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

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Dated: 24.11.2022

Date of Zero Draft MoM sent to EAC:22.11.2022
Approval by Chairman:24.11.2022
Uploading on PARIVESH:24.11.2022

MINUTES OF THE 17th EXPERT APPRAISAL COMMITTEE (INDUSTRY-1 SECTOR) MEETING HELD ON NOVEMBER 14-16, 2022

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

Time: 10:30 AM onwards

DAY-1: NOVEMBER 14, 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 16th Meeting of the EAC (Industry-1 Sector) held during November 3, 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 **16th Meeting of the EAC (Industry-1 Sector) held during November 3, 2022** conducted through Video Conferencing (VC), and noted that no request has been received for modifications/factual correction, in the minutes of the 16th EAC meeting for the project/activities, and confirmed the same.

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

Consideration of Environmental Clearance Proposals

Agenda No. 17.1

17.1 Expansion in production capacity from 30,000 TPA of MS Ingots to 1,20,000 TPA of MS Ingots/ Billets; from 48,000 TPA to 1,20,000 TPA of Twisted and ribbed bars by M/s. Prime Gold International Limited, located at S.F. Nos. 284/2B, 289/2A2, 289/2A3, 290/1B, 289/2C, 283/3, 284/1B2, 289/2B3, 282/1B, 283/4, 290/1A, 285/1C, 284/1B1, 289/2B1, 289/2B2, 282/2A at Kalugondapalli Village Denkanikotta Taluk, Krishnagiri District, Tamil Nadu - Consideration of Environmental Clearance.

[Proposal No. IA/TN/IND/258333/2019; File No. 1A-J-11011/78/2019-IA.II (I)]
[Consultant: Pridhvi Envirotech Private Limited; Valid upto: 17.11.2022]

17.1.1 M/s. Prime Gold International Limited has made an online application vide proposal no. IA/TN/IND/258333/2019 dated 03.11.2022 along with copy of EIA/EMP report, Form – 2 and certified compliance report seeking Environment Clearance (EC) under the provisions of the EIA Notification, 2006 for the project mentioned above. The proposed project activity is listed at S. No. 3(a) Metallurgical Industries (ferrous & non-ferrous) under Category "B" of the schedule of the EIA Notification, 2006. However, due to the applicability of general condition i.e., due to existence of interstate boundary within 5 km radial distance of the site, the project is being appraised at the central level as Category 'A'.

17.1.2 Name of the EIA consultant: M/s Pridhvi Envirotech Private Limited [S. No. 142, List of ACOs with their Certificate / Extension Letter No: QCI/NABET/ENV/ACO/22/2491 valid till 17.11.2022; Rev. 25, Sept 05, 2022].

Details submitted by Project proponent

17.1.3 The details of the ToR are furnished as below:

Date of Application	Consideration	Details	Date of Accord	ToR Validity
12.03.2019	5th REAC meeting held on 27-29th March 2019	Terms of Reference	08.05.2019	07.05.2023

17.1.4 The project of M/s Prime Gold International Limited located at Kalugondapalli Village, Denkanikotta Tehsil, Krishnagiri District, Tamil Nadu is for expansion in production from 30,000 TPA of MS Ingots to 1,20,000 TPA of MS Ingots/ Billets and from 48,000 TPA to 1,20,000 TPA of Twisted and ribbed bars.

17.1.5 Environmental Site Settings:

<table>
<tr><th>S. No.</th><th>Particulars</th><th>Details</th><th>Remarks</th></tr>
<tr><td>1</td><td>Total land</td><td>7.98 Ha (Own Land)</td><td>Land use: Industrial</td></tr>
<tr><td>2</td><td>Land acquisition details as per MoEF&CC O.M. dated 7/10/2014</td><td>No land acquisition required as the land is owned by the company.</td><td>-</td></tr>
<tr><td>3</td><td>Existence of habitation & involvement of R&R, if any.</td><td>Nil

A total of 118 villages and towns with a total population of 164698 are existing in the 10KM radius of the site.</td><td>R&R Not applicable</td></tr>
<tr><td>4</td><td>Latitude and Longitude of all corners of the project site.</td><td>
<table>
<tr><td>S. No</td><td>Latitude (N)</td><td>Longitude (E)</td></tr>
<tr><td>A</td><td>12°38'58.43"N</td><td>77°44'51.42"E</td></tr>
<tr><td>B</td><td>12°38'56.88"N</td><td>77°44'55.94"E</td></tr>
<tr><td>C</td><td>12°38'55.38"N</td><td>77°45'2.12"E</td></tr>
<tr><td>D</td><td>12°38'52.64"N</td><td>77°45'1.77"E</td></tr>
<tr><td>E</td><td>12°38'49.36"N</td><td>77°44'59.42"E</td></tr>
<tr><td>F</td><td>12°38'48.90"N</td><td>77°45'1.58"E</td></tr>
<tr><td>G</td><td>12°38'46.25"N</td><td>77°44'59.53"E</td></tr>
<tr><td>H</td><td>12°38'47.92"N</td><td>77°44'54.54"E</td></tr>
<tr><td>I</td><td>12°38'47.80"N</td><td>77°44'52.07"E</td></tr>
</table>
</td><td>-</td></tr>
<tr><td>5</td><td>Elevation of the project site</td><td>Highest – 951 AMSL
Lowest– 938 AMSL</td><td>-</td></tr>
<tr><td>6</td><td>Involvement of Forest land if any</td><td>Nil</td><td>-</td></tr>
<tr><td>7</td><td>Water body (Rivers, Lakes, Pond, Nala, Natural Drainage, Canal etc.) exists within the project site as well as study area</td><td>Within Project site: Nil
Study Area:
<table>
<tr><td>S. No</td><td>Location</td><td>Distance (km)</td><td>Direction</td></tr>
<tr><td>1</td><td>BynahanakalliKere</td><td>≈2.27</td><td>SE</td></tr>
<tr><td>2</td><td>MathukurKere</td><td>≈1.38</td><td>SSE</td></tr>
<tr><td>3</td><td>Nagandahally Lake</td><td>≈4.03</td><td>ENE</td></tr>
<tr><td>4</td><td>Kothur Lake</td><td>≈9.49</td><td>NE</td></tr>
<tr><td>5</td><td>Nammaorukere Lake</td><td>≈1.75</td><td>SE</td></tr>
<tr><td>6</td><td>Muthagatti Lake</td><td>≈5.86</td><td>NW</td></tr>
<tr><td>7</td><td>Belurkere Lake</td><td>≈9.22</td><td>SSE</td></tr>
<tr><td>8</td><td>DoddaUbbanuar Lake</td><td>≈8.82</td><td>SW</td></tr>
</table>
</td><td>-</td></tr>
<tr><td>8</td><td>Existence of ESZ/ ESA/ national park/ wildlife</td><td>Nil</td><td>-</td></tr>
</table>

S. No.	Particulars	Details	Remarks
	sanctuary/ biosphere reserve/ tiger reserve/ elephant reserve etc. if any within the study area		

17.1.6 The PP reported that M/s. Prime Gold International Limited started its operations at the current location as rolling mill in the year 2005 in the name of Kali Metals (P) Limited to manufacture TMT ribbed bars with a capacity of 4000 T/month. The unit obtained CTE (Consent to Establish) in the year 2005 and CTO (Consent to Operate) in 2006. Subsequently in 2009, they established induction furnace with a capacity of 4.2 TPH to manufacture MS Ingots with a capacity of 2500 T/Month. As the annual production capacity of MS Ingots is 30000 tons/Annum, as per the EIA Notification, the unit does not require Environmental Clearance. The unit has obtained CTE (Consent to Establish) from Tamil Nadu State Pollution Control Board in August 2009 for the same and obtained CTO in the year of 2011. Company name was changed from M/s. Kali Metals Private Limited to M/s. Prime Gold Internationals Limited and the industry obtained CTO from state Pollution Control Board in 2012 in the new name. The latest Consent to Operate renewal is accorded vide letter dated 22/05/2021 and valid up to 31/03/2023. The unit was running the valid CTO and first time PP has submitted the application for grant of EC.

17.1.7 Implementation status of the existing CTE:

S. No.	Facilities / Products	Quantity (TPA)	As per CTE dated	Implementation Status as on date	Production as per CTO
1	Twisted and Ribbed Bars	48,000	16.11.2005 & 03.04.2009	Implemented	48,000 TPA
2	M.S. Ingots	30,000		Implemented	30,000 TPA

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

S. No.	Product	Existing Capacity (TPA)	Proposed Capacity (TPA)	Total After expansion (TPA)
1	Twisted and Ribbed Bars	48,000	72,000	1,20,000
2.	MS Ingots/Billets	30,000	90,000	1,20,000

S. NO	Equipment/ Facility	Existing unit capacity	Total after expansion
1	Induction Furnace	1 No. 4.2 TPH	1 No. 4.2 TPH and 1 No. 12.5 TPH Furnace is proposed
2	Re-heating furnace	1 No. 6.67 TPH (Stand by Furnace)	1 No. 16.67 TPH (Stand by Furnace)
3	Continuous casting machine	Nil	1 No. 16.67 TPH

S. NO	Equipment/ Facility	Existing unit capacity	Total after expansion
4	DG Set	82.5 KVA, 160 KVA	82.5 KVA, 160 KVA and proposed 400 KVA

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

S. No.	Raw Material	Existing	Proposed	Total	Source	Mode of transport
		Consumption (TPA)				
For MS Ingots/ MS Billets						
1	MS Scraps	25800	68200	94000	Local	By Road
2	Sponge Iron	6300	25300	31600*	Local/ Bellary	By Road
3	Ferro Alloys	390	1170	1560	Local/ Bellary	By Road
Details of Raw Material for Rolling mill unit MS Ingots/Billets (TPA)						
4	MS Ingots/Billets (In house Production)	30000	90000	120000	In-house	-
5	M.S. Billets/Ingots (Purchased from outside)	21600 (Now it will be stopped)	9600	9600	Purchased	By Road
Note: 9600 TPA M.S. Billets/M. S Billets will be procured from the local market after the proposed expansion						

17.1.10 The fresh water requirement would be 68.2 KLD and recycled water from cooling towers would be 139.8 KLD both put together would be 208 KLD total water requirement. The water will be sourced from Local Panchayat (water derived from the ground water). Copy of NOC from Local panchayat is obtained for withdrawal of 25 KLD vide Roc No. 1826/2019/A2 dated 30.07.2021.

17.1.11 The power requirement of 13000 KVA will be obtained from Tamil Nadu Generation and Distribution Corporation (TANGEDCO).

17.1.12 Baseline Environmental Studies:

Period	April 2019- June 2019
AAQ parameters at 8 Locations (min and max)	• $P.M_{10}$ = 35.07 µg/m^3 to 72.84 µg/m^3 • $P.M_{2.5}$= 21.4 µg/m^3 to 48.99 µg/m^3 • SO_2 = 8.25 µg/m^3 to 16.5 µg/m^3 • NO_2 = 9.13 µg/m^3 to 36.1 µg/m^3 • CO = Below Detectable Limit
Incremental GLC level	• PM_{10} = 4.527 µg/m^3 (0.8 Km, East) • $PM_{2.5}$ = 2.04 µg/m^3 (0.8 Km, East) • SO_2 = 2.89 µg/m^3 (0.8 Km, East) • NO_x = 1.02 µg/m^3 (0.8 Km, East)
Ground water	**Criteria Pollutants** | **Unit** | **Minimum** | **Maximum** | **Prescribed**

quality at 8 locations

		Value	Value	Standard
pH	-	6.58	8.1	6.50 - 8.50
Total dissolved solids	mg/l	755	854	2000
Total hardness as $CaCO_3$	mg/l	304	352	600 max
Chlorides as Cl	mg/l	190	264	1000 max
Iron	mg/l	0.12	0.27	0.3 Max
Sulphates as SO_4	mg/l	52	78	400 max

Surface water quality at 8 locations

Criteria Pollutants	Unit	Minimum Value	Maximum Value
pH	NA	7.6	8.0
DO	mg/l	4.8	12.6
Biochemical Oxygen Demand	mg/l	3.2	15.1
Chemical Oxygen Demand	mg/l	40.2	72
Total Suspended Solids	mg/l	17.4	32
Total dissolved solids	mg/l	675	980
Nitrates as NO_3	mg/l	0.67	4.2

Noise levels Leq (Day and Night)

Parameter	Unit	Maximum Value	Minimum Value	Prescribed Standard
Leq(Day)	dB	72.0	51.2	75
Leq(Night)	dB	62.1	40.9	70

Traffic assessment study findings

The traffic study is conducted on Uliveeranahally to Pyarakanahally access road and Hosur to Thally State Highway which is well connected to the access road.

Particulars	Details	
Traffic Load Study Period	April 2009	
Traffic Load (Baseline) (PCU/Day)	State Highway (Hosur to Thally State Highway)	Connecting road (Uliveeranahally to Pyarakanahally Road)
Existing	4153.5 PCU/day	1727 PCU/day
Additional Traffic Load During Operation of the Project (PCU/Day)	166 PCU/day	
Total Traffic Load During Operation Of Proposed Project (PCU/Day)	4319.5 PCU/day	1893 PCU/day
Traffic Capacity As Per The IRC 64:1990 For Double lane Road in plane area (PCU/Day)	15000 PCU/day	

Flora and fauna (presence of Schedule I Fauna and Endangered

No schedule I species of fauna and no endangered species of flora found in study area.

species	

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

Solid Waste Generation							
Item		**Existing (TPA)**	**Total after expansion (TPA)**	**Unit**	**Distance from Site**	**Mode of Transport**	**Mode of Disposal**
Slag		1500	6000	TPA	10 kms	Trucks	will be handing over to cement bricks manufacturers
Waste Scrap		3300	5400	TPA	10 kms	Trucks	Disposed to Authorized recycler
Mill Scale		-	655	TPA	10 kms	Trucks	Disposed to Authorized recycler
Ash from Reheating Furnace*		315 Kg/day	840 Kg/day	Kg/day	10 kms	Trucks	Will be sent to Brick Manufacturers
STP Sludge		-	0.55	TPA	-	-	Used as manure
Domestic Solid waste	Biodegradable	7.392	10.35	TPA	-	-	Used as manure
	Non-Biodegradable	4.928	6.9	TPA	-	-	Disposed to Authorized recycler
Note: *In regards to ash from re-heating furnace, PP proposed the re-heating furnace as stand by only as PP is implementing Continuous casting technology. The Total coal requirement in case PP operate the re-heating furnace due to any break down in Continuous casting machine, will be 28 Tons/day at maximum. PP is currently using imported coal for re-heating furnace with 3% ash content. PP will continue to use the imported coal only in future. Thus total ash quantity will be 840 kgs/day. This will also be send to brick manufacturers.							

Hazardous Waste Generation						
Item	**Existing (TPA)**	**Total after expansion (TPA)**	**Unit**	**Distance from Site**	**Mode of Transport**	**Mode of Disposal**
Solar pan residue	-	0.030	-	10 kms	Trucks	Sent to approved TSDF facility
Waste Oil Lt/Annum	20	520	LPA	10 kms	Trucks	To be sent to Authorized Re-processors / Recyclers
Used Lead Acid Batteries	2	4	No's	10 kms	Trucks	To be returned to manufacturers / dealers on buy

						back basis

17.1.14 Public Consultation:

Details of advertisement given	05.01.2020
Date of public consultation	6th February 2020
Venue	Sri Raja Rajeswari Kalyana Mantapam Mathagondapalli, Denkanikottai, Krishnagiri, Tamilnadu.
Presiding Officer	District Revenue Officer
Major issues raised	i. Employment to local people. ii. Disposal of Solid waste and effluent in nearby water bodies iii. Air pollution and chimney height. iv. Plantation issue in the industry and nearby area. v. Road construction & public transportation nearby villages

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

S. No.	Activity	Physical Targets	Year wise Budgets (Rs. Lakhs)		
			1st Year	2nd Year	Total
1.	Road Development	Ulliveerannapally to Kappakal Road	Completed		**7.4**
2.	Providing Drinking water	1) Establishment of RO Plant in Kappakal, Govt Union Primary School	2.0	--	**2.0**
		2) Establishment of RO Plant in Ulliveeranapalli, Panyat union school.	--	2.0	**2.0**
3.	Providing Electrical Autos to School	Procurement and Handover to the School	3.0	3.0	**6.0**
4.	Vocational Skill Development Programmes (for different target groups such as Women, Youth etc.)	1) Identification of Candidates from unemployed youth & women from the nearby villages 2) Advertisement in the village Panchayat office and Schools 3) Conducting Skill development program once in a year with the help of District Authorities 4) Provide certificate to successful candidates at the end of the program. 5) Provide employment to eligible candidates	2.0	2.0	**3.0**
	Total		**7.0**	**7.0**	**20.4**

17.1.15 The PP reported that the cost of existing is Rs. 35.04 Crore. The total project cost for the proposed expansion project will be Rs. 10 Crores. The capital cost for environmental protection measures is proposed as Rs. 119.0 Lakhs. The annual recurring cost towards the environmental protection measures is proposed as Rs. 32.5 Lakhs. The employment generation from the expansion project is 30 Nos. The details of cost for environmental protection measures is as follows:

S. No	Component	Item	Capital cost in lakhs of Rs.	Recurring Costs in Lakhs of Rs./ annum
1	Air Pollution Control	Upgrading the existing Scrubber attached to 4.2 TPH furnace and Re-heating furnace	25.0	10.0
		Establishment of new bag filter for new furnace with primary and secondary ducts and adequate capacity of ID fan for new furnace	40.0	
2	Water Pollution Control	Providing Oil & grease trap and settling tank for Mill cooling water	3.0	3.50
		Establishment of STP	6.0	
3	Storm Water Management& rain water harvesting	Establishment of storm water drains and Rain water Harvesting pits	15.0	2.0
4	Occupational Health & Safety management	Additional Fire hydrant lines and fire extinguishers in the expansion activity	10	5.0
		Establishment first aid centre	4.0	--
		Occupational health budget		8.0
5	Green Belt Management	Development and Maintenance of green belt	16.0	4.0
		Total	**119.0**	**32.5**

17.1.16 Existing green belt has been developed in 0.8 ha area which is about 10% of the total project area of 7.98 ha. Proposed greenbelt will be developed in 1.88 ha which is about 23.5 % of the total project area. Thus total of 2.68. ha area (33.58 % of total project area) will be developed as greenbelt. A 3 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 4000 saplings will be planted and nurtured in 2.68 hectares by 31.01.2023.

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

Certified CTO compliance report from SPCB

17.1.18 The Status of compliance of CTO was obtained from TNPCB vide letter no. T2/TNPCB/F.23579/HSR/2020, dated 22.07.2022 in the name of M/s. Prime Gold

International Limited. As reported by RO, SPCB, there are no non-compliances of conditions stipulated in the CTO.

17.1.19 M/s. Prime Gold International Limited had earlier applied for EC vide proposal no. IA/TN/IND/166064/2019 dated 18/06/2021 and the proposal was considered in 39th meeting of the Re-constituted EAC (Industry-I) held on 30th June - 1st July, 2021 wherein the Committee returned the proposal in its present form due to technical deficiencies in the proposal.

17.1.20 The project proponent again applied for EC vide proposal no. IA/TN/IND/258333/2019 dated 03.11.2022 and the proposal is considered in the 17th meeting of the EAC for Industry-I sector held on 14-16th November, 2022. The observations and recommendations of the EAC are as follows:

Written representations:

17.1.21 During the meeting, based on the deliberations made by the EAC, the project proponent vide letter dated 14.11.2022 through email dated 14.11.2022 submitted the following information:

S. No.	Issue raised	Clarification	Enclosure
1	Development of Green belt to meet 33% of total plant area by 31.01.2023	The Total plant area is 7.98 hectares. The requirement to develop 33% green belt is 2.68 hectares. Currently the unit is have green belt in an area of 0.8 Hectares. It is agreed to plant 4000 saplings with a height of 8-10 feet by 31.01.2023. Local species will be developed with the help of local forest Department officials	A commitment for development of 33% greenbelt is submitted vide letter dated 14.11.2022. The same is updated at para 17.1.16 above.
2	Providing Electrical Auto rikshaw to school children	As suggested by the committee based on Public hearing feedback, an electrical auto will be provided to the local school in the village. ESR proposal is accordingly modified and submitted.	Modified ESR Proposal is submitted and updated at para 17.1.14 above.
3	Revised water balance to meet the green belt requirement	In order to develop the new green belt in an area of 1.8 hectares, water will be needed in the initial years. This quantity will be around 48 Cubic meters. It is proposed to take this water from rain water harvesting structures proposed. Also drip irrigation method will be adopted for green belt development as suggested	Revised water balance table is submitted. The same is updated at para 17.1.10 above.
4	Disposal of Slag from furnace and ash from re-heating furnace	Total Slag generation after expansion will be 6000 Tons/Annum. This will be disposed to Brick manufacturing units In regards to ash from re-heating furnace, we proposed the re-heating furnace as stand by only as PP is implementing Continuous casting	The Table on solid waste generation and disposal is updated and submitted. The same is updated at para 17.1.13 above.

S. No.	Issue raised	Clarification	Enclosure
		technology. The Total coal requirement in case we operate the re-heating furnace due to any break down in Continuous casting machine, will be 28 Tons/day at maximum. PP is currently using imported coal for re-heating furnace with 3% ash content. PP will continue to use the imported coal only in future. Thus total ash quantity will be 840 kgs/day. This will also be send to brick manufacturers	
5	Temperature of billets that come out from furnace	The melting temperature in induction furnace will be 1600 Deg C. the casting temperature of billet will be 1100- 1200 Deg C. The Final billet goes to rolling mill will be 1000 Deg C	--
6	Filling of Brief summary report 1) Previous CFE/ CFO's 2) Table to be inserted on traffic study 3) Solid and Hazardous table shall be updated for ash	-	Revised form by correcting the details is submitted. The summary of proposal is updated accordingly.

Deliberations by the Committee

17.1.22 The Committee noted the following:

1. The instant proposal is for expansion in production from 30,000 TPA of MS Ingots to 1,20,000 TPA of MS Ingots/ Billets and from 48,000 TPA to 1,20,000 TPA of Twisted and ribbed bars.
2. The proposed expansion project is a category B project and appraised as Category A project due to existence of interstate boundary within 5 km radial distance of the site.
3. The EAC, constituted under the provision of the EIA Notification, 2006 comprising Expert Members/domain experts in various fields, examined the proposal submitted by the Project Proponent in desired format along with EIA/EMP reports prepared and submitted by the Consultant accredited by the QCI/ NABET on behalf of the Project Proponent.
4. The EAC noted that the Project Proponent has given an undertaking that the data and information given in the application and enclosures are true to the best of his knowledge and belief and no information has been suppressed in the EIA/EMP reports. If any part of data/information submitted is found to be false/ misleading at any stage, the project will be rejected and Environmental Clearance given, if any, will be revoked at the risk and cost of the project proponent.
5. The Committee noted that the EIA reports are in compliance of the ToR issued for the project, reflecting the present environmental status and the projected scenario for all the

environmental components. The Committee deliberated on the proposed mitigation measure towards Air, Water, Noise and Soil pollutions. The Committee suggested that the storage of toxic/explosive raw materials/products shall be undertaken with utmost precautions and following the safety norms and best practices.

6. Total land available for the plant is 7.98 Hectares. No land acquisition is involved and total land is under the possession of the company.
7. The nearest human settlement from the site is Uliveeranahalli village located at a distance of 0.35 Kms from the project site. A total of 118 villages and towns with a total population of 164698 are existing in the 10KM radius of the site.
8. Mathkurkere Lake (1.38 Km, SE), Nammaorukere Lake (1.75 Km, SE), Bynahanakallikere Lake (2.27 Km, SE), Nagandahally Lake – (4.03Km, NE), Muthagatti Lake (5.89 Km, NW), Doddaubbanuar Lake (8.82 Km, SW), Belurkere Lake (9.22 Km, SSE) and Kothur Lake (9.49, Km, NE) exists within the study area of 10 km from the project site. The EAC is of the opinion that water bodies shall not be disturbed. Mitigation measures w.r.t. safeguarding the water bodies shall be implemented.
9. 208 KLD of total water will be required which will sourced from local Panchayat (68.2 KLD fresh water derived from the ground water) and recycled water from cooling towers would be 139.8 KLD.
10. Existing green belt has been developed in 0.8 ha area which is about 10% of the total project area of 7.98 ha. Proposed greenbelt will be developed in 1.88 ha which is about 23.5 % of the total project area. Thus total of 2.68. ha area (33.58 % of total project area) will be developed as greenbelt. Total no. of 4000 saplings will be planted and nurtured in 2.68 hectares by 31.01.2023. A commitment for development of 33% greenbelt is submitted vide letter dated 14.11.2022.
11. The Committee has found that the baseline data and incremental GLC due to the proposed project within NAAQ standards.
12. The committee deliberated details of carbon foot prints and carbon sequestration study w.r.t. proposed project and found them to be satisfactory.
13. The Committee also deliberated on the public hearing issues along with action plan submitted by the proponent to address the issues raised during the public hearing and found it satisfactory.
14. The Committee also deliberated certified compliance report on earlier CTO issued by the SPCB and found it satisfactory.
15. The Committee deliberated upon the written submission of the Project Proponent and found it satisfactory.
16. The EAC deliberated on the proposal with due diligence in the process as notified under the provisions of the EIA Notification, 2006, as amended from time to time and accordingly made the recommendations to the proposal. The Experts Members of the EAC found the proposal in order and recommended for grant of environmental clearance.
17. The environmental clearance recommended to the project/activity is strictly under the provisions of the EIA Notification 2006 and its subsequent amendments. It does not tantamount/construe to approvals/consent/permissions etc. required to be obtained or standards/conditions to be followed under any other Acts/ Rules/ Subordinate

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

Recommendations of the Committee

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

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

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

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

(iii) The nearest human settlement from the site is Uliveeranahalli village located at a distance of 0.35 Kms from the project site. A total of 118 villages and towns with a total population of 164698 are existing in the 10KM radius of the site. Project Proponent shall prepare and implement an action plan for environmental safeguard measures to minimise the impact on the habitation of the locals. The company shall also include some of these locations in its environmental monitoring programme.

(iv) Mathkurkere Lake (1.38 Km, SE), Nammaorukere Lake (1.75 Km, SE), Bynahanakallikere Lake (2.27 Km, SE), Nagandahally Lake – (4.03Km, NE), Muthagatti Lake (5.89 Km, NW), Doddaubbanuar Lake (8.82 Km, SW), Belurkere Lake (9.22 Km, SSE) and Kothur Lake (9.49, Km, NE) exists within the study area of 10 km from the project site. A robust and full proof Drainage Conservation scheme to protect the natural drainage and its flow parameters; along with Soil conservation scheme and multiple Erosion control measures shall be implemented.

(v) 208 KLD of total water shall be sourced from local Panchayat (68.2 KLD fresh water derived from the ground water) and recycled water from cooling towers (139.8 KLD). Necessary permission shall be obtained from the Competent Authority in this regard.

(vi) Three tier Green Belt shall be developed covering at least 33% of the total project area by 31st January, 2023 with native species all along the periphery of the project site of adequate width and tree density shall not be less than 2500 per ha. Survival rate of green belt developed shall be monitored on periodic basis to ensure that damaged plants are replaced with new plants in the subsequent years. PP shall also develop greenbelt in the

form of shelter belt with tall trees & broad leaves with thick canopy to act as green barrier for air pollution & noise levels towards Uliveeranahalli village inside the plant premises.

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

(viii) The proposed project shall be designed as "Zero Liquid Discharge" Plant. There shall be no discharge of effluent from the plant. Domestic effluent shall be treated in Sewage Treatment Plant. MSW waste shall be treated in digester and recovered gas shall be used in the canteen.

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

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

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

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

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

(xiv) New furnace shall be equipped with hot charging facility. Hot charging shall be achieved up to 85- 90 % and reheating furnace shall be operated on LDO/LSHS as a fuel. Project proponent shall explore the possibility to switch over from solid fuel to liquid fuel in the existing reheating furnace.

(xv) Project proponent shall use only bag filter(s), and shall not use wet scrubber.

(xvi) Following additional arrangements to control fugitive dust shall be provided:

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

(xvii) TCLP analysis of the slag 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 for brick manufacturing and construction work after the recovery of metal.

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

(xix) All the commitments made to the public during the Public Hearing/Public Consultation shall be satisfactorily implemented. The action plan based on the social impact assessment study of the project as per the EMP in accordance to the Ministry's OM dated 30.09.2020 shall be strictly implemented and progress shall be submitted to the Regional Office of MoEF&CC.

(xx) The Plastic Waste Management Rules 2016, inter-alia, mandated banning of identified Single Use Plastic (SUP) items with effect from 01/07/2022. In this regard, CPCB has issued a direction to all the State Pollution Control Boards (SPCBs)/Pollution Control Committees (PCCs) on 30/06/2022 to ensure the compliance of Notification published by

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

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

B. General conditions

I. Statutory compliance:

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

II. Air quality monitoring and preservation

i. The project proponent shall install 24x7 continuous emission monitoring system at process stacks to monitor stack emission 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.
ii. The ambient noise levels should conform to the standards prescribed under E(P)A Rules, 1986 viz. 75 dB(A) during day time and 70 dB(A) during night time.

V. Energy Conservation measures

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

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

VIII. Public hearing and Human health issues

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

IX. Environment Management

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

X. Miscellaneous

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

relevant offices of the Government who in turn has to display the same for 30 days from the date of receipt.

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

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

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

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

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

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

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

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

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

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

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

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

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

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Agenda No. 17.2

17.2 Expansion in the production capacity of Rolling mill from 60,000 TPA to 72,000 TPA along with installation of Argon Oxygen Decarburization (AOD) of 25 Ton for Stainless Steel Products (Wire Rod, Strip, Flats, Rounds, Rebars, Angle and Channel etc.) with existing facilities for production of Sponge Iron Production 1, 20,000 TPA (1 x 200 Ton & 2 x 100 Ton), Captive Power Plant of 15 MW (WHRB- 1 x 22 TPH & 2 x 10 TPH = 8 MW and AFBC- 1 x 30 TPH = 7 MW) and Induction Furnace (3 x 15 Ton) for production of 1,35,000 TPA (M.S & S.S Billets) by M/s Satyam Iron & Steel Co. Pvt. Ltd at Plot No. G-7, B-7/11 & G-7/A, Mangalpur Industrial Estate, PO & PS – Raniganj, District - Paschim Bardhaman, West Bengal– Consideration of Environmental Clearance under para 7(ii) of EIA Notification, 2006.

[Proposal No. IA/WB/IND1/401569/2022; File No. F. No. IA-J-11011/253/2020-IA.II(I)]
[Consultant: Grass Roots Research & Creation India (P) Ltd.; Valid upto: 15.02.2024]

17.2.1 M/s Satyam Iron & Steel Co. Private Limited, has made an online application vide proposal No-IA/WB/IND1/401569/2022, dated 03.11.2022 along with copy of addendum EIA/EMP report, Form – 2 and certified compliance report seeking Environmental Clearance under para 7(ii) of 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 plant under Category "A" of the schedule of the EIA Notification, 2006 and appraised at Central Level.

17.2.2 Name of the EIA consultant: M/s. Grass Roots Research & Creation India (P) Ltd. [Sl. No. 171, List of ACOs with their Certificate / Extension Letter no. NABET/EIA/2124/RA0213; valid upto 15.02.2024, Rev. 25, Sept 05, 2022].

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

S. No.	Criteria as Per OM dated 11.04.2022	Submission of PP
1	The project should have gone through the public hearing process, at least once, for its existing EC capacity on which expansion is being sought, except those categories of projects which have been exempted as per para 7 III (i) of ElA Notification 2006 and its amendments.	The existing project is granted EC by MoEF&CC Vide File No-J- 11011 /253/2020-1A.II.(I), dated 06.08.2021. Copy of EC letter is submitted. Public Hearing for the existing project was conducted by West Bengal Pollution Control Board dated 05.01.2021 at Muralidhar Bhawan at Raniganj, WB. Copies of PH minutes are submitted.
2	There should not be change in Category of	The earlier EC was granted by MoEF&CC under

S. No.	Criteria as Per OM dated 11.04.2022	Submission of PP
	the project from “B2” to “B1” or 'A' due to proposed modernization or expansion.	category “A” as per EIA notification 2006 & its amendment till date and there is no change in project category after proposed expansion as per OM dated 11.04.2022.
3	There is no additional land acquisition or forest land diversion involved for the proposed expansion or there is no increase in lease area with regard to mining vis-a.-vis the area mentioned in the EC, based on which public hearing has been held earlier.	Total land of the present plant is 8.30 ha and no additional land acquisition or forest land diversion is involved for the proposed expansion as per earlier granted EC dated 06.08.2021.
4	The proposed expansion shall not be more than 50% of production capacity as mentioned in the prior EC, issued on the basis of public hearing held and the same shall be allowed in minimum three phases.	The expansion of rolling mill is 20% of the capacity as per EC granted.
5	Predicted environmental quality parameters arising out of proposed expansion/ modernization shall be within the prescribed norms and the same shall be maintained as per prescribed norms.	Predicted environmental quality parameters arising out of proposed expansion/ modernization has been worked out and the incremental GLC is insignificant for all pollutants. Incremental GLC after expansion for PM_{10} will be 4.62 µg/Nm^3; for $PM_{2.5}$-1.08 µg/Nm^3; for NO_2-4.46 µg/Nm^3 and for SO_2-5.62 µg/Nm^3. They are well within the NAAQS after adding the background values as per fresh monitoring done from March to May 2022 at all the 8 locations.
6	The proposed expansion should not result in reduction in the greenbelt area as stipulated in the earlier EC, or if the existing ratio of greenbelt is more than 33%, after expansion it should not reduce below 33%.	Total existing plant area is 8.30 ha. and 33% of total plant area is for greenbelt. There is no change in greenbelt area after current proposal.
7	The project proponent should have satisfactorily complied the conditions stipulated in the existing EC(s) and satisfactorily fulfilled all the commitments made during the earlier public hearing/consultation proceedings and also the commitments given while granting previous expansion, as may be applicable. This shall be duly recorded in the certified compliance report issued by the IRO/CPCB/SPCB, which should not be more than one year old at the time of submission of application.	The current plant is granted EC by MoEF&CC on 06.08.2021. Site visit was conducted by IRO, Kolkata on 01.04.2022 and Certified Compliance Report was obtained by IRO, Kolkata Vide Letter No-102-684/21/EPE/207, dated 11.05.2022. Copy of CCR is submitted**.** Action taken report was also submitted to IRO, Kolkata against Non-complied points as per stipulated conditions in existing EC. Copy of ATR report is submitted**.** Thereafter, final closure report was obtained vide File No-102-684/21/EPE/238, dated 31.05.2022. Copy submitted**.**
8	Public Consultation shall be undertaken [if applicable as per table below] by obtaining	Public consultation is not applicable for current project as PP has applied for 20% expansion in

S. No.	Criteria as Per OM dated 11.04.2022	Submission of PP
	response in writing, as per para 7 III (ii) (b) of EIA Notification 2006, except those categories of projects which have been exempted as per para 7 III (i) of EIA Notification 2006 and its amendments.	existing rolling mill as per OM dated 11.04.2022
9	Effluent monitoring including air quality monitoring systems as specified in the existing EC, if stipulated, should have been installed.	The CEMS has been installed at DRI Kiln stacks. At other stacks, they are under installation. AAQMS system has been installed at mail gate.
Deliberation of EAC: EAC has deliberated the provisions of the Ministry's O.M. dated 11.04.2022, w.r.t. qualifying the criteria for appraisal the instant project under para 7(ii) of EIA Notification, 2006 and found that the instant project meets all the criteria in this regard.		

Details submitted by the project proponent

17.2.4 The project of M/s Satyam Iron & Steel Co. Private Limited located at Plot No. G-7, B-7/11 & G-7/A, Mangalpur Industrial Estate, PO & PS – Raniganj, District Paschim Bardhaman, West Bengal is for expansion in the production capacity of Rolling mill from 60,000 TPA to 72,000 TPA along with installation of Argon Oxygen Decarburization (AOD) of 25 Ton for Stainless Steel Products (Wire Rod, Strip, Flats, Rounds, Rebars, Angle and Channel etc.) with existing facilities for production of Sponge Iron Production 1, 20,000 TPA (1 x 200 Ton & 2 x 100 Ton), Captive Power Plant of 15 MW (WHRB- 1 x 22 TPH & 2 x 10 TPH = 8 MW and AFBC- 1 x 30 TPH = 7 MW) and Induction Furnace (3 x 15 Ton) for production of 1,35,000 TPA (M.S & S.S Billets).

17.2.5 Environmental site settings

S. No.	Particulars	Details	Remarks
1	Total Land	8.30 Ha (20.50 acres)	Land Use – Project Site falls within Mangalpur Industrial Estate.
2	Land acquisition details as per MoEF&CC O.M dated 7/10/2014	Land is under the possession of M/s Satyam Iron & Steel Co. Private Limited. No additional land is required for proposed expansion project.	
3	Existence of habitation & involvement of R&R, if any.	Nil	
4	Latitude and Longitude of the project site	**Latitude** / **Longitude** 23°36'42.43"N / 87° 8'35.34"E 23°36'40.58"N / 87° 8'37.48"E 23°36'44.77"N / 87° 8'41.56"E 23°36'38.75"N / 87° 8'47.52"E 23°36'34.79"N / 87° 8'43.19"E 23°36'37.21"N / 87° 8'39.71"E	

S. No.	Particulars	Details	Remarks
		23°36'35.92"N 87° 8'36.57"E 23°36'30.60"N 87° 8'36.54"E 23°36'30.97"N 87° 8'42.37"E 23°36'29.42"N 87° 8'41.69"E 23°36'29.12"N 87° 8'37.96"E 23°36'28.33"N 87° 8'37.45"E 23°36'28.92"N 87° 8'35.57"E	
5	Elevation of the project site	100 meter above MSL	
6	Involvement of Forest land if any.	No forest land is involved.	
7	Water body (Rivers, Lakes, Pond, Nala, Natural Drainage, Canal etc.) exists within the project site as well as study area.	**Project Site – Nil** **Study Area** Damodar River – 4.0 km – SW Mejia Lake – 6.0 km – SW Nonia Khal – 5 km – East Galghata Jhor – 6 km – South Chouphari Nala – 7 km - SSE	
8	Existence of ESZ/ ESA/ national park/ wildlife sanctuary/ biosphere reserve/ tiger reserve/ elephant reserve etc. if any within the study area	Nil Gangajalghati PF: 5.5 km/ SSW	

17.2.6 The existing project involving DRI kiln (2x100 TPD) for production of Sponge Iron was initially established based on the NOC accorded by West Bengal Pollution Control Board (WBPCB) on 7/8/2001 and 24/4/2003. EC was not obtained under the provisions of EIA Notification, 2006. PP further obtained environmental clearance from MoEF&CC vide File No- J- 11011/253/2020-1A.II.(I), dated 06.08.2021 for expansion in production from 30,000 TPA of MS Ingots to 1,20,000 TPA of MS Ingots/ Billets and from 48,000 TPA to 1,20,000 TPA of Twisted and ribbed bars. Consent to Operate for the existing unit was accorded by West Bengal Pollution Control Board vide consent No-C0118221, dated 22.04.2019, which is valid till 30.04.2024 and Consent No-C0132176, dated 29.07.2022, which is valid till 31.01.2023.

17.2.7 Implementation status as per existing EC:

S. No	Facilities	Units	As per EC dated 6th August, 2021	Implementation Status as on date	Production as per CTO
1	Sponge Iron`	DRI Kiln	2 x 100 TPD & 200 TPD	Installed	CTO obtained & Operational
2	M. S Billets	IF	3 x 15 Ton	2 x 15 Ton Installed	CTO obtained for 2 x 15 Ton but not operational
3	Reheating	--	20 TPH	Not Installed	Not operational

S. No	Facilities	Units	As per EC dated 6th August, 2021	Implementation Status as on date	Production as per CTO
	Furnace				
4	Power Plant	WHRB & AFBC	WHRB = 8 MW AFBC = 7 MW	Not Installed	Not operational
5	Rolling Mill	--	60,000 TPA	Installed	CTO obtained & Not operational

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

Facilities	Existing	Expansion	Total Capacity
Sponge Iron Production			
No of Rotary Kiln (2 x 100 TPD & 200 TPD)	03 No's	**No Change**	1,20,000 TPA
Capacity of Rotary Kiln	400 TPD		
Production capacity per day	400 Ton		
No. of days operation per day	300		
Installed Capacity Per Annum	1,20,000 TPA		
Billets Production			
No of Induction Furnace	3 No.	**No Change**	1,35,000 TPA
Melting Capacity of IF	15 Ton Each		
No of Heat per Day	10		
Production capacity per day	450 Ton		
No. of days operation per day	300		
Installed Capacity Per Annum	1,35,000 TPA		
AOD	NIL	**1 no's**	25 Tons
Rolling Mill & Strip Mill			
No of Re-heating Furnace	01 No	**12,000 TPA**	72,000 TPA
Melting Capacity of Furnace	10 Ton Each		
Production capacity per day	200 Ton		
No. of days operation per day	300 Days		
Installed Capacity Per Annum	60,000 TPA		
Captive Power Plant			
Power Plant ➢ WHRB Boiler (03 No's) ➢ AFBC Boiler (01 No's)	 2 x 10 TPH 1 x 22 TPH 1 x 30 TPH 1 x 30 TPH	**No Change**	15 MW
Final Product	M.S Billets, TMT Bar, light, medium section rolled product, Sponge Iron and Power Generation	Stainless Steel Products (Billets, Flats, Rounds, Wire rod, Rebars, Angle and Channel)	M.S Billets, TMT Bar, light, medium section rolled product, Sponge Iron, Power Generation, Stainless Steel Products (Billets, Flats, Rounds, Wire rod, Rebars, Angle and Channel)

17.2.9 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:

Raw Material Details for Sponge Iron (1,20,000 TPA)

S. No	Name	Quantity (TPA)	Source	Transportation	Distance w.r.t Project Site
1	Iron ore lumps	2,16,000	Captive mines, purchase from NMDC/ OMDC /other mines	Through Rail /Road	Between 300 to 350 KMs
2	Coal	1,20,000	Purchase from CIL, Imported	Through sea route/rail route / by road	Between 20 – 250 KMs.
3	Dolomite	6,000	Local purchase	Road through covered trucks	Between 20 – 40 KMs
	Total	**3,42,000**			

Raw Material for Billets (1,35,000 TPA)

SL. No	Name	Quantity (TPA)	Source	Transportation	Distance w.r.t Plant
1	Sponge Iron	1,30,275	In house	Internal Movement	Captive Consumption
2	Pig Iron	27,000	Local Purchase	Road through covered trucks	Between 20 – 40 KMs
3	Scrap	12,960	Local Purchase	Road through covered trucks	Between 20 – 40 KMs
4	Ferro Silico Manganese	1,485	Local Purchase	Road through covered trucks	Between 20 – 40 KMs
Total		**1,71,720**			

Raw Material for Rolling Mill (72,000 TPA)

Raw Material requirement	Plant Capacity	Quantity of Raw Material	Source	Transportation	Distance w.r.t Plant
Billet	72,000 TPA	77,904 TPA	In-house	Internal Movement	Captive Consumption
CBM Gas (SM^3/Annum)		28,80,000	Local Purchase	Through Pipelines	Between 02 – 03 KMs

17.2.10 Total existing water requirement is 574 m^3/day and is being sourced from Asansol Municipal Durgapur Development Authority. Additionally, 18.5 KLD water will be required for the proposed expansion. Permission for 300 KLD has been obtained vide Letter No-ADDA/DGP/ED/CN-65/03-04/924, dated 27.09.2004 and for additional water supply PP has received assurance letter from ADDA vide Letter No-ADDA/ASL/1664/CN-2364, dated 16.02.2022.

17.2.11 Existing power requirement is 21.1 MW power and 3 MW additionally will be required for the proposed expansion of the project and will be sourced form CPP and remaining will be from

government supply. 4 x 500 kVA & 1 x 600 kVA D.G. Sets will be provided for emergency purpose during power supply breakdown.

17.2.12 Baseline Environmental Studies

<table>
<tr><th>Period</th><th>March to May 2022</th></tr>
<tr><td>AAQ parameters at 08 locations</td><td>• $PM_{2.5}$ = 35.3 to 50.3 µg/m^3
• PM_{10} = 60.8 to 85.1 µg/m^3
• SO_2 = 6 to 19.9 µg/m^3
• NO_2 = 10.7 to 32.6 µg/m^3</td></tr>
<tr><td>Total incremental</td><td>• PM_{10} = 4.62 µg/m^3
• $PM_{2.5}$ = 1.08 µg/m^3
• NO_2 = 4.46 µg/m^3
• SO_2 = 5.52 µg/m^3</td></tr>
<tr><td>Ground water quality at 08 locations</td><td>• pH: 7.18 to 7.38
• Total Hardness: 336 to 430 mg/l.
• Chlorides = 88 to 185 mg/l.
• Fluoride = 0.1 to 0.5 mg/l
• TDS : 690 to 840 mg/l,
• Total Alkalinity : 275 to 396 mg/l</td></tr>
<tr><td>Surface water quality at 08 locations</td><td>• pH : 7.21 to 7.89
• DO : 3.1 to 6.2 mg/l.
• BOD : 2.6 to 23 mg/l
• COD : 10 to 71 mg/l</td></tr>
<tr><td>Noise levels 08 Locations</td><td>48.7 to 73.5 dBA - day time
40.9 to 67.9 dBA - Night time.</td></tr>
<tr><td>Traffic assessment study findings</td><td>Traffic study has been conducted at NH#2, which is approximately 0.28 km from the plant site.
Transportation of raw material, fuel & finished product will be done 100% by road.
Existing PCU is 2448 PCU on NH#2 and existing level of service (LOS) is B.
<table>
<tr><th>S No</th><th>Category of Road</th><th>Maximum PCU/Hr</th><th>Capacity/Hr</th><th>Existing V/C Ratio</th><th>LOS</th></tr>
<tr><td>1.</td><td>NH#2</td><td>2448</td><td>5400</td><td>0.45</td><td>B</td></tr>
</table>
PCU load after proposed project will be 13 PCU/hr and level of service (LOS) will remain same as B.
<table>
<tr><th>S.No</th><th>Road</th><th>Increased PCUs</th><th>Modified V</th><th>C</th><th>Modified V/C Ratio</th><th>Modified V/C Grade</th></tr>
<tr><td>1.</td><td>NH - 2</td><td>13 x 100%= 13</td><td>2448+13= 2461</td><td>5,400</td><td>0.45</td><td>B</td></tr>
</table>
Note: Capacity as per IRC is 5400 PCU/hr Guide line for capacity for roads.
Conclusion: The level of service will B after including additional traffic due to proposed project.</td></tr>
<tr><td>Flora and fauna</td><td>No schedule-1 species is found within study area.</td></tr>
</table>

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

S. No	Name	Existing Quantity	Expansion under para 7 (ii)	Total Quantity	Utilization
1	DRI Char	24,000	--	24,000	100% In power generation
2	Ash/Dust from DRI	17,000	-----	17,000	In civil construction purpose and is being/will be given to Brick manufacturers.
3	Kiln Accretion Slag	1,500	----	1,500	Is being/will be utilized in road construction
4	SMS slag	22,815	----	22,815	Slag from SMS will be crushed and metal is being recovered & remaining non-magnetic material is being inert nature and used as sub base material in road construction/used for brick manufacturing/ civil construction works like PCC and wall construction. AOD slag will be put to screening cum jigging machine with deck facilities which can take care of separation of metal from the slag. After separation of metal pieces from the slag, it will be used in cement plants, brick making paver blacks etc
5	AOD Slag	-	6,600	6,600	
6	Mill scales from Rolling Mill	2,600	520	3120	Send to Ferro alloy manufacturing unit.
7	End Cutting	2,320	464	2784	Will be recycled to SMS unit
8	Ash from CPP	37,050	---	37,050	Will be given to cement plants/Brick manufacturers.
9	Used Oil	2.5 KL/Annum	--	2.5 KL/Annum	Sent to SPCB approved agency for disposal

Hazardous waste generation, storage & disposal

Used Oil: 2.5 KL / Annum

This will be stored in covered HDPE drums in a designated area and will be given to WBPCB approved vendors.

17.2.14 Public Consultation (Earlier PH during EC dated 06.08.2021):

Details of advertisement given	04/12/2020
Date of public consultation	05/01/2021
Venue	Muralidhar Bhawan, Raniganj, WB
Presiding Officer	Additional District Magistrate, Paschim Bardhaman.
Major issues raised	The issues raised during Public Hearing are: ➢ Water Pollution problems ➢ Employment generation ➢ Infrastructure Development ➢ CER details

Action plan as per MoEF&CC O.M. dated 30/09/2020: As per previous EC dated 06.08.2021

S. No	Concerns raised during public hearing	Physical activity & action plan	Budget INR (Lakh)	Target for implementation of action plan	
				1st year	2nd year
1	Improve Health Infrastructure in Area	Provide the Medical equipment to Government Hospital / Health Centre at Raniganj, Ballavpur and Baktarnagar (Beds, Oxygen Cylinder, Oxygen Concentrator, AC, Air Purifer)	15.5 Lakhs 20 Bed - 4 Lakhs 20 O_2 Cylinder – 3 Lakh 10 - Oxygen Concentrator – 5 Lakh 8 Air Purifier – 2 Lakh Sanitizer and Mask – 1.5 lakh	10 Lakhs In Ballabhpur & Baktarnagar Health Centre	5.5 Lakhs In Raniganj Health Centre
2	Repair of roads in Baktar nagar and Chak Brindabanpur	2000 m road will be strengthened. This will be done in consultation with the village panchayat	10 lakhs	The work will be completed in first year	
3	Providing employment to local people	Willing and employable youths will be identified in consultation with gram panchayat of village Mangalpur (25 Nos). They will be trained in Raniganj ITI for trades namely electrician, fitters, welders, painters, and civil construction work, etc. Fees will be paid by PP. After successful completion of training, the youths will be offered employment in company	10.5 Lakhs Stipend – 3.0 Lakh (1000/- stipend to 25 persons for 1 year) ITI Fee – 7.5 Lakhs (30000/- yearly fee for 25 persons)	Training of 12 persons will be completed in 1st year	Training of 13 persons will be completed in 2nd year
4	Infrastructure development of local Primary Schools	PP will make pucca kitchen with fume exhaust in 3 local schools providing mid-day meals to students, provide furniture, computers and colour printers to the 3 schools Mangalpur village Baktar nagar village Chak Brindabanpur village	10 Lakhs 3 Kitchen – 2.5 Lakhs 400 Tables & Chairs – 4.0 L 12 Computer – 3.0 Lakhs 3 Colour printer – 1.5 Lakhs	PP will complete work in Mangalpur and Chak Brindabanpur schools	PP will complete work in Baktar Nagar school in 2nd year
5	Development of rain water harvesting structures	Make recharge shaft type RWH structures in 3 villages Mangalpur village Baktar nagar village Chak Brindabanpur village	Rs. 7.5 Lakhs	PP will complete the work in 2 villages in first year	PP will complete the work in Baktar nagar in 2nd year

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

S. No.	Concerns raised during public hearing	Physical activity & action plan	Budget INR (Lakh)	Target for implementation of action plan	
				1st year	2nd year
1	Improve Health Infrastructure in Area	Provide the Medical equipment to Government Hospital / Health Centre at Raniganj, Mangalpur, and Baktarnagar (Beds, Oxygen Cylinder, Oxygen Concentrator, AC, Air Purifer)	**30 Lakhs** 20 Bed = **10 Lakhs** 20 O_2 Cylinder = **5 Lakh** 15 Oxygen Concentrator = **10 Lakh** 10 Air Purifier = **5 Lakh**	15 Lakhs In Baktarnagar Health Centre	15 Lakhs In Raniganj Health Centre
2	Upgradation of drinking water facility in nearby villages	Installation of RO Water filter in village-Mangalpur, Baktarnagar, Ronai, Cheetadanga, Babuisole and Raniganj	**20 Lakh**	10 Lakh in Mangalpur, Baktarnagaran d Ronai,	10 Lakh in Cheetadanga, Babuisole and Raniganj
3	Installation of Solar Power lighting system in nearby Villages	Installation of Solar power lighting system in village-Mangalpur, Baktarnagar, Ronai, Cheetadanga, Babuisole and Raniganj	**20 Lakh**	10 Lakh in Mangalpur, Baktarnagaran d Ronai,	10 Lakh in Cheetadanga, Babuisole and Raniganj
3	Providing employment to local people	Willing and employable youths will be identified in consultation with gram panchayat of village Mangalpur (30 Nos). They will be trained in Raniganj ITI for trades namely electrician, fitters, welders, painters, and civil construction work, etc. Fees will be paid by PP. After successful completion of training, the youths will be offered employment in company	**10.5 Lakhs** Stipend = **3.0 Lakh** (1000/- stipend to 30 persons) ITI Fee = **7.5 Lakhs** (30000/ yearly fee for 25 persons)	Training of 15 persons will be completed in 1st year	Training of 15 persons will be completed in 2nd year
4	Infrastructure development of local Primary Schools	We will make pucca kitchen with fume exhaust in local schools providing hygenic mid-day meals to students, upgradation of sanitation facility, Design of STP, Assisting in waste management, development of smart classes dealing with environmental protection , computers, distribution of	**39.5 Lakhs** Pucca Kitchen = 4 Lakhs Smart Classes & assisting in waste management = 8 Lakh	20 Lakh in villages Raniganj, Egara, Mangalpur and Ballavpur	19.5 Lakh in villages Baktarnagar, Dhandadehi, Kajora and chakrambati

S. No.	Concerns raised during public hearing	Physical activity & action plan	Budget INR (Lakh)	Target for implementation of action plan	
				1st year	2nd year
		school uniform, stationary items, distribution of electric gadget and colour printers to the schools in villages Raniganj, Egara, Mangalpur, Ballavpur Baktarnagar, Dhandadehi,, Kajora and chakrambati	15 Computer = 4.50 Lakhs 5 Printers = 1 Lakhs Upgradation of sanitation facility in schools = 12 Lakh Distribution of school uniform = 3 Lakh Distribution of electric gadget = 7 Lakh		
		Total	**120 Lakh**		
Note: PP will adopt Village-Mangalpur and will undertake the upgradation of sanitation facility, education facility in schools, medical facility & drinking water facility under CER activities.					

17.2.15 Existing capital cost of project was Rs. 171 Crores. The capital cost of the proposed facilities is additional Rs. 10 Crores. The capital cost for environmental management of the existing and proposed project is estimated to be Rs. 854 lakhs. Rs. 106 lakhs per year is required as annual recurring expenses to meet the recurring expenditure for implementing the measures. The employment generation from the existing project is 300 Nos and for the proposed expansion is additional 50 nos. The details of cost for environmental protection measures is as follows:

Existing cost of for environmental protection measures

S. No.	Activity	Capital Cost (Lakh)	Recurring expenses proposed/ annum (Lakh)
1	Pollution control during construction phase	10	--
2	Air Emission Management (ESPs, Fume/Dust extraction systems with Bag filters, Chimneys, and Industrial Vacuum cleaner)	450	50
3	Green Belt development	7.50	7.50
4	Water Pollution Control Measures (STP,ETP, Garland Drains around stock pile with runoff treatment system,, separate storm water drains along plant boundary with sedimentation tanks, etc)	65	10
5	Occupational Health (OHC with doctor and paramedical staff, medicines, first aid, ambulance with basic equipment,)	24	15
6	Post Project Environmental Monitoring (CEMS (2	60	16

S. No.	Activity	Capital Cost (Lakh)	Recurring expenses proposed/ annum (Lakh)
	stacks), CAAQMS (1 inside plant), Manual Monitoring stations (3 outside plant), water and wastewater, Noise Meter		
7	Raw materials storage yard (scientific make), Solid wastes storage facilities, utilization and disposal	8	4
8	Noise Mitigation measures.	5	1
9	Plant Safety and Risk mitigation measures	40	8
10	Rainwater Harvesting structures	15	4
11	Energy conservation Measures (Solar lights, water heating systems, LED lights, etc)	10	2
12	Development of EMD and Laboratory for routine environmental monitoring	120	60
Total		**814.5**	**177.5**

Additional cost of for environmental protection measures

S. No.	Activity	Capital Cost (Lakh)	Recurring expenses proposed/ annum (Lakh)
1	Air Pollution Control Devices.	35	40
2	Green Belt development	NIL	7.5
3	Water Pollution Control Measures (STP, ETP etc)	5	2.5
4	Occupational Health & Safety (provision of first aid room and shelter)		3
5	Fire Safety Measures	5	
6	Environmental Monitoring	-	31
7	Preventive and corrective maintenance of plant and machinery to reduce noise pollution and consumption of non-renewable resources.	5	20
8	RWH	-	2
9	CER	10	---
Total		**60**	**106**

17.2.16 Total 2.74 ha area is earmarked for green belt development along the plant boundary 2,550 trees has been planted. Remaining 4300 trees will be planted during 2022-2023. A 5-10 m wide greenbelt, consisting of at least 3 tiers around plant boundary will be developed as greenbelt and green cover as per CPCB/MoEF&CC, New Delhi guidelines. Local and native species will be planted with a density of 2500 trees per hectare. Remaining 4300 trees will be planted by January 2023.

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

Particulars	As per EC dated 06.08.2021	After proposed change under Para 7(ii)	% increase
Land	8.30 Ha	8.30 Ha	No Change
Greenbelt	2.74 Ha	2.74 Ha	No Change
Water	574 KL/Day	592.50 KL/Day	3.22 %

Particulars	As per EC dated 06.08.2021	After proposed change under Para 7(ii)	% increase
Power	24 MW	24 MW	12.50 %
Raw material for Rolling Mill	64,920 TPA	77,904 TPA	20 %
Products	M.S Billets, TMT Bar, light, medium section rolled product, Sponge Iron and Power Generation	M.S Billets, TMT Bar, light, medium section rolled product, Sponge Iron, Power Generation, Stainless Steel Products (Billets, Flats, Rounds, Wire rod, Rebars, Angle and Channel)	--

17.2.18 Pollution load assessment:

Particulars		As per EC dated 06.08.2021	Expansion under para 7 (ii) (a)	% Increase
Air	**$PM_{2.5}$**	1.2 $\mu g/m^3$	0.6 $\mu g/m^3$	50 %
	PM_{10}	3.6 $\mu g/m^3$	1.05 $\mu g/m^3$	29 %
	SO_2	4.7 $\mu g/m^3$	0.82 $\mu g/m^3$	17.44 %
	NO_2	3.2 $\mu g/m^3$	1.26 $\mu g/m^3$	39.37 %
Domestic waste water		11 KL/Day	2 KL/Day	18.18 %
Industrial Effluent		60 KL/Day	Nil	No Change
Solid & Hazardous Waste	DRI Char	24,000 TPA	Nil	No Change
	Ash/Dust from DRI	17,000 TPA	Nil	No Change
	Kiln Accretion Slag	1,500 TPA	Nil	No Change
	SMS slag	22,815 TPA	Nil	No Change
	AOD Slag	Nil	6,600 TPA	Additional Slag generation from AOD
	Mill scales from Rolling Mill	2,600 TPA	520 TPA	20%
	End Cutting	2,320 TPA	464 TPA	20 %
	Ash from CPP	37,050 TPA	Nil	No Change
	Used Oil	2.5 KL/Annum	Nil	No Change
Traffic Load		11 PCU/Hr	02 PCU/hr	18.18 %

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

Certified Compliance Report from Regional Office

17.2.20 The Status of compliance of earlier EC was obtained from Integrated Regional Office, MoEFCC, Kolkata vide letter no. 102-684/21/EPE/207, dated 11.05.2022 in the name of M/s. Satyam Iron & Steel Company Pvt Ltd. The Action taken report regarding the non-complied condition was submitted to Integrated Regional officer MoEF&CC, Kolkata vide email dated

18.05.2022. MoEF&CC (IRO), Kolkata evaluated the same and final closure letter issued on dated 31.05.2022, vide: -102-684/21/EPE/238.

Condition No.	Observation by IRO vide letter dated 11.05.2022	ATR submission by PP dated 18.05.2022	Review of ATR by IRO dated 31.05.2022
General Condition: II – (ii)	It is observed that fugitive emission monitoring has been conducted by third party laboratory Enviro-Tech Services, which is not a NABL accredited laboratory. PAs need to submit monitoring data analyzed by NABL recognized laboratory and submit the same to the Integrated Regional Office.	i. Recognition letter of Enviro-Tech Services as Environmental Laboratory under the Environment (Protection) Act, 1986 vide F.No. Q-15018/37/2019/CPW dated 7th December 2020. ii. Certificate of accreditation by NABL valid upto 25.12.2021. iii. Communication from NABL confirming the certification of accreditation validity as on date.	**Being Complied** As per the ATR, PAs have submitted NABL accreditation certificate of Enviro- Tech Services having certificate no. TC-8771 with validity till 25.12.2023 for the lab.
General Condition: IV – (i)	It is observed that noise monitoring has been conducted by third party laboratory Enviro-Tech Services, which is not a NABL accredited laboratory. PAs need to submit monitoring data analyzed by NABL recognized laboratory and submit the same to the Integrated Regional Office.	i. Recognition letter of Enviro-Tech Services as Environmental Laboratory under the Environment (Protection) Act, 1986 vide F.No. Q-15018/37/2019/CPW dated 7th December 2020. ii. Certificate of accreditation by NABL valid upto 25.12.2021. iii. Communication from NABL confirming the certification of accreditation validity as on date.	**Being Complied** As per the ATR, PAs have submitted NABL accreditation certificate of Enviro- Tech Services having certificate no. TC-8771 with validity till 25.12.2023 for the lab.
General Condition: X – (iv)	It was observed that in the display board, the stack emission data from the existing unit has been displayed. However data with respect to ambient levels has not been displayed. PAs need to display the ambient levels as well in the display board.	Photo of display board showing the data with respect to ambient level.	**Being Complied** As per the ATR submitted by the PAs it is observed that data with respect to ambient levels has been displayed on the display board.

17.2.21 The Ministry and EAC members were in receipt of a public representation vide letter dated 12.11.2022 raising objection for issuance of EC. On the advice of EAC, the representation was forwarded to the project proponent for submission of point-wise clarification to the points raised in the representation. PP presented the clarification before the EAC during the meeting. Pointwise reply of public representations is given as below:

S. No.	Representation made by complainant	Submission of Project Proponent
1.	As per information available in the official website of the Ministry that M/s. Satyam Iron & Steel Company Pvt. Ltd having their existing plant located at Mangalpur Industrial Area at	PP agreed that they have submitted application for Environment Clearance for producing Stainless steel along with expansion in the production capacity of Rolling mill from 60,000

S. No.	Representation made by complainant	Submission of Project Proponent
	Raniganj of West Bengal has submitted an expansion proposal as referred above to the MOEF & CC under the provision of EIA Notification,2006 for grant of Environmental Clearance	TPA to 72,000 TPA with installation of Argon Oxygen Decarburization (AOD) Convertor of 25 tonne for Stainless Steel Products (Wire Rod, Strip, Flats, Rounds, Rebars, Angle and Channel etc.) with existing facilities. Existing facilities cover production of Sponge Iron Production of 1,20,000 TPA through 1 x 200 tonne & 2 x 100 tonne Rotary Kilns; Captive Power Plant of 15 MW taking care of Kiln hot gases and char (WHRB- 1 x 22 TPH & 2 x 10 TPH = 8 MW and AFBC- 1 x 30 TPH = 7 MW) and Induction Furnace (3 x 15 ton) for production of 1,35,000 TPA (M.S Billets) at Plot No. G-7, B-7/11 & G-7/A, Mangalpur Industrial Estate, PO & PS – Raniganj, Distt.-Paschim Bardhaman, West Bengal -713347 by M/s Satyam Iron & Steel Co. Pvt. Ltd - Expansion under Para 7(ii) (a) of EIA notification 2006 and its subsequent amendments till date.
2.	That prior to the present expansion proposal earlier the project proponent received an environmental clearance for expansion of their existing project from the Ministry vide dated 06.08.2021;	PP agreed that they have been awarded with EC for the initial expansion project for setting up 1 X 200 TPD Sponge Iron unit with existing 2 x 100 TPD Kiln along with 15 MW Captive Power Plant, 3 x 15 tonne Induction Furnace and 60,000 TPA Rolling Mill vide the File Ref. No. J-11103/253/2020-IA.II.(I) dated:- 06.08.2021. Copy of EC Letter is submitted**.**
3.	Earlier at the time of grant of environmental clearance dated 06.08.2021 in favour of the above said project proponent, the Ministry did not complied with the office memorandum vide no. F.No. 22-76/2014-IA-III dated 07.10.2014. Be it noted here that last time the project proponent did not submitted any land documents with respect to 6.07 acres of land area which was claimed under possession by them even the Ministry also failed to provide any land documents with respect to 6.07 acres of land area possess by the project proponent to me under application of RTI Act,2005;	PP is in possession of 20.50 acres of land within which the existing plant is located and expansion will take place. The relevant details & documents such as Asansol Durgapur Development Authority Lease Deeds, Deed of Sales from individual sellers etc. Land documents are submitted**.**
4.	The actual fact is the project proponent possess only 14.15 acres of land i.e. (Plot No. G-7, 10 acres + Plot No. G-7/A 3.72 acres + Plot No. B-7/11 43 Cottah) which have credible documents with them and duly submitted to the Ministry in last occasion when they received environmental clearance dated 06.08.2021 and the Plot No. G-7 of 10 acres land allotted for	As stated in reply to Point No. 3 PP is in possession of 20.50 acres of land and the supporting documents with details are submitted**.**

S. No.	Representation made by complainant	Submission of Project Proponent
	setting up of Sponge Iron Manufacturing purpose, Plot No. G-7/A of 3.72 acres land allotted for setting up for Captive Power Plant purpose & Plot No. B-7/11 of 43 cottah land allotted for construction of Water Reservoir.	
5.	Apart from the above disputes, the certified compliance report issued by the respective Regional Office of the MOEF&CC which have submitted by the project proponent in the present expansion proposal is an incomplete one. This report has been prepared based on monitoring conducted only on the expansion project for which the project proponent has received environmental clearance dated 06.08.2021, but no monitoring has been conducted in their existing operational plants which they are operating since a long time prior to have environmental clearance dated 06.08.2021. Hence the compliance report in question may kindly be rejected.	The EC obtained for the initial expansion phase for which EC has been obtained from MoEF&CC, New Delhi dated: - 06.08.2021 covers both existing units and the units under expansion. As such the monitoring has been done for both the existing units as well as expansion unit. CCR report has been obtained from IRO, Kolkata against stipulated conditions mentioned in EC granted by MoEF&CC dated: - 06.08.2021. Copy of CCR report is submitted**.** ATR report also submitted to IRO, Kolkata against non-complied points as per conditions mentioned in EC granted dated:- 06.08.2021 and closure letter was obtained by IRO, Kolkata dated:-31.05.2022. Copy submitted**.**
6.	Lastly it may kindly be noted here that due to unlawful issuance of environmental clearance dated 06.08.2021 in violation of the office memorandum dated 07.10.2014, I drew attention of the Secretary, MOEF&CC by a representation dated 05.08.2022 with a request to cancel the EC granted dated 06.08.2021, but due to not having any response from his end I have compelled to file an application before Hon'ble National Green Tribunal, Eastern Zone Bench, Kolkata for kind intervention and necessary order.	The letter referred has been addressed to The Secretary, MoEF&CC, Govt of India. There is no such pending case as on date against us. Affidavit stating the same is submitted**.**

Written representations:

17.2.22 During the meeting, based on the deliberations made by the EAC, the project proponent submitted the following information:

1. Justification for consideration of instant proposal under the provisions of para 7(ii) of EIA Notification, 2006 and in pursuance to Ministry's OM dated 11.04.2022. The same is mentioned in para 17.2.3 above.
2. Pointwise clarification to the points raised through public representation dated 12.11.2022 as mentioned in para 17.2.21 above.
3. Additional CER budget with total budgetary provision of 1.2 Crore for expansion under Para 7(II) (a) with timeline. The same is updated in para 17.2.14 above.
4. Undertaking dated 16.11.2022 as follows:

a) PP will develop total green belt 2.74 Ha. (33.01% of total project area) within project premises and tree density will be 2500 trees/Ha as per CPCB/MoEF&CC norms. 2550 Trees already planted since the EC granted dated 06.08.2021 and remaining 4300 trees will be planted by January 2023. The same is updated at para 17.2.16 above.
b) PP will adopt Village-Mangalpur and will do the upgradation of sanitation facility, education facility in schools, medical facility & drinking water facility under CER activities. The same is updated in para 17.2.14 above.

Deliberations by the Committee

17.2.23 The Committee noted the following:

1. The instant proposal is for expansion in the production capacity of Rolling mill from 60,000 TPA to 72,000 TPA along with installation of Argon Oxygen Decarburization (AOD) of 25 Ton for Stainless Steel Products (Wire Rod, Strip, Flats, Rounds, Rebars, Angle and Channel etc.) with existing facilities for production of Sponge Iron Production 1, 20,000 TPA (1 x 200 Ton & 2 x 100 Ton), Captive Power Plant of 15 MW (WHRB- 1 x 22 TPH & 2 x 10 TPH = 8 MW and AFBC- 1 x 30 TPH = 7 MW) and Induction Furnace (3 x 15 Ton) for production of 1,35,000 TPA (M.S & S.S Billets).
2. The EAC, constituted under the provision of the EIA Notification, 2006 comprising Expert Members/domain experts in various fields, examined the proposal submitted by the Project Proponent in desired format along with addendum to the EIA/EMP reports prepared and submitted by the Consultant accredited by the QCI/ NABET on behalf of the Project Proponent.
3. The EAC noted that the Project Proponent has given an undertaking that the data and information given in the application and enclosures are true to the best of his knowledge and belief and no information has been suppressed in the reports. If any part of data/information submitted is found to be false/ misleading at any stage, the project will be rejected and Environmental Clearance given, if any, will be revoked at the risk and cost of the project proponent.
4. The EAC deliberated on the justification provided by the Project Proponent for appraisal of instant proposal under para 7(ii) of EIA Notification, 2006 in pursuance to the Ministry's O.M. dated 11.04.2022 and found it satisfactory. EAC is of the view that the instant project is qualifying the criteria mentioned in the Ministry's OM dated 11.04.2022 and accordingly appraise the project under expansion category
5. The Ministry and EAC members were in receipt of a public representation vide letter dated 12.11.2022 raising objection for issuance of EC. The EAC deliberated on the point-wise clarification provided by the project proponent and found it satisfactory.
6. The existing project involving DRI kiln (2x100 TPD) for production of Sponge Iron was initially established based on the NOC accorded by West Bengal Pollution Control Board (WBPCB) on 7/8/2001 and 24/4/2003. EC was not obtained under the provisions of EIA Notification, 2006. PP further obtained environmental clearance from MoEF&CC Vide File No- J- 11011/253/2020-1A.II.(I), dated 06.08.2021 for expansion in production from

30,000 TPA of MS Ingots to 1,20,000 TPA of MS Ingots/ Billets and from 48,000 TPA to 1,20,000 TPA of Twisted and ribbed bars.

7. The total project area is 8.30 ha (Existing – 6.07 ha, Additional – 5.12 ha). Land has already been acquired and under the possession of the company. No additional land is required for proposed expansion project.

8. The nearest habitation to plant is Mangalpur village located at 700 m away from the project site boundary.

9. Total existing water requirement is 574 m^3/day and is being sourced from Asansol Municipal Durgapur Development Authority. Additionally, 18.5 KLD water will be required for the proposed expansion.

10. Damodar River (4.0 km – SW), Mejia Lake (6.0 km – SW), Nonia Khal (5 km – East), Galghata Jhor (6 km – South) and Chouphari Nala (7 km – SSE) are flowing within 10 Km. radius of the plant site. The EAC is of the opinion that water bodies shall not be disturbed. Mitigation measures w.r.t. safeguarding the water bodies shall be implemented.

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

12. The EAC noted that total 2.74 ha area is earmarked for green belt development along the plant boundary & 2,550 trees has been planted. Remaining 4300 trees will be planted by January, 2023.

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

14. The Committee deliberated upon the certified compliance report of IRO MoEFCC and action taken report submitted by PP with respect to the compliance status of the existing EC along with review report of IRO MoEFCC and found it satisfactory.

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

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

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

from time to time, from the State Pollution Control Board, prior to construction & operation of the project.

Recommendations of the Committee:

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

A. Specific Condition:

i. The existing environmental clearance granted by the Ministry vide File No- J-11011/253/2020-1A.II.(I), dated 06.08.2021 shall also remain active and the project proponent shall comply with all the terms and conditions mentioned in the EC dated 06.08.2021.

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. 592.5 KLD of water requirement (Existing: 574 KLD, Expansion: 18.5 KLD) after the proposed expansion shall be met from Asansol Municipal Durgapur Development Authority. Project proponent shall commence the activity at the site only after obtaining prior water withdrawal permission from Asansol Durgapur Development Authority. Ground water withdrawal is not permitted.

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

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

vii. 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.

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

ix. Particulate matter emission from stacks shall be less than 30 mg/Nm^3. Action plan submitted to limit the dust emission shall be strictly implemented.

x. CEMS shall be provided on all process stacks and the signal shall be received in plant control room for central control of APCDs installed in the plant

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

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

xiii. Solid waste utilization

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

xiv. Damodar River (4.0 km – SW), Mejia Lake (6.0 km – SW), Nonia Khal (5 km – East), Galghata Jhor (6 km – South) and Chouphari Nala (7 km – SSE) are flowing within 10 Km. radius of the plant site. Few ponds exist within 10 Km radius. A robust and full proof Drainage Conservation scheme to protect the natural drainage and its flow parameters; along with Soil conservation scheme and multiple Erosion control measures shall be implemented.

xv. The proposed project shall be designed as "Zero Liquid Discharge" Plant. ETP shall be installed and there shall be no discharge of effluent from the plant. Domestic effluent shall be treated in Sewage Treatment Plant. MSW waste shall be treated in digester and recovered gas shall be used in the canteen.

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

xvii. Mangalpur village is located at 700 m of the project site. Project Proponent shall take appropriate environmental safeguard measures to minimise the impact on the habitation of the locals. The company shall also include this locations in its environmental monitoring programme.

xviii. As committed by the PP to adopt Mangalpur village, project proponent shall prepare and implement a robust plan for socio-economic development.

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

xx. Three tier Green Belt shall be developed in at least 33% of the project area by January, 2023 as per the commitment with native species all along the periphery of the project site of adequate width and tree density shall not be less than 2500 per ha. Gap filling shall be undertaken and survival rate of green belt developed shall be monitored on periodic basis to ensure that damaged plants are replaced with new plants in the subsequent years. This shall also include a 20 m wide green belt development along the plant boundary in the south towards the Mangalpur village. Compliance status in this regard, shall be submitted to concerned Regional Office of the MoEF&CC.

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

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

xxiii. Indian coal shall be used in the Captive Power Plant as committed by project proponent.

xxiv. During operational phase at Captive Power Plant, PP shall measure coal dust exposures and to maintain coal dust exposures within stipulated standards at coal handling areas. PP shall identify extreme hot areas through heat stress survey as well as noise monitoring within process plants to ensure that workers not exposed above 90 dBA levels as per Factories Act, 1948.

xxv. All the commitments made to the public during the Public Hearing/Public Consultation shall be satisfactorily implemented. The action plan based on the social impact assessment study of the project as per the EMP in accordance to the Ministry's OM dated 30.09.2020 shall be strictly implemented and progress shall be submitted to the Regional Office of MoEF&CC.

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

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

B. General conditions:

I. Statutory compliance:

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

II. Air quality monitoring and preservation

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

ii. The project proponent shall monitor fugitive emissions in the plant premises at least once in every quarter through laboratories recognized under Environment (Protection) Act, 1986 or NABL accredited laboratories.
iii. Appropriate Air Pollution Control (APC) system shall be provided for all the dust generating points including fugitive dust from all vulnerable sources, so as to comply prescribed stack emission and fugitive emission standards.
iv. The project proponent shall provide leakage detection and mechanized bag cleaning facilities for better maintenance of bags.
v. Recycle and reuse iron ore fines, coal and coke fines, lime fines and such other fines collected in the pollution control devices and vacuum cleaning devices in the process after briquetting/ agglomeration.
vi. The project proponent shall ensure covered transportation and conveying of ore, coal and other raw material to prevent spillage and dust generation.
vii. Plant internal roads shall be concreted and a vacuum cleaner shall be used to regularly clean the roads.
viii. The project proponent shall provide primary and secondary fume extraction system at all melting furnaces.
ix. Design the ventilation system for adequate air changes as per prevailing norms for all tunnels, motor houses, Oil Cellars.

III. Water quality monitoring and preservation

i. The project proponent shall install 24x7 continuous effluent monitoring system with respect to standards prescribed in Environment (Protection) Rules 1986 (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 recognised under Environment (Protection) Act, 1986 or NABL accredited laboratories.
ii. The project proponent shall monitor regularly ground water quality at least twice a year (pre- and post-monsoon) at sufficient numbers of piezometers/sampling wells in the plant and adjacent areas through labs recognised under Environment (Protection) Act, 1986 and NABL accredited laboratories.
iii. Sewage Treatment Plant shall be provided for treatment of domestic wastewater to meet the prescribed standards.
iv. Garland drains and collection pits shall be provided for each stock pile to arrest the run-off in the event of heavy rains and to check the water pollution due to surface run off.

IV. Noise monitoring and prevention

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

V. Energy Conservation measures

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

VI. Waste management

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

VII. Green Belt

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

ii. Project proponent shall submit a study report on Decarbonisation program, which would essentially consist of company's carbon emissions, carbon budgeting/ balancing, carbon sequestration activities and carbon offsetting strategies. Further, the report shall also contain time bound action plan to reduce its carbon intensity of its operations and supply chains, energy transition pathway from fossil fuels to Renewable energy etc. All these activities/ assessments should be measurable and monitorable with defined time frames", when PP comes for EC proposal. This study shall be formulated keeping in view of India's Net-zero commitment at the COP-26 Climate Summit.

VIII. Public hearing and Human health issues

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

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

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

IX. Environment Management

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

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

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

X. Miscellaneous

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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Consideration of TOR Proposal

Agenda No. 17.3

17.3 Proposed Greenfield Clinkerisation Plant of 3.63 Million TPA capacity along with WHRS of 16 MW & DG Set of 750 kVA by M/s Calcom Cement India Ltd. [A subsidiary of Dalmia Cement (Bharat) Ltd.], located at village 19 Kilo Umrangso, Tehsil: Umrangso, District: Dima Hasao (earlier N.C. Hills), Assam – Reconsideration of TOR.

[Proposal No. IA/AS/IND/285957/2022; File No. IA-J-11011/306/2022-IA-II(IND-I)

17.3.1 M/s. Calcom Cement India Limited (CCIL), a Unit of Dalmia Cement (Bharat) Limited, has made an application online vide proposal No. IA/AS/IND/285957/2022 dated 09.08.2022 along with the application in prescribed format (Form-I), copy of pre-feasibility report and proposed ToRs for undertaking detailed EIA study as per the EIA Notification, 2006 for the project mentioned above. The proposed project activity is listed at S. No.3(b) Cement Plants under Category "A" of the schedule of the EIA Notification, 2006 and appraised at central level.

17.3.2 The proposal cited above was considered during the 13th meeting of the EAC for Industry-I sector held on 14-15th September, 2022. After detailed deliberation, it was observed that:

i. Amrang Nalla (0.14 km) and Langyen Nadi (0.25 km) flows very near to the project site. Also other water bodies such as Mongle Nadi, Langlai River, Kopili River and Umrong Reservoir exists within the study area of 10 km of the project site.

ii. The EAC observed that there is huge variation in the terrain of the project site ranging from Min. 256 AMSL to Max. Elevation 396 AMSL.

iii. Drainage Conservation scheme to protect the natural drainage and its flow parameters; along with Soil conservation scheme and multiple Erosion control measures is required.

iv. There is rich habitation within the study area of 10 km of the project site. 37 villages are reported in the study area. PP has reported that there is no Rehabilitation & Resettlement (R&R) involved in the proposal.

v. The EAC noted that Krungming Reserve Forest falls at a distance of 2.3 km in West direction of the project site.

vi. PP has reported that the water requirement of 1250 m3/day will be sourced from surface water such as nearby flowing Longlai river, Amrang nalla, other rivers/ streams, Nallah, within a radius of 25 km from the Plant site. It is pertinent to understand whether appropriate water is available to serve the industrial purpose due to presence of other plant and mines unit.

vii. The project proponent has submitted that the major raw material i.e. limestone will be obtained from Captive Limestone mine (New Umarangsho) which is adjacent to the plant site. The mode of transportation will be through road. There is a need to explore the possibility of conveyor belt for transportation of the raw material.

viii. As reported, CCIL is already operating a Clinkerisation Plant at 16 Kilo (meter), Umrangso (1.52 MTPA Clinker) with Captive New Umarangsho Limestone Mine (Extent 417.50 Ha & 7.77 MTPA Limestone Production with Mineable Reserves of 162.56

Million Tonnes). With the Captive Mine in the close Proximity and operational, CCIL opted to have another Clinkerisation Plant at Umrangso.

ix. Thus, in view of the above observations the EAC is of the opinion that it is pertinent to undertake site visit to understand the ecological sensitivity of the area, overview of carrying capacity due to presence of other plant and mines unit and possible environmental/social impacts of the instant proposed project.

17.3.3 In view of the foregoing and after deliberations, the Committee recommended for site visit of the proposed project area by a subcommittee of EAC Industry-1 members. The proposal shall be appraised based on the findings of the sub-committee and deliberation of EAC.

17.3.4 Accordingly, the EAC (Industry-1) sub-committee conducted a site visit to M/s. Calcom Cement India Limited, Umrangso was undertaken during 30th–31st October, 2022.

17.3.5 At this instance, the proposal was further considered by the EAC (Industry 1) in its 17th meeting of the EAC for Industry-I sector held on 14-16th November, 2022. The details of the proposed project are as follows:

Details submitted by Project proponent

17.3.6 The project of M/s. Calcom Cement India Limited (CCIL) located in Village Kilo 19 Umrangso, Tehsil-Umrangso, District-Dima Hasao (earlier NC Hills), Assam is for setting up of a New Clinkerisation Plant for production of 3.63 Million TPA (@ 11000 TPD) clinker along with 16 MW power by Waste Heat Recovery Boiler (WHRB) and DG Set of 750 KVA for emergency back-up.

17.3.7 Environmental site settings:

Sl. No.	Particulars	Details	Remarks
i.	Total land	37.47 Ha [Govt. Council Waste (Khas) land] Plant Area: 32.12 Ha (240 Bighas) Approach Road: 5.35 Ha (40 Bighas) Total project area: 37.47 Ha (280 Bighas) Dima Hasao Forest Division (West) has issued a certificate based on the joint verification report of Range Forest Officer, Garampani Range and Revenue Official, Umrangso stating 240 Bigha (32.12 Ha) Plant land and 40 Bigha (5.35 Ha) Approach Road is classified as "Revenue Waste (Khas) Land and Non-Forest Land" vide letter No. FRS/G/21/1(b)/PART/2019-20/840 dated 28.06.2022	Land use: The present land is Council Waste (Khas) land which will be converted into industrial use. The Revenue and Settlement Department of North Cachar (NC) Hills Autonomous Council, Haflong has allowed the land for industrial use on Periodic Patta/lease. Ownership: Land has been allotted to CCIL by Land & Revenue Deptt., N.C. Hills Autonomous Council, Haflong with renewable Periodic Patta No. 1007 till 31st March 2040.
ii.	Land acquisition details as per MoEF&CC O.M. dated 7/10/2014	On CCIL application for a suitable Site for the Greenfield Plant, the Revenue and Settlement Department of NC Hills Autonomous Council, Haflong, has allowed the land admeasuring 280 Bighas (37.47 Ha) for industrial use on periodic	Land has been allotted to CCIL with renewable Periodic Patta No. 1007 dated 10.08.2022.

<table>
<tr><th>Sl. No.</th><th>Particulars</th><th>Details</th><th>Remarks</th></tr>
<tr><td></td><td></td><td>patta at 19 Kilo, Umrangso with a separate Approach Road connecting to NH-627 Lanka-Shillong Section) vide its Letter S. CASE No.160(USO)2021-2022 Issue No.9757-60 dated 30.04.2022. Subsequently, Rs. 2.8040 Cr. has been paid to Council vide UTR No. UTIBR52022080500328398 dated 5th August 2022. Land has been allotted to CCIL by Land & Revenue Deptt., N.C. Hills Autonomous Council, Haflong with renewable Periodic Patta No. 1007 till 31st March 2040.</td><td></td></tr>
<tr><td>iii.</td><td>Existence of habitation & involvement of R&R, if any.</td><td>No Rehabilitation & Resettlement (R&R) issue due to the proposal.

<u>Project site</u>: Nil
<u>Study Area</u>: Industrial establishment of AMDC Staff colony -1.7 km, W and CCIL Plant & Colony-2.3 km, WSW. Following Census villages exist in 10 km study area:
<table>
<tr><th>S. No.</th><th>Village Name</th><th colspan="2">Approx. Distance in km & Direction</th></tr>
<tr><td></td><td colspan="3">0-2 km</td></tr>
<tr><td></td><td>None</td><td>0</td><td>0</td></tr>
<tr><td></td><td colspan="3">2 - 5 km</td></tr>
<tr><td>1</td><td>Umrangso
(Umrangso 19 Kilo)</td><td>2</td><td>NW</td></tr>
<tr><td>2</td><td>Wari Diplai</td><td>2</td><td>S</td></tr>
<tr><td>3</td><td>Dithur</td><td>2.9</td><td>S</td></tr>
<tr><td>4</td><td>Dikrabi</td><td>3.3</td><td>NE</td></tr>
<tr><td>5</td><td>Dorbin</td><td>3.35</td><td>S</td></tr>
<tr><td>6</td><td>Choto Tungkrang</td><td>3.6</td><td>ENE</td></tr>
<tr><td>7</td><td>Longchirui (Lungcheirui)</td><td>3.8</td><td>SW</td></tr>
<tr><td>8</td><td>Boro Larpheng</td><td>4.4</td><td>NNW</td></tr>
<tr><td>9</td><td>Boro Tungherang</td><td>4.4</td><td>ENE</td></tr>
<tr><td>10</td><td>Longrung</td><td>4.5</td><td>SW</td></tr>
<tr><td>11</td><td>Choto Larpheng</td><td>4.6</td><td>NNW</td></tr>
<tr><td>12</td><td>Nabdi Longukro</td><td>4.65</td><td>WNW</td></tr>
<tr><td>13</td><td>Miyungpur Raji</td><td>4.9</td><td>WSW</td></tr>
<tr><td></td><td colspan="3">5 - 10 km</td></tr>
<tr><td>14</td><td>Thaosenpur</td><td>5.2</td><td>S</td></tr>
<tr><td>15</td><td>Longkupur</td><td>5.5</td><td>WNW</td></tr>
<tr><td>16</td><td>Lurulangso</td><td>5.6</td><td>SE</td></tr>
<tr><td>17</td><td>Kekrangship</td><td>5.7</td><td>SE</td></tr>
<tr><td>18</td><td>Umrangso TC</td><td>6</td><td>SW</td></tr>
<tr><td>19</td><td>Longlaihansu (Langlai)</td><td>6.4</td><td>SW</td></tr>
<tr><td>20</td><td>Mungloi Phonglo</td><td>6.4</td><td>SW</td></tr>
<tr><td>21</td><td>Taralangso</td><td>6.5</td><td>SSE</td></tr>
<tr><td>22</td><td>Tuijonte</td><td>6.5</td><td>SW</td></tr>
<tr><td>23</td><td>Tortelangso</td><td>6.8</td><td>SSW</td></tr>
<tr><td>24</td><td>Disabra</td><td>6.9</td><td>W</td></tr>
<tr><td>25</td><td>Longplaidisa</td><td>7.5</td><td>SSW</td></tr>
<tr><td>26</td><td>Sainilangso</td><td>7.7</td><td>SSE</td></tr>
<tr><td>27</td><td>Didarbi</td><td>7.7</td><td>SW</td></tr>
<tr><td>28</td><td>Langlut (Ch)</td><td>7.9</td><td>S</td></tr>
<tr><td>29</td><td>Choto Langlai</td><td>8.1</td><td>SW</td></tr>
</table></td><td>Council Waste (Khas) land has been allotted on renewable Periodic Patta/lease by Land & Revenue Deptt., N.C. Hills Autonomous Council, Haflong.</td></tr>
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<tr><th>Sl. No.</th><th>Particulars</th><th>Details</th><th>Remarks</th></tr>
<tr><td></td><td></td><td>
<table>
<tr><td>30</td><td>Tumbung</td><td>8.3</td><td>WSW</td></tr>
<tr><td>31</td><td>Krungthai</td><td>8.3</td><td>SW</td></tr>
<tr><td>32</td><td>Boro Langlai</td><td>8.4</td><td>SW</td></tr>
<tr><td>33</td><td>Nabdi Langayen</td><td>8.7</td><td>ENE</td></tr>
<tr><td>34</td><td>Longmaiklu (Longmaklu)</td><td>8.7</td><td>WSW</td></tr>
<tr><td>35</td><td>Bongphiri (Ch)</td><td>9</td><td>S</td></tr>
<tr><td>36</td><td>Kukrilangso</td><td>9.1</td><td>SW</td></tr>
<tr><td>37</td><td>Kharthongship</td><td>9.3</td><td>SSE</td></tr>
</table>
</td><td></td></tr>
<tr><td>iv.</td><td>Latitude and Longitude of all corners of the project site.</td><td>
Plant Area:
<table>
<tr><th>Point No</th><th>Latitude (North)</th><th>Longitude (East)</th></tr>
<tr><td>1</td><td>25°31'27.6500"</td><td>092°47'44.1699"</td></tr>
<tr><td>2</td><td>25°31'19.4637"</td><td>092°47'44.1228"</td></tr>
<tr><td>3</td><td>25°31'19.0799"</td><td>092°47'53.3801"</td></tr>
<tr><td>4</td><td>25°31'22.5400"</td><td>092°47'53.4499"</td></tr>
<tr><td>5</td><td>25°31'23.1200"</td><td>092°48'01.7801"</td></tr>
<tr><td>6</td><td>25°31'23.4101"</td><td>092°48'11.4701"</td></tr>
<tr><td>7</td><td>25°31'22.5699"</td><td>092°48'11.5901"</td></tr>
<tr><td>8</td><td>25°31'22.2802"</td><td>092°48'18.6101"</td></tr>
<tr><td>9</td><td>25°31'22.0401"</td><td>092°48'29.3601"</td></tr>
<tr><td>10</td><td>25°31'21.6801"</td><td>092°48'41.0601"</td></tr>
<tr><td>11</td><td>25°31'25.1801"</td><td>092°48'41.3301"</td></tr>
<tr><td>12</td><td>25°31'29.2399"</td><td>092°48'41.5599"</td></tr>
<tr><td>13</td><td>25°31'29.0301"</td><td>092°48'32.1601"</td></tr>
<tr><td>14</td><td>25°31'28.5701"</td><td>092°48'19.1101"</td></tr>
<tr><td>15</td><td>25°31'28.4801"</td><td>092°48'11.5801"</td></tr>
<tr><td>16</td><td>25°31'28.2900"</td><td>092°48'01.8300"</td></tr>
<tr><td>17</td><td>25°31'27.9699"</td><td>092°47'52.8299"</td></tr>
</table>
Approach Road:
<table>
<tr><th>Point No</th><th>Latitude</th><th>Longitude</th></tr>
<tr><td>1</td><td>25°31'23.6859"</td><td>092°46'58.6573"</td></tr>
<tr><td>2</td><td>25°31'23.3509"</td><td>092°47'03.2272"</td></tr>
<tr><td>3</td><td>25°31'20.8060"</td><td>092°47'07.7977"</td></tr>
<tr><td>4</td><td>25°31'19.7748"</td><td>092°47'12.4690"</td></tr>
<tr><td>5</td><td>25°31'21.9822"</td><td>092°47'23.1544"</td></tr>
<tr><td>6</td><td>25°31'23.5834"</td><td>092°47'29.0187"</td></tr>
<tr><td>7</td><td>25°31'27.5757"</td><td>092°47'43.5731"</td></tr>
<tr><td>8</td><td>25°31'27.7492"</td><td>092°47'44.8037"</td></tr>
<tr><td>9</td><td>25°31'28.2694"</td><td>092°47'44.7207"</td></tr>
<tr><td>10</td><td>25°31'28.0801"</td><td>092°47'43.3436"</td></tr>
<tr><td>11</td><td>25°31'24.2970"</td><td>092°47'28.8925"</td></tr>
<tr><td>12</td><td>25°31'22.7081"</td><td>092°47'22.9160"</td></tr>
<tr><td>13</td><td>25°31'20.5251"</td><td>092°47'12.5799"</td></tr>
<tr><td>14</td><td>25°31'21.4644"</td><td>092°47'08.1416"</td></tr>
<tr><td>15</td><td>25°31'24.0190"</td><td>092°47'03.5431"</td></tr>
<tr><td>16</td><td>25°31'24.4046"</td><td>092°46'58.5435"</td></tr>
<tr><td>17</td><td>25°31'22.0701"</td><td>092°46'53.4625"</td></tr>
<tr><td>18</td><td>25°31'19.2220"</td><td>092°46'46.3515"</td></tr>
<tr><td>19</td><td>25°31'19.2120"</td><td>092°46'38.6815"</td></tr>
<tr><td>20</td><td>25°31'18.5669"</td><td>092°46'33.1180"</td></tr>
<tr><td>21</td><td>25°31'16.8906"</td><td>092°46'30.6287"</td></tr>
<tr><td>22</td><td>25°31'16.1537"</td><td>092°46'27.9705"</td></tr>
<tr><td>23</td><td>25°31'15.2049"</td><td>092°46'25.8476"</td></tr>
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</td><td></td></tr>
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<table>
<tr><th>Sl. No.</th><th>Particulars</th><th>Details</th><th>Remarks</th></tr>
<tr><td></td><td></td><td>
<table>
<tr><td>24</td><td>25°31'16.1801"</td><td>092°46'23.4679"</td></tr>
<tr><td>25</td><td>25°31'17.3981"</td><td>092°46'20.7840"</td></tr>
<tr><td>26</td><td>25°31'16.8747"</td><td>092°46'20.1958"</td></tr>
<tr><td>27</td><td>25°31'15.6000"</td><td>092°46'23.0319"</td></tr>
<tr><td>28</td><td>25°31'14.4359"</td><td>092°46'25.7792"</td></tr>
<tr><td>29</td><td>25°31'15.4659"</td><td>092°46'28.2880"</td></tr>
<tr><td>30</td><td>25°31'16.2198"</td><td>092°46'30.9211"</td></tr>
<tr><td>31</td><td>25°31'17.8631"</td><td>092°46'33.4311"</td></tr>
<tr><td>32</td><td>25°31'18.4880"</td><td>092°46'38.6690"</td></tr>
<tr><td>33</td><td>25°31'18.5183"</td><td>092°46'46.4184"</td></tr>
<tr><td>34</td><td>25°31'21.4897"</td><td>092°46'53.9275"</td></tr>
</table>
</td><td></td></tr>
<tr><td>v.</td><td>Elevation of the project site</td><td>The general elevation of the plant site varies from Max Elevation 396 AMSL to Min. 256 AMSL.</td><td></td></tr>
<tr><td>vi.</td><td>Involvement of Forest land if any.</td><td>No involvement of Forest land.

Dima Hasao Forest Division (West) has issued a certificate based on the joint verification report of Range Forest Officer, Garampani Range and Revenue Official, Umrangso stating 240 Bigha (32.12 Ha) Plant land and 40 Bigha (5.35 Ha) Approach Road is classified as “Revenue Waste (Khas) Land and Non-Forest Land” vide letter No. FRS/G/21/1(b)/PART/2019-20/840 dated 28.06.2022</td><td></td></tr>
<tr><td>vii.</td><td>Water body (Rivers, Lakes, Pond, Nala, Natural Drainage, Canal etc.) exists within the project site as well as study area</td><td><u>Project site:</u> No water body exist within the plant site.

<u>Study area:</u>
<table>
<tr><th>Water body</th><th>Distance, km</th><th>Direction</th></tr>
<tr><td>Amrang Nalla</td><td>0.14</td><td>East</td></tr>
<tr><td>Langyen Nadi</td><td>0.25</td><td>SE</td></tr>
<tr><td>Mongle Nadi</td><td>3.8</td><td>NE</td></tr>
<tr><td>Langlai River</td><td>6.1</td><td>S</td></tr>
<tr><td>Kopili River</td><td>9.4</td><td>NW</td></tr>
<tr><td>Umrong Reservoir</td><td>7.1</td><td>West</td></tr>
</table>
</td><td>Seasonal Amrang Nalla flows in northern (360 m AMSL) and in Eastern Parts (250-190 m AMSL), with 36-66 m difference in elevation, there is no flood hazard to the Site due to the Nalla.
Perennial Kopili River flows at 9.4 km NW and there is no Flood Hazard to the Site as such. Other Nallas/Rivers flow in the downstream of the Site.</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><u>Study area</u>: Nil

List of Reserved and protected forests:
Krungming RF (2.3 km in W)
Langting Mupa RF (14.7 Km NE)</td><td>-</td></tr>
</table>

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

S. No.	Plant Equipment / Facility	Configuration	Capacity	Remarks
1	Clinkerisation Plant	Kiln: 11000 TPD	3.63 Million TPA	Greenfield Project

S. No.	Plant Equipment / Facility	Configuration	Capacity	Remarks
2	Waste Heat Recovery System	-	16 MW	Utilization of Waste heat from Pre-heater and cooler
3	D.G. Set	-	750 kVA	Emergency/ Back-up
4.	Limestone Crusher	-	2000 TPH	-

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

S. No.	Raw Material	Quantity (MTPA)	Source	Distance from site (Kms)	Mode of Transportation
1	Limestone	5.45	Captive Limestone mine (New Umarangsho)	Adjacent	Road: From Mine to crusher proposed in Plant
2	Hill Sand	0.3	Purchase from Kekrang	10 km	Road
3	Coarse Sand (Silica)	0.1	Purchase from Kopili River	45 km	Road

17.3.10 The water requirement for the proposed project is estimated as 1250 m^3/day, which will be sourced from surface water such as nearby flowing Longlai river, Amrang nalla, other rivers/ streams, Nallah, within a radius of 25 km from the Plant site. No ground water drawl is proposed. Necessary Permission from N.C. Hills Autonomous Council, Haflong will be taken.

17.3.11 The power requirement for the proposed project is estimated as 23 MW, which will be sourced from 132 kV sub-station of Assam Power Distribution Company Ltd (APDCL) & stepped down to 11kV at plant and proposed WHRS (16 MW). DG set of 750 kVA is proposed for emergency back-up.

17.3.12 The capital cost of the project is Rs. 2240 Crores and the capital cost for environmental protection measures is proposed as Rs. 120 Crores. The employment generation from the proposed project is 146 persons during Construction Phase and 206 persons during Operation Phase.

17.3.13 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.

17.3.14 Proposed Terms of Reference: [Baseline data collection period: March to May 2022]

Attributes	Parameters	Sampling	
		No. of stations	Frequency
A. Air			
a. Meteorological parameters	Wind speed, wind direction (wind roses), temperature, humidity, cloud cover,	1	Hourly readings from the Site for a Season

Attributes	Parameters	Sampling	
		No. of stations	Frequency
	atmospheric pressure, rainfall etc.		
b. AAQ parameters		10	24-hourly basis, continuously for 2 days in a week for 4 weeks in a month for a season
B. Noise	Leq, Lday and Lnight values	10	Once in the season
C. Water	Surface Waters (7 locations) & Ground Waters (2 Locations)	9	Once in the Season
Surface water/Ground waterquality parameters	Surface Waters as per CPCB Norms & Ground Waters as per IS:10500 Norms.	-	-
D. Land			
a. Soil quality b. Land use	Textural & Physical Parameters, Nutrients Based on Satellite Imagery	6	Once during the Study Period
E. Biological a. Aquatic b. Terrestrial	Flora & Fauna - Core & Buffer zones		Once during the Study Period
F. Socio-economic parameters	Total Population / Household Size / Age/ Gender Composition /S.C / S.T/ Literacy Level, Occupational Structure	As per Census & Household Surveys	Once in the study period

Deliberation by the Committee

17.3.15 The Committee noted the following:

i. The instant proposal is for setting up of a New Clinkerisation Plant for production of 3.63 Million TPA (@ 11000 TPD) clinker along with 16 MW power by Waste Heat Recovery Boiler (WHRB) and DG Set of 750 KVA for emergency back-up.

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

iii. Land admeasuring 280 Bighas (37.47 Ha) has been allotted to CCIL by Land & Revenue Deptt., N.C. Hills Autonomous Council, Haflong with renewable Periodic Patta No. 1007 till 31st March 2040.

iv. The Committee further noted the following from the subcommittee's site visit report:

S. No.	EAC Observations on 14-15th September, 2022	Submissions by M/s. Calcom Cement India Limited during site visit	Remarks of the Sub-Committee	Final Submission of M/s. Calcom Cement India Limited
i.	Amrang Nalla (0.14 km) and Langyen Nadi (0.25 km)	The region constitutes the eastern flank of the Shillong Plateau, more specifically the	Amrang Nalla flows in the northern side of the Mine Pit. Working Mine Pit	• As suggested, **CCIL will provide Garland drains in**

S. No.	EAC Observations on 14-15th September, 2022	Submissions by M/s. Calcom Cement India Limited during site visit	Remarks of the Sub-Committee	Final Submission of M/s. Calcom Cement India Limited
	flows very near to the project site. Also other water bodies such as Mongle Nadi, Langlai River, Kopili River and Umrong Reservoir exists within the study area of 10 km of the project site.	Plateau of Umrangso. The project site area falls under "Structural Origin-Low Dissected Hills and Valleys". The structural valley resulting from Haflong-Disang thrust trending ENE-WSW forms a curvy-linear valley (with thin alluvial sediments) along south-western part. Amrang (Amlong) Nalla is one of the streams originate from northern parts of the site, flows at distance ranging from 1.5 km (NW Corner of plant) to nearest 0.14 km (NE corner of plant) in the valley sloping toward east and confluences into LangyenNadi at 194 AMSL which flows at distance ranging from 1.17 km (SW Corner of plant) to nearest 0.25 km (SE corner of plant). Flood is not common occurrence due to hilly terrain/topography of the region. The run-off during rain will be channelised following the natural gradient through storm water drains proposed along the roads to the sedimentation pit proposed to be constructed at SE corner, as SE corner has the lowest elevation. Silt free water from sedimentation pit will be allowed to be discharged outside the plant following the natural course. Various measures such as stone pitching etc. will also be adopted to avoid any soil erosion during construction phase. Storm water drains and sedimentation pits will be constructed keeping in mind the max. hourly rainfall data of last 20 years i.e. 32.81 mm/hr. Other water bodies in the study area are far from plant site and will not have any impact because of the	(Lease Area) exists between the Site and nearby Amrang Nalla. Amrang Nalla flows in an altitude of 194 m above MSL in the east and confluences into Langyon Nadi which flows from southern part of the Site towards northeast. Site is located at 62 m above the nearby water bodies. PP has to provide Garland drains in the eastern parts of the Site, from Crusher area, with check dams/Baffles made of biodegradable/ geo-textile material at adequate intervals for settlement of sediments, if any, before it reaches the nallas. PP has to provide 2 Settling Tanks also in the northeast corner and southeast corner of adequate size for suspended solids settlement before the discharge into natural drains. PP has to increase the thickness of the Green Belt consisting of native species from proposed 10 m to 20 m in the stretch, adjacent to the nala. Efforts are to be made to preserve existing well grown trees at the Site. If tree cutting is involved, PP has to obtain the necessary permission from DFO and carry out Compensatory Plantation as directed by	**Eastern side** of Plant along with **2 Settling Tanks in the northeast and southeast corner**. • The **thickness** of the **GreenBelt** will be increased in above stretch from **10 to 20m**. • It will be ensured to **preserve existing well grown trees** at the Site **to the extent possible**. In case it is required to cut few trees, necessary permission from DFO will be taken and Compensatory Plantation will be carried out as directed by DFO in lieu of same. • Plant layout incorporating above suggestions is given in subsequent slides:

S. No.	EAC Observations on 14-15th September, 2022	Submissions by M/s. Calcom Cement India Limited during site visit	Remarks of the Sub-Committee	Final Submission of M/s. Calcom Cement India Limited
		proposed project as any change in topography due to the setting of the proposed project will be localised and confined within the plant premises.	DFO. Local species shall only preferred for Green Belt and no alien species shall be introduced. Sub-Committee noticed no significance of other water bodies in the Study Area.	
ii.	The EAC observed that there is huge variation in the terrain of the project site ranging from Min. 256 AMSL to Max. Elevation 396 AMSL.	Proposed plant site is a long stretch of 1.6 km having maximum elevation of 396 above MSL in the west and minimum elevation of 256 above MSL in the east. As the area is hilly, the difference in elevation is gradual over a stretch of 1.6 km (Plant Site). Based on the elevation profile, the avg. slope of plant site over a stretch of 1.6 km, is about 4.2%. The main plant area including production, storage & others, will be at western part of the plant site. Plant will be surrounded by thick Greenbelt and proper drainage systems along retaining wall.	Identified Site is located in an elevated land of the valley. PP informed that advantage of the different elevation will be utilized for establishing the various structures of the Unit effectively. PP was advised to take adequate engineering measures to mitigate soil erosion.	Noted and will be complied in detailed engineering. However, benching will be done for different plant structures to utilize the elevation appropriately.
iii.	Drainage Conservation scheme to protect the natural drainage and its flow parameters; along with Soil conservation scheme and multiple Erosion control measures is required.	Any natural drainage outside the plant premises will not be disturbed. Proper arrangements will be done within the plant site to maintain and regulate the natural drainage. It is proposed to construct storm water drains along with retaining walls to manage the rain water run-offs. The run-offs during rains will be channelised following the natural gradient through storm water drains proposed to be developed along the roads to the sedimentation pit proposed to be constructed at SE corner, as SE corner has the lowest elevation. Silt free water from sedimentation pit will be allowed to be discharged	PP has to provide Garland drains in the eastern parts of the Site, from Crusher area, with check dams/Baffles made of biodegradable/ geo-textile material at adequate intervals for settlement of sediments, if any, before it reaches the nallas. PP has to provide 2 Settling Tanks also in the northeast corner and southeast corner of adequate size for suspended solids settlement before the discharge into natural drains. PP has to increase the	Garland drains in the eastern parts of the Site, from Crusher area will be provided. Garland drain will be provided with check dams/Baffles made of biodegradable/ geo-textile material at adequate intervals for settlement of sediments, if any, before it reaches the nallas. 2 Settling Tanks, in NE & SE corners will be provided. 20 m thick Green Belt along the garland drain in this stretch will be provided.

S. No.	EAC Observations on 14-15th September, 2022	Submissions by M/s. Calcom Cement India Limited during site visit	Remarks of the Sub-Committee	Final Submission of M/s. Calcom Cement India Limited
		outside the plant following the natural course. Various measures such as stone pitching etc. will also be adopted to avoid any soil erosion during construction phase. Various measures such as stone pitching, series of Rubble Check Dam, etc. shall be constructed in Valley Region to prevent any silt deposition downstream. Also, grasses like bamboo, vetiver, Stylosantheshamata, etc. will be used on slopes as they have very good soil binding properties.	thickness of the Green Belt from proposed 10 m to 20 m in this stretch. Local species shall only preferred for Green Belt and no alien species shall be introduced.	
iv.	There is rich habitation within the study area of 10 km of the project site. 37 villages are reported in the study area. PP has reported that there is no Rehabilitation & Resettlement (R&R) involved in the proposal.	As per Census-2011, the small settlements/hamlets, scattered distance-wise, are termed as local villages and numbered in total. Industrial establishments have also been considered as village in Census. There are 37 villages in the study area but the size of villages is very small. Out of 37 villages, 30 villages are with less than 50 households, even in some villages it is just 5-7. Their settlements, are mostly along the road side or hill tops. Most of them are carrying out Shifting Cultivation with temporary settlements. Thus, the region is very much thinly populated. As per Census, there is no village within 2 km from the plant site boundary. There are 13 villages/settlements within 2-5 km from the plant boundary with 578 households & with a population of 3034. There are 24 villages/settlements within 5-10 km from the plant boundary with 3056 households & with a population of 13924. Umrangso is only Industrial town in Dima Hasao District.	Other than Umrangso Town with population of 10,376. Umrangshu at 19 Kilo is with population of 442in 85 households and Wari Diplai in southeast is with population of 74 in 16 households. The sub-committee had visited Umrangso village 19 kilo interacted with the Gram Pradhan (Village Headman) reg. the living conditions and other environmental matters of the area. PP was advised to address all the mitigation measures that would be raised during the Public hearing, besides the CSR activities the company is extending to the villagers. No R&R is involved.	CCIL undertake to address all mitigation measures that would be raised during Public Hearing besides the CSR activities.

S. No.	EAC Observations on 14-15th September, 2022	Submissions by M/s. Calcom Cement India Limited during site visit	Remarks of the Sub-Committee	Final Submission of M/s. Calcom Cement India Limited
		The Project does not involve any R&R and thus no R&R Plan is envisaged.		
v.	The EAC noted that Krungming Reserve Forest falls at a distance of 2.3 km in West direction of the project site.	Krungming Reserve Forests at a distance of 2.3 km in West direction of the project site across the NH 627.	Only RF in the area located in between the NH-627 and Kopili River in the west.	--
vi.	PP has reported that the water requirement of 1250 m^3/day will be sourced from surface water such as nearby flowing Longlai river, AmrangNalla, other rivers/ streams, Nalla, within a radius of 25 km from the Plant site. It is pertinent to understand whether appropriate water is available to serve the industrial purpose due to presence of other plant and mines unit.	There are about 10 industrial establishments within the study area out of which only 6 are under operation including CCIL Plant & Mine and NEEPCO Hydro Electric Power Project. CCIL's existing unit water demand i.e. 975 KLD, is met from Longlai river and for the proposed unit it is 1250 KLD. For the existing unit, about 2 Nos. Check dams are constructed in the Nalla course for the intake and transported to the Plant by pipeline. This is the water source of the Plant for the last one decade with adequate flow even during Summer periods. Additional water demand for the proposed Unit will also be the surface water bodies within 25 km radius area.	Multiple surface water sources of perineal nature are available. PP informed that the water demand for domestic as well as industrial needs of the region are met from surface water bodies only. Necessary permission from Competent Authority shall be obtained to be taken to tap the surface water bodies/nallas/rivers.	Necessary permission from the Dima Hasao District Council shall be obtained to tap the surface water bodies/Nallahs/Rivers.
vii	The project proponent has submitted that the major raw material i.e. limestone will be obtained from Captive Limestone Mine (New Umarangsho) which is adjacent to the plant site. The mode of transportation will be through road. There is a need to explore the possibility of conveyor belt for transportation of the	This will be a Pit-Head Plant near the Captive Mine viz. New Umrangshu Limestone Mine. A limestone crusher of 2000 TPH is proposed to be installed within the plant area adjacent to Mine lease boundary. Limestone from the Captive Limestone Mine will be transported to the Crusher by haul road and the crushed limestone will be conveyed to the storage yard via covered conveyor belt.	As the mine from where the raw material is obtained is adjacent to the proposed plant, PP confirmed that limestone will be conveyed through conveyor from the Crusher proposed in the Plant.	Will be complied. Limestone will be conveyed through the covered conveyor belt from the Crusher proposed within the Plant.

S. No.	EAC Observations on 14-15th September, 2022	Submissions by M/s. Calcom Cement India Limited during site visit	Remarks of the Sub-Committee	Final Submission of M/s. Calcom Cement India Limited
	raw material.			
viii.	As reported, CCIL is already operating a Clinkerisation Plant at 16 Kilo (meter), Umrangso (1.52 MTPA Clinker) with Captive New Umarangso Limestone Mine (Extent 417.50 Ha & 7.77 MTPA Limestone Production with Mineable Reserves of 162.56 Million Tonnes). With the Captive Mine in the close Proximity and operational, CCIL opted to have another Clinkerisation Plant at Umrangso.	CCIL is operating a Clinkerisation unit at Umrangso, Assam with currently installed capacity of 1.52 Million TPA for which require 2.3 MTPA limestone which is being sourced form captive mine "New Umrangshu Limestone Mine". Permitted operating capacity as per EC of this captive mine, is 7.77 MTPA. In order to operate the mine at full capacity, CCIL now planned to establish a Clinkerisation unit of 3.63 Million TPA. The existing production capacity of the captive mine is sufficient to cater to the limestone requirement of existing Clinkerisation unit as well as proposed unit. The mining lease is valid up to Nov. 2042 and based on the minable reserves of 162.56 Million Tonnes the life of mine is 21 years operated at full capacity of 7.77 MTPA. This project will boost the economy of the area as well as generate direct & indirect employment opportunities resulting in overall development of the region and enhanced revenue to the Central & State exchequer in the form of Revenue from the captive mine as well as plants. There is no other major employment potential in this region and recently the area has been freed from insurgency so this project will give gainful employment directly and indirectly to youth of this district.	Sub-Committee deliberated the Alternative Sites considered for the Proposal. Site-I of Lanka Grinding Unit is located at about 70 km from the captive mine in the nearby Hojai District. Transportation of 1.5 times, about 16500 TPD Limestone from the Lease to Lanka by road will have significant traffic impact, carbon footprint and other environmental impacts. Site-II at 16 Kilo adjacent to existing Clinkerisation Unit is not having adequate contiguous area(2.023 ha.) which is not commensurate to the proposed production level of the new plant, for setting up the new Clinkerisation Unit. Therefore PP has concluded that Site-III is the most suitable site for the proposed plant, which is also at Pit Head adjacent to the Captive Mine. PP informed that there are 700 employees working in the existing Plant & Mines and there will be additional direct employment to 206 people due to the Proposal. Local people shall be preferred in employment.	There is no other major employment potential in this region and recently the area has been freed from insurgency so this project will give gainful employment directly and indirectly to youth of the area.

Recommendations of the Committee

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

(i) An action plan for Green Belt development consisting of 3 tiers of plantations of native species all along the periphery of the project of adequate width shall be raised in 33% of the project area with a tree density shall not less than 2500 per ha within a time frame of one year shall be submitted. Survival rate of green belt developed shall be monitored on periodic basis to ensure that damaged plants are replaced with new plants in the subsequent years. Local species shall only preferred for Green Belt and no alien species shall be introduced. PP has to develop the Green Belt with 20m wide in the eastern boundary adjacent to the Nala.

(ii) PP has to provide Garland drains in the eastern parts of the Site, from Crusher area, with check dams/ baffles made of biodegradable/ Geo-textile material at adequate intervals for settlement of sediments, if any, before it reaches the nearby nallas.

(iii) Efforts are to be made to preserve existing well grown trees at the Site. If tree cutting is involved, PP has to obtain the necessary permission from DFO and carry out Compensatory iii. PP has to provide 2 Settling Tanks also, in the northeast corner and southeast corner, of adequate size for suspended solids settlement. Plantation as directed by DFO.

(iv) Necessary permission from Competent Authority shall be obtained to be taken to tap the surface water bodies/nallas/rivers.

(v) Limestone transportation shall be through conveyors from the Crusher proposed in the Plant.

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

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

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

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

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

(xi) Action plan for establishment of conveyor from the Crusher to the storage yard shall be submitted.

(xii) Project proponent shall prepare layout plan showing all internal roads minimum 6m width and 9m turning radius with proper looping for smooth traffic flow, including fire tender as per NBC. Road network shall connect all service areas in layout. This drawing shall

include area statement showing plot area, area under roads, parking, green belt with calculations and % with respect to plot area of project site and proper indexing.

(xiii) Project proponent shall submit contour map of project site along with drainage disposal system with calculations and drawings supported with proper indexing including rain water harvesting details with calculations mentioning about GW recharge along with relevant drawing.

(xiv) Project proponent shall submit a study report on Decarbonisation program, which would essentially consist of company's carbon emissions, carbon budgeting/ balancing, carbon sequestration activities and carbon offsetting strategies. Further, the report shall also contain time bound action plan to reduce its carbon intensity of its operations and supply chains, energy transition pathway from fossil fuels to Renewable energy etc. All these activities/ assessments should be measurable and monitorable with defined time frames", when PP comes for EC proposal. This study shall be formulated keeping in view of India's Net-zero commitment at the COP-26 Climate Summit.

(xv) As part of Corporate Environment Responsibility (CER) activity, company shall adopt nearby villages based on the socio-economic survey (10 Kms radial coverage from the project site) and undertake community developmental activities in consultation with the village Panchayat and the District Administration. In this regard, time bound action plan as per the MoEF&CC Office Memorandum dated 30/09/2020 shall be submitted.

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

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

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

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

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

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Agenda No. 17.4

Technical discussion by the EAC with Steel Manufacturing Units regarding the optimization of usage of water in the Steel Sector and various innovative technologies/initiatives being adopted by the Steel Manufacturing Units to minimize the usage of water [Rationalization of water consumption in Steel Industries].

The meeting pertaining to discussion on Rationalization of water consumption in Steel Industries was attended by the representatives of the Steel Industry from PSU and private sector. The issue was deliberated in detail between the members of the Expert Appraisal Committee and

representatives of Steel Industries. The representatives presented before the EAC, process specific water consumption and the best practices adopted by them for optimal usage of water in their organisation. The meeting ended with project specific inputs from the EAC for improvisation in the water consumption.

***

DAY 2: NOVEMBER 15th, 2022 (TUESDAY)

Consideration of Environmental Clearance

Agenda No. 17.5

17.5 Change in EC Configuration from 5.5 MTPA to 4.5 MTPA by M/s Bhushan Power and Steel Limited, located at Village Thelkoloi, Tehsil Rengali, District Sambalpur, Odisha – Reconsideration of Environment Clearance under the provision of para 7 (ii) of EIA Notification, 2006 –Regarding-Reconsideration of EC proposal

[Proposal No. IA/OR/IND/257254/2022; File No. IA-J-11011/40/2009-IA-II(I)]
[M/s M. N. Dastur & Company (P) Ltd; valid up to 17/11/2022]

17.5.1 M/s. Bhushan Power and Steel Limited has made an online application vide proposal no. IA/OR/IND/257254/2022 dated 15/03/2022 along with copy of Addendum EIA report, Form – 2 and certified compliance report seeking Environment Clearance (EC) under the provisions of para 7(ii) of 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 (a) Coal Washeries, 2(b) Mineral Beneficiation, 1(d) Thermal Power Plants and 4(b) Coke oven plants under Category "A" of the schedule of the EIA Notification, 2006 and appraised at Central Level.

17.5.2 Name of the EIA consultant: M/s M. N. Dastur & Company (P) Ltd [S. No. 178, List of ACOs with their Certificate/Extension Letter no. NABET/EIA/1922/SA0174; valid up to 17/11/2022; Rev. 23, May 09, 2022].

Details submitted by the project proponent

17.5.3 The project of M/s Bhushan Power and Steel Limited is located at Village Thelkoloi, Tehsil Rengali, District Sambalpur, Odisha is for Change in EC Configuration from 5.5 MTPA to 4.5 MTPA.

17.5.4 Environmental site settings:

S. No.	Particulars	Details	Remarks
i)	Total land	**789.24 ha** (1950.25 acre) [Private: 789.24 ha]	Land use – Industrial land.

<table>
<tr><th>S. No.</th><th>Particulars</th><th>Details</th><th>Remarks</th></tr>
<tr><td></td><td></td><td>As per earlier EC dated 06/12/2016 total project area was 829.726 ha (plant area: 789.24 ha + Township: 40.48 ha).
As per instant proposal, PP excluded the township area of 40.48 ha and kept plant area of 789.24 ha only.
As per EC dated 06/12/2016 total land is 789.24 ha out of which 505.96 ha land is existing land and 283.28 ha is expansion land)</td><td></td></tr>
<tr><td>ii)</td><td>Land acquisition details as per MoEF&CC O.M. dated 7/10/2014</td><td>The proposed change in configuration will take place within existing plant area of 789.24 ha. Out of total 789.24 ha land existing land 505.96 ha is in possession of the company and for expansion 283.28 ha land acquisition process is in progress. No additional land is required for proposed change in configuration.</td><td>--</td></tr>
<tr><td>iii)</td><td>Existence of habitation & involvement of R&R, if any</td><td><u>Project site:</u>
Village Thelkoloi and Khadiapalli having Project displacement families- 111 of 2 villages.

Study area:<table><tr><th>Habitation</th><th>Distance</th><th>Direction</th></tr><tr><td>Thelkoloi</td><td>50 m</td><td>West</td></tr><tr><td>Sripura</td><td>1.5 km</td><td>NE</td></tr><tr><td>Lapanga</td><td>0.5 km</td><td>SW</td></tr></table></td><td>R&R is in progress.</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 plant 1250.25 acre</td></tr><tr><td>1</td><td>21°46'16.14"N</td><td>84° 0'49.60"E</td></tr><tr><td>2</td><td>21°45'35.06"N</td><td>84° 0'51.46"E</td></tr><tr><td>3</td><td>21°44'51.44"N</td><td>84° 0'33.81"E</td></tr><tr><td>4</td><td>21°44'53.10"N</td><td>84° 2'1.75"E</td></tr><tr><td>5</td><td>21°45'41.70"N</td><td>84° 1'41.13"E</td></tr><tr><td>6</td><td>21°46'28.66"N</td><td>84° 1'21.75"E</td></tr><tr><td colspan="3">Additional 700 acres</td></tr><tr><td>1</td><td>21°44'53.17"N</td><td>84° 1'22.00"E</td></tr><tr><td>2</td><td>21°43'49.85"N</td><td>84° 1'7.45"E</td></tr><tr><td>3</td><td>21°43'42.73"N</td><td>84° 1'39.56"E</td></tr><tr><td>4</td><td>21°44'51.88"N</td><td>84° 2'02.61"E</td></tr></table></td><td>-</td></tr>
<tr><td>v)</td><td>Elevation of the project site</td><td>222 m above mean sea level (MSL)</td><td>-</td></tr>
<tr><td>vi)</td><td>Involvement of Forest land if any</td><td>Not Applicable</td><td></td></tr>
<tr><td>vii)</td><td>Water body exists within the project site as well as study area</td><td>Project site: NIL

Study area:</td><td>-</td></tr>
</table>

S. No.	Particulars	Details	Remarks
		Water Body / **Distance** / **Direction**: Ib river / 7.0 km / West; Matwali river / 4.7 km / SSE; Bheden river / 0.88Km / NW; Hirakud Reservoir / 1.0 km / SSW	
viii)	Existence of ESZ/ESA/ national park/wildlife sanctuary/biosphere reserve/tiger reserve/ elephant reserve etc. if any within the study area	NIL	-

17.5.5 The chronology of earlier EC is given as below:

Date	Detail
12/05/2004	EC obtained from MOEF&CC vide letter no J-11011/228/2003-IA II for setting up of **1.2 MTPA** Steel Plant in the name of M/s. Bhushan Power & Steel Limited
29/03/2007	EC expansion from MOEF&CC vide letter no J-11011/372-IA-II(I) for **1.2 MTPA to 2.2 MTPA.**
02/04/2010	EC expansion from MOEF&CC vide letter no J-11011/40/2009-IA-II(I) for **2.2 MTPA to 2.8 MTPA.**
17/10/2012	Amendment in EC for **2.8 MTPA to 3.0 MTPA**
06/12/2016	Expansion in EC for **3.0 MTPA to 5.5 MTPA**
26/07/2017	BPSL went into NCLT and was under administrative control of RP (Resolution Professional) as per CIRP (Corporate Insolvency Resolution Procedure).
26/03/2021	M/s. JSW Steel Ltd took over the M/s. BPSL on and has full administrative control of its operations.

Renewal of consents to operate for the existing plant was accorded by State Pollution Control Board, Odisha dated 25/03/2022 and same is valid up to 31/03/2023.

17.5.6 Implementation status of the existing Environmental Clearances:

S. No.	Facilities	As per EC dated 06/12/2016	Implementation Status	Production as per CTO
1	Coal Washery	1x1.0MTPA+ 1x3.5MTPA	Commissioned	1x1.0MTPA+ 1x3.5MTPA
2	Beneficiation Plant	1x1200TPH (6.5MTPA Product)	Commissioned	1200 TPH
3	Pellet Plant	4.0MTPA	3.5 MTPA commissioned	3.5MTPA
4	DRI Kiln	14x500TPD (2.3MTPA)	12x500 TPD commissioned	(12x500 TPD) 1.92MTPA
5	Coke Oven	2x0.45MTPA (Non-Recovery Type) 1x1.2MTPA (Recovery Type)	1x0.45MTPA (Non recovery commissioned and 1.0 MTPA recovery type coke oven has been commissioned. Detail	0.45 MTPA-Non-Recovery Type; 1.0 MTPA-Recovery Type

S. No.	Facilities	As per EC dated 06/12/2016	Implementation Status	Production as per CTO
			engineering for upgradation to 0.2 MTPA is in progress.	
6	Sinter Plant	1x105 m^2 + 1x450 m^2	1x105 m^2 commissioned; 1x450 m^2under construction	1x105 m^2
7	Blast Furnace	1x1008 m^3 + 2x2015 m^3	1x1008 m^3 + 1x2015 m^3 commissioned and	(1x1008 m^3) 0.8 MTPA + (1x2015 $m^{3)}$ 1.55 MTPA
8	EAF	6x100 Ton	2x90T, 2x100T and 1x70 T commissioned	2x90 T + 2x100 T + 1x70
9	LF	6x100 ton + 2x250 ton	2x90T, 2x100T and 1x70 T commissioned	2x90 T + 2x100T + 1x70 T
10	Alloy Smelter	4x16 MVA	Not commissioned	--
11	BOF	2x250 ton	Not commissioned	--
12	VD/AOD	2x100 ton + 2x250 ton	Not commissioned	--
13	RH	2x250 ton	Not commissioned	--
14	HMDP	2x250 ton	Not Commissioned	--
15	Lime Plant	3x300 TPD + 2x600 TPD	3x300 TPD-commissioned	3x300 TPD
16	Dolo Plant	1x300 TPD + 1x100 TPD + 1x600 TPD	1x600 under construction.	--
17	Oxygen Plant	1x400 TPD + 1x660 TPD + 1x1250 TPD	1x400 TPD + 1x660 TPD – Commissioned; 1000 TPD under construction	1x400 TPD + 1x660 TPD
18	Billet Caster	(1x2) + (2x4) + (1x5) Strand	(1x2) + (1x4) + (1x3) Strand	1x5 + 1x2 + 1x4, strand
19	Bloom Caster	2x2 Strand	Not commissioned	--
20	Thin Slab Caster	3x1 Strand	2x1 strand Commissioned.	2x1 strand
21	CSP	4.0 MTPA	1.8 commissioned	1.8 MTPA
22	Cold Rolling Mill	2.5 MTPA	1 MTPA commissioned 1.5 MTPA under engineering	1 MTPA
23	Pipe and Tube Mill	0.8 MTPA	0.2 MTPA commissioned 0.6 MTPA under implementation	0.2 MTPA
24	Galvanising / Galvalume Line	1.3 MTPA	0.5 MTPA commissioned 0.8 MTPA under implementation	0.5 MTPA

S. No.	Facilities	As per EC dated 06/12/2016	Implementation Status	Production as per CTO
25	Colour Coating Unit	0.7 MTPA	0.45 MTPA commissioned 0.25 MTPA under implementation	0.45 MTPA
26	Wire and Rod Mill	0.45 MTPA	0.45 commissioned	0.45 MTPA
27	Bar and Rod Mill	0.55 MTPA	0.55 under implementation	--
28	Captive Power Plant	710 MW (Coal fired, & WHRB)	506 MW Commissioned	3x130 MW + 60 MW + 40 MW + 2x8
29	Cement Plant	1.0 MTPA	Under engineering stage	--

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

S. No.	Facility	Configuration as per EC dated 06/12/2016	Configuration after proposed amendment	Remarks
1	Coal Washery	1x1.0 MTPA + 1x3.5 MTPA	1x1.0 MTPA + 1x3.5 MTPA	No change
2	Beneficiation Plant	1x1200 TPH (6.5 MTPA Product)	1x1200 TPH (6.5 MTPA Product)	No change
3	Pellet Plant	4.0 MTPA	4.0 MTPA	No change
4	Sinter Plant	1x105 m^2 + 1x450 m^2 (Total: 5.9 MTPA)	1x105 m^2 + 1x450 m^2 (Total: 5.9 MTPA)	No change
5	DRI Kiln	14x500 TPD (2.3 MTPA)	12x500 TPD (2.0 MTPA)	2x500 TPD surrendered
6	Coke Oven	2x0.45 MTPA (Non-Recovery Type) 1x1.2 MTPA (Recovery Type)	1x0.45 MTPA (Non-Recovery Type) 1x1.2 MTPA (Recovery Type)	1x0.45 MTPA Non-Recovery Coke Oven surrendered
7	Blast Furnace	1x1008 m^3 + 2x2015 m^3 (Total: 3.9 MTPA)	1x1120 m^3 + 1x2015 m^3 (Total: 2.35 MTPA)	Augmentation of BF from 1008 m^3 to 1120 m^3 and 1x2015 m^3 BF surrendered
8	EAF/Zero Power Furnace (ZPF)	SMS-1: EAF: 4x100 T SMS-2: EAF: 2x100 T (Total: 600 T)	SMS-1: EAF: 4x105 T SMS-2: EAF: 1x75 T + ZPF: 1x75 Ton (Total: 570 T)	4x100 is upgraded to 4x105 T and 2x100 T EAF change to 1x75 T EAF +1x75 T ZPF
9	LF	6x100 ton + 2x250 ton (Total 1050T)	6x100 Ton + 2x75 Ton (Total 675T)	250T LF changed to 75 T LF
10	Alloy Smelter	4x16 MVA	NIL	All units surrendered
11	BOF	2x250 ton	NIL	All units surrendered
12	VD/AOD	2x100 ton + 2x250 ton	2x100 Ton + 2x75 Ton	250T LF changed to 75 T VD/AOD
13	RH	2x250 ton	NIL	All units surrendered
14	HMDP	2x250 ton	2x100 Ton	300 T surrendered
15	Lime Plant	3x300 TPD + 2 x 600 TPD	3x300 TPD + 2x600 TPD	No change

S. No.	Facility	Configuration as per EC dated 06/12/2016	Configuration after proposed amendment	Remarks
16	Dolo Plant	1x300 TPD + 1 x 100 TPD + 1x600 TPD	1x600 TPD	1x300 TPD + 1x100 TPD surrendered
17	Oxygen Plant	1x400 TPD + 1x660 TPD + 1x1250 TPD	1x400 TPD + 1x660 TPD + 1x1000 TPD + 3x200 TPD	Reduction of capacity of 1250 TPD to 1028 TPD Addition of 3x200 TPD (VPSA)
18	Billet caster	(1x2) +(2x4) +(1x5) Strand	(1x3) + (2x4) Total Strands 11 Nos	4 Strands surrendered
19	Bloom Caster	2x2 Strand	NIL	All units surrendered
20	Thin Slab Caster	3x1 Strand	2x1 Strand	1x1 strand surrendered
21	CSP	4.0 MTPA	4.0 MTPA	No change
22	Cold Rolling Mill	2.5 MTPA	2.5 MTPA	No change
23	Pipe and Tube Mill	0.8 MTPA	0.8 MTPA	No change
24	Galvanising / Galvalume Line	1.3 MTPA	1.3 MTPA	No change
25	Colour Coating	0.7 MTPA	0.7 MTPA	No change
26	WRM	0.45 MTPA	0.60 MTPA	Addition of 0.15 MTPA
27	Bar and Rod Mill	0.55 MTPA	0.60 MTPA	Addition of 0.05 MTPA
28	Captive Power Plant	710 MW (Coal fired, & WHRB)	**Total 546 MW:** 3x130 MW (CFBC-Coal & WHRB of DRI 5-12) + 40MW (AFBC & DRI 1-4) + 60MW (AFBC&DRI1-4) + 16MW WHRB of HR coke oven + 40 MW (250 TPH process steam boiler (Coal/Gas based)	Surrender of 150 MW coal fired CPP and addition of 40 MW (250 TPH coal/gas-based boiler.)
29	Cement Plant (Slag cement grinding and blending unit)	1.0 MTPA	2.0 MTPA	Addition of 1.0 MTPA
30	Slag processing for aggregates	-	300TPH + 150 TPH	New
31	Iron ore crusher for quality improvement	-	350TPH	New

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

S. No.	Raw Materials	Estimated Quantity (in TPA)			Source	Distance from project site (km)	Mode of transport
		As per EC (5.5 MTPA)	Revised (at 4.5 MTPA)	Change			
1	Iron Ore Lump	350,000	260,000	-90,000	Barbil region	500	Road/Rail
2	Iron Ore Fines	10,270,000	9,786,209	-483,791	Joda/ barbil/ Koira region		Road/Rail
3	DRI Coal	2,268,000	1,850,000	-418,000	Import - M/s Glencore South Africa	400	Sea
4	Coking Coal (semi soft)	1,109,600	1,015,200	-94,400	Australia/ SA/ China/ Mozambique	400	Sea
5	Coking Coal (hard)	937,400	930,600	-6,800	Australia/ SA/ China/ Mozambique	400	Sea
6	Limestone	1,428,700	885,000	- 543,700	International market	400	Sea
7	Dolomite	219,800	180,000	-39,800	Baradwar region	180	Rail
8	Ferro Alloy	50,150	12,000	-38,150	Joda/ barbil/ Koira region	500	Road/Rail
9	Thermal Coal	3,678,200	2,835,800	-8,42,400	Coal India Ltd. mines	13	Rail
10	Purchased Coke	228,500	0	-2,28,500	-	-	-
11	Purchased DRI	123,600	145,262	21,662	Local market	100	Road/Rail
12	Quartzite	65,000	40,400	-24,600	Local source	120	Rail
13	Bentonite	40,000	40,000	0	Import	400	Sea
Total		**20,768,950**	**17,980,471**	**-2,788,479**			

17.5.9 Existing Water requirement is 108600 m^3/day which will be reduce to 85608 m^3/day after proposed change in configuration. Water requirement is obtained from backwater reservoir of Hirakud Dam and permission for 45 cusecs (~ 110095 m^3/hr) has been from obtained Office of Executive Engineer, Main Dam Division, Burla Department of Water Resource (Government of Odisha) vide letter No. 1739 dated 14/02/2020.

17.5.10 Existing power requirement of 672 MW, which will be reduced to 605.6 MW after proposed change in configuration. Power is obtained from 546 MW of captive power plant and remaining from Grid.

17.5.11 Baseline Environmental Studies:

Period	December, 2020 to February, 2021 from Post project monitoring data
AAQ parameters at 6 Locations (min and max)	• $PM_{2.5}$ = 37.1 to 49.3 µg/m^3 • PM_{10} = 70 to 92.4 µg/m^3 • SO_2 = 9.9 to 16.1 µg/m^3 • NO_x = 21.1 to 31.8 µg/m^3

Period	December, 2020 to February, 2021 from Post project monitoring data
Incremental GLC level	• PM_{10} = 2 μg/m^3 (Level at 2.6.km in NE Direction) • SO_2 =5 μg/m^3 (Level at 2.6 km in NE Direction) • NOx = 5 μg/m^3 (Level at 2.6 km in NE Direction)
Ground water quality at 4 locations	• pH: 7.17 to 7.41, • Total Hardness: 65.33 to 94 mg/l, • Chlorides: 23.33 to 29.33 mg/l, • Fluoride: 0.24 to 0.33 mg/l. • Heavy metals (Chromium):<0.05 mg/l
Surface water quality at 4 locations	• pH: 7.11 to 7.32; • DO: 3.6 to 6.43 mg/l • BOD: 0.6 to 2.1.mg/l. • COD from 13.4 to 26.8 .mg/l
Noise levels Leq (Day and Night)	50 to 58.7 dBA for the day time and 42.5 to 49.8 dBA for the Night time.
Traffic assessment study findings	The projected raw material transported by road would be at 5.5 MTPA is 10,334,890 TPA. The revised quantity at 4.5 MTPA would be 8,626,485 TPA. Considering 35 tons trucks, the number of trucks per day at 5.5 MTPA and 4.5 MTPA are 809 and 675 respectively. So, there would be a net reduction of 134 trucks per day or 17% reduction.
Flora and fauna	No Schedule I and endangered species in present in the study area.

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

S. No.	Type	Quantity in TPA			Utilization/ Remark
		As per EC of 5.5 MTPA	Revised Configuration of 4.5 MTPA	Change	
1	BF Slag	1,241,400	1,032,450	Reduced 208,950	To be used for Cement Making.
2	SMS Slag	1,089,300	889,300	Reduced 200,000	To be used for Road construction/ Land filling purpose, Paver Block Making after recovering metal from Slag Crushing unit
3	Mill Scale	1,09,083	90150	Reduced 18933	To be used in Sinter Plant
4	Flue Dust	1,50,000	108,000	Reduced 42,000	To be used in Sinter Plant
5	Fly Ash	1,521,234	1,089,104	Reduced 432,130	To be used for Brick making and also in Captive Cement Plant
6	Bottom Ash	352,936	272,276	Reduced 80,660	To be used for Road construction/ Land filling purpose
7	Lime/Dolo Fines	14,400	14,400	No change	To be sold to WBPCB authorized Vendor
	Hazardous Waste				
1	Used /Spent oil	180	150	Reduced 30	Storage in container on impervious floor under well ventilated covered shed followed by disposal through actual users having valid authorization from SPCB, Odisha

S. No.	Type	Quantity in TPA			Utilization/ Remark
		As per EC of 5.5 MTPA	Revised Configuration of 4.5 MTPA	Change	
2	Waste residue containing oil	305	250	Reduced 55	Storage in impervious pits/ con-tainers under well ventilated covered shed followed by disposal through Authorized HW incinerator / Co-Processing in Cement Kiln authorized by SPCBs/PCCs / CHWTSDF, Jajpur
3	Oil and grease skimming residues	306	250	Reduced 56	Storage in impervious pits/ con-tainers under well ventilated covered shed followed by disposal through Authorized HW incinerator / Co-Processing in Cement Kiln authorized by SPCBs/PCCs / CHWTSDF, Jajpur
4	Chemical Sludge from Waste water Treatment	856	700	Reduced 156	Storage in impervious floor/ pit under well ventilated covered shed followed by disposal in CHWTSDF, Jajpur
5	Acid Residues	31	25	Reduced 6	Storage in impervious floor/pit under well ventilated covered shed followed by disposal in CHWTSDF, Jajpur
6	Alkali Residues	31	25	Reduced 6	Storage in impervious pits I con-tainers under covered shed followed by disposal in CHWTSDF, Jajpur
7	Spent Ion Exchange Resin Containing Toxic Metals	7	6	Reduced 1	Storage in impervious pits / containers under well ventilated covered shed followed by disposal through Authorized HW incinerator / Co-Processing in Cement Kiln authorized by SPCBs/PCCs / CHWTSDF, Jajpur
8	Decanter Tank Tar Sludge	300	300	No change	Storage in impervious pits/ containers under well ventilated covered shed followed by disposal through Authorized HW incinerator / Co-Processing in Cement Kiln authorized by SPCBs/PCCs / CHWTSDF, Jajpur
9	Process wastes, Residues & Sludge	244	200	Reduced 44	Storage in impervious pits/ containers under well ventilated covered shed followed by disposal through Authorized HW incinerator / Co-Processing in Cement Kiln authorized by SPCBs/PCCs / CHWTSDF, Jajpur
10	Empty Barrels/ Containers/ Liners Contaminated with hazardous Chemicals / Wastes	24	20	Reduced 4	Storage on impervious floor under well ventilated covered shed followed by captive reuse / disposal through original supplier / Actual Users authorized by SPCB, Odisha
11	Zinc dross	2500	2500	No change	Storage in impervious pits / containers over impervious floor under well ventilated covered shed followed by disposal through Actual Users

S. No.	Type	Quantity in TPA			Utilization/ Remark
		As per EC of 5.5 MTPA	Revised Configuration of 4.5 MTPA	Change	
					authorized by SPCB, Odisha
12	ETL Sludge	-	120	Increased 120	Storage in impervious pits / containers over impervious floor under well ventilated covered shed followed by disposal through Actual Users authorized by SPCB, Odisha

17.5.13 Public Consultation (Part of the Original EC accorded on 06/12/2016)

Details of advertisement given	12/01/2016: National Paper 'New Indian Express' and 13/01/2016: local daily newspaper 'Sambad'.
Date of public consultation	17/02/2016
Venue	Playground of Lapanga High School
Presiding Officer	Shri Manish Agarwal, Additional District Magistrate, Sambhalpur.
Major issues raised	1. Air and Water Quality 2. Road Construction 3. Employment 4. Establishment of technical training center. 5. Health facilities 6. Drinking water facility.

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

S No	Area	2022	2023	2024	Total budget in crore
1	Road Infrastructure	Construction of road in Derba (Repairing 3 km) and Thelkoloi service road (1km)	Construction of road in Sripura (2 km) and Khadiapalli (1km)	- Construction of road in Dubhenchaper (3 km)and Lapanga(1km)	7
2	Rainwater harvesting	Construction of village pond at Lapanga	Construction of village pond at Dhubenchapper	Construction of village pond at Khariapalli	1.5
3	Healthcare facilities	Healthcare facility for local people in vicinity of the plant to address respiratory, skin, ENT issues etc. related to environmental pollution – Commencement of construction of building	Completion of construction	Procurement of equipment and engagement of medical staff (operational expenditure like staff salary and consumables to be borne by BPSL)	30
4	Drinking water & sanitation	Allocation of funds towards government drinking water mission and Sanitation in the close vicinity. The approved programmed would be communicated to MoEFCC	-	-	5

S No	Area	2022	2023	2024	Total budget in crore
		through 6 monthly compliance report			
5	Vocational training arrangements for women and youth	Vocational training courses arrangements for women through various Govt departments/ NGOs- Tailoring, beautician and mushroom cultivation etc. - 200 women Vocational Training courses for local youth through local ITIs for following trade- Electrician, Welder Fitter Electrician Mason Moto winding Machining etc for about 100 local youth	Tailoring, beautician and mushroom cultivation course - additional 200 women Electrician, welding, fitting and machining course for additional 100 local youth	Tailoring, beautician and mushroom cultivation course - additional 200 women Electrician, welding, fitting and machining course for additional 100 local youth	1.7
6	Education	Strengthening of village school library – 4 Nos. of PCs and 500 books with bookshelves to Thekoloi Hugh School and Dhubenchapar upper Primary school, Sripura High School & Bir Surendra Sai High School	Strengthening of village school library – 4 Nos. of PCs and 500 books with bookshelves to Thekoloi Upper PrimarySchool, Lapanga High School, Saraswati Sishu Vidya Mandir & Sripura Upper Primary School	Strengthening of village school library – 4 Nos. of PCs and 500 books with bookshelves to Bisadhi Upper Primary School, Bir Surendra Sai Upper Primary School, Lapanga Upper Primary School & Sripura Upper Primary School	3
7	Electrification/Solar Street Lighting	Solar LED lights at Lapanga, Thelkoloi - 50 each village	Solar LED lights at Dhubenchapper, Derba - 50 each village	Solar LED lights at Khariapalli, Khinda - 50 each village	1.8
Total					**50**

17.5.14 Existing capital cost of project was Rs. 9090 Crore for expansion project from 3 MTPA to 5.5 MTPA. The capital cost of the proposed project for 3.0 MTPA to 4.5 MTPA is Rs. 4900 Crores and the capital cost for environmental protection measures is proposed as Rs. 495.7 Crores. The annual recurring cost towards the environmental protection measures is proposed as Rs. 24.64 Crores. The employment generation from the proposed project/expansion is 2700. The detail of cost for environmental protection measures is as follows:

S. No.	Description of Item	Existing (Rs. In Crores) (As per EC of 5.5 MTPA)	Proposed for 4.5 MTPA (Rs. In Crores)

		Capital Cost	Recurring Cost	Capital Cost	Recurring Cost
1.	Air Pollution Control Measure	200	--	302.5	10.51
2.	Water Pollution, rainwater harvesting & solid waste management	90	--	107.2	11.43
3.	Environmental monitoring	30	--	6	0.9
4.	Greenbelt development	3	--	30	1.8
5.	Addressal of public consultation concern	164	--	50	--
	Total	**457**	**10**	**495.7**	**24.64**

17.5.15 Existing green belt was developed in 73.25 ha area which is about 8.82% of the total project area of 829.73 ha (including 40.48 ha of Township) with total sapling of 147700 Trees (@ 2016 trees/ ha). Proposed greenbelt will be developed in additional 187.2 ha. Thus, total of 260.45 ha area (33% of total project area of 789.24 ha after excluding the 40.48 ha area of township) will be developed as greenbelt. A minimum 10 m wide greenbelt, consisting of at least 3 tiers around plant boundary will be developed as greenbelt and green cover as per CPCB/MoEF&CC, New Delhi guidelines. Local and native species will be planted with a density of about 2500 trees per hectare. Total no. of 6,51,125 saplings will be planted and nurtured in additional 260.45 ha.

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

Particulars	As per EC dated 6/12/2016	After proposed change under para 7(ii)	% Decrease
Land	829.73 ha	789.24 ha	4.88%
Greenbelt	33%	33%	-
Water	4525 m^3/hr	3567 m^3/hr	21.17%
Power	672 MW	605.6	9.88%
Raw materials	18137100	17980471	0.86%
Product	Crude Steel: 5.5 MTPA	Crude Steel: 4.5 MTPA	18.18%

17.5.17 Pollution load assessment:

Particulars	As per EC dated 6/12/2016	After proposed change under para 7(ii)	% Decrease
Air	PM ; 390.21 kg/hr SO_2 : 762.03 kg/hr NOx: 456.92 kg/hr	PM ; 361.4 kg/hr SO_2 : 610.7 kg/hr NOx: 420.3 kg/hr	**PM: 7.38%** **SO_2: 19.85%** **NOx: 8.01%**
Water	Zero discharge	Zero discharge	-
Solid and Hazardous waste	Solid Waste: 4478353 MTPA Hazardous waste: 4784 MTPA	Solid Waste: 3495680 MTPA Hazardous waste: 4546 MTPA	Solid Waste: **21.94%** Hazardous waste: **4.97%**
Traffic load	Additional 103 trucks per day	Additional 84 trucks per day	**18.44%**

17.5.18 Summary of violation under EIA, 2006/court case/show cause/direction if any, related to the project under consideration are given as below:

Types of direction	Description	Letter No & Date	Issues	Status
Closure direction	OSPCB Closure direction under Section 31(A) of Air(P&CP) Act,1981 and 33(A) of Water(P&CP) Act,1974 amended thereafter	Letter No-6989/IND_I_CON-4650, dated-07.05.2021	Regarding Stack emission from power plant and zero discharge issues	Reply to closure direction was sent to OSPCB vide our Letter dated 08/05/2021. Action plans and progress was sent to OSPCB vide our letter dated 31/05/2021. Performance Bank Guarantee No 1025521 BG 0000003 dated 06/08/2021 submitted to OSPCB vide our Letter No JSw/BPSL/Env/OSPCB/011 dated 06/08/2021 Modifications in ESPs of 40 MW, 60 MW and Boiler 1 of unit 3x130 MW completed and emissions achieved within norm. Accordingly, compliance status was submitted to OSPCB vide our letter no-JSWBPSL/ENV/OSPCB/050 dated 26/02/2022. **Revocation of Closure direction received from OSPCB vide Letter No-11721/IND-I-CON-4650 dated -09/08/2021.**
Direction	OSPCB Direction under Section 31(A) of Air(P&CP) Act,1981 and 33(A) of Water(P&CP) Act,1974 amended thereafter	Letter No-11377/IND-I-CON-4650-Dated-07/08/2021	Regarding issues at solid waste disposal site Derba	Compliance submitted at OSPCB by BPSL vide Letter No-SWBPSL/ENV/OSPCB/017 on 24/08/2021
Direction	OSPCB Direction under Section 31(A) of Air(P&CP) Act,1981 and 33(A) of Water(P&CP) Act,1974 amended thereafter	Letter No-17816/IND-CON-4650, Dated-12/11/2021	Regarding issues at solid waste disposal site Derba	Compliance Report submitted by BPSL bearing letter No-JSWBPSL/ENV/OSPCB/028 dated 29/11/2021

Certified compliance report from Regional Office:

17.5.19 The Status of compliance of earlier EC was obtained from Integrated Regional Office, Bhubaneswar *vide* letter no. 101-595/EPE/1560 dated 11/11/2021in the name of M/s. Bhushan Steel and Power Limited on basis of site inspection carried out on 28/10/2021. The Action taken report regarding the partially/ non-complied condition was submitted by project proponent to regional officer MoEF&CC, Bhubaneswar vide letter dated 28/11/2021. MoEF&CC (RO) evaluated the same and has issued closure report vide his letter No 101-595 EPE/1560 dated 07/12/2021 The details of the observations made by RO in the above closure report are as below:

S. No.	Non-compliances details	Observation of RO(abridged)	Condition no.			Re-assessment by IRO
			EC date	Specific	General	
1.	Phase IR&R is completed and for phase 2 additional 700 acre has been acquired.	Project authorities are requested to provide R&R detail.	6/12/2016	ii		Condition is treated as 'Assured to Comply'.
2.	PP initiated action for constructing Rainwater harvesting	Progress made w.r.t. Rainwater harvesting will be submitted.	6/12/2016	v		Condition is treated as 'Assured to Comply'.
3.	Roads to be made of concrete or black topped to reduce fugitive emission or to be cleaned by water Spray.	Road within the plant area got damaged and create dust pollution	6/12/2016	vii		Being complied.
4.	PP assured to comply with in June, 2022	RO plant along with CETP to treat 100% wastewater.	6/12/2016	xii		Condition is treated as 'Assured to Comply'.
5.	Complied in a phased manner	Status of commitment of public hearing is to be submitted.	6/12/2016	xix		Condition is treated as 'Assured to Comply'.
6	Physical target sunder CER are given. BPSL will furnish progress statusin6 monthly reports.	Information on Enterprise social commitment and constitution of committee should be submitted.	6/12/2016	xx& xxii		Being complied
7.	PP spent 60 crores for development of peripheral area but progress made should be communicate	Detail information regarding CSR activities should be submitted.	6/12/2016	xxi		Complied

S. No.	Non-compliances details	Observation of RO(abridged)	Condition no.			Re-assessment by IRO
			EC date	Specific	General	
	d.					
8.	Adequate no of canteen and launch shelters have been planned and constructed within March, 2022.	Sitting place for workforce		xxv		Condition is treated as 'Assured to Comply'
9.	Progress made to be communicated.	Housekeeping Needs improvement		-		Being complied.
10.	Greenbelt will be developed up to 33%.	Plantation in vacant area and road side.		-		Being complied
11.	PP submitted that information and regular health check-up is carried out.	Details of occupational health surveillance carried out with findings.		-	vi	complied
12.	Submitted information regarding intake, consumption, recycling and reuse.	Detail water budget plan should be submitted		-		complied
13.	Construction work will be started from 2022	Development of rainwater harvesting		-	vii	Condition is treated as 'Assured to Comply'
14.	PP replied in detail later.	Detail information (item wise) to be Submitted.			ix	Complied
15.	A new website is being developed by PP	The URL address of the company' s Website regarding uploading 6 months report should be submitted.			xi	Condition is treated as 'Assured to Comply'
16.	PP submitted environmental statement in Form-IV	A copy of Environmental statement in Form-IV should be submitted			xiii	Complied
17.	PP submitted that document	Date of financial closure, final approval and date of commencing of land developmental work of the project should be submitted			xv	Complied

17.5.20 M/s. Bhushan Power & Steel Limited (BPSL) had earlier applied for EC under para 7(ii) of EIA Notification vide proposal no. IA/OR/IND/234756/2021 dated 04/01/2022 and the proposal was considered in 52nd meeting of the Re-constituted EAC (Industry-I) held on 27th January, 28th January and 31stJanuary, 2022 wherein the Committee returned the proposal in its present form due to technical deficiencies in the proposal.

17.5.21 The project proponent again applied for EC under para 7(ii) of EIA Notification vide proposal no. IA/OR/IND/257254/2022 dated 15/03/2022 and the proposal was considered in the 3rd meeting of the EAC held on 11-12th April, 2022. The observations and recommendations of the EAC are as follows:

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

17.5.22 The Committee noted the following:

i. As per the closure report obtained from IRO, Bhubaneshwar on 07/12/2021, there are several non-compliances. PP did not mention current status with ATR of the EC noncompliance conditions in the presentation made before the EAC.
ii. As per AAQ modeling submitted by PP. Maximum GLC for all parameters are located at same point, clarification for same was not given by PP and consultant.
iii. There are three directions issued by Odisha Pollution Control Board for the instant proposal, PP has not submitted the detail of closure notice and the current status of the closure notice in S.No. 37 of Form 2.

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

17.5.23 In view of the foregoing and after detailed deliberations, the committee recommended to defer the proposal to seek the additional information on following points:

i. Project proponent shall submit condition wise action taken report to the non-compliances reported by IRO along with the relevant supporting documents.
ii. Project proponent shall submit the details of notices/directions issued by the SPCB in the last two years along with its present status. Further, the project proponent shall submit explanation for not furnishing the said details in s.no. 37 of Form 2.
iii. Project proponent shall clarify the reasons for as the incremental ground level concentrations for all the pollutants are falling in the same distance and direction.
iv. Project proponent shall provide the details regarding litigations pending against the proposed project.

17.5.24 The proponent submitted the ADS Reply on 29.04.2022 on PARIVESH. Point-wise reply of ADS is given as below:

(i) Project proponent shall submit condition wise action taken report to the non-compliances reported by IRO along with the relevant supporting documents.

RO, MoEF&CC inspected the plant during October 2021 and submitted his report. IRO had raised feedback from BPSL on status of 17 points on which PP had to take actions. Accordingly, PP submitted the action taken report on 27th November 2021 with all

details and then RO, MoEF&CC submitted his closure report dated 07.12.2021. As per his closure report ten points were noted as "complied with" or "being complied with" and rest seven points were marked as "Assured to comply".

Current status of these seven points is given below –

S. No. as per closure report	Information sought	Action Plan submitted and Current Status
#1	Details of R & R issues including compensation (have details of meetings held and actions taken)	**<u>R&R of Phase II (700 acres for expansion to 5.5 MTPA):</u>** 111 PDF identified; 50 acres land identified for setting up R&R colony. Due to NCLT & Covid-19, there was no progress in R&R activities by BPSL. After taking over by JSW, discussions have been initiated with local authorities to complete the process of R&R including compensation & resettlement. BPSL has requested the Special Land Acquisition Officer, Sambalpur vide our letter No. Admin 2022/35 dated 04.04.22 (Annexure 1) to conduct RPDAC (Regional Peripheral Development Action Committee) meeting and include the following in agenda so that R&R can be completed at the earliest. Finalizing of PDF list, Finalization of R&R sites, Finalization of R&R benefits etc. RPDAC meeting is expected very soon within one month.
#2	Progress on Rainwater harvesting work	Two Nos. of rainwater harvesting reservoirs of capacity of 3.34 Lac Cum have already been established. Work order has been issued to M/s. KRG Rain Water Foundation of Chennai who are experts for implementation of rainwater harvesting projects. The will conduct feasibility study and suggest necessary measures for further implementation of rain water harvesting. Study has been completed and draft report is received on 25th April 2022 which is being examined. **Salient points of the draft report are given below -** 1.0 Average rainfall in the area is around 1000 to 1400 mm per annum 2.0 Rainwater harvesting potential is estimated to be is 12,72,960 cum per annum. 3.0 The best options available are few ground water recharges as water table is shallow in the area and major

S. No. as per closure report	Information sought	Action Plan submitted and Current Status
		harvesting through surface water storage. 4.0 Roof water can be taken to ground water re-charge wherever suitable water table available 5.0 Surface runoff water can be collected in various ponds to be created at various locations for direct reuse of reuse after necessary treatment Feasible options will be finalized with the consultants by mid-May 2022 and finalized actions will be completed by Dec 2023
#4	100% utilization of treated wastewater	For 100% reuse and utilization of treated waste water RO plant of capacity 510 m^3/h has been commissioned & the same is in Operation. All the 03 Nos. of existing STP's have been Upgraded ant they are commissioned in Dec 2021. All the STP's are operating satisfactorily. By March 2022 all the Effluent water and storm water drains have been segregated throughout the plant. Up-gradation of ETP in CRM is under progress by M/s. Thermax Ltd. The same will be commissioned by Sep 2022.
#5	Status of compliance of commitments made to public during public hearing	Action plan submitted and will be completed in phases by 2024.
#8	Action plan for construction of shelters for taking lunch during lunch period (Back up fig of shelters)	6 Nos. of canteens have been established within the plant at various locations for employees and workers. Construction of additional 06 canteens is in progress which will be completed by May 2022.
#13	Construction of rainwater structures	Completion by Dec 2023. Details provided above in at #2
#15	Uploading six monthly compliance report to company website	Environment Statement submitted on 25.09.21 Copy submitted to RO, MoEF&CC dated 27.11.22 Website for JSW BPSL is under construction, Uploading by Aug 2022.

(ii) Project proponent shall submit the details of notices/directions issued by the SPCB in the last two years along with its present status. Further, the project proponent shall submit explanation for not furnishing the said details in Sl. No. 37 of Form 2.

There are total 6 Nos directions issued by Odisha State Pollution Control Board in last two years. Status of these directions are given below -

S. No.	Description of direction	Action taken and current status
1	Direction of Closure u/s 33A of the water (prevention & Control of pollution) Act,1974 and U/s 31 A of the Air (prevention & Control of Pollution) act 1981 and amended thereafter vide letter No. 2310/IND-I-CON-4650, dated - 26.02.2020 due to non-compliance of PM emissions from CPP and incomplete installation of FTP in SMS.	Repairing of ESP of CPP units were done by replacement of old rectifiers with new rectifiers. New FTP –3 of SMS 1 was commissioned and compliance was reported to OSPCB The compliance were verified by OSPCB officials and permission for operation of CPP 3x130 MW unit-1 CFBC-1, CFBC-3 and EAF-3 of SMS-1was issued vide OSPCB Letter No. 11058/IND-I-CON-4650 Dated 09.11.2020. Matter is **closed**.
2	Direction of Closure u/s 33A of the water (prevention & Control of pollution) act, 1974 and U/s 31 A of the Air (prevention & Control of Pollution) act 1981 and amended thereafter vide letter No. 9727/IND-I-CON-4650, dated - 06.10.2020 due to non compliance and emission from CPP (40 & 60 MW).	The ESP of 40 MW & 60 MW CPP units were rectified and compliance was reported to OSPCB. After inspection and verification of compliance OSPCB vide their Letter No. 11058/IND -I-CON- 4650 Dated 09.11.2020 for operation of CPP 3x130 MW unit-1 CFBC-1, CFBC-3 and EAF-3 of SMS-1. Matter is **Closed.**
3	OSPCB issued Direction vide Letter No. 9733/IND-I-CON-4650 Dated 06.10.2020 under Section 31(A) of Air (P&CP) Act,1981 and 33(A) of Water (P&CP) Act,1974 amended thereafter for Stoppage of effluent discharge and install RO system by February 2021 to achieve zero discharge.	RO system of 550 m^3/hr has been installed for ensuring zero discharge from the plant premises. Also waste water collection tanks have been constructed at various locations for collection and treatment in RO system and reuse in the plant. Compliance was verified by the Board officials and after satisfactory progress of work CTO was issued by OSPCB vide letter no. 4955/IND-I-CON-4650 dated 25.03.2021. Matter is **closed**.

S. No.	Description of direction	Action taken and current status
	OSPCB issued Closure Direction vide Letter No. 6989/IND-I-CON-4650 Dated 07.05.2021 under Section 31(A) of Air (P&CP) Act,1981 and 33(A) of Water (P&CP) Act,1974 amended thereafter for closure of CFBC Boiler 1 of 3x130 MW , AFBC Boiler of 40 MW and AFBC Boiler of 60 ME CPP Units due to stack emission issues and zero liquid discharge	Reply to closure direction was sent to OSPCB vide our Letter dated 08.05.21. Action plan and progress report was submitted to OSPCB vide our letter dated 31.05.21. Performance Bank Guarantee and affidavit was submitted to OSPCB vide our Letter dated 06.08.21 for completion of all works within committed time. After submission of BG, Permission for operation of closed CPP Boilers was accorded by OSPCB vide dated 09.08.2021 with condition to operate the units in reduced load till all rectification works are completed. Rectification of bag filter of Boiler 1 of 3x130 MW CPP unit was completed on 13.09.2021 and modifications in ESP's of 40 MW, 60 MW CPP units were completed on 30.12.2021 within the committed date and the same was intimated to OSPCB vide our letter dated 31.12.2021. Also request was made for extension of time to complete CRM ETP upgradation. All compliances with regards to CPP units were verified and revised CTO dated 25.03.2022 was issued by OSPCB for operation of all plant units including the CPP in full load. Also our request for time extension for completion of CRM ETP work by 30.11.2022 has been approved. CRM ETP up-gradation work is in progress and the same will be completed by Sep 2022.
	OSPCB issued direction under Section 31(A) of Air(P&CP) Act,1981 and 33(A) of Water P&CP) Act,1974 amended thereafter vide Letter No-11377/IND-I-CON-4650 Dated - 07.08.2021 due to complaint f pollution at Derba solid waste	Action plan and Compliance submitted to OSPCB by BPSL vide Letter No. JSWBPSL/ENV/OSPCB/ 017 on 24.08.2021 • Dumping of solid waste on Govt. Land has been stopped.

S. No.	Description of direction	Action taken and current status
	disposal site by a villager at **NGT**. OSPCB directed the following: • Stop dumping at Govt. land. • Provide retaining wall, garland drains in all the dumps • Tree Plantation on haulage road of dump site • Carry out study on slope stability.	• Toe wall/retaining wall and garland drain has been provided in all the • Dumps except Mound No 7 where work is in progress. • Tree plantation by sides of haulage road and dumping mound has been done except mound Nos & where work is in progress. • Experts of Sambalpur University have been engaged to carry out • Slope stability study. The study is under progress.
	OSPCB Direction under Section 31(A) of Air(P&CP) Act,1981 and 33(A) of Water (P&CP) Act,1974 amended thereafter vide Letter No-17816/IND-I-CON-4650, Dated-12.11.2021 Regarding completion of above jobs like Construction of retaining wall at Mound 7, plantation along the road, run off water treatment facility and study for ground water contamination.	Action plan and Compliance Report submitted by BPSL bearing letter No. JSWBPSL/ENV/OSPCB/028 dated - 29.11.2021. • The construction of retaining wall at mound no. 7 is under progress. It will be completed by 30.04.2022. • Tree plantation by sides of haulage road and dumping mound is in progress. • Experts of Sambalpur University have been engaged to carry out • Slope stability study. The study is under progress. Report will be submitted by 30.04.2022
	Direction under section 33(A) of water (P&CP) Act,1974,and section 31(A) of Air (P&CP) Act, 1981 vide Letter No-1134/IND-I-CON-4650,dated 25.01.2022 Regarding payment of Rs. 57.60 Lacks towards environmental compensation.	Environmental Compensation deposited vide our letter No. JSWBPSL/ENV/ OSPCB/046 dated-08.02.2022.
	OSPCB Direction under Section 31(A) of Air(P&CP) Act,1981 and 33(A) of Water P&CP) Act, 1974 amended there after vide Letter No 4977/IND-I-CON-4650 Dated 29.03.22 To comply with above jobs specially on mound 7.	Action plan submitted vide our letter No. JSWBPSL/ENV/OSPCB/22-23/001 dated 05.04.22 for completion of jobs.
	Case Status at NGT	NGT has disposed of the case and instructed to comply with all the conditions by 30.04.2022.
	OSPCB Direction under Section 31(A) of Air(P&CP) Act,1981 and 33(A) of Water (P&CP) Act,1974 amended thereafter vide Letter No-	Action plan submitted by BPSL bearing letter Dated - 25.01.2022. • Disposal of iron ore fines was

S. No.	Description of direction	Action taken and current status
	1014/IND-I-CON-4650, Dated-22.01.2022 and directed the following: • The unit shall stop all activities of tailing disposal at the breached site till completion of restoration work. • Stop beneficiation of low grade iron ore fine in the iron ore beneficiation plant till tailing pond with adequate infrastructure shall ready for operation with permission from Board (MoM of 14.02.22) • The unit shall regularize the storage of fines stockyard located outside of plant premises with permission of board. (MoM of 14.02.22) • The unit shall make a study on the ground water contamination of breached area and safety/stability of constructed dyke of iron ore stock yard.	stopped at the said site and all restoration works have been completed • Beneficiation of low grade iron ore fines has been stopped. • We shall take prior permission to start operations at site. • Presently study of the site is under progress by the experts of Parala Engineering College, Berhampur.

The uploading of the directions mentioned above was inadvertently missed out in Form 2. However, the details of the directions received from OSPCB were mentioned in the Addendum EIA report. The details of the two directions on fly ash pollution issue and iron ore tailing pond breach issue were uploaded along with EDS reply.

(iii) Project proponent shall clarify the reasons for as the incremental ground level concentrations for all the pollutants are falling in the same distance and direction.

The meteorological data used for the modelling exercise for the revised configuration was monitored as part of 5.5 MTPA EIA study from December 2014 – March 2015. This was done to enable a like to like comparison with the GLC modelled in the previous EIA. As observed both the previous GLC and revised GLC is falling in the SW to S direction as the monitored predominant wind direction is from the NE. The max GLC (considering the entire study area) at 4.5 MTPA stage has reduced from 30 µg/m3 to 28 µg/m^3 for PM, 24 µg/m^3 to 20 µg/m^3 for SO_2 and 24 µg/m^3 to 22 µg/m^3 for NOx as compared to 5.5 MTPA stage. This is well corroborated by the reduction in pollution load at 4.5 MTPA stage.

The GLC corresponding to the highest value for PM, SO_2 and NOx are falling mostly over the Hirakud reservoir. However, the nearest habitation where the highest glcs are falling is Lapanga village located 2.6 km from the existing plant boundary in SSW

direction where the baseline data has also been collected. This distance is therefore reported for all 3 pollutants.

(iv) Project proponent shall provide the details regarding litigations pending against the proposed project.

There is only one litigation case (court case) and status of the case is as below -

Case Details	A case was filed by Mr. Bhagwan Pradhan of village Derba against BPSL at Hon'ble NGT, EZB, Kolkata alleging ash and solid waste disposal in Govt land and resulting pollution. NGT constituted a committee including OSPCB, District magistrate Sambalpur and SEIAA to inspect the site and submit report. BPSL was in NCLT under administrative control of Bankers: 26 July 2017 JSW take over from NCLT: 26 March 2021
Chronology of actions	
03.03.2021	NGT admitted the case and directed OSPCB and District Collector to take remedial action and made OSPCB to be the nodal agency for coordination and compliance, and to file an ATR by 2 months.
13.08.2021	OSPCB submitted an affidavit recommending 6 actions to be taken by BPSL after an inspection by the representatives of the Board to site on 20.04.21.
24.09.2021	NGT directed OSPCB for a fresh inspection for analysis of soil & water; condition of ash mound; degradation if any due to dumping; status of 100% use of ash; assessment of environment compensation and penalty and remedial measures for restoration.
12.11.2021	OSPCB submitted another affidavit after the inspection mentioning: 1. All soil samples are within permissible limits 2. Suggestion to the industry to get a study to examine the reasons of high Fe and Mn in water and remedial measures 3. Additional borewells to monitor water quality 4. Higher height of retaining wall to safeguard agricultural land 5. Reclamation of ash mound-7 biologically with ta toe wall 6. Treatment of water from ash mound 1-5 and 7 to avoid solid carryover.
28.03.2022	OSPCB submitted the compliance report after the inspection of site on 24.02.2022
11.04.2022	NGT Directed the following: Complete construction of toe walls and retaining wall of ash mound-7 by 30.04.2022 Complete plantation over ash mound-7 by 30.04.2022 Submission of soil & water analysis by Sambalpur University by 30.04.2022 and ensure compliance by OSPCB by 30.05.2021

	Closure of Debra site by 30.10.2022 and submit the location of alternate site by 30.04.2022. While rejecting the request of BPSL for the penalty to be charged to the earlier owner, The Court ordered OSPCB to utilize the interim environment compensation deposited by BPSL towards restoration of the site and final environment compensation to be received from BPSL after submitting of reports and compliances. With the aforesaid directions, the Original Application No.65/2020/EZ is accordingly disposed of (Judgement submitted by PP)
Current status	**While the case filed under NGT has been closed, the follow up actions are detailed in Direction-4 of OSPCB.**

17.5.25 Based on the ADS reply by the proponent, the proposal was re-considered in the 5th meeting of the EAC held on 12-13th May, 2022. EAC noted that PP has submitted the ADS reply on Portal on 29.04.2022. The information submitted without covering letter/letter head of the Company. EAC has taken a serious note on this issue and advised the PP that all the communications/information should be submitted through letter head on Parivesh portal.

Written Submission by the PP (During 12-13th May, 2022)

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

i. PP has given undertaking the they will adopt following 10 villages and develop them as model villages within 5 years namely Thelkoli, Dhubenchapal (Gontiapada), Banjiberna, Siripura, Kheruwal, Sradhapali, Maliatika, Khadiapali, Sunamal, Derba.

ii. PP will undertake renovation and up gradation of 03 Nos. of ponds of following villages by 31/03/2023, Thelkoloi-2nos. Siripura-01 No

iii. The PP shall prepare comprehensive plan for reduction of PM emission from Integrated Plant and submit MoEF&CC by 30/06/2022.

17.5.27 After detailed deliberations, the Committee recommended the proposal for grant of Environment Clearance, under the para 7(ii) of EIA Notification, 2006 subject to the stipulation of specific conditions and general conditions as per the Ministry's Office Memorandum No. 22-34/2018-III dated 9/8/2018 based on project specific requirements.

Observations of the Ministry

17.5.28 The matter was examined in the Ministry and accordingly vide letter No. IA-J-11011/40/2009-IA-II(I) dated 14th July, 2022 directed PP to submit the following information:

(i) Project proponent is requested to submit the updated compliance report in respect of Order of Hon'ble NGT, Kolkata dated 11.04.2022 in the case of Mr Bhagwan Padhan along with copy of orders/compliances.

(ii) Project proponent is requested to submit the details / status of compliances of the Public Hearing's Action Plan proposed at the time of EC in 2016.

(iii) Compliance of all points in CCR by IRO, MoEFCC must be ensured and submitted to the Ministry.

17.5.29 Based on the above observations, the proposal was re-considered during the 15th meeting of the EAC for Industry-I sector held on 17-18th October, 2022.

Submission of the PP:

17.5.30 The ADS reply was submitted vide letter dated 20.09.2022 and uploaded on PARIVESH portal on 27th September 2022 as follows:

i. **Point 1: Project proponent is requested to submit the updated compliance report in respect of Order of Hon'ble NGT, Kolkata dated 11.04.2022 in the case of Mr Bhagwan Padhan along with copy of orders/compliances.**

Reply: A case was filed By Mr. Bhagwan Pradhan of village Derba against BPSL at Hon'ble NGT, EZB, Kolkata alleging ash and solid waste disposal in Govt. land and resulting pollution. NGT constituted a committee with OSPCB as nodal agency and members District Magistrate Sambalpur & SEIAA and directed to inspect the site and submit report. The committee inspected the site on 20.04.2021 and submitted the joint inspection report to Hon'ble NGT.

The matter was heard by Hon'ble NGT, EZB Kolkata on 30.03.2022 and vide its order dated 11th April 2022 The Original Application No.65/2020/EZ was disposed.

Based on the order of Hon'ble NGT, EZB Kolkata The Odisha State Pollution Control Board had issued a Direction vide letter no. 8918 dated 23.05.2022 to ensure compliance.

All the conditions of the Direction has been complied and compliance report has been submitted to OSPCB vide our letter dated 27.06.2022.

The site was inspected on 11.10.2022 by The Regional Officer of OSPCB, Sambalpur to verify the compliance status.

Final: The matter stands closed now.

ii. **Point 2: Project proponent is requested to submit the details / status of compliances of the Public Hearing's Action Plan proposed at the time of EC in 2016.**

Reply: BPSL obtained EC for 5.5 MTPA in December 2016.

BPSL was into NCLT from July 2017 till March 2021, hence there was very little progress on the expansion project and other social related activities. JSW Steel took over the plant on 26th March 2021. After taking over the project and other social activities have been initiated. Details of social activities initiated during year 2021-22 after taking over along with expenditure is mentioned below. The action plan for undertaking various activities in the plant periphery to fulfill the commitments made during public hearing is also submitted.

DETAILS OF SOCIAL WELFARE ACTIVITIES & EXPENSES FOR 2021-2022

S. No.	Project Name	Major Interventions	Budget Allocated (Rs. Crores)	Actual Expenditure made so far (Rs. Crores)	Ongoing Projects (Rs. Crores)	Details of activities undertaken
1	Sports promotion & institution building	Sports promotion at Dhubenchaper	0.01	0.01	-	Intra-block Knockout football tournament organised during November 2021 at Dhubenchaper village. Villages covered is Dhubhenchaper
2	Enhance Skills & rural livelihoods through nurturing of supportive ecosytems & innovations	Sewing training cum Production center renovation.	0.04	0.04	-	Established a Sewing Training Centre at Thelkoloi village for organizing vocational training of sewing for about 60 ladies at a time 30. This will run in two shifts and annually 120 ladies will be trained. Villages covered is Thelkoloi.
3	Public health infrastructure, capacity building & support programs	Mobile Medical Unit & Community Dispensary	0.31	0.31	-	1. Procured and deployed one Mobile Medical Unit for 10 revenue villages consisting of 26 hamlets. This Mobile medical unit is covering every hamlet on weekly basis to ensure regular health check ups. Villages covered are – Thelkoloi, Dhubenchaper, Lapanga, Khadiapali, Bansimal, MaliaTikra, Sripura, Gumkarama, Ghichamura & Derba 2. Established a Community Dispensary at Thelkoloi Village.
4	Integrated water resources management	Drinking water supply in villages	0.46	0.36	0.10	Drinking water supply by tankers in 11 villages around the plant complex. Villages covered are – Thelkoloi, Dhubenchaper, Lapanga, Khadiapali Sardhapali, Bansimal, Pauli pada, Gontia pada, Banjiberna, Bhuliadihi & Sardhapalli
5	Educational	School &	1.51	0.85	0.66	Renovated & upgraded 12

S. No.	Project Name	Major Interventions	Budget Allocated (Rs. Crores)	Actual Expenditure made so far (Rs. Crores)	Ongoing Projects (Rs. Crores)	Details of activities undertaken
	infrastructure & Systems strengthening	Anganwadi Center Transformation, Udaan/Umeed Scholarship,				Anganwadi Centers Renovated & upgraded 6 schools in 5 villages. Support in 5 Nos. Mo School Programme of Govt. of Odisha Facilities like computer lab, smart class rooms, library, toilets and overall renovation have been provided in above these schools. Udaan & Umeed Scholarship to the meritorious students of Sambalpur and Jharsuguda districts. Support to Thelkoloi High School
6	General community infrastructure support & welfare initiatives	Construction of Community Centers, road & drain repair etc.	5.52	1.85	3.67	Established total 10 Nos community centers Installation of hand pumps – 3 Nos. Installation of Street Light - 186 Nos. Installation of 01 Pump room at village Thelkoloi Repair and Renovation of Road & Drain at village Thelkoloi
7	Waste management & sanitation initiatives	Waste management at DIZ Villages	0.61	0.58	0.03	Waste Collection and disposal at following villages – Thelkoloi, Brahmanpada-Thelkoloi. Gandapada-Thelkoloi, Sripura Dhubenchhaper
8	COVID 19 Support & rehabilitation program	Setting up of COVID Care Center at Rengali	1.42	1.42	-	Establishment of Covid Care Center at Odisha Adarsh Vidyalaya village Rengali & Supply of Oxygen to hospitals.
TOTAL			**Rs 9.88 Cr**	**Rs 5.42 Cr**	**Rs 4.46 Cr**	

ACTION PLAN FOR SOCIAL WELFARE ACTIVITIES WITH ESTIMATED COST

No.	Area	2022	2023	2024	Total Budget in (Rs. Crore)
1	Road Infrastructure	Construction of road in Derba (Repairing 3 km) and Thelkoloi service road (1km)	Construction of road in Sripura (2 km) and Khadiapalli (1km)	Construction of road in Dubhenchaper (3 km) and Lapanga (1km)	7.0
2	Rainwater harvesting	Construction of village pond at Lapanga	Construction of village pond at Dubenchapper	Construction of village pond at Khariapalli	1.5
3	Healthcare facilities	Healthcare facility for local people in vicinity of the plant to address respiratory, skin, ENT issues etc. related to environmental pollution – Commencement of construction of building	Completion of construction	Procurement of equipment and engagement of medical staff (operational expenditure like staff salary and consumables to be borne by BPSL)	30.0
4	Drinking water & sanitation	Allocation of funds towards Government drinking water mission and Sanitation in the close vicinity. The approved programmed would be communicated to MoEFCC through 6 monthly compliances	-	-	5.0
5	Vocational training arrangements for women and youth	Vocational training courses arrangements for women on Tailoring, beautician and mushroom cultivation etc - 200 women Vocational Training courses for local youth through local ITIs on Electrician, Welder, Fitter, Electrician, Mason, Moto winding, Machining, etc. For about 100 local youth	Tailoring, beautician and mushroom cultivation course- additional 200 women. Electrician, welding, fitting and machining course for additional 100 local youth	Tailoring, beautician and mushroom cultivation course- Additional 200 women Electrician, welding, fitting and machining course for Additional 100 local youth	1.7
6	Education	Strengthening of village school library – 4 Nos. of PCs and 500 books with bookshelves to Thekoloi Hugh School and Dhubenchapar upper Primary school, Sripura High School & Bir Surendra Sai High	Strengthening of village school library – 4 Nos. of PCs and 500 books with book shelves to Thekoloi Upper Primary school, Lapanga High School,	Strengthening of village school library – 4 Nos. of PCs and 500 books with bookshelves to Bisadhi Upper Primary School,	3.0

No.	Area	2022	2023	2024	Total Budget in (Rs. Crore)
		School	Saraswa ti Sishu Vidya Mandir & Sripura Upper Primary School	Bir Surendra Sai Upper Primary School, Lapanga Upper Primary School & Sripura Uppe Primary School	
7	Electrification/Solar Street Lighting	Solar LED lights at Lapanga, Thelkoloi - 50 each village	Solar LED lights at Dhubenchapper, Derba - 50 each village	Solar LED lights at Khariapalli, Khinda - 50 each village	1.8
TOTAL					**Rs 50 Crores**

iii. Point 3: Compliance of all points in CCR by IRO, MoEF&CC must be ensured and submitted to the Ministry.

Reply: Mr. Sandeep Nandi from IRO, MoEF&CC, Bhubaneswar inspected plant on 24th August 2022, to verify the compliance status and submitted his report Vide letter no. 101-595/22/EPE dated 16.09.2022 to I.A. Division (Industry – I), MoEF&CC, New Delhi.

It can be noted from the report that actions have been taken substantial progress has been made as per commitment to comply with all the EC conditions

17.5.31 Based on the above submission and the deliberation made, the EAC deferred the proposal for additional information from the project proponent. The final deliberations and recommendations of the EAC were as follows:

Deliberations by the Committee (EAC during 17-18th October, 2022)

17.5.32 The Committee noted the following:

1. The EAC deliberated on the details submitted by the project proponent pertaining to updated compliance report in respect of Order of Hon'ble NGT, Kolkata dated 11.04.2022 in the case of Mr Bhagwan Padhan. PP has reported that as per order, the OSPCB had issued a Direction vide letter no. 8918 dated 23.05.2022 to ensure compliance. All the conditions of the Direction has been complied and compliance report has been submitted to OSPCB vide our letter dated 27.06.2022. The site was inspected on 11.10.2022 by the Regional Officer of OSPCB, Sambalpur to verify the compliance status and as such the matter stands closed.
2. The EAC further deliberated on the submission of information w.r.t. details of social welfare activities & expenses for 2021-2022 and action plan for social welfare activities with estimated cost for next three years and observed that the proposed action plan is not

satisfactory to address the issues. In view of the same, the project proponent requested EAC to allow them to revise the action plan and reappear before the EAC for appraisal.

3. The Committee also deliberated on compliance of all points in CCR by IRO, MoEF&CC wherein EAC observed that IRO in its report dated 16.09.2022 has still reported partly complied in some of the conditions. In view of the same, EAC is of the opinion that PP has to comply with the partly complied conditions and the updated status shall be submitted in the next EAC meeting.

4. The EAC also deliberated on the proposed plantation and is of the opinion that greenbelt shall be completed by 2023. In this regard, PP needs to submit the adequate action plan along with commitment and timelines.

5. **In view of above, the EAC concluded that the reply submitted by project proponent is not adequate/satisfactory. The PP/Consultant submitted that they will submit the revised information and their case may be reconsidered after submission of revised information.**

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

17.5.33 In view of the foregoing and after detailed deliberations, the committee recommended to **defer the proposal** on account of the shortcomings as detailed in para 17.5.32 above. The proposal shall be considered after submission/uploading of requisite information on Parivesh portal in next EAC meeting.

17.5.34 The ADS reply was submitted by project proponent vide letter dated 29.10.2022 and **uploaded on PARIVESH portal on 1st November, 2022** on the compliance status of IRO Inspection report and action plan with commitment for greenbelt development and fulfill the commitments made in Public Hearing.

1. Compliance to EC Conditions

A. Specific Condition:

S. No.	EC Cond. No.	Description of condition	Compliance status reported by IRO on 11.11.2021	Remarks of IRO, MoEFCC	Compliance status reported by IRO, MoEFCC on 16.09.2022	PP's Compliance status & Action Plan
1	i	The Project proponent shall install 24x7 air monitoring devices to monitor air emission as provided by the CPSB and submit report to ministry and its Regional office.	Complied			
2	ii	The Project proponent shall prepare R&R plan for the affected households in the core zone, including compensation to be paid and employment to be provided and	Partially Complied	It was observed during monitoring that the R&R plan is under preparation. The	Complied	R&R Plan approved by RPDAC has been submitted to IRO during inspection

S. No.	EC Cond. No.	Description of condition	Compliance status reported by IRO on 11.11.2021	Remarks of IRO, MoEFCC	Compliance status reported by IRO, MoEFCC on 16.09.2022	PP's Compliance status & Action Plan
		submit the same to the Regional office of the ministry of the Environment, Forest Climate Change, Bhubaneswar Odisha.		project authorities are requested to provide information on the R&R plan to this office along with the implementation schedule.		visit on 16.09.2022.
3	iii	Continuous stack Monitoring facilities for all the stacks shall be provided and sufficient air pollution control devices viz, electronic precipitator (ESP), bag house, bag filters etc, shall be provided t keep the emission levels below 50mg/Nm^3 and installing energy efficient technology.	Complied			
4	iv	Hot Gases from DRI kiln shall be passed through Dust Settling Chamber (DSC) to remove coarse solid s and after burning chamber (ABC) to burn CO completely. The gas then shall be cleaned in ESP before leaving out into the atmosphere through ID fan and stack	Complied			
5	v	Efforts shall further be made to use maximum water from the rainwater harvesting sources, **Use of air-cooled condensers shall be explored** and closed circuit cooling system shall be provided to reduce water consumption and water requirement shall be modified accordingly. All the effluent should be treated and used for ash handling, dust suppression and green belt development. ETP sludge should be disposed viof scientifically.	Complied	The project authorities have two numbers of water reservoirs of capacity 200000 m^3 and 134000M^3 . It was stated by the project authorities that during rainy season, both reservoirs act as rain water harvesting tank, it was also stated by the project authorities that they are in process of study by third party for development rain water harvesting structure within the plant. Progress made with respect to proposed	Partly Complied	**Air Cooled condensers are not installed because the proposed 150 MW CPP unit in 5.5 MTPA expansion is dropped.**

S. No.	EC Cond. No.	Description of condition	Compliance status reported by IRO on 11.11.2021	Remarks of IRO, MoEFCC	Compliance status reported by IRO, MoEFCC on 16.09.2022	PP's Compliance status & Action Plan
				rain water harvesting system may be submitted to this office		
6	vi	All the cola fines, char from DRI plant shall be utilized and no char shall be used for briquette making or disposed off anywhere else. Scrap shall be used in steel melting shop (SMS) and SMS slag and kiln accretions shall be properly utilized. All the other solid waste including broken refractory mass shall be properly disposed of in environment friendly manner.	Complied			
7	vii	All internal roads shall be black topped. The roads shall be regularly cleaned with mechanical sweepers. A 3-tier avenue plantation using native species shall be developed along the road. Facilities for parking of trucks carrying raw coal from the linked coal mines shall be created within the unit.	Partially Complied	During site visit it was observed that internal road construction work is in progress. The roads within the plant area need to be made concrete or black topped	Partly Complied **(Project has informed that out of 50 km of road length inside plant premises, nearly 34 km of internal roads is made of concrete, and the rest 16 km will also be made concrete.)**	**Since the company was under NCLT no progress on any project works was made. After taking over the plant by JSW Steel on March 2021 the road and drain construction has been initiated. Construction of concrete roads is in progress. The balance 16 KM road will be completed by June 2023**
8	viii	The standards issued by the Ministry vide G.S.R. No.277(E) dated 31st March 2012 regarding integrated iron and steel plant shall be followed.	Complied			
9	ix	The national Ambient Air Quality Emission standards issued by the Ministry vide G.S.R No.826 (E) dated 16th November,2009 shall be followed.	Complied			
10	x	Gaseous emission levels including secondary fugitive emission from all the sources shall be controlled	Complied			

S. No.	EC Cond. No.	Description of condition	Compliance status reported by IRO on 11.11.2021	Remarks of IRO, MoEFCC	Compliance status reported by IRO, MoEFCC on 16.09.2022	PP's Compliance status & Action Plan
		within the latest permission limits issued by the Ministry vide G.S.R No.414 (E) dated 30th May, 2008 and regularly monitored. Guidelines/code of Practice issued by the CPCB shall be followed.				
11	xi	Vehicular Pollution due to transportation of raw material and finished product shall be controlled. Proper arrangement shall also be made to control dust emission during loading and unloading of the raw material and finished produc	Complied			
12	xii	'Zero' effluent discharge shall be strictly followed, and no wastewater shall be discharged outside the premises. During field visit, it was observed that to maintain zero effluent discharge the industry has already installed effluent treatment facilities CRM, BETP for Coke Oven-2 and three nos. of Common Waste water treatment plant.	Partially Complied	An action plan along with implementation schedule for the installation of Reverse Osmosis plant, which is reported to be under commissioning stage for utilization of 100% treated effluent/waste water along with CETP, which is to be installed for collection and treatment of waste water.	Being Complied **(Zero effluent discharge is followed, RO plant is in operation, CETP plant in CRM is in construction stage and action plan for its completion by November 2022 is submitted)**	**Zero effluent discharge is maintained. RO Plant has been Commissioned and is in operation. Construction of New CETP plant in CRM is completed. Commissioning activity is in progress. This condition may be treated as complied.**
13	xiii	Regular monitoring of influent and effluent surface, sub-surface and ground waste shall be ensured and treated wastewater shall meet the norms prescribed by the State Pollution Control Board or described under the Environment (Protection) Act, 1986 whichever are more stringent.	Complied			
14	xiv	Proper handling, storage, utilization and disposal of all the solid waste shall be ensure and regular report regarding toxic metal content in the waste material and its composition, and use of solid/hazardous waste	Complied			

S. No.	EC Cond. No.	Description of condition	Compliance status reported by IRO on 11.11.2021	Remarks of IRO, MoEFCC	Compliance status reported by IRO, MoEFCC on 16.09.2022	PP's Compliance status & Action Plan
		shall be submitted to the Ministry's Regional office, SPCB and CPCB				
15	xv	A time bound action plan shall be submitted to reduce solid waste generated due the project related activity, its proper utilization and disposal.	Partially Complied	During site visit it was reported by the project authorities that the solid waste generated with be segregated properly disposed as per the guidelines. The project authorities are to submit a detailed action plan with implementation schedule on various scrap and other solid waste lying within the industrial plant premises and their disposal.	Complied	**Action plan for disposal of all solid waste as per guidelines have been submitted to IRO during inspection on 16.09.2022. Presently all scrapes and scales are being reused through Sinter plant and SMS within the plant. Hazardous waste is disposed of through authorised vendors as per guidelines. This condition may be treated as complied.**
16	xvi	Utilization of fly ash shall be ensured as per fly ash notification, 1999 as amended. All the fly ash shall be provided to cement and brick manufacturer for further utilization and Memorandum of Understanding shall be submitted to the Regional Office of the Ministry, Bhubaneswar.	Complied			
17	xvii	A risk and Disaster Management Plan shall be prepared, and a copy submitted to the Ministry's Regional office, SPCB and CPCB within 3 months of issue of environment clearance letter.	Assured to Comply	It was reported by the project authorities that a risk and Disaster Management Plan incorporating the expansion project will be submitted to this office.		**We assure to submit the revised DMP incorporating the expansion project to MOEFCC within 3 months after getting the EC.**
18	xviii	Green belt shall be developed in at least 33% of the project area by		The project authorities have	Partly Complied	**Since soon after getting the EC**

S. No.	EC Cond. No.	Description of condition	Compliance status reported by IRO on 11.11.2021	Remarks of IRO, MoEFCC	Compliance status reported by IRO, MoEFCC on 16.09.2022	PP's Compliance status & Action Plan
		planting native and board leaved species in consultation with local communication as per the CPCB guidelines		reported that they are planning to fill up all available areas with greenery in next five year. Plantation of trees in all the vacant areas and also along the road side may be taken up by the project authorities.	Project has submitted in its report that it would achieve 33% green belt by 2024-25	**for 5.5 MTPA the plant went into NCLT no much attention was given on greenbelt development and only 9.28% greenbelt is developed till March 2021. Revised action plan to completion greenbelt over 33% of total project area by December 2024 is given in slide no 18 below.**

Greenbelt Development Status & Revised Action Plan

SL. No.	Details of plantation	Area
1	Total Project Area	1950.25 Acres
2	Area earmarked for greenbelt development	643.60 Acres
3	Greenbelt developed till 31.03.2021	181 Acres
4	Greenbelt proposed to develop by September 2023	300 Acres
5	Greenbelt proposed to develop by September 2024	162.6 Acres

- Since many projects would be executed simultaneously greenbelt development to cover 33% of the plant area will be extended till September 2024.
- However about 25% of total project area will be covered by greenbelt by September 2023.

19	xix	All the comments made to the public during Public Hearing/public consultation meeting shall be satisfactory implemented as adequate budget provision shall be made accordingly.	Partially Complied	It was reported by the project authorities that all the commitments made to the public during Public Hearing/public consultation meeting will be implemented. The status of compliance the commitments mad to the public during public Hearing/public	Partly Complied (Project has agreed to ensure full compliance to commitments made to the public during PH)	EC for the project was accorded in December 2016. Soon after the company went into NCLT from June 2017 hence no much progress was made to fulfill the commitments made during PH. Now after taking over the plant by JSW Steel in March 2021

S. No.	EC Cond. No.	Description of condition	Compliance status reported by IRO on 11.11.2021	Remarks of IRO, MoEFCC	Compliance status reported by IRO, MoEFCC on 16.09.2022	PP's Compliance status & Action Plan
				consultation meeting should be submitted to this office.		activities to fulfill the commitments made in PH has been started on priority basis. **During FY 2021-22 CSR activities with a budget of 9.28 crores has been started. Details of activities initiated and carried out during FY 2021-22 is mentioned in Slide No. 21 to 24. As per suggestion of EAC during last meeting ON 18.10.2022 an action plan to undertake various activities to fulfill the commitments made in PH by December 2023 with a budget outlay of 50 crores has been made and the same is mentioned in Slide No. 25 to 39.**

DETAILS OF SOCIAL WELFARE ACTIVITIES TAKENUP IN FY 2021-2022

Sl No	Project Name	Major Interventions	Budget (Rs. Crores)	Project details	Villages covered
1	Sports promotion & institution building	Sports promotion at Dhubenchaper	₹ 0.01	Intra-block Knockout football tournament organised in November 2021.	Dhubenchapar
2	Enhance Skills & rural livelihoods through nurturing of supportive ecosystems & innovations	Sewing training cum Production center renovation.	₹ 0.04	Established a Sewing Training Centre	Thelkoloi
3	Public health infrastructure,	Mobile Medical	₹ 0.31	Procured and deployed one	

S. No.	EC Cond. No.	Description of condition		Compliance status reported by IRO on 11.11.2021	Remarks of IRO, MoEFCC	Compliance status reported by IRO, MoEFCC on 16.09.2022	PP's Compliance status & Action Plan
	capacity building & support programs	Unit & Community Dispensary			Mobile Medical Unit for 10 revenue villages consisting of 26 hamlets.		
					Established a Community Dispensary	Thelkoloi	
4	Integrated water resources management	Drinking water supply in villages	₹ 0.46		Ensuring Drinking water supply by tankers in 11 villages around the plant complex.		
5	Educational infrastructure & Systems strengthening	School & Anganbadi Center Transformation, Udaan/Umeed Scholarship,	₹ 1.51		Renovated & upgraded 12 Anganbadi Centres in 10 peripheral villages.	Katarbaga Rampella Kadligarh Budharaja Manesar	
					Renovated & upgraded 6 schools in 5 villages. Support to High School Transformation Programme of Govt. of Odisha for 5 schools. Facilities like computer lab, smart class rooms, library, toilets and overall renovation have been provided in these schools.		
					Udaan & Umeed Scholarship to the meritorious students. During FY 21-22 scholarship is provided to 58 Nos. of student. For engineering and medical studies, Rs 50000 per annum, For ITI/ Diploma Rs 10000 per annum is given.		
					Financial support for operation of school @ Rs.35,000/- per month.	Thelkoloi	
6	General community infrastructure support & welfare initiatives	Construction of Community Centers, road & drain repair etc.	₹ 5.52		Established total 10 Nos. community centres .	Thelkoloi – 4 Nos. Dhubenchaper Khadiapali Banjiberna Bhuliadihi Old Khinda Sripura	
					Other infrastructure established as [per details given below - Installation of Hand pumps with bore wells – 3 Nos.	Thelkoloi	

S. No.	EC Cond. No.	Description of condition	Compliance status reported by IRO on 11.11.2021	Remarks of IRO, MoEFCC	Compliance status reported by IRO, MoEFCC on 16.09.2022	PP's Compliance status & Action Plan
				Installed 186 Nos. Streetlights One Pump room renovation 3 KM Road & Drain Repair		
7	Waste management & sanitation initiatives	Waste management at DIZ Villages	₹ 0.61	Dustbins provided for waste collection and disposal at 5 villages.	Thelkoloi, Brahmanpada, Gandapada, Sripura Dhubenchaper	
8	COVID 19 Support & rehabilitation program	Setting up of COVID Care Center at Rengali	₹ 1.42	Establishment of Covid Care Center at Odisha Adarsh Vidyalaya Rengali Supply of Oxygen to hospitals.	Rengali and nearby villages	
GRAND TOTAL			**₹ 9.88**			

ACTION PLAN OF SOCIAL WELFARE ACTIVITIES TO BE UNDERTAKEN BY DEC - 2023.

Sl No	Project Name	Major Interventions	Budget (Rs. Crores)	Project details	Villages covered
1	Public health infrastructure, capacity building & support program	• Health service through Mobile Medical Units & Community Dispensary • Village level Health Camps	15.0	1. Mobile health unit Mobile Health Unit & Other Community Health Awareness Programmes with Mega Health Camps for 10 revenue villages consisting of 26 hamlets.	Thelkoloi Dhubenchapper Old Khinda Bamsimal Lapanga Khadiapali Sardhapali Gumkarma Derba Sripura
				2. Community dispensary at Thelkoloi Establishing necessary infrastructure medical equipment's and engagement of medical staff .	Thelkoloi
				3. Trauma Centre at Jharsuguda.	Jharsuguda District
				.4. Procurement and running one ambulance specifically for community	Thelkoloi Dhubenchapper Dantamura Bamsimal

S. No.	EC Cond. No.	Description of condition	Compliance status reported by IRO on 11.11.2021	Remarks of IRO, MoEFCC	Compliance status reported by IRO, MoEFCC on 16.09.2022	PP's Compliance status & Action Plan
					Lapanga Khadiapali Sardhapali Gumkarma Derba Sripura	
				5. Construction and establishment of additional facility at Sakrabati Narsingh Rotary Mother & child Hospital, Sambalpur.	Sambalpur District	
2	Integrated water resources management	• Drinking water supply through bore wells & tankers • Watershed linked livelihood	6.0	Ensuring Drinking water supply by tankers in 11 villages around the plant complex	Thelkoloi Palepada, Dhubenchapper Bamsimal Lapanga Maliatikra Khadiapali Sardhapali Banjiberna Saharapada Bhuliadihi	
				Development of water resource structures to promote water linked livelihood like agriculture, fisheries etc in 10 revenue villages surrounding the plant periphery	Thelkoloi Dhubenchapper Dantamura Bamsimal Lapanga Khadiapali Sardhapali Gumkarma Derba Sripura	
				Bore well repair at leprosy colony.	Leprosy Colony. Jharsuguda	
3	Waste management & sanitation initiatives	• Waste collection & composting through community intervention	4.5	Waste Collection and disposal	Thelkoloi, Brahmanpada, Thelkoloi, Sripura, Dhubenchaper	
				Support to Sambalpur District Administration with 7 waste collection vehicles towards Clean Sambalpur Mission of Govt. of Odisha.	Sambalpur District	
				Support to Jharsuguda District Administration	Jharsuguda District	

S. No.	EC Cond. No.	Description of condition	Compliance status reported by IRO on 11.11.2021	Remarks of IRO, MoEFCC	Compliance status reported by IRO, MoEFCC on 16.09.2022	PP's Compliance status & Action Plan
				with waste collection vehicles towards Clean Jharsuguda Mission of Govt of Odisha.		
				WASH Programme in 10 revenue villages. Establishing Complete solid waste management in 10 villages around plant complex. This will include Collection, storage, transportation composting etc. Ensuring 100% ODF by ensuring convergence with Swachh Bharat Mission scheme. Convergence with GoO for Piped water supply with Har Ghar (pipe water scheme) under Jal Jeevan Mission.	Thelkoloi Dhubenchapper Dantamura Bamsimal Lapanga Khadiapali Sardhapali Gumkarma Derba Sripura
4	Education infrastructure & systems strengthen	• Transformation of Schools in collaboration with Govt. of Odisha • Transformation of Anganwadis • Supporting Early childhood education • JSW Udaan Scholarships	7.0	1. Provision of Desk/Bench Rengali Girls High School.	Rengali	
				2. Sripura Primary School renovation	Sripura	
				3. Sripura Middle School renovation	Sripura	
				4. Drinking water & Toilet at Kherual School	Kherual	
				5. Drinking water & Toilet at Sripura Primary & Middle School	Sripura	
				6. Inter School competition at Jharsuguda	Jharsuguda District	
				7. Renovation at Lapanga Primary School	Lapanga	
				8. Renovation at Lapanga UP School	Lapanga	

S. No.	EC Cond. No.	Description of condition	Compliance status reported by IRO on 11.11.2021	Remarks of IRO, MoEFCC	Compliance status reported by IRO, MoEFCC on 16.09.2022	PP's Compliance status & Action Plan
				9. Boundary Wall & first floor of Shishu Mandir School.	Lapanga	
				10. Completion of boundary wall at UGME School, Salad	Salad	
				11. School Railing at Odisha Adarsh Vidyalaya, Maneswar	Maneswar Block	
				13. Boundary Wall construction & Renovation of Seva Shram School, Derba	Derba	
				14. Renovation of Bisadihi Primary School.	Bisadihi	
				15. Mid-day Meal kitchen & dining arena for Khadiapali School.	Khadiapali	
				16. Computer Training Center at Sambalpur University.	Sambalpur District	
				17. Support to Thelkoloi High School.	Thelkoloi	
				18. Udaan Scholarship.	Sambalpur & Jharsuguda district	
				19. Early Childhood Care & Education Programme in 12 Anganwadis of 10 revenue villages.	Thelkoloi Dhubenchapper Dantamura Bamsimal Lapanga Khadiapali Sardhapali Gumkarma Derba Sripura	
				20. Support (computer lab, smart classroom, toilet, library etc) in Mo School Programme of Govt. of Odisha for 10 schools.	• Udit Pratap Singh High School • Gokulananda Nodal High School Batemura • Mathura Prasad Govt H.S Dhama • Parmanpur High School • Sahaspur High School • Anchalik High	

S. No.	EC Cond. No.	Description of condition	Compliance status reported by IRO on 11.11.2021	Remarks of IRO, MoEFCC	Compliance status reported by IRO, MoEFCC on 16.09.2022	PP's Compliance status & Action Plan
					School,tabla • Budgaraja Govt High School , Sambalpur • Pabitra Mohan Nodal High School, Jagannath Prasad • Sahebi High School • Alasua Baba High School, Bansajal • Govt.High School Kadaligarh • Lahamani Ughs • Laida High School • Lapanga High School • New Rampela High School ,Rengali • Katarbaga Govt High School	
5	Enhancing skills & rural livelihoods through Nurturing of supportive ecosystems & innovations	Promotion of Agri-livelihood and livestock management Supporting livelihood through Women SHGs Sewing training cum Production centre	5.0	1. Operationalisation of Sewing Training cum Production Centre. About 120 girls/ women will be trained in 1st year.	Thelkoloi	
				2. JSW Shakti – Women Empowerment & Entrepreneurship programme in 10 revenue villages. Under this scheme micro enterprise development will be initiated for about 2000 SHG ladies which will be completed in 4 years.	Thelkoloi Dhubenchapper Dantamura Bamsimal Lapanga Khadiapali Sardhapali Gumkarma Derba Sripura	
6	Nurturing aquatic & terrestrial ecosystems for better environment & reduced emissions	Rejuvenation of water bodies	4.0	Development of waterbody in 5 community ponds in 4 villages.	1. Nagmata Temple Pond, Thelkoloi 2. Brahmanpada Pond, Thelkoloi 3. Ramchandrapur Pond, Sripura 4. Gariakanta Pond, Sripura 5. Gauntiyapada, Dhubbenchapper	
7	General community infrastructure support & welfare initiatives	• Construction and/or renovation of community halls, youth clubs etc. • Farmer's Vegetable market	6.5	1. Vegetable/ Farmer Market - Gol Bazaar	Sambalpur District	
				2. Retaining Wall for Thelkoloi village from IB Rivulet	Thelkoloi	

S. No.	EC Cond. No.	Description of condition	Compliance status reported by IRO on 11.11.2021	Remarks of IRO, MoEFCC	Compliance status reported by IRO, MoEFCC on 16.09.2022	PP's Compliance status & Action Plan
				3. Community Center, Lapanga	Lapanga	
				4. Community Center, Sripura	Sripura	
				5. Community Toilets- • Market Area, Thelkoloi – Gents Toilet • Gandapada, Thelkoloi – Ladies Toilet • Pdf Colony, Thelkoloi – Combined Toilet • Brahmanpada, Thelkoloi – Combined Toilet • Khinda CHC – Combined Toilet • Rengali CHC – Combined Toilet • Lapanga – Gents Toilet • Lapanga – Ladies Toilet • Indracolony, Sripura – Combined Toilet • Sripura CHC – Combined Toilet	Thelkoli Lapanga Khinda Sripura Rengali	
				6. Construction of awareness & Training Centre at Kasipali,	Salad	
				7. Completion of community Hall at Pitapali	Salad	
				8. Construction of Public utility along SH-10	Thelkoloi Sripura Dhubenchaper	
				9. Installation of Bus Shelter along SH-10	Sripura Thelkoloi Khinda	
				10. Sambalpur Bus stand renovation.	Sambalpur District	
				11. Integrated Infrastructure complex (IIC), Sambalpur	Sambalpur District	

S. No.	EC Cond. No.	Description of condition	Compliance status reported by IRO on 11.11.2021	Remarks of IRO, MoEFCC	Compliance status reported by IRO, MoEFCC on 16.09.2022	PP's Compliance status & Action Plan
				12. Reconstruction of Khadiapali Bhogruha Community Center	Khadiapali	
				13. Toilet at Community	Khinda	
				14. Railway Station development, Jharsuguda	Jharsuguda District	
				15. Transformer installation at Thelkoloi Community Center	Thelkoloi	
				16. Club House House Renovation, Banjiberna	Banjiberna	
				17. Community Center, Kultapada, Lapanga	Lapanga	
				18. Boring & Solar pumps at 4 community toilets	Thelkoloi Lapanga	
				19. Ground Levelling at Odisha Adarsha Vidyalaya, Rengali	Rengali	
				20. Park Development at Rengali	Rengali	
				21. Solar Light Sarda	Sarda	
				22. Stadium Development, Jharsuguda	Jharsuguda District	
8	Sports promotion & institution building	• Play ground development & promotion of sports	2.0	1. At Lapanga Playground will be developed for football, cricket etc.	Lapanga	
				2. Inter-block knockout football tournament will be organised involving about 16 teams	Lapanga	
				3. Inter-district Karate Tournament at Jharsuguda has been organised.	Jharsuguda District	
				4. Establishing roof-shed, flood lights etc. at Stadium of Manmohan Govt High School, Jharsuguda.	Jharsuguda District	
				5. Supporting Sambalpur Hockey Teams to participate in Odisha Hockey Championship 2022.	Sambalpur District	
TOTAL			**50.0**			
20	xx	An amount of Rs.458 crores shall be earmarked toward the Enterprises Social Commitment for a period of 10 years for implementing activities based on Public Hearing issues,	Partially complied	An action plan for proper utilization of the fund will be prepared and submitted to the	Complied	Action Plan to undertake expenditure towards Enterprises Social

S. No.	EC Cond. No.	Description of condition	Compliance status reported by IRO on 11.11.2021	Remarks of IRO, MoEFCC	Compliance status reported by IRO, MoEFCC on 16.09.2022	PP's Compliance status & Action Plan
		local needs and item-wise details along with time bound action plan shall be prepared and submitted to the Ministry's Regional Office. Implementation of such program shall be ensured by consulting a Committee comprising of the proponent, representative of village panchayat and District Administration. Action taken report in this regard shall be submitted to the Ministry's Regional Office.		Ministry's Regional office.		Commitment has been submitted to IRO during inspection on 16.09.2022. This condition may be treated as complied.
21	xxi	The proponent shall prepare a detailed CSR plan for every year for the next 5 years for the existing-cum-expansion project, which includes village-wise, sector-wise (Health, Education, Sanitation, Health, Skill Development and infrastructure requirements such as strengthening of village roads, avenue plantation, etc) activities in consultation with the local communities and administration..	Partially complied	Detailed information on the CSR activities carried out should be submitted along with boundary provision.	Complied	Action Plan to undertake CSR activities has been submitted to IRO during inspection on 16.09.2022.
22	xxii	The company shall submit within three months their policy towards Corporate Environment Responsibility which shall inter-alia address(i) Standard operating process/procedure to being into focus any infringement/deviation/violation of environmental or forest norms/conditions, (ii) Hierarchical system or administrative order of the company to deal with environmental issues and ensuring compliance to the environmental clearance conditions and (iii) system of reporting of non-compliance/violation environmental norms to the Board of Directors of the company and /or stakeholders or shareholders.	Partially Complied	It is requested that information on expenditure towards Enterprise Social Commitment and consultation of committee should be submitted to this office.	Being Complied	Information on expenditure towards Enterprise Social Commitment has been submitted to IRO during inspection on 16.09.2022. This condition may be treated as complied.
23	xxiii	The project proponent shall provide for solar light system for all common areas, streetlights, villages, parking around project area and maintain the same regularly.	Assured to Comply	During site visit it was reported by the project authorities that solar light system for all		PP has already provided solar street light in Village Salad. We assure to

S. No.	EC Cond. No.	Description of condition	Compliance status reported by IRO on 11.11.2021	Remarks of IRO, MoEFCC	Compliance status reported by IRO, MoEFCC on 16.09.2022	PP's Compliance status & Action Plan
				common areas in the proposed expansion will be provided.		provide solar lights in more villages and also expedite installation of solar light in common area of the plant.
24	xxiv	The project proponent shall provide for LED lights in their offices and residential areas. It was reported by the project authorities that LED lights in all the offices and residential areas existing plant. It is also implemented in the project areas.	Complied			
25	xxv	Provision shall be made for the housing of construction labour within the site with all necessary infrastructure and facilities such as fuel for cooking, mobile toilets, mobile STP, Safe drinking water, medical health care, crèche etc. The housing may be in the form of temporary structures to be removed after the completion of the project.	Partially Complied	It has been observed that during the lunch hours the workers in the plant area taking their lunch along the road sides underneath the tree sheds. The project authorities may contemplate on constructing facilities with proper lighting and aeration and sitting space for the workforce to have their lunch and relaxation with better facilities.	Being Complied "During monitoring it was observed that labour colony has been setup for construction labours. Necessary facilities such as fuel for cooking, mobile toilets, mobile STP, safe drinking water, is provided in the colony. Medical and health care facility is provided in plant dispensary to all labours". It was observed during present monitoring that canteens and rest shelters for workforce is	Labour colony with all facilities and health care facility is provided. 06 Nos. of canteens and rest sheds for workers have been established. The point may be considered as complied

S. No.	EC Cond. No.	Description of condition	Compliance status reported by IRO on 11.11.2021	Remarks of IRO, MoEFCC	Compliance status reported by IRO, MoEFCC on 16.09.2022	PP's Compliance status & Action Plan
					constructed.	

B. General Condition

S. No.	EC Cond. No.	Description of condition	Compliance status reported by IRO on 11.11.2021	Remarks of IRO	Compliance status reported by IRO on 16.09.2022	PP Compliance status & Action Plan
1	i	The project authorities must strictly adhere to the stipulations made by the Odisha Pollution Control Board and the State Government.	Assured to comply	The Project authorities have assured to comply with the condition.		We assure to abide by all stipulations made by OSPCB.
2	ii	No further expansion or modification in the plant shall be carried out without prior approval of the Ministry of Environment, Forests and climate Change (MOEFCC).	Assured to comply	It was assured by the project authorities that no expansion or modification has been carried out without prior approval of Ministry of Environment Forest and Climate Change.		We assure that no expansion or modification will be carried out without prior approval of Ministry of Environment Forest and Climate Change
3	iii	At least four ambient air quality monitoring stations should be established in the downwind direction as well as where maximum ground level concentration of PM_{10}, $PM_{2.5}$, SO_2, and NOx are anticipated in consultation with the SPCB. Date on ambient air quality and stack emission shall be regularly submitted to this Ministry including its Regional Office at Bhubaneswar and the SPCB/CPCB once in six months.	Complied	During monitoring it was observed that three numbers of Continuous Ambient Air Quality Monitoring Stations have been installed within plant: CAAQMS-1-near Township, CAAQMS-2 near Railway Gate, CAAQMS-3 Behind CRM. It was stated that the 4th Station will be installed by 31st March 2021 in consultation with the Regional Office of OSPCB.		04th AAQ monitoring stations have been installed. **This point may be considered as complied.**
4	iv	Industrial wastewater shall be properly collected, treated so as to conform to the standards prescribed under GSR 422 (E) dated 19th May, 1993 and 31st December, 1993 or as	Complied			

S. No.	EC Cond. No.	Description of condition	Compliance status reported by IRO on 11.11.2021	Remarks of IRO	Compliance status reported by IRO on 16.09.2022	PP Compliance status & Action Plan
		amended form time to time. The treated wastewater shall be utilized for plantation purpose				
5	V	The overall noise levels in and around the plant area shall be kept well within the standard 85 dB(A) by providing noise control measures including acoustic hoods, silencers, enclosures etc. On all sources of noise generation. The ambient noise levels should conform to the standards prescribed under EPA Rules, 1989 viz. 75 Db(A) daytime and 70 dB(A) night time.	Complied	It was noticed during site visit that all the noise prone areas such as turbine houses and compressor houses have been provided with adequate silencer and acoustics enclosure, From the analysis report it is noted that the noise parameters are within the prescribed limit.		
6	vi	Occupational health surveillance of the workers shall be done on a regular basis and records maintained as per the Factories Act.	Partially Complied	During site visit, it was noticed that an Occupational health centre (OHC) has been setup within the plant for pre-joining and periodic medical health check up of all workers including contract labours. Details Occupational health surveillance carried out in last year should be provided along with findings, if any, need to be submitted to this office.	Complied	Occupational health surveillance data of last one year has been submitted to IRO.
7	vii	**The company shall develop rainwater harvesting structures to harvest the rainwater for utilisation in the lean seasons besides recharging the groundwater table.** During site visit, it was observed that the project authorities have two number of water reservoir of capacity 200000 M3 and 134000 M3. During rainy season both reservoir act as	**Partially Complied**	**It is requested to submit information on development of rainwater harvesting structure to this office.**	Complied	Action plan for further development of rain water harvesting structures have been provided to IRO.

S. No.	EC Cond. No.	Description of condition	Compliance status reported by IRO on 11.11.2021	Remarks of IRO	Compliance status reported by IRO on 16.09.2022	PP Compliance status & Action Plan
		rainwater harvesting tank. photographs are furnished below:				
8	viii	**The project proponent shall also comply with all the environmental protection measures and safeguard recommended in the EIA/EMP report. Further, the Company must undertake socio-economic development activities in the surrounding villages like community development programmes, educational programming, drinking water supply and health care etc.**	**Complied**	During site visit, it was observed that the project authorities are undertaking various community developments activities under its socio-economic development programme. These included construction/renovation of primary and secondary schools in nearby villages, providing financial assistance to educational institutions, construction of roads, construction of temples, providing drinking water, etc		
9	ix	Requisite funds shall be earmarked towards capital cost and recurring cost/annum for environment pollution control measures to implement the conditions stipulated by the Ministry and Environment, Forest, and Climate Change (MOEFCC) as well as the state Government. An Implementation schedule for implementing all the conditions stipulated herein shall be submitted to the Regional Office of the Ministry at Bhubaneswar. The funds so provided shall not be diverted for any other purpose.	Partially Complied	During monitoring it was reported by the project authorities that the funds allocated for installation of pollution control equipment and implementing environmental protection measures is being judiciously utilized. **It is requested to submit detailed information (item wise) on the expenditure for environment pollution control measures.**		Detail information on expenditure for environment pollution control measures will be submitted within 3 months after getting the EC.
10	xx	A copy of clearance letter shall be sent by the proponent of concerned Panchayat, Zila Parisad/Municipal Corporation, Urban Local Body, and the Local NGO, if	Complied			

S. No.	EC Cond. No.	Description of condition	Compliance status reported by IRO on 11.11.2021	Remarks of IRO	Compliance status reported by IRO on 16.09.2022	PP Compliance status & Action Plan
		any, from whom suggestions/representations, if any, were received while processing the proposal. The clearance letter shall also be out on the web site of the company by the proponent.				
11	xxi	The project proponent shall upload the status of compliances of the stipulated environmental clearance conditions, including results of monitored data on their website and shall update the same periodically. It shall simultaneously be sent to the Regional Office of the MOEFCC CC at Bhubaneswar. The respective Zonal office of CPCB and SPCB. The criteria pollutant labels namely PM_{10} ,so_2 , no_x (ambient levels as well as stack emissions) or critical sectoral parameters, indicated for the project shall be monitored and displayed at a convenient location near the main gate of the company in the public domain.	Partially Complied	The URL address of the company's website regarding uploading of six-monthly reports should be submitted to this office. It was notice that for display of the parameters and electronic board has been installed at the main gate.	Complied	The URL address of company has been provided to IRO during inspection on 16.09.2022.
12	xxii	The project proponent shall also submit 6 monthly reports on the status of the compliance of the stipulated environmental conditions including results of monitored data (both in hard copies as well as by email) to the regional office of MOEFCC, the respective zonal office of CPCB and SPCB. The Regional Office of this ministry at Bhubaneswar/CPCB/SPCB shall be monitor the stipulated condition.	Complied	The project is regular in submitting six monthly compliance reports.	Complied	
13	xxiii	The environmental statement		A Copy of the	Complied	Copy of latest

S. No.	EC Cond. No.	Description of condition	Compliance status reported by IRO on 11.11.2021	Remarks of IRO	Compliance status reported by IRO on 16.09.2022	PP Compliance status & Action Plan
		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 Office of the MOEF&CC at Bhubaneswar by email.		environmental statement in form-V should be submitted to this office		environmental statement in form-V has been submitted to IRO on16.09.2022
14	xxiv	The project proponent shall inform the public that the project has been accorded Environmental Clearance by the Ministry and copies of the clearance letter are available with the SPCB and may also be seen at the website of the Ministry of Environment, forests, and climate change (MOEF&CC) at http:/envfor.nic.in. This shall be advertised within seven days from the date of issue of the clearance letter at least within seven days from the date of issue of the clearance letter, at least in two local newspaper that are widely circulated in the reason of which one shall be in vernacular language of the locality concern and the copy of the same should be forwarded to the regional office at Bhubaneswar.	Complied	It is noted that accordance of the environmental clearance has been advertised by the project authorities in local newspaper, viz. 'The Indian Express' and Odiya daily 'The samaj' dated 24.12.2016.		
15	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 concern authorities	Not Complied	It is requested that the date of financial closure, final approval, and the date of commencing the land development work of		Information on financial closure will be submitted after completion of the project. and date of

S. No.	EC Cond. No.	Description of condition	Compliance status reported by IRO on 11.11.2021	Remarks of IRO	Compliance status reported by IRO on 16.09.2022	PP Compliance status & Action Plan
		and the date of commencing the land development work.		the project should be submitted to this office.		commencing the land development work will be submitted after getting the EC.

2. Commitment made by the PP:

With reference to the discussions held during EAC meeting on 18.10.2022, PP assures to undertake the following activities as per the target dated mentioned below:

S. No	Commitments	Target Date
1	Green belt Development as per action plan mentioned above.	
a	25% of total Project Area	September 2023
b	33% of Total Project Area	September 2024.
2	Fulfil commitments made in PH as per activities mentioned above.	December 2023

Deliberations by the Committee

17.5.35 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 per the commitments made by the PP, the green belt development shall be completed within 33% by September 2024.

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 status of compliance made as per the action plan submitted by the proponent earlier at the time of EC in 2016 to address the issues raised during the public hearing and is of the view that PP shall strictly fulfil commitments made in PH as per the action plan committed.

8. The Committee deliberated upon the latest certified compliance report of IRO as well as action taken report submitted by PP with respect to the observations reported by IRO and found is of the view that PP shall strictly comply with the commitments made and the action plan submitted to comply with partially complied conditions reported by IRO.

9. The EAC also deliberated on the written submissions submitted by the proponent and found it satisfactory.

10. The EAC deliberated on the submission of PP against the ADS sought by the Committee during 17-18th October, 2022 and found it satisfactory.

11. 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.

12. 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

17.5.36 In view of the foregoing and after detailed deliberations, the Committee **recommended** the instant proposal for grant of Environment Clearance, **subject to uploading the ADS reply/Written submission on Parivesh Portal in proper letter head of the Company,** under the para 7(ii) of EIA Notification, 2006 subject to the stipulation of following specific conditions and general conditions 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 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) The project proponent shall abide by all orders and judicial pronouncements, made from time to time w.r.t. OSPCB directions under Section 31(A) of Air(P&CP) Act,1981 and 33(A) of Water(P&CP) Act, 1974 amended thereafter issued vide Letter No-6989/IND_I_CON-4650, dated 07.05.2021, Letter No-11377/IND-I-CON-4650 dated 07/08/2021 and Letter No-17816/IND-CON-4650, dated-12/11/2021.

(vi) PP shall strictly comply with the commitments made and the action plan submitted to comply with partially complied conditions reported by IRO in the certified compliance report.

(vii) PP shall strictly fulfil commitments made in PH as per the action plan committed by December 2023.

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

(x) Solid waste utilization

a. Maximum 90 days of slag storage area shall be permitted inside the plant.
b. 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.
c. PP shall recycle/reuse 100 % solid waste generated in the plant.
d. Carbon recovery plant to recover the elemental carbon present in GCP slurries for use in Sinter plant shall be installed.
e. Used refractories shall be recycled as far as possible.

(xi) Sinter Plant

a. Sinter cooler waste recovery system shall be installed to generate process steam or power.
b. Equipped with MEROS technology to reduce emission of SO2, NOx and heavy metals.

(xii) Producer gas plant shall not be established by the proponent.

(xiii) Coke Oven Plant

a. Coke Dry Quenching (CDQ) shall be installed.
b. Coke Oven Gas shall be desulfurized.

c. Tar sludge shall be mixed with coal and reused.

(xiv) BF shall be equipped with Top Recovery Turbine, dry gas cleaning plant, stove waste heat recovery, cast house and stock house ventilation system and slag granulation facility.

(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) Waste Heat Recovery system for charge preheating shall be included for 65 T Electric Arc Furnace.

(xviii) Submerged Arc Furnace and Electric Arc Furnace shall be closed type with 4th hole extraction system.

(xix) 85-90 % of billets/slabs shall be rolled directly in hot stage. Only 10-15 % rolling shall be done through RHF using only Light Diesel Oil or Mixed BF/CO gas.

(xx) 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.

(xxi) Acid recovery plant shall be included to recover acid from pickling lines.

(xxii) Dust emission from Steel Plant stacks shall not exceed 30 mg/Nm^3.

(xxiii) Water requirement for the plant shall be met from River Tungbhadra or Krishna. Ground water abstraction is not permitted.

(xxiv) Three tier Green Belt shall be developed covering at least 33% of the total project area by September, 2024 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.

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

(xxvi) Specific water consumption in the steel plant shall be less than 6.0 m3/t of finished product.

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

(xxviii) Dedicated railway siding within the steel plant complex shall be established by the proponent by December, 2023 for the transportation of materials as committed.

(xxix) As committed by the PP, they shall prepare and submit the plan to conserve the nearby lakes and shall develop Lake Fronts for two number of lakes nearby.

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

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

B. General conditions

I. Statutory compliance:

i. The Environment Clearance (EC) granted to the project/ activity is strictly under the provisions of the EIA Notification, 2006 and its amendments issued from time to time. It

does not tantamount/ construe to approvals/ consent/ permissions etc., required to be obtained or standards/conditions to be followed under any other Acts/Rules/Subordinate legislations, etc., as may be applicable to the project.

II. Air quality monitoring and preservation

i. The project proponent shall install 24x7 continuous emission monitoring system at process stacks to monitor stack emission as well as 06 Nos. Continuous Ambient Air Quality Station (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 for coke oven and by-product 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 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. Treated water from ETP of COBP shall not be used for coke quenching.
viii. 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 type burners on all reheating furnaces.

VI. Waste management

i. Oil Collection pits shall be provided in oil cellars to collect and reuse/recycle spilled oil. Oil collection trays shall be provided under coils on saddles in cold rolled coil storage area.
ii. Kitchen waste shall be composted or converted to biogas for further use.

VII. Green Belt

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

ii. Project proponent shall submit a study report on Decarbonisation program, which would essentially consist of company's carbon emissions, carbon budgeting/ balancing, carbon sequestration activities and carbon offsetting strategies. Further, the report shall also contain time bound action plan to reduce its carbon intensity of its operations and supply chains, energy transition pathway from fossil fuels to Renewable energy etc. All these activities/ assessments should be measurable and monitorable with defined time frames", when PP comes for EC proposal. This study shall be formulated keeping in view of India's Net-zero commitment at the COP-26 Climate Summit.

VIII. Public hearing and Human health issues

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

ii. The project proponent shall carry out heat stress analysis for the workmen who work in high temperature work zone and provide Personal Protection Equipment (PPE) 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 10 villages, namely Thelkoli, Dhubenchapal (Gontiapada), Banjiberna, Siripura, Kheruwal, Sradhapali, Maliatika, Khadiapali, Sunamal, Derba villages based on the socio-economic survey and undertake community developmental activities in consultation with the village Panchayat and the District Administration as committed by the PP.

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

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

X. Miscellaneous

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

***

Agenda No. 17.6

17.6 Setting of 3.2 MTPA Pellet Plant (PP) and 3.6 MTPA Pellet feed cum Beneficiation Plant (BP) by M/s. Resources Pellets Concentrates Private Limited (RPCL), located at Somalapura Village, Sandur Taluk, Bellary District, Karnataka - Consideration of Environmental Clearance.

[Proposal No.: IA/KA/IND/225778/2021; File No. J- 11011/39/2021-IA I)]
[Consultant: MECON LIMITED; valid upto 09.02.2023]

17.6.1 M/s. Resource Pellets & Concentrate Pvt Ltd (RPCL) has made an online application vide proposal no. IA/KA/IND/225778/2021 Dated 18.08.2022 along with copy of EIA/EMP report and Form – 2 seeking Environment Clearance (EC) under the provision of the EIA Notification, 2006 for the project mentioned above. The proposed project activity is listed at schedule no. 3(a) Metallurgical Industries (ferrous & non-ferrous) and 2(b) Mineral Beneficiation under Category "A" of the schedule of the EIA Notification, 2006 and appraised at Central Level.

17.6.2 Name of the EIA consultant: M/s. Mecon Limited [Sl. No. 49, List of ACOs with their Certificate / Extension Letter no. NABET/EIA/2023/RA 0195; valid upto 09.02.2023, Rev. 24, July 05, 2022].

17.6.3 The proposal cited above was considered during the 12th meeting of the EAC for Industry-I sector held on 30-31st August, 2022. After detailed deliberation, it was observed that

i. The EAC (Industry-1) members are in receipt of a representation dated 30.08.2022 against the project raising objection for issuance of EC for 3.2 MTPA pellet Plant M/s RPCL, Sandur, Karnataka. The EAC is of the opinion that since the issues raised are pertaining to proposed project, the complaint shall be shared with the project proponent for their pointwise reply. Also, it is pertinent to undertake site visit to understand the issues in detail. Accordingly, the Chairman has nominated Dr. S. Ranganathan, Dr. Hemant Sahasrabuddhe and Representative of MoEFCC to conduct the site visit and submit the Report for further deliberations by the EAC.

ii. The EAC observed that M/s RPCL had obtained Transfer of ToR dated 26.02.2021 from M/s. Resource Concentrates Private Limited (RCPL) to M/s. Resource Pellets & Concentrate Pvt Ltd (RPCL) vide letter dated 27.10.2021 from MoEF&CC. However,

the same is not disclosed in the instant EC application. Project proponent is advised to provide complete information in the form of chronology of events undertaken for obtaining EC with requisite documents.

iii. The EAC observed that the area of the project land varies in ToR (178.46 ha), in the submitted brief/PPT (178.13 ha) and EIA/EMP report (440 acres which is equivalent to 178.062 ha). The project proponent is required to clarify the same and is advised to stick to single unit while defining the project area. Further, PP has reported that 104.45 ha has been already acquired and balance 73.68 ha is under process of acquisition through KIADB. M/s RPCL is required to submit detailed status of acquisition and has to complete the acquisition process.

iv. The EAC observed that power requirement for the project has changed to 36 MVA from the recorded 32.6 MVA in TOR. The project proponent did not disclose the same and was was unable to explain the likely changes.

v. The EAC also observed that cost of the project has changed to Rs. 2850 from the recorded Rs. 2000 crores in TOR.

vi. Somalapura (Population: 863 nos) and Yeshwantnagara (Population: 6847 nos) are in close proximity to the project site. Environmental safeguards to be adopted in this regard has not been enumerated in the Report.

vii. The PP has reported that about 119 trees are identified to be felled in the proposed site. PP has not submitted the details of the tree felling and status of permission from the Competent Authority. Thus it is important to understand the nature of the land.

viii. As reported about 9 reserve forests are falling within 10 km radius namely Kumaraswamy Betta, Somalapura RF, Bandri RF Extension, Ramangarh RF, Sivapura RF Extension, Tumbaraguddi RF, SM block RF, Keriyaginahalli RF extension, and Donimalai RF.

ix. M/s. RPCL has declared that Seasonal first order drains are passing through the project site. The PP has not submitted suitable steps / conservation plan along with contouring, Run - off calculations, disposal etc. Further, Narihalla stream is passing in the western direction of project site at about 1.5 km. Drainage Conservation scheme to protect the natural drainage and its flow parameters; along with Soil conservation scheme and multiple Erosion control measures is not submitted.

x. The EAC noted that project proponent has not reported Incremental GLC / AAQ modelling data for CO.

xi. The Traffic assessment study findings is not appropriate. PP is required to undertake exhaustive study and present the data in the existing and post project scenario in the Ministry's prescribed format including LOS details.

xii. PP reported that the conservation plan is prepared for schedule-1 species and the same is submitted to forest dept. for approval. PP is required to submit the updated status of the same with all the requisite documents and should upload on portal.

xiii. Complete details of solid and hazardous waste generation along with its mode of treatment/disposal has not been submitted in the EIA/EMP Report.

xiv. The action plan submitted by the PP to address the issues raised during the public hearing is not in conformity to MoEF&CC O.M. F.No. 22-65/2017-IA.III dated 30/09/2020.

xv. The brief submitted by M/s. RPCL is incomplete and not in the Ministry's prescribed format. For e.g. paragraph mentioning the unit configuration and capacity of proposed units is missing.

xvi. The PP/Consultant has to revise the EIA/EMP Report along with all the details as per the provisions of the EIA Notification, 2006.

17.6.4 In view of the foregoing and after deliberations, the Committee recommended for site visit of the proposed project area by a sub-committee of EAC Industry-1 members comprising of Dr. S. Ranganathan, Dr. Hemant Sahasrabuddhe and Representative of MoEFCC to conduct the site visit and submit the Report. The proposal shall be appraised based on the findings of the sub-committee and deliberation of EAC.

17.6.5 Accordingly, the EAC (Industry-1) sub-committee conducted a site visit to M/s. Resources Pellets Concentrates Private Limited (RPCL), located at Somalapura Village, Sandur Taluk, Bellary District, Karnataka on 22nd September, 2022.

17.6.6 At this instance, the proposal was further considered by the EAC (Industry 1) in its 17th meeting of the EAC for Industry-I sector held on 14-16th November, 2022. The details of the proposed project are as follows:

Details submitted by the project proponent

17.6.7 The detail of the ToR is furnished as below:

Date of application	Consideration	Details	Date of accord	ToR Validity
29.01.2021	30th Meeting of the EAC (Industry-1) held on 10th – 11th Feb. 2021.	Terms of Reference in the name of M/s Resource Concentrates Private Limited (RCPL)	26.02.2021	25.02.2025
13.10.2021	-	Transfer of ToR from M/s. Resource Concentrates Private Limited (RCPL) to M/s. Resource Pellets & Concentrate Pvt Ltd (RPCL)	27.10.2021	
22.12.2021	51st Meeting of the Re-constituted Expert Appraisal Committee (Industry-1) held on 11th – 12th Jan. 2022.	Amendment in ToR in the name of M/s. Resource Concentrates Private Limited (RCPL)	27.01.2022	

Date of application	Consideration	Details	Date of accord	ToR Validity
04.02.2022	Application for name transfer dated 04.02.2022	Corrigendum in ToR Amendment letter dated 27.01.2022 w.r.t. change in name from M/s. Resource Concentrates Private Limited (RCPL) to M/s. Resource Pellets & Concentrate Pvt Ltd (RPCL)	14.03.3022	

17.6.8 The project of M/s. Resource Pellets & Concentrate Pvt. Ltd (RPCL) located in Somalapura Village, Sandur Tehsil, Bellary District, Karnataka is for setting up of a new Pellet and Pellet cum Beneficiation plant for production of 3.2 MTPA Pellets and 3.6 MTPA pellet feed cum Beneficiation plant.

17.6.9 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>Total land is about 178.13 ha.</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 178.13 ha, 104.45 ha has been already acquired and balance 73.68 is under process of acquisition through KIADB.</td><td></td></tr>
<tr><td>iii.</td><td>Existence of habitation & involvement of R&R, if any.</td><td>Project site: No habitation exists in the plant site. R&R not applicable.</td><td>--</td></tr>
<tr><td>iv.</td><td>Latitude and Longitude of all corners of the project site</td><td><table><tr><th>S. No.</th><th>Co-ordinates</th></tr><tr><td>1</td><td>Lat: 15°02’23.26” N, Long: 76°30’13.41”E</td></tr><tr><td>2</td><td>Lat: 15°02’00.16” N, Long: 76°30’36.91”E</td></tr><tr><td>3</td><td>Lat: 15°01’42.91” N, Long: 76°30’34.82”E</td></tr><tr><td>4</td><td>Lat: 15°01’32.98” N, Long: 76°30’50.02”E</td></tr><tr><td>5</td><td>Lat: 15°01’17.37” N, Long: 76°30’55.62”E</td></tr><tr><td>6</td><td>Lat: 15°01’09.54” N, Long: 76°30’25.04”E</td></tr><tr><td>7</td><td>Lat: 15°01’26.96” N, Long: 76°30’23.79”E</td></tr><tr><td>8</td><td>Lat: 15°01’35.02” N, Long: 76°30’12.56”E</td></tr></table></td><td>--</td></tr>
<tr><td>v.</td><td>Elevation of the project site</td><td>625 to 655 M above mean sea level</td><td>--</td></tr>
<tr><td>vi.</td><td>Involvement of Forest Land, if any</td><td>Nil</td><td>--</td></tr>
<tr><td>vii.</td><td>Water body (Rivers,</td><td><u>Project Site:</u> Seasonal first order drains.</td><td></td></tr>
</table>

S. No.	Particulars	Details	Remarks
	Lakes, Pond, Nala, Natural Drainage, Canal etc.,) exists within the project site as well as study area	**Study area:** Narihalla stream is passing in the western direction of project site at about 1.5km.	No major water bodies are located within the study area
viii.	Existence of ESZ / ESA / National Park / Wildlife Sanctuary / Biosphere Reserve / Tiger Reserve / Elephant Reserve etc. if any within the study area	Nil	

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

S. No.	Name	Proposed Units		Total
		Configuration	Production TPA	
1.	Pellet Plant	3.2 MTPA	3200000	3.2 MTPA
2.	Beneficiation Plant	3.6 MTPA	3600000	3.6 MTPA

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

S. No.	Raw material	Quantity (T/Year)	Source	Distance from site	Mode of transportation
1	Iron ore fines	45,00,000 to 50,00,000	Indigenous (Mines belongs to group companies and other mines)	50	Downhill conveyor/ Road
2	Bentonite	27,000	Indigenous (Gujarat/nearby sources)	1500	Rail/road
3	Coke breeze	70,000	Indigenous (Bellary/Gujarat)	1500	Rail/road
4	Limestone/ dolomite	70,000	Indigenous (Bellary/Gujarat)	1500	Rail/road

17.6.12 Water requirement for the project is estimated as 6600 m^3/day, which will be obtained from Tunga Bhadra Dam by laying 700mm dia. pipeline at a distance of 35 Km. The permission for the same has been obtained from Water Resources Department, Government of Karnataka vide letter no. J.Sam.E21 MTP 2020, dated 23.02.2021.

17.6.13 The power requirement for the proposed project is estimated as 36 MVA for which permission from KPTCL is obtained vide letter dated 11.01.2021.

17.6.14 Baseline Environmental Studies

Period	**March to May 2021**
AAQ Parameters at 8 locations	• $PM_{2.5}$ = 23 to 40 µg/m^3 • PM_{10} = 52 to 73 µg/m^3 • SO_2 = 5.20 to 13.20 µg/m^3 • NO_2 = 9.40 to 19.20 µg/m^3 • CO = 218 to 1542 µg/m^3
AAQ Modeling (Incremental GLCs)	• PM_{10} = 16.33 µg/m^3 (Within project site) • $PM_{2.5}$ = 3.95 µg/m^3 (Within project site) • SO_2 = 3.42 µg/m^3 (Within project site) • NO_X = 7.33 µg/m^3 (Yeshwantnagar South, 1km)
Groundwater quality at 8 locations	pH: 6.52 to 7.12, Total Hardness: 340 to 1210 mg/l, Chlorides: 70 to 750 mg/l, Fluoride: 0.7 to 1.4 mg/l, Heavy metals: <0.001 to <0.01
Surface water quality at 9 locations	pH: 6.71 to 7.21, DO: 4.7 to 6.8 mg/l, BOD: <2 mg/l, COD: 34 to 73 mg/l.
Noise levels at 8 locations	37.5 to 54.1 DBA for day time and 35.1 to 48.2 DBA for night time.
Traffic assessment studyfindings	• Traffic study has been conducted at SH 40, Sandur to Kudligi which is approximately 01 (distance) from the plantsite. • Transportation of raw material, fuel & finished product will be done 30% by road. • Existing PCU in SH = 8005 PCU/day. • Additional traffic load during operation of the project (PCU/Day) = 1305 PCU/day • Total traffic load during operation of the project = 9310 PCU/day • Traffic capacity as per the IRC 73: 1980 for highways (PCU/Day) = 15000 PCU/day • Available capacity after the plant operation = 5690 PCU/day
Flora and fauna	The conservation plan is prepared for schedule-1 species.

17.6.15 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	Tailings	Beneficiation	1500000	-	Stacking in a disposal area

		plant	TPA		
2	Spent Oil	DG Sets, Transformers etc.	3 m^3/year	Sold to authorised vendors as per KSPCB norms	

17.6.16 Public Consultation

Date of advertisement	21 March 2022
Name of newspapers	National Paper (Decan Hearald) Regional Paper (Vijaya Karnataka)
Date on which Public Hearing conducted	22 April 2022
Venue	Project site Somalapura
Attended by	District Magistrate
Issues are	Employment generation, Education facilities to locals, pollution & health related issues to local villagers.

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

S. No.	Issues raised during Public Hearing	Commitment by project proponent	Action plan with time frame and budget
1	Employment generation and area development	About 1000 and 534 persons will be employed during construction and operation respectively. Mostly it will be sourced from the nearby villages. Development of surrounding villages will be carried out through CER and CSR funds.	CER amount of Rs. 25.75 Crore is planned to be spent during the time of construction period with a span of 60 months. CSR funds will be spent every year once the plant is commissioned.
2	Education for local	An amount of Rs. 100 lakhs are earmarked against the CER head of Education and skill development for local peoples.	This amount will be spent during construction stage i.e. 2023-2024.
3	Issues on Pollution	During construction, the measures like wetting of the roads, green belt development, erection of wind curtains and controlled vehicle movement will bring down the fugitive emissions level. Further, a modelling has been carried out to predict the fugitive dust generation during construction and the highest GLC values are occurring within the project site only and also the values are well within the AAQ norms.	About Rs. 144.3 Crore is planned to be spent towards pollution control equipment, Rs. 10 Crore is planned to be spent on monitoring system and about Rs. 15.5 Crore is likely to be incurred towards recurring cost.

S. No.	Issues raised during Public Hearing	Commitment by project proponent	Action plan with time frame and budget
		In addition, the nearest villages are Yeshwantnagara and Somalapura from project site. The width of the plantations in the project boundary near villages are about 50m is envisaged to reduce the impact through fugitive dust. **<u>During operation:</u>** To control air pollutions during operation various environmental pollution control measures are adopted in the proposed project like Dust Extraction systems, suitable stack heights, ESP's, Dry fog dust suppression system/secondary dust extraction system, hood extraction, bag filters, water spray as suitable to site, covered conveyors, Process Flue gas cleaning, water sprinklers in tailing disposal area etc. are adopted.	

17.6.17 The capital cost of the proposed project is Rs. 2850 Crore and the capital cost for environmental protection measures is proposed as Rs.154.3 Crore. The annual recurring cost towards the environmental protection measures is proposed as Rs. 15.5 Crore. The employment generation from the proposed project is 534 nos. The details of cost for environmental protection measures is as follows:

S. No.	Item	Capital cost (Rs. in Crore)	Recurring cost per annum (Rs. in Crore)
A.	**Environmental Pollution Control**		
1	Air pollution control measures (ESP, Bag filters, Cyclone separators, Dry fog systems Water sprinklers, primary and dust extraction system, Fume hood) etc.	33.5	3.5
2	Gun type Water sprinklers around the solid waste dump and paste thickener/filter press and construction bund around the disposal area	65	6.5
3	Water pollution control measures (WTP and STP)	3	0.3
4	Noise pollution like erection of wind curtain, extended green belt etc.	1	0.1
5	Occupational health & nearest village medical camp	1	0.1
6	Personal safety equipment	0.5	0.05
7	Rain water harvesting system	34.8	3.4
8	Scavenger machines	3.0	0.3

S. No.	Item	Capital cost (Rs. in Crore)	Recurring cost per annum (Rs. in Crore)
9	Municipal solid waste management like Organic Waste Converter	1.0	0.1
10	Ground water monitoring network around the solid waste disposal area including drilling and installation of piezometer and minimum 10 places	1.5	0.15
B.	**Environmental and pollution monitoring**		
1	Environmental survey and sampling (Continuous AAQ monitoring system for 4 stations inside the plant including uploading into SPCB server with digital display board at plant site)	5	0.5
2	On line monitoring system for STP and stacks	2	0.2
3	Green belt development	3	0.3
C.	**Corporate Environment Responsibility (CER)**		
	CER will be spent during construction period (2021-2023)	25.75	-
D.	**Conservation plan of Schedule 1 fauna**		
	Conservation plan	0.5	-
	Total	**180.55**	**15.5**

17.6.18 Proposed greenbelt will be developed in 58.70 ha which is about 33% of the total project area. A 15m 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 146750 saplings will be planted and nurtured in 58.70 hectares in 5 years.

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

17.6.20 It was noted that the EAC Members are in receipt of a representation dated 30.08.2022 against the project raising objection for issuance of EC for 3.2 MTPA pellet Plant M/s RPCL, Sandur, Karnataka. Some of the important issues raised in the representation are as follows:

1. The proposed location of establishment of plant at fertilized agricultural land (but it has been purchased from most of the land through Benami transaction/ in the name of company earlier to proposed to seek establishment of plant) therefore easy claim land without any oppose for acquire of the land. Some people (agriculturist) had opposed the acquisition and still it is pending before the KIADB authorities, Davanagere.
2. The proposed location is adjacent to the forest land and surrounding within 1 km of radius there is a reserve forest, flora fauna, reservoirs, ancient temples, medicine plants etc.
3. The proposed location of establishment of plant rain catchment area and water will flow from forest and it will to reach the Narihalla water reservoirs about 8 km, the said

reservoir is for drinking water for entire Sandur town and it causes the closing of natural diversion of the water.

4. The proposed location is very near to the village of Somalapura, Yeshwanthanagara within 300 meter, within 150 meter one Polytechnic college located.
5. The Grama Panchayath, Yeshwanthanagara, Sandur Taluk, Ballari have passed three resolution for oppose of establishment of RPCL Plant or any other plant within the jurisdiction of the said Grama Panchayath, Yeshwanthanagara.
6. Public hearing conducted by the Karnataka State Pollution board is not accordance with guidelines, in the said meetings other representatives like Grama panchayath, ecology, environment and forest and senior citizen of the locality were absent in hearing committee evaluates the suggestions/ objections submitted by the general public.
7. During the public hearing, 90% of the affected villages are opposed for establishment of plant (RPCL) kindly see the video of gathered more than 3 to 4 thousands of people are gathered. The villagers came with their bullock carts in this public meeting.
8. Already air pollution rampant due to mining operation surrounding the villages. The ambit of air pollution is not within the limits.
9. The health of the people is not with good condition, they are already suffering from many diseases because of the mining operations.
10. If pellet plant established in that location further causing degradation of the forest, agriculture, water table, flora fauna and further impact of air pollution even if taken any precautions.
11. Most of the association/ NGO's who have given representation on the date of public hearing, the said representation cannot be considered because the said association only to conduct the awareness to the public of that village about advantage or disadvantage and effect about the establishment of proposed pellet plant. Definitely the said representation indicate fraud/ fake/ paid/political and therefore not to consider the representation.
12. Some representation of the association are inactive and functioning against their bylaws. Therefore, detail investigation is required.
13. Unfortunate events that, those persons/ locals who opposed in the public hearing for the establishment of factory, those were booked for false complaint before the jurisdiction police by the influence of the owner.

17.6.21 **Submission of PP during the 17th EAC meeting on the observations/recommendations made by the sub-committee based on the site visit:**

S. No.	Observations/Recommendations made by the sub-committee based on the site visit	Submission of PP during the 17th EAC held during 14th – 16th November, 2022
1.	The modelling carried out on GLC indicates that the particulate matter and SO_2 will be within the critical limit for safeguarding human health. Further, the PP should correct the statement cited in their report as mentioning that there is no Archaeological monument within 10	The predicted incremental load is calculated at project site is about 16.33 µg/m^3 for (PM10) for initially 4 years due to transportation of iron ores by road from nearby mines. After 4 years, it is significantly reduced to 1.08 µg/m^3 as the transportation of iron ores are planned by downhill conveyors from nearby mines. This is only for initial duration of four years. However, the mitigation measures like concrete roads, frequent wetting of roads,

<table>
<tr><th>S. No.</th><th>Observations/Recommendations made by the sub-committee based on the site visit</th><th>Submission of PP during the 17th EAC held during 14th – 16th November, 2022</th></tr>
<tr><td></td><td>km radius</td><td>tarpaulin covered material handling, SOP for vehicle movement are proposed.

<u>Scenario: 1 (for initial 4 years)</u>
<table>
<tr><th>Parameters</th><th>Unit</th><th>Baseline AAQ – C98 (A)</th><th>Predicted GLCs due to the proposed project (B)</th><th>Cumulative AAQ (A+B)</th></tr>
<tr><td>PM_{10}</td><td>µg/m^3</td><td>71.08</td><td>16.33</td><td>87.41</td></tr>
<tr><td>$PM_{2.5}$</td><td>µg/m^3</td><td>38.08</td><td>3.95</td><td>42.03</td></tr>
<tr><td>SO_2</td><td>µg/m^3</td><td>11.76</td><td>3.42</td><td>15.18</td></tr>
<tr><td>NOx</td><td>µg/m^3</td><td>18.38</td><td>6.71</td><td>25.09</td></tr>
</table>
<u>Scenario: 2 (after 4 years)</u>
<table>
<tr><th>Parameters</th><th>Unit</th><th>Baseline AAQ – C98 (A)</th><th>Predicted GLCs due to the proposed project (B)</th><th>Cumulative AAQ (A+B)</th></tr>
<tr><td>PM_{10}</td><td>µg/m^3</td><td>71.08</td><td>1.08</td><td>72.16</td></tr>
<tr><td>$PM_{2.5}$</td><td>µg/m^3</td><td>38.08</td><td>0.66</td><td>38.74</td></tr>
<tr><td>SO_2</td><td>µg/m^3</td><td>11.76</td><td>2.73</td><td>14.49</td></tr>
<tr><td>NOx</td><td>µg/m^3</td><td>18.38</td><td>2.30</td><td>20.68</td></tr>
</table>
Further, the predicted incremental load is added to receptor values (background values) and it is found to be well within the AAQ norms.
Existence of archaeological monument within 10 km radius is corrected and mentioned in the EIA report as “Kumaraswamy temple is located at about 6.06 km from the project site in eastern direction.

There will not be any impact to Kumaraswamy temple since the elevation of temple is higher than plant elevation with a difference of 252m AMSL. In addition, two intervening hillocks with full of greeneries are also present at a height of 1037m each w.r.t. MSL.</td></tr>
<tr><td>2.</td><td>As estimated by the PP, about 1200 tonnes of SO_2 gas will be emitted by the pelletizing Plant, per annum. The severity of this pollution is masked in the modelling calculations because of the huge amount of dilution of the</td><td>➢ Volume of gas from the pellet plant wind box exhaust is 749580 Nm^3/hr.
➢ Standard Norms for SO_2 is 500 mg/Nm^3.
➢ Based on the above, Permissible SO_2 generation is 104.10 g/sec (2878.15 Tonne/year).
➢ SO_2 prediction from Pellet plant wind box exhaust is 37 g/sec</td></tr>
</table>

S. No.	Observations/Recommendations made by the sub-committee based on the site visit	Submission of PP during the 17th EAC held during 14th – 16th November, 2022
	flue gases with air, in the process. Not only the impact on human health, but the impact on the health of the monument also must be considered in this case. Hence, this issue must be scrutinised closely. The PP should ensure that the SO_2 is reduced significantly before the gas leaves the chimney. They should prepare a mitigation plan for this and submit the same for further deliberations by the EAC.	(1022.97 Tonne/year) which is 2.8 times lesser than the permissible limit. ➢ Further, the emissions are discharged through 85m tall chimney for proper dispersion in the environment
3.	The PP shall remove tailings from the designated area periodically once in six months and shall execute a MOU with intending parties for the removal of tailings.	As per Para 16 (vii) & 17 of the original TOR dated 26.02.2021, the PP was asked to submit a plan to reduce storage up to 90 days of the tailings generated. However, in view of such condition being impractical and implemented nowhere in the country/world. The PP had thereafter sought an amendment to the above condition. As per the condition 9 & 10 of the amended TOR dated 27.01.2022, the tailings shall be dewatered in filter press and stacked in stable stockpile over an area of 50 acres, as per the design by IIT Delhi after their study (attached report). Further, green belt shall be created in & around stockpiles without disturbing the existing watercourses therein. Nevertheless, efforts shall be made from time to time to remove tailings as much as possible for downstream use in construction activities & an MOU to that effect is signed & submitted. However, it is practically not feasible to commit on its removal every six months or any fixed period because of poor & unstable demand of the said product in the market either domestically or internationally. Pertinently, it may be noted that the EC granted by MOEF CC for similar plants, including some granted in the recent past viz.; Orissa Sponge (submitted) does not have any such compulsion on removal of tailings at a fixed time interval. Further, the prevalent international practice also requires disposing off dry tailings (filter cake) and stacking the same in safe stockpiles with vegetation over it for bio-stabilisation (International Mining News submitted). The Global Industry Standards (published by UNEP, ICMM, and PRI in Aug 2020) also does not mandate periodic removal of tailings from its storage

S. No.	Observations/Recommendations made by the sub-committee based on the site visit	Submission of PP during the 17th EAC held during 14th – 16th November, 2022
		facilities. Pertinently all the major operators in the country including the eight plants in our nearby area (list attached submitted) are still disposing off tailings in a more risky liquid slurry form without any mandate for its periodic removal. Compared to that, our proposed stacking of dry filter cake, as per amended TOR condition, is obviously safer and being first in the state of Karnataka, it deserves to be promoted without any further condition for its periodic removal, until at least the downstream construction industry matures enough to absorb such waste in substantial quantities.
4.	All the commitments made to the public during the Public Hearing/Public Consultation shall be satisfactorily implemented. The action plan based on the social impact assessment study of the project as per the EMP in accordance to the Ministry's OM dated 30.09.2020 shall be strictly implemented. The PP should prepare a separate chapter to address the representations received at the MoEF&CC directly from the local population.	All the commitments made to the public during PH will be satisfactorily implemented during the construction period of 54 months. The action plan is prepared and the same is covered in Chapter-7, Table 07 – 02. Separate chapter with point wise replies has been prepared against local's representation to MoEF&CC and the same is enclosed as a part of EIA report.
5.	In response to PH query #17, the PP asserts that the predominant wind direction at the site is West-to-East. This is not true. The wind direction changes with season. It appears that the PP is making the assertion based on the Wind Rose Diagram for the season March-May. However, in the Bellary region, the wind blows South-West to North-East during December - February. The PP should reanalyse the Wind Rose diagram for the other seasons also and examine the wind direction and speed and reuse the data accordingly. This has a lot of relevance to the erosion of the tailings-mound.	The ToR was issued by MoEF&CC on 26.02.2021, as received ToR immediately the baseline data generation at site was carried out during March to May 2021 considering the north-east monsoon starts from July to Sep. in Karnataka. In addition, the following mitigation measures have been adopted to reduce the impact if any on the neareby villages. ➢ Width of 25m Green belt is planned all along the periphery ➢ About 15.90 ha land of green belt is envisaged near villages within the project site ➢ Frequent road wetting, WT roads, SOP for vehicle movement is envisaged ➢ Vegetation is planned (bio-stabilization) on the tailings slope to arrest the dust if any ➢ In addition, the dust will not be generated from tailings stack due to compactness in nature
6.	The PP obtained the ToR mentioning that furnace oil would be replaced	During subcommittee site visit, RPCL informed that presently LNG pipeline is not available at Sandur. In future the FO will be

S. No.	Observations/Recommendations made by the sub-committee based on the site visit	Submission of PP during the 17th EAC held during 14th – 16th November, 2022
	with LNG in future, implying that the use of FO was a temporary arrangement. The PP has categorically stated during the visit of the sub-committee that replacement of FO with LNG has been abandoned forever. The PP shall adhere the statement made in ToR.	replaced with LNG against the availability of LNG pipeline in Sandur. In addition, already dual burner arrangements of 20 nos. in induration machine are envisaged.
7.	The industry has to report on the existence of other industries within a radius of 10 K.M. (Page 52, E.I.A. Report) as required by ToR. However, the PP has reported industries only within 5 K.M. radius (page 75, E.I.A. Report). The PP should correct this and report on industries within 10 Km radius as prescribed in the ToR issued by the Ministry.	Complied. About 9 mining industries are located within 5 km radius and 2 Beneficiation plants are located 5 to 10 km radius. The industry details are mentioned in Chapter-2, Clause 02.04.03, 2) page no. 16 and in subsequent slide for immediate reference.
8.	For streams within project area, PP should proceed for preparation of contour with a Permanent Bench Mark established and all streams shall be protected and a water conservation Plan shall be prepared. For Narihalla stream, the PP should prepare a conservation plan with a construction of retaining wall or earthen bund of sufficient height to safeguard. Proper mitigation measures may be adopted to protect the nallah/drains as well as Narihalla stream. A water conservation plan for the water bodies present in the project site is essential with respect to contouring of the area and PP to ensure that no disposal of drainage inside the project area shall be letting into the natural water bodies exist within and around project site. PP further to ensure that the Narihalla stream is also safeguarded by preparing a conservation plan with the help of contouring.	Water conservation plan like 4 storm water tanks with different capacities with suitable garland drains are envisaged to harvest the surface run-off generated from the plant. The location of tanks is selected in the lower most area as per contour plan to ensure the natural gravity flow. Mitigation measures like Green belt width of 15m along with suitable height of retaining wall is planned in the vicinity of water bodies/nallah near tailings disposal area. Proper drainage system is planned to divert the entire surface run-off generation in the tailings disposal area to avoid any discharge to Narihalla stream. Necessary precautions have already been taken care that no drainage inside the project area will be let into the natural water bodies exist within and around the project site.

S. No.	Observations/Recommendations made by the sub-committee based on the site visit	Submission of PP during the 17th EAC held during 14th – 16th November, 2022
9.	As discussed with PP on site, a detailing of layout plans for Green Belt within site and outer periphery @ 30M width, Land use plans, Roads with proper traffic channelization in the context of movement of fire tenders, Indexing indicating all activities, Contours with water conservation plan with respect Bench Mark, Area statement, Drainage disposal within site area safeguarding existing streams etc shall be prepared in a separate drawing as discussed in detail. No diversion of any stream or nallaha shall be permitted in the project site. Further the PP shall submit revised Water Balance data.	As suggested by sub committee during site visit, 25 m wide green belt is planned all along the periphery with three tier system. About 63.67 ha, i.e., 35.68% green belt is planned within the project site and its boundary. Land use plans, area statements, roads of 4, 7, 10 and 12m width of about 17 km length is considered in the context of movement of fire tenders / trucks. Water conservation plan with 4 storm water tanks of different capacities with suitable garland drains are envisaged and the location of tanks is finalised as per contour plan. The revised plan is shown in below drawing and the same is covered in Chapter-2, Fig. 02 – 04, page no. 13. No diversion of existing nallah/stream is planned. The water balance is revised and the present make-up water consumption per day is 5397 m^3/day in place of 6600 m^3/day as per issued ToR. Make-up water requirement: Min 3919 m^3/day and max 5397 m^3/day is required. ZLD concept is envisaged.
10.	The Green belt of about 25-30m depth may be developed in the vicinity of water bodies/Nallah/drain/stream. Further PP to ensure a thick Green belt all around project boundary within the project site with three tier system. The revised plan shall be submitted to the EAC for further deliberation.	As suggested by subcommittee during site visit, Green belt width of 15m along with suitable height of retaining wall is planned in the vicinity of existing water bodies/nallah near tailings disposal area. Width of 25m green belt is planned all along the periphery with three tier system. The revised plan is shown in below drawing and the same is covered in Chapter-2, Fig. 02 – 04, page no. 13.
11.	The PP to prepare a land use plan for land which is acquired and remaining which is not yet acquired giving boundary area with proper indexing.	Complied. The same is shown in the submitted drawing and the same is covered in Chapter-2, Fig. 02 – 02, page no. 11.
12.	The PP to provide a proposed Green Belt Plan for the project site as per EIA notifications 2006 with different colour code in the index.	Complied. The same is shown in the submitted drawing and the same is covered in Chapter-2, Fig. 02 – 04, page no. 13.
13.	The PP to provide a layout plan showing all internal roads networks for smooth traffic flow, including fire tender as per NBC. Road network shall connect all service areas in layout. This drawing shall include area statement showing plot area, area under roads, parking, green belt with calculations and % with respect	Complied. The same is shown in the submitted drawing and covered in Chapter-2, Fig. 02 – 04, page no. 13.

S. No.	Observations/Recommendations made by the sub-committee based on the site visit	Submission of PP during the 17th EAC held during 14th – 16th November, 2022
	to plot area of project site and proper indexing.	

Deliberations by the Committee

17.6.22 The Committee noted the following:

1. The instant proposal is for setting up of a new Pellet and Pellet cum Beneficiation plant for production of 3.2 MTPA Pellets and 3.6 MTPA pellet feed cum Beneficiation plant. The proposal was initially considered during the 12th meeting of the EAC for Industry-I sector held on 30-31st August, 2022 and after deliberations, the Committee recommended for site visit of the proposed project area by a sub-committee of EAC Industry-1 members. Accordingly, the EAC (Industry-1) sub-committee conducted a site visit on 22nd September, 2022 and submitted a site visit report on their observations and recommendations.

2. The PP/Consultant presented the case before the EAC on the Observations/ Recommendations made by the sub-committee based on the site visit. The EAC deliberated on the submission of PP to the points recorded by the subcommittee and provided suggestions to project proponent pertaining to revision/adoption of drainage conservation, quick disposal/reuse of tailings, CER activities, village adoption and other mitigation measures to minimise the environmental impacts due to project activities. The Committee further agreed to 'in principle' recommendation for grant of EC, however, due to some technical/factual errors observed in the proposal form on PARIVESH and the aforesaid suggestions provided by the EAC, and further taking into consideration the online process of generation and grant of EC on PARIVESH, the EAC is of the opinion that the instant proposal shall be returned for rectification of the technical/factual issues.

3. The EAC is also of the opinion the project proponent shall upload their submission on PARIVESH related to representation dated 30.08.2022 received against the project raising objection for issuance of EC and submission of PP on the observations/recommendations made by the sub-committee based on the site visit.

4. The EAC also advised the project proponent to upload the documents pertaining to the suggestions provided by the EAC related to revision/adoption of drainage conservation, quick disposal/reuse of tailings, CER activities, village adoption and other mitigation measures to minimise the environmental impacts due to project activities

5. The PP/Consultant also agreed to the suggestions made by the Committee and requested to reappear before the EAC with a revised application after rectification of the issues raised by the EAC.

Recommendations of the Committee:

17.6.23 In view of the foregoing and after deliberations, the Committee recommended that proposal to be **returned in its present form** to address the technical/factual errors observed in the

proposal form on PARIVESH and the documents submitted by project proponent and submit the updated EIA/EMP report along with all the details after rectification of the issues as detailed in para 17.6.22 above in accordance to the provisions of EIA Notification, 2006. After uploading the revised Report, the same may be placed before the EAC for deliberations.

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Modification in Environmental Clearance Proposal

Agenda No. 17.7

17.7 Amendment in Environmental Clearance for exclusion of 6 Acres land from part of survey number 653/B, out of total area of 240 Acres to M/s SLR Metaliks Limited, located at village Narayanadeverakere, Taluka Hagaribommanahalli, District Vijayanagar, Karnataka – Consideration of Amendment in Environmental Clearance.

[Proposal No. IA/KA/IND/292327/2022; File No. F. No. J-11011/257/2013-IA II(I)]

17.7.1 M/s SLR Metaliks Limited has made an online application vide proposal no. IA/KA/IND/292327/2022 dated 29.09.2022 along with Form-4 and addendum EIA report and sought for amendment in Environmental Clearance accorded by the Ministry vide File no. J-11011/257/2013-IA II(I) dated 31.03.2015 and subsequent amendment dated 09.03.2016 w.r.t. exclusion of 6 Acres land from part of survey number 653/B, out of total area of 240 Acres.

17.7.2 Name of the EIA consultant: M/s. Ecomen Laboratories Pvt Ltd. [Sl. No. 158, List of ACOs with their Certificate / Extension Letter no. NABET/EIA/2023/RA 0203; valid upto 21.09.2023, Rev. 25, Sept 05, 2022].

Details submitted by Project proponent

17.7.3 M/s SLR Metaliks Limited was granted environmental Clearance by MoEF&CC vide letter No. J-11011/257/2013-IA II(I) dated 31.03.2015 for expansion of existing pig iron manufacturing industry consisting of 262 m^3 blast furnace, 33 m^2 sinter plant and 6 MW blast furnace off gas power plant by installation of 0.30 MTPA steel, 0.32 MTPA Rolling Mill, 0.12 MTPA coke oven plant, 9 MW coke oven off gas based power plant, 120 TPD oxygen plant and Producer Gas Plant. Further, amendment to EC was obtained vide letter dated 09/03/2016 for change of fuel in 1x6 MW Captive power plant from BF gas to imported coal, change of fuel in reheating furnace of 0.32 MTPA Rolling mill from Furnace Oil to Blast Furnace gas and reduction in capacity of Producer gas plant from 15000 to 5500 Nm^3/hr. The project proponent also obtained extension of the validity of above EC vide letter no. J-11011/257/2013-IA. II(I) dated 22.04.2022 valid up to 30/03/2025. Consent to Operate (CTO) from Karnataka State Pollution Control Board was obtained periodically from time to time and current Consent to Operate obtained from KSPCB vide Consent Order No. AW-332167 dated 08.07.2022 and is valid till 03.06.2027.

EC		CTE		CTO	
EC Details	**Production Details**	**CTE Details**	**Production Details**	**CTO Details**	**Production Details**
EC J-11011/766/2008-IA II (I) dated 30.08.2010	Sinter: 33m^2 MBF: 262m^3 Power Gen.: 6MW	No. 14/KSPCB/SEO/MINES/CFE/2011-12/139 dated 27/05/2011	Sinter: 33m^2 MBF: 262m^3 Power Gen.: 6MW	No. 84/PCB/MIN/CFO/2012-13/430 dated 11/07/2012	Sinter: 33m^2 MBF: 262m^3 Power Gen.: 6MW
EC for Expansion J- 11011/257/2013-IA II (I) dated 31.03.2015	1. SMS (Billets) – 3,00,000 TPA 2. Pulverized coal-10 TPH 3. Rolled steel products – 3,20,000 TPA 4. Coke oven 1,20,000 TPA 5. 9 MW Off gas based power plant 6. 120 TPD Oxygen Plant 7. 15000Nm^3/h Producer gas plant	No.11/KSPCB/SEO/MINES/CFE/2015-16/156, dated 08/05/2015	1. SMS (Billets) – 3,00,000 TPA 2. Pulverized coal-10 TPH 3. Rolled steel products – 3,20,000 TPA 4. Coke oven 1,20,000 TPA 5. 9 MW Off gas based power plant 6. 120 TPD Oxygen Plant 7. 15000Nm^3/h Producer gas plant	AW-302794 dated 06/06/2017 & AW-332167 Dated 08.07.2022 Valid upto 03.06.2027	1. SMS (Billets) – 3,00,000 TPA 2. Pulverized coal-10 TPH 3. Rolled steel products – 3,20,000 TPA 4. Crushed mineral ore, stone, slag products – 144000 MT/ month 5. Pig iron – 2,00,000 TPA 6. Power generation – 6 MWH 7. Sinter –3,31,000 TPA (*Monthly figure converted to Annual figure in all items)
Amendment to EC J-11011/257/2013-IA II (I) dated 09.03.2016	1. RHF: Furnace	Amendment to Consent for Establishment (CFE) vide KSPCB/SEO/MINES/ 2016-17/4904, dated 23/11/2016	1. RHF: Furnace	AW-332167 dated 08.07.2022 Valid upto 03.06.2027	RHF: Fuel change in RHF implemented.
EC Validity Extension	The project proponent also obtained extension of the validity of above EC vide letter no. J-11011/257/2013-IA. II(I) dated 22.04.2022 valid up to 30/03/2025.				

17.7.4 Implementation status of existing EC:

S. No.	Unit (Configuration)	Product	Unit	Production Capacity	Implementation Status
1.	Blast Furnace (262 m^3)	Hot metal	TPA	210000	Implemented
		Pig Iron	TPA	200000	Implemented

S. No.	Unit (Configuration)	Product	Unit	Production Capacity	Implementation Status
2.	Captive power plant (BF based)	Electricity	MW	6	Implemented
3.	Sinter plant (32 m^2)	Sinter	TPA	331000	Implemented
4.	PCI unit (1X10 TPH)		TPH	10	Implemented
5.	Steel Meltoing Shop (SMS)	Billets	TPA	300000	Implemented
6.	Rolling Mill	Rolled Steel products	MTPA	320000	Implemented
7.	Coke oven (Non recovery)	coke	MTPA	120,000	Not Implemented
8.	Coke oven off gas based power Plant (WHRB)	Electricity	MW	9	Not Implemented
9.	Air separation unit	Liq Oxygen	TPD	120	Implemented
10.	Producer gas plant	Producer gas	Nm^3/hr	5,500	Not Implemented

17.7.5 The instant proposal is for seeking amendment in EC dated 31.03.2015 and subsequent amendment dated 09.03.2016 w.r.t. exclusion of 6 Acres land from part of survey number 653/B, out of total area of 240 Acres as detailed below:

1. Land use break up Existing and Proposed:

S. No.	Land Utilization description	Existing Land use		Proposed Land use (After proposed EC Amendment)	
		in Acre	in %	in Acre	in %
1.	Built-up area	29	12	29	12
2.	Raw material Storage Yards	25	10	25	11
3.	Roads	12	5	12	5
4.	Water Storage Reservoirs	18	8	18	8
5.	Afforestation	82	34	82	35
6.	Coke oven & Associated facilities + Producer gas plant (yet to be installed)	26	11	26	11
7.	Vacant Land	49	20	43	18
	Total	**240**	**100**	**234**	**100**
Note: The entire area of 6.0 acre does not have any facility related to Existing Environmental Clearance. It shall be used by 3rd Party for slag processing.					

2. Co-ordinates of the Project Site:

Existing Area (240 acre without Exclusion)		Proposed Area (234 acre) After Exclusion of 6.0 Acre		6.0 Acre area to be excluded	
1.	15°11'20.51"N 76°18'48.85"E	1.	15°11'20.51"N 76°18'48.85"E	10A	15°10'57.31"N 76°19'39.70"E

Existing Area (240 acre without Exclusion)		Proposed Area (234 acre) After Exclusion of 6.0 Acre		6.0 Acre area to be excluded	
2.	15°11'21.51"N 76°19'7.94"E	2.	15°11'21.51"N 76°19'7.94"E	10B	15°10'53.48"N 76°19'39.01"E
3.	15°11'22.69"N 76°19'20.94"E	3.	15°11'22.69"N 76°19'20.94"E	10C	15°10'56.84"N 76°19'32.31"E
4.	15°11'20.43"N 76°19'23.40"E	4.	15°11'20.43"N 76°19'23.40"E	10D	15°10'53.19"N 76°19'32.86"E
5.	15°11'10.26"N 76°19'24.80"E	5.	15°11'10.26"N 76°19'24.80"E		
6.	15°11'5.92"N 76°19'38.74"E	6.	15°11'5.92"N 76°19'38.74"E		
7.	15°11'0.97"N 76°19'37.55"E	7.	15°11'0.97"N 76°19'37.55"E		
8.	15°11'1.18"N 76°19'32.67"E	8.	15°11'1.18"N 76°19'32.67"E		
9.	15°10'58.17"N 76°19'31.83"E	9.	15°10'58.17"N 76°19'31.83"E		
10.	15°10'57.57"N 76°19'38.74"E	10.	15°10'57.57"N 76°19'38.74"E		
10A	15°10'57.31"N 76°19'39.70"E	10C	15°10'56.84"N 76°19'32.31"E		
10B	15°10'53.48"N 76°19'39.01"E	10D	15°10'53.19"N 76°19'32.86"E		
11.	15°10'53.32"N 76°19'36.79"E		15°10'53.32"N 76°19'36.79"E		
12	15°10'50.03"N 76°19'35.26"E	12	15°10'50.03"N 76°19'35.26"E		
13	15°10'51.44"N 76°19'31.82"E		15°10'51.44"N 76°19'31.82"E		
14	15°10'52.48"N 76°19'15.36"E	14	15°10'52.48"N 76°19'15.36"E		
15	15°11'3.62"N 76°18'48.14"E	15	15°11'3.62"N 76°18'48.14"E		

3. Final matrix after EC amendment

S. No.	Particular		Existing EC	Proposed EC Amendment	After EC Amendment
1.	Area		240 acre	(-) 6 acre	234 acre
2.	Water		3005 m^3/day	--	3005 m^3/day
3.	Power		40 MVA	--	40 MVA
4.	Greenbelt		82 acre	--	82 acre
5.	Blast Furnace	Hot Metal	210000 TPA	--	210000 TPA
		Pig Iron	200000 TPA	--	200000 TPA
6.	Captive power plant (coal based)		6MW	--	6MW
7.	Sinter plant		331000 TPA	--	331000 TPA
8.	PCI unit		10 TPA	--	10 TPA

S. No.	Particular	Existing EC	Proposed EC Amendment	After EC Amendment
9.	Steel Melting Shop	300000 TPA	--	300000 TPA
10.	Rolling Mill (on BF gas)	320000 MTPA	--	320000 MTPA
11.	Coke oven	120,000 MTPA	--	120,000 MTPA
12.	Coke oven off gas-based power Plant	9 MW	--	9 MW
13.	Air separation unit	120 TPD	--	120 TPD
14.	Producer gas plant	5500 Nm^3/hr	--	5500 Nm^3/hr
15.	Manpower/Employment	2390	--	2390

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

17.7.7 **Reason for Amendment:** Granulated Blast Furnace Slag (GBFS) is a by-product generated from blast furnace operations while smelting Iron ore. It was being sold to cement manufacturers and brick manufacturers. Now the cement manufacturers are reluctant to buy the GBFS due to non-viability (high moisture content & logistic cost due to long distance) as more moisture resulting in less yield in cement manufacturing & long-distance logistic cost due to long distance. Hence, to properly dispose the generated GBFS in an environmentally sound manner & to create a value addition through circular economy, third party will put up a Ground Granulated Blast furnace slag (GGBFS), which will be directly used in Ready mix Concretes as partial replacement of cement by a third party. To make it viable, the processing plant has to be installed near to the generation; hence, a land of 6.0 acres shall be given to the third party to put up a plant. Hence, SLRM has sought an amendment to EC to delist the area of 6.0 Acres from EC.

17.7.8 The project has an area of 82 acre/33.18 ha. (34% of the total area of 240 acre) covered under greenbelt/afforestation. At present the total area is covered under plantation with a density of 2500 trees per hectare (6175 trees per acre). The total no. of saplings planted are 86,000 nos. All the plants are existing within the area of 234 acre. There is no plantation in the area of 6 acres proposed for exclusion. Hence greenbelt percentage shall be increased from 34% to 35%.

17.7.9 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.

17.7.10 **Certified Compliance Report from IRO:**

The Status of compliance of earlier EC was obtained from Integrated Regional Office, Bangalore vide letter F.No. EP/12.1/2014-15/19/KAR, based on the site visit dated 19.05.2022 in the name of M/s. SLR Metaliks Limited. IRO reported that PA has complied most of the EC conditions except installation of CAAQMS.

Written representations:

17.7.11 During the meeting, based on the deliberations made by the EAC, the project proponent vide letter dated 16.11.2022 through email dated 16.11.2022 submitted the following information:

- SLRM has also placed an order to M/s. SWAN technical service, Hyderabad for procurement of CAAQMS vide LOI dated 26.07.2022, and has submitted a copy of LOI.
- A copy of Order and order acceptance by SWAN technical vide ref no. PO\22-23\PC22Y\-00139 dated 10-08-2022 is submitted.
- A copy of the invoice vide ref No. 41/PI/22-23 & Date: 15.10.2022 from SWAN technical, Hyderabad is submitted
- Photographs of the equipment's ready for installation are submitted.
- An undertaking dated 16.11.2022 from Director of SLR Metaliks Limited for installation of CAAQMS within one month in consultation with Karnataka State Pollution Control Board (KSPCB) is submitted.

Deliberation by the Committee

17.7.12 The Committee noted the following:

i. The instant proposal is for seeking amendment in EC dated 31.03.2015 and subsequent amendment dated 09.03.2016 w.r.t. exclusion of 6 Acres land from part of survey number 653/B, out of total area of 240 Acres as detailed in para 17.7.5 above.

ii. M/s SLR Metaliks Limited was granted environmental Clearance by MoEF&CC vide letter No. J-11011/257/2013-IA II(I) dated 31.03.2015 for expansion of existing pig iron manufacturing industry consisting of 262 m^3 blast furnace, 33 m^2 sinter plant and 6 MW blast furnace off gas power plant by installation of 0.30 MTPA steel, 0.32 MTPA Rolling Mill, 0.12 MTPA coke oven plant, 9 MW coke oven off gas based power plant, 120 TPD oxygen plant and Producer Gas Plant. Further, amendment to EC was obtained vide letter dated 09/03/2016 for change of fuel in 1x6 MW Captive power plant from BF gas to imported coal, change of fuel in reheating furnace of 0.32 MTPA Rolling mill from Furnace Oil to Blast Furnace gas and reduction in capacity of Producer gas plant from 15000 to 5500 Nm^3/hr. The project proponent also obtained extension of the validity of above EC vide letter no. J-11011/257/2013-IA. II(I) dated 22.04.2022 valid up to 30/03/2025. Consent to Operate (CTO) from Karnataka State Pollution Control Board was obtained periodically from time to time and current Consent to Operate obtained from KSPCB vide Consent Order No. AW-332167 dated 08.07.2022 and is valid till 03.06.2027.

iii. The PP submitted that in order to properly dispose the generated GBFS in an environmentally sound manner & to create a value addition through circular economy, third party will put up a Ground Granulated Blast furnace slag (GGBFS), which will be directly used in Ready mix Concretes as partial replacement of cement by a third party. To make it viable, the processing plant has to be installed near to the generation; hence, a land of 6.0 acres shall be given to the third party to put up a plant. Hence, SLRM has sought an amendment to EC to delist the area of 6.0 Acres from EC.

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

v. The EAC noted that the project has an area of 82 acre/33.18 ha. (34% of the total area of 240 acre) covered under greenbelt/afforestation. The total no. of saplings planted are

86,000 nos. There is no plantation in the area of 6 acres proposed for exclusion. Hence greenbelt percentage shall be increased from 34% to 35%.

vi. The EAC deliberated on the compliance report of IRO and noted that IRO has reported that PA has complied most of the EC conditions except installation of CAAQMS. The EAC is of the opinion that as per the commitment made by the project proponent vide undertaking dated 16.11.2022, shall installed the CAAQMS within one month in consultation with KSPCB.

Recommendations of the Committee

17.7.13 After deliberations, the Committee **recommended** for amendment in EC granted vide File no. J-11011/257/2013-IA II(I) dated 31.03.2015 and subsequent amendment dated 09.03.2016 w.r.t. exclusion of 6 Acres land from part of survey number 653/B, out of total area of 240 Acres as detailed in para 17.7.5 above. All other terms and conditions of the EC No. J-11011/257/2013-IA II(I) dated 31.03.2015 and subsequent amendment dated 09.03.2016 shall remain the same with stipulation of following additional specific conditions:

i. Greenbelt shall be strengthened by gap filling and plantation of native species.

ii. Project proponent shall explore the possibility to collaborate with the nearby educational institutions to undertake different works related to academic social responsibility for overall educational development of the area.

iii. The company shall comply with the condition of EC dated 31.03.2015 and install CAAQMS within one month in consultation with KSPCB as per the commitment.

***

Consideration of Terms of Reference

Agenda No. 17.8

17.8 Expansion of Steel Plant – DRI Kilns (Sponge Iron from 1,20,000 TPA to 4,50,000 TPA), Induction Furnaces along with CCM & LRF (Hot Billets/ MS Ingots / Billets from 65,000 TPA to 3,96,000 TPA), Ferro Alloys - 1 x 9 MVA (FeCr- 12,500 TPA/FeMn- 18,000 TPA) to 3 x 9 MVA (FeCr- 45,000 TPA /SiMn- 43,200 TPA/FeMn-75,600 TPA/FeSi-21,000 TPA / FeSi- 21,000 TPA /Pig Iron- 75,600 TPA), WHRB (DRI) based Power Plant from 5 MW to 24 MW,AFBCbased Power Plant from 14 MW to 44 MW, new WHRB (BF gases) – 5.0 MW, New Sinter Plant (4,27,680 TPA), New 8,00,000 TPA of Pellet Plant along with Producer Gasifier 24,000 NM^3/Hr, New Briquetting Plant - 300 Kg/Hr.& New Brick Manufacturing unit (68,100 Bricks/day)] M/s Beekay Steel Industries Limited, located at Village: Rampei, Tehsil: Athagarh, District: Cuttack, Orissa – Consideration of TOR.

[Proposal No. IA/OR/IND1/403107/2022; File No. IA-J-11011/398/2022-IA-II(IND-I)]

[M/s. Pioneer Enviro Laboratories & Consultants Pvt. Ltd.; valid upto 22.03.2023]

17.8.1 M/s. Beekay Steel Industries Limited (Formerly M/s. Maheshwari Ispat Limited) has made an application online vide proposal no. IA/OR/IND1/403107/2022 dated 26th October 2022 along with the application in prescribed format (Form-I), copy of pre-feasibility report and proposed ToRs for undertaking detailed EIA study as per the EIA Notification, 2006 for the project mentioned above. The proposed project activity is listed at S. No. 2(a) Coal washery, 3(a) Metallurgical industries (ferrous & non-ferrous) and 1(d) Thermal Power Plants under Category "A" of the schedule of the EIA notification, 2006 being appraised at Central Level.

17.8.2 Name of the EIA consultant: M/s. Pioneer Enviro Laboratories & Consultants Pvt. Ltd. [Sl. No. 63, List of ACOs with their Certificate / Extension Letter no. NABET/EIA/2023/SA 0162; valid upto 22.03.2023, Rev. 25, Sept 05, 2022].

Details submitted by Project proponent

17.8.3 The project of M/s Beekay Steel Industries Limited located at Rampei Village, Athagarh Tehsil, Cuttack District, Orissa has proposed for expansion of Steel Plant – DRI Kilns (Sponge Iron from 1,20,000 TPA to 4,50,000 TPA), Induction Furnaces along with CCM & LRF (Hot Billets/ MS Ingots / Billets from 65,000 TPA to 3,96,000 TPA), Ferro Alloys - 1 x 9 MVA (FeCr- 12,500 TPA/FeMn- 18,000 TPA) to 3 x 9 MVA (FeCr- 45,000 TPA /SiMn- 43,200 TPA/FeMn-75,600 TPA/FeSi-21,000 TPA / FeSi- 21,000 TPA /Pig Iron- 75,600 TPA), WHRB (DRI) based Power Plant from 5 MW to 24 MW,AFBCbased Power Plant from 14 MW to 44 MW, new WHRB (BF gases) – 5.0 MW, New Sinter Plant (4,27,680 TPA), New 8,00,000 TPA of Pellet Plant along with Producer Gasifier 24,000 NM^3/Hr, New Briquetting Plant - 300 Kg/Hr.& New Brick Manufacturing unit (68,100 Bricks/day)].

17.8.4 Environmental site settings:

S. No.	Particulars	Details	Remarks
i.	Total land	Total land:73.20 Ha. (180.88 Acres)*	Land use: Industrial Land
ii.	Land acquisition details as per MoEF&CC O.M dated 7/10/2014	Total 73.20 Ha. (180.88 Acres) of land is in possession of management.	--
iii.	Existence of habitation & involvement of R & R, if any.	<u>Plant site:</u> No habitation exists in plant site; Hence no R & R is involved. <u>Study area:</u> Nearest habitation: Khuntuni village is adjacent in West Direction. Around 66 no. of villages are reported in the study area.	---

<table>
<tr>
<td>iv.</td>
<td>Latitude and Longitude of the plant site</td>
<td>Latitude and Longitude of the plant site:
<table>
<tr><th>Point</th><th colspan="2">Coordinates</th></tr>
<tr><td>Point # 1</td><td>20°33'56.20"N</td><td>85°44'27.03"E</td></tr>
<tr><td>Point # 2</td><td>20°33'57.33"N</td><td>85°44'26.26"E</td></tr>
<tr><td>Point # 3</td><td>20°33'58.98"N</td><td>85°44'26.63"E</td></tr>
<tr><td>Point # 4</td><td>20°34'0.09"N</td><td>85°44'18.19"E</td></tr>
<tr><td>Point # 5</td><td>20°34'12.95"N</td><td>85°44'16.97"E</td></tr>
<tr><td>Point # 6</td><td>20°34'12.85"N</td><td>85°44'17.81"E</td></tr>
<tr><td>Point # 7</td><td>20°34'24.93"N</td><td>85°44'16.10"E</td></tr>
<tr><td>Point # 8</td><td>20°34'31.64"N</td><td>85°44'24.66"E</td></tr>
<tr><td>Point # 9</td><td>20°34'29.76"N</td><td>85°44'24.77"E</td></tr>
<tr><td>Point # 10</td><td>20°34'29.77"N</td><td>85°44'29.52"E</td></tr>
<tr><td>Point # 11</td><td>20°34'30.92"N</td><td>85°44'29.85"E</td></tr>
<tr><td>Point # 12</td><td>20°34'30.70"N</td><td>85°44'31.26"E</td></tr>
<tr><td>Point # 13</td><td>20°34'29.17"N</td><td>85°44'32.69"E</td></tr>
<tr><td>Point # 14</td><td>20°34'25.56"N</td><td>85°44'33.09"E</td></tr>
<tr><td>Point # 15</td><td>20°34'25.80"N</td><td>85°44'35.19"E</td></tr>
<tr><td>Point # 16</td><td>20°34'29.52"N</td><td>85°44'34.48"E</td></tr>
<tr><td>Point # 17</td><td>20°34'29.69"N</td><td>85°44'37.08"E</td></tr>
<tr><td>Point # 18</td><td>20°34'31.27"N</td><td>85°44'37.15"E</td></tr>
<tr><td>Point # 19</td><td>20°34'31.05"N</td><td>85°44'43.98"E</td></tr>
<tr><td>Point # 20</td><td>20°34'29.44"N</td><td>85°44'48.02"E</td></tr>
<tr><td>Point # 21</td><td>20°34'24.44"N</td><td>85°44'48.08"E</td></tr>
<tr><td>Point # 22</td><td>20°34'20.37"N</td><td>85°44'42.77"E</td></tr>
<tr><td>Point # 23</td><td>20°34'20.65"N</td><td>85°44'38.98"E</td></tr>
<tr><td>Point # 24</td><td>20°34'14.72"N</td><td>85°44'39.41"E</td></tr>
<tr><td>Point # 25</td><td>20°34'12.77"N</td><td>85°44'45.85"E</td></tr>
<tr><td>Point # 26</td><td>20°34'5.41"N</td><td>85°44'46.27"E</td></tr>
<tr><td>Point # 27</td><td>20°34'3.51"N</td><td>85°44'41.01"E</td></tr>
<tr><td>Point # 28</td><td>20°34'0.87"N</td><td>85°44'42.23"E</td></tr>
<tr><td>Point # 29</td><td>20°33'58.08"N</td><td>85°44'37.18"E</td></tr>
<tr><td>Point # 30</td><td>20°33'59.45"N</td><td>85°44'33.45"E</td></tr>
<tr><td>Point # 31</td><td>20°33'55.68"N</td><td>85°44'33.21"E</td></tr>
<tr><td>Point # 32</td><td>20°33'55.35"N</td><td>85°44'30.96"E</td></tr>
<tr><td>Point # 33</td><td>20°33'57.20"N</td><td>85°44'29.89"E</td></tr>
</table>
</td>
<td>---</td>
</tr>
<tr>
<td>v.</td>
<td>Elevation of the plant site</td>
<td>MSL of the plant area – 40 m to 57 m</td>
<td>---</td>
</tr>
<tr>
<td>vi.</td>
<td>Involvement of Forest land if any.</td>
<td>No Forest land is involved in the plant site.

<u>Forests within 10 Kms. radius</u></td>
<td>---</td>
</tr>
</table>

<table>
<tr><td></td><td></td><td>Subasi RF (1.5 Kms. – S),
Deulia RF (2.9 Kms-W),
Shankhaipoi RF (3.1 Kms- EEN),
Gobara RF (7.6 Kms. – NE)</td><td></td></tr>
<tr><td>vii.</td><td>Water body exists within the project site as well as study area</td><td>Project site: Nil

Study area:<table><tr><th>Water Body</th><th>Distance</th><th>Direction</th></tr><tr><td>Mahanadi River</td><td>7.7 Kms.</td><td>SE</td></tr><tr><td>Sapua nadi</td><td>8.8 Kms.</td><td>S</td></tr><tr><td>Barkatia Jhor</td><td>2.5 Kms</td><td>E</td></tr><tr><td>Barha Jhor</td><td>0.8 Kms</td><td>NW</td></tr><tr><td>Bamanpur pond</td><td>5.8 Kms</td><td>SE</td></tr></table></td><td>---</td></tr>
<tr><td>viii.</td><td>Existence of ESZ / ESA / National Park / Wildlife sanctuary / Biosphere reserve / Tiger reserve / Elephant reserve, etc. if any within the study area</td><td><table><tr><th>Name</th><th>Distance</th><th>Direction</th></tr><tr><td>Kapilas WL Sanctuary– ESZ</td><td>5.6 Kms</td><td>N</td></tr><tr><td>Kapilas WL Sanctuary</td><td>11.87 Kms</td><td>N</td></tr></table>
Status of NBWL approval: Conservation plan will be prepared & approval from PCCF will be obtained.</td><td>---</td></tr>
<tr><td>ix.</td><td>Critically polluted area as per MoEF&CC Office Memorandum dated 13th January 2010</td><td>None

The Plant area does not fall in the areas given in Hon’ble NGT order issued vide dated 10th July 2019.</td><td>---</td></tr>
<tr><td>x.</td><td>Defense Installations</td><td>Nil</td><td>---</td></tr>
<tr><td>xi.</td><td>Tree Enumeration</td><td>Plantation exists in the vacant land, where some units of expansion are proposed now. It is proposed to translocate few trees accordingly. As a compensatory measures, it is proposed to develop additional plantation @1: 5 for every translocated tree within the plant premises.
Total number of trees existing in the project site is 500. Entire existing plantation along the periphery will be retained as it is.
Plantation in North & North West direction (leaving peripheral plantation) will be translocated to peripheral plantation in NE direction
Total Trees to be Retained : 400
Total Trees to be Translocated : 100</td><td>---</td></tr>
<tr><td colspan="4">*Note:
Total land as per Environmental Clearance order accorded to M/s. Maheshwari Ispat Limited on 27th December 2007 was 133.6 ha.
M/s. Maheshwari Ispat Limited has operated the plant and incurred heavy losses continuously and became a sick unit. The unit was taken over by State Bank of India(SBI). The SBI subsequently auctioned the company and was taken over by M/s. Beekay Steel Industries Limited. through auction on 09th December 2021. Subsequently SBI has issued sale confirmation advice vide letter dated 10th December 2021,</td></tr>
</table>

certificate of sale of land vide order dated 09/03/2022 and certificate of sale for plant machinery vide order dated 28/03/2022.

Out of 133.6 Ha of land for which Environment Clearance was granted, 73.2 Ha was only available with Maheshwari Ispat Limited and same has been allotted by SBI to M/s. Beekay Steel Industries Limited through sale confirmation advice vide letter dated 10th December 2021, certificate of sale of land vide order dated 09/03/2022 and certificate of sale for plant machinery vide order dated 28/03/2022. **Hence PP requests the Hon'ble ministry to kindly consider their land as 73.2 Ha.(180.88 Acres) only.** The proposed expansion will be taken up in the existing plant premises only.

17.8.5 The following are the EC/CTE permissions obtained along with status of implementation:

S. No.	EC/ CTE / EC Extension Permissions	Units permitted	Date of permission	Units implemented (CTO)	Date of 1st CTO obtained from SPCB	Remarks
1.	CTE	• **DRI Unit** - 3 x 100 TPD (1,00,000 TPA) • **Steel Melting Shop** (comprising of2 x 15 T Induction Furnace, 1 x 15 T LRF, 1 x 400 TPD Steel Billet Caster) - 1,28,000 TPA • WHRB Power Plant – 8 MW • Sized Iron Ore Unit – 30 TPH	25.09.2004	Not Implemented	Not Implemented	**EC not applicable as** • CTE has been obtained prior to EIA notification 2006 • Not applicable as per EIA notification 1994 also as capital cost is less than Rs 100 Crores.
2.	Amendment to CTE granted on 25.09.2004	• **DRI Unit -** 3 x 100 TPD to 4 x 100 TPD (1,00,000 TPA to 1,20,000 TPA) • **Steel Melting Shop** (Induction Furnace from 2 x 15 T to 2 x 10 T + 2 x 8 T, LRF from 1 x 15 T to 1 x 20 T, 1 x 400 TPD Steel Billet Caster) - 1,28,000 TPA • **WHRB Power Plant** - from 8.0 MW to 10.0 MW • **Sized Iron Ore Unit** – 30 TPH	09.12.2005	**<u>Implemented Units</u>** • **DRI Units** – 4 x 100 TPD (1,20,000 TPA) • **Steel Melting Shop –** (Induction Furnace 1 x 10 T + 1 x 8T with LRF 10 T – 65,000 TPA	30.12.2009	Remaining units could not be implemented within the validity period. Hence, they are not considered in the present proposal
				• **WHRB Power Plant -**	12.11.2010	

				from 5.0 MW		
3.	EC (Expansion)	• **DRI Unit -** 2,35,000 TPA, • **Steel Melting Shop (Steel Billets)** - 2,72,000 TPA • **Rolled Products-** 3,00,000 TPA • **Ferro Alloys** - 30,500 TPA • **WHRB Power Plant** - 14 MW • **AFBC Power Plant** - 110 MW • **Blast Furnace (Hot Metal / Pig Iron)** - 3,30,000 TPA • **Coal Washery** - 4,50,000 TPA	27.12.2007	**<u>Implemented Units</u>** • **Mini Blast Furnace (MBF) –** 1 x 262 m3 (1,65,000 TPA)	30.12.2009	Obtained Consent to Establish vide dt. 12105/IND-II-NOC-4270 dt. 30.07.2009 and implementation status is shown below
				AFBC Power Plant – 1 x 14 MW	16.12.2009	
				• **Coal Washery** – 0.45 MTPA • **Ferro Alloys** – 1 x 9 MVA	22.03.2010	
				• **Rolling Mill –** 3,00,000 TPA	12.11.2010	
4.	CTE (For EC)	**Phase # I** • Mini Blast Furnace (MBF)– 1 x 262 m^3 (1,65,000 TPA) **Phase # II** • Coal Washery – 0.50 MTPA • Mini Blast Furnace (MBF) – 1 x 262 m^3 (1,65,000 TPA) • Sinter Plant – 45 m^2 (4,60,000 TPA) ***** • Coke Oven Plant – 0.2 MTPA ***** • Steel Melting Shop – 2,72,000 TPA • Rolling Mill – 3,00,000 TPA • CPP (MBF Gas) – 4.0 MW • Ferro Alloys – 30,500 TPA (FeCr – 12,500 TPA & FeMn – 18,000 TPA) **Phase # III** • AFBC Power Plant –	30.07.2009	**<u>Implemented Units</u>** • **Mini Blast Furnace (MBF) –** 1 x 262 m3 (1,65,000 TPA)	30.12.2009	Remaining units could not be implemented within the EC validity period. Hence, they are not considered in the present proposal *** Note: The earlier management could not provide any document pertaining to any other EC order other than on 27.12.2007. However, these units of Coke Over Plant and Electric Arc**
				• **AFBC Power Plant –** 1 x 14 MW	16.12.2009	
				• **Coal Washery** – 0.45 MTPA • **Ferro Alloys** – 1 x 9 MVA	22.03.2010	
				• **Rolling Mill –** 3,00,000 TPA	12.11.2010	

		110 MW (1 x 14 MW + 1 x 25 MW + 1 x 43 MW + 1 x 28 MW) *** Note: The earlier management could not provide any document pertaining to any other EC order other than on 27.12.2007. However, these units of Coke Oven Plant and Electric Arc Furnace are not implemented.**				**Furnace are not implemented.**

Note:

• Environmental clearance has been accorded by MoEF&CC in the title of "M/s. Maheshwari Ispat Limited". Subsequently company incurred losses continuously and became a sick unit. Latter it was taken over by M/s. Beekay Steel Industries Limited through auction from State Bank of India on 09/12/2021. Then the immovable property sold by State Bank of India to M/s. Beekay Steel Industries Limited vide Sale Certificate No. SAMB-I/BR/1187 dated 09/03/2022 and then movable property sold by State Bank of India to M/s. Beekay Steel Industries Limited vide Sale Certificate No. SAMB-I/BR/1342 dated 28/03/2022.

• Presently unit is not in operation since 2012. It requires a few months to put the plant back into operation after obtaining CTO.

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

S. No.	Units (Products)	As per EC & CTE	Units were in operation as per CTO obtained (based on EC & CTE permissions)	Proposed expansion Production Capacity	Total Production Capacity after Expansion
1.	Coal Washery (Wet) (Washed Coal)	0.45 MTPA	0.45 MTPA	---	0.45 MTPA
2.	Pellet Plant (pellets)	---	---	8,00,000 TPA	8,00,000 TPA
3.	Producer Gas	---	---	3 X 8000 NM^3/hr	3 X 8000 NM^3/hr
4.	DRI Kilns (Sponge Iron)	1,20,000 TPA (4 X 100 TPD)	1,20,000 TPA (4 X 100 TPD)	3,30,000 TPA (2 x 500 TPD)	4,50,000 TPA (4 X 100 & 2 x 500 TPD)
5.	Induction Furnace (Hot Billets/ Ingots/ Billets)	1,30,000*TPA (2 X 10 T & 2x 8 T With LRF 20 T)	65,000 TPA* (1 X 10 T & 1 X 8 T With LRF 10 T) **This unit will be dismantled**	3,96,000 TPA (4 X 30 T)	3,96,000 TPA (4 X 30 T)
6.	Blast Furnace (Hot Metal/Pig Iron)	3,30,000 TPA	1,65,000 TPA	---	1,65,000 TPA
7.	Sinter Plant (Sinter feed to MBF)	45 m^2	---	4,27,680 TPA ($30m^2$)	4,27,680 TPA ($30m^2$)

S. No.	Units (Products)		As per EC & CTE	Units were in operation as per CTO obtained (based on EC & CTE permissions)	Proposed expansion Production Capacity	Total Production Capacity after Expansion
8.	Rolling Mill (Rolled products) (85 % Hot charging with Hot Billets and remaining 15% through RHF with LDO as fuel)		3,00,000 TPA	3,00,000 TPA	---	3,00,000 TPA
9.	Ferro Alloy		2X 9 MVA (Fe Cr- 12,500 TPA/ Fe Mn- 18,000 TPA)	1X 9 MVA (Fe Cr- 6,250 TPA/ Fe Mn- 9,000 TPA) *** The existing 9 MVA SEAF will be upgraded to increase the production of Fe Cr from 6,250 TPA to 15,000 TPA / FeMnfrom9,000 TPA to 25,200 TPA and also to produce FeSi-7,000 TPA / Si Mn – 14,400 TPA/ Pig Iron – 25,200 TPA*	(2 X 9 MVA) (FeCr-30,000 TPA/ SiMn-28,800 TPA / FeMn-50,400 TPA /FeSi-14,000 TPA / Pig Iron- 50,400 TPA)	(3 X 9 MVA) (FeCr-45,000 TPA/ SiMn-43,200 TPA / FeMn-75,600 TPA /FeSi-21,000 TPA / Pig Iron-75,600 TPA) *** The existing 9 MVA SEA will be upgraded to increase the production of Fe Cr from 6,250 TPA to 15,000 TPA / Fe Mn from 9,000 TPA to 25,200 TPA and also to produce FeSi-7,000 TPA / Si Mn – 14,400 TPA/ Pig Iron – 25,200 TPA*
10.	Power Plant	WHRB Power Plant	24 MW	5MW	24 MW	29 MW
		AFBC Power Plant	110 MW (1 X 14 MW, 1 X 25 MW, 1 X 28 MW & 1 X 43 MW)	14 MW	30 MW	44 MW
		WHRB power plant from BF gases	1 X 4 MW	---	5 MW	5 MW
Total				19 MW	59 MW	78 MW
11.	Fly Ash Brick Manufacturing Unit		---	---	68,100 Bricks/Day	68,100 Bricks/Day
12.	Briquetting unit		---	---	300 Kg/Hr	300 Kg/Hr

Note :

* The existing 1 X 10 T & 1 X 8 T With LRF 10 T of induction furnace unit will be dismantled.

*****The existing 9 MVA SEAF will be upgraded to increase the production of FeCr from 6,250 TPA to 15,000 TPA / Fe Mn from 9,000 TPA to 25,200 TPA and also to produce FeSi-7,000 TPA / SiMn – 14,400 TPA/ Pig Iron – 25,200 TPA***.

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

S.No.	Raw Material		Quantity (TPA)			Sources	Distance from site (Kms.)	Mode of Transport
			Existing	Expansion	Total			
1.	**Pellet Plant (Pellets) - 8,00,000 TPA**							
a)	Iron Ore Concentrate / Fines		---	8,00,000	8,00,000	Odisha/ Chhattisgarh	~ 300	By rail & road (through covered trucks)
b)	Bentonite		---	6,400	6,400	Chhattisgarh	~ 300	By rail & road (through covered trucks)
c)	Limestone		---	12,000	12,000	Odisha / Chhattisgarh	~ 400	By road (through covered trucks)
d)	Anthracite Coal		---	28,000	28,000	Odisha / Chhattisgarh	~ 400	By road (through covered trucks)
e)	LDO		---	20,411 KL/Annum	20,411 KL/Annum	IOCL Dept. Odisha	~ 100	Through tankers
f)	Coal for Gasifier	Indian	---	72,000 TPA	72,000 TPA	MCL Odisha / SECL Chhattisgarh	~ 300	By rail & road (through covered trucks
		Imported	---	46,080 TPA	46,080 TPA	Indonesia / South Africa / Australia	~ 400 (from Vizag Port)	Through sea route, rail route & by road (through covered trucks)
2.	**DRI Kilns (Sponge Iron) 3,30,000 TPA (2 x 500 TPD)**							
a)	Pellets		Plant Shutdown	4,78,500	4,78,500	Own generation	---	Through covered conveyers
	OR							
b)	Iron ore		Plant Shutdown	5,28,000	5,28,000	Odisha/Chhattisgarh	~ 300	By rail & road (through covered trucks)
c)	Coal	Indian (100%)	Plant Shutdown	4,29,000	4,29,000	MCL Odisha / SECL Chhattisgarh	~ 300	By rail & road (through covered trucks
		Imported (100%)	Plant Shutdown	274560	274560	Indonesia / South Africa / Australia	~ 400 (from Vizag Port)	Through sea route, rail route & by road (through covered

S.No.	Raw Material	Quantity (TPA)			Sources	Distance from site (Kms.)	Mode of Transport
		Existing	Expansion	Total			
							trucks)
d)	Dolomite	Plant Shutdown	16,500	16,500	16,500	~ 300	By road (through covered trucks)
3.	**Steel Melting Shop (Hot Billets / Billets/MS Ingots) –3,96,000 TPA (4x30 T)**						
a)	Sponge Iron	Plant Shutdown	4,00,000	4,00,000	Own generation	---	Through covered conveyers
b)	MS Scrap/ Pig Iron	Plant Shutdown	59,000	59,000	Odisha/ Chhattisgarh	~ 300	By road (through covered trucks)
c)	Ferro alloys	Plant Shutdown	20,000	20,000	Own generation	---	Through covered conveyers
4.	**For Ferro Alloys (2 x 9 MVA)**						
4 (i)	*Ferro Silicon – 14,000 TPA*						
a)	Quartz	---	21,280	21,280	Odisha / Chhattisgarh	~ 300	By road (through covered trucks)
b)	Mill scales	---	3,290	3,290	Own Generation	----	Through covered conveyers
c)	MS Scrap	---	490	490	Odisha / Chhattisgarh	~ 300	By road (through covered trucks)
d)	Coke	---	7,840	7,840	Andhra Pradesh	~ 500	By road (through covered trucks)
e)	Electrode paste	---	280	280	Odisha / West Bengal	~ 500	By road (through covered trucks)
f)	Bagfilter dust	---	532	532	Own generation	---	Through covered conveyers
(OR)							
4 (ii)	*Ferro Manganese – 50,400 TPA*						
a)	Manganese Ore	Plant Shutdown	1,14,660	1,14,660	Odisha / Chhattisgarh	~ 300	By Rail & Road (through covered trucks)
b)	Coke	Plant Shutdown	18,396	18,396	Andhra Pradesh	~ 500	By road (through covered trucks)

S.No.	Raw Material	Quantity (TPA)			Sources	Distance from site (Kms.)	Mode of Transport
		Existing	Expansion	Total			
c)	Dolomite	Plant Shutdown	8,568	8,568	Odisha / Chhattisgarh	~ 300	By road (through covered trucks)
d)	MS Scrap / Mill scales	Plant Shutdown	7,560	7,560	Own Generation	---	Through covered conveyers
e)	Electrode Paste	Plant Shutdown	655	655	Odisha / West Bengal	~ 300	By road (through covered trucks)
f)	Bagfilter dust	Plant Shutdown	2,520	2,520	Own generation	---	Through covered conveyers
(OR)							
4 (iii)	*Silico Manganese – 28,800 TPA*						
a)	Manganese Ore	---	46,944	46,944	Odisha / Chhattisgarh	~ 300	By Rail & Road (through covered trucks)
b)	FeMn. Slag	---	30,472	30,472	Own generation	----.	---
c)	Coke	---	10,800	10,800	Andhra Pradesh	~ 500	----
d)	Dolomite	---	6,480	6,480	Odisha / Chhattisgarh	~ 300	By road (through covered trucks)
e)	Electrode paste	---	576	576	Odisha / West Bengal	~ 300	By road (through covered trucks)
f)	Quartz	---	6,912	6,912	Odisha / Chhattisgarh	~ 300	By road (through covered trucks)
g)	Bagfilter dust	---	432	432	Own generation	---	Through covered conveyers
(OR)							
4 (iv)	*Ferro Chrome – 30,000 TPA*						
a)	Chrome Ore	Plant Shutdown	60,000	60,000	Sukinda, Odisha Import, South Africa	~ 50 ~ 400 (from vizag Port)	By road (through covered trucks) From Port By Road (through covered Trucks)

S.No.	Raw Material	Quantity (TPA)			Sources	Distance from site (Kms.)	Mode of Transport
		Existing	Expansion	Total			
b)	Coke	Plant Shutdown	9,900	9,900	Andhra Pradesh	~ 500	By road (through covered trucks)
c)	Quartz	Plant Shutdown	5,250	5,250	Odisha / Chhattisgarh	~ 300	By road (through covered trucks)
d)	MS Scrap / Mill Scale	Plant Shutdown	4,500	4,500	Own generation	---	Through covered conveyers
e)	Magnetite / Bauxite	Plant Shutdown	5,070	5,070	Odisha / Chhattisgarh	~ 300	By road (through covered trucks)
f)	Electrode Paste	Plant Shutdown	900	900	Odisha / West Bengal	~ 300	By road (through covered trucks)
g)	Bagfilter dust	Plant Shutdown	1,920	1,920	Own generation	---	Through covered conveyers
(OR)							
4 (v)	*Pig Iron– 50,400 TPA*						
a)	HG Iron ore	---	74,340	74,340	Odisha/Chhattisgarh	~ 300	By rail & road (through covered trucks)
b)	Coke	---	24,444	24,444	Andhra Pradesh	~ 500	By road (through covered trucks)
c)	Limestone	---	6,300	6,300	Odisha / Chhattisgarh	~ 300	By road (through covered trucks)
d)	Quartz	---	3,024	3,024	Inhouse Generation	---	By road (through covered trucks)
e)	Electrode Paste	---	1,008	1,008	Odisha / West Bengal	~ 300	By road (through covered trucks)
f)	Bagfilter dust	---	1,512	1,512	Own generation	---	Through covered conveyers
5.	**Sinter unit – 4,27,680 TPA**						
a)	Iron ore fines	---	3,42,144	3,42,144	Odisha	~ 100	By rail & road (through covered

S.No.	Raw Material		Quantity (TPA)			Sources	Distance from site (Kms.)	Mode of Transport
			Existing	Expansion	Total			
								trucks)
b)	Mill Scales		---	2,138	2,138	Own generation	----	Through covered conveyers
c)	Fluxes		---	21,384	21,384	Odisha / West Bengal	~ 300	By road (through covered trucks)
d)	Coke Fines		---	36,353	36,353	Odisha / West Bengal	~ 300	By road (through covered trucks)
e)	Dust from DRI, Pellet plant etc		---	42,768	42,768	Own generation	----	Through covered conveyers
f)	Sinter Returns		---	51,322	51,322	Own generation	----	Through covered conveyers
6.	**For FBC Boiler [Power Generation1 x 30 MW]**							
a)	Indian Coal (100 %)		Plant Shutdown	1,78,200	1,78,200	SECL Chhattisgarh / MCL Odisha	~ 500	By rail & road (through covered trucks)
OR								
b)	Imported Coal (100 %)		Plant Shutdown	1,14,048	1,14,048	Indonesia / South Africa / Australia	~ 400 (from Vizag Port)	Through sea route, rail route & by road (through covered trucks)
OR								
c)	Dolochar + Indian Coal	Dolochar	Plant Shutdown	66,000	66,000	Own generation	---	through covered conveyors
		Indian Coal	Plant Shutdown	1,45,200	1,45,200	SECL Chhattisgarh / MCL Odisha	~ 300	By rail & road (through covered trucks)
OR								
d)	Dolochar + Imported Coal	Dolochar	Plant Shutdown	66,000	66,000	Own generation	---	through covered conveyors
		Imported Coal	Plant Shutdown	92,928	92,928	Indonesia / South Africa / Australia	~ 400 (from Vizag Port)	Through sea route, rail route & by road (through covered trucks)

17.8.8 The total water requirement for existing plant is 1,850 KLD and was sourced from Mahanadi River. The total water requirement for the expansion project is estimated as 2340 KLD, which will be sourced from the Mahanadi River. Water drawl permission for expansion proposal from Water Resource Department, Orissa will be obtained after receipt of TOR letter for proposed expansion project.

17.8.9 The Power requirement for the existing plant is 28.5 MW and same was met from Captive Power plant & State Grid. Power required for proposed expansion will be 78.3 MW. Total power consumption after expansion will be 106.8 MW, out of which 78.0 MW from Captive power plant & remaining 28.8 MW will be sourced from state grid.

17.8.10 The capital cost of the project is Rs. 750.55 Crores. Employment generation from proposed project will be 300 nos. through direct employment and 500 nos. through indirect employment.

17.8.11 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.

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

Attributes	**Sampling**		**Remarks**
	No. of Stations	**Frequency**	
1) **Air**			
i) Meteorological parameters	1	On hourly basis for one season	• Wind Speed • Wind Direction • Temperature • Relative Humidity • Rainfall
ii) AAQ parameters	8	24 hourly Twice a week for 3 months (One Season)	Parameters were Monitored: • $PM_{2.5}$, • PM_{10}, • SO_2, • NOx, • CO,
2) Noise	8	On hourly basis for 24 Hrs. at each station	Parameters were Monitored: • Day equivalent • Night equivalent
3) Water			
i) Ground Water	8	One sample at each of the locations	Parameters was Monitored: as per IS: 10500
ii) Surface Water	2	One sample at each of the locations	Parameters were s Monitored: as per BIS: 2296
4) Land			
i) Soil quality	8	One sample at each of the locations	Parameters were Monitored: Texture, infiltration rate, SAR bulk density, CEC, pH, Ca, Mg, Na, K, Zn, Mn

Attributes	Sampling		Remarks
	No. of Stations	Frequency	
ii) Land use	--	--	LU map was prepared by concerned FAE for study area
5) Biological			
i) Aquatic	--	Once in Season	---
ii) Terrestrial	--	Once in Season	---
6) Socio economic parameters	--	Once in Season	Social Impact Assessment was carried out by concerned FAE for study area
7) Traffic Density	--	Once in Season	Vehicular traffic study was carried out at Transportation route.

Deliberation by the Committee

17.8.13 The Committee noted the following:

i. The EAC noted that Environment Clearance was initially accorded to M/s. Maheshwari Ispat Limited on 27th December 2007. As reported by PP, M/s. Maheshwari Ispat Limited operated the plant and incurred heavy losses continuously and became a sick unit. The unit was taken over by State Bank of India (SBI). The SBI subsequently auctioned the company and was taken over by M/s. Beekay Steel Industries Limited through auction on 09th December 2021. Subsequently SBI has issued sale confirmation advice vide letter dated 10th December 2021, certificate of sale of land vide Sale Certificate No. SAMB-I/BR/1187 dated 09/03/2022 and then movable property sold by State Bank of India to M/s. Beekay Steel Industries Limited vide Sale Certificate No. SAMB-I/BR/1342 dated 28/03/2022. Presently unit is not in operation since 2012. It requires a few months to put the plant back into operation after obtaining CTO. Further, the EAC noted that M/s Beekay Steel Industries Limited has proposed for expansion of Steel Plant but has not obtained transfer of EC dated 27th December 2007 from M/s. Maheshwari Ispat Limited to M/s Beekay Steel Industries Limited so far. The PP also confirmed that they have not obtained EC transfer and are in process. Therefore, EAC is of the opinion that they cannot appraise the instant TOR proposal unless aforesaid EC transfer is obtained by the project proponent.

ii. In view of above, the Project Proponent agreed to the advice of EAC and requested the EAC to allow to reappear after obtaining transfer of EC dated 27th December 2007 from M/s. Maheshwari Ispat Limited to M/s Beekay Steel Industries Limited.

Recommendations of the Committee

17.8.14 In view of the foregoing and after deliberations, the Committee recommended that proposal to be **returned in its present form** to address the shortcomings as detailed in para 17.8.13 above and submit the revised application in accordance to the provisions of EIA Notification, 2006.

***

Agenda No. 17.9

17.9 Proposed Integrated Cement Plant - Clinker (2 x 4.0 Million TPA), Cement (2 x 3.0 Million TPA), WHRS (2 x 25 MW), DG Set [2 x 1250 KVA {1000 KVA or 500 KVA, 250 KVA & 125 KVA}], Oxygen Plant (2 x 80 m^3/hr) in phased manner along with installation of Railway Siding with Wagon Tippler at Village: Parewar, Tehsil: Shri Mohangarh, District: Jaisalmer (Rajasthan) by M/s. JK Cement Ltd – Consideration of TOR.

[Proposal No. IA/RJ/IND1/402352/2022; File No. IA-J-11011/498/2021-IA-II(IND-I)]

17.9.1 M/s. JK Cement Limited has made an online application *vide* proposal no. IA/RJ/IND1/402352/2022, dated 03rd November, 2022 along with the application in prescribed format (Form-I), copy of pre-feasibility report and proposed ToRs for undertaking detailed EIA study as per the EIA Notification, 2006 for the project mentioned above. The proposed project activity is listed at S. No. 3(b) Cement Plants under Category "A" of the schedule of the EIA notification, 2006 being appraised at Central Level.

17.9.2 Name of the EIA consultant: M/s J.M. EnviroNet Pvt. Ltd. [Sl. No. 41, List of ACOs with their Certificate / Extension Letter no. NABET/EIA/2023/RA 0186; valid upto 02.02.2023, Rev. 25, Sept 05, 2022].

Details submitted by Project proponent

17.9.3 The project of M/s. JK Cement Limited located in Parewar Village, Shri Mohangarh Tehsil, Jaisalmer District and Rajasthan State is for setting up of Proposed Integrated Cement Plant - Clinker (2 x 4.0 Million TPA), Cement (2 x 3.0 Million TPA), WHRS (2 x 25 MW), DG Set [2 x 1250 KVA {1000 KVA or 500 KVA, 250 KVA & 125 KVA}], Oxygen Plant (2 x 80 m^3/hr) in phased manner along with installation of Railway Siding with Wagon Tippler.

17.9.4 Environmental site settings:

S No.	Particulars	Details	Remarks
i.	Total land	Total Project area is 210 ha; which is government land.	Land Use - Present land use of the proposed project site is barren land which will be used for industrial purpose after its conversion into Industrial land.
ii.	Land acquisition details as per MoEF&CC O.M. dated 7/10/2014	1. Set-a-Part order has been issued by the Revenue Department, Govt. of Rajasthan vide letter dated 27th May, 2022 for set-up of the Cement Plant by JK Cement	--

<table>
<tr><th>S No.</th><th>Particulars</th><th>Details</th><th>Remarks</th></tr>
<tr><td></td><td></td><td>Limited.
2. Land has been converted for Industrial use as per Distt. Collector Jaisalmer letter dated 27th June, 2022.</td><td></td></tr>
<tr><td>iii.</td><td>Existence of habitation & involvement of R&R, if any.</td><td>No habitation exists within the project site
<table><tr><th>Habitation</th><th>Distance (km)</th><th>Direction</th></tr><tr><td>Khimsar</td><td>~ 4.5</td><td>East</td></tr><tr><td>Odon Ki Dhani</td><td>~ 4.5</td><td>SSE</td></tr><tr><td>Tulsi Ram Ki Dhani</td><td>~ 4.8</td><td>NW</td></tr><tr><td>Parewar Ki Dhani</td><td>~ 5.0</td><td>West</td></tr><tr><td>Joga</td><td>~ 5.1</td><td>East</td></tr><tr><td>Khinya</td><td>~ 6.0</td><td>NE</td></tr><tr><td>Kabir Basti</td><td>~ 7.0</td><td>NW</td></tr><tr><td>Parewar</td><td>~ 7.0</td><td>West</td></tr><tr><td>Lila</td><td>~ 8.5</td><td>West</td></tr><tr><td>Rata</td><td>~ 9.0</td><td>NNE</td></tr></table></td><td>R&R is not applicable.</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>A.</td><td>27°16'37.70"N</td><td>70°49'35.91"E</td></tr><tr><td>B.</td><td>27°16'3.60"N</td><td>70°49'35.35"E</td></tr><tr><td>C.</td><td>27°16'4.36"N</td><td>70°48'36.88"E</td></tr><tr><td>D.</td><td>27°16'55.07"N</td><td>70°48'36.91"E</td></tr></table></td><td>--</td></tr>
<tr><td>v.</td><td>Elevation of the project site</td><td>168 m to 172 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 area</td><td>--</td></tr>
<tr><td>vii.</td><td>Water body exists within the project site as well as study area</td><td>No water body exists within the project site.
Indira Gandhi Canal (~12.5 km in NNE direction) is the nearest water body in the area.</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>No Existence of ESZ / ESA / National Park / Wildlife Sanctuary / Biosphere Reserve / Tiger Reserve / Elephant Reserve etc.

One Protected Forest (~6.5 km in SW direction) is falling within the study area.</td><td>--</td></tr>
<tr><td>ix.</td><td>Interlinked Project</td><td>Proposed Limestone Mine - Khinya-II(A) Block (Auction Block), (Area: 304.0 ha) with total excavation of 6.04 Million TPA including 5.50 Million TPA ROM (Cement grade 5.40 million TPA and SMS grade 0.10 million TPA); 0.28 Million TPA Inter-burden and 0.26 Million TPA Alluvial Sand/Top soil along with Installation of one mobile crusher</td><td>-</td></tr>
</table>

S No.	Particulars	Details	Remarks
		of 50 TPH and 1500 TPH Crushers with vibrating screen near Village: Khinya, Tehsil: Shri Mohangarh, District: Jaisalmer (Rajasthan). Environmental Clearance for the same has already been granted by MoEFCC vide letter No. IA-J-11015/77/2021-IA-II(NCM) dated 11th July, 2022.	

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

Particular	Unit	Proposed Capacity	Remarks
Clinker	Million TPA	2 x 4.0	Surplus Clinker will be sent to Sister Grinding Units and market sale
Cement	Million TPA	2 x 3.0	-
WHRS	MW	2 x 25	-
Oxygen Plant	m^3/hr	2 x 80	-
D.G. Sets	KVA	[2 x 1250 KVA {1000 KVA or 500 KVA, 250 KVA & 125 KVA}]	-
Railway Siding with Wagon Tippler	Part of Project		-

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

S. No.	Name of Raw Material	Quantity (Million TPA)		Source and Distance	Mode of Transportation
		Phase I	Phase II		
1.	Limestone (87% of Raw Meal)	5.40	5.40	Phase-1: Proposed Khinya-II(A) Block Captive Limestone mines Phase-2: Future auction	Initially by Road and by conveyor belt
2.	Clay/Alumina (10% of Raw Meal)	0.40	0.40	Jaisalmer District (Within 75 Kms)	Road
3.	Laterite (3% of Raw Meal)	0.12	0.12	Open market	Road
5.	Gypsum-India & Imported (Mineral, Synthetic, Chemical & Industrial waste/HW) (5% of Cement)	0.15	0.15	Sy. Gypsum from sister units at Rajasthan (~600 Kms), Mineral Gypsum from Mohangarh (Jaisalmer)-70 kms, Kawas (Barmer)-200 kms & Nagaur (Rajasthan)-400 kms, Industrial waste in the form of chemical gypsum/marine gypsum/ phosphor-gypsum from Gujarat	Road

S. No.	Name of Raw Material	Quantity (Million TPA)		Source and Distance	Mode of Transportation
				(~600 kms) Imported Gypsum from Kandla Port (Oman & Iran)-~850 kms	
6.	Fly ash & Pond Ash (35% of Cement)	1.05	1.05	Power plants in Barmer-200 kms, Bikaner- 320 kms and Suratgarh (475 kms)	Road
**Clinker will be used for Cement grinding at the site and dispatched to Sister Units and Markets.*					

17.9.7 The total water requirement for Cement Plant will be 2950 KLD. Out of 2950 KLD, 1550 KLD water will be required for Phase I and 1400 KLD water will be required for Phase II. The water will be sourced from Indira Gandhi Canal (1550 KLD), STP (285 KLD), Recycled water (264 KLD) and Rainwater harvesting (134 KLD). NOC for utilization of 1700 KLD water from Indira Gandhi canal has been obtained from Indira Gandhi Nahar Department, Department of Water Resources, Govt. of Rajasthan vide letter no F. 6(3) IGNB/2021 dated 04.03.2022. Out of 1700 KLD, 1550 KLD water will be required for Cement Plant, and 150 KLD water will be required for the Proposed Limestone mine.

17.9.8 The power requirement for the project is estimated as 76 MW (Phase I: 38 MW & Phase II: 38 MW), which will be obtained from proposed WHRS, State Grid and RE.

17.9.9 The capital cost of the project is Rs. 4943 Crores (Phase I: Rs. 2862 Crores; Phase II: Rs. 2261 Crores) and the capital cost for environmental protection measures is proposed as Rs. 160 Crores. The employment generation from the proposed project - During implementation phase it will be Phase - I: 200 Permanent staff and 500 Contractual workers and Phase - II: 150 Permanent staff and 500 Contractual workers. During operation phase, it will be Phase - I: 350 Permanent staff and 300 Contractual workers and Phase - II: 200 Permanent staff and 200 Contractual workers.

17.9.10 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.

17.9.11 Proposed Terms of Reference: [Baseline data collection period: **October, 2022 to December, 2022**]

Attributes	Parameters	Sampling		Remarks
		No. of Stations	Frequency	
A. Air				
a. Meteorology	Wind Speed, Wind Direction, Humidity, Temperature, Rainfall, Wind speed (Hourly), Dry bulb temperature, Wet bulb temperature, Relative humidity, Solar radiation, Cloud cover, Environmental Lapse Rate	01 (Project site)	Hourly	-
b. Air	PM_{10}, $PM_{2.5}$, SO_2, NO_2, CO, HC	08	Twice a	-

Attributes	Parameters	Sampling		Remarks
		No. of Stations	Frequency	
	(as per NAAQS Standards)		week (24 Hourly)	
B. Noise	Leq Day time & Leq Night time	08	Once in a season (Day &Night time)	-
C. Water				
a. Surface water/ b. Ground water quality parameters	***No Surface Water bodies exists within 10 km radius study area*** **Ground Water Quality: -** pH (at 25°C), Colour, Turbidity, Odour, Taste, Total Hardness as CaCO3, Calcium as Ca, Alkalinity as CaCO3, Chloride as Cl, Cyanide as CN, Magnesium as Mg, Total Dissolved Solids, Sulphate as SO4, Fluoride as F, Nitrate as NO3-N, Iron as Fe, Aluminum as Al, Boron, Phenolic Compounds, Anionic Detergents as MBAS, Hexa Chromium as Cr+6, Chromium as Cr, Zinc as Zn, Copper as Cu, Manganese as Mn, Cadmium as Cd, Lead as Pb, Arsenic as As, Mercury as Hg, Sodium as Na, Potassium as K, Phosphate as PO4, Nickel, Conductivity, Total Suspended Solids, Total Carbon, Free Ammonia, Total Coliforms, Faecal coliforms.	08	Once in a season	-
D. Land				
a. Soil Quality	pH (at 25°C) (1:2.5 soil water suspension), Electrical Conductivity (1:2 soil water sus.), particle size distribution, Soil Texture, Colour, Water holding capacity, Bulk Density, Soluble Chloride, Exchangeable Calcium, Exchangeable Sodium, Available Potassium, Organic Matter, Exchangeable Magnesium as Mg, Available Nitrogen as N, Available Phosphorus, Total Zinc as Zn, Total Manganese as Mn, Total Chromium as Cr, Total Lead as Pb, Total Cadmium as Cd, Total Copper as Cu, Organic Carbon, SAR Value, Porosity, Cation Exchange capacity	08	Once in a season	-
b. Land Use	Land use/ Land Cover Map by Satellite Imagery including Location code, Total	10 km radius	Once in a Study	-

Attributes	Parameters	Sampling		Remarks
		No. of Stations	Frequency	
	project area, Topography, Drainage (natural), Cultivated, forest, plantations, water bodies, roads and settlements	Study Area	period Season	
E. Biological				
a. Aquatic	Flora and fauna	Study area	Once in a season	-
b. Terrestrial				
F. Socio-economic parameters	Economic Demography	Study area	Once in a season	-

17.9.12 **Certified Compliance Report from IRO:**

The Status of compliance of earlier EC was obtained from Integrated Regional Office, Bangalore, based on the site visit dated 22.07.2022 in the name of M/s. JK Cement Limited. Additional documents/information sought during the site visit were submitted by Project proponent vide letter dated 21.10.2022. IRO has reviewed the same and has issued a report vide letter F. No. EP/12.1/507/KAR/956 dated 15.11.2022.

Written representations:

17.9.13 During the meeting, based on the deliberations made by the EAC, the project proponent vide email dated 16.11.2022 submitted the CCR report obtained from IRO vide letter dated 15.11.2022.

Deliberation by the Committee

17.9.14 The Committee noted the following:

i. The instant proposal is for setting up of Proposed Integrated Cement Plant - Clinker (2 x 4.0 Million TPA), Cement (2 x 3.0 Million TPA), WHRS (2 x 25 MW), DG Set [2 x 1250 KVA {1000 KVA or 500 KVA, 250 KVA & 125 KVA}], Oxygen Plant (2 x 80 m3/hr) in phased manner along with installation of Railway Siding with Wagon Tippler.

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

iii. Total project land is 210 ha; which is government land. Set-a-Part order has been issued by the Revenue Department, Govt. of Rajasthan vide letter dated 27th May, 2022 for set-up of the Cement Plant by JK Cement Limited. Land has been converted for Industrial use as per Distt. Collector Jaisalmer letter dated 27th June, 2022.

iv. The proposed project is a part of interlinked project with a Limestone Mine - Khinya-II(A) Block, (Area: 304.0 ha) near Village: Khinya, Tehsil: Shri Mohangarh, District: Jaisalmer (Rajasthan). Environmental Clearance for the same has already been granted by MoEF&CC vide letter No. IA-J-11015/77/2021-IA-II(NCM) dated 11th July, 2022. The PP submitted that transportation of limestone shall be carried out initially by road and and

thereafter by conveyor belt. The EAC is of the opinion that PP shall emphasize making transportation of limestone through conveyor belt at the earliest.

v. The nearest habitation to plant are Khimsar (4.5 km, E), Odon Ki Dhani (4.5 K, SSE), Tulsi Ram Ki Dhani (4.8 km, NW), Parewar Ki Dhani (5 km, W), Joga (5.1 km, E), Khinya (6 km, NE), Kabir Basti (7 km, NW), Parewar (7 km, W), Lila (8.5 km, W) and Rata (9 km, NNE).

vi. Indira Gandhi Canal (~12.5 km in NNE direction) is the nearest water body in the area.

vii. The total water requirement for Cement Plant will be 2950 KLD. Out of 2950 KLD, 1550 KLD water will be required for Phase I and 1400 KLD water will be required for Phase II. The water will be sourced from Indira Gandhi Canal (1550 KLD), STP (285 KLD), Recycled water (264 KLD) and Rainwater harvesting (134 KLD).

viii. The Committee deliberated upon the compliance report of earlier EC and found it satisfactory.

Recommendations of the Committee

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

(i) The nearest habitation to plant are Khimsar (4.5 km, E), Odon Ki Dhani (4.5 K, SSE), Tulsi Ram Ki Dhani (4.8 km, NW), Parewar Ki Dhani (5 km, W), Joga (5.1 km, E), Khinya (6 km, NE), Kabir Basti (7 km, NW), Parewar (7 km, W), Lila (8.5 km, W) and Rata (9 km, NNE). Project Proponent shall submit action plan for environmental safeguard measures to minimise the impact on the habitation of the locals. The company shall also include some of these locations in its environmental monitoring programme.

(ii) PP shall emphasize on the transportation of raw material from Proposed Khinya-II(A) Block Captive Limestone mines to the plant through conveyor belt at the earliest. Action plan for implementation of conveyor belt shall be submitted.

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

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

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

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

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

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

(ix) Project proponent shall prepare layout plan showing all internal roads minimum 6m width and 9m turning radius with proper looping for smooth traffic flow, including fire

tender as per NBC. Road network shall connect all service areas in layout. This drawing shall include area statement showing plot area, area under roads, parking, green belt with calculations and % with respect to plot area of project site and proper indexing.

(x) Project proponent shall submit contour map of project site along with drainage disposal system with calculations and drawings supported with proper indexing including rain water harvesting details with calculations mentioning about GW recharge along with relevant drawing.

(xi) Project proponent shall submit a study report on Decarbonisation program, which would essentially consist of company's carbon emissions, carbon budgeting/ balancing, carbon sequestration activities and carbon offsetting strategies. Further, the report shall also contain time bound action plan to reduce its carbon intensity of its operations and supply chains, energy transition pathway from fossil fuels to Renewable energy etc. All these activities/ assessments should be measurable and monitorable with defined time frames", when PP comes for EC proposal. This study shall be formulated keeping in view of India's Net-zero commitment at the COP-26 Climate Summit.

(xii) As part of Corporate Environment Responsibility (CER) activity, company shall adopt nearby villages based on the socio-economic survey (10 Kms radial coverage from the project site) and undertake community developmental activities in consultation with the village Panchayat and the District Administration. In this regard, time bound action plan as per the MoEF&CC Office Memorandum dated 30/09/2020 shall be submitted.

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

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

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

(xvi) Monitoring and control of NOx, SO_2 and CO gases from the furnace must be included in the pollution control scheme.

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

***

Agenda No. 17.10

Technical discussion by the EAC with Accredited QCI/NABET Consultant related to Industry 1 Sector regarding various issues emerged while appraising the proposals by the EAC in the meetings

The meeting pertaining to discussion on various issues emerged while appraising the proposals by the EAC (Industry-1) in the meetings was attended by the representatives of the Accredited QCI/NABET Consultants. The issue was deliberated in detail between the members of the Expert Appraisal Committee and representatives of Accredited QCI/NABET Consultants. The EAC members

highlighted the major issues which are common to most of the proposals appraised by the EAC. The EAC also discussed the concerns of the Consultants and provided value suggestions for improvisation in the proposals to be presented before the EAC. The meeting ended with inputs from the EAC and Accredited QCI/NABET Consultants.

***

DAY 3: NOVEMBER 16, 2022 [WEDNESDAY]

Consideration of Environmental Clearance Proposals

Agenda No. 17.11

17.11 Proposed installation of 3x15T Induction Furnace with 1x2 stand of CCM for manufacturing of MS Ingot/Billet (2,00,000 TPA) and 1x25 TPH Rolling Mill (TMT bars - 1,97,000 TPA) within the existing Rolling mills area by M/s Purbanchal Concast Pvt. Ltd., located at J.L. No.: 83, L.R Plot No.: 1007 to 1015, 1022, 1104, 1105, Kashiram Jote, Phulbari Ghoshpukur Bypass, Silliguri, District Darjeeling, West Bengal– Consideration of Environmental Clearance.

[Proposal No. IA/WB/IND1/404663/2022; File No. IA-J-11011/265/2021-IA-II(IND-I)]
[Consultant: M/s Ultra Tech; valid upto 09.03.2023]

17.11.1 M/s Purbanchal Concast Pvt. Ltd. (PCPL) has made an online application vide proposal no. IA/WB/IND1/404663/2022 dated 09/11/2022 along with copy of EIA/EMP report, Form 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 S. No. 3(a) Metallurgical Industries (ferrous & non-ferrous) under Category "A" of the schedule of the EIA Notification, 2006 and attracts general condition due to existence of India-Bangladesh International boundary at a distance of 2.55 Km in SE direction from the project and appraised at Central Level.

17.11.2 Name of the EIA consultant: M/s. ULTRA-TECH [Sl. No. 89, List of ACOs with their Certificate / Extension Letter no. NABET/EIA/2023/RA 0194; valid upto 09.03.2023, Rev. 25, Sept 05, 2022].

Details submitted by Project proponent

17.11.3 The details of the ToR are furnished as below:

Date of application	Consideration	Details	Date of accord	ToR Validity
04/08/2021	2nd EAC meeting held on 22-23rd March, 2022	Terms of Reference	11/04/2022	10/04/2026

17.11.4 The project of M/s. Purbanchal Concast Private Limited (PCPL) located in Kashiram Jote Village, Phansidewa Tehsil, Darjeeling District, West Bengal is for installation of 3x15T Induction Furnace with 1x2 stand of CCM for Manufacturing of M.S. Ingot/Billet (200000 TPA) and 1x25 TPH Rolling Mill within the existing Rolling mills area running on basis of CTE/ CTO from West Bengal Pollution Control Board. PP assured that they will be abide by the order of MoEF&CC, SPCB and Hon'ble NGT to bring the existing rolling mill in ambit of the Environment Clearance under the provisions of EIA, Notification, 2006.

17.11.5 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>10.31 Acre (4.17 Ha)</td><td>Land use: Industrial land</td></tr>
<tr><td>ii.</td><td>Land acquisition Details as per MoEF&CC O.M. dated 7/10/2014</td><td>The proposed project is coming within the existing steel plant of M/s. Purbanchal Concast Pvt. Ltd.</td><td></td></tr>
<tr><td>iii.</td><td>Existence of Habitation & Involvement of R&R, if any.</td><td>R&R issue is not involved.</td><td></td></tr>
<tr><td>iv.</td><td>Latitude and Longitude of the project site</td><td><table><tr><th>Point</th><th>Latitude (N)</th><th>Longitude (E)</th></tr><tr><td>A</td><td>26.628835°</td><td>88.369272°</td></tr><tr><td>B</td><td>26.627442°</td><td>88.369566°</td></tr><tr><td>C</td><td>26.627593°</td><td>88.370109°</td></tr><tr><td>D</td><td>26.627625°</td><td>88.371800°</td></tr><tr><td>E</td><td>26.628800°</td><td>88.371778°</td></tr><tr><td>F</td><td>26.628744°</td><td>88.372421°</td></tr><tr><td>G</td><td>26.629341°</td><td>88.371468°</td></tr><tr><td>H</td><td>26.629057°</td><td>88.369785°</td></tr></table></td><td></td></tr>
<tr><td>v.</td><td>Elevation of the project site</td><td>103-105 m MSL</td><td></td></tr>
<tr><td>vi.</td><td>Involvement of Forest land if any.</td><td>No involvement of Forest Land</td><td></td></tr>
<tr><td>vii.</td><td>Water body (Rivers, Lakes, Pond, Nala, Natural Drainage, Canal etc.) exists within the project site as well as study area</td><td><u>Project site</u> – Nil

<u>Study area:</u>
Mahananda River – 2.68 km, E
Tista sub canal – 2.55 km, E
Tista Canal (Fulbari Ghoshpukur Canal) – 0.6 km, W</td><td></td></tr>
<tr><td>viii.</td><td>Existence of ESZ/ ESA/ national park/ wildlife sanctuary/ biosphere reserve/ tiger reserve/ elephant reserve etc. if any within the study area</td><td>Nil</td><td></td></tr>
</table>

17.11.6 The existing project was accorded Consent to Establish vide lr.no. N427/WPB/SRO/ NOC/Dar/P-140-2011 dated 09-12-2011. The EC was not applicable to the existing rolling mill at that instant. The latest Consent to Operate for the existing unit was accorded by West Bengal State Pollution Control Board vide lr. No C248/WPB/ SRO/Dar/P.139.2015 dated 13.10.2017. The validity of CTO is up to 31.12.2022.

17.11.7 Implementation status of the existing CTE/CTO

Sr. No	Facilities	Unit	As per CTE/CTO	Implementation Status as on date	Production as per CTO
1	Reheating Furnace	2X15 TPH	Angle (Structures) – 1250 T/Month, Pipes, Profile – 3000 T/Month, Stripes – 2200 T/Month	Implemented	Angle (Structures) – 1250 T/Month, Pipes, Profile – 3000 T/Month, Stripes – 2200 T/Month
2	Rolling Mill	2X15TPH 1X25TPH			
3	Tube Mill	9X5TPH			

17.11.8 The project proponent had applied on 04/08/2021 initially for expansion of existing Rolling Mill Products-Angles (Structure), Pipes, Profile and Strips from 77400 TPA to 200000 TPA) & New installations of 3x15T Induction Furnace with 1x2 stand of CCM for Manufacturing of M.S. Ingot/Billet (200000 TPA). Project proponent approached the Ministry to obtain EC for their existing unit in pursuance to the Order dated 12/02/2020 of Hon'ble NGT in Appeal No. 55 of 2019. PP stated that they could not approach the Ministry timely due to Covid-19 pandemic situation. The said proposal was considered in the 42nd meeting of the Re-constituted EAC (Industry-I) held on 12 – 13th August, 2021 wherein after detailed deliberation, the Committee recommended that MoEF&CC may take an appropriate view regarding processing this request as it has been received after the deadline i.e. after 11/02/2021. Subject to the decision by MoEF&CC regarding the late submission of application by the PP as mentioned above, the committee recommended the project proposal for prescribing ToR. Ministry vide letter dated 13/09/2021 requested PP to submit additional information w.r.t. reasons for delay in submission of proposal after the deadline (11/02/2021). Further, on 24/11/2021, the Ministry clarified that The Hon'ble NGT vide its Order dated 12/02/2020 in O.A No. 55 of 2019 held that the MoEF upon consideration of the expert opinion appears to have now clarified that Cold Rolled Stainless Steel manufacturing industries do require prior environmental clearance but, having regard to the fact that there were a large number of such mills operating on the strength of CTE and CTO, opportunity should be provided to such units to fall within the EC regime by granting a period of at least one year to operate for the purpose. The time frame for applying within the EC regime got expired on 11/02/2021 and application for ToR was submitted on 04/08/2021. The delayed submission of proposal by the proponent was examined by the Ministry. The PP vide letter dated 24/12/2021 made a request to Ministry to issue ToR letter only for installation of the Induction Furnaces instead of the entire proposal of expansion and modification (hot charging) of Rolling mill and installation of induction furnace for the sustainability of the project. In view of the same PP revised the proposal and the same was considered during 2nd meeting of the EAC for Industry-I sector held on 22nd – 23rd March, 2022 wherein the Committee recommended the project proposal for prescribing ToR. Accordingly, the TOR was granted on 11/04/2022 by the Ministry for setting up of a 3x15 T induction furnace with lx2 strand CCM for production of 2,00,000 TPA M.S Billet/Ingot and 1 x25 TPH Rolling Mill within the existing Rolling mills area running on basis of CTE/ CTO from West Bengal Pollution Control Board. PCPL assured that they will be abide by the order of MoEF&CC, SPCB and Hon'ble NGT to bring the existing rolling mill in ambit of the Environment Clearance.

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

Plant facility/equipment	Configuration	Production
Induction Furnace	3x15 T	MS Billet/Ingot – 200000 TPA
Continuous Casting Machine (CCM)	1x2 Strand and 7 m Dia	
Rolling Mill	1x25 TPH	Rolling Mill products (TMT bars) – 197000 TPA

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

S. N.	Raw Material	Quantity Required Per Annum (TPA)	Source	Distance from site (Kms)	Mode of Transport
For Rolling Mill Products					
1	MS Billets/ Ingot	200000	Captive production	--	--
For Billets					
2	Sponge Iron	175000	Durgapur, Jharsuguda and other local sources	~ 500 to 900 Kms	Truck
3	MS Scrap	45000			
4	Ferro alloy	2350			
5	Pig Iron	1250			

17.11.11 The one-time water requirement for the project is estimated as 111 KLD, out of which 45 KLD of fresh water requirement will be met from Ground Water and the remaining of 66 KLD will be recycled and reused. The permission for drawl of ground water is obtained from SWID vide permit no. P05110830079200000001TSE & P05110830075300000001TSE.

17.11.12 The power requirement for the proposed project is estimated as 4.4 MW (5550 kVA), which will be obtained from the WBSEDCL.

17.11.13 Baseline Environmental Studies:

Period	1st January 2021 to 31st March 2021
AAQ parameters at 8 Locations	• PM_{10} : 66.8 µg/m^3 to 98.7 µg/m^3 • $PM_{2.5}$: 20.2 µg/m^3 to 43.1 µg/m^3 • SO_2 : 5.2 µg/m^3 to 7.7 µg/m^3 • NO_X :19.8 µg/m^3 to 37.8 µg/m^3 • CO : 0.5 mg/m^3 to 1.2 mg/m^3
AAQ Modeling (Incremental GLC) (ISCST3 Model)	• PM_{10}: 3.287 µg/m^3 (600 m, S) • $PM_{2.5}$: 0.051 µg/m^3 (600 m, S) • NOx: 1.75 µg/m^3 (600 m, S) • CO: 1.312 µg/m^3 (600 m, S)
Ground water quality at 8 locations	• pH: 5.06 to 7.14 • Total hardness: 33.4 to 59.3 mg/l. • Chlorides: 11.6 to 19.2 mg/l, • Fluoride: BDL (<0.5) • Arsenic: BDL (<0.01) • TDS: 73.2 to 123 mg/l
Surface water quality at	pH:, 5.6 to 7.5

<table>
<tr><td>5 locations</td><td>DO: 3.2 to 6.2 mg/l
BOD:2.8 to 4.4 mg/l
COD :10 to 45.8 mg/l</td></tr>
<tr><td>Noise levels Leq (Day and Night)</td><td>60.8 to 73.8 dB(A)for day time and
39.7 to 62.4 dB(A) for night time.</td></tr>
<tr><td>Traffic assessment study findings</td><td>Traffic study has been conducted at NH-27 (Fulbari ghoshpukur Bypass), which is approximately 1.5 km away from the plant site.
• Transportation of raw material, fuel & finished product will be done 100% by road.
• Existing PCU is 2059 PCU/hr on NH-27 and existing level of service (LOS) is: Good (C)
<table>
<tr><th>Road</th><th>V (Volume in PCU/hr.)</th><th>C (Capacity in PCU/hr.)</th><th>Existing V/C Ratio</th><th>LOS</th></tr>
<tr><td>NH-27</td><td>2059</td><td>3600</td><td>0.57</td><td>C (Good)</td></tr>
</table>
• PCU load after proposed project will be 2059 (Existing) + 24.67 (Additional) = 2083.67 PCU/hr and level of service (LOS) will be: Good (C)
<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>NH-27</td><td>2083.67</td><td>3600</td><td>0.58</td><td>C (Good)</td></tr>
</table>
**Note: Capacity as per IRC-106-1990 Guideline for capacity for roads.*
Conclusion: The level of service will remain Good (C) after including additional traffic due to proposed project.</td></tr>
<tr><td>Flora and fauna</td><td>No species in the study area belongs to Schedule I, of Wildlife Protection Act, 1972 and there are no endangered, threatened wild animal species in study area.</td></tr>
</table>

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

Industrial Waste			
Type of Waste	**Source**	**Quantity**	**Treatment/Disposal**
Slag	Induction Furnace	1726 TPM	Slag will be crushed and metal part will be recovered by magnetic separator and rest part will be used for road construction.
End cutting from rolling mill	Rolling Mill	250 TPM	Reused in SMS
STP Sludge	STP	0.5 Kg/Day	Will be used as manure for gardening
Dust from APC System	APC Device (Bag Filter)	194 TPM	Will be utilised for landfilling.
Municipal Solid Waste (MSW) -Kg/Day			
Type of Waste	**Source**	**Quantity**	**Treatment/ Disposal**
Wet Garbage	Domestic	23	To be disposed off as per MSW Rules
Dry Garbage	Domestic	53	To be disposed off as per MSW Rules
Hazardous waste			

Type of Waste	Source	Quantity	Treatment/ Disposal
Used oil	DG Set	0.5 TPA	SPCB authorized recyclers & re-processors

17.11.15 Public Consultation:

Details of advertisement given	09/06/2022
Date of public consultation	27/07/2022
Venue	Tea Leaf Resort, Fulbari, Ghoshpukur Bypass Road, P.O - Liusipukuri, Near Biskfarm Factory, Dist. - Darjeeling, West Bengal
Presiding Officer	Additional Executive Officer, SMP & Additional District Magistrate, Darjeeling district
Major issues raised	i. Local employment ii. Plantation /Greenbelt development iii. Social Development

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

S. No.	Major Activity heads		Year of Implementation			Total Expenditure (Rs. in Lakhs)
			1st Year	2nd Year	3rd Year	
A	**Based on Public Consultation / Hearing**					
1	Jobs & Skill development Programmes					
	Skill training programme for local youth in the nearby villages	Physical Nos. & village	Skill development program in Kashiram village	Skill development program in Luisipukuri village	Skill development program in Mohammad box village	
		Budget in lakhs	Rs. 1 Lakhs	Rs. 1 lakhs	Rs. 1 lakhs	3
2	Greenbelt Development/plantation					
	Tree Plantation Programme (120 nos.) in the nearby villages will be done and distribution of saplings will be done to the nearby villagers and school students in consultation with forest department	Physical Nos. & village	40 nos. tree plantation & distribution of saplings in Kashipur village.	40 nos. tree plantation & distribution of saplings in Luisipukuri village.	40 nos. tree plantation & distribution of saplings in Kinajote village.	
		Budget in lakhs	Rs 0.5 Lakhs	Rs 0.5 Lakhs	Rs 0.5 Lakhs	1.5
3	Street Solar Lighting					
	Installation of street solar light along the adjacent road of the plant and nearby villages	Physical Nos. & village	30 nos. of solar street light along adjacent road of the plant & Kashiram village	10 nos. of solar street light in Mohammad Box village.	10 nos. of solar street light in Liusipukuri village.	
		Budget in	Rs. 3 Lakhs	Rs. 1 lakh	Rs. 1 lakh	5

S. No.	Major Activity heads		Year of Implementation			Total Expenditure (Rs. in Lakhs)
			1st Year	2nd Year	3rd Year	
		lakhs				
B	**Based on Need Based & SIA Study**					
3	Arrangement of health camp, distribution of medicines etc. at nearby villages	Physical Nos. & village	Health checkup camps shall be organized on yearly basis, in kashiram village for general body, eyes, blood test For this purpose, one doctor along with 2 assistants shall be deputed.	Health checkup camps shall be organized on yearly basis, in Liusipukuri village for general body, eyes, blood test. For this purpose, one doctor along with 2 assistants shall be deputed.	Health checkup camps shall be organized on yearly basis, in Kinajote village for general body, eyes, blood test. For this purpose, one doctor along with 2 assistants shall be deputed.	
		Budgets in lakhs	Rs 1 Lakh	Rs 1 Lakhs	Rs 1 Lakhs	3
4	Infrastructure development	Development & maintenance of approach road in adjacent villages	Development of approach road in Kashiram village	-	-	
		Budgets in lakhs	Rs 2.5Lakhs	-	-	2.5
		Grand Total (A+B)				**15**

17.11.16 The capital cost of the project is Rs 10 Crores and the capital cost for environmental protection measures is proposed as Rs 115 lakhs. The annual recurring cost towards the environmental protection measures is proposed as Rs. 38 lakhs. The employment generation from the proposed project is 100. The details of cost for environmental protection measures are as follows:

S. No.	Particulars	Amount in INR, Lakhs	
		Capital Cost	Recurring Cost
1	Air Pollution Control System	40	12
2	Noise Control System	12	2
3	Green Belt Development	10	2
4	Environment Monitoring and Management	10	7
5	Water Pollution Control System	23	10

S. No.	Particulars	Amount in INR, Lakhs	
		Capital Cost	Recurring Cost
6	Occupational Health & Safety	5	5
7	Addressal of Public hearing	15	-
Total		**115**	**38**

17.11.17 After the proposed installations, the existing green belt will be extended over an area of 13940.95 m^2 or 1.39 Ha (33.40%). A 15m (Minimum) 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. Considering 2500 plants per Ha, around 3475 trees are required to be planted inside the plant. 175 nos. of trees have already been planted and 3300 nos. of trees have been proposed to be planted.

17.11.18 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, WBPCB

17.11.19 The Status of compliance of earlier CTO was obtained from Regional Office, WBPCB, Siliguri vide letter no. 258/WPB/SRO/Dar/P-139-2015 dated 27.09.2022 in the name of M/s. Purbanchal Concast Pvt Ltd. No non-compliance reported.

17.11.20 M/s Purbanchal Concast Pvt. Ltd. (PCPL) earlier applied for EC vide proposal no. IA/WB/IND/214214/2021 dated 04/08/2021 and the proposal was considered during 14th meeting of the EAC for Industry-I sector held on 29-30th September, 2022 wherein after detailed deliberations, the committee recommended to return the proposal in its present form due to the shortcomings. The deliberation and recommendations of the EAC of 14th EAC meeting are as follows:

Deliberations by the Committee

17.11.21 The Committee noted the following:

1. The project proponent had applied on 04/08/2021 initially for expansion of existing Rolling Mill Products-Angles (Structure), Pipes, Profile and Strips from 77400 TPA to 200000 TPA) & New installations of 3x15T Induction Furnace with 1x2 stand of CCM for Manufacturing of M.S. Ingot/Billet (200000 TPA). Project proponent approached the Ministry to obtain EC for their existing unit in pursuance to the Order dated 12/02/2020 of Hon'ble NGT in Appeal No. 55 of 2019. PP stated that they could not approach the Ministry timely due to Covid-19 pandemic situation. The said proposal was considered in the 42nd meeting of the Re-constituted EAC (Industry-I) held on 12 – 13th August, 2021 wherein after detailed deliberation, the Committee recommended that MoEF&CC may take an appropriate view regarding processing this request as it has been received after the deadline i.e. after 11/02/2021. Subject to the decision by MoEF&CC regarding the late submission of application by the PP as mentioned above, the committee recommended the project proposal for prescribing ToR. Ministry vide letter dated

13/09/2021 requested PP to submit additional information w.r.t. reasons for delay in submission of proposal after the deadline (11/02/2021). Further, on 24/11/2021, the Ministry clarified that The Hon'ble NGT vide its Order dated 12/02/2020 in O.A No. 55 of 2019 held that the MoEF upon consideration of the expert opinion appears to have now clarified that Cold Rolled Stainless Steel manufacturing industries do require prior environmental clearance but, having regard to the fact that there were a large number of such mills operating on the strength of CTE and CTO, opportunity should be provided to such units to fall within the EC regime by granting a period of at least one year to operate for the purpose. The time frame for applying within the EC regime got expired on 11/02/2021 and application for ToR was submitted on 04/08/2021. The delayed submission of proposal by the proponent was examined by the Ministry. The PP vide letter dated 24/12/2021 made a request to Ministry to issue ToR letter only for installation of the Induction Furnaces instead of the entire proposal of expansion and modification (hot charging) of Rolling mill and installation of induction furnace for the sustainability of the project. PP assured that they will be abide by the order of MoEF&CC, SPCB and Hon'ble NGT to bring the existing rolling mill in ambit of the Environment Clearance. In view of the same PP revised the proposal and the same was considered during 2nd meeting of the EAC for Industry-I sector held on 22nd – 23rd March, 2022 wherein the Committee recommended the project proposal for prescribing ToR. Accordingly, the TOR was granted on 11/04/2022 by the Ministry.

2. **The EAC further observed that the instant proposal is applied as a greenfield project involving setting up of a 3x15 T induction furnace with 1x2 strand CCM for production of 2,00,000 TPA M.S Billet/Ingot and 1x25 TPH Rolling Mill, <u>though the project is being proposed within the existing Rolling mills area which is running on basis of CTE/ CTO from West Bengal Pollution Control Board</u>. The PP has not obtained/submitted SPCB certified compliance report of CTO conditions for the existing rolling mill which is a requisite for appraisal of the instant proposal.**

3. The EAC also noted that the project proponent and consultant during the appraisal presented wrong EMP cost which are also factually incorrect in the uploaded presentation in the PARIVESH portal. This is a serious concern as the consultant are presenting wrong facts and are not serious about the project.

4. The EAC informed to the PP/Consultant that as the whole process of granting ECs are online on Parivesh Portal. The application uploaded on portal cannot be revised. In view of the above, the PP shall submit the revise application. PP has committed to revise the application and agreed his mistake.

Recommendations of the Committee:

17.11.22 In view of the foregoing and after detailed deliberations, the committee recommended to return the proposal in its present form due to the shortcomings given at para no 17.11.21 above. The EAC also warned the consultant to guide the project proponent properly with respect to the requisite information and documents required at the time of appraisal and also to present the correct facts during the appraisal of the project.

17.11.23 M/s PCPL has again applied for EC vide proposal no. IA/WB/IND1/404663/2022 dated 09/11/2022. The proposal is considered during 17th meeting of the EAC for Industry-I sector held on 14-16th November, 2022. The deliberation and recommendations of the EAC are as follows:

Deliberations by the Committee

17.11.24 The Committee noted the following:

1. The project proponent had applied on 04/08/2021 initially for expansion of existing Rolling Mill Products-Angles (Structure), Pipes, Profile and Strips from 77400 TPA to 200000 TPA) & New installations of 3x15T Induction Furnace with 1x2 stand of CCM for Manufacturing of M.S. Ingot/Billet (200000 TPA). Project proponent approached the Ministry to obtain EC for their existing unit in pursuance to the Order dated 12/02/2020 of Hon'ble NGT in Appeal No. 55 of 2019. PP stated that they could not approach the Ministry timely due to Covid-19 pandemic situation. The said proposal was considered in the 42nd meeting of the Re-constituted EAC (Industry-I) held on 12 – 13th August, 2021 wherein after detailed deliberation, the Committee recommended that MoEF&CC may take an appropriate view regarding processing this request as it has been received after the deadline i.e. after 11/02/2021. Subject to the decision by MoEF&CC regarding the late submission of application by the PP as mentioned above, the committee recommended the project proposal for prescribing ToR. Ministry vide letter dated 13/09/2021 requested PP to submit additional information w.r.t. reasons for delay in submission of proposal after the deadline (11/02/2021). Further, on 24/11/2021, the Ministry clarified that The Hon'ble NGT vide its Order dated 12/02/2020 in O.A No. 55 of 2019 held that the MoEF upon consideration of the expert opinion appears to have now clarified that Cold Rolled Stainless Steel manufacturing industries do require prior environmental clearance but, having regard to the fact that there were a large number of such mills operating on the strength of CTE and CTO, opportunity should be provided to such units to fall within the EC regime by granting a period of at least one year to operate for the purpose. The time frame for applying within the EC regime got expired on 11/02/2021 and application for ToR was submitted on 04/08/2021. The delayed submission of proposal by the proponent was examined by the Ministry. The PP vide letter dated 24/12/2021 made a request to Ministry to issue ToR letter only for installation of the Induction Furnaces instead of the entire proposal of expansion and modification (hot charging) of Rolling mill and installation of induction furnace for the sustainability of the project. In view of the same PP revised the proposal and the same was considered during 2nd meeting of the EAC for Industry-I sector held on 22nd – 23rd March, 2022 wherein the Committee recommended the project proposal for prescribing ToR. Accordingly, the TOR was granted on 11/04/2022 by the Ministry for setting up of a 3x15 T induction furnace with lx2 strand CCM for production of 2,00,000 TPA M.S Billet/Ingot and 1 x25 TPH Rolling Mill within the existing project area running on basis of CTE/ CTO from West Bengal Pollution Control Board. PCPL assured that they will

be abide by the order of MoEF&CC, SPCB and Hon'ble NGT to bring the existing rolling mill in ambit of the Environment Clearance.

2. The instant proposal is for installation of 3x15T Induction Furnace with CCM & 1x25TPH Rolling Mill (Hot Charging) within its existing rolling mills area which is running on basis of CTE /CTO from West Bengal Pollution Control Board. PP assured that they will be abide by the order of MoEF&CC, SPCB and Hon'ble NGT to bring the existing rolling mill in ambit of the Environment Clearance.

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

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

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

6. The total project area is 10.31 ha which is in possession of PCPL. Land is under the possession of the company. The proposed project will be coming within the existing plant premises.

7. The water requirement for the project is estimated as 111 KLD, out of which 45 KLD of fresh water requirement will be met from Ground Water and the remaining of 66 KLD will be recycled and reused.

8. Mahananda River (2.68 km, E), Tista sub canal (2.55 km, E) and Tista Canal (Fulbari Ghoshpukur Canal) (0.6 km, W) exists within the study area of 10 km around the project site. The EAC is of the opinion that water bodies shall not be disturbed. Mitigation measures w.r.t. safeguarding the water bodies shall be implemented.

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

10. The EAC noted that the after the proposed installations, the existing green belt will be extended over an area of 13940.95 m^2 or 1.39 Ha (33.40%). Considering 2500 plants per Ha, around 3475 trees are required to be planted inside the plant. 175 nos of trees have already been planted and 3300 nos of trees have been proposed to be planted. The

Committee deliberated on the action plan and budget allocation for green belt development and found it satisfactory.

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

12. The Committee deliberated upon the certified compliance report of SPCB and found it satisfactory.

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

14. The EAC 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:

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

A. Specific Condition:

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

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

iii. Mahananda River (2.68 km, E), Tista sub canal (2.55 km, E) and Tista Canal (Fulbari Ghoshpukur Canal) (0.6 km, W) exists within the study area of 10 km around the project site. A robust and full proof Drainage Conservation scheme to protect the natural drainage and its flow parameters; along with Soil conservation scheme and multiple Erosion control measures shall be implemented.

iv. The water requirement for the project is estimated as 111 KLD, out of which 45 KLD of fresh water requirement will be met from Ground Water and the remaining of 66 KLD will be recycled and reused. Necessary permission shall be obtained from the Competent Authority in this regard. PP shall explore the possibility of shifting to alternate source of water to reduce dependency on groundwater.

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

vi. 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.

vii. 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.

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

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 and catch pits to trap the run off material and shall be implemented as per the action plan submitted in EIA/EMP report.

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

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

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

xiv. 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.

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

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

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

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

xix. PP shall adopt nearby villages and prepare and implement a robust plan to develop them into model villages in next 10 years.

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

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

xxii. Three tier Green Belt shall be developed in at least 33% of the project area in a time frame of one year with native species all along the periphery of the project site of adequate width and tree density shall not be less than 2500 per ha. Survival rate of green belt developed shall be monitored on periodic basis to ensure that damaged plants are replaced with new plants in the subsequent years. PP shall also emphasize on road side plantation. 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. All the commitments made to the public during the Public Hearing/Public Consultation shall be satisfactorily implemented. The action plan based on the social impact assessment study of the project as per the EMP in accordance to the Ministry's OM dated 30.09.2020 shall be strictly implemented and progress shall be submitted to the Regional Office of MoEF&CC.

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

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

the project premises and also in the surrounding villages to arrest suspended dust in the atmosphere.

B. General conditions:

I. Statutory compliance:

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

II. Air quality monitoring and preservation

i. The project proponent shall install 24x7 continuous emission monitoring system at process stacks to monitor stack emission 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.

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Consideration of Environmental Clearance Proposals

Agenda No. 17.12

17.12 Expansion of Steel Plant Sponge Iron (175 TPD to 375 TPD), Rolling Mill (72,000TPA) and Captive Power Generation 12 MW (WHRB 6 MW, AFBC 6 MW) located at Village Chikkabaganal, Post Kerikihalli and District Koppal, Karnataka by M/s Baba Akhila Sai Jyothi Industries Pvt. Ltd., located at Village Chikkabaganal, Post Kerikihalli and District Koppal, Karnataka– RE-Consideration of Environmental Clearance.

[Proposal No. IA/KA/IND/290414/2012; File No. IA-J-11011/163/2010-IA.II(I)]
[Consultant: Shree Green Consultants; valid upto 24.02.2024]

17.12.1 M/s. Baba Akhila Sai Jyothi Industries Pvt. Ltd has made an online application vide proposal no. IA/KA/IND/290414/2012 dated 18th September 2022 along with copy of EIA/EMP report and Form – 2 and certified compliance report seeking Environment Clearance (EC) under the provision of the EIA Notification, 2006 for the project mentioned above. The proposed project

activity is listed at schedule no. 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.

17.12.2 Name of the EIA consultant: M/s. Shree Green Consultants [Sl. No. 30, List of ACOs with their Certificate / Extension Letter no. NABET/EIA/2124/IA0072; valid upto 24.02.2024, Rev. 25, Sept 05, 2022].

Details submitted by the project proponent

17.12.3 The detail of the ToR is furnished as below:

Date of application	Consideration	Details	Date of accord	ToR Validity
11/03/2019	6th meeting of EAC held on 29-30th April 2019	Terms of Reference	13/06/2019	12/06/2023

17.12.4 The project of M/s. Baba Akhila Sai Jyothi Industries Pvt. Ltd. located in Chikkabaganal Village, Post Kerikihalli and District Koppal Karnataka State is for expansion of Steel Plant - Sponge Iron (175 TPD to 375 TPD), Rolling Mill (72,000 TPA) and Captive Power Generation 12 MW (WHRB 6 MW, AFBC 6 MW).

17.12.5 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>16.7944 ha ≈ 16.79 ha (Private)</td><td>Land use: Industrial</td></tr>
<tr><td>2.</td><td>Land acquisition details as per MoEF&CC O.M. dated 7/10/2014</td><td>It is a Private Land owned by M/s. Baba Akhila Sai Jyothi Industries Pvt. Ltd</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>Chikkabaganal</td><td>0.56 km</td><td>East</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>15°16'42.06"N</td><td>76°13'54.04"E</td></tr><tr><td>B</td><td>15°16'42.19"N</td><td>76°14'10.74"E</td></tr><tr><td>C</td><td>15°16'43.73"N</td><td>76°14'10.68"E</td></tr><tr><td>D</td><td>15°16'44.17"N</td><td>76°14'16.00"E</td></tr><tr><td>E</td><td>15°16'35.46"N</td><td>76°14'15.68"E</td></tr><tr><td>F</td><td>15°16'35.19"N</td><td>76°13'53.83"E</td></tr></table></td><td>-</td></tr>
<tr><td>5.</td><td>Elevation of the project site</td><td>1697 Feet MSL</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,</td><td>Project site: There is no water body present within project site.</td><td>-</td></tr>
</table>

<table>
<tr><th>Sr. No.</th><th>Particulars</th><th>Details</th><th>Remarks</th></tr>
<tr><td></td><td>Natural Drainage, Canal etc.) exists within the project site as well as study area</td><td>Study area:<table><tr><th>Water body</th><th>Distance</th><th>Direction</th></tr><tr><td>Tungabhadra reservoir</td><td>1.28 Km</td><td>East</td></tr></table></td><td></td></tr>
<tr><td>8.</td><td>Existence of ESZ/ ESA/ national park/ wildlife sanctuary/ biosphere reserve/ tiger reserve/ elephant reserve etc. if any within the study area</td><td>Nil</td><td>-</td></tr>
</table>

17.12.6 The chronology of the project activities and obtained permissions are as follows:

Date	Permission
30.07.2005	**Consent for Establish (CFE) from KSPCB** vide letter no.: CFE/CELL/BASJIPL/NE-1058/2005-06/73 dated 30th July 2005 for 30000 MTPA capacity Sponge Iron manufacturing unit which was valid for a period of two years.
01.07.2008	**Environmental Clearance was obtained from Department of Forest Ecology & Environment, Govt. of Karnataka** vide file ref. no. FEE 317 ECO 2005 dated 1st July, 2008 for establishing 30,000 MTPA capacity Sponge Iron manufacturing unit which was valid for a period of five years.
12.08.2010	**Terms of Reference were issued from Ministry of Environment & Forests** vide file ref. no. J-11011/163/2010-IA-II (I) dated 12th August 2010 for expansion of Sponge Iron Plant from 100 TPD to Integrated Mini Steel Plant. Due to the market condition and ban on iron ore mining in three Districts of Karnataka including Bellary vide MoEF&CC OM dated 05.10.2011. Proponent could not take-up the proposal.
22.03.2011	**Environmental Clearance was obtained from SEIAA, Karnataka Govt. of India** vide file ref. no. SEIAA 19 IND 2009 dated 22nd March 2011 for the expansion of Sponge Iron Plant from 100 TPD to 175 TPD capacity.
07.07.2011	**Consent for Establish (CFE) from KSPCB** vide letter no.: 23/KSPCB/SEO/MINES/CFE/2011-12/231 dated 07th July 2011 was obtained for installation of Rotary Kiln-II-75 TPD in addition to the existing Rotary Kiln- I -100 TPD and started construction activities.
17.03.2012	**Consent for operate (CFO) was obtained from Karnataka State Pollution Control Board (KSPCB)** vide letter no.: 205/PCB/MIN/CFO/2011-12/1022 dated 17th March 2012 and started its operation.
01.10.2013	**Environmental Clearance was obtained from SEIAA, Karnataka, Govt. of India** vide letter no. SEIAA 32 IND 2012 dated 1st October 2013 for expansion of the project within the existing area by adding 1x20 T Induction Furnace and 12 MW Captive Power Plant.

30.05.2014	**Consent for Establish (CFE) from KSPCB** vide letter no.: CFE/PCB/EXP/LR/2014-15/216 dated 30th May, 2014 was obtained for installation of 1x20 T Induction Furnace and 12 MW Captive Power Plant (WHRB – 4 MW & AFBC – 8 MW) but could not implement due to Financial Problem.
29.07.2022	The latest **Consent to Operate accorded by State Pollution Control Board** vide letter. no. 52580 dated 29/07/2022 for 50 TPH Iron Ore crushing & screening plant and sponge iron production (1x100 TPD a& 1x75 TPD). The validity of CTO is up to 30/06/2027.

17.12.7 Implementation status of the existing EC:

S. No.	Facilities	Units	As per EC dated 1st October, 2013	Implementation Status as on September 2022	Production as per CTO
1	Sponge Iron Plant	1 X 100 TPD	Vide letter no. SEIAA: 32 IND: 2012 dated 1st October 2013	Operational	1 X 100 TPD
		1 x 75 TPD		Operational	1 x 75 TPD
3	Induction Furnace	1 X 20 T		PP didn't Install	-
4	Captive Power Plant	12 MW (WHRB – 4 MW & AFBC – 8 MW)		PP didn't Install	-

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

Sl. No.	Plant Equipment/ Facility	Existing facilities as per EC dated1st October, 2013								Proposed Units		Final (Existing + Proposed)		Remarks
		Total (A+B)		Implemented (A)		Un-implemented (B)		As per CTO						
		Configuration	Capacity	Configuration	Capacity	Configuration	Capacity	Configuration	Capacity	Configuration	Capacity	Configuration	Capacity	
1	Sponge Iron Plant	1	100 TPD	1	100 TPD	-	-	1	100 TPD		Additional 25 TPD	1	125 TPD	-
2		1	75 TPD	1	75 TPD	-	-	1	75 TPD		Additional 50 TPD	1	125 TPD	-
3		-	-	-	-	-	-	-	-	1	125 TPD	1	125 TPD	-
4	Induction Furnace	1	20 T	-	-	1	20 T	-	-	-	-	1	20 T	PP didn't Install earlier
5	Captive Power Plant	WHRB 8 MW & AFBC – 4 MW	12MW	-	-	WHRB – 8 MW & AFBC – 4 MW	12 MW	-	-	-	-	WHRB – 6 MW & AFBC – 6 MW	12 MW	PP didn't Install earlier
6	Rolling Mill	-	-	-	-	-	-	-	-	1	72000 TPA	1	72000 TPA	-

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

S. No	Raw Material	Quantity required per annum			Source	Distance from site (Kms)	Mode of Transportation
		Existing	Expansion	Total			
1	Pellet	80850	92400	173250	MSPL Limited, Koppal	10	Road
2	Coal	51975	59400	111375	Domestic / Imported	320	Road, Others
3	Dolomite	2310	2640	4950	Domestic	50	Road
4	DRI	-	72000	72000	In house	0	Road
5	Steel Scrap	-	12000	12000	Domestic/Imported	320	Road, Others
6	Hot Metal	-	79200	79200	In house	0	Road

17.12.10 PP reported that the Existing Water requirement is 1130.00 m^3/day, water requirement is obtained from Ground Water with necessary permission. The water requirement after proposed expansion is estimated as 1500 m^3 /day, out of which 1190 m^3 /day of fresh water requirement will be obtained from the Ground Water with requisite permission from the authority and the remaining requirement of 310 m^3 /day will be from surface water and reuse water. PP has submitted endorsement letter dated 13.02.2018 from Groundwater Directorate, Koppal.

17.12.11 Existing power requirement of 2.2 MW is obtained from State Electricity Board. The power requirement for the proposed project is estimated as 13.5 MW, out of which 12 MW will be obtained from Power generated from CPP.

17.12.12 Baseline Environmental Studies

Period	1st October 2019 to 31st December 2019
AAQ parameters at 8 Locations	• $PM_{2.5}$ = 13 – 32 µg/m^3 • PM_{10} = 41 – 71 µg/m^3 • SO_2 = 18 – 30 µg/m^3 • NOx = 13 – 30 µg /m^3 • CO = 0.2-2.15 mg/m^3,
Incremental GLC level	• PM_{10}=9.5µg/m^3 (Level at 1.0 km in North-east Direction) • SO_2=16.6 µg/m^3 (Level at 1.0 km in North-east Direction) • NOx=5.95µg/m^3 (Level at 1.0 km in North-east Direction) • CO = 1.27 µg/m^3 (Level at 1.0 km in North-east Direction)
Ground water quality at 8 locations	• pH: 7.07 – 8.1, • Total Hardness: 110– 189.9 mg/L, • Chlorides: 21.8–155.13 mg/l, • Fluoride: <0.1 mg/l, • Heavy metal [Iron: <0.1 mg/l]
Surface water quality at 8 locations	• pH: 7.11-7.79, • DO: 5.3 – 6.0 mg/l and • BOD: 11.2 – 27.6 mg/l. • COD: 43.9 – 73.1 mg/l

<table>
<tr><th>Period</th><th>1st October 2019 to 31st December 2019</th></tr>
<tr><td>Noise levels Leq (Day and Night)</td><td>66.1 to 76.17 for the day time and 53.5 to 61.67 for the Night time</td></tr>
<tr><td>Traffic assessment study findings</td><td>

Traffic study has been conducted at NH 67 which is approximately 7.69 km (distance) from the plant site.
Transportation of raw material, fuel & finished product will be done 30% by road.
Existing PCU is 912 PCU/hr on NH 67 and existing level of service (LOS) is:

<table>
<tr><th>Road</th><th>V (Volume In PCU/hr.)</th><th>C (Capacity in PCU/hr.)</th><th>Existing V/C Ratio</th><th>LOS</th></tr>
<tr><td>NH 67</td><td>912</td><td>1500</td><td>0.6</td><td>Good</td></tr>
</table>
PCU load after proposed project will be 912(Existing) + 40 (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>NH 67</td><td>952</td><td>1500</td><td>0.63</td><td>Fair</td></tr>
</table>
Conclusion: The level of service will be D after including additional traffic due to proposed project.
</td></tr>
<tr><td>Flora and fauna</td><td>No schedule I fauna and endangered Flora found within the study area.</td></tr>
</table>

17.12.13 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 generated (TPA)	Mode of Treatment Disposal
Solid Waste				
1	Coal char	Sponge Iron (DRI Kiln)	30000	Utilizing for captive power generation in 12 MW Power plant as Raw material.
2	Mill Scale	Rolling Mill	8000	Sold to Pellet manufacturing industries or Recycle within the plant premises
3	Fly Ash	Captive Power Plant	15000	Shall be sold to brick making.
Hazardous Waste				
1	Generator/ Lubricants	Used oil	1.10	Shall be sold to the KSPCB approved recycler.
2	WWTP	ETP Sludge	9900	Shall be sent to the nearest TSDF site.
3	Sponge Iron Klin	Dolochar	30000	It will be used in AFBC Boiler for Power Generation or Will be sent to brick manufacturer

17.12.14 Public Consultation

Details of advertisement given	Public Hearing Notice was published in Newspapers "Indian Express" & "Prajavani" dated 17/07/2021, in Local language in "Nagaika" dated 16/07/2021.
Date of public consultation	17/08/2021
Venue	Survey No. 79 & 84 Chikkabagnal Village and 90/5, 90/7, 90/8, 90/9 and 91/6 of Kunikeri Village, Koppal Taluk District, Karnataka.
Presiding Officer	Deputy Commissioner and District Magistrate Koppal.
Major issues raised	Environment Pollution, Employment, Health, Agriculture and Animal Husbandry.

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

Sr. No.	Item	Village Name	Totals in Rs. Lakhs			
			1st Year	2nd Year	3rd Year	Total
I	**Village Infrastructure Development**					
1	Construction of Roads, speed breakers and sign boards in the villages	Chikkabagnal, Kunikeri, Hireboganhal, Kanakpur, Bahaddurbandi, Mellikeri Chikkabagnal	10.0	6.5	5	21.5
2	Construction of community toilet		13.0	10	6.5	29.5
3	Rain water harvesting structure		23.5	23	10.5	57
4	Construction of toilet in schools		25.0	15.5	8.5	49
5	Construction of playground facilities in schools		25.0	15.5	8.5	49
6	Construction of drain		12.5	10	5.5	28
7	Construction of Community Hall		10	6.5	5	21.5
8	Drinking water Facilities		17.5	15	7.5	40
9	Irrigation Facilities		17.5	15	7.5	40
	Sub Total (I)		**154**	**117**	**64.5**	**335.5**
II	**Sustainable Livelihood / Skill Development Programs**					
1	Skill Development Workshops		16.0	12.5	5.5	34.0
	Sub Total (II)		**16.0**	**12.5**	**5.5**	**34.0**
III	**Health Facilities**					
1	Ambulance facility and equipment for medical Centre		20.5	15.5	9	45
2	Construction Primary Health Care Facilities		7.0	6.5	5.0	18.5
3	Acilities for veterinary and animal husbandry		16	12.5	5	33.5
	Sub Total (III)		**42**	**33**	**15.5**	**90.5**
IV	**Plantation Programs**					
1	Development of nursery for plantation of in villages and distribution beyond the immediate villages		15.0	15.0	10.0	40.0
	Sub Total (IV)		**15.0**	**15.0**	**10.0**	**40.0**

Sr. No.	Item	Village Name	Totals in Rs. Lakhs			
			1st Year	2nd Year	3rd Year	Total
	Grand Total		**227**	**177.5**	**95.5**	**500**
PP has submitted that they are committed to adopt the Chikkabaganal village. PP will formulate a sound Village adoption program consisting of need based community development activities with the objective of developing it into a model village. This shall be done by engaging an expert agency and in consultation with the Karnataka govt. officials. PP will also explore to adopt one more village "Kunukeri" after 3 years.						

17.12.15 The existing capital cost of project was 324 crores. The capital cost of the proposed project is Rs 145 crores and the capital cost for environmental protection measures is proposed as Rs. 680 lakhs. The annual recurring cost towards the environmental protection measures is proposed as Rs. 65.71 lakhs. The employment generation from the proposed expansion is 485(Temporary 310 + Permanent 175) The details of cost for environmental protection measures is as follows:

Sr. No.	Particulars	Existing (Rs. In Lakhs)		After Proposed Expansion (Rs. In Lakhs)	
		Capital Cost	Recurring Cost	Capital Cost	Recurring Cost
1	Air Pollution Control System	144	1.75	300.00	3.65
2	Noise Control System	27	0.8	60.00	1.50
3	Green Belt Development	12	11	30.0	28.0
4	Environment Monitoring Program	42	3.5	80.00	7.20
5	Solid and Hazardous Waste Management	33.8	2	75.00	5.30
6	Water Pollution Control System	41.2	5.25	80.00	12.00
7	Occupational Health & Safety	4	0.65	10.00	1.36
8	Rain Water Harvesting System	11	0.6	25.00	1.70
9	Fire Safety & Equipment	9	2.7	20.00	5.00
	Total	**324**	**28.25**	**680**	**65.71**

17.12.16 The existing green belt has been developed in 3.8624 ha area which is about 23 % of the total project area of 16.79 ha with total sapling of 9960 Trees. Proposed greenbelt will be developed in 1.6795 ha which is about 10 % of the total project area and approximately 8 acre outside of premises which is about 19.27%. Thus, total of 5.5422 ha area (33% of total project area) will be developed as greenbelt. A 9 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 22253(E 9960 nos.+ P 12293 nos.) saplings will be planted and nurtured in 4.9168 hectares in 5 years.

17.12.17 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

17.12.18 The Status of compliance of earlier EC was obtained from Regional Office, Bangalore, vide letter no. F.No. EP/12.1/2010-11/127/SEIAA/KAR dated 03.06.2022 in the name of M/s. Baba Akhila Sai Jyothi Industries Pvt. Ltd. The Action taken report regarding the partially/non-complied condition was submitted to Regional officer MoEF&CC, vide letter no. BASJIPL/2022-2023/MOEF/11 Dated 08/09/2022.

S. No.	Non-compliances details	Observation of RO (abridged)	Condition no.			Re-assessment by RO / Response by PP
			EC date	Specific	General	
1	Partially Complied condition	To control the emission, PA has installed ESP. Regarding Online Monitoring system, PA has installed Continuous Stack Emission Monitoring System and connected to the PCB servers and not provided Continuous Ambient Air Quality Monitoring System. PA has informed that considering many similar kinds of industries operating within the vicinity, avoiding individual online system and the huge cost thereon, the KSPCB has been requested to install online air monitoring station in this industrial area. The copy of the letter was submitted. The CAAQMS needs to be installed immediately in consultation with KSPCB.	1st October, 2013	1	-	Unit has already installed continuous stack monitoring facilities for all the stacks and also connected with Karnataka State Pollution Control Board (KSPCB) and Central Pollution Control Board (CPCB). Unit will install Online ambient air quality monitoring facilities within two months.
2.	Partially Complied condition	The 5 % of total cost comes around Rs 39.2 lakhs. According to the records produced, PA has spent Rs. 2.46 Crores since 2013 and Rs. 6.25 lakhs during the last year on CSR activities on including improvement of agricultural productivity.	1st October, 2013	18	-	Unit regularly carry out community welfare activities in the nearby project area for overall improvement of the environment.

17.12.19 The proposal was initially considered in the 14th meeting of the EAC for Industry-I sector held on 29-30th September, 2022 wherein the Committee deferred the proposal on account of technical shortcomings. The deliberations and recommendations of the EAC during 14th meeting are as follows:

Deliberations by the Committee (EAC during 29-30th September, 2022)

17.12.20 The Committee noted the following:

1. The Committee deliberated upon the certified compliance report of IRO MoEF&CC as well as action taken report submitted by PP with respect to the observations reported by IRO. The EAC noted that IRO in its report dated 03.06.2022 has stated that the site was inspected by IRO on 10.11.2021 and ATR has been submitted by PP on the partial/non-compliance observed. Further it is noted that PP has complied with all the EC conditions except Specific condition no. 1 of EC dated 22.03.2011 w.r.t installation of continuous Ambient Air Quality Monitoring System. PP also requested the KSPCB to install an online air monitoring station in this industrial area considering many similar kinds of industries Operating within the vicinity, thereby, avoiding individual online system and the huge cost thereon. PP submitted an undertaking that they will contribute their share for the installation of the CAAQMS. Further, PP also stated that they will install CAAQMs at their plant in case the KSPCB fails to install CAAQMS or the SEIAA insists for installation of individual System. In view of the same, the EAC is of the opinion that since EC was granted long back in 2011, PP should have complied with all the EC conditions by now. Therefore, PP shall first comply with all the EC conditions and process for installation of CAAQMs either in individual capacity or in consortium and submit the requisite documents for further appraisal of the proposal.
2. The EAC noted that existing green belt has been developed in 3.8624 ha area which is about 23% of the total project area of 16.79 ha with total sapling of 9960 Trees. The Committee is of the view that PP has obtained EC during 2013 and has not covered 33% greenbelt till now. Project proponent shall submit commitment with an action plan to achieve 33% greenbelt in the project site within a year at a density of 2500 plants per hectare.
3. The nearest habitation to plant is Chikkabaganal which is at distance of 0.56 Kms from the project site boundary. Project Proponent shall submit appropriate environmental safeguard measures to minimise the impact on the habitation of the people.
4. 1500 m^3 of water requirement after the proposed expansion is proposed to be met from the Ground Water by Borewell (1190 m^3/day) and 310 m^3/day will be reuse. The EAC advised that project proponent shall explore the possibility of shifting to alternate source of water to reduce dependency on groundwater.
5. PP shall undertake village adoption and formulate Village Adoption program consisting of need-based community development activities, shall be prepared to develop them into model villages. PP shall submit commitment alongwith name of the villages to be adopted. Action plan submitted to address the PH issues and socio-economic development of the nearby villages shall also be revised and submitted.

6. Tungabhadra reservoir (1.28 Kms, E) exists within the study area. A robust and full proof Drainage Conservation scheme to protect the natural drainage and its flow parameters; along with Soil conservation scheme and multiple Erosion control measures shall be submitted.

Recommendations of the Committee (EAC during 29-30th September, 2022)

17.12.21 In view of the foregoing and after detailed deliberations, the committee recommended to defer the proposal due to certain deficiencies in the proposal and sought requisite information on the points referred at para no. 17.12.20 above. The proposal shall be considered after submission of requisite information in next EAC meeting.

17.12.22 The proponent submitted the ADS reply vide letter dated 7/10/2022, 13/10/2022 and 19/10/2022 uploaded on PARIVESH on 7/10/2022, 13/10/2022 and 05/11/2022 Point-wise reply of ADS is given as below.

S. No.	ADS Point	Reply/Response of PP
1	The Committee deliberated upon the certified compliance report of IRO MoEF&CC as well as action taken report submitted by PP with respect to the observations reported by IRO. The EAC noted that IRO in its report dated 03.06.2022 has stated that the site was inspected by IRO on 10.11.2021 and ATR has been submitted by PP on the partial/non-compliance observed. Further it is noted that PP has complied with all the EC conditions except Specific condition no. 1 of EC dated 22.03.2011 w.r.t installation of continuous Ambient Air Quality Monitoring System. PP also requested the KSPCB to install an online air monitoring station in this industrial area considering many similar kinds of industries Operating within the vicinity, thereby, avoiding individual online system and the huge cost thereon. PP submitted an undertaking that they will contribute their share for the installation of	Unit has already obtained CCR from regional office MoEFCC Bangalore dated 03/06/2022. Two conditions were partially complied (Specific Condition 1 & specific Condition 18). Rest of the Conditions are complied. **Specific Condition-1: As per Hon. Committees' recommendation, the industry has already issued PO and initiated the work for installation of CAAQMS.** *Efforts shall be made to reduce RSPM levels in the ambient air and a time bound action plan shall be submitted. Online ambient air quality monitoring and continuous stack monitoring facilities for all the stacks and sufficient air control pollution control devices viz. gas cleaning plant (GCP), electrostatic precipitator (ESP)etc. shall be provided to keep the emission levels below 100 mg/Nm^3. At no time, the emission level shall go beyond the prescribed standards. Interlocking facilities shall be provided so the process can be automatically stopped in case emission level exceeds the limit. Data on ambient air quality stack emission and fugitive emission shall be ssregularly submitted to this SEIAA Karnataka, MoEF Regional Office Bangalore, Karnataka State Pollution Control Board (KSPCB) and Central Pollution Control Board (CPCB) once in six months.* Unit has already installed continuous stack monitoring facilities for all the stacks and also connected with Karnataka State Pollution Control Board (KSPCB) and Central Pollution Control Board (CPCB). Photographs for the same is uploaded in Parivesh portal As suggested by the Committee, PP has taken immediate action for installation of CAAQMS in the individual capacity without

<table>
<tr><th>S. No.</th><th>ADS Point</th><th>Reply/Response of PP</th></tr>
<tr><td></td><td>the CAAQMS. Further, PP also stated that they will install CAAQMs at their plant in case the KSPCB fails to install CAAQMS or the SEIAA insists for installation of individual System. In view of the same, the EAC is of the opinion that since EC was granted long back in 2011, PP should have complied with all the EC conditions by now. Therefore, PP shall first comply with all the EC conditions and process for installation of CAAQMs either in individual capacity or in consortium and submit the requisite documents for further appraisal of the proposal.</td><td>waiting for the proposed consortium to be formed by KSPCB.

Unit has initiated installation of 3 nos. of continuous Ambient Air Quality Monitoring System within the premises. Unit has given purchase order for supply of 3 nos. of CAAQMS at a total cost of Rs.48,00,000 (Rs. Forty eight lakhs) to M/s Nexteng Enviro Private Limited, Ahmedabad on 04/10/2022 vide our purchase order no: BASJIL/NEXTENG ENVIRO/001/22-23 Dt:04/10/2022. And paid 25% advance of Rs.12,00,000/- (Rupees Twelve Lakhs Only)

PO for 3 nos. of CAAQMs is also uploaded in Parivesh portal.

Specific Condition-2: <u>Complied</u>

The project proponent shall spend Rs. 5 lakhs for developmental works for nearby community towards social commitment made vide letter dated 28.01.2011 and report and report be submitted to the authority. The proponent shall also earmark atleast 5% of the total cost of the project towards corporate social responsibility and item wise details along with the time bound action plan shall be prepared and submitted to the authority.

Unit regularly carry out community welfare activities in the nearby project area for overall improvement of the environment. Unit has already spent Rs. 2,84,74,200/- for development work and social activities Existing CSR activities details is as below.

<table>
<tr><th>Sl. No.</th><th>EC</th><th>Status of compliance</th><th>Investment cost</th><th>Amount bench-marked for CSR</th><th>Amount spent under CSR Activities</th></tr>
<tr><td>1</td><td>EC issued vide letter no. SEIAA 19 IND 2009 dated 22nd March 2011</td><td>Complied</td><td>7.84 Crores</td><td>39 Lakhs</td><td>1. From 2011 to 2016 Rs. 9203270/- (12% of the total cost)
2. From 2017 to 2022 Rs. 19270930/-</td></tr>
<tr><td>2</td><td>EC issued vide letter no. SEIAA 32 IND 2012 dated 1st October, 2013</td><td>Project not yet implemented</td><td>90 Crores</td><td></td><td></td></tr>
</table>

Existing CSR activities & Time bound action plan of Enterprise</td></tr>
</table>

S. No.	ADS Point	Reply/Response of PP
		Social Commitment (ESC) uploaded in parivesh portal.
2	The EAC noted that existing green belt has been developed in 3.8624 ha area which is about 23% of the total project area of 16.79 ha with total sapling of 9960 Trees. The Committee is of the view that PP has obtained EC during 2013 and has not covered 33% greenbelt till now. Project proponent shall submit commitment with an action plan to achieve 33% greenbelt in the project site within a year at a density of 2500 plants per hectare.	PP has fully grown green belt in the premises comprising of 23%. Here the density of trees 9960 is over 3.8624 ha area (38627 sq.m) which is about 2500/ha. density and is about 23% of the plant total area. The Proposed project will also developed the 8 Acre additional green belt outside of the factory premises. Now PP is committed to plant additional 12,293 nos. of tall and mature trees of native species (species shall be selected in consultation with local DFO that would mitigate air and noise pollution) in our west side vacant area & outside premise, which is in next year monsoon itself (June – July 2023). Therefore, the total greenbelt area in Plant area will be 87795 sq.m which is about 52.27 % of the total Plant area. Detailed Action plan for Green Belt development plant is upload in parivesh portal.
3	The nearest habitation to plant is Chikkabaganal which is at distance of 0.56 Kms from the project site boundary. Project Proponent shall submit appropriate environmental safeguard measures to minimize the impact on the habitation of the people.	Chikkabaganal is a medium size village located in Koppal Taluka of Koppal district, Karnataka with total 266 families residing. The Chikkabaganal village has population of 1488. Unit is adopted following Environmental safeguard measures to minimize the impact on the habitation of the people ➢ Unit has 02 nos. of separate ESPs, 08 Nos High Capacity Bag filters, to control air pollution. ➢ Unit has 03 nos big sheds to store coal, Iron ore Pellet, Sponge iron, Char waste which is help us to control air pollution. ➢ Unit will commission wheel washing system in the entry and exit points of our project to control erosion and dust. ➢ Adequate and Best practices of Housekeeping shall be adopted to mitigate air pollution. ➢ Unit has already completed the RCC road in vehicle movement area, and PP installed 01 no sweeping machine for road cleaning on regular basis to control fugitive emissions. ➢ Unit has committed to commission mobile as well as stationery water sprinkling systems both to arrest ground level dust and also Mobile Fog/mist type sprinklers to arrest suspended particulate matter in the atmosphere. PP shall operate these mobile water and Fog sprinklers in the above village also frequently. ➢ Unit has planted tall growing plants in all around the compound wall and now grown up to 30 ft. PP also started work of wind breaking walls minimum 20 feet height with zinc sheet in all round the compound wall. PP shall also after consultation with the village panchayat, do adequate plantation with tall trees of native species in the village area and a green shelter belt between the village and our project.

S. No.	ADS Point	Reply/Response of PP
		This will mitigate air/dust and noise pollutions that would impact the above village significantly. ➢ Presently unit has provided 45% (54 Nos out of 120 Nos) employment to Chikkabagnal village people. PP is committed to do periodic medical check-up related to disorders arising out of air/dust pollution to the habitants of the above village. ➢ Unit is committed to safeguard the habitants of this village from all types of industrial impacts arising out of our operations. PP is committed to operate all our operations under ZLD protocols and shall ensure that no effluents are allowed to pass beyond our project premises. PP is fully committed to minimize the air, water and noise pollution impacts.
4	1500 m^3 of water requirement after the proposed expansion is proposed to be met from the Ground Water by Borewell (1190 m^3/day) and 310 m^3/day will be reuse. The EAC advised that project proponent shall explore the possibility of shifting to alternate source of water to reduce dependency on groundwater.	Average annual rainfall in our area is around 612.6mm, which is a deficit and dry/arid area. And there are no surface water sources in the area. PP is fully depending on bore well, for water requirements. However, PP is committed to strengthen and enhance the water storage capacity of our existing Rain harvesting pit in our plant premises. Besides this, PP is committed to conserve and recycle water usage at all stages of our industrial operations and domestic consumption. PP is also (All neighbouring plants together) in talk with Karnataka Govt. to supply Municipal ETP treated water from Koppal, which is around 10kms from our plant. As soon this scheme is materialized the dependency on ground water shall be significantly reduced.
5	PP shall undertake village adoption and formulate Village Adoption program consisting of need-based community development activities, shall be prepared to develop them into model villages. PP shall submit commitment along with name of the villages to be adopted. Action plan submitted to address the PH issues and socio-economic development of the nearby villages shall also be revised and submitted.	PP submits that as proposed project cost is Rs.145 crores only, PP is committed to adopt the Chikkabaganal village. PP shall formulate a sound Village adoption program consisting of need based community development activities with the objective of developing it into a model village. This shall be done by engaging an expert agency and in consultation with the Karnataka govt. officials. PP shall also explore to adopt one more village "Kunukeri" after 3 years. The model villages will be developed within a span of 10 years with special emphasis on the following activities/facilities: ➢ Health - Community health centre will be established with emphasis on maternal & child care. ➢ Drinking water - The villagers will be provided with clean drinking water through tankers/pipeline. ➢ Sanitation - Common toilet blocks will be constructed and financial aid would be provided for construction of toilets in economically backward households to achieve 100% open defecation free village. ➢ Education - School with library and computers with internet facility will be established to provide better

S. No.	ADS Point	Reply/Response of PP
		access to educational resources. Computer literacy programs for the local youth will be conducted. ➢ Aid for farmers - Education pertaining to agricultural sciences for the local farmers will be sponsored. ➢ Road - Damaged village roads will be repaired and converted to pucca road which will be connected to the main arterial road. ➢ Solar lighting - Solar powered LEDs will be installed on village roads. ➢ Plantation - Social forestry program will be undertaken which will not only benefit the environment but also contribute to the aesthetics of the village. ➢ Parks - Community park will be developed. ➢ Women empowerment - Self-help groups will be established for women to enable them to achieve self-reliance. ➢ Awareness will be created for providing primary education to children as the first step towards achieving 100% child-labour free village. All the above mentioned activities will be carried out under CSR activities in coordination with the local Gram Panchayat. As suggested by the Committee PP has revised the allocated funds for PH/Socio-economic development /CER expenditure from Rs.3.0857 crores to Rs.5.0 crores, which would be about 3.5% of the proposed project cost. PP shall incur most of the capital expenditure in the 1st -2nd years and maintenance shall be done in the following years from the recurring allocated funds. PP hereby are submitting the revised PH/Socio-economic development Action Plan
6	Tungabhadra reservoir (1.28 Kms, E) exists within the study area. A robust and full proof Drainage Conservation scheme to protect the natural drainage and its flow parameters; along with Soil conservation scheme and multiple Erosion control measures shall be submitted.	The water level in Tungabhadra reservoir is controlled by respective department of State Govt. during rainy season or flood. With improvement in meteorological prediction, the water resource department never allows the water level to reach the highest flood level i.e. 380 meter. They open the gates depending on the inflow of water from the upstream. As a result there is no likelihood of any danger due to High flood in Tungabhadra reservoir Back waters and the water flooding the project.

Written representations:

17.12.23 During the meeting, based on the deliberations made by the EAC, the project proponent vide letter dated 16.11.2022 email dated 16.11.2022 submitted an undertaking for following:

- that, unit will use surface water / STP treated water for industrial purpose.
- that, unit will approach and take guidance for adopting a village and its development from Karnataka State Rural Development And Panchyat Raj University, Gadag-Betageri, Karnataka.

Deliberations by the Committee

17.12.24 The Committee noted the following:

1. The instant proposal is for expansion of Steel Plant - Sponge Iron (175 TPD to 375 TPD), Rolling Mill (72,000 TPA) and Captive Power Generation 12 MW (WHRB 6 MW, AFBC 6 MW).

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

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

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

5. The existing unit was accorded Environmental Clearance by the SEIAA, Karnataka in the year 2013. The project Proponent could not implement activities to construct the facilities of Induction Furnace and Power Plant.

6. The total project area is 16.79 ha. Land has already been acquired and under the possession of the company.

7. The nearest habitation to plant is Chikkabaganal which is at distance of 0.56 Kms from the project site boundary. PP has submitted the environmental safeguard measures to minimize the impact on the habitation of the people.

8. The water requirement for the existing and proposed expansion project is estimated as 1500 m^3 /day, out of which 1190 m^3 /day of fresh water requirement will be obtained from the Ground Water by Borewell and the remaining requirement of 310 m^3 /day shall be reuse water only. PP has submitted endorsement letter dated 13.02.2018 from Groundwater Directorate, Koppal. The EAC is of the opinion that industry shall only

operate after obtaining necessary permission in this regard. PP is committed to strengthen and enhance the water storage capacity of existing Rain harvesting pit in their plant premises. Further, PP is also pursuing with Karnataka Govt to supply Municipal ETP treated water from Koppal, which is around 10 kms from plant. As soon this scheme is materialized, dependency on ground water shall be significantly reduced. PP has also submitted an undertaking dated 16.11.2022 stating that unit will use surface water / STP treated water for industrial purpose.

9. Tungabhadra reservoir (1.28 Kms, E) exists within the study area. The EAC is of the opinion that water body shall not be disturbed. Mitigation measures w.r.t. safeguarding the water body shall be implemented.

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

11. The EAC noted that existing green belt has been developed in 3.8624 ha area which is about 23% of the total project area of 1.67944 ha with total sapling of 9960 Trees. Proposed greenbelt will be developed in 1.6795 ha which is about 10 % of the total project area and approximately 8 acre outside of premises which is about 19.27%. Thus, total of 5.5422 ha area (33% of total project area) will be developed as greenbelt. Total no. of 22253 (E 9960 nos.+ P 12293 nos.) saplings will be planted and nurtured in 4.9168 hectares in 5 years. The Committee deliberated on the action plan and budget allocation for green belt development and found it satisfactory.

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

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

14. The Committee deliberated upon the certified compliance report of IRO, MoEFCC as well as action taken report submitted by PP with respect to the observations reported by IRO and is of the opinion that PP shall strictly comply with the partially complied conditions as reported by IRO, MoEFCC. The Committee deliberated the Action Plan and found in order.

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

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

Act, 1974 and the Air (Prevention and Control of Pollution) Act, 1981, as applicable from time to time, from the State Pollution Control Board, prior to construction & operation of the project.

Recommendations of the Committee:

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

A. Specific Condition:

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

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

iii. 1500 m^3 of water requirement after the proposed expansion shall be met from the Ground Water by Borewell (1190 m^3 /day) and 310 m^3/day shall be reused only after obtaining necessary approval from the competent authority/CGWB. PP shall use the Municipal ETP treated water from Koppal, after one year to replace the ground water requirement. The unit shall use surface water/ground water/STP treated water (as committed by PP) for industrial purpose after obtaining necessary permission from the Competent Authority in this regard.

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

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

vi. 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.

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

viii. Particulate matter emission from stacks shall be less than 30 mg/Nm^3. Action plan submitted to limit the dust emission shall be strictly implemented.

ix. Project proponent shall not install any reheating furnace, and instead adopt the process for 100 % hot charging.

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

xi. Tungabhadra reservoir (1.28 Kms, E) exists within 10 Km. radius of the plant site. NOC from irrigation Department shall be obtained. A robust and full proof Drainage Conservation scheme to protect the natural drainage and its flow parameters; along with Soil conservation scheme and multiple Erosion control measures shall be implemented.

xii. The proposed project shall be designed as "Zero Liquid Discharge" Plant. ETP shall be installed and there shall be no discharge of effluent from the plant. Domestic effluent shall be treated in Sewage Treatment Plant. MSW waste shall be treated in digester and recovered gas shall be used in the canteen.

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

xiv. Chikkabaganal is at distance of 0.56 Kms from the project site boundary. Project Proponent shall take appropriate environmental safeguard measures to minimise the impact on the habitation of the locals. The company shall also include this location in its environmental monitoring programme. There is also a school at a distance of approx. 1 km from the project site. PP shall deploy Fog / Mist Sprinklers on the roads on regular basis to minimise the air pollutants due to transportation.

xv. As committed to adopt Chikkabaganal village, project proponent shall prepare and implement a robust plan to develop it into model village in next 10 years. PP shall also explore to adopt one more village “Kunukeri” after three years and develop it into model village.

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

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

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

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

xx. During operational phase at Captive Power Plant, PP shall measure coal dust exposures and to maintain coal dust exposures within stipulated standards at coal handling areas. PP shall identify extreme hot areas through heat stress survey as well as noise monitoring within

process plants to ensure that workers not exposed above 90 dBA levels as per Factories Act, 1948.

xxi. Project proponent shall explore the possibility to collaborate with the nearby educational institutions to undertake different works related to academic social responsibility for overall educational development of the area.

xxii. All the commitments made to the public during the Public Hearing/Public Consultation shall be satisfactorily implemented. The action plan based on the social impact assessment study of the project as per the EMP in accordance to the Ministry's OM dated 30.09.2020 shall be strictly implemented and progress shall be submitted to the Regional Office of MoEF&CC.

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

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

B. General conditions

I. Statutory compliance:

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

II. Air quality monitoring and preservation

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

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

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

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

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

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

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

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

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

III. Water quality monitoring and preservation

i. The project proponent shall install 24x7 continuous effluent monitoring system with respect to standards prescribed in Environment (Protection) Rules 1986 (G.S.R 414 (E) dated 30th May 2008; G.S.R 277 (E) dated 31st March 2012 (applicable to IF/EAF); 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 recognised under Environment (Protection) Act, 1986 or NABL accredited laboratories.

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

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

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

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

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

IV. Noise monitoring and prevention

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

V. Energy Conservation measures

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

VI. Waste management

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

VII. Green Belt

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

VIII. Public hearing and Human health issues

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

IX. Environment Management

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

/ stake holders. The copy of the board resolution in this regard shall be submitted to the MoEF&CC as a part of six-monthly report.

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

X. Miscellaneous

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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Consideration of TOR Proposal

Agenda No. 17.13

17.13 Proposed Integrated Cement Plant with Clinker Production Capacity of 12.0 MTPA, Calcined Clay Production Capacity-1.5 MTPA, Cement Production Capacity 5.0 MTPA (OPC/PPC/PSC/Composite Cement/LC3/PLC), WHRB based Power Plant - 54 MW, DG Sets of 6000 KVA, Oxygen Plant of capacity 160 m^3/hr, AFR Pre-Processing/Co-processing Facility and Railway siding with wagon tippler by M/s JSW Cement Ltd. located at Village - Bhadana & Jindas, Tehsil - Nagaur , District - Nagaur, Rajasthan – Consideration of TOR.

[Proposal No. IA/RJ/IND1/405682/2022; File No. IA-J-11011/355/2022-IA-II(IND-I)]
[Consultant: M/s. Vimta Labs Ltd. valid till 27.03.2023]

17.13.1 M/s. JSW Cement Limited has made an application online vide proposal no. IA/RJ/IND1/405682/2022 dated 09.11.2022 along with the application in prescribed format (Form-I), copy of pre-feasibility report and proposed ToRs for undertaking detailed EIA study as per the EIA Notification, 2006 for the project mentioned above. The proposed project activity is listed at S. No.3(b) Cement Plants under Category "A" of the schedule of the EIA Notification, 2006 and appraised at central level.

17.13.2 Name of the EIA consultant: M/s. Vimta Labs Ltd. [S. No. 146, List of ACOs with their Certificate / Extension Letter No: NABET/EIA/1922/RA0226 valid till 27.03.2023; Rev. 25, Sept 05, 2022].

Details submitted by Project proponent

17.13.3 The project of M/s JSW Cement Limited located in village Bhadana & Jindas Villages, Nagaur Tehsil , Nagaur District, Rajasthan is for setting up of a new Integrated cement plant with Clinker production capacity of 12 MTPA, Calcined Clay production capacity of 1.5 MTPA, Cement production capacity of 5 MTPA (OPC/PPC/PSC/Composite Cement/LC3/PLC), WHRB based Power Plant of 54 MW, DG Sets of 6000 KVA'S (3 X 2000 KVA'S) Capacity, Oxygen Plant of 160 m^3/hr Capacity, AFR Pre-Processing/Processing facility and Railway Siding along with Wagon Tipplers.

17.13.4 Environmental site settings:

<table>
<tr><th>Sr. No.</th><th>Particulars</th><th>Details</th><th>Remarks</th></tr>
<tr><td>i.</td><td>Total land</td><td>194.5560 ha [Private: 192.4838 ha (Agriculture); Govt: 2.0722 ha]</td><td>Private land is mostly agriculture land.</td></tr>
<tr><td>ii.</td><td>Land acquisition details as per MoEF&CC O.M. dated 7/10/2014</td><td>M/s JSW Cement Limited has already purchased 67.1208 ha (34.50 % of the total land) private land and the remaining land, including the Govt. land of 2.0722 ha (1.08% of the total land) will be acquired/purchased in next 2-3 months. Company has also obtained consents of approx. 95% of the private landowners for sale of their land.</td><td>-</td></tr>
<tr><td>iii.</td><td>Existence of habitation & Involvement of R&R, if any.</td><td>Project site: Village Bhadana and Jindas
Study Area:
<table>
<tr><th>Habitation (nos)</th><th>Distance (km)</th><th>Direction</th></tr>
<tr><td>5 families</td><td colspan="2">Inside the project area, 0 km</td></tr>
</table>
Details of habitation outside project area:
<table>
<tr><th>Habitation (nos)</th><th>Distance (m)</th><th>Direction</th></tr>
<tr><td>Hamlet with 4 families</td><td>50 m</td><td>NW</td></tr>
<tr><td>Jindas Village</td><td>1.50 km</td><td>NE</td></tr>
<tr><td>Bhadana</td><td>1.70 km</td><td>SW</td></tr>
<tr><td>Harima</td><td>2.70 km</td><td>S</td></tr>
<tr><td>Hamlet (Jindas ki Dhani)</td><td>0.60 km</td><td>NW</td></tr>
</table></td><td>Status of R&R: R&R is involved for the habitations within the project area and also for purchase of private land.</td></tr>
<tr><td>iv.</td><td>Latitude and Longitude of all corners of the project site.</td><td>
<table>
<tr><th>Sl. No</th><th>Latitude</th><th>Longitude</th></tr>
<tr><td colspan="3">Centre Point</td></tr>
<tr><td>1</td><td>27°17'17.27"N</td><td>73°50'25.32"E</td></tr>
<tr><td colspan="3">Corner Co-ordinates</td></tr>
<tr><td>A</td><td>27°17'03.49"N</td><td>73°49'43.33"E</td></tr>
<tr><td>B</td><td>27°16'51.20"N</td><td>73°49'54.19"E</td></tr>
<tr><td>C</td><td>27°16'49.54"N</td><td>73°50'05.91"E</td></tr>
<tr><td>D</td><td>27°17'19.23"N</td><td>73°51'06.69"E</td></tr>
<tr><td>E</td><td>27°17'38.52"N</td><td>73°50'57.11"E</td></tr>
<tr><td>F</td><td>27°17'43.46"N</td><td>73°50'37.83"E</td></tr>
</table></td><td>-</td></tr>
<tr><td>v.</td><td>Elevation of the project site</td><td>297-304 m AMSL</td><td>-</td></tr>
<tr><td>vi</td><td>Involvement of</td><td>No forest land involved in the proposed project</td><td>-</td></tr>
</table>

<table>
<tr><th>Sr. No.</th><th>Particulars</th><th>Details</th><th>Remarks</th></tr>
<tr><td></td><td>Forest land, if any.</td><td></td><td></td></tr>
<tr><td>vii.</td><td>Water body (Rivers, Lakes, Pond, Nala, Natural Drainage, Canal etc.) exists within the project site as well as study area</td><td><u>Water Bodies within 10 km study area:</u>

<table>
<tr><th>Water Body</th><th>Distance</th><th>Direction</th></tr>
<tr><td>Nosar Talab</td><td>5.4 km</td><td>ENE</td></tr>
<tr><td>Janjoli Naddi</td><td>5.3 km</td><td>NE</td></tr>
<tr><td>Jindas talab/ Kuradi Naddi</td><td>0.4 km</td><td>NNE</td></tr>
<tr><td>Badi Naddi (Rajlai Naddi) /Badana talab</td><td>1.0 km</td><td>SW</td></tr>
<tr><td>Dobi Naddi</td><td>1.9 km</td><td>SW</td></tr>
<tr><td>Chunni Naddi</td><td>1.8 km</td><td>SW</td></tr>
<tr><td>Panchalai Naddi (Jakhil Naddi)</td><td>2.0 km</td><td>NW</td></tr>
<tr><td>Ketalai Naddi</td><td>2.3 km</td><td>WSW</td></tr>
<tr><td>Malgaon Talab</td><td>3.8 km</td><td>W</td></tr>
<tr><td>Jathera Talab</td><td>6.2 km</td><td>N</td></tr>
<tr><td>Sarsani Talab</td><td>6.5 km</td><td>SE</td></tr>
<tr><td>Chapar Naddi</td><td>8.5 km</td><td>SE</td></tr>
<tr><td>Bohra Nadda</td><td>5.9 km</td><td>WSW</td></tr>
<tr><td>Kharkhani Naddi</td><td>8.3 km</td><td>NNW</td></tr>
</table></td><td>-</td></tr>
<tr><td>viii.</td><td>Existence of ESZ/ ESA/ national park/ wildlife sanctuary/ biosphere reserve/ tiger reserve/ elephant reserve etc. if any within the study area.</td><td>Nil.</td><td>-</td></tr>
</table>

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

Sr. No.	Name of the Facility	Configuration	Capacity (MTPA)
1	Stacker & Reclaimer		
	Limestone Stacker	3 X 1500 TPH	18.39
	Limestone Reclaimer	3 X 1900 TPH	18.39
	Coal and Gypsum Stacker	3 X 300 TPH	2.16
	Coal Reclaimer	3 X 200 TPH	2.16
	Gypsum Stacker	2 X 300 TPH	0.35
2	Raw Mill	3 X 900 TPH	19.36
3	Cement Mill	2 X 350 TPH	5.00
4	Coal and Petcoke Mill	3 X 125 TPH	2.16
5	Kiln & Cooler with 5 Stage ILC Low Nox Pre-heater	3 X 12000 TPD	12.00
6	Waste Heat Recovery Based Power Plant (WHRB)	3 X 18 MW	-

Sr. No.	Name of the Facility	Configuration	Capacity (MTPA)
7	Boiler for Desalination Plant	6 TPH	-
8	Alkalis/chorine bypass system	3 X 70 TPD	0.069
9	Clay Calciner System for calcined clay production	2 X 2300 TPD	1.5
10	Packers	5 Packers	5.00
11	Oxygen (O_2) Plant	160 m3/hr	-
12	DG Sets	6000 KVA (3 X 2000)	-
13	Railway Siding with Wagon Tippler	62500 TPD handling cap.	20.625
14	AFR Pre-Processing/Co-processing Facility	3750 TPD	1.24
15	Sewage Treatment Plant	300 KLD	-
16	Water Treatment Plant (Desalination Plant)	7000 KLD	-
17	Water harvesting pond	1 No. (100 x 100 x 4 M)	40000 M^3

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

S. No.	Name of Raw Materials	Quantity required per annum (MTPA)	Source	Distance from site (Kms)	Mode of Transportation
1	Limestone	17.64 For Clinker and 0.75 MTPA for LC#3 Cement Production	Lime stone mines 3B2 and other own auctioned mines 3D1, 3C1 and 3C2 block at Nagaur Rajasthan and from open market	3B2 and other auctioned mines 0.5 to 4.5 km Open market – 10 – 100 km	OLBC/ Road
2	Additive-1, Silica Sand	0.985	Nearby plant area	50	Road
3	Additive-2, Clay	2.43 (0.73 for Clinker and 1.70 for Calcined Clay)	Nearby plant area	50	Road
4	Additive-3, Red Ochre/ I.O.	0.73	Chittorgarh (Rajasthan) or other nearest sources	350	Road
5	Gypsum	0.35	Mineral Gypsum from Nagaur, Rajasthan	20 to 100 km	Road
6	Fly ash & Pond Ash	1.75	Suratgarh, Barmer and other power plants in nearby areas	300 – 380 km	Road
7	Slag	1.3	JSW Steel Plant at Dolvi, Maharashtra.	955 km	Rail/Road

17.13.7 The total fresh water requirement for the Cement Plant will be 6000 KLD which will be met from saline Ground water after prior approval from competent authorities or from the RSMM Matasukh lignite mine sump. Saline water will be de-salinated. Harvested rainwater in cement plant and own mines will also be used as and when available.

17.13.8 The power requirement for the proposed project is estimated as 120 MW, out of which 54 MW will be obtained from the WHRS and the remaining power will be sourced from the state grid and the proposed solar plant.

17.13.9 The capital cost of the project is Rs. 4998.048 Crores and the Capital cost of environmental protection measures is proposed as Rs. 547.39 Crores & Recurring cost for environment protection measures is Rs. 29.93 Crores. The employment generation from the proposed project during operation phase (Regular + Contractual) will be 1400 no's.

17.13.10 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.

17.13.11 Proposed Terms of Reference: [Baseline data collection period: **1st October 2021 to 31st December 2021**]

Sr. No.	Attributes	Parameters	Sampling		Remarks
			No. of Stations	Frequency	
A	Air				
a	Meteorological parameters	Wind speed, wind direction, temperature, relative humidity, rainfall and other non-instrumental observations	1 location	Continuous for three months with hourly recording at one central location and secondary data collected from nearest IMD	-
b	AAQ parameters	NAAQS 2009	10 Locations	24 hourly samples twice a week for 13-weeks. CO is monitored for three 8 hourly samples in 24 hours for twice a week for thirteen weeks	-
B	Noise	Noise levels in dB(A)	10 Locations	Hourly readings for 24 hours once during study period	-
C	Water				
a	Surface water /ground water quality parameters	Physical, chemical and bacteriological parameters	SW-3 Locations GW-8 Locations	Grab samples were collected from surface water (SW) and ground water (GW) sources. Sampling and analysis is carried out for once during study	-

Sr.	Attributes	Parameters	Sampling		Remarks
				period	
D	Land				
a	Soil quality	Soil profile with chemical constituents	10 locations	Once during study period	-
b	Land use	Trend of land use change for different categories	-	Once during study period	-
E	Biological				
a	Aquatic	Aquatic flora and fauna in the study area	2 locations	Once during study period	-
b	Terrestrial	Terrestrial flora and fauna in the study area	5 locations in core zone 40 Locations in buffer zone	Once during study period	-
F	Socio-economic parameters	Socio-economic characteristics	-	Once during study period	-

17.13.12 M/s. JSW Cement Limited had earlier applied for TOR vide proposal no. IA/RJ/IND/290991/2022 dated 03.10.2022 and the proposal was initially considered in the 15th meeting of the EAC for Industry-I sector held on 17-18th October, 2022 wherein after deliberations, the Committee recommended that proposal to be returned in its present form on account of technical shortcomings. The deliberations and recommendations of the EAC during 15th meeting are as follows:

Deliberation by the Committee (EAC during 17-18th October, 2022)

17.13.13 The Committee noted the following:

i. Total project area is 194.5560 which is mostly agricultural land. M/s JSW Cement has obtained consents of the private land owners for sale of land, however there is no single part of land is in possession of the PP. Even, the PP has not taken the LoI/Commitments from the State Government land. As per Ministry's O.M. vide F.No. 22-76/2014-IA-III dated 07.10.2014 which reads as *" While full acquisition of land may not be a prerequisite for the consideration of the case for EC, there should be some credible document to show the status of land acquisition w.r.t project site when the case is brought before the concerned EAC/SEAC for appraisal……In case the land is being acquired through private negotiations with the land Owners, credible document showing the intent of the land owners to sell the land for the proposed project."* Therefore, in view of the same, credible document showing the intent of the land owners to sell the land for the proposed project shall be required which was not uploaded by the proponent on Parivesh portal. The EAC noted that PP has not acquired any land yet. At present there is no land available with the PP neither from the private land nor from State

Govt. PP has not obtained LoI from the State Govt. for installation of Cement Plant in Govt. land.

ii. The project proponent submitted that baseline data has already been submitted during 1st October 2021 to 31st December 2021, whereas alternate site analysis has been carried post baseline data collection. In this regard, EAC is of the opinion that alternate site analysis has to be undertaken first and once the site is finalized and agreed upon by the EAC during appraisal, baseline data shall be carried out. In view of the same, it is required that baseline data shall be collected again.

iii. Five families reside inside the project area. Also there is a hamlet with 4 families (50 m, NW), Hamlet (Jindas ki Dhani) (0.50 km, NW), Jindas Village (1.5 km, NE), Bhadana (1.70 km, SW) and Harima (2.70 km, S) within the study area. Project Proponent shall submit action plan for environmental safeguard measures to minimise the impact on the habitation of the locals. Project Proponent shall submit the R&R details involved for the habitations within the project area and also for purchase of private land.

iv. There are many water bodies which exists within the study area of 10 km of the project site. The PP shall submit the suitable steps /conservation plan along with contouring (close intervals), Run -off calculations, disposal etc. A robust and full proof Micro-Drainage Conservation scheme to protect the natural drainage/water bodies and its flow parameters; along with Soil conservation scheme and multiple Erosion control measures shall be provided.

v. Project Proponent has submitted that they have acquired limestone mines nearby project site. EC for limestone mine 3B2 was taken in e-auction 2 years back. Later, the company again participated in other nearby auction blocks such as 3D1, 3C1, 3C2 where the company has been declared as 'preferred bidder'. LoI of these mines is awaited from the state govt which PP expect to be issued by this month end. The EAC deliberated that it appears that the proposed project is a part of Interlinked project. PP shall explore the re-check and re-verify whether the proposed project falls as a part of Interlinked project. Accordingly, the proposal shall be revised and re-submitted.

vi. In view of above, the Project Proponent requested the EAC to allow to reappear after revision of the application.

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

17.13.14 In view of the foregoing and after deliberations, the Committee recommended that proposal to be returned in its present form to address the shortcomings enumerated at para no. 15.11.12 above and submit the revised application as per the provisions of EIA Notification, 2006.

17.13.15 M/s. JSW Cement Limited has again applied for TOR vide proposal no. IA/RJ/IND1/405682/2022 dated 09.11.2022 and the proposal is considered in the 17th meeting of the EAC for Industry-I sector held on 14-16th November, 2022 wherein after deliberations, the Committee recommended that proposal to be returned in its present form on account of technical shortcomings. The deliberations and recommendations of the EAC are as follows:

Deliberation by the Committee in EAC Meeting held on November 14-16, 2022

17.13.16 The Committee noted the following:

i. The instant proposal is for setting up of a new Integrated cement plant with Clinker production capacity of 12 MTPA, Calcined Clay production capacity of 1.5 MTPA, Cement production capacity of 5 MTPA (OPC/PPC/PSC/Composite Cement/LC3/PLC), WHRB based Power Plant of 54 MW, DG Sets of 6000 KVA'S (3 X 2000 KVA'S) Capacity, Oxygen Plant of 160 m^3/hr Capacity, AFR Pre-Processing/Processing facility and Railway Siding along with Wagon Tipplers.

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

iii. Total project area is 194.5560 which is mostly agricultural land. M/s JSW Cement Limited has already purchased 67.1208 ha (34.50 % of the total land) private land and the remaining land, including the Govt. land of 2.0722 ha (1.08% of the total land) will be acquired/purchased in next 2-3 months. Company has also obtained consents of approx. 95% of the private landowners for sale of their land.

iv. Five families reside inside the project area. Also there is a hamlet with 4 families (50 m, NW), Hamlet (Jindas ki Dhani) (0.50 km, NW), Jindas Village (1.5 km, NE), Bhadana (1.70 km, SW) and Harima (2.70 km, S) within the study area.

v. There are many water bodies which exists within the study area of 10 km of the project site. The EAC is of the opinion that the water bodies shall not be disturbed. Action plan comprising of mitigation measures for conservation of the water bodies shall be prepared.

vi. The total fresh water requirement for the Cement Plant will be 6000 KLD which will be met from saline Ground water after prior approval from competent authorities or from the RSMM Matasukh lignite mine sump. Saline water will be de-salinated. Harvested rainwater in cement plant and own mines will also be used as and when available.

Recommendations of the Committee

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

(i) Five families reside inside the project area. Also there is a hamlet with 4 families (50 m, NW), Hamlet (Jindas ki Dhani) (0.50 km, NW), Jindas Village (1.5 km, NE), Bhadana (1.70 km, SW) and Harima (2.70 km, S) within the study area. Project Proponent shall submit action plan for environmental safeguard measures to minimise the impact on the habitation of the locals. The company shall also include this location in its environmental monitoring programme.

(ii) Details of R&R involved for the habitations within the project area and also for purchase of private land shall be icluded in the EIA/EMP report.

(iii) There are many water bodies which exists within the study area of 10 km of the project site. The PP shall submit the suitable steps /conservation plan along with contouring (close intervals), Run -off calculations, disposal etc. A robust and full proof Micro-Drainage Conservation scheme to protect the natural drainage/water bodies and its flow parameters; along with Soil conservation scheme and multiple Erosion control measures shall be provided.

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

(v) PP shall revalidate the baseline monitoring data with one month additional monitoring and include the same in the EIA/EMP Report.

(vi) PP shall emphasize on the transportation of raw material from the adjacent Limestone mines to the plant through conveyor belt. Action plan for implementation of conveyor belt shall be submitted.

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

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

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

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

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

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

(xiii) Project proponent shall prepare layout plan showing all internal roads minimum 6m width and 9m turning radius with proper looping for smooth traffic flow, including fire tender as per NBC. Road network shall connect all service areas in layout. This drawing shall include area statement showing plot area, area under roads, parking, green belt with calculations and % with respect to plot area of project site and proper indexing.

(xiv) Project proponent shall submit contour map of project site along with drainage disposal system with calculations and drawings supported with proper indexing including rain water harvesting details with calculations mentioning about GW recharge along with relevant drawing.

(xv) Project proponent shall submit a study report on Decarbonisation program, which would essentially consist of company's carbon emissions, carbon budgeting/ balancing, carbon sequestration activities and carbon offsetting strategies. Further, the report shall also contain time bound action plan to reduce its carbon intensity of its operations and supply chains, energy transition pathway from fossil fuels to Renewable energy etc. All these activities/ assessments should be measurable and monitorable with defined time frames", when PP comes for EC proposal. This study shall be formulated keeping in view of India's Net-zero commitment at the COP-26 Climate Summit.

(xvi) As part of Corporate Environment Responsibility (CER) activity, company shall adopt nearby villages based on the socio-economic survey (10 Kms radial coverage from the project site) and undertake community developmental activities in consultation with the village Panchayat and the District Administration. In this regard, time bound action plan as per the MoEF&CC Office Memorandum dated 30/09/2020 shall be submitted.

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

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

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

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

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

***

Agenda No. 17.14

17.14 Expansion of Integrated Cement Plant - Clinker (9.0 to 13.3 Million TPA), Cement (8.7 to 13.7 Million TPA), CPP (108.2 to 158.2 MW) and WHRS (27 to 47 MW) by installation of Line - V at Villages: Nrupatunganagar & Hanganahalli, P.O.: Aditya Nagar, Malkhed Road, Taluka: Sedam, District: Kalaburagi (Karnataka) by M/s. UltraTech Cement Ltd. (Unit: Rajashree Cement Works) - Consideration of TOR.

[Proposal No. IA/KA/IND1/403891/2022; File No. IA-J-11011/488/2022-IA-II(IND-I)]
[Consultant: M/s. J.M. EnviroNet Pvt. Ltd.; valid upto 02.02.2023]

17.14.1 M/s. UltraTech Cement Limited (Unit: Rajashree Cement Works) has made an online application vide proposal no. IA/KA/IND1/403891/2022 dated 9th November, 2022 along with the application in prescribed format (Form-I), copy of pre-feasibility report and proposed ToRs for undertaking detailed EIA study as per the EIA Notification, 2006 for the project mentioned above. The proposed project activity is listed at S. No.3(b) Cement Plants and 1(d) Thermal Power Plants under Category "A" of the schedule of the EIA Notification, 2006 and appraised at central level.

17.14.2 Name of the EIA consultant: M/s. J.M. EnviroNet Pvt. Ltd. [Sl. No. 41, List of ACOs with their Certificate / Extension Letter no. NABET/EIA/2023/RA 0186; valid upto 02.02.2023, Rev. 25, Sept 05, 2022].

Details submitted by Project proponent

17.14.3 The project of M/s. UltraTech Cement Limited (Unit: Rajashree Cement Works) located in Villages: Nrupatunganagar & Hanganahalli, Adityanagar, P.O.: Malkhed Road, Taluka: Sedam, District: Kalaburagi (Karnataka) is for Expansion of Integrated Cement Plant - Clinker (9.0 to 13.3 Million TPA), Cement (8.7 to 13.7 Million TPA), CPP (108.2 to 158.2 MW) and WHRS (27 to 47 MW) by installation of Line - V.

17.14.4 Environmental site settings:

<table>
<tr><th>S. No.</th><th>Particulars</th><th>Details</th><th>Remarks</th></tr>
<tr><td>i.</td><td>Total land</td><td>625.12 ha (including plant and colony)</td><td>Land use of the existing plant area is already industrial.</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. 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>Project Area: No habitation exists within the plant site.
Study Area:
<table>
<tr><th>Habitation</th><th>Distance (km)</th><th>Direction</th></tr>
<tr><td>Hanganhalli</td><td>~1.0</td><td>NNE</td></tr>
<tr><td>Udgi</td><td>~1.5</td><td>East</td></tr>
<tr><td>Huda</td><td>~3.0</td><td>NW</td></tr>
<tr><td>Mogla</td><td>~3.5</td><td>West</td></tr>
<tr><td>Itgi</td><td>~3.5</td><td>WSW</td></tr>
<tr><td>Digaon</td><td>~4.0</td><td>SSW</td></tr>
</table>
*Note: There are approx. 23 villages in 10 km radius study area</td><td>R & R is not applicable.</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><th colspan="3">Part A (Plant Site)</th></tr>
<tr><td>1.</td><td>17° 8'41.12"N</td><td>77° 9'58.02"E</td></tr>
<tr><td>2.</td><td>17° 8'46.47"N</td><td>77°10'11.63"E</td></tr>
<tr><td>3.</td><td>17° 8'48.31"N</td><td>77°10'28.63"E</td></tr>
<tr><td>4.</td><td>17° 8'50.23"N</td><td>77°10'38.15"E</td></tr>
<tr><td>5.</td><td>17° 8'52.41"N</td><td>77°10'56.68"E</td></tr>
<tr><td>6.</td><td>17° 8'54.20"N</td><td>77°11'15.15"E</td></tr>
<tr><td>7.</td><td>17° 8'55.33"N</td><td>77°11'25.16"E</td></tr>
<tr><td>8.</td><td>17° 8'58.01"N</td><td>77°11'46.53"E</td></tr>
<tr><td>9.</td><td>17° 9'1.55"N</td><td>77°11'59.10"E</td></tr>
<tr><td>10.</td><td>17° 9'5.21"N</td><td>77°12'10.62"E</td></tr>
<tr><td>11.</td><td>17° 9'0.09"N</td><td>77°12'22.62"E</td></tr>
<tr><td>12.</td><td>17° 8'56.82"N</td><td>77°12'19.57"E</td></tr>
<tr><td>13.</td><td>17° 8'55.70"N</td><td>77°12'17.85"E</td></tr>
<tr><td>14.</td><td>17° 8'53.05"N</td><td>77°12'17.98"E</td></tr>
<tr><td>15.</td><td>17° 8'52.35"N</td><td>77°12'14.06"E</td></tr>
<tr><td>16.</td><td>17° 8'54.12"N</td><td>77°12'12.34"E</td></tr>
<tr><td>17.</td><td>17° 8'52.52"N</td><td>77°12'5.52"E</td></tr>
</table>
</td><td>-</td></tr>
</table>

S. No.	Particulars	Details			Remarks
		18.	17° 8'52.09"N	77°12'5.37"E	
		19.	17° 8'53.97"N	77°11'55.68"E	
		20.	17° 8'50.43"N	77°11'55.25"E	
		21.	17° 8'50.20"N	77°11'52.21"E	
		22.	17° 8'46.89"N	77°11'52.66"E	
		23.	17° 8'46.81"N	77°11'51.93"E	
		24.	17° 8'43.46"N	77°11'52.25"E	
		25.	17° 8'43.38"N	77°11'50.20"E	
		26.	17° 8'43.09"N	77°11'47.96"E	
		27.	17° 8'20.63"N	77°11'53.48"E	
		28.	17° 8'6.11"N	77°11'53.14"E	
		29.	17° 8'6.60"N	77°12'0.45"E	
		30.	17° 7'57.01"N	77°12'2.88"E	
		31.	17° 7'54.28"N	77°11'58.44"E	
		32.	17° 7'47.55"N	77°11'56.18"E	
		33.	17° 7'50.70"N	77°11'53.24"E	
		34.	17° 7'46.24"N	77°11'30.26"E	
		35.	17° 7'45.07"N	77°11'13.12"E	
		36.	17° 7'54.30"N	77°11'8.44"E	
		37.	17° 7'54.67"N	77°10'59.91"E	
		38.	17° 7'58.16"N	77°10'59.62"E	
		39.	17° 7'56.89"N	77°10'42.41"E	
		40.	17° 7'59.21"N	77°10'41.89"E	
		41.	17° 7'54.51"N	77°10'7.84"E	
		42.	17° 8'17.74"N	77°10'8.47"E	
		43.	17° 8'25.77"N	77°10'5.27"E	
		44.	17° 8'30.84"N	77°10'0.59"E	
		Part B (Lorry & Truck Parking Area)			
		A	17° 8'51.58"N	77°10'40.47"E	
		B	17° 8'56.61"N	77°10'37.69"E	
		C	17° 8'56.40"N	77°10'36.97"E	
		D	17° 8'57.52"N	77°10'36.54"E	
		E	17° 8'58.20"N	77°10'37.74"E	
		F	17° 9'1.43"N	77°10'37.88"E	
		G	17° 9'4.39"N	77°10'46.42"E	
		H	17° 9'1.47"N	77°10'46.30"E	
		I	17° 9'1.55"N	77°10'51.20"E	
		J	17° 9'1.02"N	77°10'51.07"E	
		K	17° 9'0.91"N	77°10'50.72"E	
		L	17° 8'56.25"N	77°10'50.62"E	
		M	17° 8'56.24"N	77°10'49.64"E	
		N	17° 8'52.35"N	77°10'49.12"E	
v.	Elevation of the project site	323 m to 347 m above mean sea level.			-
vi.	Involvement of Forest land if any.	No Forest Land is involved in the plant site.			-

<table>
<tr><th>S. No.</th><th>Particulars</th><th>Details</th><th>Remarks</th></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>Plant site: Two seasonal nallas are passing through the Plant site. Also, there are artificial Rainwater Harvesting Ponds / reservoirs developed by the company.
Study area: The following water bodies fall within 10
km radius:
<table>
<tr><th>Water body</th><th>Distance (km)</th><th>Direction</th></tr>
<tr><td>Kagna River</td><td>~6.5</td><td>NW</td></tr>
<tr><td>Benithora River</td><td>~7.5</td><td>NNW</td></tr>
<tr><td>Kona Halla</td><td>~8.5</td><td>NNE</td></tr>
</table></td><td>-</td></tr>
<tr><td>viii.</td><td>Existence of ESZ/ ESA/ national park/ wildlife sanctuary/ biosphere reserve/ tiger reserve/ elephant reserve etc. if any within the study area.</td><td>Nil.</td><td>-</td></tr>
</table>

17.14.5 The existing project was accorded Environmental Clearance from MoEFCC, New Delhi for Expansion of Cement Plant (Cement production from 4.2 MTPA to 8.7 MTPA, Clinker from 4.7 MTPA to 9.0 MTPA, Captive Power Plant {from 58.2 MW to 190 MW (including WHRS of 15 MW)} and Captive Limestone Mine (from 6.7 Million TPA to 13.4 Million TPA) by M/s UltraTech Cement Limited (Unit: Rajashree Cement Works) *vide* letter no. J-11011/65/2010-IA-II(I) dated 29th April, 2011. Consent for Operation (CFO) for the existing unit was accorded by KSPCB v*ide* Consent No: AW - 327536 dated 21st October, 2021 for Clinker (9.0 MTPA), Cement (8.7 MTPA), CPP (108.2 MW), WHRS (27 MW) and D.G Set (5.8 MW). The validity of CFO is up to 30th June, 2026. Consent for Operation (CFO) was accorded by KSPCB for WHRS of 27 MW capacity *vide* Consent No: AW - 327536 dated 21st October, 2021 and valid up to 30th June, 2026.

17.14.6 Implementation Status of the existing EC:

S. N0.	Facilities	Units	Existing Capacity as per EC dated 29th April, 2011	Implementation Status as on date	Production as per CTO
1.	Clinker	Million TPA	9.0	Implemented	9.0 Million TPA
2.	Cement	Million TPA	8.7	Implemented	8.7 Million TPA
3.	CPP	MW	175	Partially Implemented	108.2 MW
4.	WHRS*	MW	15	Implemented	27 MW
**Consent for Operation (CFO) for Expansion of WHRS to 27 MW has been obtained vide Consent No: AW - 327536 dated 21st October, 2021 and valid up to 30th June, 2026*					

S. N0.	Facilities	Units	Existing Capacity as per EC dated 29th April, 2011	Implementation Status as on date	Production as per CTO
** *DG sets in standby & kept for emergency backup purpose*					

17.14.7 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 29th April, 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: 28000 TPD	9.0 MTPA	Kiln: 28000 TPD	9.0 MTPA	Nil	Nil	Kiln: 28000 TPD	9.0 MTPA	Kiln: 13000 TPD	4.3 MTPA	Kiln: 13000 TPD	13.3 MTPA
2.	Cement	Mill: 1200 TPH	8.7 MTPA	Mill: 1200 TPH	8.7 MTPA	Nil	Nil	Mill: 1200 TPH	8.7 MTPA	Mill: 450 TPH	5.0 MTPA	Mill: 450 TPH	13.7 MTPA
3.	CPP	Boiler capacity 805 TPH	175 MW	Boiler capacity 497 TPH	108.2 MW	Boiler capacity 308 TPH	66.8 MW	Boiler capacity 497 TPH	108.2 MW	Boiler capacity 230 TPH	50 MW	Boiler capacity 797 TPH	158.2 MW
4.	WHRS**	10.77 MW Turbine	15 MW	10.77 MW Turbine	15 MW	Nil	Nil	23.77 MW Turbine	27 MW	22 MW Turbine	20 MW	45.77 MW Turbine	47 MW

**Surplus Clinker will be sent to sister Grinding units of UltraTech*

***Consent for Operation (CFO) for Expansion of WHRS to 27 MW has been obtained dated 21st October, 2021 and valid up to 30th June, 2026.*

****RMC & aggregate crusher will be installed for plant construction purpose*

17.14.8 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 (Million TPA)			Source	Approx. Distance from Site (Kms)	Mode of Transportation
		Existing	Additional	Total			
1.	Limestone	13.4	6.65	20.05	Captive Limestone Mine	2 to 4	Covered Conveyor belt
2.	Laterite/	0.88	0.42	1.3	Laterite: from	160	Road

S. No.	Raw Material	Quantity (Million TPA)			Source	Approx. Distance from Site (Kms)	Mode of Transportation
		Existing	Additional	Total			
	Bauxite				Humnabad		
					Bauxite: from Belgaum and Goa	650 - 700	Road
3.	Red mud	0.20	0.10	0.30	Hindalco Belgaum	350 - 400	Road
4.	Lithomarge	0.36	0.15	0.51	Karnataka, Telengana	120 – 200	Road
5.	Gypsum (Chemical / Mineral)	0.30	0.15	0.45	Mumbai, Tuticorin, Vishakapatnam and Kochi	650 - 1370	Road / Rail
6.	Fly Ash	2.05	1.06	3.11	CPP, RTPS, NTPC Hotgi & Ramagundam, MSEB Parli	500 - 600	Road / Rail

17.14.9 The existing water requirement is 12921 m^3/day; water requirement is obtained from Kagina river and Mine pit. Permission for withdrawal of water from Kagina River has been obtained from Karnataka Neeravari Nigam Limited (A government of Karnataka Enterprise) *vide* letter No. EE/KNNL/IPC/Dn.1/K/PB-10/2021-22/1963 dated 2nd February, 2022. The water requirement for the proposed project is estimated as 1800 m^3/day, which will be sourced from water stored in reservoirs of Mine pits of captive mine sites. Thus the total water requirement will be 14721 m^3/day.

17.14.10 Existing power requirement of 131 MW is obtained from Karnataka State Electricity Board, CPP, WHRS and Solar Power Plant. The power requirement for the proposed project is estimated as 56 MW out of which 20 MW from proposed WHRS and remaining 36 MW will be obtained from Proposed CPP and Grid. Thus total power requirement will be 187 MW.

17.14.11 The capital cost for the project is Rs. 1500 Crores & the capital cost for environmental protection measures is proposed as Rs. 150 Crores. The employment generation from the proposed expansion project is 1077 people (242 regular & 835 contractual) during operation phase and 2110 (110 regular & 2000 contractual) during construction phase.

17.14.12 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.

17.14.13 Proposed Terms of Reference: [Baseline data collection period: October, 2022- December, 2022]

Attributes	Parameters	Sampling	
		No. of Monitoring / Sampling Locations	Frequency
A. Air			
a. Meteorological parameters	Wind Speed, Wind Direction, Humidity, Temperature, Rainfall, Wind speed (Hourly), Dry bulb temperature, Wet bulb temperature, Relative humidity, Solar radiation, Cloud cover, Environmental Lapse Rate	01 (Plant site)	Hourly

Attributes	Parameters	Sampling	
		No. of Monitoring / Sampling Locations	Frequency
b. AAQ Parameters	PM_{10}, $PM_{2.5}$, SO_2, NO_2, CO, HC (as per NAAQS Standards)	08	Twice a week (24 hourly)
B. Noise	Leq Day time & Leq Night time	08	Once in a season (Day & Nighttime)
C. Water			
a. Surface Water	pH (at 25°C), Colour, Turbidity, Odour, Total Hardness as CaCO3, Calcium as Ca, Alkalinity as CaCO3, Chloride as Cl, Residual free Chlorine, Cyanide as CN, Magnesium as Mg, Total Dissolved Solids, Sulphate as SO4, Fluoride as F, Nitrate as NO3, Iron as Fe, Aluminum as Al, Boron, Phenolic Compounds, Anionic Detergents as MBAS, Hexa Chromium as Cr+6, Zinc as Zn, Copper as Cu, Manganese as Mn, Lead as Pb, Selenium as Se, Arsenic as As, Mercury as Hg, Phosphate as PO4, Total Suspended Solid, Biochemical Oxygen Demand, Chemical Oxygen Demand, Sodium as Na, Potassium as K, Conductivity, Nickel, Dissolve Oxygen, Total Carbon, Free Ammonia, Total Coliforms, Fecal coliforms, Phytoplankton & Zoo plankton.	03	Once in a season
b. Ground Water	pH (at 25°C), Colour, Turbidity, Odour, Taste, Total Hardness as CaCO3, Calcium as Ca, Alkalinity as CaCO3, Chloride as Cl, Cyanide as CN, Magnesium as Mg, Total Dissolved Solids, Sulphate as SO4, Fluoride as F, Nitrate as NO3-N, Iron as Fe, Aluminum as Al, Boron, Phenolic Compounds, Anionic Detergents as MBAS, Hexa Chromium as Cr+6, Chromium as Cr, Zinc as Zn, Copper as Cu, Manganese as Mn, Cadmium as Cd, Lead as Pb, Arsenic as As, Mercury as Hg, Sodium as Na, Potassium as K, Phosphate as PO4, Nickel, Conductivity, Total Suspended Solids, Total Carbon, Free Ammonia, Total Coliforms, Faecal coliforms.	08	Once in a season
D. Land			
a. Soil quality	pH (at 25°C) (1:2.5 soil water suspension), Electrical Conductivity (1:2 soil water sus.), particle size distribution, Soil Texture, Colour, Water holding capacity, Bulk Density, Soluble Chloride, Exchangeable Calcium, Exchangeable Sodium, Available Potassium, Organic Matter, Exchangeable Magnesium as Mg, Available Nitrogen as N, Available Phosphorus, Total Zinc as Zn, Total Manganese as Mn, Total Chromium as Cr, Total Lead as Pb, Total Cadmium as Cd, Total Copper as Cu, Organic Carbon, SAR Value, Porosity, Cation Exchange capacity	08	Once in a season

Attributes	Parameters	Sampling	
		No. of Monitoring / Sampling Locations	Frequency
b. Land Use	Land use/ Land Cover Map by Satellite Imagery including Location code, Total project area, Topography, Drainage (natural), Cultivated, forest, plantations, water bodies, roads and settlements	10 km radius study area	Once in a Season
E. Biological a. Aquatic b. Terrestrial	Flora and fauna	Study area	Once in a season
F. **Socio-Economic parameters**	Economic Demography	Study area	Once in a season

Deliberation by the Committee

17.14.14 The Committee noted the following:

i. The instant proposal is for expansion of Integrated Cement Plant - Clinker (9.0 to 13.3 Million TPA), Cement (8.7 to 13.7 Million TPA), CPP (108.2 to 158.2 MW) and WHRS (27 to 47 MW) by installation of Line - V.

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

iii. The existing project was accorded Environmental Clearance from MoEFCC, New Delhi for Expansion of Cement Plant (Cement production from 4.2 MTPA to 8.7 MTPA, Clinker from 4.7 MTPA to 9.0 MTPA, Captive Power Plant {from 58.2 MW to 190 MW (including WHRS of 15 MW)} and Captive Limestone Mine (from 6.7 Million TPA to 13.4 Million TPA) by M/s UltraTech Cement Limited (Unit: Rajashree Cement Works) *vide* letter no. J-11011/65/2010-IA-II(I) dated 29th April, 2011.

iv. Total land area is 625.12 ha. The land is acquired and under the possession of the company.

v. Hanganhalli (1.0 km,NNE), Udgi (1.5 km, E), Huda (3.0, NW), Mogla (3.5 km, W), Itgi (3.5 km, WSW), Digaon (4.0 km, SSW) alongwith approx. 23 other villages are found in the study area.

vi. Kangana River (6.5 km, NW), Benithora River (7.5 km, NNW) and Kona Halla (8.5 km, NNE) exists within the study area of the project site. The EAC is of the opinion that the water bodies shall not be disturbed.

vii. The existing water requirement is 12921 m^3/day which is obtained from Kagina river and mine pit. The water requirement for the proposed project is estimated as 1800 m^3 /day, which will be sourced from water stored in reservoirs of Mine pits of captive mine sites. Thus the total water requirement will be 14721 m^3/day.

Recommendations of the Committee

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

(i) Hanganhalli (1.0 km, NNE), Udgi (1.5 km, E), Huda (3.0, NW), Mogla (3.5 km, W), Itgi (3.5 km, WSW), Digaon (4.0 km, SSW) along-with approx. 23 other villages are within the study area. Project Proponent shall submit action plan for environmental safeguard measures to minimise the impact on the habitation of the locals. The company shall also include this location in its environmental monitoring programme.

(ii) Kangana River (6.5 km, NW), Benithora River (7.5 km, NNW) and Kona Halla (8.5 km, NNE) exists within the study area of 10 km of the project site. The PP shall submit the suitable steps /conservation plan along with contouring (close intervals), Run -off calculations, disposal etc. A robust and full proof Micro-Drainage Conservation scheme to protect the natural drainage/water bodies and its flow parameters; along with Soil conservation scheme and multiple Erosion control measures shall be provided.

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

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

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

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

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

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

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

(x) Project proponent shall prepare layout plan showing all internal roads minimum 6m width and 9m turning radius with proper looping for smooth traffic flow, including fire tender as per NBC. Road network shall connect all service areas in layout. This drawing shall include area statement showing plot area, area under roads, parking, green belt with calculations and % with respect to plot area of project site and proper indexing.

(xi) Project proponent shall submit contour map of project site along with drainage disposal system with calculations and drawings supported with proper indexing including rain water harvesting details with calculations mentioning about GW recharge along with relevant drawing.

(xii) Project proponent shall submit a study report on Decarbonisation program, which would essentially consist of company's carbon emissions, carbon budgeting/ balancing, carbon sequestration activities and carbon offsetting strategies. Further, the report shall also

contain time bound action plan to reduce its carbon intensity of its operations and supply chains, energy transition pathway from fossil fuels to Renewable energy etc. All these activities/ assessments should be measurable and monitorable with defined time frames", when PP comes for EC proposal. This study shall be formulated keeping in view of India's Net-zero commitment at the COP-26 Climate Summit.

(xiii) As part of Corporate Environment Responsibility (CER) activity, company shall adopt nearby villages based on the socio-economic survey (10 Kms radial coverage from the project site) and undertake community developmental activities in consultation with the village Panchayat and the District Administration. In this regard, time bound action plan as per the MoEF&CC Office Memorandum dated 30/09/2020 shall be submitted.

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

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

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

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

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

***

ANNEXURE –1

Standard ToR in line with Appendix III of the EIA, 2006. applicable to Proposals Under Industry-1 Sector

Preliminary requirements:

i. EIA/EMP report cover page shall consists of project title with location, applicable schedule of the EIA Notification, 2006, ToR letter No. with date, study period along with EIA consultant & laboratory details with QCI/NABET/NABL accreditation certificate detail.

ii. Besides, following points shall be compiled as per QCI/NABET norms:
   a. Disclaimer by the EIA consultant.
   b. Declaration by the Functional Area Experts contributed to the EIA study and declaration by the head of the accredited consultant organization/authorized person.
   c. Undertaking by the project proponent owning the contents (information and data) of the EIA/EMP report.
   d. Undertaking by the EIA consultant regarding compliance of ToR issued by MoEF&CC.
   e. Consultant shall submit the Plagiarism Certificate for the EIA/EMP Report.

Structure of EIA/EMP report

Executive Summary

i. Table of Contents of the EIA report including list of tables/figures/annexures/ abbreviations/symbols/notations.

ii. Point wise compliance to the ToR issued by MoEF&CC.

iii. Executive Summary
   I. Introduction
      i. Name of the project along with applicable schedule and category as per EIA, 2006.
      ii. Location and accessibility
   II. Project description
      i. Resource requirements (Land; water; fuel; manpower)
      ii. Operational activity
      iii. Key pollution concerns
   III. Baseline Environment Studies
      i. Ambient air quality
      ii. Ambient Noise quality
      iii. Traffic study
      iv. Surface water quality
      v. Ground water quality
      vi. Soil quality
      vii. Biological Environment
      viii. Land use
      ix. Socio-economic environment
   IV. Anticipated impacts

i. Impact on ambient air quality
ii. Impact on ambient noise quality
iii. Impact on road and traffic
iv. Impact on surface water resource and quality
v. Impact on ground water resource and quality
vi. Impact on terrestrial and aquatic habitat
vii. Impact on socio-economic environment

V. Alternative analysis
VI. Environmental Monitoring program
i. Ambient air, noise, water and soil quality
ii. Emission and discharge from the plant
iii. Green belt
iv. Social parameters

VII. Additional studies
i. Risk assessment
ii. Public consultation
iii. Action plan to address the issues raised during public consultation as per MoEF&CC O.M. dated 30/09/2020

VIII. Project benefits
IX. Environment management plan
i. Air quality management plan
ii. Noise quality management plan
iii. Solid and hazardous waste management plan
iv. Effluent management plan
v. Storm water management plan
vi. Occupational health and safety management plan
vii. Green belt development plan
viii. Socio-economic management plan
ix. Project cost and EMP implementation budget.

EIA/EMP Report

1. Introduction

i. Background about the project
ii. Need of the project
iii. Purpose of the EIA study
iv. Scope of the EIA study

2. Project description

A. Site Details

i. Location of the project site covering village, Taluka/Tehsil, District and State.
ii. Site accessibility
iii. A digital toposheet in pdf or shape file compatible to google earth of the study area of radius of 10km and site location preferably on 1:50,000 scale. (including all eco-sensitive areas and environmentally sensitive places).

iv. Latest High-resolution satellite image data having 1 m - 5 m spatial resolution like quickbird, Ikonos, IRS P-6 pan sharpened etc., along with delineation of plant boundary co-ordinates. Area must include at least 100 m all around the project location.

v. Environment settings of the site and its surrounding along with map.

vi. A list of major industries with name, products and distance from plant site within study area (10km radius) and the location of the industries shall be depicted in the study area map.

vii. In case if the project site is in vicinity of the water body, 50 meters from the edge of the water body towards the site shall be treated as no development/construction zone. If it's near the wetland, Guidelines for implementing Wetlands (Conservation and Management) Rules, 2017 may be followed.

viii. In case if the project site is in vicinity of the river, the industry shall not be located within the river flood plain corresponding to one in 25 years flood, as certified by concerned District Magistrate/Executive Engineer from State Water Resources Department (or) any other officer authorized by the State Government for this purpose as per the provisions contained in the MoEF&CC Office Memorandum dated 14/02/2022.

ix. In case of canal/ nala/ seasonal drain and any other water body passing through project site, the PP shall submit the suitable steps /conservation plan/mitigation measures along with contouring, Run -off calculations, disposal etc. A robust and full proof Drainage Conservation scheme to protect the natural drainage/water bodies and its flow parameters; along with Soil conservation scheme and multiple Erosion control measures shall be provided in the report.

x. Type of land, land use of the project site needs to be submitted.

xi. Status of acquisition of land. If acquisition is not complete, stage of the acquisition process as per the MoEF&CC O.M. dated 7/10/2014 shall be furnished.

xii. Project proponent shall prepare Engineering layout plan showing all internal roads minimum 6 m width and 9 m turning radius for smooth traffic flow inside including fire tender as per NBC. Road network shall connect all service areas in layout. This drawing shall include area statement showing plot area, area under roads, parking, green belt with calculations and % with respect to plot area of project site and proper indexing. If located within an Industrial area/Estate/Complex, layout of Industrial Area indicating location of unit within the Industrial area/Estate.

xiii. Project proponent shall submit contour map of project site along with drainage disposal system with calculations and drawings supported with proper indexing including Rain Water Harvesting details with calculations mentioning about GW recharge along with relevant drawing.

xiv. A detailed report covering all aspects of Fire Safety Management and Fire Emergency Plan shall be submitted.

xv. Details of drone survey for the site, needs to be included in report and presented before the EAC during appraisal of the project.

B. Forest and wildlife related issues (if applicable):

i. Status of Forest Clearance for the use of forest land shall be submitted.

ii. Copy of application submitted for clearance under the Wildlife (Protection) Act, 1972, to the Standing Committee of the National Board for Wildlife if the project site located within notified Eco-Sensitive Zone, 10 km radius of national park/sanctuary wherein final ESZ notification is not in place as per MoEF&CC Office Memorandum dated 8/8/2019.

iii. The projects to be located within 10 km of the National Parks, Sanctuaries, Biosphere Reserves, Migratory Corridors of Wild Animals, Eco-sensitive Zone and Eco-sensitive areas, the project proponent shall submit the map duly authenticated by Divisional Forest Officer showing the distance between the project site and the said areas.

iv. Wildlife Conservation Plan duly authenticated by the Competent Authority of the State Government for conservation of Schedule I fauna along with budget and action plan, if any exists in the study area.

C. Salient features of the project

i. Products with capacities in **Tons per Annum** for the proposed project.

ii. If expansion project, status of implementation of existing project, details of existing/proposed products with production capacities in Tons per Annum.

iii. Site preparatory activities.

iv. List of raw materials required and their source along with mode of transportation.

v. Other than raw materials, other chemicals and materials required with quantities and storage capacities.

vi. Manufacturing process details along with process flow diagram of proposed units.

vii. Consolidated materials and energy balance for the project.

viii. Total requirement of surface/ ground water and power with their respective sources, status of approval.

ix. Water balance diagram

x. Details of Emission, effluents, hazardous waste generation and mode of disposal during construction as well as operation phase.

xi. Man-power requirement.

xii. Cost of project and scheduled time of completion.

xiii. In case of expansion projects, project proponent shall submit structural stability certificate showing whether existing structure withstand for proposed expansion activity.

xiv. Brief on present status of compliance (Expansion/modernization proposals)

   a. Cumulative Environment Impact Assessment for the existing as well as the proposed expansion/modernization shall be carried out.

   b. In case of ground water drawl for the existing unit, action plan for phasing out of ground water abstraction in next two years except for domestic purposes and shall switch over to 100 % use of surface water from nearby source.

   c. Copy of all the Environment Clearance(s) including Amendments/validity of extension/transfer of EC, there to obtained for the project from MoEF&CC/SEIAA shall be attached as Annexures. A Certified Compliance

Report (CCR) of the Integrated Regional Office of the Ministry of Environment, Forest and Climate Change/ or concerned authority as per OM No. IA3-22/10/2022-IA.III [E 1772581], dated 8th June, 2022 on the status of compliance of conditions stipulated in all the existing environment clearances including amendments shall be provided. A Certified Compliance Report (CCR) issued by the concerned Authority shall be valid for a period of one year from the date of inspection.

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

3. Description of the Environment

i. Study period

ii. Approach and methodology for data collection as furnished below.

Attributes	Sampling		Remarks
	Network	Frequency	
A. Air Environment			
Micro-Meteorological • Wind speed (Hourly) • Wind direction • Dry bulb temperature • Wet bulb temperature • Relative humidity • Rainfall • Solar radiation • Cloud cover • Environmental Lapse Rate	Minimum 1 site in the project impact area	1 hourly continuous	• IS 5182 Part 1-20 • Site specific primary data is essential • Secondary data from IMD, New Delhi • CPCB guidelines to be considered.
Pollutants • $PM_{2.5}$	At least 8-12 locations	As per National Ambient Air Quality Standards,	• Sampling as per CPCB guidelines • Collection of AAQ data (except in monsoon season) • Locations of various
• PM_{10}			
• SO_2			
• NOx			
• CO			

Attributes	Sampling		Remarks
	Network	Frequency	
• HC • Other parameters relevant to the project and topography of the area		CPCB Notification.	stations for different parameters should be related to the characteristic properties of the parameters. • The monitoring stations shall be based on the NAAQM standards as per GSR 826(E) dated 16/11/2009 and take into account the predominant wind direction, population zone and sensitive receptors including reserved forests, • Raw data of all AAQ measurement for 12 weeks of all stations as per frequency given in the NAAQM Notification of 16/11/2009 along with min., max., average and 98% values for each of the AAQ parameters from data of all AAQ stations should be provided as an annexure to the EIA Report.
B. Noise			
• Hourly equivalent noise levels	At least 8-12 locations	As per CPCB norms	-
C. Water			
Parameters for water quality • pH, temp, turbidity, magnesium hardness, total alkalinity,	Samples for water quality should be collected and analyzed as per: • IS: 2488 (Part 1-5) methods for sampling and testing of Industrial effluents • Standard methods for examination of water and		

Attributes	Sampling		Remarks
	Network	Frequency	
chloride, sulphate, nitrate, fluoride, sodium, potassium, salinity • Total nitrogen, total phosphorus, DO, BOD, COD, Phenol • Heavy metals • Total coliforms, faecal coliforms • Phyto-plankton • Zoo-plankton • Microalgae/microalgal bloom	wastewater analysis published by American Public Health Association.		
For River Bodies • Total Carbon • pH • Dissolved Oxygen • Biological Oxygen Demand • Free NH4 • Boron • Sodium Absorption Ratio • Electrical Conductivity • TDS	• Surface water quality of the nearest River (60m upstream and downstream) and other surface water bodies	• Yield of water sources to be measured during critical season • Standard methodology for collection of surface water (BIS standards)	
For Ground Water	• Ground water monitoring data should be collected at minimum of 8 locations (from existing wells /tube wells/existing current records) from the study area and shall be included.		
D. Traffic Study			
• Type of vehicles • Frequency of vehicles for transportation of materials • Additional traffic due to proposed project • Parking arrangement	-		
E. Land Environment			
Soil	Soil samples be collected as per BIS specifications		

Attributes	Sampling		Remarks
	Network	Frequency	
• Particle size distribution • Texture • pH • Electrical conductivity • Cation exchange capacity • Alkali metals • Sodium Absorption Ratio (SAR) • Permeability • Water holding capacity • Porosity			
Land use/Landscape • Location code • Total project area • Topography • Drainage (natural) • Cultivated, forest, plantations, water bodies, roads and settlements	-		
E. Biological Environment			
Aquatic • Primary productivity • Aquatic weeds • Enumeration of phyto plankton, zoo plankton and benthos • Fisheries • Diversity indices • Trophic levels • Rare and endangered species • Marine Parks/ Sanctuaries/ closed areas /coastal regulation zone (CRZ) **Terrestrial** • Vegetation-species list, economic	• Detailed description of flora and fauna (terrestrial and aquatic) existing in the study area shall be given with special reference to rare, endemic and endangered species. Indicator species which indicate ecological and environment degradation should be identified and included to clearly state whether the proposed project would result in to any adverse effect on any species. • Samples to collect from upstream and downstream of discharge point, nearby tributaries at downstream, and also from dug wells close to activity site. • For forest studies, direction of wind should be considered while selecting forests. • Secondary data to collect from Government offices, NGOs, published literature.		

Attributes	Sampling		Remarks
	Network	Frequency	
importance, forest produce, medicinal value • Importance value index (IVI) of trees • Fauna • Avi fauna • Rare and endangered species • Sanctuaries / National park / Biosphere reserve • Migratory routes			
F. Socio-economic			
• Demographic structure • Infrastructure resource base • Economic resource base • Health status: Morbidity pattern • Cultural and aesthetic attributes • Education	• Socio-economic survey is based on proportionate, stratified and random sampling method. • Primary data collection through questionnaire • Secondary data from census records, statistical hard books, topo sheets, health records and relevant official records available with Govt. agencies		

iii. Interpretation of each environment attribute shall be enumerated and summarized as given below:
- Ambient air quality
- Ambient Noise quality
- Surface water quality
- Ground water quality
- Soil quality
- Biological Environment
- Land use
- Socio-economic environment

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

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

Activity	Environment	Ecological	Socio-economic

Construction phase			
Operation phase			

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

iii. Impact on ambient noise quality (Sources; Embedded control measures; Assessment; Mitigation measures; Residual impact)
    a. Construction phase
    b. Operation phase

iv. Impact on traffic (Sources; Embedded control measures; Assessment; Mitigation measures; Residual impact)
    a. Construction phase
    b. Operation phase

v. Impact on soil quality (Sources; Embedded control measures; Assessment; Mitigation measures; Residual impact)
    a. Construction phase
    b. Operation phase

vi. Impact on land use (Sources; Embedded control measures; Assessment; Mitigation measures; Residual impact)
    a. Construction phase
    b. Operation phase

vii. Impact on surface water resource and quality (Sources; Embedded control measures; Assessment; Mitigation measures; Residual impact)
    a. Construction phase
    b. Operation phase

viii. Impact on ground water resource and quality (Sources; Embedded control measures; Assessment; Mitigation measures; Residual impact)
    a. Construction phase
    b. Operation phase

ix. Impact on terrestrial and aquatic habitat (Sources; Embedded control measures; Assessment; Mitigation measures; Residual impact)
    a. Construction phase

b. Operation phase

x. Impact on socio-economic environment (Sources; Embedded control measures; Assessment; Mitigation measures; Residual impact)
   a. Construction phase
   b. Operation phase

xi. Impact on occupational health and safety (Sources; Embedded control measures; Assessment; Mitigation measures; Residual impact)
   a. Construction phase
   b. Operation phase

5. Analysis of Alternatives (Technology & Site)

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

6. Environmental Monitoring Program

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

iv. Action plan for **post-project environment monitoring matrix**:

Activity	**Aspect**	**Monitoring Parameter**	**Location**	**Frequency**	**Responsibility**
Construction phase					
Operation phase					

7. Additional Studies

i. Project proponent shall submit a study report on Decarbonisation program, which would essentially consist of company's carbon emissions, carbon budgeting/ balancing, carbon sequestration activities and carbon capture, use and storage after

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

ii. Details of adoption/ implementation status/plan to achieve the goal of Glasgow COP26 Climate Submit with regard to enhance the non-fossil energy, use of renewable energy, minimization of net carbon emission and carbon intensity with long-term target of "net Zero" emission.

iii. Implementation status/measures adopted for avoiding the generation of single used plastic waste.

iv. In cases the project is located in Critically and Severely Polluted Areas, additional mitigation measures adopted and detailed action plan to be submitted in the EIA/EMP Report as per MoEF&CC O.M. No. 22-23/2028-IA.III dated 31/10/2019 and MoEF&CC O.M. No. 22-23/2028-IA.III dated 5/07/2022 has to be submitted.

v. Public consultation details (Entire proceedings as separate annexure along with authenticated English Translation of Public Consultation proceedings).

vi. As part of Corporate Environment Responsibility (CER) activity, company shall adopt nearby villages based on the socio-economic survey and undertake community developmental activities in consultation with the village Panchayat and the District Administration. In this regard, time bound action plan as per the MoEF&CC Office Memorandum dated 30/09/2020 shall be submitted.

vii. Summary of issues raised during public consultation along with action plan to address the same as per MoEF&CC O.M. dated 30/09/2020

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

viii. Risk assessment

- Methodology
- Hazard identification
- Frequency analysis
- Consequence analysis
- Risk assessment outcome

ix. Emergency response and preparedness plan

8. Project Benefits

i. Environment benefits

ii. Social infrastructure

iii. Employment and business opportunity

iv. Other tangible benefits

9. Environment Cost Benefit Analysis

i. Net present value
ii. Internal rate of return
iii. Benefit cost ratio
iv. Cost effectiveness analysis

10. Environment Management Plan (Construction and Operation phase)

i. Air quality management plan
ii. Noise quality management plan
iii. Action plan for hazardous waste management
iv. Action plan for solid waste management
v. Action plan for e-waste management.
vi. Action plan for plastic waste management.
vii. Action plan for construction and demolition waste management.
viii. Effluent management plan
ix. Storm water management plan
x. Rain water harvesting plan
xi. Plan for maximum usage of waste water/treated water in the Unit
xii. Occupational health and safety management plan
xiii. Green belt development plan: An action plan for Green Belt development consisting of 3 tiers of plantations of native species all along the periphery of the project of adequate width shall be raised in 33% of total area with a tree density shall not less than 2500 per ha within a time frame of one year shall be submitted. Survival rate of green belt shall be monitored on periodic basis to ensure that survival rate not be less than 80 %.
xiv. Socio-economic management plan
xv. Wildlife conservation plan (In case of presence of schedule I species)
xvi. Total capital cost and recurring cost/annum for environment pollution control measures shall be included.

11. Conclusion of the EIA study

12. In addition to the above, any litigation pending against the project and/or any direction/order passed by any Court of Law against the project, if so, details thereof shall also be included. Has the unit received any notice under the Section 5 of Environment (Protection) Act, 1986 or relevant Sections of Air and Water Acts? If so, details thereof and compliance/ATR to the notice(s) and present status of the case.

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ANNEXURE-2

Standard ToRs FOR CEMENT INDUSTRY [3(b)]

1. Limestone and coal linkage documents along with the status of environment clearance of limestone and coal mines.
2. Quantum of production of coal and limestone from coal & limestone mines and the projects they cater to;
3. Present land use shall be prepared based on satellite imagery. High-resolution satellite image data having 1m-5m spatial resolution like quickbird, Ikonos, IRS P-6 pan sharpened etc. for the 10 Km radius area from proposed site. The same shall be used for land used/land-cover mapping of the area.
4. If the raw materials used have trace elements, an environment management plan shall also be included.
5. Plan for the implementation of the recommendations made for the cement plants in the Corporate Responsibility for Environmental Protection (CREP) guidelines shall be prepared.
6. Energy consumption per ton of clinker and cement grinding
7. Provision of waste heat recovery boiler
8. Arrangement for co-processing of hazardous waste in cement plant.
9. Provision of Alternate fuels.
10. Details of Implementation of Fly Ash Management Rules
11. Emission/Effluent norms as per GSR 496 (E) dated 9/5/2016 [EPA Rules 1986].
12. Action plan for the stock piles with impervious floor, provision of garland drains and catch pits to trap run off material shall be submitted.
13. Action plan to limit the particulate matter emission from all the stacks below 30 mg/Nm3 shall be furnished.
14. PP shall explore the possibility of plastic waste utilization in the Plant/Unit process.
15. Action plan for 100 % solid waste utilization shall be submitted.
16. PM (PM_{10} and $P_{2.5}$) present in the ambient air must be analysed for source analysis – natural dust/RSPM generated from plant operations (trace elements) of PM_{10} to be carried over.

Standard ToRs FOR INTEGRATED STEEL PLANT [3(a)]

1. Iron ore/coal linkage documents along with the status of environment clearance of iron ore and coal mines.
2. Quantum of production of coal and iron ore from coal & iron ore mines and the projects they cater to. Mode of transportation to the plant and its impact.
3. For Large ISPs, a 3-D view i.e. DEM (Digital Elevation Model) for the area in 10 km radius from the proposal site. MRL details of project site and RL of nearby sources of water shall be indicated.
4. Recent land-use map based on satellite imagery. High-resolution satellite image data having 1m-5m spatial resolution like quickbird, Ikonos, IRS P-6 pan sharpened etc. for the

10 Km radius area from proposed site. The same shall be used for land used/land-cover mapping of the area.

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

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

1. A 3-D view i.e. DEM (Digital Elevation Model) for the area in 10 km radius from the proposal site. MRL details of project site and RL of nearby sources of water shall be indicated.

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

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

1. A note on pulp washing system capable of handling wood pulp shall be included.
2. Manufacturing process details for the existing and proposed plant shall be included. Chapter on Pulping & Bleaching shall include: no black liquor spillage in the area of pulp mill; no use of elemental chlorine for bleaching in mill; installation of hypo preparation plant; no use of potcher washing and use of counter current or horizontal belt washers. Chapter on Chemical Recovery shall include: no spillage of foam in chemical recovery plant, no discharge of foul condensate generated from MEE directly to ETP; control of suspended particulate matter emissions from the stack of fluidized bed recovery boiler and ESP in lime kiln

3. Studies shall be conducted and a chapter shall be included to show that Soda pulping process can be employed for Eucalyptus/Casuarina to produce low kappa (bleachable) grade of pulp.
4. Commitment that only elemental Chlorine-free technology will be used for the manufacture of paper and existing plant without chemical recovery plant will be closed within 2 years of issue of environment clearance.
5. A commitment that no extra chlorine base bleaching chemicals (more than being used now) will be employed and AOx will remain within limits as per CREP for used based mills. Plan for reduction of water consumption.
6. Undertaking to comply with the norms stipulated in the S.O. 3187 (E) dated 7/10/2016 for the projects located in Ganga basin.
7. Action plan for the stock piles with impervious floor, provision of garland drains and catch pits to trap run off material shall be submitted.
8. Action plan to limit the particulate matter emission from all the stacks below 30 mg/Nm3 shall be furnished.
9. Action plan for 100 % waste utilization shall be submitted.

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

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

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

1. Justification for selecting recovery/non-recovery (beehive) type batteries with the proposed unit size.
2. Details of proposed layout clearly demarcating various facilities such as coal storages, coke making, by-product recovery area, etc within the plant.
3. Details of coke oven plant (recovery/non-recovery type) including coal handling, coke oven battery operations, coke handling and preparation.

4. Scheme for coal changing, charging emission centre, Coke quenching technology, pushing emission control.
5. Scheme for coke oven effluent treatment plant details including scheme for meeting cyanide standard.
6. Emission/effluent norms as per G.S.R 894 (E) dated 4/12/2019. Provision of CDQ in case of coke oven plant of 0.8 MTPA and above.
7. Action plan to limit the particulate matter emission from all the stacks below 30 mg/Nm3 shall be furnished.
8. Action plan for 100 % solid waste utilization shall be submitted.
9. Action plan for the stock piles with impervious floor, provision of garland drains and catch pits to trap run off material shall be submitted.

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

1. Type of fibres used (Asbestos and others) and preference of selection from techno-environment angle should be furnished
2. As asbestos is used in several products and as the level of precautions differ from milling to usage in cement products, friction products gasketing, textiles and also differ with the process used, it is necessary to give process description and reasons for the choice for selection of process
3. Technology adopted, flow chart, process description and layout marking areas of potential environment impacts
4. National standards and codes of practice in the use of asbestos particular to the industry should be furnished
5. In case of newly introduced technology, it should include the consequences of any failure of equipment/ technology and the product on environment status.
6. In case of expansion project asbestos fibre to be measured at stack emission and work zone area, besides base line air quality.
7. In case of green field project asbestos fibre to be measured in the ambient air.
8. Action plan to limit the particulate matter emission from all the stacks below 30 mg/Nm3 shall be furnished.
9. Action plan for 100 % solid waste utilization shall be submitted.
10. PM (PM10 and P2.5) present in the ambient air must be analysed for source analysis – natural dust/RSPM generated from plant operations in case of expansion projects (trace elements /asbestos fibre) of PM10 to be carried over.
11. Action plan for the stock piles with impervious floor, provision of garland drains and catch pits to trap run off material shall be submitted.

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

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

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ANNEXURE-3

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

S. No.	Name	Position	14/11/2022	15/11/2022	16/11/2022
1.	Shri. Rajive Kumar	Chairman	***Present***	***Present***	***Present***
2.	Dr. Dipankar Shome	Vice Member	***Present***	***Present***	***Present Through VC mode***
3.	Dr. S. Ranganathan	Member	***Present***	***Present***	***Present***
4.	Dr. Ranjit Prasad	Member	***Present***	***Present***	***Present***
5.	Dr. E V R Raju	Member	***Present***	***Present***	***Present***
6.	Dr. S. K. Singh	Member	***Present Through VC mode***	***Present Through VC mode***	***Present Through VC mode***
7.	Dr. Jai Krishna Pandey	Member	***Present***	***Present***	***Present***
8.	Dr. Tejaswini Ananthkumar	Member	***Present***	***Present***	***Present***
9.	Dr. Hemant Sahasrabuddhe	Member	***Present Through VC mode***	***Present Through VC mode***	***Present Through VC mode***
10.	Dr. B. N. Mohapatra, DG, (Representatives of NCCBM)	Member	***Present Through VC mode***	***Present Through VC mode***	***Present Through VC mode***
11.	Shri Nazimuddin, Scientist 'F' (Representative of CPCB)	Member	***Absent***	***Absent***	***Absent***
12.	Dr. Sanjay Bist, Scientist 'E' (Representative of Indian Meteorological Department)	Member	***Present***	***Present***	***Present***
13.	Dr. S. Raghavan, Scientist 'D' (Representative of National Institute of Occupational Health (NIOH)	Member	***Present***	***Present***	***Present***
14.	Dr. R.B. Lal, Scientist E, MoEFCC	Member Secretary	***Present***	***Present***	***Present***
MoEF&CC					
1.	Dr R P Rastogi	Scientist C	***Present***	***Present***	***Present***
2.	Dr. Sandeepan B.S	Scientist B	***Present***	***Present***	***Present***

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ANNEXURE-4

Approval of EAC Chairman

Email **Additional Director MoEFCC Dr R B LAL**

Re: Revised Draft minutes of the 17th EAC Meeting held on 14-16 November 2022 for approval of Chairman (EAC-Industry 1 Sector)-Regarding

From : rajivekumar1983@gmail.com — Thu, Nov 24, 2022 01:04 PM

Subject : Re: Revised Draft minutes of the 17th EAC Meeting held on 14-16 November 2022 for approval of Chairman (EAC-Industry 1 Sector)-Regarding

1 attachment

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

Cc : chairman eac ind 1 <chairman.eac.ind.1@gmail.com>, ranganathan metals <ranganathan.metals@gmail.com>, ranjitnitj@gmail.com, rajuevr60@gmail.com, sksinghdce@gmail.com, dshome61@gmail.com, tejaswini acf <tejaswini.acf@gmail.com>, sshemant 801 <sshemant_801@rediffmail.com>, NCCBM DIRECTOR GENERAL <dg@ncbindia.com>, Nazimuddin <nazim.cpcb@nic.in>, Raghavan S <raghuharihar@gov.in>, raghuharihar@yahoo.co.in, Sanjay Bist <sanjay.bist@imd.gov.in>, drjkpandey eac industry1 <drjkpandey.eac.industry1@gmail.com>

Dear Dr Lal,
The draft minutes are approved. Please do the needful.
Best wishes
Rajive Kumar
Chairman Industry-1

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