	Description after Amendment			
			Total Project Area	**347.058 ha**	**46.754 ha**	**-**

According to amendment application, out of total project area of 347.058 ha proposed land of 180.789 ha involves forest land of 8.361 ha for which PP already obtained stage -1 forest clearance on 09/01/2020. After deliberations, the Committee recommended for amendments in ToR dated 14/01/2021and the ToR amendment letter was issued by MoEF&CC on 26.05.2022.

6.6.21 The project proponent has again applied for EC vide proposal no. IA/OR/IND/269835/2020 dated 11.05.2022 after obtaining requisite amendment in ToR and the proposal is considered in the 6th meeting of the EAC held on 30-31stMay, 2022. The deliberations and recommendations of the EAC are as follows:

Deliberations by the Committee

6.6.22 The Committee noted the following:

1. Instant proposal is for expansion of existing Integrated steel plant to final capacity of Sponge Iron - 2,054,000 TPA, Billets (Mild & Alloy Steel)- 23,73,566 TPA, Rolled Products - 15,60,000 TPA, Captive Power- 308 MW, Pellets - 30,00,000 TPA, Producer Gas Plant-96,450 Nm^3/Hr, Sinter Plant- 5,90,625 TPA, Blast Furnace- 3,93,750 TPA.
2. Out of total project area of 347.058 ha, proposed land of 180.789 ha involves forest land of 8.361 ha for which PP already obtained Stage -1 forest clearance on 09/01/2020.
3. Manmade pits exist in the proposed site for expansion along-with Hirakud Reservoirand rivers and nallahs exists within the study area from the project site.
4. There is 1 no. of Schedule - I species reported in study area, namely Python (Pythan molurus). Wildlife Conservation Plan for the Schedule - I species found in the study area has been prepared with a budget allocation of Rs. 70.586 Lakhs and authenticated by PCCF, Raipur. vide Letter No. 7752/7WL-FD&WLC-147/2020 Dated. 29th Sept, 2020.
5. The specific conditions (xxv) in EC dated 10/12/2008 is as follows "*As committed, Rs. 2.00 Crores shall be earmarked for setting up of Industrial Training Institute (ITI) in consultation with the State Govt. and progress shall be reported to the Ministry's Regional Office at Bhubaneswar."* The PP informed EAC that they are waiting for the allotment of government land for this purpose.

Recommendations of the Committee

6.6.23 In view of the foregoing and after detailed deliberations, the Committee **deferred** the proposal and sought following requisite information for further consideration of the proposal:

i. The PP will submit compliance status of directions issued by SPCB in the past in view of public complaints, especially in respect of action taken to keep the internal

roads and the road in front of plant clean from dust to prevent air pollution due dust re-suspended by trucks movement.

ii. Revised Action Plan on the issues raised during the Public Hearing needs to be submitted with timeline and budget.

iii. Hirakud water reservoir is at 0.67 km from the Unit. Mitigation measures w.r.t. water bodies which is very near to the Unit needs to be submitted.

iv. This is an existing Unit and therefore it is necessary to ensure whether all air pollutants-PM2.5, PM10, SO2, NOx, CO emissions in the occupational environment of different process plants, within the permissible exposure limits of as per Factories Act? If not it is requested to kindly do air monitoring-industrial hygiene survey within occupational environments in order to ensure good environment within the industry, so that workers health is ensured. In this regard details needs to be submitted.

v. Particulate matter is in higher side. PP shall submit the detailed mitigation measures for controlling the same.

vi. The specific condition (xxv) in EC dated 10/12/2008 is as follows "As committed, Rs. 2.00 Crores shall be earmarked for setting up of Industrial Training Institute (ITI) in consultation with the State Govt. and progress shall be reported to the Ministry's Regional Office at Bhubaneswar." The PP informed EAC that they are waiting for the allotment of government land for this purpose. The committee opined that a factual report from District Administration should be asked on this issue by the Ministry. After receipt of the information from the District Administration, the proposal may be placed before the EAC for further consideration.

Agenda No. 6.7

6.7 **Expansion of Cement Plant with increase of production of clinker from 1.7 to 3.2 MTPA, cement from 1.8 to 4.0 MTPA (by installation of new unit (Unit III) & power from 18 to 33 MW (by installation of WHRB Power Plant) by M/s. Deccan Cements Ltd. located at Mahankaligudem Village, Palakeedu Mandal, Suryapet District, Telangana- Consideration of Environmental Clearance.**

[Proposal No. IA/TG/IND/266850/2016; File no. J-11011/572/2007-IA II (I)]
[Consultant: M/s. B. S. Envi-Tech Pvt. Ltd.; Valid upto 16.11.2022]

6.7.1 M/s. Deccan Cements Limited (DCL) has made an online application vide proposal no. IA/TG/IND/266850/2016 dated 11/05/2022 along with copy of EIA/EMP report, Form – 2 and certified EC compliance report seeking Environment Clearance (EC) under the provisions of EIA Notification, 2006 for the project mentioned above. The proposed project activity is listed at schedule no. 3(b) Cement Plants and 1(d) Thermal Power Plants under Category "A" of the schedule of the EIA Notification, 2006 and appraised at Central level.

6.7.2 Name of the EIA consultant: M/s. B. S. Envi-Tech Pvt. Ltd. [Sl. No. 144, List of ACOs with their Certificate / Extension Letter no. NABET/EIA/1922/RA 0174; valid upto 16.11.2022, Rev. 23, May 09, 2022].

Details submitted by Project proponent

6.7.3 The details of the ToR are furnished as below:

Date of application	Consideration	Details	Date of accord	Validity of ToR
30.11.2019	14th Meeting of REAC held during 23rd-24th December, 2019	Terms of Reference	10.11.2020	09.11.2024
26.03.2021	34th Meeting of REAC held during 15-16th April, 2021	Amendment of ToR	03.05.2021	

6.7.4 The expansion project of cement plant of M/s. Deccan Cements Limited located in Mahankaligudem Village, Palakeedu Mandal, Suryapet District, Telangana State is for expansion of Cement Plant with increase of production of clinker from 1.7 to 3.2 MTPA, cement from 1.8 to 4.0 MTPA (by installation of new unit (Unit III) & power from 18 to 33 MW (by installation of WHRB Power Plant).

6.7.5 Environmental Site Settings:

<table>
<tr><th>S.No.</th><th>Particulars</th><th>Details</th><th>Remarks</th></tr>
<tr><td>i.</td><td>Total land: 74.5 Ha.

Existing:53.8 Ha.
Additional:20.7 Ha</td><td>Present DCL cement plant is located in an area of 53.80 Ha, which has Forest land of 8.02 Ha. Additional land of 20.7 Ha owned by DCL will be used for expansion.

<table>
<tr><th rowspan="2">S.NO.</th><th rowspan="2">FACILITY</th><th colspan="2">AREA (HA.)</th></tr>
<tr><th>Before Expansion</th><th>After Expansion</th></tr>
<tr><td>1</td><td>Cement Plant area and roads</td><td>12.5</td><td>12.5</td></tr>
<tr><td>2</td><td>New Line – III</td><td>0</td><td>13.48</td></tr>
<tr><td>3</td><td>Power plant area and roads</td><td>3.0</td><td>3.0</td></tr>
<tr><td>4</td><td>Colony</td><td>10.0</td><td>10.0</td></tr>
<tr><td>5</td><td>WHRB Power Plant</td><td>0</td><td>2.5</td></tr>
<tr><td>6</td><td>Greenbelt</td><td>17.0</td><td>25.0</td></tr>
<tr><td>7</td><td>Railway siding – 2 (Forest Land)</td><td>8.02</td><td>8.02</td></tr>
<tr><td>8</td><td>Vacant Land</td><td>3.28</td><td>0</td></tr>
<tr><td colspan="2">Total</td><td>53.8</td><td>74.5</td></tr>
</table></td><td>Land use:</td></tr>
<tr><td>ii.</td><td>Land acquisition details as per MoEF&CC O.M. dated 7/10/2014</td><td>Present DCL cement plant is located in an area of 53.80 Ha, which has Forest land of 8.02 Ha. Additional land of 20.7 Ha owned by DCL will be used for expansion.</td><td>-</td></tr>
<tr><td>iii.</td><td>Existence of habitation & involvement of R&R, if any.</td><td>Additional land of 20.7 Ha owned by DCL will be used for expansion.

Nearest Village:
1. Ravipahad – 0.89 km – E;
2. Mahankaligudem–1.47km - SW</td><td>No R&R.</td></tr>
<tr><td>iv.</td><td>Latitude and Longitude of <u>all corners</u> of the project site.</td><td>
<table>
<tr><th>S.No</th><th>Latitude N”</th><th>Longitude E”</th></tr>
<tr><td>1.</td><td>16°42'26.82"N</td><td>79°43'15.60"E</td></tr>
<tr><td>2.</td><td>16°42'25.63"N</td><td>79°43'13.91"E</td></tr>
<tr><td>3.</td><td>16°42'30.56"N</td><td>79°43'9.23"E</td></tr>
<tr><td>4.</td><td>16°42'31.32"N</td><td>79°42'56.99"E</td></tr>
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S.No.	Particulars	Details			Remarks
		5.	16°42'29.09"N	79°42'56.48"E	
		6.	16°42'29.30"N	79°42'55.80"E	
		7.	16°42'19.69"N	79°42'53.64"E	
		8.	16°42'23.97"N	79°42'45.20"E	
		9.	16°42'24.05"N	79°42'45.32"E	
		10.	16°42'30.53"N	79°42'32.80"E	
		11.	16°42'32.07"N	79°42'32.85"E	
		12.	16°42'37.97"N	79°42'31.51"E	
		13.	16°42'47.93"N	79°42'24.02"E	
		14.	16°42'57.02"N	79°42'29.46"E	
		15.	16°42'53.78"N	79°42'36.41"E	
		16.	16°42'50.21"N	79°42'43.14"E	
		17.	16°42'45.14"N	79°42'54.36"E	
		18.	16°42'44.42"N	79°42'56.42"E	
		19.	16°42'41.07"N	79°43'1.93"E	
		20.	16°42'38.69"N	79°43'4.16"E	
v.	Elevation of the project site	87 m above msl			-
vi.	Involvement of Forest land if any.	Forest land of 8.02 Ha. Stage – I Forest clearance was approved Vide MoEF&CC leter no F. No. 4-TSC182/2021-HYD/116 dated 30th July, 2021.			-
vii.	Water body (Rivers, Lakes, Pond, Nala, Natural Drainage, Canal etc.) exists within the project site as well as study area	No water Bodies exists in project area **Study area** 1. Krishna River – 1.14 km – SE 2. Naguleru Vagu – 3.93 km - S 3. Musi River – 3.39 km – WNW 4. Bugga Vagu -4.46 km – W 5. Wazirabad Minor – 7.32 km – W			HFL : 1.1 km
viii.	Existence of ESZ/ ESA/ national park/ wildlife sanctuary/ biosphere reserve/ tiger reserve/ elephant reserve etc. if any within the study area	Nil. Nearest Reserved Forests: 1. Ravipahad RF – Adjacent – N; 2. Saidulnam RF – Adjacent - W 3. Wazirabad RF – 3.7 km – W 4. Pasupulabodu RF – 1.0 km – WNW 5. Nirchinta Vagu RF – 2.3km - ENE 6. Mangalabodu RF–3.5km–N; 7. Madinapadu–RF–2.3km–SE 8. Madinapadu – Extension RF – 2.4 km – SSE 9. Gamalapadu RF – 2.6 km – S			-

6.7.6 The cement plant was commenced in the year 1982 with a clinker production capacity of 200 TPD (0.06 MTPA) which is later upgraded to 900 TPD (0.3 MTPA) i.e., Unit I, duly obtaining Consent for Operation (CFO) from Andhra Pradesh Pollution Control Board (TSPCB).The plant capacity was enhanced in the year 2003 for 0.5 MTPA Clinker Production after obtaining CFE from TSPCB vide TSPCB/PTN/53/HO/2003/74-1847 dt. 26.09.2003. Subsequently, DCL has setup a new unit i.e., Unit II adjacent to existing Unit I obtaining EC from MOEFCC vide J - 11011/572/2007-IA II(I) dated 27.12.2007 for Clinker production : 1.0 MTPA, Cement

production : 1.5 MTPA, Captive Power Plant : 15 Mega Watt (MW) coal based Captive power plant.Further EC was obtained from MOEFCC vide J-11011/572/2007-IA II(I) dated 11.05.2017 for enhancement of production of Unit II with Clinker production: 1.2 MTPA, Cement production: 1.5 MTPA, Captive Power Plant: 18 MW coal based Captive power plant.The Consent to Operation (CFO) was obtained from State Pollution Control Board from time to time and Current CTO is issued vide Order No. TSPCB/RCP/NLG/180/CFO&HWA/HO/2017-2916 dt 07.12.2017 is valid upto 31.12.2022. Consent for Operation (CFO) from TSPCB has also been obtained vide Order No. TSPCB/RCP/NLG/180/CFO&HWA/HO/2017-2916 dt 07.2.2017 Valid up to 31.12.2022.

6.7.7 Implementation status of the existing EC

S. No	CLEARANCES	CAPACITY/IMPLEMENTED
1	**Cement Plant – (Unit - I)** CFE Obtained vide APPCB/PTN/53/HO/2003/74-1847 dt 26.09.2003	Clinker production : 1450 TPD (0.50 MTPA)
2	**Cement Plant EC-1 (Unit - II)** EC obtained vide J - 11011/572/2007-IA II(I) dt 27.12.2007 from MoEF&CC	Clinker production : 1.0 MTPA Cement production : 1.5 MTPA Captive Power Plant : 15 Mega Watt (MW) coal based Captive power plant
3	**Cement Plant EC-2 (Unit – II under Clause 7(II))** EC obtained vide J - 11011/572/2007-IA II(I) dt 11.05.2017 from MoEFCC	Clinker production : 1.2 MTPA Cement production : 1.5 MTPA Captive Power Plant : 18 MW coal based Captive power plant
Cement Plant - CFO Order no. TSPCB/RCP/NLG/180/CFO&HWA/HO/2017-2916 dt 07.2.2017 Valid up to 31.12.2022		

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

Cement Plant	Present approved Capacity as per MoEF EC (MTPA)			Capacity after proposed enhancement (MTPA)		
	Clinker	Cement	Power (MW)	Clinker	Cement	Power (MW)
Unit – I	0.5	0.3	18	0.5	0.3	33MW • 18 MW Coal based power plant • 15 MW Waste Heat Recovery Power Plant
Unit – II	1.2	1.5		1.2	1.5	
Unit – III	-	-		1.5	2.2	
Total	**1.7**	**1.8**		**3.2**	**4.0**	

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

S. No	Material	Before Expansion	After Expansion	Source Locality	Distance, km	Mode of transport
1	Limestone	2.3	4.6	Captive Limestone Mines	adjacent	Road

S. No	Material		Before Expansion	After Expansion	Source Locality	Distance, km	Mode of transport
2	Gypsum		0.09	0.14	EID, Parry, Coramandal Fertilizers, Vizag.	450	Road
3	Fly ash		0.215	0.66	DCL Captive Power plant and VTPS, KTPP, KTPS, NTPC and ITC.	120	Road
4	Coal	Cement Plant	0.310	0.564	Singareni Collieries Company Ltd and Imported Coal	160	Rail
		Power Plant	0.16	0.16			
5	Pet Coke	Cement Plant	0.193	0.353	Indigenous	360	Rail
6	IR Laterite		0.113	0.212	Mulugu	60	Road
7	Iron Ore		0.0025	0.0047	Bellary	450	Road
8	AL Laterite		0.012	0.023	Rajahmundry	270	Road

6.7.10 The present water requirement for DCL Cement Plant complex is 2420 m^3/day of which 398 m^3/day is treated recycled wastewater from Power Plant. Water requirement for the proposed expansion is 1054 m^3/ day. The total water requirement after expansion is 3474 m^3/day of this about 857 m^3/day will be met from recycling of treated wastewater from the existing and proposed power plant's ETP of 1200 m^3/day. The net fresh water requirement of the plant will be 2617 m^3/day after expansion. The source of water is Krishna River. DCL has obtained necessary permission from Irrigation Department & CAD, Govt of Telangana vide G.O. MS No. 57 dated 26.08.2016 for drawl of 5,00,000 Gallons/day (2270 m3/day) for five year which is valid upto 24.06.2021. The permission is renewed vide G.O. MS No. 13 dated 30.03.2022 valid upto 24.06.2026. Further, DCL has obtained necessary permission from Irrigation Department, Govt of Telangana vide proceedings SE/IC-NLG/DEE/T3/2019-20 dated 02.10.2019 for water drawl from River Krishna at the rate of 1500 m3/day for five years valid upto 30.10.2024.

6.7.11 The peak power consumption in the DCL Cement plant complex including mine is 24 MW. The Power requirement is met from existing captive thermal power plant and grid. Additional power required for the proposed expansion is about 24 MW. Additional power requirement of 22 MW will be met from proposed 15 MW WHRB power plant and grid.

6.7.12 Baseline Environmental Studies:

Period	Winter Season, 2020-2021 (December'20, January 2021 and February 2021)
AAQ parameters at 09 Locations	PM10 = 46.7 to 61.8 µg/m3 PM2.5 = 20.6 to 31.5 µg/m3 SO2 = 7.0 to 13.4 µg/m3 NOx = 9.0 to 15.6 µg/m3 CO: less than 1 ppm
AAQ modelling (Incremental GLC)	PM10 = 11.3 µg/m3 - 0.50 km - ENE PM2.5 = 3.76 µg/m3 - 0.50 km - ENE

	SO2 = 5.0 µg/m3 - 1.5 km - WSW NOx = 8.96 µg/m3 - 1.5 km - WSW CO = 240 µg/m3 - 0.1 km - on transportation route Model used : AERMOD – Version 10.1
Ground water quality at 08 locations	pH = 7.02 – 7.58 Total Hardness = 253 - 596 mg/l Chlorides = 88-350 mg/l Fluoride = 0.23 – 1.13 mg/l Heavy Metals (Zinc) = 0.03 – 4.77 mg/l
Surface water quality at 08 Locations	pH: 7.62 to 7.92 ; DO: 4.7 to 5.9 mg/l; BOD: 03 to 06 mg/l ; COD from 14 to 27 mg/l
Noise Levels At 09 Locations	52.8 to 74.4.7dB (A) for the day time 41.3 to 67.8 dB (A) for the Night time.

Traffic assessment study Findings

- Traffic study carried out at Road connecting Cement plant and National Highway 167A (Miryalaguda Wadapalli Highway) which is approximately 5.5 km distance from the plant site.
  - Type of Road : Arterial - 2 lane divided (2 way) road
  - PCU limit : 1500 PCU per hour
- Transportation of raw material, fuel & finished product will be done 50% by road.
- Existing PCU is 299 PCU/hr on National Highway 167A and existing level of service (LOS) is A (Excellent)

Road	V (Volume in PCU/hr.)	C (Capacity in PCU/hr.)	Existing V/C Ratio	LOS
Cement plant and National Highway 167A	299	1500	0.19	A (Excellent)

- PCU load after proposed project will be 299 (Existing) + 88 (Additional) PCU/hr and level of service (LOS) will be:

Road	Existing V	Additional	C	Total	Existing V/C	LOS
Cement plant and National Highway 167A	299	44(88) Two way	1500	299+88=387	0.25	B (Very Good)

* Note: Capacity as per IRC-106:1990.

The Level of Service which is at present in A Category (Excellent)) will change to B Category (Very Good)

- **EMP MEASURES**
  - Closed trucks will be employed for transport of Materials/Products
  - Trucks Pollution Under Control (PUC) will be employed
  - Monitoring of trucks to ensure compliances such as covering of trucks by tarpaulin, spillage on roads etc.

- **PARKING FACILITIES:**

DCL has earmarked an area of 4.55 Ha for Parking facility with following

- 2 Ha Area for roads and free movement of trucks

• 0.75 Ha area for 250 vehices (@30 m2 /truck) • 0.90 Ha for greenbelt around the parking area • 0.90 Ha for facilities to truck drivers All facilities, such as canteen, toilets, rest rooms, etc. will be provided for truck drivers. Separate office building equipped with all communication and other infrastructure will be provided to the transporters.	
Flora and fauna	• Nearest Forest - Ravipahad RF – Adjacent - N Saidulnam RF – Adjacent - W • There are no Schedule-I species presented in study area.

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

Manufacturing Process:

- No solid waste will be generated.
- Dust collected from Pollution Control Equipment will be recycled back to the process

Plant Domestic Waste:

(Solid Waste Management considered in compliance SWM, 2016 rules)

Colony : Solid waste generated (garbage) - present is 36 t/month.
Additional 1.8 t/month.

Power plant: Ash generated - 280 T/day - used in cement manufacturing process

Hazardous Waste:

Sl. No	Type Of Waste	Source Name	Quantity		Treatment before disposal	Mode Of Disposal	Agreement Details For Disposal
			Existing	Additional			
1	Spent Oil	Cement Plant	22.54 KL/year	20 KL/year	None	Containers	Authorized Recycler
2	Waste grease	Cement Plant	3750 kg/year	3000 kg/year	None	Containers	Authorized Recycler

6.7.14 Public Consultation:

Details of advertisement given	07.11.2021: Deccan Chronicle" (English News Paper) and Namasthe Telangana (Telugu News Paper)
Date of public consultation	09.12.2021
Venue	Existing Cement Plant, Mahankaligudem Village, Palakeedu Mandal, Suryapet District, Telangana state
Presiding Officer	Chairmanship of Addl. Collector & Addl. District Magistrate, Suryapet District.
Major issues raised	1. Employment and Skill Development – Preference to locals and Skill development training programmed 2. Extend facilities to the labourers - All covered under Minimum Wages Act, ESI, PF and Bonus facilities. Medical camps will be conducted

	3. Develop Janpahad Darga – Already support extended – Further as per advise of the Darga committee. 4. Adopt and introduce latest technology to control pollution. – Already considered in design 5. Repair of roads - Village roads are being laid and repaired in the surrounding villages. 6. Leveling the site for the BC Gurukul School – DCL accepted; Budget provided 7. Payment of compensation to the lands acquired for laying the Railway line. – Property acquired by Railways 8. Display of road signs to avoid accidents. - DCL accepted; Budget provided 9. Take necessary precautions as blasting operations - Latest blasting techniques are used 10. Adopt Ravipahad village – CSR measures implemented and will be continued 11. Increase the area of plantation in plant - Green belt will be developed as per norms 12. Construction of Rain Water Harvesting Structures - DCL accepted; Budget provided 13. Takeup extensive plantations of trees should be taken up in the villages. - DCL accepted; Budget provided 14. Establish RO plants to cater to the drinking water needs of villages - DCL accepted; Budget provided

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

S. No	Activity		Year			Total (Rs Lakhs)
			2022-23	2023-24	2024-25	
SWATCH BHARAT						
1	Construction of 30 numbers of toilets 3 villages @ 1 lakhs each Toliets at Janpahd Dargha,	**Physical Nos**	10	10	10	**30**
		@Village	Ravipahad	Mahamkaigudem	Janpahad/Dargha	
		Budget Rs Lakhs	10	10	10	**30**
2	Providing LED street lighting with solar panels in 3 villages @ Rs. 25,000/- each	**Physical Nos**	20	20	20	**60**
		@Village	Mahamkaligudem (20 nos)	Ravipahad(20 nos)	Janpahad(20)	
		Budget Rs Lakhs	5	5	5	**15**
EDUCATION						
1	Leveling the site for the BC Gurukul School and site preparation.	**Physical Nos**	-	1	-	**1**
		@Village	-	Palakeedu	-	
		Budget Rs Lakhs	-	15	-	**15**
ROADS DEVELOPMENT						
1	Repair of internal village roads & drainages (Avg. 2 km of internal roads per village @ 15 Lakhs/km) – Villages	**Physical Nos**	1 km	1km	1km	5
		@Village	Mahmkaligudem	Ravipahad	Janpahad	
		Budget Rs Lakhs	15	15	15	**45**
2	Repair of Roads and Sign boards	**Physical Nos**	-	-	-	**3**
		@Village	Sunyapahad	Janpahad dargha-	-	
		Budget Rs Lakhs	20	20	-	**40**

S. No	Activity		Year			Total (Rs Lakhs)
			2022-23	2023-24	2024-25	
VILLAGE						
1	Development of Janpahad Rama Temple	**Physical Nos**	-	1	-	**1**
		@Village	-	Janpahad	-	
		Budget Rs Lakhs	-	5	-	**5**
DRINKINGWATER						
1	Provision of RO plants for drinking water in 3 villages @5 Lakhs per RO unit	**Physical Nos**	1	1	1	**3**
		@Village	Ravipahad	Kalmet thanda	Janpahad	
		Budget Rs Lakhs	5	5	5	**15**
SKILLDEVELOPMENT						
1	Providing skill development training to ITI &diploma passed local youth (for 15 members) per year in plants for a span of one year. Three batches of 12 each for 3 years. Monthly stipend @ Rs. 8150/pmfor1yeartoeachof the trainee.	**Physical Nos**	12 students/year	12 students/year	12 students/year	36
		@Village	**Local Youth from 10 km radius**			
		Budget Rs Lakhs	12	12	12	**36**
HEALTH CARE						
1	Medical Camps for Children and women Camp @ 5 Lakhs	**Physical Nos**	1	1	1	**3**
		@ Village	Mahmkaligudem, Ravipahad, Janpahad and Local thandas	Mahmkaligudem, Ravipahad, Janpahad and Local thandas	Mahmkaligudem, Ravipahad, Janpahad and Local thandas	
		Budget Rs Lakhs	5	5	5	**15**
2	Awareness programs on health and sanitation and providing PPEs for need Program @ 1 Lakhs	Physical Numbers	2	2	2	**6**
		@Village	Mahmkaligudem, Ravipahad, Janpahad and Local thandas	Mahmkaligudem, Ravipahad, Janpahad and Local thandas	Mahmkaligudem, Ravipahad, Janpahad and Local thandas	
		Budget Rs Lakhs	2	2	2	**6**
OTHERS						
1	Plantation under 'Telangana ku Haritha Haram" on the roads Sides, land allotted by Dist. Administration and forest departments. Local species Neem, Ravi, Jamun, amla and fruit breed etc – 30000 Saplings @Rs 200 per sapling	**Physical Nos**	10000 saplings	10000 saplings	10000 saplings -	30000
		@Village	Mahmkaligudem, Ravipahad, Janpahad and Local thandas	Mahmkaligudem, Ravipahad, Janpahad and Local thandas	Mahmkaligudem, Ravipahad, Janpahad and Local thandas	
		Budget Rs Lakhs	20	20	20	**60**
TOTAL BUDGET (In lakhs of rupees) – Implementation period - 3 years						**282**

6.7.15 The capital cost of the project is Rs. 600 Crores and DCL has spent about Rs 66 crores for installation of EMP measures and about Rs. 1.00 crores per Annum is being spent as recurring expenditure for maintenance. Under Expansion an amount of Rs. 60.0 crores is earmarked for implementation of environmental management plan and recurring cost of about Rs 1.14 crores

per annum is earmarked. The total manpower at the existing plant is 636. Additional manpower required for proposed expansion is 170. The EMP for the proposed project is as follows:

S.No	Description		Capital Cost (Rs. Crores)	Recurring Cost per annum (Rs. Crores)
1	Air Pollution	Air Pollution Control Equipment for Cement Plant	25.00	0.45
		Sheds & Silos for raw material storage	29.51	-
2	Industrial Vaccum Cleaner		1.00	-
3	Wastewater Management	Neutralization pit for WHRB CPP	2.50	0.1
4	Greenbelt development additional area of 8.0 Ha		0.30	0.15
5	Rainwater Harvesting Structures – 12 pits		0.55	0.05
6	Occupational Health (Initial medical examination for new recruits and Personal Protection equipment for all plant personnel		0.14	0.14
7	Environmental monitoring equipment		1.00	0.25
	Total		**60.00**	**1.14**

6.7.16 The cement plant is located in an area of 53.8 Ha. Additional land of 20.7 Ha and it is own land of DCL will be used for expansion. The required greenbelt as per norms is 33 % of the plant area. Thick green belt of width of 10m along the boundary has been developed. Species are plated in consultation with the local DFO. Greenbelt is developed in an area of 17.0 Ha as per EC (33 % of green belt) with 23000 saplings by planting. In the present area of 17 Ha also, the density of the trees will be enhanced to 2500 /Ha by gap filling with additional 19500 saplings. Apart from this, greenbelt will be developed in an additional area of 8.0 Ha vacant land, with about 20,000 saplings. Additional greenbelt will be developed in an area of 8.0 Ha vacant land.

PROPOSED GREENBELT DEVELOPMENT

Year	Area (Ha)		Number of saplings		Estimated budget (Rs. Lakhs)
	Fresh	Existing	Fresh	Existing	
2022-23	1.60	6.0	4000	6882	17.0
2023-24	1.60	6.0	4000	6882	17.0
2024-25	1.60	5.0	4000	5736	16.0
Total	**8.0**	**17.0**	**20000**	**19500**	**50.0**

6.7.17 Summary of violation under EIA, 2006/court case/show cause/direction: **PP informed that there is no court case related to this Cement Project**. However, there is cases related to mining project. Details are as below submitted by the PP:

(i) CASE FILED IN HON'BLE NATIONAL GREEN TRIBUNAL (NGT) - ORIGINAL APPLICATION NO. 33 OF 2016

A case was filed in National Green Tribunal (NGT) – South Zone, Chennai, in the case of Vakkanti Koteshwar Rao Vs Union of India and Ors in Original Application no. 33 of 2016,

claiming that the mining lease area falls nearer to a Historical place i.e. Janpahad Darga, praying for cancellation of lease for the so said illegal mining along with other allegations.

The case was disposed on 18.11.2021 by the Honorable NGT in favor of M/s Deccan Cements Limited. As per the TOR letter paragraph no. 17 (Page 3 of 11), Compliance report to the directions made by Honorable NGT in the Judgement is below Table

COMPLIANCE TO DIRECTIONS OF NATIONAL GREEN TRIBUNAL SOUTHERN ZONE, CHENNAI ON APPLICATION NO. 33 OF 2016 (SZ) JUDGEMENT ISSUED VIDE O.A. NO.33/2016 (SZ) DATED 18TH NOVEMBER, 2021

S. No	Points	8th Respondent Compliance status.
1	The Mining Department is directed to ascertain the excess quantity of limestone mined over and above the permission granted under the Mining Plan and assess the value of excess mining done in tune with the directions issued by the Hon'ble Apex Court in *Common Cause Vs. Union of India(2017) 9SCC 499* and recover the amount from the 8th Respondent, after following the due process in accordance with law.	Department of Mines and Geology, Govt. of Telangana vide demand notice no. 2141/DCL/SRPT/2021 dated 12.02.2022 has served a demand amount of Rs 18,63,64,200 /- (Eighteen crores sixty three lakhs, 64 thousand and two hundred rupees) for excess quantity of 4,11,400 MT. DCL has paid the amount on 28.02.2022 Action drop letter on DCL was issued by Department of Mines and Geology on 05.03.2022
2	The Mining Department is also directed to ascertain the quantity of limestone mined simultaneously done in the Mine–3 Plot while undergoingmining in Mine–2 Plot against the Environmental Clearance (EC) and assess the value of the same, as this will amount to illegal mining as has been observed by the Hon'ble Apex Court in *Common Cause* case and recover the amount from the 8thRespondent, after following due procedure in accordance with law.	-do-
3	We do not find any reason to interfere with the findings of the Joint Committee that only 8.02Ha. of forest land has been encroached upon by the 8th Respondent and steps have already been taken by the 8th Respondent and the Government for regularization of the same by applying the Forest(Conservation)Act,1980.	Forest clearance regularization Stage –I, (In-principle) approval is accorded by MoEF & CC. Conditions imposed in Stage –I are being complied DCL has paid Rs 5.78 crores (CAMPA Fund) & 1.20 crores (Compensatory Afforestation) to CA PD Account of DFO, Suryapet. Further An amount of Rs 80 Lakhs is paid to Bio Diversity Conservation Society of Telangana towards Wild Life Mitigation Plan
4	The right of the applicant to challenge the final Stage-2 approval granted under Section 2 of the Forest (Conservation) Act, 1980 before the appropriate forum in this regard is left open	NA

S. No	Points	8th Respondent Compliance status.
5	The 8th Respondent is directed to comply with all the directions issued by the Telangana State Pollution Control Board for the purpose of maintaining the Ambient Air Quality and sound pollution to avoid complaints in this regard in future.	Accepted and operating as per the Direction of TSPCB and informing and updating proceedings time to time
6	The Telangana State Pollution Control Board is directed to periodically inspect the operation of the 8thRespondent unit and if there is any violation found, they are directed to take appropriate action against the 8thRespondent in accordance with law, including imposition of environmental compensation for the violation (if any) committed	NA
7	We do not find any reason to direct the Forest Department to initiate the prosecution against the 8thRespondent especially when they have decided to regularize the encroachment by invoking the Forest (Conservation) Act,1980.The question as to whether the conditions imposed for regularization including the afforestation etc. will be sufficient or not can be left open to be considered in the appeal to be filed by the applicant against the final Stage–2 approval granted for this purpose under Section 2 of the Forest (Conservation)Act,1980 as provided under Section 16 of the National Green Tribunal Act, 2010.	NA
8	The Mining Department is directed to periodically inspect the mining areas of the 8thRespondent unit so as to ascertain as to whether any excess mining is being done by the 8thRespondent and if it is found on inspection later, then they are directed to take appropriate action against the 8thRespondent in accordance with law.	NA
9	Considering the circumstances, parties directed to bear their respective costs in the application.	Complied
10	The Registry is directed to communicate this order to the Telangana State Pollution Control Board, Director of Mines and Geology, Hyderabad, Integrated Regional Office, Ministry of Environment, Forests &Climate Change (MoEF&CC), Hyderabad and also to the Ministry of Environment, Forests &Climate Change (MoEF&CC), New Delhi for their	

S. No	Points	8th Respondent Compliance status.
	information and compliance of the directions issued.	

(ii) CASE FILED IN HONOURABLE HIGH COURT – TELANGANA STATE

The judgement of Hon'ble NGT was challenged by the same Petitioner in High Court of Telangana State vide case no 32902 dated 04.12.2021. The case was listed for hearing on 02/02/2022 wherein the Hon'ble Court has directed that "Till the next date of hearing, the respondent no 14 (M/s. Deccan Cement Limited) is restrained from carrying out any mining activity in respect of mining lease no 3. However, it shall be open to the respondent no 14 to file an appropriate application before this court in case they complete all formalities for proceeding ahead with the mining activities".

In this context, M/s DCL duly filed the Review Petition on 03.02.2022. Further, Writ PIL Petition with case no. 26/22 dated 21.02.2022 with connected case of WP 0032902/2021 was filed by Mr. Panthangi Lakshmi Narsimha Rao. Details of Writ PIL Petition alongwith proceedings of Hon'ble High Court of Telangana.

Hon'ble High Court of Telangana, by an order dated 16.02.2022, has directed the Union of India to inform the Court whether in respect of third mine, Environment Clearance Certificate has been granted or not.

An affidavit dated 15.03.2022 has been filed by the Union of India and in the light of the categorical statement in the affidavit filed by the Union of India as well as by the learned counsel for Union of India, the interim **order granted by Hon'ble High Court of Telangana is vacated vide Order dated 30.03.222 and permitted to continue the operations**. Further proceedings are in progress.

(iii) SHOWCAUSE NOTICE BY HONOURABLE HIGH COURT TELANGANA STATE

M/s DCL has received a show cause notice on 26.04.2022 from Hon'ble High Court of Telangana on petition of 17733 of 2022 regarding a dispute of Land of 2.22 acres which is under the possession of M/s Deccan Cements Limited. DCL reported that they are filing the reply, once High Court resume operations after the summer vacation in June, 2022 with following facts:

- The disputed land of 2.22 acres is not part of project area.
- Disputed land is under possession of DCL since 2009 but complaint is raised in 2022, after 13 years due to the vested interest.
- DCL has all authorized properly mutated documents from the revenue department.
- DCL will produce all the relevant documents to MOEFCC as and when necessary.

(iv) SHOW CAUSE NOTICE ISSUED BY MOEFCC TO DCL

DCL has been issued show cause notice vide letter no. SCN No. F.No. J-11014/29/2021 – IA-I(M), dated 05.08.2021 by MoEFCC for the non-compliance of the EC condition issued to the captive limestone mine vide letter 11015/642/2007-IA.II (M) Dated 18.10.2007. Personal

Hearing was held with MoEFCC on 24.09.2021. The course of action decided by MoEF&CC is given below:

i. Taking into account the facts and evidences presented both from the government and the project proponent, the contention and reasoning presented by the PP for undertaking the referred activity against the EC condition, does not appear to be justifiable. Accordingly, undertaking mining in ML-3 simultaneously with ML-2 before exhaustion of mineable ore of ML-2 between the period of first EC dated 18.10.2007 and the next EC dated 05.01.2017, wherein the capacity of ML-3 was increased from 0.3 MTA to 2.3 MTA and the specific condition (iii) of EC dated 2007 was amended, is being considered as a serious violation.

ii. Accordingly, the Judgment dated 2nd August, 2017ofHon'ble Supreme Court in Writ Petition No.114/2014 in the matter of Common Cause Vs UoI become applicable in the extant matter. It was held in the matter that wherever violation was carried out with regard to the Water (Prevention and Control of Pollution) Act1974, The Forest(Conservation) Act1980, Air (Prevention and Control of Pollution) Act,1981 and the Environment (Protection) Act, 1986,100% of the cost value of the illegally mined mineral needs to be compensated by the mining entity / project proponent. Accordingly, State Govt. shall be asked to take action under the Common cause for recovering the compensation, as applicable.

iii. Further, with reference to Show cause Notice dated 16.08.2021 issued by the Ministry for the above cited violation, CPCB shall impose compensation as applicable for the extant violation, which shall be derived on the basis of calculations as per their guidelines.

(v) SHOW CAUSE NOTICE ISSUED BY DY. DIRECTOR OF MINES AND GEOLOGY, GOVT OF TELANGANA: DCL has been issued show cause notice vide no. 2141/DCL/SRPT/2021 dated 30.12.2021 by Office of the Dy. Director of Mines and Geology, Govt. of Telangana on the violation noticed on the EC issued by the MOEFCC for the noncompliance of the EC condition issued to the captive limestone mine vide letter 11015/642/2007-IA.II (M) Dated 18.10.2007. DCL has requested to extend the time for replying to the show cause notice till 10.02.2022

Certified compliance report from Regional Office

6.7.18 The Status of compliance of earlier EC was obtained from Regional Office, Chennai, MoEFCC, dated 18.12.2020 in the name of M/s. Deccan Cement Limited (DCL). Date of Site Visit on 24 & 25.10.2020. Action Taken Report/Action Plan for the NCs raised on EC J - 11011/572/2007-IA II(I) dated 27.12.2007 Submitted to Regional Office, Hyderabad on 10.05.2022:

A. Action Taken Report/Action Plan for the NCs raised on EC J - 11011/572/2007-IA II(I) dated 27.12.2007

Clinker production : 1.0 MTPA; Cement production : 1.5 MTPA; Captive Power Plant: 15 Mega Watt (MW) coal based Captive power plant

S. No	Conditions	Certified compliance report	Action Taken/Action Plan
i).	Electrostatic precipitators (ESPs) to clinker cooler, AFBC	ESP is provided to clinker cooler and AFBC boiler. RABH is provided to Raw mill /Kiln and bag filters are provided to lime stone crusher, coal	All the emission level are monitored regular basis by third party monitoring agencies, all the ESP and Bag Filter are

S. No	Conditions	Certified compliance report	Action Taken/Action Plan
	boiler, cyclones to preheaters and reverse air bag house to raw mill /kiln and bag filters to lime stone crusher, coal mill, cement mills places shall be provided to control air emissions from various sources. Nox burners shall be installed to reduce NOx emissions, continuous monitoring system to monitor gaseous emissions shall be provided and limit of SPM shall be controlled within 50mg/Nm3 by installing adequate air pollution control system. Monitoring data shall be submitted to ministry's regional Office at Chennai, APPCB and CPCB regularly	mill, cement mills areas. Low Nox burners are provided in the kiln to minimize Nox emissions. Online continuous monitoring systems are provided in the stacks and real time data is uploaded to the TSPCB as well as CPCB servers. Apart from this, periodically third party also monitors emission level in stacks and ambient air quality. The stack emission level is controlled and it is with in 30 mg/Nm3. The emission monitoring data are submitted to MoEFCC, RO, TSPCB and CPCB regularly. The PA informed that the pollution control equipment's are upgraded as per the ministry's G.S.R no.612 (E) dated 25.08.2014 and its amendments with respect to meet the particulate matter So2 and Nox (photograph No1-11) Annexuer-1,2,6	upgraded with new Membrane bags to minimum emissions which meets all the requirements of MOEFCC.
ii)	The total water requirement from Krishna river shall not exceed 355 M3/day all the treated waste water shall be recycled and reused in the process and /or fro dust suppression, green belt development and other plant related activities etc . No	The Project authority (PA) drawing water from Krishna river with approval from Govt. of Andhra Pradesh (Earlier)(Now Telangana) Authority to Draw 5 Lakhs gallons per day . The PCB also issued consent to draw 2420 M3/day. The PA is drawing 1800 M3/day now to meet the requirement of unit 1&2 of the cement plant. For WHRB which is under construction, the water requirement is another 1500 m^3/day and for that (2420+1500=3920 m^3/day) also they have obtained the	PP has approvals from Andhra Pradesh earlier and now Telangana State Government for drawl of water from Krishna river for Unit-I as per CTE/CTO EIA report clearly mentioned water consumption as 1900 m3/day and wastewater as 355 m3/day. Due to typographical error while issuing EC for Unit –II, wastewater quantity is reflected as Water requirement. Copy of water Balance given in

S. No	Conditions	Certified compliance report	Action Taken/Action Plan
	process waste water shall be discharged outside the factory premises and zero discharge shall be adopted. Domestic effluent treated in the septic tank followed by soak pit and used for green belt development within the plant colony area	permission from Govt. of Telangana, Irrigation & CAD department, as per EC the permitted quantity is 355 M3/day now and for this they have not obtained the amendment/permission from the ministry. There is no process effluent, they have provided STP for their colony and canteen waste water. The sewage is treated sewage is used for green belt development. Zero discharge is followed.	EIA report based on which EC is granted**.** The same quantity is also mentioned to MOEFCC while obtaining second EC. PP has started water harvesting in the mined-out pits and using the same water for plant operations Balanced water will used from Krishna River, Water cooled condensers will be converted in to air cooled within three years which will be reduce water consumption. In future.
	The Proiect Authorities shall inform the Regional Office as well as the Ministry, date of financial closure and final approval of the project by the concerned authorities and date of commencing the land development work.	It is an expansion work of the existing cement plant some up gradation of some machineries. However during this visit, PA informed that land development work stared on 08.05.2008 and date of Fincial closure was on 30.06.2009	During initial stages the land development was carried out by our own no support was been rendered by the financial agencies, the funds used from our operational plant as it is the expansion and once the loans sanction, PP has started full-fledged. Once PP has received the closer certificated from the Financial agencies, PP has submitted the same to the ministry.

B. Action Taken Report/Action Plan for the NCs raised on EC J-11011/572/2007-IA II(I) dated 11.05.2017

Clinker production : 1.2 MTPA; Cement production : 1.5 MTPA; Captive Power Plant: 18 Mega Watt (MW) coal based Captive power plant

SPECIFIC CONDITION:

S. No	Conditions	Certified compliance report	Action Taken/Action Plan by PP
iv.	Efforts shall be made to achieve power consumption of 70 Units /Tones for Portland Pozzolona Cement (PPC) and 95 units /tone for Ordinary Portland	Mandatory energy audit is carried out on regular basis and based on recommendations, modification are carried out. As stated they have achieved power consumption of 67.31 units for PPC, 88.64 units for OPC during the year 2019-2020. Thermal	Process modification are being implemented as per the energy audit recommendations next audit finding will certify the Heat value. PP has installed RDF feeding system which will also contribute

S. No	Conditions	Certified compliance report	Action Taken/Action Plan by PP
	Cement (OPC) production and thermal energy consumption of 670 Kcal/ Kg of clinker.	consumption is 742.39 Kcal/Kg clinker during the year 2019-20.	in reduction of the overall heat consumption and brings closer to the required thermal consumption.
vi.	Efforts shall be made to further reduce water consumption by using air cooled condensers. All the treated wastewater shall be recycled and reused in the process and /or for dust suppression and green belt development and other plant related activities etc No process wastewater shall be discharge outside the factory premises and 'zero' discharge shall be adopted.	Air cooled condenser is not provided instead water cooled condenser is installed part of mine pit water is used for green belt development as well as dust suppression. There is no trade effluent except the waste water from the oil and grease trap system of their work shop. The treated water is used for green belt development. Sewage is treated in the STP and the treated sewage is also used for green belt development. No process waste water is discharged outside and zero discharge is being adopted.	Within three year i.e by the end of 2025 we will convert our water cooled condensers into air cooled condensers, Technical quotations received and we are as per the execution plan. For conversion of water condenser to Air cooled condensers
vii.	Efforts shall be made to make use of rainwater harvested. If needed, capacity of the reservoir shall be made enhanced to meet the maximum water requirement. Only balance water requirement shall be met from other sources.	Rain water is collected and stored in the mine pits of ML-2 and ML-3. The PA information that the capacities of the pits are sufficient to store the maximum rain water collection. The collected rain water is used for CPP, green belt development and dust suppression activities. The balance water requirement is met from Krishna River Capacity is sufficient for the Plant Operations.	Volume of Pit Size are as follows ML-2 = 540900 cum ML-3 = 136372 cum The Pit volumes will increase as per the need.
viii.	Greenbelt shall be developed in 33% of the project area within the plant premises with at least 10-meter wide green belt on all sides along the periphery of the project area, along road sides etc. By planting native and board leaved species in consultation with local	The PA has developed 33% of green belt in the cement plant as well as colony area . 10 m wide green belt on all side of periphery of the project is not developed. However they have taken up plantation wherever possible in and around cement plant area as well as colony area in consultation with the local forest department. Plantation details are given in Annexure -5	Gap Plantation is under progress New areas developed as per the green belt development program (Haritha-Haram) under surveillance by state government.

S. No	Conditions	Certified compliance report	Action Taken/Action Plan by PP
	DFO and local communities as per the CPCB guidelines.	Enclosed plantation Photograph no 15-44.	
xii.	The project proponent shall provide for solar light system for all common area, streetlights, village, and parks around project area and maintain the same regularly.	So far the solar lighting system is not installed and the PA informed this system will be installed and maintain.	15 Solar Lights are implemented in the areas of Guest House, Mines, colony and school
xiii.	The project proponent shall provide for LED lights in their office and residential areas.	As informed by the PA in new constructions LED lights are provided. Further informed that whenever old lights are failed or damaged, the same are replaced with LED lights.	LED lights are implemented. It is a continuous process. The number of LED lights provided.

B. GENERAL CONDITIONS:

S. No	Conditions	Certified compliance report	Action Taken/Action Plan
i.	The project authorities must strictly adhere to the stipulations made by the Telangana Pollution Control Board and the State Government.	As stated in point No. Specific Conditions (iii) the stack emission levels were beyond the stipulated limits and the PCB directed the PA to pay an amount of 28.2 Lakhs and for that the PA also made the payment. Through measures are taken to control the fugitive dust, it needs some more improvement. Annexure-3	PP has made the payment on 13.11.2020
iv	Industrial waste water shall be properly collected, treated so as to conform to the standards prescribed under GSR 422 (E) dated 19th May, 1993 and 31st December	There is no industrial waste water except small quantity of wastewater generated from the oil and grease trap. The treated water is used for green belt development. STP is provided for treating the sewage which is generated from the colony,	New ETP constructed Wet lands technology for 1000 KL and the regenerated water is used for Green Belt Development in the plant and colony

S. No	Conditions	Certified compliance report	Action Taken/Action Plan
	1993 or as amended form time to time. The treated wastewater shall be utilized for plantation purpose.	cement plant areas. The treated sewage is monitored by an external agency and after confirming the standard, the same is used for green belt development,	
viii	The project proponent shall also comply with all the environmental protection measures and safeguards recommended in the EIA/EMP report. Further , the company must undertake socio-economic development activities in the surrounding villages like community development programmes, educational programmes, drinking water supply and health care etc.	Generally the PA implementing all the EIA/EMP recommendations except fugitive dust control which requires some more improvement. Note and also undertaken as such 1. Free Primary & secondary education is provided to surrounding villagers up to 10th class by DCL High school. 2. Drinking water is provided to nearby villagers; during summer, water is carted to surrounding villagers by tankers. 3. Primary health Centre is run by company and qualified Doctor available 24 X 7, OHS serves all needy during emergency.	PP has installed new water sprinkler in plant and some more are been procured for new location identified.
xiii	The environmental statement for each financial year ending 31st March in form-V as is mandated to be submitted by the project proponent to the concerned State Pollution Control Board as prescribed under the Environment (Protection) Rules, 1986 as amended subsequently, shall also be put on the website of the company along with the status of compliance of environmental conditions and shall also be sent to the respective Regional	The PA submitting the Form –V (hard copy) every year to PCB as well as MoEF, RO and not by e-mail. The compliance status is uploaded on the company's website.	Soft copy emailed

S. No	Conditions	Certified compliance report	Action Taken/Action Plan
	Office of the MOEF&CC at Chennai by e-mail.		
xv	Project authorities 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 and the date of commencing the land development work.	It is an expansion work of existing cement plant some up gradation of some machineries. However the data start of work and final approval of all concerned authorities were not informed to Regional Office.	Complied

6.7.19 The project proponent had earlier applied for EC vide proposal no. IA/TG/IND/253087/2016 dated 02/02/2022 and the proposal was considered in 53rd meeting of the Re-constituted EAC (Industry-I) held on 10th-11th February, 2022 wherein the Committee made the following observations and recommendations.

Observations of the Committee (EAC during 10-11th February, 2022)

The Committee noted the following:

i. The limestone requirement for the proposed expansion project will be met from their captive Bhavanipuram Limestone Mine only. No alternative has been indicated by the proponent.
ii. The Hon'ble High Court of Telangana vide its Order dated 2/02/2022 restrained the project proponent from carrying out any mining activity in their captive Bhavanipuram Limestone Mine (Mining Lease No. 3)

Recommendations of the Committee (EAC during 10-11th February, 2022)

In view of the foregoing and after deliberations, the Committee recommended to return the proposal in its present form and submit the revised application as per the provisions of EIA Notification, 2006 based on the outcome of the Writ Petition No. 32902 dated 2021 pending before the Hon'ble High Court of Telangana.

6.7.20 The project proponent has again applied for EC vide proposal no. IA/TG/IND/266850/2016 dated 11/05/2022 submitting the revised application as per the provisions of EIA Notification, 2006. The proposal is considered in the 6th meeting of the EAC held on 30-31st May, 2022.

6.7.21 During the meeting, project proponent submitted written submission on the following points:

i. PP commits to implement air cooled condensation system for 18 MW operating coal based captive power plant in place of existing water cooled condensation system by the financial year 2023.
ii. PP commits to complete the gap filling for increasing the density from 1350 to 2500 tree /Ha by planting additional sapling of 19550 (2500-1350 = 1150 saplings X17 Ha =

19550) by Monsoon,2022. The budget for the same is increased from Rs 29.32 Lakhs to Rs 58.65 Lakhs (@Rs 300/sapling).

iii. PP commits to increase proposed plantation around the cement plant and surrounding villages from 1.0 Lakh saplings to 2.0 Lakh saplings with completion within five years.

iv. PP commits to monitor Dioxins and Furans in Kiln stack whenever hazardous waste is fired.

v. PP has a copy of permission for blasting in the mine adjacent to cement plant as per regulation 106 (2)(B) and 164 (1A) (Special Permission) for Metalliferous Mines Regulations, 1961.

vi. PP commits to adopt the following six villages, Ravipahad, Mahankaligudem, Janpahad Darga, Janpahad,Kalmetthanda and Sunyapahad to provide required facilities.

vii. PP is collecting the E-Waste generated from the plant and colony and handing over the same to Authorised recyclers. Copy of the document showing the implementation submitted.

viii. PP at present proposed to implement 5 MW Solar Power. The same will be increased to 10 MW after obtaining the necessary permission from Govt of Telangana.

Deliberations by the Committee

6.7.22 The Committee noted the following:

1. 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.
2. 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.
3. 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.
4. The Committee has also found that the baseline data and incremental GLC due to the proposed project within NAAQ standards.
5. The project site involves Forest land of 8.02 Ha. For which Stage – I Forest clearance was obtained from MoEF&CC vide letter no F. No. 4-TSC182/2021-HYD/116 dated 30th July, 2021.
6. There are 5 litigations were against the mining project, viz. OA No. 33 of 2016 in Hon'ble NGT, Case no 32902 dated 04.12.2021 (filed in Hon'ble High Court of Telangana), Show cause notice dated 26.04.2022 from Hon'ble High Court of Telangana on petition of 17733 of 2022, SCN vide letter no. F.No. J-11014/29/2021 – IA-I(M), dated 05.08.2021 by MoEFCC and SCN vide no. 2141/DCL/SRPT/2021 dated 30.12.2021 by Office of the Dy. Director of Mines and Geology, Govt of Telangana as mentioned in para 6.7.17 above.

EAC noted that these cases/directions related to mining projects and not for the Cement Plant.

7. W.r.t. to the observation of EAC in earlier meeting regarding The Hon'ble High Court of Telangana Order dated 2/02/2022 restraining the project proponent from carrying out any mining activity in their captive Bhavanipuram Limestone Mine (Mining Lease No. 3), PP has submitted that an affidavit dated 15.03.2022 has been filed by the Union of India and in the light of the categorical statement in the affidavit filed by the Union of India as well as by the learned counsel for Union of India, the interim order granted by Hon'ble High Court of Telangana is vacated vide Order dated 30.03.2022 and permitted to continue the operations. Further proceedings are in progress.
8. Total 65 villages are existing in the periphery of the project within 10 km radius. As committed by the PP, six number of villages may be adopted by the company for their socio-economic development.
9. The Committee deliberated on the action plan and budget allocation for green belt development and noted that as committed by the PP the green belt development shall be completed within one year.
10. The committee deliberated details of carbon foot prints and carbon sequestration study w.r.t. proposed project and found 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 Committee deliberated upon the certified compliance report of IRO as well as action taken report submitted by PP with respect to the observations reported by IRO and found it satisfactory.
13. The EAC also deliberated on the written submissions submitted by the proponent and found it satisfactory.
14. The EAC deliberated on the proposal with due diligence in the process as notified under the provisions of the EIA Notification, 2006, as amended from time to time and accordingly made the recommendations to the proposal. The Experts Members of the EAC found the proposal in order and recommended for grant of environmental clearance.
15. The environmental clearance recommended to the project/activity is strictly under the provisions of the EIA Notification 2006 and its subsequent amendments. It does not tantamount/construe to approvals/consent/permissions etc. required to be obtained or standards/conditions to be followed under any other Acts/ Rules/ Subordinate legislations, etc., as may be applicable to the project. The project proponent shall obtain necessary permission as mandated under the Water (Prevention and Control of Pollution) Act, 1974 and the Air (Prevention and Control of Pollution) Act, 1981, as applicable from time to time, from the State Pollution Control Board, prior to construction & operation of the project.

Recommendations of the Committee:

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

(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 water bodies passing adjacent to project site within the study area shall not be disturbed. Detailed mitigation measures to prevent any impacts on the water bodies needs to be prepared and implemented.

(iii) The company 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 activities and the action plan proposed by the project proponent to address the issues raised during public hearing and socio-economic issues in the study area shall be completed as per the schedule presented before the Committee and as described in the EIA report in letter and spirit.

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

(vii) Three tier Green Belt shall be developed in a time frame of one year covering 33% of the total land 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.

(viii) 3474 m^3/day KLD of water requirement after the proposed expansion shall be met from recycling of treated wastewater from the existing and proposed power plant's ETP and Krishna River after obtaining requisite permission from the Competent Authority. No ground water abstraction is permitted.

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

(x) Slip roads shall be provided at the gates and along crossings on main roads.

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

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

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

(xiv) Project proponent shall develop separate drainage system for storm water and industrial waste water and effectively prevent the pollution of natural waterbody.

(xv) Rain water harvesting shall be carried out as per the action plan submitted in the EIA report.

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

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

(xviii) The recommendations of the approved Site-Specific Conservation Plan / Wildlife Management Plan shall be implemented in consultation with the State Forest Department.

The implementation report shall be furnished along with the six-monthly compliance report to the concerned Regional Office of the MoEF&CC.

B. General conditions

I. Statutory compliance:

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

II. Air quality monitoring and preservation

i. The project proponent shall install 24x7 Continuous Emission Monitoring System (CEMS) at process stacks to monitor stack emission as well as 4 Nos. Continuous Ambient Air Quality Station (CAAQS) for monitoring AAQ parameters with respect to standards prescribed in Environment (Protection) Rules 1986 as amended from time to time. The CEMS and CAAQMS shall be connected to SPCB and CPCB online servers and calibrate these systems from time to time according to equipment supplier specification through labs recognized under Environment (Protection) Act, 1986 or NABL accredited laboratories.

ii. The project proponent shall monitor fugitive emissions in the plant premises at least once in every quarter through labs recognized under Environment (Protection) Act, 1986.

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

iv. The project proponent shall ensure covered transportation and conveying of ore, coal and other raw material to prevent spillage and dust generation; Use closed bulkers for carrying fly ash;

v. The project proponent shall provide wind shelter fence and chemical spraying on the raw material stock piles;

vi. Ventilation system shall be designed for adequate air changes as per the prevailing norms for all tunnels, motor houses, and cement bagging plants.

III. Water quality monitoring and preservation

i. The project proponent shall install 24x7 continuous effluent monitoring system with respect to standards prescribed in Environment (Protection) Rules 1986 vide G.S.R. No. 612 (E) dated 25thAugust, 2014 (Cement) and subsequent amendment dated 9thMay, 2016 (Cement) and 10th May, 2016 (in case of Co-processing Cement)as amended from time to time; S.O. 3305 (E) dated 7th December 2015 (Thermal Power Plants) as amended from time to time) and connected to SPCB and CPCB online servers and calibrate these system from time to time according to equipment supplier specification through labs recognized under Environment (Protection) Act, 1986 or NABL accredited laboratories.

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

iii. Sewage Treatment Plant shall be provided for treatment of domestic wastewater to meet the prescribed standards.

iv. Garland drains and collection pits shall be provided for each stock pile to arrest the run-off in the event of heavy rains and to check the water pollution due to surface run off
v. Water meters shall be provided at the inlet to all unit processes in the cement plant.
vi. The project proponent shall make efforts to minimize water consumption in the cement plant complex by segregation of used water, practicing cascade use and by recycling treated water.

IV. Noise monitoring and prevention

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

V. Energy Conservation measures

i. Waste heat recovery system shall be provided for kiln and cooler.
ii. The project proponent makes efforts to achieve power consumption less than 65 units/ton for Portland Pozzolona Cement (PPC) and 85 units/ton for Ordinary Portland Cement (OPC) production and thermal energy consumption of 670 Kcal/Kg of clinker.
iii. Provide solar power generation on roof tops of buildings, for solar light system for all common areas, street lights, parking around project area and maintain the same regularly.
iv. Provide the project proponent for LED lights in their offices and residential areas.

VI. Waste management

i. Used refractories shall be recycled as far as possible.

VII. Green Belt

i. PP shall undertake the backlog and gap filling of greenbelt work@ 2500 plants/hectare in the 2022 monsoon season itself and shall accordingly increase the budget for green belt purpose.
ii. 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.
iii. Project proponent shall submit a study report within six months on De-carbonization program, which would essentially consist of company's carbon emissions, carbon budgeting/ balancing, carbon sequestration activities and carbon capture, use and storage 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 monitor able with defined time frames.

VIII. Public hearing and Human health issues

i. Emergency preparedness plan based on the Hazard identification and Risk Assessment (HIRA) and Disaster Management Plan shall be implemented.
ii. The project proponent shall carry out heat stress analysis for the workmen who work in high temperature work zone and provide Personal Protection Equipment (PPE) as per the norms.
iii. Occupational health surveillance of the workers shall be done on a regular basis and records maintained.

IX. Environment Management

i. The project proponent shall comply with the provisions contained in this Ministry's OM vide F.No. 22-65/2017-IA.III dated 30/09/2020. As part of Corporate Environment

Responsibility (CER) activity, company shall adopt six villages namely Ravipahad, Mahankaligudem, Janpahad Darga, Janpahad, Kalmetthanda and Sunyapahad based on the socio-economic survey and undertake community developmental activities in consultation with the village Panchayat and the District Administration as committed.

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

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

X. Miscellaneous

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

Consideration of Amendment/Modification in TOR Proposal

Agenda No. 6.8

6.8 Establishment of DRI Kilns (Sponge Iron- 2,31,000TPA), Indusction Furnace with concast (Billets/ingots /Hot Billets – 3,30,000 TPA), Rolling Mill (2,64,000 TPA), Power Generation – 40 MW (20 MW through Waste Heat Recovery Boiler (WHRB) and 20 WM through Fluidized bed combustion (FBC) Boiler) by M/s. Rama Power and Steel Pvt. Ltd. located at Sy. No. 38/1, 41/1, 42/1 & 2, 43/2, 45/1, 46/3 & 4, 47/1 & 22, 57/1 & 2, CSIDC – 58/1-2, Village: Khamaria, Tehsil: Tehsil: Tilda, District: Raipur, Chhattisgarh - Consideration of Amendment in TOR.

[Proposal No. IA/CG/IND/267097/2022; File No. J-11011/278/2020-IA.II(I)]
[Consultant: M/s. Pioneer Enviro Laboratories And Consultants Pvt Ltd; valid upto 21.09.2022]

6.8.1 M/s. Rama Power and Steel Pvt. Ltd.has made an application online *vide* proposal no. IA/CG/IND/267097/2022 dated 05.05.2022 along with Form 3, revised Form-1 and revised PFR seeking amendment in Terms of Reference accorded by the Ministry vide letter no. J-11011/278/2020-IA-II (I) dated 14.12.2020. 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 and appraised at central level.

6.8.2 Name of the EIA consultant: M/s. Pioneer Enviro Laboratories And Consultants Pvt Ltd. [S No 138, List of ACOs with their Certificate / Extension Letter No: NABET/EIA/1922/SA0148 valid till 21.09.2022; Rev. 23, May 09, 2022].

Details submitted by Project proponent

6.8.3 M/s. Rama Power & Steel Pvt. Ltd. had earlier applied for grant of ToR vide proposal no. IA/CG/IND/182361/2020 dated 07.11.2020for Greenfield project comprising of 2x350 TPD

DRI Kiln (2,31,000 TPA), 5x20 T Induction Furnace (3,30,000 TPA), 1x800 TPD Rolling Mill (2,64,000 TPA), Power Generation – 40 MW (20 MW through Waste Heat Recovery Boiler (WHRB) and 20 MW through Circulating Fluidized bed combustion (CFBC) Boiler)] located at Village – Khamaria, Tehsil – Tilda, District - Raipur, Chhattisgarh. The proposal was considered in 25th meeting of the Reconstituted Expert Appraisal Committee (Industry- 1) held on 25th November, 2020. Accordingly TOR was issued vide letter no. J-11011/278/2020-IA-II (I) dated 14th December, 2020.

6.8.4 The instant proposal is for seeking amendment in ToR dated 14.12.2020 with respect to revised Plant configuration and water with drawl.

6.8.5 Changes in configuration & capacity of units in granted ToR vis-à-vis with proposed ToR are as follows:

S. No.	Units (Products)	Plant configuration & production capacities as per ToR issued by MOEF&CC dated 14th December, 2020	Plant configuration & production capacities (Proposed Amendment)
1.	DRI Kilns (Sponge Iron)	2 x 350 TPD (2,31,000 TPA)	**2 x 200 TPD (1,32,000 TPA)**
2.	Induction Furnace with Concast (MS Billets / Hot Billets)	5 x 20 T (3,30,000 TPA)	**4 x 15 T (1,98,000)**
3.	Rolling Mill (Structural Steel & Rolled products)	1 x 800 TPD (2,64,000 TPA)	**1 x 400 TPD (1,32,000 TPA)**
4.	Power generation through WHRB (Electricity)	20 MW	**10 MW**
5.	Power generation through CFBC (Electricity)	20 MW	**10 MW**
Addition of following facilities:			
6.	**Fasifier for RHF**	**--**	**1190 Nm^3/Hr**
7.	**Ferro Alloys Unit (FeSi / FeMn / SiMn / FeCR / Pig Iron)**	**--**	**2 x 9 MVA (FeSi – 14,000 TPA/ FeMn – 50,400 TPA / SiMn – 28,800 TPA / FeCr – 30,000 TPA / Pig Iron – 47,500 TPA)**
8.	**Briquetting Plant**	**--**	**200 Kg/hour**
9.	**Brick Manufacturing Unit**	**--**	**50,000 Bricks**

6.8.6 **Other changes proposed in ToR:**

S. No.	Units	Details as per ToR dated 14th December, 2020	Proposed Amendment in ToR
1.	Water Requirement	1455 KLD water requirement proposed to be sourced water partly from Ground water and **partly from Kirna Reservoir which is at 2.4 kms from the project site**.	900 KLD water requirement proposed to draw partly from Ground water and **partly from Shivnath river which is at a distance of 18 Kms (aerial).**

S. No.	Units	Details as per ToR dated 14th December, 2020	Proposed Amendment in ToR

6.8.7 **Reason for seeking amendment in ToR:** PP has submitted that due to due to techno economic reasons, changes are proposed in the following:

1. Revised Plant Configuration & Production capacities
2. Water withdrawal

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

Deliberation by the Committee

6.8.9 The Committee noted the following:

i. ToR was issued to M/s. Rama Power and Steel Pvt. Ltd.*vide* letter no. J-11011/278/2020-IA-II (I) dated 14th December, 2020 for Greenfield project comprising of 2x350 TPD DRI Kiln (2,31,000 TPA), 5x20 T Induction Furnace (3,30,000 TPA), 1x800 TPD Rolling Mill (2,64,000 TPA), Power Generation – 40 MW (20 MW through Waste Heat Recovery Boiler (WHRB) and 20 MW through Circulating Fluidized bed combustion (CFBC) Boiler)] located at Village – Khamaria, Tehsil – Tilda, District - Raipur, Chhattisgarh.
ii. Instant proposal is for seeking amendment in ToR dated 14.12.2020 with respect to revised Plant configuration and water with drawl as detailed in para 6.8.5 and 6.8.6 above.
iii. In the granted ToR, the water requirement is mentioned as 1455 KLD, however, in the revised PFR, the water requirement is 900 KLD.
iv. PP is proposing amendment in almost all the Plant configuration & production capacities as per ToR issued by MOEF&CC dated 14th December, 2020

Recommendations of the Committee

6.8.10 In view of the foregoing and after deliberations, the Committee in its EAC meeting decided that PP should apply for fresh TOR because the case is not of modification but change in TOR. However, after the meeting MS informed that examination of minutes of past meetings, it is also a case of modification, so there is no need to request PP to apply for fresh TOR. Chairman requested the Member Secretary to put up this proposal again in next EAC meeting to be held on June 13-14, 2022. **PP shall also call for making presentation before the EAC.**

Consideration of Environmental Clearance Proposal

Agenda No. 6.9

6.9 Expansion of Integrated Steel Plant (1.2 To 2.0 Million TPA Finished Steel) with 270 MW Captive Power Plant by M/s. Orissa Alloy Steel Pvt. Ltd. located at Mouza – Nandarchalk, Bargai, Shyamraipur & Kanjarichak, Village – Gokulpur, P.O. – Shyamraipur, P.S. – Kharagpur (L), Dist. Paschim Medinipur, West Bengal - Consideration of Environmental Clearance.

[Proposal no. IA/WB/IND/261449/2021; File no. J-11011/169/2017-IA.II(I)]
[Consultant: M/s. Centre for Envotech & Management Consultancy Pvt.; valid upto 16/06/2022]

6.9.1 M/s Orissa Alloy Steel Private Limited has made an application vide proposal no. IA/WB/IND/261449/2021 dated 12.05.2022 along with copy of EIA/EMP Report, Form - 2 and Certified EC Compliance Report seeking Environment Clearance (EC) under the provisions of the EIA Notification, 2006 for the project mentioned above. The proposed project activity is listed at schedule no. 3(a) Metallurgical Industries (ferrous & non-ferrous), 2(b) Mineral Beneficiation, 4(b) Coke oven plants and 1(d) Thermal Power Plants under Category "A" of the schedule of the EIA Notification, 2006 and appraised at Central Level.

6.9.2 Name of the EIA consultant: M/s Centre for Envotech & Management Consultancy Pvt. Ltd. [Sl. No. 99, List of ACOs with their Certificate / Extension Letter no. QCI/NABET/ENV/ACO/22/2279; valid upto 16.06.2022, Rev. 23, May 09, 2022].

Details submitted by Project proponent

6.9.3 The details of the ToR are furnished as below:

Date of application	Consideration	Details	Date of accord	Validity of ToR
03.04.2021	Standard ToR issued	Terms of Reference	08.04.2021	07.04.2025
05.05.2022	Transfer of TOR	Transfer of TOR from M/s Rashmi Alloy Steel Private Limited to M/s Orissa Alloy Steel Private Limited	-	

6.9.4 The project of M/s Orissa Alloy Steel Private Limited located at Mouza –Nandarchak, Bargai, Shyamraipur & Kanjarichak, Village – Gokulpur, P.O. – Shyamraipur, P.S. – Kharagpur (L), Dist. Paschim Medinipur, West Bengal is for Expansion of Integrated Steel Plant (1.2 Million TPA To 2.0 Million TPA Finished Steel) With 270 Mw Captive Power Plant.

6.9.5 Environmental Site Settings:

Sl. No.	Particulars	Details	Remarks
i.	Total land	145.69 ha (360 acres) [Private: 20.23 ha; Other Land: 125.46 ha]	

<table>
<tr><th>Sl. No.</th><th>Particulars</th><th>Details</th><th>Remarks</th></tr>
<tr><td></td><td></td><td>
<table>
<tr><th>S. No.</th><th>Particulars</th><th>Area (Ha)</th><th>%</th></tr>
<tr><td>1</td><td>Main Plant</td><td>52.63</td><td>36.12</td></tr>
<tr><td>2</td><td>Water Reservoir</td><td>6.48</td><td>4.45</td></tr>
<tr><td>3</td><td>Built up Area</td><td>7.77</td><td>5.33</td></tr>
<tr><td>4</td><td>Internal roads</td><td>6.48</td><td>4.45</td></tr>
<tr><td>5</td><td>Green Belt</td><td>48.07</td><td>33.00</td></tr>
<tr><td>6</td><td>Tailing Area</td><td>2.02</td><td>1.39</td></tr>
<tr><td>7</td><td>Truck Parking area</td><td>6.05</td><td>4.15</td></tr>
<tr><td>8</td><td>Raw Material Storage</td><td>16.19</td><td>11.11</td></tr>
<tr><td colspan="2">TOTAL PROJECT AREA</td><td>145.69</td><td>100.0</td></tr>
</table>
</td><td></td></tr>
<tr><td>ii</td><td>Land acquisition details as per MoEF&CC O.M. dated 7/10/2014</td><td>Out of the 145.69 hectare of land, 131.53 hectare of land is already in possession of M/s Orissa Alloy Steel Private Limited (Formerly M/s Rashmi Alloy Steel Private Limited) & for rest of land (14.16 hectare) consent from private rayat obtained.</td><td>--</td></tr>
<tr><td>iii.</td><td>Existence of habitation & involvement of R&R, if any.</td><td>Project Site:
No habitation in the proposed site.

Study Area:
<table>
<tr><th>Habitation</th><th>Distance</th><th>Direction</th></tr>
<tr><td>Kharagpur</td><td>3.0 km</td><td>S</td></tr>
</table>
</td><td>No rehabilitation and resettlement is involved for the subject project.</td></tr>
<tr><td>iv.</td><td>Latitude and Longitude of the project site</td><td>
<table>
<tr><th>Point</th><th>Latitude</th><th>Longitude</th></tr>
<tr><td colspan="3">Existing</td></tr>
<tr><td>A</td><td>22˚21’39.93”N</td><td>87˚17’57.63”E</td></tr>
<tr><td>B</td><td>22˚22’05.60”N</td><td>87˚17’48.71”E</td></tr>
<tr><td>C</td><td>22˚22’14.07”N</td><td>87˚18’11.67”E</td></tr>
<tr><td>D</td><td>22˚22’08.35”N</td><td>87˚18’29.62”E</td></tr>
<tr><td>E</td><td>22˚21’40.33”N</td><td>87˚18’29.19”E</td></tr>
<tr><td>F</td><td>22˚21’38.26”N</td><td>87˚18’12.82”E</td></tr>
<tr><td colspan="3">Proposed</td></tr>
<tr><td>1</td><td>22˚21’43.26”N</td><td>87˚18’40.85”E</td></tr>
<tr><td>2</td><td>22˚21’50.56”N</td><td>87˚18’41.34”E</td></tr>
<tr><td>3</td><td>22˚21’55.08”N</td><td>87˚18’35.88”E</td></tr>
<tr><td>4</td><td>22˚21’37.63”N</td><td>87˚18’25.76”E</td></tr>
<tr><td>5</td><td>22˚21’34.78”N</td><td>87˚18’29.77”E</td></tr>
<tr><td>6</td><td>22˚21’27.01”N</td><td>87˚18’26.71”E</td></tr>
<tr><td>7</td><td>22˚21’30.28”N</td><td>87˚18’22.30”E</td></tr>
</table>
</td><td>--</td></tr>
<tr><td>v.</td><td>Elevation of the project site</td><td>Elevation of the project site varies from 32 m to 35 m AMSL.</td><td>--</td></tr>
</table>

<table>
<tr><th>Sl. No.</th><th>Particulars</th><th>Details</th><th>Remarks</th></tr>
<tr><td>vi.</td><td>Involvement of Forest land if any.</td><td>No forest land involved.</td><td>--</td></tr>
<tr><td>vii.</td><td>Water body (Rivers, Lakes, Pond, Nala, Natural Drainage, Canal etc.) exists within the project site as well as study area</td><td>Project site:
01 Nos. artificial ponds (rain water harvesting pond).

Study area:
<table>
<tr><th>Water body</th><th>Distance</th><th>Direction</th></tr>
<tr><td>Kangsabati River</td><td>3.0 Km</td><td>NE</td></tr>
<tr><td>Saha Chouk pond</td><td>1.9 km</td><td>W</td></tr>
<tr><td>Khalkona pond</td><td>6.9 km</td><td>NW</td></tr>
<tr><td>Gokulpur pond</td><td>2.4 km</td><td>NW</td></tr>
<tr><td>Upharjhuli pond</td><td>4.7 km</td><td>S</td></tr>
</table></td><td>--</td></tr>
<tr><td>viii.</td><td>Existence of ESZ/ ESA/ national park/ wildlife sanctuary/ biosphere reserve / tiger reserve/ elephant reserve etc. if any within the study area</td><td>Study area
No National Parks, Wildlife Sanctuaries, Biosphere Reserves, Reserve Forest lies within 10 km radius.

Three protected forest is present within 10 km area of the project.
~5.52 km in N direction
~6.32 km in S direction
~5.80 km in SE direction</td><td></td></tr>
</table>

6.9.6 The existing project was accorded environmental clearance in the name of M/s Orissa Metaliks Private Limited vide letter no. J-11011/169/2017-IA-(II), dated 03.04.2019 which was transferred to M/s Rashmi Alloy Steel Private Limited vide File No. - J-11011/169/2017-IA-(II), dated 28.01.2020. Environment Clearance under clause 7(ii) of EIA Notification 2006 for change in configuration and product mix, keeping the plant capacity (crude steel production) unchanged accorded vide File no. J-11011/169/2017-IA-II(I), dated 19.03.2021in suppression of earlier EC accorded to M/s Rashmi Alloy Steel Pvt. Ltd. EC was transferred in favour of M/s Orissa Alloy Steel Private Limited vide File No.- J-11011/169/2017-IA-II(I) dated 12.05.2021. Consent to Operate for the existing unit was accorded by West Bengal Pollution Control Board vide lr. No. CO128946 dated 29.05.2020, CO131937 dated 23.04.2021, CO131949 dated 20.07.2021, CO132105 dated 08.12.2021 and CO132139 dated 24.03.2022. The validity of CTO is up to 31.07.2024.

6.9.7 Implementation status of the existing EC

Sl. No.	Facilities/Units	As per EC dated 19.03.2021 & 12.05.2021		Implementation Status as on May 2022	Production as per CTO
		Configuration	Capacity		
1	Blast Furnace	1 x 550 m^3	0.6 MTPA	Not Yet Implemented	**
2	Sinter	1 x 175 m^2	0.6 MTPA	Not Yet Implemented	**
3	DRI	4 x 600 TPD	0.744 MTPA	4 x 600 TPD	0.744 MTPA

Sl. No.	Facilities/Units	As per EC dated 19.03.2021 & 12.05.2021		Implementation Status as on May 2022	Production as per CTO
		Configuration	Capacity		
4	SMS with LRF,CCM and oxygen optimized furnace	10 x 20 T EIF + 2 x 50 T EAF	1.0 MTPA	Under Construction stage (civil foundation works/ erection going on)	**
5	Ferro Alloy Plant	4 x 9 MVA	0.048 MTPA	CTO obtained for 3 x 9 MVA and 4th no. ferro plant civil foundation works/ erection going on	36,000 TPA
6	Fe-Cr Briquette Manufacturing plant	1 x 40 TPH	40 TPH	Not Yet Implemented	**
7	Non-recovery type Coke Oven Plant	2 x 0.25 MTPA	0.5 MTPA	Under Construction stage (civil foundation works/ erection, fabrication of machineries going on)	**
8	Lime Dolomite Plant	1x200 TPD	200 TPD	Not Yet Implemented	**
9	Oxygen Plant	1x200 TPD	200 TPD	Under Construction	**
10	Hot Rolling Mill	**	0.60 MTPA	Under Construction stage (civil foundation works/ erection going on)	**
11	Cold Rolling Plant with Pickling Line & Continuous Galvanizing	***	0.35 MTPA	Not Yet Implemented (proposed to be surrender)	**
12	Ductile Iron Pipe Unit, Fitting & Accessories	**	0.2 MTPA	DIP Finishing line CTO obtained. Rest under construction	0.2 MTPA
13	Captive Power Plant	104 MW WHRB Based (68 MW from DRI Plant+ 34 MW from Coke Oven Plant + 2 MW from EAF	194 MW	WHRB -68 MW attached with 4 x 600 TPD DRI CTO obtained.	68 MW
		90 MW CFBC (Coal & Dolochar Mix based 2 x 45 MW)		Under Construction stage (civil foundation works/ erection going on)	**
14	Pellet Plant	1 x 2.4 MTPA	2.4 MTPA	CTO obtained for 1 x 2.4 MTPA Pellet Plant	2.4 MTPA
15	I/O Beneficiation Plant	2 x 1.2 MTPA	2.4 MTPA	CTO obtained for 2.4 MTPA beneficiation plant	2.4 MTPA
16	Producer Gas Plant	20 x 7,500 Nm^3/hr	1,50,000 Nm^3/hr	CTO obtained for 20 x 7,500 Nm^3/hr	1,50,000 Nm^3/hr
17	Railway siding	One no.	-	CTO obtained	One no.

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

Sl. No.	Plant Equipment/ Facility	Existing facilities as per EC dated 19.03.2021 & 12.05.2021								Expansion Proposal considering 350 annual working days		Final (Existing + Proposed)		Remarks
		Total (A+B)		Implemented (A)		Unimplemented (B)		As per CTO						
		Configuration	Capacity	Configuration	Capacity	Configuration	Capacity	Configuration	Capacity	Configuration	Capacity	Configuration	Capacity	
1	Blast Furnace with matching PCM	1 x 550 m^3	0.6 Million TPA	--	--	1 x 550 m^3	0.6 Million TPA	--	--	**No change In Blast furnace size**	(+) 0.17 Million TPA	1 x 550 m^3	0.77 Million TPA	Hot Liquid Metal / Pig Iron/ High Quality Billet & steel product
	Matching LD,CCM & Rolling Mill	***	***	***	***	***	***	***	***	**2 x 45 T**	0.77 Million TPA	2 X 45 T		
2	Sinter	1 x 70 m^2	0.60 Million TPA	--	--	1 x 70 m^2	0.60 Million TPA	--	--	**No change**	(+) 0.24 Million TPA	1 x 70 m^2	0.84 Million TPA	Sinter
3	Enhancement of DRI plant capacity	4 x 600 TPD	0.744 Million TPA	4 x 600 TPD	0.744 MTPA	--	--	4 x 600 TPD	0.744 MTPA	**No change same kiln**	(+) 0.156 Million TPA	4 x 600 TPD (Same kilns) + 2 x1200 TPD	1.80 Million TPA	Sponge Iron
	New DRI plant			***	***	***	***	***	***	**Addition** (2 x 1200 TPD)	(+) 0.90 Million TPA			
4	SMS with LRF/AOD,CCM and oxygen optimized furnace	10 x 20 T EIF + 2 x 50 T EAF	1.0 Million TPA	--	--	10 x 20 T EIF + 2 x 50 T EAF (Under Construction)	1.0 MTPA	--	--	**Addition & change in technology** (25 T I.F x 12 + 30 T I.F. x 5)	(+) 0.80 Million TPA	20 T I.F X 10 + 25 T I.F x 12 + 30 T I.F. X 5	1.80 Million TPA	M.S Billet
5	SMS Slag Crusher	***	***	***	***	***	***	***	***	4 x 25 TPD	(+) 100 TPD	4 x 25 TPD	100 TPD	Metal Recovery
6	Ferro Alloy Plant	4 x 9 MVA	0.048 Million TPA	3 x 9 MVA	0.036 Million TPA	1 x 9 MVA (Under Construction)	0.012 Million TPA	3 x 9 MVA	0.036 Million TPA	**No change in configuration**		4 x 9 MVA	0.078 Million TPA	Ferro Alloys (FeMn, FeSi, SiMn & FeCr)
7	Jigging Plant	***	***	***	***	***	***	***	***	2 x 15 TPD	(+) 30 TPD	2 x 15 TPD	30 TPD	Metal Recovery
8	Chrome Briquette manufacturing plant	1 x 40 TPH	40 TPH	--	--	1 x 40 TPH	40 TPH	--	--	**No change**		1 x 40 TPH	40 TPH	Chrome Briquette
9	Non-recovery	2 x 0.25	0.5	--	--	2 x 0.25	0.5 Million	--	--	**(+0.05)**		2 x 0.25	0.55	Metallurgical

Sl. No.	Plant Equipment/ Facility	Existing facilities as per EC dated 19.03.2021 & 12.05.2021								Expansion Proposal considering 350 annual working days		Final (Existing + Proposed)		Remarks
		Total (A+B)		Implemented (A)		Unimplemented (B)		As per CTO						
		Configuration	Capacity	Configuration	Capacity	Configuration	Capacity	Configuration	Capacity	Configuration	Capacity	Configuration	Capacity	
	type Coke Oven Plant (*modified wet quenching type*)	MTPA	Million TPA			MTPA (Under Construction)	TPA					MTPA	Million TPA	Coke
10	Lime Dolomite Plant	1 x 200 TPD	200 TPD	--	--	1 x 200 TPD	200 TPD	--	--	**No change**		1 x 200 TPD	200 TPD	Lime & Dolomite
11	Oxygen Plant	1 x 200 TPD	200 TPD	--	--	1 x 200 TPD (Under Construction)	200 TPD	--	--	**Addition** (2 x 200 TPD)	400 TPD	3 x 200 TPD	600 TPD	Oxygen
12	Rolling Mill	****	0.6 Million TPA	--	--	**** (Under Construction)	0.6 Million TPA	--	--	**Expansion**	(+) 1.2 Million TPA	**	1.8 Million TPA	TMT Bar, Wire, Wire Rod
13	Rolling Mill with Pickling Line & Continuous Galvanizing	***	0.35 Million TPA	--	--	***	0.35 Million TPA	--	--	**(-) 0.35 MTPA**		SURRENDERING THE UNIT		
14	Ductile Iron Pipe Unit, Fitting & Accessories	***	0.20 Million TPA	DIP Finishing line	0.20 Million TPA	Rest under construction	0.20 Million TPA	***	0.20 Million TPA	**No change**		**	0.20 Million TPA	DI Pipe, Fitting & Accessories
15	Captive Power Plant	WHRB Based 104 MW (68 MW from DRI Plant) + 34 MW from Coke Oven Plant + 2 MW from EAF+ CFBC (Coal & Dolochar Mix based) 2 x 45 MW]	194 MW	***	68 MW from DRI Plant	***	34 MW from Coke Oven Plant + 2 MW from EAF + CFBC (Coal & Dolochar Mix based) 2 x 45 MW (Under Construction)			**Expansion of WHRB Based CPP**	(+) 68 MW from WHRB DRI Plant + 8 MW from Coke Oven Plant + 2 MW B.F. TRT + (-	**180 MW WHRB** Based (136 MW from DRI Plant) + 42 MW from Coke Oven Plant + 2 MW from B.F. TRT **90 MW CFBC** (Coal & Dolochar Mix based) 2 x	270 MW	Power

Sl. No.	Plant Equipment/ Facility	Existing facilities as per EC dated 19.03.2021 & 12.05.2021								Expansion Proposal considering 350 annual working days		Final (Existing + Proposed)		Remarks
		Total (A+B)		Implemented (A)		Unimplemented (B)		As per CTO						
		Configuration	Capacity	Configuration	Capacity	Configuration	Capacity	Configuration	Capacity	Configuration	Capacity	Configuration	Capacity	
											2) MW from EAF	45 MW		
16	Pellet Plant with matching Beneficiation Plant	1 x 2.4 MTPA	2.4 Million TPA	1 x 2.4 MTPA	2.4 Million TPA	--	--	1 x 2.4 MTPA	2.4 Million TPA	**No change same Pellet module**	(+) 0.6 Million TPA	1 x 3.0 MTPA (Same kiln) + 2 x 4.0 MTPA	11.0 Million TPA	Iron ore Pellet
	New Pellet Plant with matching Beneficiation Plant	***	***	***	***	***	***	***	***	**Additional (**2 x 4.0 MTPA)	(+) 8.0 Million TPA			
17	Producer Gas Plant	20 x 7,500 Nm^3/hr	1,50,000	20 x 7,500 Nm^3/hr	1,50,000	--	--	1 x 2.4 MTPA	2.4 Million TPA	**Additional** (6 x7,500 Nm^3/hr)	(+) 45,000 Nm^3/hr	26 x 7,500 Nm^3/hr	1,95,000 Nm^3/hr	Producer Gas
18	Railway Siding	01 No.	01 No.	01 No.	01 No.	--	--	01 No.	01 No.	**	**	01 No.	01 No.	***

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

Sl. No.	Raw Materials	Quantity Required per Annum (TPA)			Source	Distance from Site (km)	Mode of Transport
		Existing (As per EC)	Expansion (Additional)	Total			
1	Sized Iron Ore Lump and fines	37,52,534	1,24,26,236	161,78,770	Barbil-Joda, Orissa	201	Rail
2	Non-coking Coal	14,71,300	12,36,711	27,08,011	CCL, MCL & Imported Coal. Captive Coal mines (Jagnnathpur-B, Raniganj Coal Field, WB)	--	Rail/Road
3	Coking Coal	6,70,000	1,27,500	7,97,500	Purchased from BCCL, Dhanbad Alternate source: Imported	177	Rail/Road
4	Coke fines	-	33,901	33,901		177	Rail/Road
5	Dolomite	1,00,080	2,76,630	3,76,710	From Birmitrapur, Orissa/Bilaspur, CG	264/541	Rail/Road
6	Limestone	1,32,023	4,02,457	5,34,480	From Birmitrapur, Orissa / Bilaspur, Raipur CG / Katni MP	264/541	Rail/Road
7	Bentonite	48,000	1,72,000	2,20,000	Rajasthan & Gujarat	>1000	Rail/Road
	Manganese Ore	1,24,000	24,200	1,48,200	From Balaghat, MP & Orissa	719	Rail/Road
8	Chromium Ore	1,05,600	89,400	1,95,000	Jajpur, Orissa	202	Rail/Road
9	Quartzite	2,58,000	1,98,100	4,56,100	From Belpahar, Orissa/Bilaspur, Raipur, CG	<150	Rail/Road
10	Pyroxenite	-	23,100	23,100	From Jharkhand, Orissa	<150	Rail/Road
11	Ferro Alloy	-	37,556	37,556	From WB	<150	Rail/Road
12	Inoculants	168	No change	168	Local Market	<150	Road
13	Magnesium	300	No change	300	Local Market	<150	Road
14	Runner Coat	900	No change	900	Local Market	<150	Road
15	Slag Coagulant	264	No change	264	Local Market	<150	Road
16	Zinc	408	No change	408	Local Market	<150	Road
17	Bitumen/ Epoxy Solution	1,150 KL/Year	No change	1,150 KL/Year	WRAS* Approved Vendor	<150	Rail/Road

Sl. No.	Raw Materials	Quantity Required per Annum (TPA)			Source	Distance from Site (km)	Mode of Transport
		Existing (As per EC)	Expansion (Additional)	Total			
18	Sand	Variable	No change	Variable	Local Market	<150	Road
19	Others	2,39,650	(-) 2,05,232	34,418	-	<150	Rail/Road
TOTAL		**67,97,627**	**1,47,53,159**	**2,15,50,786**	--		

6.9.10 Existing Water requirement (as per sanctioned EC) is 10,128 m^3/day. The water requirement for the proposed project is estimated as 1,672 m^3/day. The net water requirement of the ISP after implementation of proposed expansion project would be around 491.67 m^3/hr (11,800 KLD) which will be obtained from Kharagpur Municipality and Treated waste water. The permission for drawl of surface water is obtained from Kharagpur Municipality vide Letter Memo No. 2623 PW dated 14.08.2018) and Waste Water - Kharagpur Municipality vide Letter Memo No. 1186/KM dated 2.11.18 & memo no. 677 km dated 04.08.2020. Bore well supply as envisaged earlier will be completely replaced by surface water/ treated waste water in the present proposal for operation phase of the project.

6.9.11 Existing power requirement of 263 MW is obtained from Captive power plant & State grid. The power requirement for the proposed project is estimated as 215.9 MW. Total power 478.9 MW will be obtained from the captive power plant {180 MW WHRB Based (136 MW from DRI Plant) + 42 MW from Coke Oven Plant + 2 MW from B.F. TRT, 90 MW CFBC (Coal & Dolochar Mix based) 2 x 45 MW & 208.9 MW from State Grid power supply system at 220 kV/ 400 kV.

6.9.12 Baseline Environmental Studies:

Period	1st December 2020 to 28th February 2021
AAQ parameters at 10 Locations (min and max)	$PM_{2.5}$ = 29.06 to 36.56 µg/m^3 PM_{10} = 72.69 to 81.22 µg/m^3 SO_2 = 5.69 to 17.92 µg/m^3 NO_X = 19.32 to 26.18 µg/m^3 CO = <0.1 to 0.30 mg/m^3
Incremental GLC level	PM_{10} = 6.88 µg/m^3 (Level at 0.52 km in SE Direction) SO_2 = 7.02 µg/m^3 (Level at 1.48 km in SE Direction) NO_X = 7.05 µg/m^3 (Level at 0.52 km in SE Direction)
Ground water quality at 8 Locations	pH: 6.24 to 7.14, Total Hardness: 108 to 132 mg/l, Chlorides: 18.9 to 85.9 mg/l, Fluoride: <0.05 mg/l, Heavy metals (Mercury, Lead, Cadmium & Arsenic): BDL
Surface water quality at 9 Locations	pH: 6.83 to 7.2, DO: 4.6 to 5.7 mg/l, BOD: 2.6 to 9.6 mg/l, COD: 11 to 35 mg/l
Noise levels Leq (Day and Night)	41.8 to 69.4 for the day time and 34.2 to 63.6 for the Night time.
Traffic assessment study findings	• Traffic study has been conducted on NH-49 (Formerly NH-6) at Saha Chowk which is approximately 3.3 km (West) from the plant site and near WBSEDCL Substation which is approximately 2.5 km (East) from the plant site. • Transportation of raw material, fuel & finished product will be done 15% by road.

<table>
<tr><td></td><td>
Existing PCU is 21,736 PCU/hr on NH-49 (Formerly NH-6) at Saha Chowk & 8,971 PCU/hr on NH-49 (Formerly NH-6) near WBSEDCL substation and existing level of service (LOS) is:
<table>
<tr><td>Road</td><td>V (Volume in PCU/hr)</td><td>C (Capacity in PCU/Hr)</td><td>Existing (V/C Ratio</td><td>LOS</td></tr>
<tr><td>NH-49 (Formerly NH-6) at Saha Chowk</td><td>21736/24 = 906</td><td>3600</td><td>0.25</td><td>B</td></tr>
<tr><td>NH-49 (Formerly NH-6) near WBSEDCL substation</td><td>8971/24 = 374</td><td>3600</td><td>0.10</td><td>A</td></tr>
</table>
PCU load after proposed project will be 1,200 (Existing) + 6,875 (Additional – worst case 100% movement by road) PCU/hr and level of service (LOS) will be:
<table>
<tr><td>Road</td><td>V (Volume in PCU/hr)</td><td>C (Capacity in PCU/Hr)</td><td>Existing (V/C Ratio</td><td>LOS</td></tr>
<tr><td>NH-49 (Formerly NH-6) at Saha Chowk</td><td>1242</td><td>3600</td><td>0.34</td><td>B</td></tr>
</table>
* Note: Capacity as per IRC-106:1990 Guide line for capacity for roads.
Conclusion: The level of service will “B” after including additional traffic due to proposed project
</td></tr>
<tr><td>Flora and fauna</td><td>No schedule-I species & endangered fauna were recorded in the core & buffer zone of plant area.</td></tr>
</table>

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

A) Solid Waste

S. No.	Type of waste	Source	Quantity (TPA)			Mode of Treatment	Disposal	Remarks
			Existing	Additional	Total			
1	Slag	MBF	2,43,000	3,000	2,46,000	Granulation	Used for Cement making & in Sinter plant	--
	Sludge		3,00,154	15,881	3,16,035			
2	Dolo Char	DRI Plant	2,13,420	3,02,980	5,16,400	Not Applicable	100% used in CFBC Boilers.	--
3	Slag	SMS (IF)	1,09,083	79,767	1,88,850	Recovery of metal & flux from Slag Crushing unit	Used for Road construction/ Land levelling purpose, Paver Block Making after recovering metal from Slag Crushing unit;	--
	Scale		9,400	7,500	16,900			
4	Slag	Ferro Alloys Plant	23,540	93,460	1,17,000	Not Applicable	Slag generated during Ferro Manganese	--

S. No.	Type of waste	Source	Quantity (TPA)			Mode of Treatment	Disposal	Remarks
			Existing	Additional	Total			
							production - used as raw material for Silico Manganese production. Slag generated during Silico Manganese production - used for road construction/land filling After maximum recovery of Chrome from Ferro chrome slag it will undergo TCPL Test & then used in green concreting.	
5	Core Sand and Slag	DIP	4,777	No change	4,777	Not Applicable	Used for Road construction/ Land levelling purpose	--
6	Cement Slurry	DIP	500	No change	500	Not Applicable	Used for Brick making and also in Cement Plant	--
7	Bottom Ash	CPP	3,57,500	(-)2,09,800	1,47,700	Not Applicable	Used for Road construction/ Land levelling purpose	--
8	Dust	APC Devices	1,88,550	7,07,240	8,95,790	Not Applicable	Used in Sinter Plant and Brick Manufacturing, Pelletisation mix	--
	Kiln Accretion	DRI Plant	6,000	8,500	14,500	Not Applicable	Road Construction	--
9	Tar Sludge	Producer gas plant	14,400	31,500	1,500	Not Applicable	Sold to WBPCB authorized vendor	--
10	Coal Tar				44,400	Not Applicable		
11	Miss Roll/End Cuts	Rolling Mill	50,000	(-)28,980	21,020	Not Applicable	Used as raw material in SMS Plant	--
12	Fly Ash	CPP	1,98,000	3,13,276	5,11,276	Not Applicable	Used for Brick making and also in Cement Plant	Agreement made with associate companies.
13	Tailing	I/O Beneficiation plant	75,400	1,44,600	2,20,000	Not Applicable	Used for Brick manufacturing/ Paver block making,	--

S. No.	Type of waste	Source	Quantity (TPA)			Mode of Treatment	Disposal	Remarks
			Existing	Additional	Total			
							aggregate in concrete, road construction	
14	Iron oxide Powder from ARP	Rolling Mill	1,750	(-)1,750	0	Not Applicable	Eliminated due to surrendering cold rolling mill with pickling & galvanizing line	--
15	Zinc Ash/ Dross	DIP & Rolling Mill	862	(-)845	17	Not Applicable	Sold to WBPCB Authorized Vendors	--
16	Sludge	ETP	50	30	80	Not Applicable	Sent to CHWTSDF	--
17	Molding Line	DIP Fitting & Accessories Unit	5	No change	5	Not Applicable	Used for Road construction/Land levelling purpose	--
18	Shot Blasting		8	No change	8	Not Applicable	Used for Road construction/Land levelling purpose	--
19	Fettling & Grinding		2	No change	2	Not Applicable	Used for Road construction/Land levelling purpose	--

B) Hazardous Waste

S. No.	Type of waste (Hazardous)	Quantity			Mode of Treatment	Disposal	Remarks
		Existing	Additional	Total			
1	Damaged Bag Filters	-	-	850 Nos.	Not Applicable	Sent to WBPCB Authorized CHWTSDF	Membership obtained by the Group from CHWTSDF, Haldia W.B.
2	Used Oil	-	-	15,000 lit	Not Applicable	Sold to WBPCB Authorized Vendors	Sold to WBPCB authorised vendor as per HWM ,2016
3	Cotton Waste	-	-	520 kg	Not Applicable	Sent to WBPCB Authorized CHWTSDF	Membership obtained by the Group from CHWTSDF, Haldia W.B.
4	Process Residue FeCr Plant	23,540	93,460	1,17,000	Not Applicable	After TCLP test sent to WBPCB Authorized CHWTSDF	
5	Phenolic Water	Variable	Variable	Variable	Not Applicable	Phenolic water of PGP used in ABC of DRI Plant	Not Applicable

S. No.	Type of waste (Hazardous)	Quantity			Mode of Treatment	Disposal	Remarks
		Existing	Additional	Total			
6	Zinc Dross	862	(-)845	17	Not Applicable	Sold to WBPCB Authorized Vendors	Sold to WBPCB authorised vendor as per HWM ,2016
7	Sludge from ETP	50	30	80	Not Applicable	Sold to WBPCB Authorized Vendors	
8	Tar Sludge	-	-	1,500	Not Applicable	Sold to WBPCB Authorized Vendors	

6.9.14 Public Consultation:

Details of advertisement	• "Millennium Post" (in English) dated 9th July, 2021. • "Aajkaal" (in Bengali) dated 9thJuly, 2021. • "Sanmarg" (in Hindi) 9th July, 2021.
Date/Time of Public Hearing	13th August, 2021
Venue	Mahasakti Mahasangha, Satkui, P.O. Matkatpur (near BDO Office Kharagpur-I), Dist.- Paschim Medinipur, West Bengal
Presiding Officer	Additional District Magistrate LR & DL&LRO, Paschim Medinipur
Major Issues Raised	1. Environment – APCD, Pollution Control, Housekeeping 2. Employment 3. Drinking water facilities 4. Education 5. Road development 6. CSR Activities related etc.

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

<table>
<tr><th rowspan="2">S. No.</th><th colspan="2">Physical activity and action plan</th><th colspan="3">Year of implementation (Budget in INR)</th><th rowspan="2">Total Expenditure (Rs. in Lakhs)</th></tr>
<tr><th>Name of the Activity</th><th>Physical Targets</th><th>1st</th><th>2nd</th><th>3rd</th></tr>
<tr><td>1.</td><td>Proper action to control pollution</td><td>Most effective and advanced stage technology having techno-economic viability for air pollution control devices of adequate capacity have been installed for existing operational units and will be installed in parallel with implementation of the proposed plant and it will be regularly monitored by dedicated team. Also third party audit / monitoring will be conducted by approved lab / agency on quarterly basis.

Performance test shall be conducted on all pollution control</td><td colspan="4"><table><tr><th>Description</th><th>Capital cost, Rs. in crore</th><th>Recurring cost Rs. in crore</th></tr><tr><td>Air pollution control</td><td>96.00</td><td>8.40</td></tr><tr><td>Water pollution control</td><td>8.00</td><td>0.80</td></tr><tr><td>Solid Waste Management System</td><td>10.00</td><td>1.00</td></tr><tr><td>Green belt Development</td><td>15.00</td><td>0.83</td></tr><tr><td>Noise pollution control</td><td>8.00</td><td>1.00</td></tr><tr><td>Env. Monitoring and management</td><td>5.04</td><td>1.32</td></tr><tr><td>Setting Environmental Management Cell</td><td>3.00</td><td>0.70</td></tr></table></td></tr>
</table>

S. No.	Physical activity and action plan		Year of implementation (Budget in INR)			Total Expenditure (Rs. in Lakhs)
	Name of the Activity	Physical Targets	1st	2nd	3rd	
		systems every year and report shall be submitted to Integrated Regional Office of the MoEFCC/ WBPCB with EC compliance report. Plant is being design as Zero Liquid Discharge plant and entire waste water after treatment used in plant. Once in three months treated waste water quality will be monitored by NABL/ MOEFCC approved laboratory.	Setting Environmental Laboratory		1.50	0.50
			Total		**146.54**	**14.55**
2.	Local employment	Maximum employment will be given to the Local youth as per State Government norms based on their knowledge and skill. In addition, vocational training will be given for the employment to local. Total 192 persons will receive stipend of Rs. 12,500 per month for three months training	Rs. 8.0 Lakhs	Rs. 8.0 Lakhs	Rs. 8.0 Lakhs	24.00
3.	Drinking water facilities	10 nos. of bore well/ tube well in the village of Barkola	5.0 Lakhs	--	--	5.00
4.	Development of schools	Development of school building, construction of toilets, drinking water facilities, procurement of tables & benches, computer etc. will be done in the schools of Barkola village in 1st year, and in 3rd year in Shyamraipur village.	12.00 Lakhs	-	12.00 Lakhs	24.00
5.	Toilet facilities	Construction of 08 nos. of toilet with well chamber facilities in the village of Shyamraipur (04 nos. in 1st year and 04 nos. in 2nd year).	4.0 Lakhs	4.0 Lakhs	-	8.00
6.	Completion of local 'Shiv Temple'	Under EMP for Social & Infrastructure development activities 'Shiv Temple' in Gokulpur village will be developed in 1st year.	3.0 Lakhs			3.00
7.	Improvement of local roads	Construction/ improvement & repairing of 2.0 km metal road in Gokulpur & Barkola village (1.0 km in 1st year in Gokulpur & village and 1.0 km in 3rd year in Barkola village).	25.0 Lakhs	-	25.0 Lakhs	50.0
NEED BASED ACTIVITIES						
8.	Construction of community hall	Construction of community hall in Kanjarichak (1st year), Rajagram (2nd year) and Gokulpur (3rd year).	10.00 Lakhs	10.00 Lakhs	10.00 Lakhs	30.00
9.	Ambulance facility	Ambulance facility to Kalaikunda (2nd year) & Barkola (3rd year) Panchayat.	--	12.00 Lakhs	12.00 Lakhs	24.00
10.	Financial support to charitable Dispensary with	Samraipur (1st year), Bargai (2nd year) and Walipur (3rd year) - Cost	12.00 Lakhs	12.00 Lakhs	12.00 Lakhs	36.00

S. No.	Physical activity and action plan		Year of implementation (Budget in INR)			Total Expenditure (Rs. in Lakhs)
	Name of the Activity	Physical Targets	1st	2nd	3rd	
	specialist doctor / Primary Health Center	for 1 doctor, 2 nurses, Support staffs, medicines etc.				
11.	Installation of Solar street light.	15 numbers of solar street light with pole each in Walipur (1st year) Bargai (2nd year) and Barkola (3rd year) villages.	7.00 Lakhs	7.00 Lakhs	7.00 Lakhs	21.00
12.	Providing collection bins/ dustbin.	10 nos. of collection bins with stand each in Barkola (1st year), Bargai (2nd year) and Samraipur (3rd year) villages.	3.00 Lakhs	3.00 Lakhs	3.00 Lakhs	9.00
13.	Avenue Plantation	Avenue plantation/ development of park in Risha (1st year), Krishnanagar (2nd year), Samraipur village (3rd year).	10.00 Lakhs	10.00 Lakhs	10.00 Lakhs	30.00
Total			**99.00 Lakhs**	**66.00 Lakhs**	**99.00 Lakhs**	**264.00**

6.9.15 Existing capital cost of project was Rs. 1,700 Crores. The capital cost of the proposed project is Rs. 1,200 Crores and the capital cost for environmental protection measures is proposed as Rs. 114.70 Crores. The annual recurring cost towards the environmental protection measures is proposed as Rs. 10.65 Crores. The employment generation from the proposed expansion is 2,000 (Direct additional employment - Regular & Contractual). The total manpower for the 2.0 MTPA plant shall be 5000 persons. The details of cost for environmental protection measures is as follows:

S. No.	Description	Existing ECs (Rs. in Crores)		Proposed (Rs. in Crores)	
		Capital cost	Recurring cost	Capital cost	Recurring cost
1	Air pollution control	58.00	5.10	75.00	6.60
2	Water pollution control	5.00	0.50	6.20	0.60
3	Solid Waste Management System	6.00	0.60	5.00	0.50
4	Green belt Development	9.00	0.50	6.00	0.39
5	Noise pollution control	8.00	1.00	8.00	1.00
6	Occupational health Management	4.50	0.45	3.14	0.30
7	Risk Mitigation & Safety Plan	6.50	0.60	7.00	0.70
8	Env. Monitoring and management*	3.80	1.40	1.72	0.56
9	Setting Environmental Management Cell	3.00	0.70	-	--
10	Setting Environmental Laboratory	1.50	0.50	-	--
11	EMP for Social & Infrastructure development and addressal of public consultation concerns	-	-	2.64	-
	Total	**105.30**	**11.35**	**114.70**	**10.65**

6.9.16 An area of 43.91 hectare has been earmarked for greenbelt development/ plantation. 1,10,000 tree saplings have been plant till March 2022. An area of around 37.92 hectare (inside plant) + 1.60 hectare (along NH & service road) i.e. 31.5 % has already been covered under greenbelt remaining 4.39hectare green belt will be developed in 06 months (Oct 2022). Greenbelt / plantation will be increased from 43.91 hectare to 48.1 hectare for the proposed expansion. Greenbelt @ 2500 trees per hectare will be completed within a span of two (2) years (March - 2024) with continuous and intensive maintenance. A 30 m wide greenbelt, consisting of at least 3 tiers around plant boundary will be developed as greenbelt and green cover as per CPCB/MoEF&CC, New Delhi guidelines. Local and native species will be planted with a density of 2,500 trees per hectare. Total no. of 1,20,200 saplings will be planted and nurtured in 48.1 hectares in 1st year.

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

Certified Compliance Report from Regional Office

6.9.18 The Status of compliance of earlier EC was obtained from Integrated Regional Office, Kolkata vide letter no102-616/18/EPE/115 dated 30.03.2022 in the name of M/s Orissa Alloy Steel Private Limited. The Action taken report regarding the partially/non-complied condition was submitted to Regional officer MoEF&CC, Kolkata vide letter no. OASPL/ATR/22-23/01 dated 04.04.2022. MoEF&CC (IRO), Kolkata evaluated the same and has issued letter dated 11.04.2022. The details of the observations made by IRO in the report dated 11.04.2022 along with its re-assessment/present status as furnished by the PP is given as below.

S. No.	Non-compliance details	Observation of IRO MoEFCC vide letter dated 30.03.2022	Condition no.			Re-assessment by IRO, MoEFCC vide letter dated 11.04.2022/Response by PP
			EC date	Specific	General	
1.	100% solid waste generated in the plant shall be reused/recycled/sold No dumping is permitted. Storage area for the solid waste inside the plant premises shall be secured and impervious with garland drains and catch pits around. The storage shall not exceed 90 days.	PAs need to submit information regarding amount of waste reuse/ reutilized / sold.	19th March 2021	iv	--	At present, Ferro manganese & Silico manganese is only manufactured from operational Ferro alloy plant. Around 11,577 Tones slag generated during production process in the FY 2021-22 (till February 2022). 100% Slag generated during production of ferro manganese was used as raw material for Silico manganese production and slag generated during production of Silico manganese used for road construction (Qty.- 2,900 TPA), land leveling (Qty.-5790 TPA) & as an aggregate (Qty.-2,887 TPA) purposes. Around 35,800 Tonnes dolochar generated from operational 2 x

<table>
<tr><th rowspan="2">S. No.</th><th rowspan="2">Non-compliance details</th><th rowspan="2">Observation of IRO MoEFCC vide letter dated 30.03.2022</th><th colspan="3">Condition no.</th><th rowspan="2">Re-assessment by IRO, MoEFCC vide letter dated 11.04.2022/Response by PP</th></tr>
<tr><th>EC date</th><th>Specific</th><th>General</th></tr>
<tr><td></td><td></td><td></td><td></td><td></td><td></td><td>600 TPD DRI plant in the FY 2021-22 (till February 2022). All the dolochar generated from DRI plant utilized in CFBC based power plant of holding company (OMPL-I) for power generation as the captive power plant of OASPL is not yet commissioned. After commissioning of EC sanctioned 2 x 45 MW CFBC boiler dolochar will be used in-house for power generation.

Review of IRO: Being Complied</td></tr>
<tr><td>2.</td><td>Green Belt should be developed in an area of 43.91 ha by 31st December, 20221. The greenbelt shall inter alia cover the entire periphery of the plant with a width of 20m and density of 2500 trees per hectare.</td><td>PAs need to develop the remaining 8.47 Ha as greenbelt at the earliest.</td><td>19th March 2021</td><td>ix</td><td>--</td><td>Greenbelt development all along the boundary of the plant site with uniform width and density is under progress. Management is in process of developing 43.91 acres of green belt around the plant area. In FY 19-20 - 30,000 nos. of saplings, in FY 20-21 - 40,000 saplings and in FY 21-22 (till March 22) – 40,000 (no fruit bearing tress) were planted and the survival rate is 90.0%. To speed up the green belt development work additional dedicated manpower has been deployed. The details are:
<table>
<tr><th colspan="4">Plantation Details in the FY 2021-2022 (Till March 2022)</th></tr>
<tr><th>S. No.</th><th>Species Planted</th><th colspan="2">Quantity in Numbers</th></tr>
<tr><td>1</td><td>Ashoka</td><td colspan="2">1000</td></tr>
<tr><td>2</td><td>Akashmoni</td><td colspan="2">5500</td></tr>
<tr><td>3</td><td>Bakul</td><td colspan="2">1200</td></tr>
<tr><td>4</td><td>Chatim</td><td colspan="2">3000</td></tr>
<tr><td>5</td><td>Foxtail Palm</td><td colspan="2">2600</td></tr>
<tr><td>6</td><td>Jarool</td><td colspan="2">3000</td></tr>
<tr><td>7</td><td>Kadam</td><td colspan="2">4500</td></tr>
<tr><td>8</td><td>Krishnachura</td><td colspan="2">3000</td></tr>
<tr><td>9</td><td>Mahagony</td><td colspan="2">2000</td></tr>
<tr><td>10</td><td>Malaysian Sal</td><td colspan="2">1200</td></tr>
<tr><td>11</td><td>Neem</td><td colspan="2">1600</td></tr>
<tr><td>12</td><td>Putranjiba</td><td colspan="2">1200</td></tr>
<tr><td>13</td><td>Radhachura</td><td colspan="2">2200</td></tr>
<tr><td>15</td><td>Siris</td><td colspan="2">1600</td></tr>
<tr><td>15</td><td>Sisoo</td><td colspan="2">800</td></tr>
<tr><td>16</td><td>Sonajhuri</td><td colspan="2">3800</td></tr>
<tr><td>17</td><td>Taberia</td><td colspan="2">1800</td></tr>
<tr><td colspan="2">Financial Year</td><td>2019-20</td><td>2020-21</td><td>2021-22 (till March)</td></tr>
<tr><td colspan="2">Total Seedling/ Plantation (No.)</td><td>30,000</td><td>40,000</td><td>40,000</td></tr>
<tr><td colspan="2">Survival Trees (No) as on date from date of EC</td><td>25,200</td><td>33,600</td><td>36,000</td></tr>
<tr><td colspan="2">Survival</td><td>84%</td><td>84%</td><td>90%</td></tr>
<tr><td colspan="2">Total Survival</td><td colspan="3">94,800 (inside plant) + 4000 (along NH & service road)</td></tr>
<tr><td colspan="2">Area Covered (Hectare)</td><td colspan="3">37.92 Ha inside the plant and 1.60 Ha. along NH & service road = Total 39.52 Ha (31.5 %)</td></tr>
</table>
Remaining 4.39 Ha @ 2500 hectare per trees greenbelt</td></tr>
</table>

S. No.	Non-compliance details	Observation of IRO MoEFCC vide letter dated 30.03.2022	Condition no.			Re-assessment by IRO, MoEFCC vide letter dated 11.04.2022/Response by PP
			EC date	Specific	General	
						development will be developed in 06 months (by Sept' 2022). **Review of RO: PA's are in the process of developing 43.91 acres of greenbelt around the plant area. Till March 2022, total of 39.52 ha (31.5%) has been developed. PA have provided the action plan of developing the remaining 4.39 ha greenbelt wherein it has been ensured by Pas that in FY 22-23, (within 6 months i.e. Sep 22), 11000 plants will be developed.**
3.	Raw material shall be stored under closed sheds on impervious floors. Garland drains and catch pits shall be provided to trap run materials.	It was also observed that raw material was being stored in the open covered with tarpaulin. PAs need to store all raw materials under closed shed.	19th March 2021	x	--	Dedicated raw material storage facility with closed roof shed has already been provided in side factory premises for storage of raw materials. Due to some problem in raw material handling system, material was unloaded temporarily near the plant in open area & covered with tarpaulin. The same is now being removed and being shifted to storage yard. OASPL is in process of installing stacker-reclaimer which is used to stack the material in a stockyard and to reclaim the material from a stockpile. Around 75% work has already been completed. Also company is installing wagon Tippler for emptying loaded wagons by tipping it. Pilling work of wagon tippler is under progress. After installation & commissioning of wagon tippler, the raw materials will be directly unloaded by tipping and sent to stacker by conveying system. At the same time, material will be reclaimed and sent to raw material

S. No.	Non-compliance details	Observation of IRO MoEFCC vide letter dated 30.03.2022	Condition no.			Re-assessment by IRO, MoEFCC vide letter dated 11.04.2022/Response by PP
			EC date	Specific	General	
						handling system of the plant through conveyor. **Review of RO: Being Complied**
4.	Sufficient number of mobile or stationary vacuum cleaners shall be provided to clean plant roads shop floors, roofs, regularly.	PAs need to provide more numbers of mobile or stationary vacuum cleaners to clean plant roads, shop floors, roofs regularly.	19th March 2021	**	II (Air quality monitoring and preservation) Point no-vi	M/s Orissa Alloy Steel Private Limited has already provided 02 Nos. of dedicated mechanical road sweeping machine. During the site visit only one mechanical road sweeping machine was operational & another one under breakdown and was sent to automobile shop for repair & maintenance work. The same has been repaired and both the mechanical road sweeping machines are operational now. **Review of RO: Being Complied**
5.	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.	PAs need to provide the exact date of land development work start of production operation by the project.	19th March 2021	--	X (Miscellaneous) Point no-vii	Land development work started after obtaining Consent to Establish from West Bengal Pollution Control Board (NOC NO159375, Memo No. 516-2N-09/2018(E) Dated 31.05.2019) i.e. in the month of June 2019 and production operation started after obtaining valid CTO (Consent Letter No. CO128946, Memo No. 229-hl-co-r/19/0526 dated: 29.05.2020). **Review of RO: Being Complied**

6.9.19 During the meeting, project proponent submitted written submission on the following points:

i. As committed by the PP, they will adopt 10 nos. of village(s) namely Bargai, Dangarpara, Amba, Gokulpur, Kantapal, Keshpal, Ajabpur, Barkola, Wallipur, Mohanpur & Risha

village, situated at a distance of around 3.0 km from plant boundary, and develop the facilities within the village as per need based assessment.

ii. An area of around 37.92 hectare i.e. 31.5 % has already been covered under greenbelt @ 2500 trees per hectare. Remaining 4.39 hectare@ 2500 trees per hectare green belt will be developed on or before July 2022.

iii. Greenbelt / plantation will be increased from 43.91 hectare to 48.1 hectare for the proposed expansion. 3 tiers plantations of native species all along the periphery of the project @ 2500 trees per hectare will be completed within a span of 1st years. Subsequently in upcoming year strengthening and gap filling of greenbelt area will be done.

iv. Average water requirement per trees per day considered is 3.5 litres for green belt development. The species that are selected for green belt development is as per CPCB guideline considering the geological & hydrogeological features of the area. Also the annual average rainfall in that area is 1659 mm (as per past IMD 1981-2017 data) which is sufficient enough for maintaining the soil moisture content of soil. With past experience for green belt development in nearby plant of associate company the average water requirement per trees per day is 3.2 to 3.5 litres. Also as per research paper the general rule of thumb for determining the irrigation needs of a system is that 1 square meter of bench top, covered with leaves, will use 4-6 litres of water a day. New plants, or where the square meter is not totally covered with leaves, will use an average of about 3 litres a day. Generally, plantation is done in monsoon season for better survival rate and lower water demand in initial period.

v. Land acquisition is carried out under Land Acquisition Act of West Bengal. Land is purchased through private negotiations from private rayat. Apart from Govt. valuation of the land, Additional One time Welfare Fund is given to the land looser in addition to the land cost.

Deliberations by the Committee

6.9.20 The Committee noted the following:

1. Instant proposal is for expansion of Integrated Steel Plant (1.2 Million TPA to 2.0 Million TPA Finished Steel) With 270 Mw Captive Power Plant.
2. Out of the 145.69 hectare of land, 131.53 hectare of land is already in possession of M/s Orissa Alloy Steel Private Limited (Formerly M/s Rashmi Alloy Steel Private Limited) & for rest of land (14.16 hectare) consent from private rayat obtained.
3. The Committee noted that M/s RASHMI ALLOY STEEL PRIVATE LIMITED has obtained TOR in April 2021. However, the present application of EC submitted on Portal is from M/s ORISSA ALLOY STEEL PVT. LTD without transfer of TOR. PP has submitted its EC application without transfer of TOR. The EAC is warned the PP/Consultant in this regard and advised the PP to follow the rules and guidelines issued by the Ministry from time to time in this regard.
4. The EAC also noted that there is still Water approval in the name of earlier Company. PP immediate to transfer all the approval in the new name of the company and intimate on Parivesh Portal accordingly.

5. The EAC also noted that the PP has initially obtained EC in the name of M/s Orissa Metaliks Pvt. Ltd. in 03.04.2019 and then EC transfer to M/s Rashmi Alloy Steel Private Limited and further transferred to M/s Orissa Alloy Steel Private Limited. This is not clear why PP has taken too much EC transfer in very small span of time.

6. The EAC noted that PP has submitted the application for the Transfer of TOR from M/s Rashmi Alloy Steel Private Limited to M/s Orissa Alloy Steel Private Limited which is under consideration by the Ministry.

7. The Water bodies exist within the study area from the project site. PP needs to be taken mitigation measures on this.

8. The net water requirement of the ISP after implementation of proposed expansion project would be around 491.67 m^3/hr (11,800 KLD) which will be obtained from Kharagpur Municipality and Treated waste water. Bore well supply as envisaged earlier will be completely replaced by surface water/ treated waste water in the present proposal for operation phase of the project.

9. EAC also noted that PP has not fully compiled the green belt condition still. EAC noted that the green belt is very thin and also the canopy size of trees is very less. It seems that PP is not taken serious steps to improve the green belt development. Also the three tier green belt is not visible on KML file. EAC advised the PP to implement the green belt condition by this coming monsoon seasons i.e. by July-August, 2022. In addition to this PP shall plant 50,000 Trees additionally in nearby area to compensate this non-compliance.

10. EAC noted that PM 10 is reaching nearer to the prescribed standard. In this context, PP needs to implement the strict mitigation measures and reduce the Particulate matter by adopting suitable technology/mitigation measures. Necessary mitigating measures w.r.t. raw material storage, control of fugitive emission, vacuum cleaning, continuous effluent monitoring system shall be proper in place so impact can be minimized.

11. EAC noted that 20.23 ha Private land is required for this project. However, PP in form 2 mentioned that R&R plan is Not Applicable (NA).

12. 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.

13. 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.

14. 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.

15. The Committee has also found that the baseline data and incremental GLC due to the proposed project within NAAQ standards but reaching to the prescribed standards.

16. The Committee deliberated on the action plan and budget allocation for green belt development and noted that as committed by the PP the green belt development shall be completed in coming monsoon seasons.

17. The has not submitted the details of carbon foot prints and carbon sequestration study w.r.t. proposed project as per the agenda instructions.

18. 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.

19. The Committee deliberated upon the certified compliance report of IRO, MoEFCC as well as action taken report submitted by PP with respect to the observations reported by IRO 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.

Recommendations of the Committee

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

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

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

iv. The activities and the action plan proposed by the project proponent to address the issues raised during public hearing and socio-economic issues in the study area shall

be completed as per the schedule presented before the Committee and as described in the EIA report in letter and spirit.

v. Water bodies exists within the study area from the project site. The water bodies shall not be disturbed. Landscaping shall be done on both embankments, with green belt covering 10 m land on both sides. This shall be in addition to the 33% green belt development.

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

vii. Iron ore slimes shall be dewatered and disposed dry. The recovered water shall be reused in the process. Ponding of tailings shall not be permitted. Maximum storage for tailings in the plant shall not exceed 90 days.

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

ix. Solid waste utilization

- PP shall install a slag crusher to convert steel slag into aggregate for use in construction industry, fine sand for use as flux in steel plant, sand in brick making and as lime in cement making.
- PP shall recycle/reuse 100 % solid waste generated in the plant.
- Used refractories shall be recycled as far as possible.

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

xi. Tar shall be recovered from producer gas and shall be sold to registered processors and phenolic water shall be incinerated in After Burn Chamber (ABC) of DRI kilns.

xii. Coke oven plant shall be equipped with modified wet quenching system.

xiii. Coke Oven Gas shall be desulfurized.

xiv. Blast Furnaces shall be equipped with Top Recovery Turbine (capacity more than 550m^3), dry gas cleaning plant, stove waste heat recovery, cast house and stock house ventilation system and slag granulation facility.

xv. Secondary fume extraction system shall be installed on converters of Steel Melting Shop.

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

xvii. Electric Arc Furnace shall be closed type with 4th hole extraction system.

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

xix. Cold Rolling Mill (CRM), color coating and galvanizing plants shall have CETP to treat and recycle the treated water from CRM complex. Sludge generated at CRM ETP shall be sent to TSDF.

xx. Dust emission from Steel Plant stacks shall be up to 30 mg/Nm^3.

xxi. The net water requirement of the ISP after implementation of proposed expansion project would be around 491.67 m^3/hr (11,800 KLD) which will be obtained from Kharagpur Municipality and Treated waste water. Bore well supply as envisaged earlier will be completely replaced by surface water/ treated waste water in the present

proposal for operation phase of the project. No ground water extraction is permitted.

xxii. Three tier Green Belt shall be developed in a time frame of one year with native species all along the periphery of the project site of adequate width and tree density shall not be less than 2500 per ha. Survival rate of green belt developed shall be monitored on periodic basis to ensure that damaged plants are replaced with new plants in the subsequent years. Compliance status in this regard, shall be submitted to concerned Regional Office of the MoEF&CC.

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

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

i. Ductile Iron (DI) plant shall have the following provisions:

   a. Bag filter for Zn coating and Mg converter area.

   b. Wet scrubbers in paint and bitumen coating area.

   c. Bag Filter in Cement lining area.

   d. PTFE dipped bags shall be used in the plant.

   e. PM emissions from BF in Zinc coating area shall be 5 mg/Nm^3.

   f. ETP with recycling facility shall be included.

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

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

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

xxviii. Railway siding shall be completed by June 2022, as committed by the PP.

xxix. PP shall prepare and implement an action plan giving annual improvement targets for resource conservation and environment improvement. This plan shall be monitored by the concerned Regional Office of the MoEF&CC.

xxx. The heat rate of coal based power plant as specified by Central Electricity Authority shall be maintained and monitored.

xxxi. Energy efficient drives, VFD for auxiliary motors and slip power recovery system for motors above 1000 kw shall be provided.

xxxii. PTFE Membrane bags shall be used in filter bag house and designed for 150% of normal design air flow.

xxxiii. Shall use ultralow NOx burner with three stage combustion, flue gas recirculation and auto combustion control system. Shall use Post combustion control system (SCR/SCNR process) with NH_3 monitoring when Ammonia is used.

xxxiv. Parking area for trucks/dumpers shall be provided within the steel plant. No truck/dumper shall be parked outside the steel plant premises.

xxxv. PP reported that out of the 145.69 hectare of land, 131.53 hectare of land is already in possession of M/s Orissa Alloy Steel Private Limited (Formerly M/s Rashmi Alloy Steel Private Limited) and for rest of land (14.16 ha) consent from private rayat

obtained, however land is not yet acquired. This EC is subject to obtaining complete acquisition of land required for the proposed expansion project.

xxxvi. This is an existing Unit. PP shall controlled the air pollutants-PM2.5, PM10 , SO2, NOx, CO emissions in the occupational environment of different process plants, within the permissible exposure limits of as per the Factories Act. PP shall do the monitoring of industrial hygiene survey within occupational environments in order to ensure good environment within the industry, so that workers health is ensured.

xxxvii. During operational phase at Captive Power Plant PP shall to measure coal dust exposures and to maintain coal dust exposures within stipulated standards at coal handling areas, conveyer belt and coal crushing area-ball mill. 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.

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

B. <u>General conditions</u>

I. Statutory compliance:

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

II. Air quality monitoring and preservation

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

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

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

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

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

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

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

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

ix. Facilities for spillage collection shall be provided for coal and coke on wharf of coke oven batteries (Chain conveyors, land based industrial vacuum cleaning facility).

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

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

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

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

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

III. Water quality monitoring and preservation

i. The project proponent shall install 24x7 continuous effluent monitoring system with respect to standards prescribed in Environment (Protection) Rules 1986 vide G.S.R 277 (E) dated 31st March 2012 (Integrated iron & Steel); G.S.R 414 (E) dated 30th May 2008 (Sponge Iron) as amended from time to time; S.O. 3305 (E) dated 7th December 2015 (Thermal Power Plants) as amended from time to time and connected to SPCB and CPCB online servers and calibrate these system from time to time according to equipment supplier specification through labs recognized under Environment (Protection) Act, 1986 or NABL accredited laboratories.

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

iii. The project proponent shall provide the ETP to meet the standards prescribed in G.S.R 277 (E) dated 31st March 2012 (Integrated iron & Steel); G.S.R 414 (E) dated 30th May 2008 (Sponge Iron) as amended from time to time; S.O. 3305 (E) dated 7th December 2015 (Thermal Power Plants) as amended from time to time.

iv. Sewage Treatment Plant shall be provided for treatment of domestic wastewater to meet the prescribed standards.

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

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

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

IV. Noise monitoring and prevention

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

V. Energy Conservation measures

i. Use torpedo ladle for hot metal transfer as far as possible. If ladles not used, provide covers for open top ladles.
ii. Restrict Gas flaring to < 1%.
iii. Provide solar power generation on roof tops of buildings, for solar light system for all common areas, street lights, parking around project area and maintain the same regularly;
iv. Provide LED lights in their offices and residential areas.
v. Ensure installation of regenerative/recuperative type burners on all reheating furnaces.

VI. Waste management

i. An attrition grinding unit to improve the bulk density of BF granulated slag from 1.0 to 1.5 Kg/I shall be installed to use slag as river sand in construction industry.
ii. Carbon recovery plant to recover the elemental carbon present in GCP slurries for use in Sinter plant shall be installed.
iii. Used refractories shall be recycled as far as possible.
iv. 100% utilization of fly ash shall be ensured. All the fly ash shall be provided to cement and brick manufacturers for further utilization and Memorandum of Understanding in this regard shall be submitted to the Ministry's Regional Office.
v. Oil Collection pits shall be provided in oil cellars to collect and reuse/recycle spilled oil. Oil collection trays shall be provided under coils on saddles in cold rolled coil storage area.
vi. Kitchen waste shall be composted or converted to biogas for further use.

VII. Green Belt

i. PP shall undertake the backlog and gap filling of greenbelt work@ 2500plants/hactare in the 2022 monsoon season itself and shall accordingly increase the budget for green belt purpose.
ii. 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.
iii. Project proponent shall submit a study report within six months on Decarbonisation program, which would essentially consist of company's carbon emissions, carbon budgeting/ balancing, carbon sequestration activities and carbon offsetting strategies. Further, the report shall also contain time bound action plan to reduce its carbon intensity of its operations and supply chains, energy transition pathway from fossil fuels to Renewable energy etc. All these activities/ assessments should be measurable and monitorable with defined time frames.

VIII. Public hearing and Human health issues

i. Emergency preparedness plan based on the Hazard identification and Risk Assessment (HIRA) and Disaster Management Plan shall be implemented.
ii. The project proponent shall carry out heat stress analysis for the workmen who work in high temperature work zone and provide Personal Protection Equipment (PPE) as per the norms.

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

IX. Environment Management

i. The project proponent shall comply with the provisions contained in this Ministry's OM vide F.No. 22-65/2017-IA.III dated 30/09/2020. As part of Corporate Environment Responsibility (CER) activity, and as committee by the PP, the company shall adopt eleven villages namely Bargai, Dangarpara, Amba, Gokulpur, Kantapal, Keshpal, Ajabpur, Barkola, Wallipur, Mohanpur and Risha based on the socio-economic survey and undertake community developmental activities in consultation with the village Panchayat and the District Administration as committed.

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

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

X. Miscellaneous

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

Agenda No. 6.10

6.10 Revised Configuration of Modernisation-cum-expansion (3.5 MTPA to 2.7 MTPA Gross Hot Metal) by M/s Steel Authority of India Limited (SAIL), Durgapur Steel Plant (DSP) located at Durgapur, Faridpur Block, District Paschim Bardhaman, West Bengal - Consideration of Environmental Clearance.

[Proposal no. IA/WB/IND/267283/2020; File no. J-11011/492/2007-IA-II(I)]
[Consultant: M/s. MECON Limited; QCI NABET Accreditation: valid upto 09/02/2023]

6.10.1 M/s Durgapur Steel Plant -Steel Authority of India has made an online application vide proposal no. IA/WB/IND/267283/2020 dated 13.04.2022 along with copy of EIA/EMP Report, Form - 2 and Certified EC Compliance Report seeking Environment Clearance (EC) under the provisions of the EIA Notification, 2006 for the project mentioned above. The proposed project activity is listed at schedule no. 3(a) Metallurgical Industries (ferrous & non-ferrous), 2(b) Mineral Beneficiation, 4(b) Coke oven plants and 1(d) Thermal Power Plantsunder Category "A" of the schedule of the EIA Notification, 2006 and appraised at Central Level.

6.10.2 Name of the EIA consultant: M/s. MECON Limited [Sl. No. 51, List of ACOs with their Certificate / Extension Letter no. NABET/EIA/2023/RA 0195; valid upto 09.02.2023, Rev. 23, May 09, 2022].

Details submitted by Project proponent

6.10.3 The details of the ToR are furnished as below:

Date of application	Consideration	Details	Date of accord	Validity of ToR
11/08/2020	22nd meeting REAC held on 26th– 29th August, 2022.	Terms of Reference	23/09/2020	22/09/2024
15/01/2021	29thmeeting of REAC held on 27th January, 2021.	Amendment in Terms of Reference	08/02/2021	

6.10.4 The project of M/s Durgapur Steel Plant located in Durgapur Town, Faridpur-Durgapur Tehsil, Paschim Bardhaman District, West Bengal State is proposing revised configuration of its existing plant from 3.5 MTPA to 2.7 MTPA Gross Hot Metal (GHM).

6.10.5 Environmental Site Settings:

<table>
<tr><th>S.No.</th><th>Particulars</th><th>Details</th><th>Remarks</th></tr>
<tr><td>i.</td><td>Total land</td><td>600 ha
[Private: 0 ha; Govt.: 600 ha; Other: 0]</td><td>Land use: Industrial</td></tr>
<tr><td>ii.</td><td>Land acquisition details as per MoEF&CC O.M. dated 7/10/2014</td><td>Entire 600 ha is already in procession of DSP</td><td>The plant is in operation from 1960’s.Proposed project will be carried out within the existing plant boundary.</td></tr>
<tr><td>iii.</td><td>Existence of habitation & involvement of R&R, if any.</td><td>Project Site: Nil
Study Area:
<table><tr><td>Habitation</td><td>Distance</td><td>Direction</td></tr><tr><td>DSP Township</td><td>~3 km</td><td>NE</td></tr><tr><td>DTPS Township</td><td>~2 km</td><td>SE</td></tr></table></td><td>No R&R required.</td></tr>
<tr><td>iv.</td><td>Latitude and Longitude of all corners of the project site.</td><td><table><tr><th>Point</th><th>Latitude (N)</th><th>Longitude (E)</th></tr><tr><td>1</td><td>23°31'53"</td><td>87°15'55"</td></tr><tr><td>2</td><td>23°32'07"</td><td>87°15'50"</td></tr><tr><td>3</td><td>23°32'13"</td><td>87°15'48"</td></tr><tr><td>4</td><td>23°32'35"</td><td>87°15'41"</td></tr><tr><td>5</td><td>23°32'39"</td><td>87°15'50"</td></tr><tr><td>6</td><td>23°32'46"</td><td>87°15'46"</td></tr><tr><td>7</td><td>23°32'47"</td><td>87°15'46"</td></tr><tr><td>8</td><td>23°32'46"</td><td>87°15'45"</td></tr><tr><td>9</td><td>23°32'46"</td><td>87°15'44"</td></tr><tr><td>10</td><td>23°32'47"</td><td>87°15'43"</td></tr><tr><td>11</td><td>23°32'47"</td><td>87°15'43"</td></tr><tr><td>12</td><td>23°32'46"</td><td>87°15'42"</td></tr><tr><td>13</td><td>23°32'48"</td><td>87°15'41"</td></tr><tr><td>14</td><td>23°32'50"</td><td>87°15'35"</td></tr><tr><td>15</td><td>23°33'25"</td><td>87°15'17"</td></tr><tr><td>16</td><td>23°33'26"</td><td>87°15'16"</td></tr><tr><td>17</td><td>23°33'28"</td><td>87°15'07"</td></tr><tr><td>18</td><td>23°33'29"</td><td>87°15'03"</td></tr><tr><td>19</td><td>23°33'30"</td><td>87°15'03"</td></tr></table></td><td>-</td></tr>
</table>

<table>
<tr><th>S.No.</th><th>Particulars</th><th colspan="4">Details</th><th>Remarks</th></tr>
<tr><td></td><td></td><td colspan="4"><table>
<tr><td>20</td><td>23°33'31"</td><td>87°15'04"</td></tr>
<tr><td>21</td><td>23°33'34"</td><td>87°15'05"</td></tr>
<tr><td>22</td><td>23°33'35"</td><td>87°14'60"</td></tr>
<tr><td>23</td><td>23°33'35"</td><td>87°14'57"</td></tr>
<tr><td>24</td><td>23°33'38"</td><td>87°14'59"</td></tr>
<tr><td>25</td><td>23°33'40"</td><td>87°14'54"</td></tr>
<tr><td>26</td><td>23°33'37"</td><td>87°14'51"</td></tr>
<tr><td>27</td><td>23°33'43"</td><td>87°14'19"</td></tr>
<tr><td>28</td><td>23°33'42"</td><td>87°14'18"</td></tr>
<tr><td>29</td><td>23°33'42"</td><td>87°14'17"</td></tr>
<tr><td>30</td><td>23°33'41"</td><td>87°14'17"</td></tr>
<tr><td>31</td><td>23°33'33"</td><td>87°14'18"</td></tr>
<tr><td>32</td><td>23°33'32"</td><td>87°14'16"</td></tr>
<tr><td>33</td><td>23°33'22"</td><td>87°14'16"</td></tr>
<tr><td>34</td><td>23°33'07"</td><td>87°14'23"</td></tr>
<tr><td>35</td><td>23°33'01"</td><td>87°14'10"</td></tr>
<tr><td>36</td><td>23°32'48"</td><td>87°14'17"</td></tr>
<tr><td>37</td><td>23°32'27"</td><td>87°14'41"</td></tr>
<tr><td>38</td><td>23°32'01"</td><td>87°15'12"</td></tr>
<tr><td>39</td><td>23°31'40"</td><td>87°15'39"</td></tr>
<tr><td>40</td><td>23°31'38"</td><td>87°15'48"</td></tr>
<tr><td>41</td><td>23°31'41"</td><td>87°15'52"</td></tr>
<tr><td>42</td><td>23°31'44"</td><td>87°15'54"</td></tr>
</table></td><td></td></tr>
<tr><td>v.</td><td>Elevation of the project site</td><td colspan="4">Altitude: 74 m to 87 m above MSL</td><td>-</td></tr>
<tr><td>vi.</td><td>Involvement of Forest land if any.</td><td colspan="4">No Forest Land Involved</td><td>-</td></tr>
<tr><td>vii.</td><td>Water body (Rivers, Lakes, Pond, Nala, Natural Drainage, Canal etc.) exists within the project site as well as study area</td><td colspan="4">Project site: Nil
Study area:<table>
<tr><td>Water body</td><td>Distance</td><td>Direction</td></tr>
<tr><td>Damodar River</td><td>~1.15 km</td><td>S</td></tr>
<tr><td>Durgapur Barrage</td><td>~7.0 km</td><td>SE</td></tr>
<tr><td>Tamla Nala</td><td>~0.3km</td><td>E</td></tr>
<tr><td>Singaran Nala</td><td>~1.5 km</td><td>W</td></tr>
<tr><td>Barjora Nala</td><td>~6 km</td><td>S</td></tr>
</table></td><td>-</td></tr>
<tr><td>viii.</td><td>Existence of ESZ/ESA/national park/wildlife sanctuary/biosphere reserve/tiger reserve/elephant reserve etc. if any within the study area</td><td colspan="4">Study area: Nil</td><td>-</td></tr>
</table>

6.10.6 The existing project was accorded environmental clearance vide lr.no. J-11011/492/2007-IA II(I) dated 10.09.2007 and subsequent amendments in 23.12.2008, 01.04.2011, 20.11.2014 and 19.02.2016.Consent to Operate for the existing plant was accorded by West Bengal State

Pollution Control Board project vide consent letter no. CO110218 dated 31.07.2018 & subsequent amendment vide memo no. 1097-dr_co_s/11/1952 dated 02.07.2020. The validity of CTO is up to 31.07.2023.

6.10.7 Implementation status of the existing EC

Sl. No.	Facilities/ Plant Unit /Particulars	As per EC 2007 and its amendments	Implementation Status as on 31.03.2020	
		Capacity/ Configuration	Capacity/ Configuration	Remarks
1.	**Coke Oven Complex**			
a)	**Composition / Availability :**			
	Coke Oven Battery (COB) No. # I	78 Ovens; 4.5 m tall; Top Charge; Wet Quenching Facility	78 Ovens; 4.5 m tall; Top Charge; Wet Quenching Facility	No Change
	COBs # II, # III, # IV, #V, # VI	Each 78 Ovens, height 4.45m; Top Charge; Wet Quenching.	Each 78 Ovens, height 4.45m; Top Charge; Wet Quenching.	No Change
	Gross Coke Production	**1.7 MTPA**	**1.7 MTPA**	No Change
2.	**Byproducts Plant**			
a)	Benzol Plant : Crude Benzol Production	16800 TPA	16800 TPA	No Change
b)	Ammonium Sulphate Plant	19200 TPA	19200 TPA	No Change
c)	Tar Plant : Crude Tar Production	72000 TPA	72000 TPA	No Change
3.	**Sinter Plant Complex :**			
a)	Sinter Plant SP # I (2X143.2 m^2)	1.299 MTPA (To be phased out after installation of SP#III)	1.299 MTPA	Not Phased out, as SP #III is not installed.
b)	Sinter plant SP # II (1X180 m^2)	1.71 MTPA	1.71 MTPA	No Change
c)	Sinter plant SP # III New: (1X296 m^2)	3.029 MTPA	Not Installed	Not Installed
d)	**Total Gross Sinter Production :**	**4.739 MTPA**	**3.009 MTPA**	**Reduction**
4.	**Blast Furnace :**			
a)	BF# 1 : 1x1400 m^3; GHM Production	0.945 MTPA	Not Re-constructed	Dismantled
b)	BF# 2 & BF# 3 : 2x1400 m^3, GHM Production	1.61 MTPA	1.61 MTPA	No Change
c)	BF# 4 : 1 x 1800 m^3; GHM Production	0.945 MTPA	0.945 MTPA	No Change
d)	**Total GHM Production**	**3.5 MTPA**	**2.555 MTPA**	**Reduction**
e)	BF Gas Cleaning Plant (GCP): BF #2, #3 & BF #4	GCP: BF #2, #3 & BF #4	GCP: BF #2, #3 & BF #4	No Change
f)	Slag Granulation Plant (SGP):	0.89 MTPA	0.89 MTPA	No Change
g)	Pig Casting Machine	214000 TPA	214000 TPA	No Change
5.	**Steel Melting Shop & Associated Facilities**			
a)	Hot Metal Mixer	2 x 1300t	2 x 1300t	No Change
b)	Hot Metal De-sulphurisation Unit : 1.4 MTPA	1.4 MTPA	-	Not installed
c)	Charging Ladles 140t for Hot Metal supply from Mixers to BOFs.	140t	140t	No Change

Sl. No.	Facilities/ Plant Unit /Particulars	As per EC 2007 and its amendments	Implementation Status as on 31.03.2020	
		Capacity/ Configuration	**Capacity/ Configuration**	**Remarks**
d)	Basic Oxygen Furnaces (BOFs)	3x120t (3x110 m^3): 3/3 Convertor Operation	3x120t (3x110 m^3): 3/3 Convertor Operation	No Change
e)	Laddle Furnace (LF)	2x130t (Existing) + 1x130t (New)	3x130t	No Change
f)	RH de-gassing unit (new envisaged)	1X130t	-	Not installed
g)	Secondary Refining : Vacuum Arc Degassing (VAD)	1X130t	1X130t	No Change
h)	Gas Cleaning Plant (GCP)	83000 Nm^3/hr	83000 Nm^3/hr	No Change
6.	**Casting Facilities**			
a)	Billet Caster	2X6 strand	2X6 strand	No Change
b)	Bloom Caster	1X4 strand	1X4 strand	No Change
c)	Bloom-cum-Round Caster	1X4 Strand	1X4 Strand	No Change
d)	Ingot Casting	100% Continuous casting replacing Ingot casting – blooming mill route.	Bottom Pouring Ingot Casting for 2.5% liquid steel (for high grade steel for wheels) & rest through continuous casting.	Both Continuous casting and Ingot casting
	Total Crude Steel Production : 3.0 MTPA	**3.0 MTPA**	**2.20 MTPA**	**Reduction**
7.	**Rolling Mills**			
a)	Existing Merchant Mill	0.33 MTPA	0.33 MTPA	No Change
b)	New Bar & Rod Mill:	Wire Rod Mill: 0.5 MTPA. New Merchant Mill: 0.8 MTPA	-	Not installed
c)	Wheel & Axle Plant	0.16 MTPA	0.16 MTPA	No Change
d)	Skelp Mill	0.22 MTPA	-	Not in Operation
e)	Section Mill	0.207 MTPA (Kept Out of Operation)	0.207 MTPA (Kept Out of Operation)	No Change
f)	New Medium Structural Mill (MSM)	1.0 MTPA	1.0 MTPA	No Change
g)	20 Nos. Soaking Pits Ingot-Stripping Facilities & Blooming Mills	Phased Out	Phased Out	No Change
h)	Billet Mill; Producing 0.23 MTPA. Phased out	Phased Out	Phased Out	No Change
	Total Finished Steel / Saleable Steel Production :	**2.832 MTPA**	**2.29 MTPA**	**Reduction**
8.	**Old Power Plant (OPP)**			

Sl. No.	Facilities/ Plant Unit /Particulars	As per EC 2007 and its amendments	Implementation Status as on 31.03.2020	
		Capacity/ Configuration	**Capacity/ Configuration**	**Remarks**
	Dual Fired (Coal & Coke oven & BF Gas) Boiler	Boiler No. 1, 2, 5 & 6: Dual Fired- Gas & Coal (68 TPH each) proposed to be replaced with Dual Fired (Coal & Gas) Boiler 3X125 TPH.	Boiler No. 1, 2, 5 & 6: Dual Fired Gas & Coal (68 TPH each)	Boiler replacement not undertaken
	Coke Oven/ BF Gas Fired Boiler	Three Gas Fired Boiler Nos. 3, 4 & 7 (68 TPH each).	Three Gas Fired Boiler Nos. 3, 4 & 7 (68 TPH each).	No Change
	Turbo-Alternators	Four Steam driven Turbo-Alternators 4X5 MW. Max. Power Generation 4x5 MW of Category –I Load; To be replaced with 3X20MW (2W+1S) Turbo-Alternator to produce 2x20MW Category –I Power		Replacement not undertaken
9.	**Associated Facilities**			
a)	Calcined Lime Plant (3X300 t/d)	0.2485 MTPA	0.2485 MTPA	No Change
b)	Calcined Dolomite Plant (1X300t/d)	0.0694 MTPA	0.0694 MTPA	No Change
c)	Oxygen Plant: Captive	2x350 TPD	2x350 TPD	No Change
d)	Oxygen Plant : BOO basis	1x700 TPD 1x350 TPD(new)	1x700	1x350 TPD- Not Installed
e)	Foundry shop with EAF	Furnace 6t	Furnace 6t	No Change
f)	**Raw material Handling Complex**	**9.1138 MTPA**	**7.5321 MTPA**	**Reduction**
g)	Coke Oven Gas Holder	56,000 m^3	56,000 m^3	No Change
h)	BF Gas Holder	1,00,000m^3	1,00,000m^3	No Change
i)	Existing BOF Gas Holder	40,000m^3	40,000m^3	No Change
j)	Liquid Oxygen Holder	2000t	2000t	No Change
k)	Propane Unit (2x200t)	2x200t = 400t	2x200t = 400t	No Change
l)	LPG Storage Facility	4X500t	-	Not Installed

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

Sl. No.	Plant Unit /Particulars	Plant Unit Configuration/Capacity			
		EC 2007 (with amendments)	**Existing / Implemented**	**Present Proposal**	**Final (Existing+ Proposed)**
1.	**EC Capacity**				

Sl. No.	Plant Unit /Particulars	Plant Unit Configuration/Capacity			
		EC 2007 (with amendments)	**Existing / Implemented**	**Present Proposal**	**Final (Existing+ Proposed)**
a)	Gross Hot Metal (GHM) Production	3.5 MTPA	2.555 MTPA	2.7 MTPA	2.7 MTPA
b)	Crude Steel Production	3.0 MTPA	2.20 MTPA	2.5 MTPA	2.5 MTPA
c)	Finished / Saleable Steel Production	2.8325 MTPA	2.29 MTPA	2.4104 MTPA	2.4104 MTPA
d)	Cold Pigs Production:	214000 TPA	214000 MTPA	No Change	214000 TPA
2.	**Coke Oven Complex**				
b)	**Composition / Availability :**				
	Coke Oven Battery (COB) No. # I	78 Ovens; 4.5 m tall; Top Charge; Wet Quenching Facility	78 Ovens; 4.5 m tall; Top Charge; Wet Quenching Facility	Existing COB # I to be replaced with New COB#I (2x44 Ovens, height 5.5m, Stamp Charge; CDCP).	COB # I (2x44 Ovens, height 5.5m; Stamp Charge; CDCP)
	COBs # II, # III, # IV, #V, # VI	Each 78 Ovens, height 4.45m; Top Charge; Wet Quenching.	Each 78 Ovens, height 4.45m; Top Charge; Wet Quenching.	No Change	Each 78 Ovens, height 4.45m; Top Charge; Wet Quenching)
	Gross Coke Production	**1.7 MTPA**	**1.7 MTPA**	**No Change**	**1.7 MTPA**
c)	CDQ Green Power : 10 MW	-	-	New CDQ Extraction Turbine 12MW; Power Generation 10MW	CDQ Extraction Turbine 12MW; Power Generation 10MW
3.	**Byproducts Plant**				
d)	Benzol Plant : Crude Benzol Production	16800 TPA	16800 TPA	No Change	16800 TPA
e)	Ammonium Sulphate Plant	19200 TPA	19200 TPA	No Change	19200 TPA
f)	Tar Plant : Crude Tar Production	72000 TPA	72000 TPA	No Change	72000 TPA
4.	**Sinter Plant Complex :**				
e)	Sinter Plant SP # I (2X143.2 m^2)	1.299 MTPA (To be phased out after installation of SP#III)	1.299 MTPA	Increase in Gross Sinter Production from 1.299 to 1.5 MTPA	1.5 MTPA

Sl. No.	Plant Unit /Particulars	Plant Unit Configuration/Capacity			
		EC 2007 (with amendments)	**Existing / Implemented**	**Present Proposal**	**Final (Existing+ Proposed)**
f)	Sinter plant SP # II (1X180 m^2)	1.71 MTPA	1.71 MTPA	Increase in Gross Sinter Production from 1.71 to 1.9 MTPA	1.9 MTPA
g)	Sinter plant SP # III New: (1X296 m^2)	3.029 MTPA	Not Installed	No Change	-
h)	**Total Gross Sinter Production :**	**4.739 MTPA**	**3.009 MTPA**	**3.4 MTPA**	**3.4 MTPA**
5.	**Blast Furnace :**				
h)	BF# 1 : 1x1400 m^3; GHM Production	0.945 MTPA	Not Re-constructed	No Change	-
i)	BF# 2 & BF# 3 : 2x1400 m^3, GHM Production	1.61 MTPA	1.61 MTPA	Increase in GHM Production from 1.61 MTPA to 1.755 MTPA	1.755 MTPA
j)	BF# 4 : 1 x 1800 m^3; GHM Production	0.945 MTPA	0.945 MTPA	No Change	0.945 MTPA
k)	**Total GHM Production**	**3.5 MTPA**	**2.555 MTPA**	**2.7 MTPA**	**2.7 MTPA**
l)	BF Gas Cleaning Plant (GCP): BF #2, #3 & BF #4	GCP: BF #2, #3 & BF #4	No Change	No Change	BF Gas Cleaning Plant (GCP) : BF #2, #3 & BF #4
m)	Slag Granulation Plant (SGP):	0.89 MTPA	0.89 MTPA	No Change	0.89 MTPA
n)	Pig Casting Machine	214000 TPA	214000 TPA	No Change	214000 TPA
6.	**Steel Melting Shop & Associated Facilities**				
i)	Hot Metal Mixer	2 x 1300t	2 x 1300t	No Change	2 x 1300t
j)	Hot Metal De-sulphurisation Unit : 1.4 MTPA	1.4 MTPA	Not installed	No Change	-
k)	Charging Ladles 140t for Hot Metal supply from Mixers to BOFs.	140t	140t	No Change	140t
l)	Basic Oxygen Furnaces (BOFs)	3x120t (3x110 m^3): 3/3 Convertor Operation	3x120t (3x110 m^3): 3/3 Convertor Operation	No Change	Basic Oxygen Furnaces (BOFs) 3x120t (3x110 m^3): 3/3 Convertor Operation.
m)	Laddle Furnace (LF)	2x130t (Existing) + 1x130t (New)	3x130t	No Change	3x130t

Sl. No.	Plant Unit /Particulars	Plant Unit Configuration/Capacity			
		EC 2007 (with amendments)	**Existing / Implemented**	**Present Proposal**	**Final (Existing+ Proposed)**
n)	RH de-gassing unit (new envisaged)	1X130t	Not installed	No Change	-
o)	Secondary Refining : Vacuum Arc Degassing (VAD)	1X130t	1X130t	No Change	1X130t
p)	Gas Cleaning Plant (GCP)	83000 Nm^3/hr	83000 Nm^3/hr	No Change	83000 Nm^3/hr
7.	**Casting Facilities**				
e)	Billet Caster	2X6 strand	2X6 strand	No Change	2X6 strand
f)	Bloom Caster	1X4 strand	1X4 strand	No Change	1X4 strand
g)	Bloom-cum-Round Caster	1X4 Strand	1X4 Strand	No Change	1X4 Strand
h)	Ingot Casting	100% Continuous casting replacing Ingot casting – blooming mill route.	Bottom Pouring Ingot Casting for 2.5% liquid steel (for high grade steel for wheels) & rest through continuous casting.	No Change	Bottom Pouring Ingot Casting for 2.5% liquid steel (for high grade steel for wheels) & rest through continuous casting.
	Total Crude Steel Production : 3.0 MTPA	**3.0 MTPA**	**2.20**	**2.5 MTPA**	**2.5 MTPA**
8.	**Rolling Mills**				
i)	Existing Merchant Mill	0.33 MTPA	0.33 MTPA	Increase in Production Capacity from 0.33 MTPA to 0.4 MTPA	0.4 MTPA
j)	New Bar & Rod Mill:	Wire Rod Mill: 0.5 MTPA. New Merchant Mill: 0.8 MTPA	Not installed	New Bar Mill Capacity : 1.0 MTPA	New Bar Mill, Capacity : 1.0 MTPA
k)	Wheel & Axle Plant	0.16 MTPA	0.16 MTPA	Addition of Online Heat Treatment Facility in place of existing 4 nos. reheating furnaces	0.16 MTPA (with Online Heat Treatment Facility)
l)	Skelp Mill	0.22 MTPA	Not in Operation	Not to be in operation	-
m)	Section Mill	0.207 MTPA (Kept Out of Operation)	0.207 MTPA (Kept Out of Operation)	Bring Back in Operation (Capacity 0.207 MTPA) till Full	Section Mill: Capacity 0.207 MTPA in Operation till Full Capacity

Sl. No.	Plant Unit /Particulars	Plant Unit Configuration/Capacity			
		EC 2007 (with amendments)	**Existing / Implemented**	**Present Proposal**	**Final (Existing+ Proposed)**
				Capacity Utilization of Medium Structural Mill.	Utilization of Medium Structural Mill
n)	New Medium Structural Mill (MSM)	1.0 MTPA	1.0 MTPA	No change	1.0 MTPA
o)	20 Nos. Soaking Pits Ingot-Stripping Facilities & Blooming Mills	Phased Out	Phased Out	No change	-
p)	Billet Mill; Producing 0.23 MTPA. Phased out	Phased Out	Phased Out	No change	-
	Total Finished Steel / Saleable Steel Production :	**2.832 MTPA**	**2.29 MTPA**	**2.4104 MTPA**	**2.4104 MTPA**
9.	**Old Power Plant (OPP)**				
	Dual Fired (Coal & Cokeoven & BF Gas) Boiler	Boiler No. 1, 2, 5 & 6: Dual Fired Gas & Coal (68 TPH each) proposed to be replaced with Dual Fired (Coal & Gas) Boiler 3X125 TPH.	Boiler replacement not undertaken	No Change	Dual Fired (Gas & Coal) Boilers No. 1, 2, 5 & 6 (68 TPH each).
	Coke oven & BF Gas Fired Boiler	Three Gas Fired Boiler Nos. 3, 4 & 7 (68 TPH each).	No Change	Replacement of 7th 68 TPH Gas Fired Boiler with 100 TPH Gas Fired Boiler	Three Gas Fired Boilers: No. 3 & 4 (68 TPH each) & New No. 7 (100 TPH).
	Turbo-Alternators	Four Steam driven Turbo-Alternators 4X5 MW. Max. Power Generation 4x5 MW of Category –I Load; To be replaced with 3X20MW (2W+1S) Turbo-Alternator to produce 2x20MW Category –I Power	Replacement not undertaken	No Change	Four Steam driven Turbo-Alternators 4X5 MW with Max. Power Generation 4x5 MW (Category –I Load).
10.	**Associated Facilities**				
m)	Calcined Lime Plant (3X300 t/d)	0.2485 MTPA	0.2485 MTPA	No Change	0.2485 MTPA
n)	Calcined Dolomite Plant (1X300t/d)	0.0694 MTPA	0.0694 MTPA	No Change	0.0694 MTPA

Sl. No.	Plant Unit /Particulars	Plant Unit Configuration/Capacity			
		EC 2007 (with amendments)	**Existing / Implemented**	**Present Proposal**	**Final (Existing+ Proposed)**
o)	Oxygen Plant: Captive	2x350 TPD	2x350 TPD	• 1x350 TPD continues • 1x350 TPD Phasing out	1x350 TPD
p)	Oxygen Plant : BOO basis	1x700 TPD 1x350 TPD(new)	• 1x700 • 1x350 TPD-Not Installed	• New 1x1250 TPD BOO Basis in place of existing 1x700 TPD	1x1250 TPD (new)
q)	Foundry shop with EAF	Furnace 6t	Furnace 6t	No Change	Furnace 6t
r)	**Raw material Handling Complex**	9.1138 MTPA	7.5321 MTPA	No Change	7.5321 MTPA
s)	Coke Oven Gas Holder	56,000 m^3	56,000 m^3	To be replaced with New Gas Holder of Capacity 70,000 m^3	70,000 m^3
t)	BF Gas Holder	1,00,000m^3	1,00,000m^3	No Change	1,00,000m^3
u)	Existing BOF Gas Holder	40,000m^3	40,000m^3	No Change	40,000m^3
v)	Liquid Oxygen Holder	2,000t	2,000t	No Change	2,000t
w)	Propane Unit (2x200t)	2x200t = 400t	2x200t = 400t	No Change	2x200t = 400t
x)	LPG Storage Facility	4X500t	Not Installed	No Change	-

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

S. No.	Raw Material	Quantity required per annum			Source	Distance from site (kms)	Mode of Transportation
		EC 2007 and its amendments	**Additional for the Proposed Project (t)**	**Total after Proposed Project (t)**			
Gross Hot Metal Capacity (MTPA)		**3.5**		**2.7**			
1.	Iron Ore Lump	1137920	501080	1639000	Captive EMD Mines at Bolani / Gua	250	Rail
2.	Iron Ore Fines	4329360	-1649360	2680000	Captive EMD Mines at Bolani / Gua	250	Rail
3.	SMS Grade Iron Ore	33600	47400	81000	Captive EMD Mines at Bolani / Gua	250	Rail

S. No.	Raw Material	Quantity required per annum			Source	Distance from site (kms)	Mode of Transportation
		EC 2007 and its amendments	Additional for the Proposed Project (t)	Total after Proposed Project (t)			
4.	Lime stone for Lime Calcination Plant (LCP) / SMS	506688	0.0	506688	Jaisalmer, Rajasthan	1600	Rail
5.	Dolomite for Dolo plant (SMS)/Dolomite (Low/Silica)	141568	0.0	141568	Bhutan	600	Rail
6.	Lime Stone for SP (BF)	392672	-261672	131000	Captive EMD Mines Kuteswar in Katni, MP / Imported	700	Rail
7.	Dolomite for SP / BF	537600	-325600	212000	Bhutan	600	Rail
8.	Mn Ore for BF	33600	-33600	0	Captive EMD Mines at Bolani / Gua	-	Rail
9.	Ferro Manganese	0	2500	2500	Private Suppliers	500	Rail
10.	Ferro Silicon	0	7600	7600	Private Suppliers	500	Rail
11.	Silico Manganese	0	41100	41100	Private Suppliers	500	Rail
12.	Ferro Alloys	48496	-48496	0	Private Suppliers	-	Rail
13.	Quartzite for BF	96992	-96992	0	Chaibasa, Ranchi	-	Road/Rail
14.	Coal for CDI	443520	-229520	214000	ECL / BCCL, Chasnala	250	Rail
15.	Coking Coal (1.7 MTPA Coke Production)	2675450	0.0	2675450	Imported / BCCL Chasnala / CCL	250	Rail
	Total	**10377466**	**-2045560**	**8331906**			
16.	Coal for Power Plant	172870	-130870	42000	Imported / BCCL Chasnala / CCL	250	Rail
	Grand Total	**10550336**	**-2176430**	**8373906**			

6.10.10 The requirement of make-up water for the project is estimated to be 5575 m^3/hr (1,33,800 KLD) which is sourced from Durgapur Barrage built on River Damodar, permission for the same has

been obtained from Damodar Valley Corporation (DVC) vide agreement no. COML/WS/2012-13/WC dated 19.02.2016.

6.10.11 The power requirement for the proposed project is estimated to be 245.5 MVA, which will be met from NSPCL (NTPC-SAIL Power Company Limited, a joint venture of NTPC Limited and SAIL) / Damodar Valley Corporation (DVC) along with captive power plant of DSP.

6.10.12 Baseline Environmental Studies:

<table>
<tr><td>Period</td><td>Summer season 2020 & Sept-Oct 2020
Due to National Lockdown, additional one month monitoring in Sept-Oct 2020 with permission from MoEFCC has been carried out.</td></tr>
<tr><td>AAQ parameters at 8locations</td><td>$PM_{2.5}$ = 37 to 63 µg/m^3
PM_{10} = 55 to 106 µg/m^3
SO_2 = 13.5 to 33.1 µg/m^3
NOx = 20.1 to 39.9 µg/m^3
CO = 0.3 to 2.2 mg/m^3</td></tr>
<tr><td>AAQ modelling (Max Incremental GLC)</td><td>PM10 = -1.5 µg/m^3 (4.6 km, ENE)
PM2.5 = -1.3 µg/m^3 (4.6 km, ENE)
SO2 = 0.8 µg/m^3 (0.15 km, N)
NOx = 0.9 µg/m^3 (5.3 km, NW)</td></tr>
<tr><td>Ground water quality at8 locations</td><td>pH: 7.0 to 7.3,
Total Hardness: 200 to 444 mg/l,
Chlorides: 40 to 114 mg/l,
Fluoride: 0.42 to 0.93 mg/l.
Heavy metals: within limits.</td></tr>
<tr><td>Surface water quality at 10 locations</td><td>pH: 7.2 to 7.9;
DO: 5.4 to 7.2 mg/l and
BOD: 3 to 5 mg/l.</td></tr>
<tr><td>Noise levels Leq (Day and Night)</td><td>38.8 to 66 dB for the day time;
37.6 to 53.7dB for the Night time.</td></tr>
<tr><td>Traffic assessment study findings</td><td>Traffic study has been conducted at DSP Main Gate (adjacent to plant) and Old Court more, NH-2, Durgapur which is approximately500 m from the plant site.
<table>
<tr><td>Traffic Monitoring Locations</td><td>Traffic Load Baseline (Max PCU/hr)</td><td>Additional load due to transportation in proposed project</td><td>Total</td><td>Carrying capacity as per: IRC:106-1990 (PCU’s per hour)</td></tr>
<tr><td>T1</td><td>1035</td><td rowspan="2">No additional load envisaged due to present proposal</td><td>1035</td><td>3600</td></tr>
<tr><td>T2</td><td>3896</td><td>3896</td><td>5400</td></tr>
</table>
100% Raw Material transportation through Road.

Safe – below carrying capacity of road.</td></tr>
<tr><td>Flora and fauna</td><td>Schedule-I fauna present in the buffer zone are Shikra, Black-winged Kite, Black Kite, Oriental Honey Buzzard, Osprey, Grey Wolf, Asian Elephant, Indian Rock Python, Golden Monitor, Purple Leaf Blue, Chestnut-streaked Sailer, Danaid Eggfly.</td></tr>
</table>

	Site-specific Wildlife Conservation Plan for Schedule-I Fauna has been prepared by Durgapur Wildlife Information and Nature Guide Society and is submitted to competent authority for approval. The total budget for implementation of Wildlife conservation plan is Rs. 401.17 Lakhs for the period of 10 years.

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

A) Solid Waste

S. No.	Type of Waste	Source	Quantity generated (TPA)	Mode of Treatment	Disposal
1	BF Slag	*Blast Furnace*	939034	Granulation	100% sold for Cement making
2	BF Flue dust	*Blast Furnace*	17321	-	100% reused in sinter plant/ Sold
3	BF Sludge	*Blast Furnace*	11588	-	100% used in Sinter making
4	BOF Slag	*SMS*	418298	Magnetic Separation and Screening	70-75 % used in Sinter making, BF as substitute of lime. Rest 25-30% will be utilization for road making.
5	BOF Sludge	*SMS*	40655	-	100% reused in sinter plant
6	Mill Scales	*Rolling Mills*	50066	-	100% reused in sinter plant
7	Lime Fines	*Lime Plant*	27094	-	100% reused in sinter plant
8	Waste Refractory	*All Furnaces / Ovens*	9504	-	100% sold in outside market
9	Cinder	*Power plant*	26861	-	100% Sold to Briquette manufacturers
10	SP ESP dust	*Sinter Plant*	198578	-	100% reused in sinter plant

B) Hazardous Waste

S.N.	Hazardous Waste	Source	Quantity Generated (TPA)	Mode of Utilisation/ Disposal
1.	Tar Sludge	Tar Decanter of Coal Chemical Plant of Coke Ovens	889	It is recovered from the bottom of tar decanter of Coal Chemical, dried in drying bed and used internally by blending with coal and charging into Coke Oven batteries.
2.	ETP Sludge	BOD Plant	4.45	Collected from BOD Plant sludge drying bed and used internally by blending with coal and subsequently charging into Coke Oven batteries.

S.N.	Hazardous Waste	Source	Quantity Generated (TPA)	Mode of Utilisation/ Disposal
3.	Used Oil	Lubricating oil used in Rolling mills, Transformers and other shops.	10.2	Collected in drums from the grounds of various machines in different shops and kept in used oil storage yard. From there it is distributed to different shops for reuse in the plant as well as sold to registered recyclers of Pollution Control Board viz. M/s Amit Lubricants, West Bengal, M/s OM Industries, Haryana, M/s Bristol Petroleum Ltd, West Bengal etc.
4.	Waste Lead Acid Battery	Garage, Loco shop, Telecom, ETL etc.	7.8376	Collected from various shops like garage, loco shop, telecom, ETL etc. by truck/jeep and kept in Central Stores and sold to registered recyclers of Pollution Control Board viz. M/s Adarsh Galai Udyog, Howrah, M/s Panchawati Metal Works, Kolkata, M/s J S Pigments Pvt. Ltd, Kolkata etc.
5.	Empty contaminated containers	Various Shops	4559	Collected from various shops and kept in the storage yard of Central Stores andsold to authorized recyclers of Pollution Control Board viz. M/s Goel Oil Containers, Haryana, M/s N K Company, West Bengal etc.

6.10.14 **Public Consultation:**

Details of advertisement	Notices made through advertisement: a. English News Paper: "Millennium Post" published on 01st December, 2021 b. Hindi News Paper: "Sanmarg" published on 01st December, 2021 c. Bengali News Paper: "Aajkal" published on 01st December, 2021.
Date of public consultation	5th January, 2022
Venue	Steel Club, R.K.Avenue, A-Zone, Durgapur-713204, Dist. Paschim Bardhaman, West Bengal
Presiding Officer	Additional District Magistrate (L&LR), Dist- Paschim Bardhaman, West Bengal
Major issues raised	The Project was largely welcomed by the Local Citizens. Major demands / issues were related to: • Development of roads • Educational facilities • Employment generation • Development of health infrastructure • Development of greenbelt

S. No.	Physical activity and action plan		Year of implementation (Budget in INR)				Total Expenditure (Rs. in Crores)
	Name of the Activity	Physical Targets	1st	2nd	3rd	Total	
1	Providing an Ambulance Car for the nearby villages including Old Court More and Patsov after discussion with the local State Government Hospital.	No. of Ambulance	1 (0.15)	-	-	1	0.15
2	Repairing of the existing roads of Gulf Nagar in consultation with local Municipality/ Panchayat.	Road length (Kms)	2 (0.4)	2 (0.4)	1 (0.2)	5	1.00
3	Set up a vocational Training Institute near Amrai village in consultation with local Municipality/ Panchayat.	No. of Institutes	-	-	1 (0.2)	1	0.20
4	Organise Eye testing camp in every 6 months in the nearby villages including Patsov village and Arati Gram.	No. of Camps/yr	2 (0.02)	2 (0.02)	2 (0.02) -Will Continue every year thereafter	6	0.06
5	Plantation for 50,000 saplings of fruit bearing plants and Ornamental plants in the A-Zone, Arati Gram and other nearby suitable areas.	Plantation for saplings	20,000 (0.2)	20,000 (0.2)	10,000 (0.1)	50,000	0.50
6	Wheelchairs will be provided to all Differently abled person of Palashdiha Village and nearby areas.	No. of wheelchair	30 (0.06)	20 (0.04)	-	50	0.10
						Total	**2.01**

6.10.15 The capital cost of the project is Rs. 3324 Crores and the capital cost for environmental protection measures is proposed as Rs433.51 Crores. The annual recurring cost towards the environmental protection measures is proposed as Rs0.79 Crores. The employment generation from the proposed project / expansion is about 667. The details of cost for environmental protection measures is as follows:

S. No.	Description of Item	Capital Cost (Rs. in Crores)	Recur. Cost/ annum (Rs. In Crores)
1.	Air, Noise, Solid/ Waste Management/ Water Conservation & Pollution Control Systems	430.84	0.79
2.	Green belt development	2.67	-
Sub-total Cost for Environmental Protection Measures		433.51	0.79
3.	Addressal of Public Consultation concerns	2.01	-
Total EMP implementation cost		435.52	0.79

6.10.16 Existing green belt has been developed in 239.66 ha area which is about 39.94% of the total plant area of 600 ha. However, overall green belt has been developed in 1976 ha area which is about 36.3% of the total area under possession of DSP (5444 ha) with total sapling of 31,61,600 Trees. Proposed greenbelt will be developed in 202 ha which is about 40.007% of the total area under possession of DSP.Thus total of 2178 ha area (40.007% of total project area) will be developed as greenbelt. A 2m - 20m 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 5,05,000 saplings will be planted and nurtured in 202 hectares in 3 years.

6.10.17 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 Regional Office

6.10.18 The Status of compliance of earlier EC was obtained from Regional Office, Kolkata vide letter no. J-11011/492/2007-IA II (I)dated 16/03/2021 in the name of M/s. Durgapur Steel Plant. No observations has been made by RO in the report dated 16.03.2021 mentioning "No non-compliances detected. No any further action is required".

Deliberations by the Committee

6.10.19 The Committee noted the following:

1. Instant proposal is for revised configuration of its existing plant from 3.5 MTPA to 2.7 MTPA Gross Hot Metal (GHM).
2. Water bodies exist within the study area from the project site.
3. The net water requirement is estimated to be 5575 m^3/hr (1,33,800 KLD) which is sourced from Durgapur Barrage built on River Damodar.
4. There are Schedule - I species reported in study area, namely Shikra, Black-winged Kite, Black Kite, Oriental Honey Buzzard, Osprey, Grey Wolf, Asian Elephant, Indian Rock Python, Golden Monitor, Purple Leaf Blue, Chestnut-streaked Sailer, Danaid Eggfly.Site-specific Wildlife Conservation Plan for Schedule-I Fauna has been prepared by Durgapur Wildlife Information and Nature Guide Society and is submitted to competent authority for approval. The total budget for implementation of Wildlife conservation plan is Rs. 401.17 Lakhs for the period of 10 years.
5. As per the Central Pollution Control Board's Comprehensive Environmental Pollution Index (CEPI), Durgapur falls under 'Severely Polluted Area' (SPA). The same was taken into due consideration by the Expert Appraisal Committee in their meeting held during 26-28thAugust 2020 and accordingly the ToR was issued on 23rdSeptember 2020 with stringent conditions. By implementation of the schemes under the present proposal there will be a decrease in the PM emission load from the modernized/new units. The total Emission Load of SAIL-Durgapur Steel Plant is expected to reduce by around 50% from the existing level. Further, in order to comply with the ToR conditions, DSP has already undertaken several measures to limit PM emissions within 30 mg/Nm^3 for all existing units by 31st December, 2023. Due to this, it is expected that there will be a significant reduction in PM emission load of SAIL-Durgapur Steel Plant.

Recommendations of the Committee

6.10.20 In view of the foregoing and after detailed deliberations, the committee **recommended** to defer the proposal and sought the requisite information.

1. As per the Central Pollution Control Board's Comprehensive Environmental Pollution Index (CEPI), Durgapur falls under 'Severely Polluted Area' (SPA). The PP shall revise the stringent mitigation maturases as one of the location in baseline study the PM10 is exceeding the prescribed limit. PP needs to recheck the data and come with stringent mitigation maturases.
2. The PP will submit progress made to maximize water reuse in compliance of EC condition and specific plan with time targets to complete the task.
3. The industry is having coke oven capacity of 1.7 MTPA. During coke oven emissions employees might be exposed to benzene, toluene and xylene along with polycyclic aromatic hydrocarbons (PAHs). Benzene and some PAHs (for eg. Benzo(a)pyrene are carcinogeneic in nature. Therefore it is recommended to measure PM 10 & 2.5 dust in the occupational environments of coke oven plant, benzol plant, and Tar Plant and to quantify Polycyclic aromatic hydrocarbons (PAHs) and to ensure all the air pollutants are within permissible limits. PP needs to submit the details in this regard.
4. There were also some technical issues was also observed from the SAIL' end while making the presentation through Video Conferencing Mode. **In this context, EAC recommended that this instant proposal may be placed before the next EAC meeting to be held on June 13-14, 2022 for further deliberations.**

Agenda No. 6.11

6.11 Expansion Proposed Integrated Cement Project- Clinker (3.0 MTPA), Cement (4.8 MTPA), Captive Power Plant (48 MW) and WHRS (15 MW) by M/s. Prism Johnson Limited located Village Kotapadu, Mandal Kolimigundala, District: Kurnool, Andhra Pradesh - Consideration of Environmental Clearance.

[Proposal No. IA/AP/IND/99537/2019; File No. IA-J-11011/159/2019-IA-II(I)]]
[Name of Consultant: M/s. J.M. EnviroNet Pvt. Ltd., Gurugram; QCI NABET Accreditation: valid upto 07/02/2023]

6.11.1 M/s Prism Johnson Limited has made an online application *vide* proposal no. IA/AP/IND/99537/2019 dated 17/05/2022 along with copy of EIA/EMP Report, Form - 2 seeking Environment Clearance (EC) under the provisions of the EIA Notification, 2006 for the project mentioned above. The proposed project activity is listed at schedule no. 3(b) Cement Plants and 1(d) Thermal Power Plants under Category "A" of the schedule of the EIA Notification, 2006 and appraised at Central Level.

6.11.2 Name of the EIA consultant: M/s. J.M. EnviroNet Pvt. Ltd., Gurugram [S No 42, List of ACOs with their Certificate / Extension Letter No: NABET/EIA/2023/RA 0186 valid till 07/02/2023; Rev. 23, May 09, 2022].

Details submitted by Project proponent

6.11.3 The details of the ToR are furnished as below:

Date of application	Consideration	Details	Date of accord	Validity of ToR
16/03/2019	Standard ToR	Terms of References	18/05/2019	17/05/2023

6.11.4 The project of M/s. Prism Johnson Limited located in Kotapadu Village, Kolimigundla (Mandal), Kurnool District (now Nandyal), Andhra Pradesh is for setting up of a new Proposed Integrated Cement Project - Clinker (3.0 MTPA), Cement (4.8 MTPA), Captive Power Plant (48 MW) and WHRS (15 MW).

6.11.5 Environmental Site Settings:

<table>
<tr><th>S. No.</th><th>Particulars</th><th>Details</th><th>Remarks</th></tr>
<tr><td>i.</td><td>Total land</td><td>202.3 ha; which is entirely (i.e., 100%) Government alienated waste land and D-Patta lands.</td><td>Land use: Government alienated waste land and D-Patta landand the same will be converted into industrial use upon purchase.</td></tr>
<tr><td>ii.</td><td>Land acquisition details as per MoEF&CC O.M. dated 7/10/2014</td><td>Total land is under the possession of the company.</td><td>-</td></tr>
<tr><td>iii.</td><td>Existence of habitation & involvement of R&R, if any.</td><td>Project Site: No habitation exists within the project site and R & R is not applicable.
Study Area:
<table>
<tr><th>Habitation</th><th>Distance (km)</th><th>Direction</th></tr>
<tr><td>Ramireddipalle</td><td>500 m</td><td>NNW direction</td></tr>
<tr><td>Kotapadu</td><td>1.0 km</td><td>ESE direction</td></tr>
<tr><td>Perusomula</td><td>1.7 Km</td><td>ESE Direction</td></tr>
<tr><td>Kalvatala</td><td>3.0 Km</td><td>WSW Direction</td></tr>
<tr><td>Mirjapuram</td><td>3.4 Km</td><td>WNW direction</td></tr>
<tr><td>Nandipadu</td><td>3.5 Km</td><td>SW Direction</td></tr>
</table>
There are approx. 28 villages in 10 km radius study area.</td><td>-</td></tr>
<tr><td>iv.</td><td>Latitude and Longitude of all corners of the project site</td><td>
<table>
<tr><th>Point</th><th>Latitude</th><th>Longitude</th></tr>
<tr><td>1.</td><td>15°4'13.46"N</td><td>78°09'54.84"E</td></tr>
<tr><td>2.</td><td>15°4'21.27"N</td><td>78°09'53.47"E</td></tr>
<tr><td>3.</td><td>15°4'21.94"N</td><td>78°09'52.08"E</td></tr>
<tr><td>4.</td><td>15°4'33.75"N</td><td>78°10'07.21"E</td></tr>
<tr><td>5.</td><td>15°4'31.06"N</td><td>78°10'17.31"E</td></tr>
<tr><td>6.</td><td>15°4'34.14"N</td><td>78°10'18.19"E</td></tr>
<tr><td>7.</td><td>15°4'26.99"N</td><td>78°10'38.08"E</td></tr>
<tr><td>8.</td><td>15°4'24.77"N</td><td>78°10'36.57"E</td></tr>
</table>
</td><td>-</td></tr>
</table>

<table>
<tr><th>S. No.</th><th>Particulars</th><th>Details</th><th>Remarks</th></tr>
<tr><td></td><td></td><td>
<table>
<tr><td>9.</td><td>15°4'13.07"N</td><td>78°11'02.05"E</td></tr>
<tr><td>10.</td><td>15°3'57.30"N</td><td>78°11'27.02"E</td></tr>
<tr><td>11.</td><td>15°3'45.01"N</td><td>78°11'18.64"E</td></tr>
<tr><td>12.</td><td>15°3'47.94"N</td><td>78°11'11.92"E</td></tr>
<tr><td>13.</td><td>15°3'37.34"N</td><td>78°11'05.86"E</td></tr>
<tr><td>14.</td><td>15°3'42.63"N</td><td>78°10'54.64"E</td></tr>
<tr><td>15.</td><td>15°3'46.55"N</td><td>78°10'51.34"E</td></tr>
<tr><td>16.</td><td>15°3'51.76"N</td><td>78°10'52.78"E</td></tr>
<tr><td>17.</td><td>15°3'53.54"N</td><td>78°10'59.17"E</td></tr>
<tr><td>18.</td><td>15°3'54.26"N</td><td>78°10'59.42"E</td></tr>
<tr><td>19.</td><td>15°3'51.42"N</td><td>78°11'03.97"E</td></tr>
<tr><td>20.</td><td>15°3'52.18"N</td><td>78°11'03.91"E</td></tr>
<tr><td>21.</td><td>15°3'53.47"N</td><td>78°11'03.01"E</td></tr>
<tr><td>22.</td><td>15°3'58.11"N</td><td>78°11'02.83"E</td></tr>
<tr><td>23.</td><td>15°3'58.03"N</td><td>78°10'59.98"E</td></tr>
<tr><td>24.</td><td>15°4'2.15"N</td><td>78°10'52.55"E</td></tr>
<tr><td>25.</td><td>15°3'56.41"N</td><td>78°10'37.71"E</td></tr>
</table>
</td><td></td></tr>
<tr><td>v.</td><td>Elevation of the project site</td><td>245 m to 265 m above mean sea level.</td><td>-</td></tr>
<tr><td>vi.</td><td>Involvement of Forest land if any.</td><td>No Forest Land is involved in the project site.</td><td>-</td></tr>
<tr><td>vii.</td><td>Water body exists within the project site as well as study area</td><td>Project site: No water body exists within the project site.
Study area: Following water bodies falls within 10 km radius:
<table>
<tr><th>Water body</th><th>Distance</th><th>Direction</th></tr>
<tr><td>Srisailam Right Bank Canal (SRBC)</td><td>~ 1.5 km</td><td>NE</td></tr>
<tr><td>Galeru Nagari Sujala Sravanthi canal (GNSS)</td><td>~1.0 km</td><td>ENE</td></tr>
<tr><td>Ramabhadrapalle Cheruvu</td><td>~3.0 km</td><td>ENE</td></tr>
<tr><td>Nalla Cheruvu</td><td>~5.5 km</td><td>ESE</td></tr>
<tr><td>Timmananyani Cheruvu</td><td>~6.5 km</td><td>SW</td></tr>
<tr><td>Saddala Vanganna Cheruvu</td><td>~7.5 km</td><td>WNW</td></tr>
<tr><td>Burrareddy Kanta</td><td>Adjacent</td><td>S</td></tr>
<tr><td>Mada Vagu</td><td>~1.5 km</td><td>ESE</td></tr>
<tr><td>Erra Vagu</td><td>~4.5 km</td><td>ENE</td></tr>
<tr><td>Kanala Vagu</td><td>~ 7.0 km</td><td>ENE</td></tr>
<tr><td>Gondra Vagu</td><td>~ 8.0 km</td><td>NE</td></tr>
</table>
</td><td>-</td></tr>
<tr><td>viii.</td><td>Existence of ESZ / ESA / national park / wildlife sanctuary / biosphere reserve /</td><td>Nil.</td><td>-</td></tr>
</table>

S. No.	Particulars	Details	Remarks
	tiger reserve / elephant reserve etc. if any within the study area.		

6.11.6 Earlier, Environmental Clearance for Integrated Cement Plant involving expansion of Cement Plant (2.0 MTPA to 4.8 MTPA), Clinker (3.0 MTPA), Limestone Mine (663.46 ha, 4.4 MTPA) and Thermal Power Plant (48 MW) at Villages: Kotapadu & Kalvatala, Mandal: Kolimigundla, District: Kurnool (Andhra Pradesh) was obtained from MoEFCC, New Delhi *vide* letter no. J-11011/166/2008-IA-II(I) dated 27th March, 2009. The EC was further extended *vide* letter dated 11th August, 2014 and 09th March, 2016 (valid up to 26th March, 2019). Due to non-availability of basic infrastructure required for the viability of the project, viz. rail connectivity to the project site and assurance of coal linkage from Government of India, the company could not be able to install the said project within the stipulated EC validity period.M/s. Prism Johnson Limited is now proposing the same cement project with no change in production capacity, area & location.

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

S. No.	Plant Equipment / Facility	Proposed Unit*	
		Configuration	Capacity
1.	Clinker	Kiln: 9000 TPD	3.0 MTPA
2.	Cement	Cement Mill: 3 x 275 TPH	4.8 MTPA
3.	Captive Power Plant	-	48 MW
4.	WHRS	-	15 MW

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

S. No.	Raw Material	Quantity Required (MTPA)	Source	Mode of Transportation & Approx. Distance
1.	Limestone	4.40	Captive Limestone Mine	Covered Conveyor Belt; 1.0 km
2.	Iron ore	0.01	Bellary, Karnataka	Road; 130 km
3.	Laterite	0.08	Rajahmundry and Mangalore	Road / Rail; 550 km
4	Bauxite	0.04	Kolhapur, Maharashtra	Road / Rail; 450 km
5.	Gypsum	0.11	Tutukodi, Tamil Nadu, Vizag and Chennai	Road / Rail; 450 km
6.	Fly ash	1.05	CPP & Surrounding TPP Produtur, Ibrahimpatnam	Road; 350 km
7.	Slag	2.1	Steel Plants, Tadipatri	Road; 3oo km

6.11.9 The water requirement for the proposed project is estimated as 2400 KLD, out of which 250 KLD of fresh water requirement will be obtained from the Ground Water for drinking purpose and the remaining requirement of 2150 KLD will be met from the Owk Reservoir, Rainwater harvested in captive mine pits (after development of pits). The permission for withdrawal of Ground Water has been obtained from Government of Andhra Pradesh, Ground Water and Water Audit Department *vide* their Letter No. 3251/Hg-II/2021 dated 07th Sept., 2021. Permission for withdrawal of water from Owk Reservoir has been obtained from Government of Andhra Pradesh Water Resources (Reforms) Department *vide* their letter dated 08th Nov., 2017.

6.11.10 The power requirement for the project is estimated as 48 MW, which will be sourced from CPP, WHRS, APSEB and D.G. Set (in case of emergency).

6.11.11 Baseline Environmental Studies:

Period	**Post - Monsoon Season (October to December, 2019)**
AAQ parameters at 08 locations	$PM_{2.5}$ - 20.6 to 49.6 µg/m^3 PM_{10} - 45.2 to 88.2 µg/m^3 SO_2 - 5.6 to 15.8 µg/m^3 NO_x - 12.2 to 28.1 µg/m^3 CO - BDL to 0.89 mg/m^3
Incremental GLC level	PM_{10} - 3.84 µg/m^3 (approx. 1000 m in West Direction) SO2 - 3.88 µg/m^3 (approx. 950 m in West Direction) NO2 - 4.32 µg/m^3 (approx. 920 m in West direction)
Ground water quality at 08 locations	pH - 7.47 to 7.96 Total Hardness - 348.96 to 512.86 mg/l Chlorides - 98.78 to 154.76 mg/l Fluoride - 0.71 to 0.96 mg/l
Surface water quality at 07 locations	pH - 7.59 to 7.86 DO - 4.3 to 6.1 mg/l BOD - 4.8 to 18 mg/l COD - 24 to 64 mg/l
Noise levels at 08 locations	Noise Level During Day Time - 48.5 to 54.1 Leq dB (A) Noise Level During Night Time - 38.4 to 44.0 Leq dB (A)
Traffic assessment study findings	✓ Traffic study has been conducted at NH - 544D [Earlier SH - 27] which is approximately 1.5 km in ESE direction from the plant site. ✓ Transportation of raw material, fuel & finished product will be done asper details given below: ▪ Fly ash - 100% by road, ▪ Slag - 100% by road, ▪ Iron Ore - 80% by road & 20% by rail, ▪ Laterite - 20% by road & 80% by rail, ▪ Gypsum - 20% by road & 80% by rail, ▪ Bauxite - 100% by road, ▪ Coal - 25% by road & 75% by rail, ▪ Petcoke - 25% by road & 75% by rail, ▪ Cement - 20% by road & 80% by rail. ✓ Existing PCU is 256 PCU/hr. on NH - 544D and existing level of service (LOS) is: A

Road	**V**	**C (Capacity in PCU/hr.)**	**Existing V/C Ratio**	**LOS**

	(Volume in PCU/hr.)				
NH - 544D [Earlier SH - 27]	256	1500	0.17	A	

✓ PCU load after proposed project will be 256 (Existing) + 131 (Additional) PCU/hr. and level of service (LOS) will be: B (Considering 100% Transportation by road)

Road	**V (Volume in PCU/hr.)**	**C (Capacity in PCU/hr.)**	**Existing V/C Ratio**	**LOS**
NH - 544D [Earlier SH - 27]	387	1500	0.25	B

✓ After installation of Railway siding: PCU load after proposed project will be 256 (Existing) + 54 (Additional) PCU/hr. and level of service (LOS) will be: A.

Road	**V (Volume in PCU/hr.)**	**C (Capacity in PCU/hr.)**	**Existing V/C Ratio**	**LOS**
NH - 544D [Earlier SH - 27]	309	1500	0.20	A

* *Capacity as per IRC- 64-1990 Guide line for capacity for roads.*

Conclusion: The level of service will be "A" i.e. Excellent after including additional traffic due to proposed project (after installation of railway siding).

Flora and fauna	Seven Schedule - I species were recorded within 10 km radius of the study area, i.e., *Antilope cervicapra* (Blackbuck), *Varanus bengalensis* (Bengal Monitor Lizard), *Milvus migrans* (Black kite), *Elanus axillaris* (Black shoulder kite), *Accipiter badius* (Shikra), *Pernis ptilorhynchus* (Oriental Honey-buzzard) and *Pavo cristatus* (Peafowl). Wildlife Conservation Plan for the Schedule - I species found in the study area has been prepared with a budget allocation of Rs. 124.60 Lakhs (3 years) and authenticated by PCCF & HoFF, Andhra Pradesh vide letter Rc No. 8531/2021/WL-2 dated 12/02/2022.

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

S. No.	**Type of Waste**	**Source**	**Quantity generated**	**Mode of Treatment / Disposal**
1.	Dust	Cement Plant	-	Dust collected from various APCEs will be totally recycled into the process.
2.	Fly ash	CPP	2000 TPD	Used in manufacturing of PPC grade cement.

3.	STP Sludge	STP	0.1 TPD	Used as manure for greenbelt development / plantation
4.	Used Oil, Contaminated cotton rags or other cleaning materials	Plant maintenance	300 KL / annum	Will be used in Kiln as co-processing / Sold to CPCB authorized recycler.
5.	Bottles, paper, cans, textile, etc.	Plant Canteen	150 kg/day	Will be sold to registered recycler

6.11.13 Public Consultation:

Details of advertisement given	Public Hearing Notice published in Newspapers "Hans India" and "Sakshi Publication" on 01st Feb., 2021
Date of Public Consultation	05th March, 2021
Venue	Proposed project site i.e., at Sy. Nos. 337, 338, 339, 340, 341, 342, 344, 345, 346, 347 and 352/2 located at Kotapadu (V), Kolimigundla (M), Kurnool District.
Presiding Officer	District Revenue Officer and Additional District Magistrate
Major issues raised	Employment, Environment, Land, Socio Economic Development, Plantation, etc.

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

S. No.	Concerns raised during the Public Hearing	Physical activity to be done	Unit of Measurement			Tentative Budget (Rs. in lacs)
			1st Year	2nd Year	3rd Year	
1	Employment	Development of Women Empowerment & Entrepreneurship Development Center		1 Nos (Mandal Kolimigundla)		15
2	Socio-economic Development					
2a	Infrastructure Development	Construction of Vocational Training Centre			1 nos. (Plant area - Admin Building Complex)	20
		Construction of Community Center cum Function Hall		1 nos. (Village Perusomulla)	1 nos. (Village Timmanayenepet)	30
		Maintenance of village road			1 nos. (Village Kotapadu)	5
		Provide street lights	30 nos. (Village Kotapadu)	30 nos. (Village Kalvatala)		2
		Construction of Open CC Drain	100 Mts (Village Kotapadu)	600 Mts (Village Nandipadu)		22.5
2b	Ground Water Conservation	Renovation and maintenance of the already constructed check dams		1 nos. (Village Kotapadu)	2 nos. (Village Kalvatala)	5
		Development of Percolation Tank			2 Nos (Village Kotapadu and Kalvatala)	10

S. No.	Concerns raised during the Public Hearing	Physical activity to be done	Unit of Measurement			Tentative Budget (Rs. in lacs)
			1st Year	2nd Year	3rd Year	
		Rain water harvesting on Govt. School Building	2 nos. (Village Kotapadu & Kalvatala)	1 no. (Village Perusomulla)		6
2c	For providing Water Facility	Construction of Pipeline	1200 Mts (GI Pipeline at Village Kotapadu)	1800 Mts (GI Pipeline at Village Nandipadu)		16.5
		Installation of Borewell set with Submersible pump and big size Syntax Tank	1 nos. (Village Kotapadu)	1 nos. (Village Nandipadu)	1 nos. (Village Kalvatala)	15
		RO Water Plant		1 Nos (Village Kotapadu)	1 Nos (Village Nandipadu)	10
2d	Education	Digital education through development of Furnished Computer Lab		2 nos. (Village Kotapadu and Kalvatala)	1 Nos. (Village Nandipadu)	15
		Development & modification of Playground and construction of Cultural Programme Stage	1 nos. (Village Kotapadu)	1 nos. (Village Nandipadu)		10
2e	Health	Provide Medical Mobile Van (medicine & checkup) for Villages Kotapadu, Kalvatala, Perusomulla, Nandipadu, Peddavendurla, Mirjapuram	1 nos.			20
		Renovation of Primary Health Center / Sub Health Centre		1 nos. (Village Kolimigundla)	1 nos. (Village Perusomulla)	10
		Provide medical investigating equipment and need based support Material set	1 Centre (Village Kolimigundla)		1 Centre (Sanjamala Mandal)	10
		Provide ambulance to the villagers in Villages Kotapadu, Kalvatala, Perusomulla, Nandipadu, Peddavendurla and Mirjapuram			1 nos.	14
		Provide COVID vaccination in Primary Health Centers		1000 doses 1 Centre (Village Kolimigundla)	1000 doses 1 Centre (Sanjamala Mandal)	15
3	Plantation	Block Plantation	1000 nos. saplings (Village Kotapadu)	1000 nos. saplings (Village Kalvatala)	1000 nos. saplings (Village Nandipadu 1000)	18
			Total			**269**

**The above action plan will be implemented during project implementation phase. Zero date will start from the date of construction start for the proposed project.*

***The activities given in the above table are excluding the Pollution Control and mitigation measures which are included in EMP Cost [i.e., Capital Cost:* Rs. 110 *Crores & Annual Recurring Cost:* Rs 8.25 *Crores/annum]*

6.11.14 The capital cost of the project is Rs. 1972.26 Crores and the capital cost for environmental protection measures is proposed as Rs. 110 Crores. The annual recurring cost towards the environmental protection measures is proposed as Rs 8.25 Crores. The employment generation from the proposed project is about 5000 persons during construction phase and about 560 persons during operational phase. The details of cost for environmental protection measures are as follows:

S. No.	Particular	Cost in Crores	
		Capital Cost	Recurring Cost
i.	Air Pollution Control	67	6.25
ii.	Water Pollution Control and Rain Water Harvesting Measures	15.5	1.0
iii.	Noise Pollution Control	5.0	0.2
iv.	Environment monitoring and management	20.0	0.5
v.	Greenbelt Development	2.5	0.3
vi.	**Sub Total**	**110**	**8.25**
vii.	Addressal for public consultation concern	2.69	-
	Grand Total	**112.69**	**-**

6.11.15 Greenbelt will be developed in 67 ha which is about 33 % of the total project area. A 30 m wide greenbelt, consisting of at least 3 tiers around plant boundary will be developed as greenbelt and green cover as per CPCB/MoEF&CC, New Delhi guidelines. Local and native species will be planted with a density of 2500 trees per hectare. Total no. of 1,67,500 saplings will be planted and nurtured in 67 Hectares in five years.

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

6.11.17 During the meeting, project proponent submitted written submission on the following points:

i. Two separate plant layouts, one for the entities in the plant with color coding and another for the drainage system showing drains along with contouring and proper markings has been submitted.
ii. PP has given undertaking that eight villages, Kotapadu, Kalvatala, Nandipadu, Perusomala, Peddaventrula, Kolimigundala, Ramireddipale and Mirjapuram will be adopted to implement various CSR activities for making them modal villages.
iii. PP will carry out Greenbelt development / Plantation in consultation with State Forest department (Andhra Pradesh).
iv. Greenbelt will be developed all along the plant boundary in the coming monsoon season of 2022; and will be maintained in future.

Deliberations by the Committee

6.11.18 The Committee noted the following:

1. The water requirement for the proposed project is estimated as 2400 KLD, out of which 250 KLD of fresh water requirement will be obtained from the Ground Water for drinking purpose and the remaining requirement of 2150 KLD will be met from the Owk Reservoir, Rainwater harvested in captive mine pits (after development of pits).

2. There are 7 nos. of Schedule - I species reported in study area, namely *Antilope cervicapra* (Blackbuck), *Varanus bengalensis* (Bengal Monitor Lizard), *Milvus migrans* (Black kite), *Elanus axillaris* (Black shoulder kite), *Accipiter badius* (Shikra), *Pernis ptilorhynchus* (Oriental Honey-buzzard) and *Pavo cristatus* (Peafowl). Wildlife Conservation Plan for the Schedule - I species found in the study area has been prepared with a budget allocation of Rs. 124.60 Lakhs (3 years) and authenticated by PCCF& HoFF, Andhra Pradesh vide letter Rc No. 8531/2021/WL-2 dated 12/02/2022.
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 Committee has also found that the baseline data and incremental GLC due to the proposed project within NAAQ standards.
7. Total 28 villages are existing in the periphery of the project within 10 km radius. Some of these villages may be adopted by the company year-wise for their socio-economic development.
8. The Committee deliberated on the action plan and budget allocation for green belt development and noted that as committed by the PP the green belt development shall be completed within one year.
9. The committee deliberated details of carbon foot prints and carbon sequestration study w.r.t. proposed project and found satisfactory.
10. 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.
11. The EAC also deliberated on the written submissions submitted by the proponent and found it satisfactory.
12. 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.
13. 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

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

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

(i) The company 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 canal, nallahs and other water bodies passing adjacent to project site within the study area shall not be disturbed. Detailed mitigation measures to prevent any impacts on the canal and nallah needs to be prepared and implemented.

(iv) The activities and the action plan proposed by the project proponent to address the issues raised during public hearing and socio-economic issues in the study area shall be completed as per the schedule presented before the Committee and as described in the EIA report in letter and spirit.

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

(vi) Three tier Green Belt shall be developed in a time frame of one year covering 33% of the total land 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.

(vii) 2400 KLD of additional water requirement for the proposed project shall be met from the Ground Water for drinking purpose and the remaining requirement of 2150 KLD will be met from the Owk Reservoir, Rainwater harvested in captive mine pits (after development of pits) after obtaining necessary permissions from the Competent Authority. PP shall prepare and implement a plan for gradual phasing pout of ground water consumption.

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

(ix) Slip roads shall be provided at the gates and along crossings on main roads.

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

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

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

(xiii) Project proponent shall develop separate drainage system for storm water and industrial waste water and effectively prevent the pollution of natural waterbody.

(xiv) Petcoke dosing shall be controlled automatically to control SO_2 emission from chimney within the prescribed limits.

(xv) Rain water harvesting shall be carried out as per the action plan submitted in the EIA report.

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

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

(xviii) As the project area is of rocky type and fall on an elevated land, the PP shall ensure for proper soil erosion control measures and soil conservation program.

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

B. <u>General conditions</u>

I. Statutory compliance:

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

II. Air quality monitoring and preservation

i. The project proponent shall install 24x7 Continuous Emission Monitoring System (CEMS) at process stacks to monitor stack emission as well as 4 Nos. Continuous Ambient Air Quality Station (CAAQS) for monitoring AAQ parameters with respect to standards prescribed in Environment (Protection) Rules 1986 as amended from time to time. The CEMS and CAAQMS shall be connected to SPCB and CPCB online servers and calibrate these systems from time to time according to equipment supplier specification through labs recognized under Environment (Protection) Act, 1986 or NABL accredited laboratories.

ii. The project proponent shall monitor fugitive emissions in the plant premises at least once in every quarter through labs recognized under Environment (Protection) Act, 1986.

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

iv. The project proponent shall ensure covered transportation and conveying of ore, coal and other raw material to prevent spillage and dust generation; Use closed bulkers for carrying fly ash;

v. The project proponent shall provide wind shelter fence and chemical spraying on the raw material stock piles;

vi. Ventilation system shall be designed for adequate air changes as per the prevailing norms for all tunnels, motor houses, and cement bagging plants.

III. Water quality monitoring and preservation

i. The project proponent shall install 24x7 continuous effluent monitoring system with respect to standards prescribed in Environment (Protection) Rules 1986 vide G.S.R. No. 612 (E) dated 25thAugust, 2014 (Cement) and subsequent amendment dated 9thMay, 2016

(Cement) and 10th May, 2016 (in case of Co-processing Cement) as amended from time to time; S.O. 3305 (E) dated 7th December 2015 (Thermal Power Plants) as amended from time to time) and connected to SPCB and CPCB online servers and calibrate these system from time to time according to equipment supplier specification through labs recognized under Environment (Protection) Act, 1986 or NABL accredited laboratories.

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

iii. Sewage Treatment Plant shall be provided for treatment of domestic wastewater to meet the prescribed standards.

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

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

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

IV. Noise monitoring and prevention

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

V. Energy Conservation measures

i. Waste heat recovery system shall be provided for kiln and cooler.

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

iii. Provide solar power generation on roof tops of buildings, for solar light system for all common areas, street lights, parking around project area and maintain the same regularly.

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

VI. Waste management

i. Used refractories shall be recycled as far as possible.

VII. Green Belt

i. PP is advised to engage a professional body like state forest department to accomplish green belt program successfully.

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

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

VIII. Public hearing and Human health issues

i. Emergency preparedness plan based on the Hazard identification and Risk Assessment (HIRA) and Disaster Management Plan shall be implemented.
ii. The project proponent shall carry out heat stress analysis for the workmen who work in high temperature work zone and provide Personal Protection Equipment (PPE) as per the norms.
iii. Occupational health surveillance of the workers shall be done on a regular basis and records maintained.

IX. Environment Management

i. The project proponent shall comply with the provisions contained in this Ministry's OM vide F.No. 22-65/2017-IA.III dated 30/09/2020. As part of Corporate Environment Responsibility (CER) activity, as committed by the PP, that the company shall adopt eight villages namely, Kotapadu, Kalvatala, Nandipadu, Perusomala, Peddaventrula, Kolimigundala, Ramireddipale and Mirjapuram 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 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.
iii. 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.
iv. A separate Environmental Cell both at the project and company head quarter level, with qualified personnel shall be set up under the control of senior Executive, who will directly to the head of the organization.

X. Miscellaneous

i. The project proponent shall make public the environmental clearance granted for their project along with the environmental conditions and safeguards at their cost by prominently advertising it at least in two local newspapers of the District or State, of which one shall be in the vernacular language within seven days and in addition this shall also be displayed in the project proponent's website permanently.
ii. The copies of the environmental clearance shall be submitted by the project proponents to the Heads of local bodies, Panchayats and Municipal Bodies in addition to the relevant offices of the Government who in turn has to display the same for 30 days from the date of receipt.
iii. The project proponent shall upload the status of compliance of the stipulated environment clearance conditions, including results of monitored data on their website and update the same on half-yearly basis.
iv. The project proponent shall monitor the criteria pollutants level namely; PM10, SO2, NOx (ambient levels as well as stack emissions) or critical sectoral parameters, indicated for the projects and display the same at a convenient location for disclosure to the public and put on the website of the company.
v. The project proponent shall submit six-monthly reports on the status of the compliance of the stipulated environmental conditions on the website of the ministry of Environment, Forest and Climate Change at environment clearance portal.

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

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

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

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

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

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

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

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

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

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

Additional Item with the permission of the Chair

Agenda No. 6.12

6.12 Proposed Integrated Steel Plant of 3.1 million TPA (Finished Steel) with 230 MW (80 MW WHRB/TRT based and 150 MW Coal Based) Captive Power Plant by M/s. Rashmi Green Hydrogen Steel Pvt. Ltd located at Village Lanchhmapur & Barkola, P.S. Kharagpur (Local), District West Medinipur, West Bengal [Online Proposal No. IA/WB/IND/261738/2022, File No. IA-J-11011/102/2022-IA-II(IND-I)] – Prescribing of Terms of Reference – regarding.

[Proposal No. IA/WB/IND/261738/2022; File No. IA-J-11011/102/2022-IA-II(IND-I)]
[Name of Consultant: M/s Centre for Envotech & Management Consultancy Pvt. Ltd. (S.No. 101, List ofACOs with their Certificate no. QCI/NABET/ENV/ACO/22/2279 and valid up to 15/06/2022)]

6.12.1 M/s. Rashmi Green Hydrogen Steel Pvt. Ltd. Has made an online application *vide* proposal no.IA/WB/IND/261738/2022 dated 02/04/2022 in prescribed format (Form-I), copy of pre-feasibility report and proposed ToRs for undertaking detailed EIA study as per the EIA Notification, 2006 for the project mentioned above. The proposed project activity is listed at S. No. 3(a) Metallurgical industries (ferrous & non-ferrous), 1(d) Captive Power Plant, 2 (b) Mineral beneficiation and 4(b) Coke oven Plant under Category "A" of the schedule of the EIA Notification, 2006 and appraised at central level.

6.12.2 The proposal cited above was initially considered during the 4th meeting of Expert Appraisal Committee [EAC] (Industry-I) held on 27-28th April, 2022, After detailed deliberation, committee was observed that

i. The land requirement for the project is reported to be 260 Acres (105.218 Hectares). The land is further divided in two plots (at a distance 1.9 km apart) crossing the State Highway. Both the plots are proposed to be connected by a village panchayat road.
ii. The State Highway crossing details and the village panchayat road details have not been made available.
iii. Project proponent was unable to explain the mode of transport of materials to be adopted between these two parcels of land.
iv. On perusal of the KML file, it is observed that some built up structures are already visible at the site. However, the said portion of land containing built up structures was excluded by the proponent in the KML file presented before the EAC. No explanation is made available by the proponent in this regard.
v. From plot-1 & 2- Griffins International School-0.45 km &Khatranga School 0.46 are in close proximity to the project site. Environmental safeguards to be adopted in this regard has not been enumerated.

6.12.3 In view of the foregoing and after deliberations, the Committee recommended that subcommittee of EAC Industry-1 shall undertake a site visit to the project site and based on the site visit report the instant proposal for ToR shall be considered by the EAC.

6.12.4 Accordingly, the EAC (Industry-1) sub-committee conducted a site visit to Rashmi Green Hydrogen Steel Pvt. Ltd. located at Village Lanchhmapur & Barkola, P.S. Kharagpur (Local), District West Medinipur, West Bengal. was undertaken on 21/05/2022.

6.12.5 At this instance, the proposal was further considered by the EAC (Industry 1) in its 6th meeting during 30th-31st May, 2022.

Details submitted by Project proponent

6.12.6 The project of M/s Rashmi Green Hydrogen Steel Private Limited located at Mouja – Changual (J.L. No.-360), Jethia (J.L. No.-361), Khatranga (J.L. No.-362), Kazala (J.L. No.-363), Zalpi (J.L. No.-228) & Baradhia (J.L. No.-227), P.S. – Kharagpur (Local), Dist. - Paschim Medinipur in the state of West Bengal is for setting up of a new Integrated Steel Plant - 3.1 Million Ton Per Annum Along With 230 MW (80 MW WHRB/ TRT Based + 150 MW Coal Based) Captive Power Plant.

6.12.7 Environmental site settings:

<table>
<tr><th>S. No.</th><th>Particulars</th><th>Details</th></tr>
<tr><td>i.</td><td>Total land</td><td>105.218 ha [Private: 50.18 ha; Govt.: 55.04 ha (Industrial)]
Land use:
<table>
<tr><th>S. No.</th><th>Particulars</th><th>Area (Ha)</th><th>%</th></tr>
<tr><td>1</td><td>Main Plant</td><td>44.64</td><td>42.43</td></tr>
<tr><td>2</td><td>Water Reservoir</td><td>5.8</td><td>5.51</td></tr>
<tr><td>3</td><td>Built up Area</td><td>1.71</td><td>1.63</td></tr>
<tr><td>4</td><td>Internal roads</td><td>4.86</td><td>4.61</td></tr>
<tr><td>5</td><td>Green Belt</td><td>34.85</td><td>33.13</td></tr>
<tr><td>6</td><td>Truck Parking area</td><td>4.12</td><td>3.91</td></tr>
<tr><td>7</td><td>Raw Material Storage</td><td>9.24</td><td>8.78</td></tr>
<tr><td colspan="2">TOTAL PROJECT AREA</td><td>105.22</td><td>100.0</td></tr>
</table></td></tr>
<tr><td>Ii</td><td>Land acquisition details as per MoEF&CC O.M. dated 7/10/2014</td><td>The proposed unit will be located on a piece of vacant land measuring 260 Acres (105.218 Hectares). The land is further divided in two plots (at a distance 1.9 km apart) connected by a Zilla Parishad road (NAWAB ROAD with proper underpass). The land is sufficient for setting the proposed integrated steel plant. Out of the 260 acres of land for 136 acres of land has been acquired and for rest of land (124 Acres) final stage negotiation from private rayat is in progress.</td></tr>
<tr><td>iii.</td><td>Existence of habitation & involvement of R&R, if any.</td><td>Project Site:
No habitation in the proposed site. No rehabilitation and resettlement is involved for the subject project.

Study Area:
<table>
<tr><th>Habitation</th><th>Distance</th><th>Direction</th></tr>
<tr><td colspan="3">Plot-1</td></tr>
<tr><td>Khatranga</td><td>0.5 km</td><td>NE</td></tr>
<tr><td>Changual</td><td>1.2 km</td><td>SW</td></tr>
<tr><td>Gopinathpur</td><td>1.2 km</td><td>SE</td></tr>
<tr><td colspan="3">Plot-2</td></tr>
<tr><td>Kajla</td><td>0.5 km</td><td>SW</td></tr>
<tr><td>Baradiha</td><td>0.6 km</td><td>N</td></tr>
<tr><td>Radhanagar</td><td>1.5 km</td><td>NE</td></tr>
</table></td></tr>
</table>

<table>
<tr><td>iv.</td><td>Latitude and Longitude of the project site</td><td>
<table>
<tr><th>Site</th><th>Latitude</th><th>Longitude</th></tr>
<tr><td colspan="3">Plot-1</td></tr>
<tr><td>A</td><td>22°19'50.32"N</td><td>87023'51.48"E</td></tr>
<tr><td>B</td><td>22°19'33.26"N</td><td>87°23'48.30"E</td></tr>
<tr><td>C</td><td>22°19'33.24"N</td><td>87°24'03.48"E</td></tr>
<tr><td>D</td><td>22°19'31.91"N</td><td>87°24'16.69"E</td></tr>
<tr><td>E</td><td>22°19'46.63"N</td><td>87°24'14.26"E</td></tr>
<tr><td>F</td><td>22°19'55.74"N</td><td>87°24'06.66"E</td></tr>
<tr><td>G</td><td>22°20'06.81"N</td><td>87°23'58.44"E</td></tr>
<tr><td>H</td><td>22°19'56.19"N</td><td>87°23'52.80"E</td></tr>
<tr><td colspan="3">Plot-2</td></tr>
<tr><td>1</td><td>22°20'34.61"N</td><td>87°22'59.56"E</td></tr>
<tr><td>2</td><td>22°20'53.88"N</td><td>87°22'49.52"E</td></tr>
<tr><td>3</td><td>22°21'08.88"N</td><td>87°22'34.76"E</td></tr>
<tr><td>4</td><td>22°20'54.19"N</td><td>87°22'23.91"E</td></tr>
<tr><td>5</td><td>22°20'43.04"N</td><td>87°22'41.63"E</td></tr>
<tr><td>6</td><td>22°20'32.36"N</td><td>87°22'55.02"E</td></tr>
</table>
</td></tr>
<tr><td>v.</td><td>Elevation of the project site</td><td>Elevation of the project site varies from 24 m to 27 m AMSL.</td></tr>
<tr><td>vi.</td><td>Involvement of Forest land if any.</td><td>No forest land involved.</td></tr>
<tr><td>vii.</td><td>Water body exists within the project site as well as study area</td><td>Project site:
01 No. artificial pond to be developed as rain water harvesting pond.
Study area:
<table>
<tr><th>Water body</th><th>Distance</th><th>Direction w.r.t. proposed Site</th></tr>
<tr><td>Kangsabati River</td><td>4.8-6.5 km</td><td>N</td></tr>
<tr><td>Jakala Nala</td><td>1.0 km</td><td>NE (Plot-2)</td></tr>
<tr><td>Paiknagari Pond</td><td>2.9 km</td><td>NE (Plot-1)</td></tr>
<tr><td>Benapur Pond</td><td>5.2 km</td><td>SW (Plot-1)</td></tr>
<tr><td rowspan="2">Khatranga Pond</td><td>0.05 km</td><td>E (Plot-1)</td></tr>
<tr><td>0.6 km</td><td>NE (Plot-1)</td></tr>
<tr><td>Changual Pond</td><td>1.7 km</td><td>SW (Plot-1)</td></tr>
<tr><td>Digra Pond</td><td>3.2 km</td><td>SW (Plot-2)</td></tr>
<tr><td>Paparara Pond</td><td>3.3 km</td><td>NE (Plot-1)</td></tr>
</table>
</td></tr>
<tr><td>viii.</td><td>Existence of ESZ/ESA/national park/wildlife sanctuary/biosphere reserve/tiger reserve/elephant reserve etc. if any within the study area</td><td>Study area

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

~8.7 km (from Plot-2) to 10 km (from Plot-1) in SW direction
~6.4 km (from Plot-2) to 7.5 km (from Plot-1) in SW direction</td></tr>
</table>

6.12.8 The water requirement for the proposed project estimated as 11,000 KLD (458.3 m3/Hr). Water requirement will be met from surface water (River Kangsabati), Rain Water Harvesting pond

(During operation phase) and ground water (during construction phase only). Proposal has been submitted to Irrigation and Water ways department Govt. of West Bengal vide letter no. OASPL/Water/21-22/02 for 10,000 KLD water withdrawals from Kansabati river through pipe line. Also application has been submitted to the SWID for 3 nos. of Bore well.

6.12.9 The power requirement for the proposed project is estimated as 279 MW, out of which 230 MW will be obtained from proposed Captive Power Plant & balance 49 MW from WBSEDCL/open access. Further the management will have 10 x 720 KVA DG sets to meet the emergency power requirement. During construction phase demand will be fulfilled by WBSEDCL.

6.12.10 The capital cost of the project is Rs 2900.0 Crores and the capital cost for environmental protection measures & EMP for social & infrastructure development is proposed as Rs 290.0 Crores. The employment generation from the proposed project is 5,000 3,000 Direct (Regular – 1,000 & Contractual – 2,000) and 2,000 Indirect.

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

6.12.12 Name of the EIA consultant: M/s Centre for Envotech & Management Consultancy Pvt. Ltd. [S.No. 101, List of ACOs with their Certificate no. QCI/NABET/ENV/ACO/22/2279 and valid up to 15/06/2022.

Deliberation by the Committee

6.12.13 The Committee noted the following from the subcommittee's site visit report:

i. Committee (EAC) held on 27-28th April 2022 noted that on perusal of the KML file, it is observed that some built up structures are already visible at the site. However, the said portion of land containing built up structures was excluded by the proponent in the KML file presented before the EAC. No explanation is made available by the proponent in this regard. Sub-committee during site visit observed that there is substantial change in original KML file submitted by PP during the application.

ii. The sub-committee observed that there are two other companies of Rashmi Group being operated in the same premises. However, there is no existence of physical demarcation between the companies at the site.

iii. Rashmi 6 Paradigm Ltd. being operated after obtaining statutory clearances such as Consent to Establish (NOC) & Consent to Operate by WBPCB at the west side of the proposed site.

iv. Rashmi Metaliks Ltd. (DIP Division) being installed after obtaining required statutory clearances such as Consent to Establish (NOC) by WBPCB at the south side of the proposed site.

v. The facts regarding two adjacent industries of Rashmi Group were not made available in operational industries found within the 10 km radius area around the project site in PFR.

vi. The sub-committee was informed that the proposed land in the original application Form -1, PP likes to change the proposed land due to the permission of originally proposed railway siding.

vii. PP likes to revise the proposed land. The original land is divided in two plots (at a distance 1.9 km apart) crossing the Highway. The units which were proposed to be set up at Plot-2, shall now be set up near contiguous land of Plot-1 in North & North West Direction.

viii. The committee visited the new land PP is in the process of acquiring and found it is an agricultural land.

ix. The current plot PP is having and in the process of acquiring is separated by a village road. PP submitted NOC from village panchayat for the same.

x. Two schools Griffins International School-0.45 km & Khatranga School 0.46 are in close proximity to the project site.

Recommendations of the Committee

6.12.14 Considering the aforesaid observations, the committee recommended the proposal of M/s. Rashmi Green Hydrogen Steel Pvt. Ltd of ToR may be **return in present form due to change in the proposed land.** New ToR application may be considered after complying with the following conditions.

i. The PP shall submit revised layout of the plant.
ii. Two industries are being installed/operated in adjacent plots with CTO/CTE Rashmi Metalics (DIP Division) and Rashmi 6 Paradigm Ltd. PP shall submit details of the adjacent industries. PP shall maintain clear physical boundary between the companies and shall provide distinct entry and exit for each of these companies.
iii. All operational industries found within the 10 km radius area around the project site shall be included in PFR.
iv. Land Use pattern of the additional land required (plot 2) needs to be changed from agricultural to industrial use as cultivation was seen on this land.
v. Griffins International School – 0.45 km & Khatranga School – 0.46 are in close proximity to the project site, Environmental safeguards to be adopted in this regard has to be submitted.
vi. The revise application shall contain action plan for not disturbing the village road.

The EAC has also warned the PP/Consultant [M/s Centre for Envotech & Management Consultancy Pvt. Ltd.] not to submit the immature and incomplete proposal and read the various provisions of the EIA Notification, 2006 before submitting the application on Parivesh Portal. PP/Consultant has not provided the complete information w.r.t. name of type of Industries located in the study area. Even the sister company name of the PP has not included in the study area. This is very serious concern observed by the EAC.

Agenda No. 6.13

Clarification regarding aspect of covering pipelines under EC regime - regarding.

The is in reference to the order of Hon'ble NGT (SZ) order dated 21/12/2021 in the matter of OA No. OA 66/2020 (SZ) titled Tribunal on its own motion Suo Moto Based on the news item published in The Times of India dated 07/05/2020 under the caption "Oil leak from ONGC pipe destroys cotton on 2 Acres".

In the above matter, Hon'ble NGT has observed that "Since such incidents are recurring and damage is being caused to the agricultural lands, it is always advisable for the Ministry of

Environment, Forests & Climate Change (MoEF&CC) to bring such activities of drawing pipeline also under the regime of Environmental Clearance (EC), so that necessary impact assessment studies can be conducted and necessary conditions can be imposed applying the "Precautionary Principle" along with "Principle of Sustainable Development", so that there will be some monitoring mechanism available for such activities through the regulators ".

As on date, Slurry pipelines (coal, lignite and other ores) and oil & gas transportation pipe line (crude and refinery/ petrochemical products), passing through national parks / sanctuaries / coral reefs, ecologically sensitive areas only require prior EC as per the provisions of EIA Notification 2006 as amended from time to time.
The grant of EC for slurry pipelines are dealt in Industry 1 sector and oil & gas pipelines are dealt by Industry -2. The EAC of Ind 1 &Ind 2 accords EC for such projects subject to stipulation of environmental safeguards.

In view of the above, the matter was referred to Industry1 Sector with a request to place the Hon'ble NGT Order dated 21/12/2021 before their EAC and advise the IA-Policy on the way forward.

Deliberation by the Committee

The Committee noted the following

i. EAC opined that as far as slurry pipelines passing through national parks / sanctuaries / coral reefs, ecologically sensitive require prior EC as per the provisions of EIA Notification 2006 as amended from time to time.

ii. Slurry pipelines covers under Consent to Establish and Consent to Operate mechanisms under The Water (Prevention and Control of Pollution) Act, 1974 and The Air (Prevention and Control of Pollution) Act, 1981 and there are various safeguards prescribed as a part of the consents.

Recommendations of the Committee

After detailed deliberations on the various provisions contained in the EIA Notification, 2006; The Water (Prevention and Control of Pollution) Act, 1974 and The Air (Prevention and Control of Pollution) Act, 1981, the EAC is of the view that the current provision is adequate enough in the EIA Notification, 2006 far slurry pipelines passing through national parks / sanctuaries / coral reefs, ecologically sensitive which require prior EC.

Further all other projects of slurry pipelines which are already governed by the various safeguards and mitigation measures and conditions prescribed by the concerned SPCBs/PCCs under The Water (Prevention and Control of Pollution) Act, 1974 and The Air (Prevention and Control of Pollution) Act, 1981, hence there is no requirement of EC for such cases.

The meeting ended with thanks to the Chair.

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ANNEXURE –1

GENERAL TERMS OF REFERENCE (ToR) IN RESPECT OF INDUSTRY SECTOR

1. **Executive Summary**
2. **Introduction**
   i. Details of the EIA Consultant including NABET accreditation
   ii. Information about the project proponent
   iii. Importance and benefits of the project
3. **Project Description**
   i. Cost of project and time of completion.
   ii. Products with capacities for the proposed project.
   iii. If expansion project, details of existing products with capacities and whether adequate land is available for expansion, reference of earlier EC if any.
   iv. List of raw materials required and their source along with mode of transportation.
   v. Other chemicals and materials required with quantities and storage capacities
   vi. Details of Emission, effluents, hazardous waste generation and their management.
   vii. Requirement of water, power, with source of supply, status of approval, water balance diagram, man/power requirement (regular and contract)
   viii. The project proponent shall furnish the requisite documents from the competent authority in support of drawl of ground water and surface water and supply of electricity.
   ix. Process description along with major equipment and machineries, process flow sheet (Quantitative) from raw material to products to be provided
   x. Hazard identification and details of proposed safety systems.
   xi. Expansion/modernization proposals:
      a. Copy of all the Environmental Clearance(s) including Amendments thereto obtained for the project from MoEF&CC/SEIAA shall be attached as an Annexure. A certified copy of the latest Monitoring Report of the Regional Office of the Ministry of Environment, Forest and Climate Change as per circular dated 30th May, 2012 on the status of compliance of conditions stipulated in all the existing environmental clearances including Amendments shall be provided. In addition, status of compliance of Consent to Operate for the ongoing /existing operation of the project from SPCB/PCC shall be attached with the EIA/EMP report.
      b. In case the existing project has not obtained environmental clearance, reasons for not taking EC under the provisions of the EIA Notification 1994 and/or EIA Notification 2006 shall be provided. Copies of Consent to Establish/No Objection Certificate and Consent to Operate (in case of units operating prior to EIA Notification 2006, CTE and CTO of FY 2005/2006) obtained from the SPCB shall be submitted. Further, compliance report to the conditions of consents from the SPCB shall be submitted.
4. **Site Details**
   i. Location of the project site covering village, Taluka/Tehsil, District and State, Justification for selecting the site, whether other sites were considered.
   ii. A toposheet of the study area of radius of 10km and site location on 1:50,000/1:25,000 scale on an A3/A2 sheet. (including all eco/sensitive areas and environmentally sensitive places)
   iii. Co/ordinates (lat/long) of all four corners of the site.
   iv. Google map/Earth downloaded of the project site.
   v. Layout maps indicating existing unit as well as proposed unit indicating storage area, plant area, greenbelt area, utilities etc. If located within an Industrial area/Estate/Complex, layout of Industrial Area indicating location of unit within the Industrial area/Estate.

vi. Photographs of the proposed and existing (if applicable) plant site. If existing, show photographs of plantation/greenbelt, in particular.

vii. Landuse break/up of total land of the project site (identified and acquired), government/private / agricultural, forest, wasteland, water bodies, settlements, etc shall be included. (not required for industrial area)

viii. A list of major industries with name and type within study area (10km radius) shall be incorporated. Land use details of the study area

ix. Geological features and Geo/hydrological status of the study area shall be included.

x. Details of Drainage of the project upto 5km radius of study area. If the site is within 1 km radius of any major river, peak and lean season river discharge as well as flood occurrence frequency based on peak rainfall data of the past 30 years. Details of Flood Level of the project site and maximum Flood Level of the river shall also be provided. (mega green field projects)

xi. Status of acquisition of land. If acquisition is not complete, stage of the acquisition process and expected time of complete possession of the land.

xii. R&R details in respect of land in line with state Government policy.

5. **Forest and wildlife related issues (if applicable):**

i. Permission and approval for the use of forest land (forestry clearance), if any, and recommendations of the State Forest Department. (if applicable).

ii. Land use map based on High resolution satellite imagery (GPS) of the proposed site delineating the forestland (*in case of projects involving forest land more than 40 ha).*

iii. Status of Application submitted for obtaining the stage I forestry clearance along with latest status shall be submitted.

iv. The projects to be located within 10 km of the National Parks, Sanctuaries, Biosphere Reserves, Migratory Corridors of Wild Animals, the project proponent shall submit the map duly authenticated by Chief Wildlife Warden showing these features vis/à/vis the project location and the recommendations or comments of the Chief Wildlife Warden/thereon.

v. Wildlife Conservation Plan duly authenticated by the Chief Wildlife Warden of the State Government for conservation of Schedule I fauna, if any exists in the study area.

vi. Copy of application submitted for clearance under the Wildlife (Protection) Act, 1972, to the Standing Committee of the National Board for Wildlife.

6. **Environmental Status**

i. Determination of atmospheric inversion level at the project site and site/specific micro/meteorological data using temperature, relative humidity, hourly wind speed and direction and rainfall.

ii. AAQ data (except monsoon) at 8 locations for PM_{10}, $PM_{2.5}$, SO_2, NO_X, CO and other parameters relevant to the project shall be collected. The monitoring stations shall be based CPCB guidelines and take into account the pre/dominant wind direction, population zone and sensitive receptors including reserved forests.

iii. Raw data of all AAQ measurement for 12 weeks of all stations as per frequency given in the NAQQM Notification of Nov. 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.

iv. Surface water quality of nearby River (60m upstream and downstream) and other surface drains at eight locations as per CPCB/MoEF&CC guidelines.

v. Whether the site falls near to polluted stretch of river identified by the CPCB/MoEF&CC.

vi. Ground water monitoring at minimum at 8 locations shall be included.
vii. Noise levels monitoring at 8 locations within the study area.
viii. Soil Characteristic as per CPCB guidelines.
ix. Traffic study of the area, type of vehicles, frequency of vehicles for transportation of materials, additional traffic due to proposed project, parking arrangement etc.
x. 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. If Schedule/I fauna are found within the study area, a Wildlife Conservation Plan shall be prepared and furnished.
xi. Socio/economic status of the study area.

7. **Impact Assessment and Environment Management Plan**

i. Assessment of ground level concentration of pollutants from the stack emission based on site/specific meteorological features. In case the project is located on a hilly terrain, the AQIP Modelling shall be done using inputs of the specific terrain characteristics for determining the potential impacts of the project on the AAQ. Cumulative impact of all sources of emissions (including transportation) on the AAQ of the area shall be well assessed. Details of the model used and the input data used for modelling shall also be provided. The air quality contours shall be plotted on a location map showing the location of project site, habitation nearby, sensitive receptors, if any.
ii. Water Quality modelling – in case, if the effluent is proposed to be discharged in to the local drain, then Water Quality Modelling study should be conducted for the drain water taking into consideration the upstream and downstream quality of water of the drain.
iii. Impact of the transport of the raw materials and end products on the surrounding environment shall be assessed and provided. In this regard, options for transport of raw materials and finished products and wastes (large quantities) by rail or rail/cum road transport or conveyor/cum/rail transport shall be examined.
iv. A note on treatment of wastewater from different plant operations, extent recycled and reused for different purposes shall be included. Complete scheme of effluent treatment. Characteristics of untreated and treated effluent to meet the prescribed standards of discharge under E(P) Rules.
v. Details of stack emission and action plan for control of emissions to meet standards.
vi. Measures for fugitive emission control
vii. Details of hazardous waste generation and their storage, utilization and disposal. Copies of MOU regarding utilization of solid and hazardous waste shall also be included. EMP shall include the concept of waste/minimization, recycle/reuse/recover techniques, Energy conservation, and natural resource conservation.
viii. Proper utilization of fly ash shall be ensured as per Fly Ash Notification, 2009. A detailed plan of action shall be provided.
ix. Action plan for the green belt development plan in 33 % area i.e. land with not less than 1,500 trees per ha. Giving details of species, width of plantation, planning schedule etc. shall be included. The green belt shall be around the project boundary and a scheme for greening of the roads used for the project shall also be incorporated.
x. Action plan for rainwater harvesting measures at plant site shall be submitted to harvest rainwater from the roof tops and storm water drains to recharge the ground water and also to use for the various activities at the project site to conserve fresh water and reduce the water requirement from other sources.

xi. Total capital cost and recurring cost/annum for environmental pollution control measures shall be included.
xii. Action plan for post/project environmental monitoring shall be submitted.
xiii. Onsite and Offsite Disaster (natural and Man/made) Preparedness and Emergency Management Plan including Risk Assessment and damage control. Disaster management plan should be linked with District Disaster Management Plan.

8. **Occupational health**
   i. Details of existing Occupational & Safety Hazards. What are the exposure levels of above mentioned hazards and whether they are within Permissible Exposure level (PEL). If these are not within PEL, what measures the company has adopted to keep them within PEL so that health of the workers can be preserved,
   ii. Details of exposure specific health status evaluation of worker. If the workers' health is being evaluated by pre/designed format, chest x rays, Audiometry, Spirometry, Vision testing (Far & Near vision, colour vision and any other ocular defect) ECG, during pre/placement and periodical examinations give the details of the same. Details regarding last month analysed data of abovementioned parameters as per age, sex, duration of exposure and department wise.
   iii. Annual report of health status of workers with special reference to Occupational Health and Safety.
   iv. Plan and fund allocation to ensure the occupational health & safety of all contract and casual workers.

9. **Corporate Environment Policy**
   i. 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.
   ii. Does the Environment Policy prescribe for standard operating process / procedures to bring into focus any infringement / deviation / violation of the environmental or forest norms / conditions? If so, it may be detailed in the EIA.
   iii. What is the hierarchical system or Administrative order of the company to deal with the environmental issues and for ensuring compliance with the environmental clearance conditions? Details of this system may be given.
   iv. Does the company have system of reporting of non/compliances / violations of environmental 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

10. Details regarding infrastructure facilities such as sanitation, fuel, restroom etc. to be provided to the labour force during construction as well as to the casual workers including truck drivers during operation phase.
11. To address the Public Hearing issues, provisions contained under Ministry's Office Memorandum vide F.No. 22/65/2017/IA.III dated 30/09/2020 shall be complied.
12. 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.
13. A tabular chart with index for point wise compliance of above ToRs.
14. The ToRs prescribed shall be valid for a period of three years for submission of the EIA/EMP reports along with Public Hearing Proceedings (wherever stipulated).

The following general points shall be noted:

i. All documents shall be properly indexed, page numbered.
ii. Period/date of data collection shall be clearly indicated.
iii. Authenticated English translation of all material in Regional languages shall be provided.
iv. The letter/application for environmental clearance shall quote the MOEF&CC file No. and also attach a copy of the letter.
v. The copy of the letter received from the Ministry shall be also attached as an annexure to the final EIA/EMP Report.
vi. The index of the final EIA/EMP report must indicate the specific chapter and page no. of the EIA/EMP Report
vii. While preparing the EIA report, the instructions for the proponents and instructions for the consultants issued by MOEF&CC vide O.M. No. J/11013/41/2006/IA.II (I) dated 4th August, 2009, which are available on the website of this Ministry shall also be followed.
viii. The consultants involved in the preparation of EIA/EMP report after accreditation with Quality Council of India (QCl)/National Accreditation Board of Education and Training (NABET) would need to include a certificate in this regard in the EIA/EMP reports prepared by them and data provided by other organization/Laboratories including their status of approvals etc. Name of the Consultant and the Accreditation details shall be posted on the EIA/EMP Report as well as on the cover of the Hard Copy of the Presentation material for EC presentation.
ix. ToRs' prescribed by the Expert Appraisal Committee (Industry) shall be considered for preparation of EIA/EMP report for the project in addition to all the relevant information as per the 'Generic Structure of EIA' given in Appendix III and IIIA in the EIA Notification, 2006. Where the documents provided are in a language other than English, an English translation shall be provided. The draft EIA/EMP report shall be submitted to the State Pollution Control Board of the concerned State for conduct of Public Hearing. The SPCB shall conduct the Public Hearing/public consultation, district/wise, as per the provisions of EIA notification, 2006. The Public Hearing shall be chaired by an Officer not below the rank of Additional District Magistrate. The issues raised in the Public Hearing and during the consultation process and the commitments made by the project proponent on the same shall be included separately in EIA/EMP Report in a separate chapter and summarized in a tabular chart with financial budget (capital and revenue) along with time/schedule of implementation for complying with the commitments made. The final EIA report shall be submitted to the Ministry for obtaining environmental clearance.

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ANNEXURE-2

ADDITIONAL ToRS FOR INTEGRATED STEEL PLANT

1. Iron ore/coal linkage documents along with the status of environmental clearance of iron ore and coal mines
2. Quantum of production of coal and iron ore from coal & iron ore mines and the projects they cater to. Mode of transportation to the plant and its impact
3. For Large ISPs, a 3/D view i.e. DEM (Digital Elevation Model) for the area in 10 km radius from the proposal site. MRL details of project site and RL of nearby sources of water shall be indicated.
4. Recent land/use map based on satellite imagery. High/resolution satellite image data having 1m/5m spatial resolution like quickbird, Ikonos, IRS P/6 pan sharpened etc. for the 10 Km radius area from proposed site. The same shall be used for land used/land/cover mapping of the area.
5. PM (PM_{10} and $P_{2.5}$) present in the ambient air must be analysed for source analysis – natural dust/RSPM generated from plant operations (trace elements) of PM_{10} to be carried over.
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 especially 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.

ADDITIONAL ToRs FOR PELLET PLANT

1. Iron ore/coal linkage documents along with the status of environmental 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. 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.
4. PM(PM_{10} and $P_{2.5}$) present in the ambient air must be analysed for source analysis – natural dust/RSPM generated from plant operations (trace elements) of PM_{10} to be carried over.
5. All stock piles will have to be on top of a stable liner to avoid leaching of materials to ground water.
6. Plan for the implementation of the recommendations made for the steel plants in the CREP guidelines.
7. Plan for slag utilization
8. Plan for utilization of energy in off gases (coke oven, blast furnace)
9. System of coke quenching adopted with justification.
10. Trace metals Mercury, arsenic and fluoride emissions in the raw material.
11. Trace metals in waste material especially slag.
12. Trace metals in water

ADDITIONAL ToRs FOR CEMENT INDUSTRY

1. Limestone and coal linkage documents along with the status of environmental 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 CREP guidelines must 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. Trace metals in waste material especially slag.

ADDITIONAL ToRs FOR PULP AND PAPER INDUSTRY

i. A note on pulp washing system capable of handling wood pulp shall be included.
ii. 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
iii. 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.
iv. 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.
v. 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.

ADDITIONAL ToRs FOR LEATHER/SKIN/HIDE PROCESSING INDUSTRY

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.

ADDITIONAL ToRs FOR COKE OVEN PLANT

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.

ADDITIONAL ToRs FOR ASBESTOS MILLING AND ASBESTOS BASED PRODUCTS

1. Type of the project – new/expansion/modernization
2. Type of fibres used (Asbestos and others) and preference of selection from techno/environmental angle should be furnished
3. 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
4. Technology adopted, flow chart, process description and layout marking areas of potential environmental impacts
5. National standards and codes of practice in the use of asbestos particular to the industry should be furnished
6. In case of newly introduced technology, it should include the consequences of any failure of equipment/ technology and the product on environmental status.
7. In case of expansion project asbestos fibre to be measured at slack emission and work zone area, besides base line air quality.
8. In case of green field project asbestos fibre to be measured at ambient air.

ADDITIONAL ToRs FOR METALLURGICAL INDUSTRY (FERROUS AND NON/FERROUS)

1. Complete process flow diagram describing each unit, its processes and operations, along with material and energy inputs & outputs (material and energy balance).
2. Emission from sulphuric acid plant and sulphur muck management.
3. Details on installation of Continuous Emission Monitoring System with recording with proper calibration system
4. Details on toxic metals including fluoride emissions
5. Details on stack height.
6. Details on ash disposal and management
7. Complete process flow diagram describing process of lead/zinc/copper/ aluminium, *etc.*
8. Details on smelting, thermal refining, melting, slag fuming, and Waelz kiln operation
9. Details on Holding and de/gassing of molten metal from primary and secondary aluminium, materials pre/treatment, and from melting and smelting of secondary aluminium
10. Details on toxic metal content in the waste material and its composition and end use (particularly of slag).
11. Trace metals in waste material especially slag.
12. Plan for trace metal recovery
13. Trace metals in water

Executive Summary

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

i. Project name and location (Village, Dist, State, Industrial Estate (if applicable)
ii. Products and capacities. If expansion proposal, then existing products with capacities and reference to earlier EC.
iii. Requirement of land, raw material, water, power, fuel, with source of supply (Quantitative)
iv. Process description in brief, specifically indicating the gaseous emission, liquid effluent and solid and hazardous wastes. Materials balance shall be presented.
v. Measures for mitigating the impact on the environment and mode of discharge or disposal.
vi. Capital cost of the project, estimated time of completion
vii. Site selected for the project – Nature of land – Agricultural (single/double crop), barren, Govt/private land, status of is acquisition, nearby (in 2/3 km.) water body, population, with in 10km other industries, forest, eco/sensitive zones, accessibility, (note – in case of industrial estate this information may not be necessary)
viii. Baseline environmental data – air quality, surface and ground water quality, soil characteristic, flora and fauna, socio/economic condition of the nearby population
ix. Identification of hazards in handling, processing and storage of hazardous material and safety system provided to mitigate the risk.
x. Likely impact of the project on air, water, land, flora/fauna and nearby population
xi. Emergency preparedness plan in case of natural or in plant emergencies
xii. Issues raised during public hearing (if applicable) and response given
xiii. CSR plan with proposed expenditure.
xiv. Occupational Health Measures
xv. Post project monitoring plan

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ANNEXURE-3

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

S. No.	Name	Position	30/05/2022	31/05/2022
1.	Shri. Rajive Kumar	Chairman	Present	Present
2.	Dr. S. Ranganathan	Member	Present	Present
3.	Dr. Ranjit Prasad	Member	Present	Present
4.	Dr. E V R Raju	Member	Present	Present
5.	Dr. S. K. Singh	Member	Present	Present
6.	Dr. Jai Krishna Pandey	Member	Present	Present
7.	Dr. Dipankar Shome	Member	Present	Present
8.	Dr. Tejaswini Ananthkumar	Member	Present	Present
9.	Dr. Hemant Sahasrabuddhe	Member	Present	Present
10.	Dr. B. N. Mohapatra, DG, (Representatives of NCCBM)	Member	Absent	Absent
11.	Representative of CPCB (Shri Nazimuddin, Scientist 'F')	Member	Present	Present
12.	Dr. S. Raghavan, Scientist 'D' National Institute of Occupational Health (NIOH)	Member	Present	Present
13.	Dr. Sanjay Bist, Scientist 'E' Indian Meteorological Department	Member	Present	Present
14.	Dr. R. B. Lal, Scientist E, Ministry of Environment, Forest and Climate Change, New Delhi	Member Secretary	Present	Present
Officials from MoEF&CC				
15.	Dr. Rajesh Prasad Rastogi	Scientist 'C'	Present	Present
16.	Dr. Sandeepan B.S.	Scientist 'B'	Present	Present

ANNEXURE-4

Approval of EAC Chairman

Email **Additional Director MoEFCC Dr R B LAL**

Re: Compiled Draft Minutes of the 6th EAC (Industry 1 Sector) meeting held during 30-31 May, 2022 (through Video Conferencing) for approval of the Chairman

From : chairman eac ind 1 <chairman.eac.ind.1@gmail.com> Tue, Jun 07, 2022 06:03 PM

Subject : Re: Compiled Draft Minutes of the 6th EAC (Industry 1 Sector) meeting held during 30-31 May, 2022 (through Video Conferencing) for approval of the Chairman

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

Cc : ranganathan metals <ranganathan.metals@gmail.com>, ranjitnitj@gmail.com, rajuevr60@gmail.com, sksinghdce@gmail.com, jaikrishnapandey@gmail.com, dshome61@gmail.com, tejaswini acf <tejaswini.acf@gmail.com>, sshemant 801 <sshemant_801@rediffmail.com>, NCCBM DIRECTOR GENERAL <dg@ncbindia.com>, Nazimuddin <nazim.cpcb@nic.in>, Raghavan S <raghuharihar@gov.in>, raghuharihar@yahoo.co.in, Sanjay Bist <sanjay.bist@imd.gov.in>

Dear Dr. Lal,
The minutes sent by your email dated 7 June 2022 at 12:45 PM are approved.
Kindly do the needful.
Best Wishes
Rajive Kumar
Chairman EAC (Industry-1)

On Tue, Jun 7, 2022 at 12:45 PM Additional Director MoEFCC Dr R B LAL <rb.lal@nic.in> wrote:
Dear Sir,

The Zero Draft minutes were forwarded to the EAC on 03.06.2022. The suggestion made by the EAC has been incorporated in the revised Draft minutes. The discussion of Slurry Pipeline is also included.

Based on the comments received from the EAC members, a draft copy of minutes of the 6th EAC (Industry 1 Sector) meeting held during 30-31 May, 2022 is attached herewith for approval of the Chairman, Industry 1 Sector, please.

Best Regards,

(Dr. R. B. LAL)
Additional Director/Scientist 'E' &
Member Secretary, Expert Appraisal Committee (Industry-1 Sector)

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