

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

Dated: 07.03.2023

Date of Zero Draft MoM sent to EAC:05.03.2023

Approval by Chairman:07.03.2023

Uploading on PARIVESH:07.03.2023

MINUTES OF THE 24TH EXPERT APPRAISAL COMMITTEE
(INDUSTRY-1 SECTOR) MEETING HELD ON 28TH FEBRUARY, 2023– 1ST
MARCH, 2023

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

Time: 10:30 AM onwards

DAY-1: FEBRUARY 28, 2023 [TUESDAY]

(i) Opening Remarks by the Chairman, EAC

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

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

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

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

(iii) Confirmation of the Minutes of the 23rd Meeting of the EAC (Industry-1 Sector) held during February 14-15, 2023 at MoEF&CC through VC.

The EAC, having taken note that final minutes were issued after incorporating comments offered by the EAC (Industry-1 Sector) members on the minutes of its **23rd Meeting of the EAC (Industry-1 Sector) held during February 14-15, 2023** conducted through Video Conferencing, and noted that there is a modifications/factual correction, in the minutes of the 23rd EAC meeting for the project/activities as follows:

Agenda No. 23.7: Proposed Expansion of Sponge Iron Plant From 90,000 to 1,25,000 TPA, Induction Furnace & Billet Caster from 2x12T (300 TPD) To 1x12T, 1x15T (416 TPD), Captive Power Plant from 12 to 12.5 MW, Addition of Hot Rolling Mill including galvanizing 425 TPD, & Fly Ash Brick Manufacturing Unit 1000-1200 Bricks/Hr. by M/s. Goa Sponge & Power Limited, located at Survey No. 58/I,59/I,60/I (Part), Santona Village, Sanguem Taluka, South Goa District, Goa - Consideration of Modification in TOR and violation under SOP dated 07.07.2021.

[Proposal No. IA/GA/IND/296119/2022; File No. IA-J-11011/246/2018-IA.II(I)]

The aforementioned proposal was considered and recommended by EAC in its 23rd meeting of the EAC for Industry-I sector held on 14-15th February, 2023. The PP vide email dated 27.02.2023 submitted that the condition no. (ii) was incorrectly mentioned in the MoM of 23rd EAC, which may be corrected as following -

Ref in MoM	Mentioned in the MoM of 23rd EAC meeting	Proposed Modificaion / Correction
Page No. 81 Para 23.7.9 additional conditions (ii)	(ii). The State Government/SPCB to take action against the project proponent under the provisions of the Environment (Protection) Act, 1986, and further no consent to operate to be issued till the project is granted EC for the Unit which violated under the provision of the EIA Notification 2006 i.e. 1.4 MTPA Iron Ore Pellet Plant.	(ii). The State Government/SPCB to take action against the project proponent under the provisions of the Environment (Protection) Act, 1986, and further no consent to operate to be issued till the project is granted EC for the Unit which violated under the provision of the EIA notification 2006, i.e Proposed Expansion of Sponge Iron Plant From 90,000 to 1,25,000 TPA, Induction Furnace & Billet Caster from 2x12T (300 TPD) To 1x12T, 1x15T (416 TPD), Captive Power Plant from 12 to 12.5 MW, Addition of Hot Rolling Mill including galvanizing 425 TPD, & Fly Ash Brick Manufacturing Unit 1000-1200 Bricks/Hr.

Deliberations by the EAC:

It was informed to the Committee members that additional condition no. (ii) mentioned in the MoM of 23rd EAC for Industry-I sector held during February 14-15, 2023 pertaining to proposal agenda no. 23.7 as referred above.

The EAC deleiberated and noted that the request of the PP may be accepted and recommended for the incorporation of the above-mentioned corrections/modifications in the minutes of the meeting. Accordingly, [Para 23.7.9, additional conditions (ii)] stands modified in the minutes of 23nd EAC (Industry-1) meeting as detailed in table above.

Details of the proposals considered during the 24th meeting **conducted** through **Video Conferencing**, deliberations made and the recommendations of the Committee are explained in the respective agenda items as under:

Consideration of Environmental Clearance Proposals

Agenda No. 24.1

24.1 Integrated Cement Plant {Clinker - 4.5 Million TPA; Cement - 4.0 Million TPA (OPC, PPC, PSC, RHPC, SRC & Composite Cement); WHRS - 37.5 MW and D.G. Sets - 2500 KVA (2 x 1000 KVA & 1 x 500 KVA) or (1 x 1000 KVA, 2 x 500 KVA & 2 x 250 KVA)} by M/s Shree Cement Limited (Bangur Cement Unit), located at Villages- Bhivgarh, Jawangarh and Ras - II, Tehsil - Jaitaran, District – Pali, Rajasthan - Consideration of Environmental Clearance.

**[Proposal No. IA/RJ/IND1/412731/2022; File No. IA-J-11011/398/2018-IA-II(I)
[Consultant; J.M. EnviroNet Pvt. Ltd; Valid Upto: 07.08.2023]**

24.1.1 M/s. Shree Cement Limited (Bangur Cement Unit) has made an online application vide proposal no. IA/RJ/IND1/412731/2022 dated 10.02.2023 along with copy of EIA/EMP report, CAF & Form - 1 (Part A, B & C) seeking Environment Clearance (EC) under the provisions of the EIA Notification, 2006, for the project mentioned above. The proposed project activity is listed at schedule no. 3(b) Cement Plants under Category “A” of the schedule of the EIA Notification, 2006 is therefore, appraised at Central Level.

24.1.2 Name of the EIA consultant: M/s. J.M. Environet Pvt. Ltd. [List of ACOs with their Certificate / Extension Letter no. NABET/EIA/2023/SA 0172; Valid up to 07.08.2023, as on February 27, 2023].

Details submitted by Project proponent

24.1.3 The details of the ToR are furnished as below:

Date of application	Consideration	Details	Date of accord	ToR Validity
01 st Dec., 2018	2 nd meeting of R-EAC (Industry - I) held during 10-12 th Dec., 2018	Terms of Reference	10 th July, 2019	09 th July, 2023
16 th Sept., 2021	45 th meeting of R-EAC (Industry - I) held during 28-29 th Sep., 2021	Amendment	18 th Oct., 2021	

A. Details of ToR Proposal:

The aforesaid proposal was initially considered in the 2nd meeting of the Reconstituted Expert Appraisal Committee held during 10-12th December, 2018 wherein the Committee recommended for the site visit. Accordingly, site visit was undertaken by the sub-committee comprising of following members during 18-19th January, 2019.

Observations of the sub-committee: Based on the decisions in the 2nd EAC meeting, sub-committee visited the site during 18th to 20th January, 2019 and made following observations:

- i. The land area for the proposed plant is 31.47 ha, having a separate boundary and located adjacent to Captive Nimbeti Limestone Mine. The lime stone to the proposed plant shall be sourced from this mine.
- ii. Captive Nimbeti Limestone mine is having minable reserve to the tune of 626.90 Million ton as on 31/01/2018 and the life of mine is 19 years at the rate of 32.8 Million TPA

Date of application	Consideration	Details	Date of accord	ToR Validity
	<p><i>production capacity for which PP has submitted ToR application on 18/7/2018. These reserve are proved for drilling upto 252 mRL (123 mbgl). The drill exploration is going on to further to explore the more minerals and till that it has done upto 200 mbgl.</i></p> <p><i>iii. The lime stone to the proposed plant shall be brought by a closed conveyor from the crusher installed at the mines site.</i></p> <p><i>iv. The distance between existing cement plant boundary and proposed site boundary is around 100m.</i></p> <p><i>v. There is a railway line between existing cement plant boundary and the proposed site boundary. The same railway line will be used for receiving the raw materials and dispatch cement product from both plants.</i></p> <p><i>vi. Road transportation shall also be practiced for products and some raw materials.</i></p> <p><i>vii. The site is well connected to NH-158 (earlier SH - 39 from Beawar to Ras Road). This NH-158 connects the plant site to NH – 14 (six lane highway connecting Delhi to Mumbai); which is approx. 19.4 Km in SE direction from the plant site. As per the Ministry of Road, transport and Highways Notification dated 23/02/2018, the road is proposed for further widening. The condition of roads presently is not very good.</i></p> <p><i>viii. The site is having natural growth of prosopis juli flora in abundance. In the North side there is a private agriculture land adjacent to the proposed site. One corner of the project land is in Northern side and is near to the village Jawangarh as shown in the attached google map.</i></p> <p><i>ix. PP has developed rain water collection pits in the leased area for use in the proposed green field project.</i></p> <p><i>x. In the existing cement plant, it was observed that PP had adopted best available and innovative technologies such as installation of WHRS with all kilns with specific power generation from WHRS is the highest in India; Installation of DeNOx system without use of ammonia to control the NOx emission; installation of high efficient ESP & Bag filters for control of stack emission, concreted roads, vacuum sweeping and covered storage.</i></p> <p><i>xi. In the mining area PP has adopted the controlled blasting, wet drilling and scientific mining practices. In Bagat Pura residential colony, PP has developed excellent plantation, concreted roads, STP, composting plant, etc.</i></p> <p><i>xii. PP was advised to put more efforts in the following areas for improvement of existing cement plant.</i></p> <p><i>xiii. Avoid group plantation of single species and adopt plantation of mixed local species with appropriate height.</i></p> <p><i>xiv. More plantation is required all along the plant boundary. PP should improve the condition of the nursery.</i></p> <p><i>xv. To further reduce the fugitive emission especially by concreting the roads from wall to wall and lifting of spillage & road side dust.</i></p> <p><i>xvi. Local villagers, resident of village Bagatpura appreciated CSR work and employment provided by the company and welcomed the proposed project for further betterment of social status of villagers.</i></p>			
	<p>Recommendations of the sub-committee: After detailed deliberations with the officials of</p>			

Date of application	Consideration	Details	Date of accord	ToR Validity
<p>the plant during the site visit, the following recommendations were made by the sub-committee for further consideration of the proposal.</p> <ol style="list-style-type: none"> i. <i>The project proponent shall plan for development of 50 m wide green belt in northern and southern sides to create barrier between the plant and agricultural fields.</i> ii. <i>The project proponent shall plan for development of 200 m wide green belt towards village Jawangarh as proposed in PFR.</i> iii. <i>Over all 33% of the total project area should be developed as green belt with native and broad leaved tree species.</i> iv. <i>Possibility of shifting the Cement mill proposed in Phase II to southern side of the proposed area shall be explored and details alongwith revised layout shall be submitted along with EIA/EMP.</i> v. <i>Carrying Capacity of traffic for cumulative traffic load to be estimated and mentioned in the EIA/EMP with all supporting details.</i> vi. <i>In the existing plant area and mines area, the green belt to be increased by additional 10% of the geographical area and maintained. In surrounding villages, efforts should be made to improve agri-crop yield and social forestry.</i> vii. <i>The project proponent shall prepare an action plan for development of avenue plantation along the roads leading to the plant, along the internal roads and along the roads leading to surrounding villages in a time bound manner within two years”.</i> <p>The Committee accepted the site visit report of the sub-committee and after detailed deliberations, the Committee recommended the project proposal and accordingly ToR was granted by the Ministry on 10.07.2019.</p> <p>B. <u>Details of Amendment in TOR:</u> Amendment in TOR was granted by the Ministry on 18.10.2021 for following:</p> <ol style="list-style-type: none"> i. The plant configuration changed to Clinker - 4.5 MTPA; Cement - 4.0 MTPA; WHRS - 37.5 MW and D.G. Sets - 2500 KVA. ii. Other changes: <ol style="list-style-type: none"> a. Project land area reduced from 40.87 ha to 32.27 ha. b. Total project cost increased from Rs. 1310 crores to Rs. 1872 crores. c. Total employment reduced from 230 to 170 persons. d. Total electricity load reduced from 55.2 MW to 46.17 MW. e. Total water requirement reduced from 630 KLD to 530 KLD. f. Greenbelt along the periphery reduced from 50 m to 25 m in width. 				

24.1.4 The project of M/s. Shree Cement Limited (Bangur Cement Unit) located in Villages - Bhivgarh, Jawangarh and Ras - II, Tehsil - Jaitaran, District – Pali, Rajasthan is for setting up of a new Integrated Cement Plant - {Clinker - 4.5 Million TPA; Cement - 4.0 Million TPA (OPC, PPC, PSC, RHPC, SRC & Composite Cement); WHRS - 37.5 MW and D.G. Sets - 2500 KVA (2 x 1000 KVA & 1 x 500 KVA) or (1 x 1000 KVA, 2 x 500 KVA & 2 x 250 KVA)}.

24.1.5 Environmental Site Settings:

S. No.	Particulars	Details	Remarks																																																			
i.	Total land	Total land required for the project is 32.27 ha (79.73 acres). Out of total land area; 21.62 ha (53.42 acres) land has been converted into industrial purpose and 10.65 ha (26.31 acres) is agricultural land.	Land use: Industrial Land (21.62 ha) & Agricultural Land (10.65 ha) and conversion is under process.																																																			
ii.	Land acquisition details as per MoEF&CC O.M. dated 7/10/2014.	Total project area is 32.27 ha (79.73 acres); out of which, 79.19 acres (i.e., 99.32%) land is under possession of Shree Cement Limited and balance 0.54 acres (i.e., 0.68%) land acquisition is under process.	-																																																			
iii.	Existence of habitation & involvement of R&R, if any.	<p>Plant Site: No habitation exists within the project site.</p> <p>Study Area: Nearby village has been provided below-</p> <table border="1"> <thead> <tr> <th>Habitation</th> <th>Distance (km)</th> <th>Direction</th> </tr> </thead> <tbody> <tr> <td>Jawangarh</td> <td>~0.1 Km</td> <td>North</td> </tr> <tr> <td>Khera</td> <td>~1.0 Km</td> <td>East</td> </tr> <tr> <td>Nimbeti</td> <td>~2.0 Km</td> <td>WNW</td> </tr> <tr> <td>Ras</td> <td>~2.5 Km</td> <td>North</td> </tr> <tr> <td>Bhivgarh</td> <td>~2.5 Km</td> <td>SSE</td> </tr> <tr> <td>Bhagatpura</td> <td>~3.0 Km</td> <td>ESE</td> </tr> <tr> <td>kundal</td> <td>~4.0 Km</td> <td>SW</td> </tr> </tbody> </table> <p>There are approx. 47 villages in 10 km radius study area.</p>	Habitation	Distance (km)	Direction	Jawangarh	~0.1 Km	North	Khera	~1.0 Km	East	Nimbeti	~2.0 Km	WNW	Ras	~2.5 Km	North	Bhivgarh	~2.5 Km	SSE	Bhagatpura	~3.0 Km	ESE	kundal	~4.0 Km	SW	R&R is not applicable																											
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iv.	Latitude and Longitude of all corners of the project site	<table border="1"> <thead> <tr> <th>Point</th> <th>Latitude</th> <th>Longitude</th> </tr> </thead> <tbody> <tr><td>1.</td><td>26°16'55.13"N</td><td>74°11'25.59"E</td></tr> <tr><td>2.</td><td>26°16'59.37"N</td><td>74°11'37.23"E</td></tr> <tr><td>3.</td><td>26°16'59.48"N</td><td>74°11'41.34"E</td></tr> <tr><td>4.</td><td>26°16'58.26"N</td><td>74°11'44.07"E</td></tr> <tr><td>5.</td><td>26°16'56.06"N</td><td>74°11'40.13"E</td></tr> <tr><td>6.</td><td>26°16'51.57"N</td><td>74°11'37.61"E</td></tr> <tr><td>7.</td><td>26°16'51.49"N</td><td>74°11'34.28"E</td></tr> <tr><td>8.</td><td>26°16'49.00"N</td><td>74°11'41.10"E</td></tr> <tr><td>9.</td><td>26°16'41.83"N</td><td>74°11'37.13"E</td></tr> <tr><td>10.</td><td>26°16'30.23"N</td><td>74°11'28.69"E</td></tr> <tr><td>11.</td><td>26°16'31.37"N</td><td>74°11'23.50"E</td></tr> <tr><td>12.</td><td>26°16'34.62"N</td><td>74°11'19.26"E</td></tr> <tr><td>13.</td><td>26°16'35.61"N</td><td>74°11'14.42"E</td></tr> <tr><td>14.</td><td>26°16'38.21"N</td><td>74°11'13.26"E</td></tr> <tr><td>15.</td><td>26°16'46.99"N</td><td>74°11'14.98"E</td></tr> <tr><td>16.</td><td>26°16'46.17"N</td><td>74°11'29.94"E</td></tr> </tbody> </table>	Point	Latitude	Longitude	1.	26°16'55.13"N	74°11'25.59"E	2.	26°16'59.37"N	74°11'37.23"E	3.	26°16'59.48"N	74°11'41.34"E	4.	26°16'58.26"N	74°11'44.07"E	5.	26°16'56.06"N	74°11'40.13"E	6.	26°16'51.57"N	74°11'37.61"E	7.	26°16'51.49"N	74°11'34.28"E	8.	26°16'49.00"N	74°11'41.10"E	9.	26°16'41.83"N	74°11'37.13"E	10.	26°16'30.23"N	74°11'28.69"E	11.	26°16'31.37"N	74°11'23.50"E	12.	26°16'34.62"N	74°11'19.26"E	13.	26°16'35.61"N	74°11'14.42"E	14.	26°16'38.21"N	74°11'13.26"E	15.	26°16'46.99"N	74°11'14.98"E	16.	26°16'46.17"N	74°11'29.94"E	-
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		17.	26°16'49.95"N	74°11'32.68"E							
		18.	26°16'52.20"N	74°11'29.94"E							
v.	Elevation of the project site	367 m to 377 m above mean sea level.			-						
vi.	Involvement of Forest land if any.	No Forest Land is involved in the project site.			-						
vii.	Water body (Rivers, Lakes, Pond, Nala, Natural Drainage, Canal etc.) exists within the project site as well as study area	<p>Project site: No water body exists within the project site.</p> <p>Study area: Following water body fall within 10 km radius:</p> <table border="1"> <thead> <tr> <th>Water body</th> <th>Distance (km)</th> <th>Direction</th> </tr> </thead> <tbody> <tr> <td>Lilri River</td> <td>~1.0 km</td> <td>NNW</td> </tr> </tbody> </table>			Water body	Distance (km)	Direction	Lilri River	~1.0 km	NNW	
Water body	Distance (km)	Direction									
Lilri River	~1.0 km	NNW									
viii.	Existence of ESZ/ ESA/ national park/ wildlife sanctuary/ biosphere reserve/ tiger reserve/ elephant reserve etc. if any within the study area.	<p>No National Park, Wildlife Sanctuary, Biosphere Reserve & Tiger/ Elephant Reserve exist within 10 km radius of the project site. Therefore, NBWL approval is not applicable. List of protected & reserved forests are provided below:</p> <ul style="list-style-type: none"> ○ Protected Forest (3.5 km in NNW direction) ○ Gopalpura Block PF (5.0 km in SE direction) ○ Babra Giri Block RF (6.5 km in SSE direction) ○ Salarmal Block PF (8.5 km in SSE direction) 			-						

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

S. No.	Plant Equipment / Facility	Proposed Units	
		Configuration	Capacity
1.	Clinker	Kiln: 1 x 13500 TPD	4.5 Million TPA
2.	Cement (OPC, SRC, RHPC, PPC, PSC & Composite Cement)	VRM: 1 x 13000 TPD	4.0 Million TPA
3.	WHRS	PH & AQC Boiler (37.5 MW)	37.5 MW

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

S. No.	Raw Material	Quantity required per annum (Million TPA)	Source	Distance from site (Kms)	Mode of Transportation
1.	Limestone	6.75	Nimbeti Captive Limestone Mine	Adjacent to the plant	Conveyor belt
2.	Laterite or Lead Zinc Slag	0.067	Laterite from Bhilwara, Lead zinc slag from Chittorgarh (Raj) and other nearby sources	~ 150 to 250 km	Rail and Road
3.	Gypsum (Mineral, Synthetic, Chemical & Imported)	0.28	Bikaner, Nagaur (Raj), SCL Units, Gujarat, other sources & Other countries (imported Gypsum)	~ 150 to 800 km ~ 680 km	Kandla Port, Rail and Road
4.	Fly ash	1.4	STPS, Suratgarh; KTPS Kota; Chabra and other power plants and other nearby sources	~ 2 to 500 km	Road
5.	Slag	2.2	Nearby area	~ 100 to 1000 km	Rail and Road

24.1.8 The Water requirement for the proposed project is 530 m³/day, out of which 50 m³/day of water requirement (only for drinking purpose) will be obtained from the ground water and the remaining requirement of 480 m³/day will be met from the treated STP water from Nagar Parishad Beawar City and Mine Pit water of Captive limestone mine. MoU has been signed between Shree Cement Ltd. and Nagar Parishad Beawar on 20th May, 2022 for maximum 3.5 MLD of treated STP water from Beawar city and for ground water withdrawal permission / NOC application will be submitted to CGWA after receipt of EC Letter; as the project site falls in Over-exploited area and CTE is mandatory for filing application for ground water withdrawal.

24.1.9 The power requirement for the proposed project is estimated as 46.17 MW. Out of which 37.5 MW will be sourced from proposed WHRS and existing Thermal Power Plant of Shree Cement Limited situated near to the project site, State Power Grid and DG Sets (for emergency backup).

24.1.10 Baseline Environmental Studies:

Period	Winter Season (Dec., 2020 to Feb., 2021)
AAQ parameters at 08 locations (min and max)	<ul style="list-style-type: none"> • PM_{2.5} - 27.6 to 50.8 µg/m³ • PM₁₀ - 58.0 to 91.5 µg/m³ • SO₂ - 5.5 to 17.3 µg/m³ • NO₂ - 13.6 to 29.8 µg/m³ • CO – 0.54 to 1.19 mg/m³

Incremental GLC level	<ul style="list-style-type: none"> PM = 1.29 µg/m³ (Level at 0.5 Km in South direction) SO₂ = 2.97 µg/m³ (Level at 2.0 Km in South direction) NO_x = 3.54 µg/m³ (Level at 2.0 Km in South direction) CO = 0.00013 mg/m³ (Level at 0.230 Km in South direction) 																									
Ground water quality at 08 locations	<ul style="list-style-type: none"> pH - 7.06 to 7.88 Total Hardness - 109.2 to 879.23 mg/l Chlorides - 118.86 to 1011.02 mg/l Fluoride - 0.98 to 1.44 mg/l Heavy Metals - Iron as Fe - 0.14 to 0.47 mg/l 																									
Surface water quality at 01 location (Mine Pit)	<ul style="list-style-type: none"> pH - 7.74 DO - 5.9 mg/l BOD - 4.2 mg/l COD - 17.89 mg/l 																									
Noise levels at 08 location Leq (day and Night)	52.8 Leq dB (A) to 68.9 Leq dB (A) for the Day Time and 42.1 Leq dB (A) to 59.8 Leq dB (A) for the Night time.																									
Traffic assessment study findings	<ul style="list-style-type: none"> Traffic study has been conducted at NH-158 which is approximately 1.0 km in NE direction and Internal Road connecting to NH – 158; which is adjacent to plant site. Transportation of raw material & finished product will be done as per details given below: <ul style="list-style-type: none"> ✓ Limestone - via Covered Conveyor belt from Captive Limestone Mine ✓ Fly ash - 100% by road ✓ Gypsum - 50% by road & 50 % by rail ✓ Slag - 50 % by road & 50 % by rail ✓ Indian & Imported Coal - 50 % by road & 50 % by rail ✓ Indian & Imported Petcoke - 50 % by road & 50 % by rail ✓ Dolochar - 50 % by road & 50 % by rail ✓ Biomass - 50 % by road & 50 % by rail ✓ Cement - 50 % by road & 50 % by rail. Existing PCU is 338.24 PCU/hr On NH - 158 and 225.5 PCU/hr at Internal Road connecting to NH - 158 and existing level of service (LOS) is: <table border="1"> <thead> <tr> <th>Road</th> <th>V (Volume in PCU/hr.)</th> <th>C (Capacity in PCU/hr.)</th> <th>Existing V/C Ratio</th> <th>LOS</th> </tr> </thead> <tbody> <tr> <td>NH - 158</td> <td>338.24</td> <td>1200</td> <td>0.28</td> <td>B</td> </tr> <tr> <td>Internal Road connecting to NH – 158</td> <td>225.5</td> <td>1200</td> <td>0.21</td> <td>B</td> </tr> </tbody> </table> PCU load after proposed project will be 338.24 (Existing) + 421.3 (Additional) PCU/hr on NH-158 and 225.5 (Existing) + 338.7 (Additional) at Internal Road connecting to NH – 158 and level of service (LOS) will be: <table border="1"> <thead> <tr> <th>Road</th> <th>V</th> <th>C</th> <th>Proposed</th> <th>LOS</th> </tr> </thead> <tbody> <tr> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> </tbody> </table> 	Road	V (Volume in PCU/hr.)	C (Capacity in PCU/hr.)	Existing V/C Ratio	LOS	NH - 158	338.24	1200	0.28	B	Internal Road connecting to NH – 158	225.5	1200	0.21	B	Road	V	C	Proposed	LOS					
Road	V (Volume in PCU/hr.)	C (Capacity in PCU/hr.)	Existing V/C Ratio	LOS																						
NH - 158	338.24	1200	0.28	B																						
Internal Road connecting to NH – 158	225.5	1200	0.21	B																						
Road	V	C	Proposed	LOS																						

		(Volume in PCU/hr.)	(Capacity in PCU/hr.)	V/C Ratio	
	NH - 158	338.24 (Existing) + 83.1 (Additional)	1200	0.35	B
	Internal Road connecting to NH - 158	225.5 (Existing) + 83.1 (Additional)	1200	0.28	B
* Capacity as per IRC- 64-1990 & 106-1990 Guidelines.					
Conclusion: The Level of Service will be “ Very Good ” for both NH - 158 & Road connecting to NH – 158 after including additional traffic due to proposed project.					
Flora and fauna	No Schedule - I species were recorded in the study area during field survey; according to (IWPA) Indian Wildlife Protection Act, 1972.				

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

S. No.	Type of Waste	Source	Quantity Generated (Approx.)	Mode of Treatment / Disposal
1.	Dust	Cement Plant	1.076 TPA	Dust collected from various APCEs will be 100% recycled back into the process.
2.	STP Sludge	STP	4 Kg/day	Will be used as manure in horticulture and greenbelt development.
3.	Bottles, paper, cans, textile, etc.	MSW	115 kg / day	Will be sold to registered recycler.
	Kitchen and canteen/ Green waste			Bio-degradable waste will be converted into organic manure by installation of Organic Waste Converter (OWC) machine (Capacity: 200 kg/day) and manure will be used for greenbelt development & plantation.
3.	Used Oil / Spent Oil (Cat 5.1)	Plant maintenance	80 KL / annum	Used Oil / Spent Oil will be used in Kiln as co-processing as per Schedule- I of Hazardous and Other Wastes (Management and Transboundary Movement) Rules, 2016.
	Grease & Waste residue (contaminated cotton rags) containing oil (Cat 5.2)		2.0 TPA	Grease & Waste residue (contaminated cotton rags) containing oil will be sold to the RSPCB/ CPCB authorized recyclers.
	Used Lead acid batteries		50 no's / annum	Will be stored in the designated storage area and will be disposed-off/ sold to registered vendors as per Battery Waste Management Rules 2020.
	E-waste		0.10 TPA	E-waste will be sold to registered vendors as per E- Waste Management Rules, 2016.

24.1.12 Public Consultation:

Details of advertisement given	Public Hearing Notice published in Newspapers “The Times of India” and “Rajasthan Patrika” on 06 th July, 2022.
Date of Public Consultation	8 th August, 2022 (Monday) at 11:00 AM
Venue	Modal Play Ground, Sr. Sec. School, Bhivgarh, Tehsil: Jaitaran, District: Pali (Rajasthan)
Presiding Officer	Additional District Collector, Pali
Major issues raised	Employment Related, Environment & pollution Related, Land Related, Socio-Economic Related, Health Related, Water Related, Plantation Related, Crop Related etc.

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

S. No.	Concerns raised during the Public Hearing	Physical activity to be done	Unit of Measurement						Tentative Budget (Rs. in lacs)
			1 st Year		2 nd Year		3 rd Year		
			Location / Area	Budget in Lacs	Location / Area	Budget in Lacs	Location / Area	Budget in Lacs	
1	<i>Skill Development</i>	Establishment of Skill Development Centre for providing short duration programs for unemployed youth in the field of domestic electrician, plumber, motor mechanic etc.	01 Centre at Village Ras to cover 7 nearby Villages (Ras, Paliyawas, Roopnagar, Kesarpura, Nimbeti, Ganeshpura & Jawangarh)	183	01 Centre at Villages Babra to cover nearby 6 Villages (Babra, Patan, Nayagaon, Devgarh, Pratapgarh & Ramgarh)	153	01 Centre at Village Butiwas/ Pratapgarh to cover nearby 5 Villages (Butiwas, Bagatpura, Pratapgarh, Ramawas & Kundal)	137	473
2	<i>Rural Infrastructure Development</i>	Construction of Community Centers	02 Nos (Villages Jawangarh & Bhivgarh)	61	02 No. (Village Nimbeti & Butiwas)	61	02 No. (Bagatpura & Ras)	61	183
		Repair / Restoring the Village Pathways/Road	02 No. (Village Nimbeti & Butiwas)	183	02 Nos (Villages Jawangarh & Bhivgarh)	183	01 No. (Village Ras & Bagatpura)	92	458
		Development of playgrounds	01 Nos Village Babra	61	01 No. (Village Devgarh)	61	01 No. (Village Butiwas)	61	183
		Installation of Solar lights	03 Nos (Villages Jawangarh, Bagatpura & Bhivgarh)	31	03 No. (Village Nimbeti, Devgarh & Butiwas)	31	02 No. (Village Ras & Babra)	31	92

S. No.	Concerns raised during the Public Hearing	Physical activity to be done	Unit of Measurement						Tentative Budget (Rs. in lacs)
			1 st Year		2 nd Year		3 rd Year		
			Location / Area	Budget in Lacs	Location / Area	Budget in Lacs	Location / Area	Budget in Lacs	
		Providing seeds and organizing training camps for improvement of agri - crop yield & social forestry	03 No. (Village Ras, Bagatpura & Butiwas)	46	03 Nos (Babra, Devgarh & Jagtiya)	46	03 Nos (Kolpura, Bhivgarh & Roopnagar)	46	137
3	<i>Ground Water Conservation</i>	1. Restoration of Water ponds / percolation tanks by desilting, clearing the water paths etc., 2. Renovation and maintainence of the existing check dams	03 No. (Village Ras, Paliyawas, Roopnagar)	61	03 Nos (Villages Bagatpura, Butiwas, Devgarh)	61	03 No. (Village Pratapgarh, Patan, Babra)	61	183
		Rain water harvesting on Buildings of Govt. School/ Panchayat/ Health centres etc.	03 No. (Village Ras, Babra, Bagatpura)	46	02 Nos (Giri & Butiwas)	31	02 Nos (Bhivgarh & Pratapgarh)	31	107
4	<i>Safe Drinking Water</i>	Installation of Water huts with Water Coolers and construction of water tanks, drinking water structures for animals to provide safe drinking water at community places	03 No. (Village Ras, Bagatpura & Butiwas)	46	03 Nos (Babra, Devgarh & Patan)	46	03 Nos (Bhivgarh, Pratapgarh & Paliyawas)	46	137
5	<i>Education</i>	Construction of classrooms in govt. schools	02 Nos (Village Bhivgarh & Ras)	61	03 Nos (Villages Butiwas, Babra & Jawangarh)	92	03 Nos (Village Pratapgarh, Devgarh & Bagatpura)	92	244

S. No.	Concerns raised during the Public Hearing	Physical activity to be done	Unit of Measurement						Tentative Budget (Rs. in lacs)
			1 st Year		2 nd Year		3 rd Year		
			Location / Area	Budget in Lacs	Location / Area	Budget in Lacs	Location / Area	Budget in Lacs	
		Computer Training Program will be organised to train the rural student of nearby villages and 20 computers will be provided to schools of nearby villages	01 Nos (Village Ras)	31	01 Centre (Village Bhivgarh)	31	01 Centre (Jawangarh)	31	92
		Installation of facility for Smart classes in the Government schools to promote Digital education	02 Nos (Villages Ras & Babra)	12	02 Nos (Village Butiwas & Paliyawas)	12	02 Nos (Village Pratapgarh & Patan)	12	37
6	Health	Organizing Medical Health Camps with facilities of Mobile Medical Van (Medicine & Checkup)	02 Nos (Villages Ras & Babra)	21	02 Nos (Village Butiwas & Paliyawas)	18	02 Nos (Village Pratapgarh & Patan)	21	61
		Construction / Renovation of Community Health Centres	01 Nos (Village Ras)	27	02 Nos (Villages Babra & Devgarh)	55	01 Nos (Butiwas)	24	107
		Provide medical investigating equipment and need based support Material set	01 Nos (Village Ras)	15	02 Nos (Villages Babra & Devgarh)	31	01 Nos (Butiwas)	15	61
		Construction of male & female toilet blocks at Schools	02 No. (Village Ras & Butiwas)	31	01 No. (Village Paliyawas)	31	02 Nos (Devgarh & Pratapgarh)	31	92
		Preventive health programme for women & Children	02 No. (Village Ras & Bhagatpura)	21	01 No. (Village Jawangarh)	12	02 Nos (Bhivgarh & Butiwas)	21	55

S. No.	Concerns raised during the Public Hearing	Physical activity to be done	Unit of Measurement						Tentative Budget (Rs. in lacs)
			1 st Year		2 nd Year		3 rd Year		
			Location / Area	Budget in Lacs	Location / Area	Budget in Lacs	Location / Area	Budget in Lacs	
7	<i>Plantation</i>	Plantation & Distribution of Plants in nearby villages along the roads, Govt. Offices and available free space	03 No. Ras, Paliyawas & Bagatpura	45	03 No. Babra, Butiwas & Devgarh	30	03 No. Patan, Pratapgarh & Kolpura	30	105
Sub Total				952		967		827	2804
Total									2804
Note: Villages can be interchanged as per situation demand. Activities may be changed as per situation and community requirement.									

24.1.13 The capital cost of the proposed project is Rs. 1872 Crores & the capital cost for environmental protection measures is proposed as Rs. 53.94 Crores. The annual recurring cost towards the environmental protection measures is proposed as Rs. 2.42 Crores/ annum. The employment generation from the proposed project is 770 people. The details of cost for environment protection measures are as follows:

Sr. No.	Description of item	Proposed (Rs. In Crores/ lakhs)	
		Capital Cost in Rs. Lakhs	Recurring Cost in Rs. Lakhs
1	Pollution Control during construction stage (Dust suppression, Wastewater treatment and Disposal, Roads, Monitoring, Muck disposal)	150.00	7.50
2	Air Pollution Control		
	Air Pollution Control Equipment	4000.00	150.00
	Sweeping Vacuum machines (1 Large & 2 Small)	100.00	4.00
	2 Water Tanker (with Tractor)	25.00	1.50
3	Environmental Monitoring		
	CAAQM Stations (3 online each Rs. 50 Lakhs)	150.00	7.50
	CEMS (3 Online)	60.00	7.50
	3 RDS/FPS	6.00	1.00
	Env. Laboratory	50.00	8.00
4	Water Pollution Control		
	STP of 50 KLD Capacity (including Drains)	80.00	10.00
	Water Treatment Plant (Capacity 1 MLD)	350.00	10.00
	2 AWLR for water level measurement	5.00	0.50
	RO Plant	50.00	5.00
5	Noise Pollution Control	10.00	1.00
6	Occupational Health & Safety	75.00	5.00
7	Greenbelt and plantation (11.74 ha = 29350	88.00	9.00

Sr. No.	Description of item	Proposed (Rs. In Crores/ lakhs)	
		Capital Cost in Rs. Lakhs	Recurring Cost in Rs. Lakhs
	Saplings)		
	Drip irrigation System & Water Sprinkling	10.00	2.50
8	RWH pond and Storm Water Management	100.00	3.50
9	Organic Waste Converter & Its Facilities	10.00	3.50
10	Others (Housekeeping and Municipal waste management)	75.00	5.00
	Sub Total	5394.00	242.00

24.1.14 Proposed greenbelt will be developed in 11.94 ha which is about 37% of the total project area. Greenbelt of 25 m wide in northern and southern sides, all along the periphery of plant boundary to create barrier between the plant and agricultural fields and 200 m wide greenbelt towards Village Jawangarh will be developed. Local and native species will be planted with a density of 2500 tree per hectare. Total no. of 29,850 saplings will be planted and nurtured in 11.94 ha in 3 years. At present, 2700 saplings in 1.08 ha. area have already been planted along the project boundary.

S. No.	Year as per planning	Area Covered under greenbelt (Hectare)	No. of Saplings (Nos.)	Location in Plant area
1.	Existing	1.08	2700	25 m wide greenbelt along the Project Boundary
2.	1 st Year	1.90	4750	25 m wide greenbelt along the Project Boundary
		1.72	4300	200 m wide greenbelt towards village Jawangarh
Sub Total		3.62	9050	
3.	2 nd Year	1.89	4725	Internal roads, Machinery area, CCR Office
		1.73	4325	200 m wide greenbelt towards village Jawangarh
Sub Total		3.62	9050	
4.	3 rd Year	1.89	4725	Packing Plant area and Raw Material Storage area, other plant area and gap filling in the plant area
		1.73	4325	200 m wide greenbelt towards village Jawangarh
Sub Total		3.62	9050	-
Grand Total		11.94	29,850	-
Note: Out of the total greenbelt area of 11.94 ha.; 5.18 ha. area with 12,950 no. of saplings will be planted towards village Jawangarh having 200 m width.				

Action Plan for development of Avenue Plantation along the roads

S. No.	Year as per planning	Road Length under plantation (km)	Total length covered along both the road side (km)	No. of Saplings (Nos.)	Location in Plantation area	Plant Species to be Planted	Cost (Rs. 300 per plant including Tree guard & Maintenance)
1.	1 st Year	1	3	300	All along the Road Boundary from Plant to Bhivgarh Chauraha	Neem (<i>Azadirachta indica</i>), Gulmohar (<i>Delonix regia</i>), Yellow Gulmohar (<i>Peltophorum pterocarpum</i>), Shisham (<i>Dalbergia sissoo</i>), Karanj (<i>Pongamia pinnata</i>), Amaltas (<i>Cassia fistula</i>)	90000
2.	2 nd Year			300			90000
Total		1	3	600			1,80,000

Note: 5 meter distance will be maintained among each sapling for avenue plantation in 1 km length connecting road from main gate to existing road (Bhivgarh Chauraha).

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

Written representations:

24.1.16 During the meeting, based on the deliberations made by the EAC, the project proponent vide letter dated 28.02.2023 through email dated 28.02.2023 submitted the following information:

S. No.	Additional Observations / ADS Point of EAC	Reply
1.	PP should submit the inversion level of the site used in Air modeling.	The inversion levels used in Air modeling is submitted by the project proponent.
2.	PP should increase the Cost of Action Plan for socio-economic development including PH commitments 1.5% of the expansion project cost.	PP has revised and detailed out the plan for for socio-economic development including PH commitments equal to 1.5% (i.e. 28 Crores) of the project cost (i.e. 1872 Crores). The detailed plan of for socio-economic development including PH commitments is updated at para 24.1.12 above.
3.	PP should submit the details of CGWA	Since the area falls in over exploited area as per CGWA. Therefore, PP has proposed to obtain permission to abstract the ground water for

S. No.	Additional Observations / ADS Point of EAC	Reply
	application showing the requirement of Consent for process the application.	<p>domestic requirements of the project. Whereas, the industrial requirement will be fulfill by the STP treated water from Beawar Town and Mines Pit of existing limestone mines of applicant company located near to site.</p> <p>PP has tried to submit the CGWA application, to comply the ToR condition of CGWA permission but unable to process the CGWA application as, in overexploited area, the Consent to Establish is the mandatory requirement. The relevant documents are submitted.</p> <p>Whereas, the CGWA application for ground water will be applied after obtain Environment Clearance and Consent for the project.</p>
4.	PP should submit the justification for only one surface water sampling location selection in EIA Study.	<p>The baseline study was done during winter season from Dec. 2020 to Feb. 2021. Lilri Seasonal River exists (~1.0 km in NNW direction) within 10 km radius from the project site, which was found dry during EIA study period. Thus, Surface water samples could not be collected from the Lilri river as same was seasonal and was found dry during the study period.</p> <p>Apart from Lilri River, the surface water sample from mine pit of Nimbeti Mines was collected and incorporated in the EIA Report. SCL assures for periodic sampling & analysis of Lilri River during and post- monsoon, when surface water will be available.</p>
5.	PP should submit the reply of observations/ recommendations of sub-committee after site visit.	<p>There was one specific observations/ recommendations of sub-committee after site visit i.e. <i>“The project proponent shall plan for development of 50 m wide greenbelt in northern and southern sides to create barrier between plant and agricultural fields.”</i></p> <p>Same was further modified during ToR amendment <i>“The project proponent shall plan for development of 25 m wide greenbelt in northern and southern sides to create barrier between plant and agricultural fields.”</i></p> <p>After following justification and detailed discussions during ToR amendment meeting held on 28.09.2021 i.e. Due to unavailability of land & difficulty in re-orientation of plant machinery, PP has reduced the width of plantation from 50 m to 25 m wide greenbelt in northern and southern sides to create barrier between plant and agricultural fields. However, SCL assure that they will create a thick barrier of plantation as greenbelt with more number & density of trees in this area. Avenue plantation along the roads will also be developed. The details of greenbelt development plan along with avenue plantation are updated at para 24.1.14 above.</p>

Deliberations by the Committee

24.1.17 The Committee noted the following:

1. The instant proposal is for setting up of a new Integrated Cement Plant - {Clinker - 4.5 Million TPA; Cement - 4.0 Million TPA (OPC, PPC, PSC, RHPC, SRC & Composite Cement); WHRS - 37.5 MW and D.G. Sets - 2500 KVA (2 x 1000 KVA & 1 x 500 KVA) or (1 x 1000 KVA, 2 x 500 KVA & 2 x 250 KVA)}.
2. The EAC, constituted under the provision of the EIA Notification, 2006 comprising Expert Members/domain experts in various fields, examined the proposal submitted by the Project Proponent in desired format along with EIA/EMP reports prepared and submitted by the Consultant accredited by the QCI/ NABET on behalf of the Project Proponent.
3. The EAC noted that the Project Proponent has given an undertaking that the data and information given in the application and enclosures are true to the best of his knowledge and belief and no information has been suppressed in the EIA/EMP reports. If any part of data/information submitted is found to be false/ misleading at any stage, the project will be rejected and Environmental Clearance given, if any, will be revoked at the risk and cost of the project proponent.
4. The Committee noted that the EIA reports are in compliance of the ToR issued for the project, reflecting the present environmental status and the projected scenario for all the environmental components. The Committee deliberated on the proposed mitigation measure towards Air, Water, Noise and Soil pollutions. The Committee suggested that the storage of toxic/explosive raw materials/products shall be undertaken with utmost precautions and following the safety norms and best practices.
5. Total land required for the project is 32.27 ha (79.73 acres), out of which, 79.19 acres (i.e., 99.32%) land is under possession of Shree Cement Limited and balance 0.54 acres (i.e., 0.68%) land acquisition is under process. Out of total land area; 21.62 ha (53.42 acres) land has been converted into industrial purpose and 10.65 ha (26.31 acres) is agricultural land.
6. The nearest habitation to plant are Jawangarh (~0.1 Km, North), Khera (~1.0 Km, East), Nimbeti (~2.0 Km,WNW), Ras (~2.5 Km, North), Bhivgarh (~2.5 Km, SSE), Bhagatpura (~3.0 Km, ESE) and Kundal (~4.0 Km, SW). There are approx. 47 villages in 10 km radius study area.
7. Lilri River flows at a distance of 1 km in the NNW direction from the project site. The EAC is of the opinion that water body shall not be disturbed. Mitigation measures w.r.t. safeguarding the water body shall be implemented.
8. The water requirement is 530 m³/day, out of which 50 m³/day (only for drinking purpose) will be obtained from the ground water and the remaining requirement of 480 m³/day will be met from the treated STP water from Nagar Parishad Beawar City and Mine Pit water of Captive limestone mine.
9. Proposed greenbelt will be developed in 11.94 ha which is about 37% of the total project area. Greenbelt of 25 m wide in northern and southern sides, all along the periphery of plant boundary to create barrier between the plant and agricultural fields and 200 m wide greenbelt towards Village Jawangarh will be developed. Local and native species will be planted with a density of 2500 tree per hectare. Total no. of 29,850 saplings will be planted and nurtured in 11.94 ha in 3 years. At present, 2700 saplings in 1.08 ha. area have already been planted along the project boundary. The committee deliberated on the

greenbelt development plan and the avenue plantation as submitted and found it satisfactory.

10. The Committee has found that the baseline data and incremental GLC due to the proposed project within NAAQ standards.
11. The committee deliberated details of carbon foot prints and carbon sequestration study w.r.t. proposed project and found them to be satisfactory.
12. The Committee also deliberated on the public hearing issues along with revised action plan submitted by the proponent to address the issues raised during the public hearing and found it satisfactory.
13. The Committee deliberated upon the written submission of the Project Proponent and found it satisfactory.
14. The Committee also took into account the site visit undertaken by the sub-committee at the time of ToR and the recommendations of then sub-committee/committee alongwith the amendments granted in TOR.
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

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

A. Specific conditions:

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

- (ii) The project proponent shall utilize modern technologies for capturing of carbon emitted and shall also develop carbon sink/carbon sequestration resources capable of capturing more than emitted. The implementation report shall be submitted to the IRO, MoEF&CC in this regard.
- (iii) The nearest habitation to plant are Jawangarh (~0.1 Km, North), Khera (~1.0 Km, East), Nimbeti (~2.0 Km, WNW), Ras (~2.5 Km, North), Bhivgarh (~2.5 Km, SSE), Bhagatpura (~3.0 Km, ESE) and Kundal (~4.0 Km, SW). There are approx. 47 villages in 10 km radius study area. Project Proponent shall take appropriate environmental safeguard measures to minimise the impact on the habitation of the locals. The PP shall also include some of these locations in its environmental monitoring programme.
- (iv) The total land involved in the proposed project i.e. 32.27 ha shall be acquired and necessary permission shall be obtained pertaining to conversion of land for industrial purpose use prior to commencement of project.
- (v) Lilri River flows at a distance of 1 km in the NNW direction from the project site. A robust and full proof Drainage Conservation scheme to protect the natural drainage and its flow parameters; along with Soil conservation scheme and multiple Erosion control measures shall be implemented.
- (vi) As committed, PP shall adopt villages and formulate Village Adoption program consisting of need-based community development activities, to develop them into model villages.
- (vii) In surrounding villages, efforts should be made to improve agri-crop yield and social forestry.
- (viii) The water requirement for the proposed project of 530 m³/day [50 m³/day for drinking purpose from the ground water] and the remaining requirement of 480 m³/day shall be met from the treated STP water from Nagar Parishad Beawar City and Mine Pit water of Captive limestone mine. Necessary permissions shall be obtained from the Competent Authority in this regard. PP shall explore the possibility of shifting to alternate source of water for drinking purpose to reduce dependency on groundwater.
- (ix) Three tier Green Belt shall be developed with majority in the 1st year covering at least 37% of the total project area as per the submitted plan with native species all along the periphery of the project site of adequate width and tree density shall not be less than 2500 per ha. Survival rate of green belt developed shall be monitored on periodic basis to ensure that damaged plants are replaced with new plants in the subsequent years. PP shall develop avenue plantation as per the submitted plan. PP shall also develop greenbelt in the form of shelter belt comprising of total of 6 rows of 2x2 m plantation with tall trees & broad leaves with thick canopy along with windshield inside the plant premises to act as green barrier for air pollution & noise levels towards the villages namely Jawangarh (~0.1 Km, North), Khera (~1.0 Km, East), Nimbeti (~2.0 Km, WNW), Ras (~2.5 Km, North), Bhivgarh (~2.5 Km, SSE), Bhagatpura (~3.0 Km, ESE) and Kundal (~4.0 Km, SW) and in northern and southern sides to create barrier between plant and agricultural fields. Compliance status in this regard, shall be submitted to concerned Regional Office of the MoEF&CC.
- (x) Greening and Paving shall be implemented in the plant area to arrest soil erosion and dust pollution from exposed soil surface.

- (xi) 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. Process effluent/ any wastewater shall not be allowed to mix with storm water.
- (xii) 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.
- (xiii) 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.
- (xiv) 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.
- (xv) 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.
- (xvi) Dioxin and furans shall be monitored twice a year during co-processing of hazardous waste and report shall be submitted to the Regional Office of the MoEF&CC.
- (xvii) Particulate matter emissions from all the stacks shall be less than 30 mg/Nm³.
- (xviii) DeSOx system shall be provided dry type. NOx level shall be maintained below 600 mg/Nm³ by using best available technology.
- (xix) Petcoke dosing shall be controlled automatically to control SO₂ emission from chimney within the prescribed limits.
- (xx) PP shall identify the Source of fluoride emissions and action plan to mitigate the same shall be implemented.
- (xxi) The PP shall measure the water level of all water bodies in the vicinity in a periodic manner (once in 6 months) and submit the report to IRO, MoEF&CC.
- (xxii) A proper action plan must be implemented to dispose of the electronic waste generated in the industry.
- (xxiii) Topsoil removed during construction phase should be managed scientifically with the objective of conservation, and earliest and continuous reuse.
- (xxiv) Action Plan for fire-fighting system including provision for flame detectors, temperature actuated heat detectors with alarms, automatic sprinkler system, fixing the location of fire water tanks, separate power system for fire-fighting, involvement of qualified and trained fire personnel, nearest fire station & time required to reach the proposed site shall be prepared and implemented.
- (xxv) All the recommendations made in the risk assessment report shall be implemented and compliance status in this regard shall be furnished to the Regional Office of the MoEF&CC along with the six monthly compliance report.
- (xxvi) All the commitments made to the public during the Public Hearing/Public Consultation shall be satisfactorily implemented. The action plan based on the social impact assessment study of the project as per the EMP in accordance to the Ministry's OM dated 30.09.2020 shall be strictly implemented and progress shall be submitted to the Regional Office of MoEF&CC.

- (xxvii) The PP shall construct a Wind shield/ Acoustic barrier besides three rows of tall thick, broad leaved evergreen tree species in order to protect the school children and villagers from dust and noise pollution.
- (xxviii) 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.
- (xxix) 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. Storage of raw materials shall be either in silos or in covered areas to prevent dust pollution and other fugitive emissions.

B. General conditions

I. Statutory compliance:

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

II. Air quality monitoring and preservation

- i. The project proponent shall install 24x7 continuous emission monitoring system with respect to standards prescribed in Environment (Protection) Rules 1986 vide G.S.R. No. 612 (E) dated 25th August, 2014 (Cement) and subsequent amendment dated 9th May, 2016 (Cement) and 10th May, 2016 (in case of Co-processing Cement); as amended from time to time; and connected to SPCB and CPCB online servers and calibrate these system from time to time according to equipment supplier specification through labs recognized under Environment (Protection) Act, 1986 or NABL accredited laboratories.
- ii. The project proponent shall monitor fugitive emissions in the plant premises at least once in every quarter through labs recognised under Environment (Protection) Act, 1986.

- iii. The project proponent shall install system carryout to Ambient Air Quality monitoring for common/criterion parameters relevant to the main pollutants released (e.g. PM10 and PM2.5 in reference to PM emission, and SO2 and NOx in reference to SO2 and NOx emissions) within and outside the plant area at least at four locations (one within and three outside the plant area at an angle of 120°each), covering upwind and downwind directions.
- iv. The project proponent shall submit monthly summary report of continuous stack emission and air quality monitoring and results of manual stack monitoring and manual monitoring of air quality /fugitive emissions to Regional Office of MoEF&CC, Zonal office of CPCB and Regional Office of SPCB along with six-monthly monitoring report.
- v. Appropriate Air Pollution Control (APC) system shall be provided for all the dust generating points including fugitive dust from all vulnerable sources, so as to comply prescribed stack emission and fugitive emission standards.
- vi. The project proponent shall provide leakage detection and mechanised bag cleaning facilities for better maintenance of bags.
- vii. Pollution control system in the cement plant shall be provided as per the CREP Guidelines of CPCB.
- viii. Sufficient number of mobile or stationery vacuum cleaners shall be provided to clean plant roads, shop floors, roofs, regularly.
- ix. Ensure covered transportation and conveying of raw material to prevent spillage and dust generation; Use closed bulkers for carrying fly ash.
- x. Provide wind shelter fence and chemical spraying on the raw material stock piles; and
- xi. Provide Low NOX burners as primary measures and SCR /NSCR technologies as secondary measure to control NOX emissions.
- xii. Have separate truck parking area and monitor vehicular emissions at regular interval.
- xiii. Efforts shall be made to reduce impact of the transport of the raw materials and end products on the surrounding environment including agricultural land by the use of covered conveyor belts/railways as a mode of transport
- xiv. Ventilation system shall be designed for adequate air changes as per ACGIH document for all tunnels, motor houses, cement bagging plants.

III. Water quality monitoring and preservation

- i. The project proponent shall install 24x7 continuous effluent monitoring system with respect to standards prescribed in Environment (Protection) Rules 1986 vide G.S.R. No. 612 (E) dated 25th August, 2014 (Cement) and subsequent amendment dated 9th May, 2016 (Cement) and 10th May, 2016 (in case of Co-processing Cement) as amended from time to time; and connected to SPCB and CPCB online servers and calibrate these system from time to time according to equipment supplier specification through labs recognized under Environment (Protection) Act, 1986 or NABL accredited laboratories.
- ii. The project proponent shall regularly monitor ground water quality at least twice a year (pre- and post-monsoon) at sufficient numbers of piezometers/sampling wells in the plant and adjacent areas through labs recognized under Environment (Protection) Act, 1986 and NABL accredited laboratories.
- iii. Sewage Treatment Plant shall be provided for treatment of domestic wastewater to meet the prescribed standards.

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

IV. Noise monitoring and prevention

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

V. Energy Conservation measures

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

VI. Waste management

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

VII. Green Belt

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

VIII. Public hearing and Human health issues

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

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

IX. Environment Management

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

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. 24.2

- 24.2 Establishment of Sponge Iron unit (2,25,000 TPA), Induction Furnace with matching LRF & CCM (Billets / Ingots / Hot Billets) (2,40,000 TPA), Rolling Mill (TMT Bars / Structural Steel) (2,25,000 TPA), Brick manufacturing unit – 25,000 bricks/day, WHRB based Power Plant – 18 MW (3 x 6 MW), AFBC based Power Plant - 6 MW by M/s ITECHC Metals Private Limited, located at at Khasra. No.s 587/1, 587/6, 587/10, 587/14,**

597/1, 597/3, 598, 599, 600, 612, 613/1 & 613/2, Village: Chicholi, Tehsil: Kharora, District: Raipur, Chhattisgarh- Consideration of Environmental Clearance.

[Proposal No IA/CG/IND1/413664/2023; File No. IA/J-11011/290/2021-IA-II (I)]

[Consultant: Pioneer Enviro Laboratories & Consultants Pvt. Ltd.; Valid upto 11.03.2023]

24.2.1 M/s. ITECHC Metals Private Limited has made an online application vide proposal no. IA/CG/IND1/413664/2023 dated 06.02.2023 along with copy of EIA/EMP report, CAF & Form - 1 (Part A, B & C) seeking Environment Clearance (EC) under the provisions of the EIA Notification, 2006 for the project mentioned above. The proposed project activity is listed S.No.3 (a) Metallurgical industries and 1(d) Thermal Power Plants under category “A” of the schedule of EIA Notification 2006 and appraised at the central level.

24.2.2 Name of the EIA consultant: M/s Pioneer Enviro Laboratories & Consultants Pvt. Ltd. [List of ACOs with their Certificate / Extension Letter no. NABET/EIA/1922/SA 0148; valid upto 11.03.2023, as on February 27, 2023].

Details submitted by Project proponent

24.2.3 The details of the ToR are furnished as below:

Date of Application	Consideration	Details	Date of Accord	ToR Validity
07 Aug 2021	43 rd EAC held during 26 th Aug , 2021 To 26 th Aug, 2021	Terms of references	13.09.2021	12.09.2025

24.2.4 The project of M/s. ITECHC Metals Private Limited is located at Khasra nos. 587/1, 587/6, 587/10, 587/14, 597/1, 597/3, 598, 599, 600, 612, 613/1& 613/2 of Chicholi Village, Kharora Tehsil, Raipur District, Chhattisgarh is for setting up of a new steel plant for production of 0.225 Million Tons Per Annum (MTPA) of TMT bars / Structural Steel.

24.2.5 Environmental Site Settings:

S.No.	Particulars	Details	Remarks
1.	Total land	Total land 12.19 Ha (30.12 Acres) 11.346Ha. (28.035 Acres). [Private land] 0.843Ha. (2.083 Acres). [Govt. Land]	--
2.	Land acquisition details as per MoEF&CC O.M. dated 7/10/2014	❖ Private land – 11.346 Ha.(28.035 Ac.). Entire Private land has been registered in the company name and entire land has been diverted for industrial purpose. ❖ Govt. land – 0.843 Ha.(2.083 Acres.). Lease application for 99 years period is under progress.	--
3.	Existence of habitation & involvement of R&R,	Project site: No habitation exists in the plant site. Hence R&R not applicable. Study Area	--

S.No.	Particulars	Details	Remarks																																		
	if any.	Nearest habitation <table border="1"> <thead> <tr> <th>Habitation</th> <th>Distance</th> <th>Direction</th> </tr> </thead> <tbody> <tr> <td>Gaurkhera</td> <td>0.85Kms.</td> <td>North</td> </tr> </tbody> </table>	Habitation	Distance	Direction	Gaurkhera	0.85Kms.	North																													
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5.	Elevation of the project site	224 to 231 m AMSL	--																																		
6.	Involvement of Forest Land, if any	Not applicable as no Forest land is involved in the project site.	--																																		
7.	Water body exists within the project site as well as study area	Project Site :Nil Study area: <table border="1"> <thead> <tr> <th>Water Body</th> <th>Distance</th> <th>Direction</th> </tr> </thead> <tbody> <tr> <td>Jamuniya Nala</td> <td>1.2 Kms</td> <td>W</td> </tr> <tr> <td>Mahanadi Branch canal</td> <td>4.8 Kms</td> <td>SW</td> </tr> <tr> <td>Kirna Tank</td> <td>7.7 Kms</td> <td>W</td> </tr> <tr> <td>Pindraon Pond</td> <td>4.8 Kms.</td> <td>S</td> </tr> <tr> <td>Kumhari Pond</td> <td>2.8 Kms.</td> <td>NE</td> </tr> </tbody> </table>	Water Body	Distance	Direction	Jamuniya Nala	1.2 Kms	W	Mahanadi Branch canal	4.8 Kms	SW	Kirna Tank	7.7 Kms	W	Pindraon Pond	4.8 Kms.	S	Kumhari Pond	2.8 Kms.	NE	--																
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S.No.	Particulars	Details	Remarks
	study area		

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

S.No.	Units (Products)	Plant Configuration	Production Capacity	
1.	DRI Kilns (Sponge Iron)	3 x 250 TPD	2,25,000 TPA	
2.	Induction Furnace (Hot Billets / Billets / Ingots)	4 x 20 T	2,40,000 TPA	
3.	Rolling Mill (TMT bars / Structural Steel) (85 % Hot charging with Hot Billets and remaining 15% through RHF with LDO as fuel)	750 TPD	2,25,000 TPA	
4.	Brick manufacturing unit	25,000 bricks/day	7.5 Million bricks/annum	
5.	Power Plant (24 MW)	WHRB Power Plant	3 x 6 MW	18 MW
		FBC Power Plant	1 x 6 MW	6 MW

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

S.No.	Raw Material	Quantity (TPA)	Sources	Distance from site (in Kms.)	Mode of Transport
1.	For DRI Kilns (Sponge Iron) – 2,25,000 TPA				
a)	Pellets (100 %)	3,37,500	purchased from outside	~ 50 Kms	Through covered conveyers & By road (through covered trucks)
	(OR)				
b)	Iron ore (100%)	3,60,000	Barbil, Orissa NMDC, Chhattisgarh	~ 500 Kms.	By rail & road (through covered trucks)
c)	Coal	Indian	SECL Chhattisgarh / MCL Odisha	~ 500 Kms.	By rail & road (through covered trucks)
		(OR)			
	Imported	1,87,200	Indonesia / South Africa / Australia	~ 600 Kms. (from Vizag Port)	Through sea route, rail route & by road (through covered trucks)

S.No.	Raw Material	Quantity (TPA)	Sources	Distance from site (in Kms.)	Mode of Transport	
d)	Dolomite	11,250	Chhattisgarh	~ 100 Kms.	By road (through covered trucks)	
2.	For Steel Melting Shop (Hot Billets/ Billets /Ingots) – 2,40,000 TPA					
a)	Sponge Iron	2,42,000	Own generation & purchased from outside	~ 20 Kms.	Through covered conveyers & by road	
b)	MS Scrap / Pig Iron	36,000	Chhattisgarh	~ 100 Kms.	By road (through covered trucks)	
c)	Ferro alloys	12,000	Raipur	~ 50 Kms.	By road (through covered trucks)	
3.	For Rolling Mill through Hot charging (TMT bars/Structural steel) – 2,25,000 TPA					
a)	Hot Billets / Billets / Ingots	2,40,800	Own generation & purchased from outside	~ 20 Kms.	By Road (through covered trucks)	
b)	LDO / LSHS	1,500 Kl/annum	Nearby IOCL Depot	~ 100 Kms.	By road (through Tankers)	
4.	For FBC Boiler [Power Generation 6 MW]					
a)	Indian Coal (100 %)	40,500	SECL Chhattisgarh / MCL Odisha	~ 500 Kms.	By rail & road (through covered trucks)	
OR						
b)	Imported Coal (100 %)	25,961	Indonesia / South Africa / Australia	~ 600 Kms. (from Vizag Port)	Through sea route, rail route & by road (through covered trucks)	
OR						
c)	Dolochar + Indian Coal	Dolochar	45,000	In plant generation	---	through covered conveyors
		Indian Coal	18,000	SECL Chhattisgarh / MCL Odisha	~ 500 Kms.	By rail & road (through covered trucks)
OR						
d)	Dolochar + Imported Coal	Dolochar	45,000	In plant generation	---	through covered conveyors
		Imported Coal	11,520	Indonesia / South Africa / Australia	~ 600 Kms. (from Vizag Port)	Through sea route, rail route & by road (through covered trucks)

24.2.8 Water requirement for proposed project is estimated as 1130 KLD and same will be sourced from Kumhari tank, which is at distance of 2.8 Kms. State Investment Promotion Board, Chhattisgarh has forwarded recommendations to Water Resources Department for issuing approval for withdrawing water from Kumhari tank vide letter no. 985/SIPB/2021/728 dt. 6th August 2021. MOU has been signed between Govt. of Chhattisgarh and ItechC Metals Pvt. Ltd. for implementation of the steel plant. All necessary approvals will be accorded by state govt. expeditiously through State Investment Promotion Board (SIPB) including water drawl permission.

24.2.9 The total power requirement for the proposed project will be about 33.7 MW, this will be partly met from the Captive power plant of 24 MW & Remaining 9.7 MW will be sourced from the state grid.

24.2.10 Baseline Environmental Studies:

Period	1 st March 2021 to 31 st May 2021
AAQ parameters at 8 locations	PM _{2.5} = 20.6 to 46.2 µg/m ³ PM ₁₀ = 34.6 to 69.8 µg/m ³ SO ₂ = 10.8 to 14.5 µg/m ³ NO _x = 12.4 to 20.4 µg/m ³ CO = 425 to 815 µg/m ³
AAQ modelling	Incremental GLCs due to the proposed project: PM ₁₀ = 0.8 µg/m ³ (1000 m NE) ; PM ₁₀ = 0.2 µg/m ³ (Vehicular) SO ₂ = 14.8 µg/m ³ (1200 m in NE) NO ₂ = 5.1 µg/m ³ (1100 m in NE) NO ₂ (vehicular) = 1.5 µg/m ³ CO (vehicular) = 0.9 µg/m ³
Ground water quality at 8 locations	pH : 7.2 to 7.64 TSS : 0.2 to 0.4 mg/l TDS : 448 to 539 mg/l Total Hardness: 208 to 315 mg/l Chlorides : 225 to 273 mg/l Fluoride : 0.59 to 0.9 mg/l Heavy metals (Iron -Fe):0.2 to 0.3 mg/l
Surface water quality	pH : 7.3 to 7.74, DO (in mg/l) : 4.2 to 5.5, TDS (in mg/l) : 234 to 439, BOD (in mg/l) : 3.0 to 12.6 , COD (in mg/l) : 10.8 to 24.8
Noise levels	The equivalent day-night noise levels in the study zone are ranging from 46.8 dBA to 54.07 dBA.
Traffic assessment study Findings	<ul style="list-style-type: none"> Traffic study has been conducted at Tilda – Simga (Major District road) (0.5 Kms.) Coal/Iron ore will be transported through railway upto the nearest railway station (Tilda RS) and then to the plant in covered trucks by road. Total no. of trucks required for transportation of raw materials, products & Solid wastes will be 120 trucks/day. Existing PCU is 5330.5 PCU/day & and existing Level of Service

	<p>(LOS) is 0.53</p> <ul style="list-style-type: none"> PCU load after proposed project will be 5330.5 (baseline) + 360 (Additional) PCU/day and Level of Service (LOS) will be: 0.57. <table border="1"> <thead> <tr> <th></th> <th>V (Volume in PCU/day)</th> <th>C (Capacity in PCU/day)</th> <th>V/C Ratio</th> <th>LOS</th> </tr> </thead> <tbody> <tr> <td>Baseline</td> <td>5330.5</td> <td>10,000</td> <td>0.53</td> <td>Good</td> </tr> <tr> <td>During operation of the proposed Project</td> <td>(5330.5 + 360) = 5690.5</td> <td>10,000</td> <td>0.57</td> <td>Good</td> </tr> </tbody> </table> <ul style="list-style-type: none"> Traffic Capacity as per the IRC 73: 1980 for highways road is 10000 PCU/day. Hence existing road can cater to this additional traffic due to the proposed project. <p>Level of Service (LOS) of the Road as per IRC 73: 1980</p> <table border="1"> <thead> <tr> <th>V/C</th> <th>LOS</th> <th>Performance</th> </tr> </thead> <tbody> <tr> <td>0.0 – 0.2</td> <td>A</td> <td>Excellent</td> </tr> <tr> <td>0.2 – 0.4</td> <td>B</td> <td>Very Good</td> </tr> <tr> <td>0.4 – 0.6</td> <td>C</td> <td>Good</td> </tr> <tr> <td>0.6 – 0.8</td> <td>D</td> <td>Fair/ Average</td> </tr> <tr> <td>0.8 – 1.0</td> <td>E</td> <td>Poor</td> </tr> <tr> <td>1.0 & Above</td> <td>F</td> <td>Very Poor</td> </tr> </tbody> </table> <ul style="list-style-type: none"> The Level of Service (LOS) of the Road during operation of the project = $5,690.5 / 10,000 = 0.57$ As per the above the LOS of the ROAD is categorised under ‘C’, which implies “GOOD”. Hence the existing road is capable of taking the additional vehicular traffic due to the proposed project 		V (Volume in PCU/day)	C (Capacity in PCU/day)	V/C Ratio	LOS	Baseline	5330.5	10,000	0.53	Good	During operation of the proposed Project	(5330.5 + 360) = 5690.5	10,000	0.57	Good	V/C	LOS	Performance	0.0 – 0.2	A	Excellent	0.2 – 0.4	B	Very Good	0.4 – 0.6	C	Good	0.6 – 0.8	D	Fair/ Average	0.8 – 1.0	E	Poor	1.0 & Above	F	Very Poor
	V (Volume in PCU/day)	C (Capacity in PCU/day)	V/C Ratio	LOS																																	
Baseline	5330.5	10,000	0.53	Good																																	
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0.6 – 0.8	D	Fair/ Average																																			
0.8 – 1.0	E	Poor																																			
1.0 & Above	F	Very Poor																																			
Flora and fauna	No schedule-1 fauna within the study area																																				

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

S.No.	Waste / By product	Quantity (TPA)	Proposed method of disposal
1.	Ash from DRI	40,500	Will be utilised in the proposed Brick Manufacturing Unit
2.	Dolochar	45,000	Will be used in proposed FBC power plant as fuel.
3.	Kiln Accretion Slag	2,025	Will be used in road construction & utilised in the proposed brick Manufacturing Unit
4.	Wet scrapper sludge	10,350	Will be used in road construction & utilised in the

S.No.	Waste / By product	Quantity (TPA)	Proposed method of disposal
			proposed brick Manufacturing Unit
5.	SMS Slag	24,000	Slag from SMS will be crushed and iron will be recovered & then remaining non -magnetic material being inert by nature will be used as sub base material in road construction.
6.	End Cuttings from Rolling Mill	6,750	Will be reused in the SMS
7.	Mill scales from Rolling Mill	4,500	Will be given to Ferro Alloys units
8.	Ash from Power Plant (with Indian Coal + dolochar)	43,538	Will be utilized in the proposed brick manufacturing unit

Hazardous Waste:

- 1) Used Oil & Waste Oil : 3 KL/Annum
Disposal : will be given to CECB approved Recyclers/reprocessors
- 2) Used batteries will be given back to the supplier under buyback arrangement.

24.2.12 Public Consultation:

Details of advertisement given	Local newspaper (Hindi) NAIDUNIYA, Raipur (advt. on dt. 14.06.2022) National newspaper (English) "PUNJAB KESARI" (advt. on dt. 14.06.2022)
Date of Public Consultation	15.07.2022, at 11:00 AM
Venue	Project site Khasra No.s 587/1, 587/6, 587/10, 587/14, 597/1, 597/3, 598, 599, 600, 612, 613/1 and 613/2, Gram Panchayat Chicholi, Tehsil Kharora, District Raipur, Chhattisgarh.
Presiding Officer	Additional District Magistrate
Major issues raised	The issues raised during Public Hearing are: <ul style="list-style-type: none"> • Priority to be given to local people in employment. • Construction of Boundary wall in Chicholi village to prevent cattle entering into the agriculture fields • Construction of community building in Chicholi village • All required environment protection measures shall be installed in the industry. • Minimum Wages to be paid as per Govt rules. • Basic infrastructure facilities like supply of water, construction of rooms in school buildings • Water problem in Kumhari tank. • Impact on crops due to the proposed industry

	<ul style="list-style-type: none"> • Request for computer facilities for training children and contribute in upliftment of their education standard • Surface water pollution • ITI training to unemployed youth • Desiltation of ponds, drainage, etc.
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Action plan as per MoEF&CC O.M. dated 30/09/2020:

S.NO.	MAJOR ACTIVITY HEADS		YEAR OF IMPLEMENTATION			TOTAL EXPENDITURE (Rs. in Lakhs)
			1st Year (Rs. in Lakhs)	2nd Year (Rs. in Lakhs)	3rd Year (Rs. in Lakhs)	
A). Based on Need Based & SIA Study						
1	Community & Infrastructure Development Programmes					
	i) Construction of public toilets	Physical Nos. & village	3 nos. in Chicholi (v) & 4 nos. in Gaurkhera (v) & 3 nos. in Gaitra (v)	3 nos. in Mohrenga (v) & 3 nos. in Keotara (v)	2 nos. in Bharuwadih khurd (v) & 2 nos. in Paraswani (v) & 2 nos. in Khaulidabri (v)	66
		Budget in Lakhs	30	18	18	
					Total	
2	Education					
	Providing Model Anganwadi Centre in consultation with State Women and Child Development Department	Physical Nos. & village	Chicholi (v) -1 No	Mohrenga (v) – 1 No.	1 no. in Bharuwadih khurd (v) & 1 no. in Paraswani (v)	60
		Budget Rs in Lakhs	20	20	20	
		Budget in Lakhs	50	38	38	
					TOTAL (A)	126
B). Based on Public Consultation/Hearing						
1	Impart training to the local villagers for skill development. DISHA Centre” along with necessary infrastructure for various vocational training program for employment generation in association with National Skill Development Mission (Automobile Repair, Welding, Electrical, Computer Hardware, Soft skills like computer	Physical Nos. & village	One DISHA centre			164
		Budget in Lakhs	60	54	50	

S.NO.	MAJOR ACTIVITY HEADS	YEAR OF IMPLEMENTATION			TOTAL EXPENDITURE (Rs. in Lakhs)	
		1st Year (Rs. in Lakhs)	2nd Year (Rs. in Lakhs)	3rd Year (Rs. in Lakhs)		
	programs etc.)					
2	Construction of class rooms in schools of size 8m x 5m x3 m	Physical Nos. & village	3 rooms in Chicholi (v) & 3 rooms in Mohrenga (v)	3 rooms in Gaurkhera (v) & 3 rooms Keotara (v)	2 rooms in Paraswani (v)	70
		Budget in Lakhs	30	30	10	
3	Providing furniture, computers, library, sports equipment etc. for nearby local schools of 3 villages @Rs. 10.0 Lakhs per school	Physical Nos. & village	Mohrenga (v) – 1 no	Chicholi (v) – 1no	Keotara (v) – 1 no	45
		Budget in Lakhs	15	15	15	
4	Mineral water plants	Physical Nos. & village	2 no.s in Chicholi (v) & 2 no.s in Gaurkheda (v) & 2 no.s in Mohrenga (v)	2 no.s in Tildadih (v) & 2 no.s in Keotara (v) & 2 no.s Bharuwadih Khurd (v)	2 no.s in Paraswani (v) & 2 no.s in Gaitra (v) & 2 no.s in Khauli Dabri (v)	54
		Budget in Lakhs	18	18	18	
5	Desiltation of ponds	Physical Nos.&village	Chicholi (v) pond deepening by 1 m due to desiltation	Tidadih (v) pond deepening by 1 m due to desiltation	Mohrenga (v) pond deepening by 1 m due to desiltation	75
		Budget in Lakhs	22.5	30	22.5	
6	Compound wall of 240 m length will be constructed in Chicholi village to prevent cattle entering the agriculture fields of Chicholi village	Physical Nos.&village	Chicholi (v)	---	---	20
		Budget in Lakhs	20	---	---	
7	Plantation to be taken up outside the plant premises	Physical Nos.&village	<ul style="list-style-type: none"> ➤ 400 nos. of plants will be planted on both sides of the approach road from Tilda-Simga road. ➤ 2000 nos. 	---	---	25

S.NO.	MAJOR ACTIVITY HEADS		YEAR OF IMPLEMENTATION			TOTAL EXPENDITURE (Rs. in Lakhs)
			1st Year (Rs. in Lakhs)	2nd Year (Rs. in Lakhs)	3rd Year (Rs. in Lakhs)	
			of plants will be planted on either side of Tilda-Simga road ➤ 1000 nos of plants in Chicholi village & 1000 nos. of plants in Gourkher a village			
		Budget in Lakhs	25	---	---	
8	Construction of Community hall	Physical Nos.&village	--	Chicholi (v)	--	
		Budget in Lakhs	--	73.5	---	73.5
					Total (B)	526.5
		TOTAL	160.00	173.00	94.00	
			Grand Total (A+B)			652.5
Recurring expenditures under CSR as per companies Act 2014						
<ul style="list-style-type: none"> Health checkup will be carried out periodically in surrounding villages @ Rs 5.0 Lakhs every year 						

24.2.13 The capital cost of the project is Rs. 435 Crores and the capital cost for environmental protection measures is proposed as Rs. 35.1 Crores. The annual recurring cost towards the environmental protection measures is proposed as Rs.4.68 Crores. The employment generation from the proposed project is 700 nos. The details of cost for environmental protection measures is as follows:

S.No	Item	Capital Cost (Rs in Crores)			Recurring Cost per Annum (Rs in Crores)
		2023-25	2025-27	Total	
1.	Air Emission Management				
	Electro Static Precipitators	9.00	3.00	12.00	2.20
	Fume /Dust extraction systems with Bag filters	3.50	3.50	7.00	0.80
	Stacks	1.50	1.00	2.50	---
	CAAQS (4 nos)	0.80	0.80	1.60	0.20
	CEMS (9 nos.)	0.45	0.25	0.70	0.05
	Mechanical dust sweepers (4 nos.)	0.20	0.10	0.30	0.02
	Other APCS	0.70	0.30	1.00	0.05
	Environment Monitoring	--	--	--	0.15

S.No	Item	Capital Cost (Rs in Crores)			Recurring Cost per Annum (Rs in Crores)
		2023-25	2025-27	Total	
	Sub Total	16.15	8.95	25.10	3.47
2.	Wastewater Management				
	ETP	1.20	0.30	1.50	0.20
	STP	0.60	---	0.60	0.15
	Garland drains& settling ponds	0.40	0.20	0.60	0.04
	Sub Total	2.20	0.50	2.70	0.39
3.	Solid waste Management				
	Ash silos & ash handling system	2.50	0.50	3.00	0.35
	Slag crushing & disposal	0.15	0.15	0.30	0.05
	Hazardous & Municipal solid waste storage	0.20	---	0.20	0.05
	Sub Total	2.85	0.65	3.50	0.45
4.	Greenbelt development & land scaping	0.50	0.20	0.70	0.07
5.	Storm water Management & Rainwater Harvesting	0.50	0.10	0.60	0.05
6.	Fire safety	1.50	0.50	2.00	0.10
7	Occupational Health center	0.50	---	0.50	0.15
	Total budget for Environment Protection measures	24.20	10.90	35.10	4.68

24.2.14 Greenbelt will be developed in 4.20 Ha. out of 12.19 Ha. of land. 2500 nos. of plants will be planted per Hectare as per CPCB norms. Total no. of plants will be 10,500 nos. which is about 34.45% of the total project area and nurtured within 1 year from the date of receipt of EC.

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

Written representations:

24.2.16 During the meeting, based on the deliberations made by the EAC, the project proponent vide letter dated 28.02.2023 through email dated 28.02.2023 submitted the following information:

S.No.	Point	Reply
1.	Plant layout with area statement, proper indexing with colour notation for units, superimposition of contour map along with drainage pattern, calculation of drain size	As advised by the Hon'ble Expert Appraisal Committee, PP has submitted submitting the Revised Plant layout duly incorporating the area statement, colour notation, Contour map, Drainage pattern along the internal roads. Calculation for drain size is also submitted.

S.No.	Point	Reply
2.	Social Infrastructure development cost to be revised to 1.5% of the Project cost along with 4 nos. of villages	As advised by the Hon'ble EAC , PP has submitted the revised budget for social Infrastructural Development @ 1.5% of RS 435 Crores i.e. Rs 6.525 Crores. PP will be adopting 4 nos. of villages i.e. Chicholi, Mohrenga, Gaurkhera & Tildadih for undertaking Social Infrastructure Development works. Revised Action Plan is updated at para 24.2.12 above.
3.	Details on toxic metals including fluoride emissions	PP has submitted that the present proposal is a Greenfield project. There will not be any toxic metals in the slag from SMS unit. However PP hereby confirm that upon commencement of production, toxic metal analysis will be carried out every year and the reports will be submitted to the IRO, MOEF&CC and SPCB periodically.
4.	Confirmation of Elevation of project site	PP hereby confirm that the elevation of the project site is ranging from 224 m above MSL to 231 m above MSL
5.	Details regarding the status of Govt. land	Out of total 12.19 Ha. of land, 0.843 Ha. of land is govt. land. The latest correspondence pertaining to govt. land is submitted. PP hereby confirm that govt. land will be allotted in one month time. PP also assure that without allocation of govt. land, they will not commence construction of the project.
6.	Name of the consultant not mentioned in Part-B	Due to Parivesh portal issue consultant name has not been displayed in Part-B. PP hereby confirm that Pioneer Enviro Laboratories & Consultants Pvt. Ltd. are EIA consultant for our project.

Deliberations by the Committee

24.2.17 The Committee noted the following:

1. The instant proposal is for setting up of a new steel plant for production of 0.225 Million Tons Per Annum (MTPA) of TMT bars / Structural Steel.
2. The EAC, constituted under the provision of the EIA Notification, 2006 comprising Expert Members/domain experts in various fields, examined the proposal submitted by the Project Proponent in desired format along with EIA/EMP reports prepared and submitted by the Consultant accredited by the QCI/ NABET on behalf of the Project Proponent.
3. The EAC noted that the Project Proponent has given an undertaking that the data and information given in the application and enclosures are true to the best of his knowledge and belief and no information has been suppressed in the EIA/EMP reports. If any part of data/information submitted is found to be false/ misleading at any stage, the project will be rejected and Environmental Clearance given, if any, will be revoked at the risk and cost of the project proponent.

4. The Committee noted that the EIA reports are in compliance of the ToR issued for the project, reflecting the present environmental status and the projected scenario for all the environmental components. The Committee deliberated on the proposed mitigation measure towards Air, Water, Noise and Soil pollutions. The Committee suggested that the storage of toxic/explosive raw materials/products shall be undertaken with utmost precautions and following the safety norms and best practices.
5. Total project land is 12.19 Ha (Private Land:11.346 ha and Govt. Land: 0.843 Ha). Entire Private land has been registered in the company name and entire land has been diverted for industrial purpose. Lease application for 0.843 ha of Govt. land for a 99 years period is under progress.
6. The nearest human settlement from the project site is Gaurkhera at a distance of 0.85 km in the North direction.
7. Jamuniya Nala (1.2 Km, W), Mahanadi Branch canal (4.8 Km, SW), Kirna Tank (7.7 Km, W), Pindraon Pond (4.8 Km, S) and Kumhari Pond (2.8 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.
8. The water requirement for the project is 1130 KLD which will be sourced from Kumhari tank, which is at distance of 2.8 Km. State Investment Promotion Board, Chhattisgarh has forwarded recommendations to Water Resources Department for issuing approval for withdrawing water from Kumhari tank vide letter no. 985/SIPB/2021/728 dt. 6th August 2021.
9. Greenbelt will be developed in 4.20 Ha. out of 12.19 Ha. of land. Total no. of plants will be 10,500 nos. which is about 34.45% of the total project area and nurtured within 1 year. The EAC deliberated on the greenbelt action plan and found it satisfactory.
10. The EAC noted that the PP has proposed the Brick Manufacturing unit (25000 bricks/day) to use to solid waste as a step towards waste to wealth generation approach. The PP reported that the same unit will install simultaneously with other installation so that waste could be utilised gainfully from the commencement of operation of the Plant.
11. The Committee has found that the baseline data and incremental GLC due to the proposed project within NAAQ standards.
12. The committee deliberated details of carbon foot prints and carbon sequestration study w.r.t. proposed project and found them to be satisfactory.
13. The Committee also deliberated on the public hearing issues along with revised action plan submitted by the proponent to address the issues raised during the public hearing and found it satisfactory.
14. The EAC deliberated on the written submission of project proponent and found it satisfactory.
15. The EAC deliberated on the proposal with due diligence in the process as notified under the provisions of the EIA Notification, 2006, as amended from time to time and accordingly made the recommendations to the proposal. The Experts Members of the EAC found the proposal in order and recommended for grant of environmental clearance.
16. The environmental clearance recommended to the project/activity is strictly under the provisions of the EIA Notification 2006 and its subsequent amendments. It does not tantamount/construe to approvals/consent/permissions etc. required to be obtained or

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

Recommendations of the Committee

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

A. Specific conditions:

- (i) The project proponent shall comply with all the environmental protection measures and safeguards proposed in the documents submitted to the Ministry. All the recommendations made in the EIA/EMP in respect of environmental management, and risk mitigation measures relating to the project shall be implemented.
- (ii) The project proponent shall utilize modern technologies for capturing of carbon emitted and shall also develop carbon sink/carbon sequestration resources capable of capturing more than emitted. The implementation report shall be submitted to the IRO, MoEF&CC in this regard.
- (iii) The nearest human settlement from the project site is Gaurkhera at a distance of 0.85 km in the North direction. 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 this location in its environmental monitoring programme.
- (iv) Jamuniya Nala (1.2 Km, W), Mahanadi Branch canal (4.8 Km, SW), Kirna Tank (7.7 Km, W), Pindraon Pond (4.8 Km, S) and Kumhari Pond (2.8 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) The water requirement of 1130 KLD shall be sourced from Kumhari tank, which is at distance of 2.8 Km. PP shall obtain necessary permission from the Competent Authority prior to commencement of project.
- (vi) Following additional arrangements to control fugitive dust shall be provided:
 - a. Fog / Mist Sprinklers at all conveyors point and on bulk raw material storage area (at the transfer points) like Iron Ore, Coal and for Fly Ash and similar solid waste storage areas.
 - b. Proper covered vehicle shall be used while transport of materials.
 - c. Wheel Washing mechanism shall be provided in entry and exit gates with complete recirculation system.

- (vii) All internal road and connecting road from project site to main highway shall be developed and maintained with suitable Million Axle Standard (MSA) as per the traffic load due to existing and proposed project.
- (viii) All stockyards shall be having impervious flooring and shall be equipped with water spray system for dust suppression. Stock yards shall also have garland drains to trap the run off material.
- (ix) Performance test shall be conducted on all pollution control systems every year and report shall be submitted to Regional Office of the MoEF&CC.
- (x) Particulate matter emission from stacks shall be less than 30 mg/Nm³. Action plan submitted to limit the dust emission shall be strictly implemented.
- (xi) CEMS shall be provided on all process stacks and the signal shall be received in plant control room for central control of APCDs installed in the plant
- (xii) 85-90 % of billets shall be rolled directly in hot stage. RHF shall operate using only Light Diesel Oil as a fuel.
- (xiii) Solid waste utilization
 - a. PP shall install a slag crusher to convert steel slag into aggregate for use in construction industry, fine sand for use as flux in steel plant, sand in brick making and as lime in cement making.
 - b. PP shall recycle/reuse 100 % solid waste generated in the plant.
 - c. Used refractories shall be recycled as far as possible.
 - d. PP has proposed the Brick Manufacturing unit (25000 bricks/day) to use to solid waste as a step towards waste to wealth generation approach. The PP reported that the same unit will install simultaneously with other installation so that waste could be utilised gainfully from the commencement of operation of the Plant.
- (xiv) 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.
- (xv) 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.
- (xvi) Toxic metal analysis shall be carried out every year and the reports shall be submitted to the IRO, MOEF&CC and SPCB periodically
- (xvii) As committed, PP shall adopt four villages namely Chicholi, Mohrenga, Gaurkhera & Tildadih and shall prepare and implement a robust plan for socio-economic development of nearby villages to develop them into model villages.
- (xviii) A proper action plan must be implemented to dispose of the electronic waste generated in the industry.
- (xix) Three tier Green Belt shall be developed in at least 33% of the project area in a period of 1 year with native species all along the periphery of the project site of adequate width and tree density shall not be less than 2500 per ha. 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. PP shall also develop 50 m wide greenbelt in the form of shelter belt inside the project area towards Mohrenga PF and 30 m green belt development between plant site and Gaurkhera village along with windshield inside the plant premises to act as green barrier for air pollution &

noise levels. Compliance status in this regard, shall be submitted to concerned Regional Office of the MoEF&CC.

- (xx) Greening and Paving shall be implemented in the plant area to arrest soil erosion and dust pollution from exposed soil surface.
- (xxi) Air Cooled condensers shall be used in the captive power plant.
- (xxii) 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.
- (xxiii) All the commitments made to the public during the Public Hearing/Public Consultation shall be satisfactorily implemented. The action plan based on the social impact assessment study of the project as per the EMP in accordance to the Ministry's OM dated 30.09.2020 shall be strictly implemented and progress shall be submitted to the Regional Office of MoEF&CC.
- (xxiv) Action Plan for fire fighting system including provision for flame detectors, temperature actuated heat detectors with alarms, automatic sprinkler system, fixing the location of fire water tanks, separate power system for fire fighting, involvement of qualified and trained fire personnel, nearest fire station & time required to reach the proposed site shall be prepared and implemented.
- (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 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 approved by the Board of Directors. The environmental policy should prescribe for standard operating procedures to have proper checks and balances and to bring into focus any

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

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

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. 24.3

24.3 Proposed Integrated Cement Project: Clinker - 8.0 Million TPA (2 x 4.0 Million TPA), Cement - 5.0 Million TPA (2 x 2.5 Million TPA), CPP - 40 MW (2 x 20 MW), WHRS - 40 MW (2 x 20 MW) in phased manner along with Railway Siding at Village: Parewar, Tehsil & District: Jaisalmer, Rajasthan by Wonder Cement Limited- Consideration of Environmental Clearance.

[Proposal No. IA/RJ/IND1/413238/2023; File No. IA-J-11011/24/2022-IA-II(IND-I)]
[Consultant: J.M. EnviroNet Pvt. Ltd.,; Valid Upto: 07.08.2023]

24.3.1 M/s. Wonder Cement Ltd. has made an online application vide proposal no. IA/RJ/IND1/413238/2023 dated 09.02.2023 along with copy of EIA/EMP report, CAF & Form - 1 (Part A, B & C) seeking Environment Clearance (EC) under the provisions of the EIA Notification, 2006, for the project mentioned above. The proposed project activity is listed at schedule no. 3(b) Cement Plants and 1(d) Thermal Power Plants under Category "A" of the schedule of the EIA Notification, 2006 is therefore, appraised at Central Level.

24.3.2 Name of the EIA consultant: M/s. J.M. Environet Pvt. Ltd. [List of ACOs with their Certificate / Extension Letter no. NABET/EIA/2023/SA 0172; Valid up to 07.08.2023, as on February 27, 2023].

Details submitted by Project proponent

24.3.3 The details of the ToR are furnished as below:

Date of application	Consideration	Details	Date of accord	ToR Validity
24 th Jan.,	53 rd meeting of EAC	Terms of	02 nd March,	01 st March, 2026

Date of application	Consideration	Details	Date of accord	ToR Validity
2022	held on 10 th Feb., 2022	Reference	2022	

24.3.4 The project of M/s. Wonder Cement Limited located in Village: Parewar, Tehsil & District: Jaisalmer Rajasthan is for setting Integrated Cement Project: Clinker - 8.0 Million TPA (2 x 4.0 Million TPA), Cement - 5.0 Million TPA (2 x 2.5 Million TPA), CPP - 40 MW (2 x 20 MW), WHRS - 40 MW (2 x 20 MW) in phased manner along with Railway Siding.

24.3.5 Environmental Site Settings:

S. No.	Particulars	Details	Remarks																					
i.	Total land	Total Project area is 377.065 ha (Entirely Government alienated barren land).	Land use: Government barren land allocated for industrial use.																					
ii.	Land acquisition details as per MoEF&CC O.M. dated 7/10/2014	Total land has been allotted to Wonder Cement Limited by District Collector, Jaisalmer Govt. of Rajasthan Vide Order dated 24 th March 2022 and subsequent amendment on 27 th May 2022. Subsequently, Joint Secretary, Department of Industries and Commerce, Govt. of Rajasthan granted the permission for allotment of 377.065 ha land for industrial purpose under the provisions of Rajasthan Industrial Area Allotment Rules, 1959 vide letter dated 5 th Dec 2022 to Wonder Cement limited for setting up Integrated Cement Plant	-																					
iii.	Existence of habitation & involvement of R&R, if any.	<p>Plant Site: Nil</p> <p>Study Area:</p> <table border="1"> <thead> <tr> <th>Habitation</th> <th>Distance (km)</th> <th>Direction</th> </tr> </thead> <tbody> <tr> <td>Parewar</td> <td>~0.8</td> <td>SSW</td> </tr> <tr> <td>Tulsiram ki Dhani</td> <td>~1.3</td> <td>NE</td> </tr> <tr> <td>Leela Parewar</td> <td>~2.4</td> <td>SW</td> </tr> <tr> <td>Kabir Basti</td> <td>~5.4</td> <td>NNE</td> </tr> <tr> <td>Khinya</td> <td>~9.5</td> <td>NE</td> </tr> <tr> <td>Sanu</td> <td>~9.5</td> <td>SSW</td> </tr> </tbody> </table>	Habitation	Distance (km)	Direction	Parewar	~0.8	SSW	Tulsiram ki Dhani	~1.3	NE	Leela Parewar	~2.4	SW	Kabir Basti	~5.4	NNE	Khinya	~9.5	NE	Sanu	~9.5	SSW	R&R is not applicable
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S. No.	Particulars	Details	Remarks
v.	Elevation of the project site	172 m to 188 m above mean sea level.	-
vi.	Involvement of Forest land if any.	No Forest Land is involved in the plant site.	-
vii.	Water body (Rivers, Lakes, Pond, Nala, Natural Drainage, Canal etc.) exists within the project site as well as study area	Plant site: Nil Study area: No water body falls within study area	-
viii.	Existence of ESZ/ ESA/ national park/wildlife sanctuary/ biosphere reserve/ tiger reserve/ elephant reserve etc. if any within the study area.	Study Area: Nil ● List of Reserved and protected forests: Protected Forest (4.0 km in South direction)	-

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

S. No.	Plant Equipment / Facility	Proposed Unit (Phase - I)		Proposed Unit (Phase - II)	
		Configuration	Capacity	Configuration	Capacity
1.	Clinker	Kiln: 12000 TPD	4.0 Million TPA	Kiln: 12000 TPD	4.0 Million TPA
2.	Cement	Cement Mill: 330 TPH	2.5 Million TPA	Cement Mill: 330 TPH	2.5 Million TPA
3.	CPP	CPP Boiler (2 x 20 MW)	20 MW	20 MW	40 MW **
4.	WHRS	PH & AQC Boiler: (2 x 20MW)	20 MW	20 MW	40 MW **

Note: ** Common Single turbine of 40 MW comprises of 20 MW WHRS & 20 MW CPP

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

S. No.	Name of Raw Material	Proposed Quantity (MTPA)			Source	Approx. Distance from Project site	Mode of Transportation
		Phase - I	Phase - II	Total Quantity			
1.	Limestone	5.28	5.28	10.56	Captive Limestone Mine/Purchase	Adjacent	Belt conveyor / Road / Rail

2.	Red ochre/Iron Ore	0.0066	0.0066	0.0132	Parewar, Jaisalmer, Rajasthan	5 Km	by Road
3.	Clay	0.396	0.396	0.792	Captive/ Nearby area From Village - Lanela	50 Km	by Road
4.	Silica Sand	0.396	0.396	0.792	Parewar & Devikot, Jaisalmer, Rajasthan	5 Km & 150 Km	by Road
5.	Gypsum (Mineral and Chemical)	0.125	0.125	0.250	Mohangarh, Rajasthan	69 Km	by Road
6.	Fly ash & Pond ash	0.875	0.875	1.75	Own TPP and Nearby Thermal Power Plants, Barmer, Rajasthan	190 Km	by Rail and Road

24.3.8 The total water requirement is 2300 KLD, which will be sourced from Indira Gandhi Canal / Nehar project (Sagarmal Gopa Branch). Permission for the same has been obtained from Indira Gandhi Nahar Department for withdrawal of 1700 KLD vide their letter no. F. 6(3) IGNB/2021 dated 15th March, 2022. Permission for balance water requirement i.e., 600 KLD will be obtained from the concerned authority.

24.3.9 Power requirement of 90 MW will be sourced from proposed Captive Power Plant (40 MW), WHRS (40 MW), State grid of Jodhpur Vidyut Vitran Nigam Ltd. (JVVNL) & D.G Set (2 x 1500 KVA - for emergency).

24.3.10 Baseline Environmental Studies:

Period	Winter Season (December 2021 to February 2022)	March 2022
AAQ parameters at 08 locations (Min and Max)	<ul style="list-style-type: none"> PM_{2.5} - 22.7 to 40.6 µg/m³ PM₁₀ - 50.4 to 75.9 µg/m³ SO₂ - 5.0 to 12.8 µg/m³ NO_x - 8.2 to 23.2 µg/m³ CO - BDL to 0.76 mg/m³ 	2 additional location were monitored one in Upwind and one in crosswind toward NE: PM _{2.5} - 23.0 to 41.3 µg/m ³ PM ₁₀ - 52.0 to 76.3 µg/m ³ SO ₂ - 5.2 to 13.2 µg/m ³ NO _x - 8.6 to 24.3 µg/m ³ CO - BDL to 0.79 mg/m ³
Incremental GLC level	<ul style="list-style-type: none"> PM - 2.14 µg/m³ (Level at ~600 m in SW Direction) SO₂ - 2.92 µg/m³ (Level at ~1800 m in SW Direction) 	-

	<ul style="list-style-type: none"> • NO_x - 3.99 µg/m³ (Level at ~2300 m in SW Direction) • CO - 1.88 µg/m³ (Level at ~ 2100 m in SW Direction) 											
Ground water quality at 01 location (Ground water was collected from 01 location as it was unavailable on other locations)	<ul style="list-style-type: none"> • pH - 7.68 • Total Hardness - 589.65 mg/l • Chlorides - 789.65 mg/l • Fluoride - 1.40 mg/l • Heavy Metals - Iron as Fe: 0.23 mg/l 	-										
Surface water quality at 02 locations	<ul style="list-style-type: none"> • pH - 7.56 - 7.77 • DO - 6.0 - 6.5 mg/l • BOD - 5.6 - 8.5 mg/l • COD - 15.7 - 27.8 mg/l 	-										
Noise levels Leq (Day and Night)	48.9 to 52.5 Leq dB (A) for day time and 39.3 to 42.3 Leq dB (A) for the night time.	-										
Traffic assessment study findings	<ul style="list-style-type: none"> ✓ Traffic study has been conducted at NH - 968 (earlier MDR - 19) which is 3.0 km in East direction. ✓ Transportation of raw material, fuel & finished product will be done as per details given below: <ul style="list-style-type: none"> ▪ Limestone - via Covered belt Conveyor from Captive Limestone Mine (1.0 MTPA) and 5.0 MTPA Limestone From RSMML by road. ▪ Fly ash - 90% by road 10% by rail ▪ Red ochre/Iron Ore - 100% by road. ▪ Gypsum (mineral and chemical) - 100% by road. ▪ Clay - 100% by road. ▪ Silica sand - 100% by road. ▪ Coal - 20% by road 80% by rail ▪ Petcoke - 50% by road 50% by rail ▪ Lignite - 100% by road. ▪ Cement - 30% by road and 70% by rail. ▪ Clinker - 30% by road and 70% by rail <p>Existing PCU is 27.14 PCU/hr. on NH - 968 (MDR - 19) and existing level of service (LOS) is A</p> <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="width: 15%;">Road</th> <th style="width: 20%;">V (Volume in</th> <th style="width: 20%;">C (Capacity in</th> <th style="width: 20%;">Existing V/C Ratio</th> <th style="width: 25%;">LOS</th> </tr> </thead> <tbody> <tr> <td> </td> <td> </td> <td> </td> <td> </td> <td> </td> </tr> </tbody> </table>	Road	V (Volume in	C (Capacity in	Existing V/C Ratio	LOS						
Road	V (Volume in	C (Capacity in	Existing V/C Ratio	LOS								

		PCU/hr.)	PCU/hr.)		
	NH - 968 (MDR - 19)	27.14	625*	0.04	A
	* Capacity as per IRC- 64-1990 Guidelines.				
	✓ PCU load after proposed project will be 27.14 (Existing) + 70.62 (Additional) PCU/hr. and level of service (LOS) will be A.				
	Road	V (Volume in PCU/hr.)	C (Capacity in PCU/hr.)	Existing V/C Ratio	LOS
	NH – 968 (MDR – 19)	27.14 + 70.62 = 97.76	625*	0.15	A
	* Capacity as per IRC- 64-1990 Guidelines.				
	Conclusion: The level of service is “A” after including the additional traffic due to the proposed project.				
Flora and fauna	No Schedule - I species have been observed and recorded during the field survey in the study area from the project boundary. List of flora & fauna of the study area has been authenticated by Deputy Conservator of Forest, Jaisalmer dated 01 st Nov., 2022.				

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

S. No.	Type of Waste	Source	Quantity	Treatment / Disposal
1.	Dust	Cement Plant	420 TPD	Dust collected from various APCEs will be recycled into the process.
2.	Fly ash	CPP	0.11 MTPA	Used in manufacturing of PPC grade cement
3.	STP Sludge	STP	~25 Kg/Annum	Used as manure for greenbelt development / plantation
4.	Used Oil, Contaminated cotton rags or other cleaning materials	Plant Maintenance	~100 KL/Annum	Will be used in Kiln as co-processing / Sold to CPCB authorized recycler
	Empty barrels/containers/liners		~200 Kg/Annum	Will be sold to CPCB authorized recycler
5.	Bottles, paper, cans, textile, etc.	MSW	500 Kg/day	Will be sold to registered recycler
	Kitchen and canteen/ Green waste			Bio-degradable waste will be converted into organic manure by installation of Organic Waste Composting (OWC) machine (Capacity: 250 kg/day) and manure

S. No.	Type of Waste	Source	Quantity	Treatment / Disposal
				will be used for greenbelt development / plantation.

24.3.12 Public Consultation:

Details of advertisement given	Public Hearing Notice published in Newspapers “The Indian Express” on 30 th June, 2022 and “Rajasthan Patrika” on 30 th June, 2022
Date of Public Consultation	03 rd August, 2022 at 11:00 AM
Venue	Rajiv Gandhi Seva Kendra, Village Parewar, Tehsil and District: Jaisalmer
Presiding Officer	Additional District Collector, Jaisalmer (Rajasthan)
Major issues raised	Employment, Environment, Education, Socio Economic Development, Health, etc.

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

<i>Budgeted Amount in Lakh</i>									
S. N	Thematic Area	Activity	Estimation basis	Village Name	1st yr.	2nd yr.	3rd yr	Capital Cost	Recurring/ 4th Year onwards Cost
1	Wonder Sanrachana (Infrastructure Development Programme)	Infrastructure Support to the govt. / gram panchyat for Establishment of infrastructure like drinking water pipe line to Parewar, Kabir basti, naga village through ongoing Govt. Jal Scheme Mission.	Infrastructure Support to the govt. / gram panchyat for Laying of pipe line from Kabir Basti to Parewar (8.5KM) for drinking water through ongoing Govt. Scheme Jal Mission	Parewar	100			100	NA
			Infrastructure Support to the govt. / gram panchyat for Strengthening of existing pipe line from eastern canal to Kabir basti (8KM) for drinking water through ongoing Govt. Scheme Jal Mission	Kabir Basti		80		80	NA
			Infrastructure Support to the govt. / gram	Naga			50	50	NA

S. N	Thematic Area	Activity	Estimation basis	Village Name	1st yr.	2nd yr.	3rd yr	Capital Cost	Recurring/ 4th Year onwards Cost
			panchayat for Strengthening of pipe line from eastern canal to Naga (2 KM)for drinking water through ongoing Govt. Scheme Jal Mission						
			Suport for Laying of pipe line from Parewar to Leela Parewar Dhani (3KM)	Leela Parewar			50	50	NA
		Street lights for Model Villages	Solar powered LED street lights 18W, lithium battery auto operated @ Rs. 20,000/-	Parewar	16			45.8	5
				Leela Parewar		4			
				Dhakar Singh ki Dhani			1.6		
				Bhad ki dhani		1.6			
				Tulach singh ki Dhani		1.6			
				Kabir Basti	8				
				Joga			6		
				Kakab			3		
				Naga			4		
		Construction of Common Service Centre	Construction of well equipped common service centre for villagers near gram panchayat, in Rajasthan know as 'Rajiv Gandhi Service Centre'. Facilities includes - Meeting room, library, Bus Stop etc.	Parewar, Leela Parewar, kabir Basti,	50	50	50	150	NA
		Construction of Bitumen/ gravel/ CC Road in Villages	Construction of Road from parewar to Kabir basti approx 4.7 Km	Parewar	850			850	20

S. N	Thematic Area	Activity	Estimation basis	Village Name	1st yr.	2nd yr.	3rd yr	Capital Cost	Recurring/ 4th Year onwards Cost
			Contribution to Gram panchyat for Construction of 2000 Mtr CC road from main road to school gate under Jan Sahbhagita Yojna	Parewar	60	60		390	
			Contribution to Gram panchyat for Village streets construction in CC road 3000 Mtr under Jan Sahbhagita Yojna	Kabir Basti	60	60	60		
			Contribution to Gram panchyat for Village streets construction in CC road 1500 Mtr under Jan Sahbhagita Yojna	Leela Parewar		60	30		
			Contribution to Gram panchyat for Village streets construction in CC road 1000 Mtr under Jan Sahbhagita Yojna	Tulsiram ki dhani		30	30		60
		Construction of Drainage & Sanitation System in Village area	Construction of Drainage System, Sanitation & waste composting in Village area	Leela parewar, parewar, Kabir Basti	60	60	60	180	
		Support for Drinking water facility under Jal Mission Yojna	Support for provising water connection for every household under the Jal Mission Yojna	Leela parewar, parewar, Kabir Basti	50	50	50	150	
		Swcahha Bharat Mission - II	Providing training, dustbin, battery operated garbage collection auto, compost to villagers and common area	Leela parewar, parewar, Kabir Basti	15	15	15	45	
		Construction	Construction	Parewar	75	75	75	225	25

<i>Budgeted Amount in Lakh</i>									
S. N	Thematic Area	Activity	Estimation basis	Village Name	1st yr.	2nd yr.	3rd yr	Capital Cost	Recurring/ 4th Year onwards Cost
		works for Model Village as per requirement of community or direction of Govt.	works for Model Village as per requirement of community or direction of Govt.	village , Leela Parewar and Kabirbasti					
		Total			1344	547.2	484.6	2375.8	50
2	Education (Wonder Udaan)	Construction of Integrated Model Sports Complex	Construction of Integrated Sports Complex including racing track, boundary wall, high rise sitting structure, moveable goal posts for hockey, football tournaments etc in co-ordination with the Gram Panchayat & School	Parewar, kabir Basti	150	150		300	NA
		Refurbishment of Govt. Girls Upper Primary School - Parewar	Construction of Toilet block Water Proofing at 8 Class rooms and connect with tankas, CCTV, Painting & electrification of building, provide furniture for 100 Students, green boards etc.	Parewar	70			70	NA
		Iron Shed at Govt. Schools and Establishment of Rural Library	Construction of Iron Shed 60x40 Ft at each school for children assembly & cultural activities, Establish rural library for preparation of competition examinations through Jan Sahbhagita	Parewar	8			32	NA
				Parewar Girls School			8		
				Naga		8			
Support for students for preparation of	Rs 1000 per child for guide book, note book etc	Parewar	1	1	1	9	NA		
		Kabir basti,	1	1	1				

S. N	Thematic Area	Activity	Estimation basis	Village Name	1st yr.	2nd yr.	3rd yr	Capital Cost	Recurring/ 4th Year onwards Cost	
		Board examination, scholarship and Facilitation of best performing girls-boys		Naga,						
				Joga, Kakab	1	1	1			
		Supply of computers set with all in one printers	Rs 32400 for Computers and 22600 for printer = 55000	Parewar		1.1		3.3	NA	
				Joga			1.1			
				Kabir Basti			1.1			
		Supply of Sports kit to children	@25000 rupees per schools for cricket kit/football kit/ vollyboll kit etc for oner sports of their choice	Parewar	2	2	2	18	NA	
				Kabir basti, Naga	2	2	2			
				Joga, Kakab	2	2	2			
		Supply of Furniture in Schools as per requirements	@2000 per set (table and chairs)	Parewar	3			7.5	2	
				Kabir Basti			2			
				Naga, Joga, Kakab						2.5
		Renovation /Construction of Classrooms/ Boundary wall / tanka / Roof/ Electrification /Painting work and Girls & Boys Toilet blocks etc.	@500000 per school of each Village through Jan sahbhagita	Parewar	90			255	5	
				Kabir Basti			90			
				Naga, Joga, Kakab						75
		Providing Wi-Fi facility	Providing Wi-Fi facility in village for accessing common services	Leela parewar, parewar, Kabir Basti			2	2	2	2
		Digitalization of the Classrooms	Digitalization of the Classrooms	Leela parewar, parewar, Kabir Basti			5	5	5	
		Library development(Digital+Physical)	Library development(Digital+Physical)	Leela parewar, parewar, Kabir Basti			5	5	5	
		Schorship for Higher	Schorship for Higher Education	Leela parewar,			5	5	5	5

<i>Budgeted Amount in Lakh</i>									
S. N	Thematic Area	Activity	Estimation basis	Village Name	1st yr.	2nd yr.	3rd yr	Capital Cost	Recurring/ 4th Year onwards Cost
		Education		parewar, Kabir Basti					
		Distribution of Solar Lamp to Children	Distribution of Solar Lamp to Children	Leela parewar, parewar, Kabir Basti	4	4	4		
		Supply of Sanitary pad vending & incinerator machine, sports items and other works as per request of villagers or Govt. Department	Rs. 1 Lakh per school of each Village for Vending machine, Incinerator and free pad distribution	Parewar (Boys & Girls School)	2			6	5
				Kabir basti, Naga		2			
				Joga, Kakab			2		
		Total			336	283.1	127.7	717.8	19
3	Wonder Arogyam (Preventive Health Care initiatives Programme)	Construction of Hospital	Construction of 10 bedded hospital with laboratory and other required facilities	Parewar	300			300	50
		Refurbishment and Infra support to Govt. sub health centre as per requirement and to equip with Covid Care Facilities	Financial support to purchase of essential furniture like patient bad, examination couch, table, chair, labour table, stretcher, trolley, wheel chair, Sanitary pad vending & incinerator machine, Medical Furniture, Renovation of Buildings etc.	Parewar, Kabir basti, Leela Parewar	10	7	10	35	2
				Naga		4			
		Monthly Medical check up camp covering in each village on rotation basis, Annual Eye Check-up Camp in partnership	Rs. 1 Lakh Per camp includes tent, sitting arrangement, free medicine, refreshment, poster, awareness,	Parewar, Leela Parewar, Kabir Basti, Naga, Joga, Kakab	18	18	18	54	7.2

<i>Budgeted Amount in Lakh</i>									
S. N	Thematic Area	Activity	Estimation basis	Village Name	1st yr.	2nd yr.	3rd yr	Capital Cost	Recurring/ 4th Year onwards Cost
		with Govt. Block Department	medical team etc. No of Villages - 6, Parewar, Leela Parewar, Kabir Basti, Naga, Joga, Kakab No of Camps - 18 Camps annually						
		Financial support to the Govt / gram panchyat for Construction of Govt. Veterinary Sub Centre	Financial support to the Govt / gram panchyat for Construction of well equipped Govt. Veterinary Sub Centre for livestock's at GP - Parewar, staff by Govt.	Parewar	75			75	NA
		Periodic Veterinary Health Check UP Camp on quarterly Basis covering in each villages to cover livestock	Rs. 1 Lakh Per camp includes tent, sitting arrangement, check up by Govt medical team ,supply of vaccines etc.	Parewar, Leela Parewar	6	6	6	54	5
				Kabir basti, Naga	6	6	6		
				Joga, Kakab	6	6	6		
				Total		425	47	46	518
4	Wonder Eco Green Initiatives (Natural Resource Management)	Repairing or Construction of Village Tanka for drinking Water facility	@200000 per tanka for 15 Tanka	Parewar, Kabir basti	15	15	15	105	2
				Naga	12	12	12		
				Joga, Kakab	8	8	8		
		Pond Development	Development of pond in villages with latest technological intervention in three villages	Parewar, Kabir Basti & Leela Parewar	20	20	20	60	
		Green Zone Development in villages	Development of green zone as per guidance of AFRI / CAZRI in nearby villages for development of degraded land with modern technology	Parewar, Kabir basti, Leela parewar	25	25	25	75	
		Establishment of	Establishment of	Parewar,	70	65	65	200	2

S. N	Thematic Area	Activity	Estimation basis	Village Name	1st yr.	2nd yr.	3rd yr	Capital Cost	Recurring/ 4th Year onwards Cost
		Panchphal in convergence with MGNREGA (Gram Panchayat)	Panchphal Udhyan (Fruit Orchard) in convergence with MGNREGA at 50 Bigha of Land in each 5 Villages. Plants - Ber, Shisham, Date, Neem, Lemon, Khejri, Sangri, Kumath, Pilu (Jhal), Sevan Grass Advantage - Increase biodiversity, Regular income to Panchayat, Availability of Fruits & fodder (Sevan Graas) for livestock to villagers Input - Chain-link fencing, Drip irrigation, Hybrid plants, soil mixture etc in collaboration with AFRI - Jodhpur and CAZRI - Jodhpur	Kabir Basti, Leela Parewar, Naga, Joga					
		Development of Plantation in Public Place, Schools, Hospitals, panchayat, Community center with tree Guard	@1500 per Plant with tree guard for 2000 plants	Parewar	5	5	5	45	15
				Kabir basti, Naga,	5	5	5		
				Joga, Kakab	5	5	5		
		Distribution of Fruits plants, medicinal Plants, suitable to Local climatic Conditions	@150 per plants for 3000 plants and drip irrigation support to farmers	Parewar, Kabir basti, Naga, Joga, Kakab	8	8	8	24	NA
		Support for Grazing Land	Distribution of Good Quality	Parewar, Kabir	9	9	9	27	1.5

S. N	Thematic Area	Activity	Estimation basis	Village Name	1st yr.	2nd yr.	3rd yr	Capital Cost	Recurring/ 4th Year onwards Cost
		Development	Seeds (Sevan Grass) to Panchayat for development of Grazing Land @ 2 Lakh per village	basti, Naga, Joga, Kakab					
				Total	182	177	177	536	20.5
5	Wonder Hunar (Women Empowerment Programme)	Construction of 'Rural Development Centre' - Skill Training	Construction of Rural Development Centre which includes two hall and other facilities for skill & other training under Hunar Initiatives	Parewar	160	60		220	2
		Training & Create brand of handloom products developed by women artisan for income generation skills to Women in craft, embroidery, handloom etc.	Skill training & brand creation to women for knitting, weaving and stitching for their handloom products etc.	Parewar, Kabir basti			3	15	1
				Naga		6			
				Joga, Kakab		6			
		Train women for value addition in crop production to increase their income generation	Women training	Parewar, Kabir basti	1			5	1
				Naga		2			
				Joga, Kakab		2			
Support local art, craft, cultural activities	Support for participating in exhibition, mela & promote Hunar and mangilyar artist of local area, lumpsum	Parewar, Kabir basti	5	5	5	15	2.5		
		Naga							
		Joga, Kakab							
Training & support to Women / farmers for increase income generation	Training & Support / skill development to Women / farmers / youth for increase income	Parewar, Kabir basti, leela Parewar	15	15	15	45	5		

<i>Budgeted Amount in Lakh</i>									
S. N	Thematic Area	Activity	Estimation basis	Village Name	1st yr.	2nd yr.	3rd yr	Capital Cost	Recurring/ 4th Year onwards Cost
			generation						
		Project Coordinator, field workers, travel & other cost for implementation of activity	Experienced development professional & local field workers, project coordinators to execute above activities in time bound manner	Parewar, Kabir basti, Naga, Joga, Kakab	18	20	22	60	24
		Total			199	108	53	360	35.5
		Total In Lakh			2486.00	1162.30	888.30	4507.60	139.20

24.3.13 The capital cost of the proposed project is Rs. 4200 Crores and the capital cost for Environmental Protection Measures is proposed as Rs. 302 Crores. The annual recurring cost towards the environmental protection measures is proposed as Rs 15 Crores/annum. The employment generation from the project is about 1498 persons. The details of cost for environmental protection measures are as follows:

S. No.	Particulars	Phase -I		Phase -II	
		Capital cost in Lakh	Recurring cost / annum In Lakh	Capital cost in Lakh	Recurring cost / annum in Lakh
1	Air pollution control	10000	500	10000	500
2	Environment Laboratory	50	10	0	
3	Environmental Monitoring	375	40	200	30
4	Water pollution control & Water Management (STP)	300	30	0	0
5	Noise pollution control	50	5	0	0
6	Occupational Health (Initial & Periodical)	278.5	50	0	0
7	Organic Waste Converter & its facilities	20	3	0	0
8	Greenbelt and plantation	1000	50	0	0
9	Drip Irrigation system & Water Sprinkling	200	10	0	0
10	RWH pond and Storm Water Management	100	5	50	5
11	Others (Housekeeping and Municipal waste management)	100	25	100	25

12	Road Sweeping Machine	350	20	125	10
13	AFR and Storage of Haz /non Haz waste Shed	2000	20	500	10
14	Testing Lab for Coprocessing of Hazardous Waste /Non Haz. waste & other Waste	300	30	0	30
15	Cover Shed and Silos for Raw materials and finish products	2500	35	1500	35
16	Hazardous Waste and E waste management facility	76.5	17	25	5
Grand Total (lakh)		17700	850	12500	650
Grand Total in Crore		177	8.50	125	6.50
Both Phase (Total in Crore)		302	15.0	-	-

24.3.14 Proposed greenbelt will be developed in 124.59 ha which is about 33% of the total project area. Thus, a total of 124.59 ha (33% of total project area) will be developed as greenbelt. A 20 m wide greenbelt, consisting of at-least 3 tiers around plant boundary will be developed as greenbelt and green cover as per CPCB/MoEFCC, New Delhi guidelines. Local and native species will be planted with a density of 2500 trees per hectare. Total no. of 3,11,475 saplings will be planted and nurtured in 124.59 ha in 03 years.

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

Written representations:

24.3.16 During the meeting, based on the deliberations made by the EAC, the project proponent vide letter dated 28.02.2023 through email dated 28.02.2023 submitted the following information:

S. No.	Details/Documents, Clarification sought	Wonder Cement Limited's Reply
1.	PP should submit the revised CER plan for the 1 % of Total project cost.	PH Action Plan plan has been revised to 1.07% total project cost of i.e 45.07 Crores. Revised PH Action Plan is updated at para 24.3.12 above.
2.	PP should update plant layout with proper demarcation of nursery and shown uniform coding for proposed green belt.	Updated and revised plant layout is submitted.
3.	PP should submit Justification for reduction in the proposed project area from 377.54 Ha to 377.065 Ha.	District Collector, Jaisalmer, Govt. of Rajasthan vide order dated 24 th March 2022 reserved 377.5487 Ha. land for establishment of Large Scale Industry, Cement Plant to Wonder Cement Limited. Vide Annexure A to the referred letter, reserved land comprises of 26 khasra having total land area

S. No.	Details/Documents, Clarification sought	Wonder Cement Limited's Reply
		<p>377.5487 ha. including Khasra number 1622 (listed at Sl no. 25) having the area of 3.0013 out of which 1.9462 reserved to Wonder Cement Limited. (Copy submitted).</p> <p>Further office of the District Collector- Jaisalmer vide letter dated 27th May 2022 (Copy submitted) issued the amendment order, to read 377.0650 ha in place of total land 377.5487 ha reserved for industrial purpose for establishment Cement Plant and to read old Khasra Number 1622 (listed at Sl no. 25 of annexure -A) having total area 3.0013 ha out of which 1.9462 reserved for industrial purpose for establishment of cement plant with new khasra no. 2138 having the total area 1.5209 out of which 1.4625 ha is reserved for industrial purpose for the establishment of Large Scale Industry Cement Plant by M/S Wonder Cement Limited. Due to aforesaid amended in the order, the total land area for the proposed cement plant is reduced/ revised from 377.5487 Ha to 377.065 ha.</p> <p>Subsequently, Joint Secretary, Department of Industries and Commerce, Govt. of Rajasthan granted the permission for allotment of 377.065 ha land for industrial purpose under the provisions of Rajasthan Industrial Area Allotment Rules, 1959 vide letter dated 5th Dec 2022 (Copy submitted) to Wonder Cement limited for setting up proposed Cement Plant. Further, to the permission granted for allotment of 377.065 ha land for industrial purpose, District collector allotted the said land to M/S Wonder Cement Limited vide their order dated 2nd Feb 2023 (Copy submitted) for the establishment of cement plant for an area of 377.065 ha.</p>
4.	PP should submit the approval regarding diversion of Road passing through proposed Cement Plant	PWD department has granted their permission for diversion of Road passing through proposed Cement Plant vide letter dated 11-04-2022 (Copy submitted). Subsequently, wonder Cement Limited has signed MOU with PWD department to divert the referred Road. (Copy of MoU submitted).
5.	Justification for Groundwater sampling at only one location.	Groundwater sampling was done at only one location during the study period; as there was no other source available for collecting groundwater in 10 km radius study area.
6.	PP should submit the undertaking , to engage and take the technical support of Arid Forest Research Institute (AFRI), Jodhpur and or Central Arid Zone Research Institute (CAZRI), Jodhpur organizations for developing	Undertaking dated 28.02.2023 to engage and take the technical support of Arid Forest Research Institute (AFRI), Jodhpur and or Central Arid Zone Research Institute (CAZRI), Jodhpur organizations for developing green belt, plantation in our proposed Integrated Cement Plant is submitted.

S. No.	Details/Documents, Clarification sought	Wonder Cement Limited's Reply
	green belt, plantation in our proposed Integrated Cement Plant.	

Deliberations by the Committee

24.3.17 The Committee noted the following:

1. The instant proposal is for setting Integrated Cement Project: Clinker - 8.0 Million TPA (2 x 4.0 Million TPA), Cement - 5.0 Million TPA (2 x 2.5 Million TPA), CPP - 40 MW (2 x 20 MW), WHRS - 40 MW (2 x 20 MW) in phased manner along with Railway Siding.
2. The EAC, constituted under the provision of the EIA Notification, 2006 comprising Expert Members/domain experts in various fields, examined the proposal submitted by the Project Proponent in desired format along with EIA/EMP reports prepared and submitted by the Consultant accredited by the QCI/ NABET on behalf of the Project Proponent.
3. The EAC noted that the Project Proponent has given an undertaking that the data and information given in the application and enclosures are true to the best of his knowledge and belief and no information has been suppressed in the EIA/EMP reports. If any part of data/information submitted is found to be false/ misleading at any stage, the project will be rejected and Environmental Clearance given, if any, will be revoked at the risk and cost of the project proponent.
4. The Committee noted that the EIA reports are in compliance of the ToR issued for the project, reflecting the present environmental status and the projected scenario for all the environmental components. The Committee deliberated on the proposed mitigation measure towards Air, Water, Noise and Soil pollutions. The Committee suggested that the storage of toxic/explosive raw materials/products shall be undertaken with utmost precautions and following the safety norms and best practices.
5. Total land required for the project is 377.065 ha (Entirely Government alienated barren land). Total land has been allotted to Wonder Cement Limited by District Collector, Jaisalmer Govt. of Rajasthan Vide Order dated 24th March 2022 and subsequent amendment on 27th May 2022. Subsequently, Joint Secretary, Department of Industries and Commerce, Govt. of Rajasthan granted the permission for allotment of 377.065 ha land for industrial purpose under the provisions of Rajasthan Industrial Area Allotment Rules, 1959 vide letter dated 5th Dec 2022 to Wonder Cement limited for setting up Integrated Cement Plant.
6. The nearest habitation to plant are Parewar (~0.8 km, SSW), Tulsiram ki Dhani (~1.3 km, NE) and Leela Parewar (~2.4 km, SW).
7. The total water requirement is 2300 KLD, which will be sourced from Indira Gandhi Canal / Nehar project (Sagarmal Gopa Branch). Permission for the same has been obtained from Indira Gandhi Nahar Department for withdrawal of 1700 KLD vide their

letter no. F. 6(3) IGNB/2021 dated 15th March, 2022. Permission for balance water requirement i.e., 600 KLD will be obtained from the concerned authority.

8. Proposed greenbelt will be developed in 124.59 ha which is about 33% of the total project area. Total no. of 3,11,475 saplings will be planted and nurtured in 124.59 ha in 03 years. The committee deliberated on the greenbelt development plan and found it satisfactory.
9. The Committee has found that the baseline data and incremental GLC due to the proposed project within NAAQ standards.
10. The committee deliberated details of carbon foot prints and carbon sequestration study w.r.t. proposed project and found them to be satisfactory.
11. The Committee also deliberated on the public hearing issues along with revised action plan submitted by the proponent to address the issues raised during the public hearing and found it satisfactory.
12. The Committee deliberated upon the written submission of the Project Proponent and found it satisfactory.
13. The EAC deliberated on the proposal with due diligence in the process as notified under the provisions of the EIA Notification, 2006, as amended from time to time and accordingly made the recommendations to the proposal. The Experts Members of the EAC found the proposal in order and recommended for grant of environmental clearance.
14. The environmental clearance recommended to the project/activity is strictly under the provisions of the EIA Notification 2006 and its subsequent amendments. It does not tantamount/construe to approvals/consent/permissions etc. required to be obtained or standards/conditions to be followed under any other Acts/ Rules/ Subordinate legislations, etc., as may be applicable to the project. The project proponent shall obtain necessary permission as mandated under the Water (Prevention and Control of Pollution) Act, 1974 and the Air (Prevention and Control of Pollution) Act, 1981, as applicable from time to time, from the State Pollution Control Board, prior to construction & operation of the project.

Recommendations of the Committee

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

A. Specific conditions:

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

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

- (iii) The nearest habitation to plant are Parewar (~0.8 km, SSW), Tulsiram ki Dhani (~1.3 km, NE) and Leela Parewar (~2.4 km, SW). Project Proponent shall take appropriate environmental safeguard measures to minimise the impact on the habitation of the locals. The PP shall also include some of these locations in its environmental monitoring programme.
- (iv) Village road passing through the plant area shall be diverted as per the MOU signed with PWD department.
- (v) As committed, PP shall adopt villages and formulate Village Adoption program consisting of need-based community development activities, to develop them into model villages.
- (vi) The water requirement for the proposed project of 2300 KLD, which will be sourced from Indira Gandhi Canal / Nehar project (Sagarmal Gopa Branch). Necessary permissions shall be obtained from the Competent Authority in this regard. No ground water abstraction is permitted.
- (vii) The PP shall explore the conversion of desert area in to the green one on pilot basis. In this regard, the PP shall conduct the studies with the guidance of the Central Arid Zone Research Institute. The PP shall also use the best available technology and best available practice prescribed in the various documents issued under the convention of UNCCD (India is the Party under the Convention).
- (viii) Three tier Green Belt shall be developed with majority in the 1st year covering at least 33% of the total project area as per the submitted plan with native species all along the periphery of the project site of adequate width and tree density shall not be less than 2500 per ha. Survival rate of green belt developed shall be monitored on periodic basis to ensure that damaged plants are replaced with new plants in the subsequent years. PP shall also develop greenbelt in the form of shelter belt comprising of total of 6 rows of 2x2 m plantation with tall trees & broad leaves with thick canopy along with windshield inside the plant premises to act as green barrier for air pollution & noise levels towards the villages namely Parewar (~0.8 km, SSW), Tulsiram ki Dhani (~1.3 km, NE) and Leela Parewar (~2.4 km, SW) within the plant premises. Compliance status in this regard, shall be submitted to concerned Regional Office of the MoEF&CC.
- (ix) Greening and Paving shall be implemented in the plant area to arrest soil erosion and dust pollution from exposed soil surface.
- (x) 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.
- (xi) 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.
- (xii) 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.
- (xiii) 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.

- (xiv) 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.
- (xv) Dioxin and furans shall be monitored twice a year during co-processing of hazardous waste and report shall be submitted to the Regional Office of the MoEF&CC.
- (xvi) Particulate matter emissions from all the stacks shall be less than 30 mg/Nm³.
- (xvii) DeSO_x system shall be provided dry type. NO_x level shall be maintained below 600 mg/Nm³ by using best available technology.
- (xviii) Petcoke dosing shall be controlled automatically to control SO₂ emission from chimney within the prescribed limits.
- (xix) PP shall identify the Source of fluoride emissions and action plan to mitigate the same shall be implemented.
- (xx) The railway siding from Sanu Railway station shall be completed as per the timebound action plan submitted with the EIA/EMP report.
- (xxi) A proper action plan must be implemented to dispose of the electronic waste generated in the industry.
- (xxii) Action Plan for fire fighting system including provision for flame detectors, temperature actuated heat detectors with alarms, automatic sprinkler system, fixing the location of fire water tanks, separate power system for fire fighting, involvement of qualified and trained fire personnel, nearest fire station & time required to reach the proposed site shall be prepared and implemented.
- (xxiii) All the recommendations made in the risk assessment report shall be implemented and compliance status in this regard shall be furnished to the Regional Office of the MoEF&CC along with the six monthly compliance report.
- (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 with respect to standards prescribed in Environment (Protection) Rules 1986 vide G.S.R. No. 612 (E) dated 25th August, 2014 (Cement) and subsequent amendment dated 9th May, 2016 (Cement) and 10th May, 2016 (in case of Co-processing Cement); as amended from time to time; and connected to SPCB and CPCB online servers and calibrate these system from time to time according to equipment supplier specification through labs recognized under Environment (Protection) Act, 1986 or NABL accredited laboratories.
- ii. The project proponent shall monitor fugitive emissions in the plant premises at least once in every quarter through labs recognised under Environment (Protection) Act, 1986.
- iii. The project proponent shall install system carryout to Ambient Air Quality monitoring for common/criterion parameters relevant to the main pollutants released (e.g. PM10 and PM2.5 in reference to PM emission, and SO2 and NOx in reference to SO2 and NOx emissions) within and outside the plant area at least at four locations (one within and three outside the plant area at an angle of 120°each), covering upwind and downwind directions.
- iv. The project proponent shall submit monthly summary report of continuous stack emission and air quality monitoring and results of manual stack monitoring and manual monitoring of air quality /fugitive emissions to Regional Office of MoEF&CC, Zonal office of CPCB and Regional Office of SPCB along with six-monthly monitoring report.
- v. Appropriate Air Pollution Control (APC) system shall be provided for all the dust generating points including fugitive dust from all vulnerable sources, so as to comply prescribed stack emission and fugitive emission standards.
- vi. The project proponent shall provide leakage detection and mechanised bag cleaning facilities for better maintenance of bags.
- vii. Pollution control system in the cement plant shall be provided as per the CREP Guidelines of CPCB.
- viii. Sufficient number of mobile or stationery vacuum cleaners shall be provided to clean plant roads, shop floors, roofs, regularly.
- ix. Ensure covered transportation and conveying of raw material to prevent spillage and dust generation; Use closed bulkers for carrying fly ash.
- x. Provide wind shelter fence and chemical spraying on the raw material stock piles; and

- xi. Provide Low NOX burners as primary measures and SCR /NSCR technologies as secondary measure to control NOX emissions.
- xii. Have separate truck parking area and monitor vehicular emissions at regular interval.
- xiii. Efforts shall be made to reduce impact of the transport of the raw materials and end products on the surrounding environment including agricultural land by the use of covered conveyor belts/railways as a mode of transport
- xiv. Ventilation system shall be designed for adequate air changes as per ACGIH document for all tunnels, motor houses, cement bagging plants.

III. Water quality monitoring and preservation

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

IV. Noise monitoring and prevention

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

V. Energy Conservation measures

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

VI. Waste management

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

VII. Green Belt

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

VIII. Public hearing and Human health issues

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

IX. Environment Management

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

X. Miscellaneous

- i. The project proponent shall make public the environmental clearance granted for their project along with the environmental conditions and safeguards at their cost by prominently advertising it at least in two local newspapers of the District or State, of which one shall be in the vernacular language within seven days and in addition this shall also be displayed in the project proponent's website permanently.
- ii. The copies of the environmental clearance shall be submitted by the project proponents to the Heads of local bodies, Panchayats and Municipal Bodies in addition to the relevant offices of the Government who in turn has to display the same for 30 days from the date of receipt.
- iii. The project proponent shall upload the status of compliance of the stipulated environment clearance conditions, including results of monitored data on their website and update the same on half-yearly basis.
- iv. The project proponent shall monitor the criteria pollutants level namely; PM10, SO₂, NO_x (ambient levels as well as stack emissions) or critical sectoral parameters, indicated for the projects and display the same at a convenient location for disclosure to the public and put on the website of the company.
- v. The project proponent shall submit six-monthly reports on the status of the compliance of the stipulated environmental conditions on the website of the ministry of Environment, Forest and Climate Change at environment clearance portal.
- vi. The project proponent shall submit the environmental statement for each financial year in Form-V to the concerned State Pollution Control Board as prescribed under the Environment (Protection) Rules, 1986, as amended subsequently and put on the website of the company.
- vii. The project proponent shall inform the Regional Office as well as the Ministry, the date of financial closure and final approval of the project by the concerned authorities, commencing the land development work and start of production operation by the project.
- viii. The project proponent shall abide by all the commitments and recommendations made in the EIA/EMP report, commitment made during Public Hearing and also that during their presentation to the Expert Appraisal Committee.
- ix. The PP shall put all the environment related expenditure, expenditure related to Action Plan on the PH issues, and other commitments made in the EIA/EMP Report etc. in the company web site for the information to public/public domain. The PP shall also put the information on the left over funds allocated to EMP and PH as committed in the earlier ECs and shall be carried out and spent in next three years, in the company web site for the information to public/public domain.
- x. No further expansion or modifications in the plant shall be carried out without prior approval of the Ministry of Environment, Forests and Climate Change (MoEF&CC).
- xi. Concealing factual data or submission of false/fabricated data may result in revocation of this environmental clearance and attract action under the provisions of Environment (Protection) Act, 1986.
- xii. The Ministry may revoke or suspend the clearance, if implementation of any of the above conditions is not satisfactory.
- xiii. The Ministry reserves the right to stipulate additional conditions if found necessary. The Company in a time bound manner shall implement these conditions.

- xiv. The Regional Office of this Ministry shall monitor compliance of the stipulated conditions. The project authorities should extend full cooperation to the officer (s) of the Regional Office by furnishing the requisite data / information/monitoring reports.
- xv. Any appeal against this EC shall lie with the National Green Tribunal, if preferred, within a period of 30 days as prescribed under Section 16 of the National Green Tribunal Act, 2010.

Re-consideration of Environmental Clearance Proposal

Agenda No. 24.4

24.4 Expansion in Existing Environmental Clearance granted capacity of Integrated Cement Plant - Clinker: 2.0 to 4.5 million TPA, Cement: 4.0 to 6.0 Million TPA, Waste Heat Recovery Power Generation: 20 to 40 MW and installation of Captive Power Plant: 25 MW, DG Sets of 2000 KVA (1000/500/250/125 KVA) along with Railway Siding at Village: Gothra, Tehsil: Nawalgarh, District: Jhunjhunu, Rajasthan by M/s Shree Cement Limited -Re-Consideration of Environmental Clearance.

[Proposal No.: IA/RJ/IND1/407182/2022; File No. J-11011/1173/2007-IA.II (I)]
[Consultant: J.M. EnviroNet Pvt. Ltd.; Valid upto : 07.08.2023]

- 24.4.1 Shree Cement Limited has made an online application vide proposal no. IA/RJ/IND1/407182/2022 dated 2nd December, 2022 along with copy of EIA/EMP Report, Forms (Part A, B and C) and Certified Compliance Report seeking Environment Clearance (EC) under the provisions of the EIA Notification, 2006, as amended thereof for the project mentioned above. The proposed project activity is listed at schedule no. 3(b) Cement Plants and 1(d) Thermal Power Plants under Category “A” of the schedule of the EIA Notification, 2006 and appraised at Central Level.
- 24.4.2 Name of the EIA consultant: M/s. J.M. Environet Pvt. Ltd. [List of ACOs with their Certificate / Extension Letter no. NABET/EIA/2023/SA 0172; Valid up to 07.08.2023, as on February 27, 2023.
- 24.4.3 The proposal cited above was considered during the 19th EAC meeting held during 16th & 19th December 2022. After detailed deliberation, it was observed by the EAC that:
1. The existing project was initially accorded EC from MoEF&CC, New Delhi for Integrated Cement Plant (Clinker: 2.0 Million TPA, Cement: 3.0 Million TPA), CPP: 36 MW, WHRS: 15 MW and Limestone Mine (ML Area: 624 ha) with limestone production capacity of 3.2 Million TPA; further validity of same for 3 years was extended vide letter dated 29th September, 2016; which was expired on 14th July, 2019 for Integrated Cement Plant, whereas the same EC is valid for Captive Limestone Mines upto 14th July, 2039. Due to expiry of earlier granted EC, a fresh EC of Integrated Cement Plant on same project site with revised capacities (Clinker: 2.0 Million TPA, Cement: 4.0 Million TPA,

Waste Heat Recovery Power Generation: 20 MW, Captive Power Plant: 25 MW and D.G. Sets of 2000 KVA) was granted by MoEF&CC vide letter dated 3rd February 2021. Integrated Cement Plant with production capacity 2.0 Million TPA Clinker, 3.0 Million TPA Cement, granted by RSPCB vide letter dated 28.02.2019. Based on EC obtained from MoEF&CC, the project is under construction of utilities & infrastructure development and yet not operational.

2. The EAC noted that instant proposal is a part of Interlinked project. Limestone Mine (ML No.: 47/2007& ML Area: 624 ha.) with existing production capacity of 3.2 Million TPA located at Village: Gothra, Tehsil: Nawalgarh, District: Jhunjhunu (Rajasthan). Environmental Clearance for the mine has been obtained from MoEF&CC, New Delhi vide letter no. J-11011/1173/2007-IA II (I) dated 15th July, 2009 (valid up to 14th July, 2039). To cater the limestone requirement after Expansion of Integrated Cement Plant from Environmental Clearance granted Capacity, a separate EC application (Proposal No. IA/RJ/MIN/272197/2022 dated 11.05.2022) for increase of limestone production capacity from 3.2 to 6.822 Million TPA was submitted to MoEF&CC. The proposal was considered in the 53rd EAC meeting of Non-Coal Mining (NCM) Sector held during 28th – 29th June, 2022. The project proponent submitted the proposal for Terms of Reference for Expansion in Limestone Production Capacity from 3.2 Million TPA to 6.822 Million TPA (Total Excavation: 27.298 Million TPA). *After, the detailed deliberations, the Committee (NCM) noted that the project proponent has started production in the year 2021-22 and has achieved a production of 478.18 tonnes only out of the 3.2 MTPA production limit granted in the earlier Environmental Clearance letter dated 15.07.2009. Also, the Committee (NCM) observed that there will be an instant shock load on the environment by jumping twice the production capacity granted in previous Environmental Clearance. The EAC (NCM) felt that the Environmental Management Plan (EMP) which is in place cannot be fully tested at this juncture since the production capacity reached by the project proponent is way beyond the prescribed limit. The EAC (NCM) was of the opinion that this project must first achieve at least 50% capacity of the EC granted for generating pragmatic baseline data for appraisal by the Committee. Furthermore, the project proponent is advised to submit the compliance in terms of plantation, efficacy of EMP on the maximum production that it achieves before seeking expansion. Therefore, the Committee (NCM) deferred the proposal.* The EAC noted that PP has hid this information and these facts are not submitted before the EAC neither in presentation nor in the Report. In view of the same, the EAC (Industry-1) seeks clarification from the PP regarding fulfilling the limestone requirement for the proposed expansion in the instant application.
3. On perusal of kml file, the EAC noted that there are number of the schools adjacent to the project site (Three corners of the boundary of the project) and within the study area. However, PP has not reported this neither in the EIA/EMP Report nor in the Presentation. The EAC also observed that there is a habitation inside the project boundary, though PP has reported that there is no habitation within the plant site and hence R&R is not applicable. Further PP has reported that the nearest habitation to the project site include Gothra (0.5 Km, NE), Dhani Kanakawali (1.5 km, WSW), Jhajhar (1.5 km, WNW), Basawa (2 km, SSW), Keswa Ki Dhani (2 Km, NE), Neharon Ki Dhani (3 km, SSe) and Bhairoo Ki Bas (3 km, NNW). There are approx. 43 other villages in 10 km radius study

area of the project site. **Considering the Environmental Sensitivity to the adjacent schools and habitation in the area, the EAC opined that it is prudent to inspect the area for understanding the ground reality as the area appears to have rich habitation.**

4. 1000 m³/day water is proposed for the expansion project which is proposed to be sourced from STP Treated Water of Nagar Palika, Nawalgarh/ Ground Water/ Mine Pit. The EAC deliberated on water consumption and consequently the ETP/STP capacity and is of the view that the quantity of water requirement is not justified and there is a need to understand the water balance along with the source of water available near the project site as PP has also proposed the ground water as source of water.
5. The PP shall submit the compliance status of earlier commitments and its implementation status along with details of expenditures on the issues raised during the PH while granting the EC in February 2021.
6. Existing greenbelt (GB) is developed in 3.7 ha area (6476 Nos saplings) only which is about 2.47% of the total project area. The Committee deliberated that EC was granted long back in 2009 and further in 2021 and still the greenbelt development is very poor. The GB width along plot boundary is too small. It must be around 40 m to incorporate 3 tier GB design. Further for 49.40ha of Gb the PP to plant 123500 trees. PP shall ensure around 1200cum water per day for the proposed GB sustainability.
7. Thus, in view of the above observations the EAC is of the opinion that it is pertinent to undertake site visit to understand the ecological/environmental sensitivity of the area to the schools and local habitation, fulfilment of raw material (limestone), water consumption, sources & treatment proposed in project, greenbelt development at the project site.

24.4.4 In view of the foregoing and after deliberations, the Committee recommended to defer the proposed project and recommended for site visit of the proposed project area by a sub-committee of EAC Industry-1 members comprising of Dr. J.K. Pandey, Dr. S. Raghavan 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.

24.4.5 Accordingly, the EAC (Industry-1) sub-committee conducted a site visit to M/s. Shree Cement Limited, located at Village: Gothra, Tehsil: Nawalgarh, District: Jhunjhunu, Rajasthan during 13-14th January 2022.

24.4.6 At this instance, the proposal was further considered by the EAC (Industry 1) in its 24th meeting of the EAC for Industry-I sector held on 28th February – 1st March, 2023. The details of the proposed project are as follows:

Details submitted by Project proponent

24.4.7 The details of the ToR are furnished as below:

Date of Application	Consideration	Details	Date of accord	ToR Validity
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Date of Application	Consideration	Details	Date of accord	ToR Validity
11 th May, 2022	Standard ToR was issued by MoEF&CC	Standard Terms of Reference	08 th June, 2022	07 th June, 2026

24.4.8 The project of M/s. Shree Cement Limited located at Gothra Village, Nawalgarh Tehsil, Jhunjhunu District, Rajasthan is for expansion in existing Environmental Clearance granted capacity of Integrated Cement Plant - Clinker: 2.0 to 4.5 Million TPA, Cement: 4.0 to 6.0 Million TPA, Waste Heat Recovery Power Generation: 20 to 40 MW and installation of Captive Power Plant: 25 MW, DG Sets of 2000 KVA (1000/500/250/125 KVA) along with Railway Siding.

24.4.9 Environmental Site Settings:

S. No.	Particulars	Details submitted by the PP	Remarks																								
i.	Total land	Total Land Area of the Integrated Cement Plant Site including township is 153.62 ha; Out of which, 3.92 ha. land widening and construction of connecting area excluded for Road. The Effective land area of Integrated Cement Plant including residential colony is 149.70 ha; Out of 149.70 ha i.e., effective area of the site, 135.34 ha is for the Integrated Cement Plant (including 49.2 ha common area of plant & mine lease) and remaining 14.36 ha area is reserve for residential Colony.	Land use: Industrial Land																								
ii.	Land acquisition details as per MoEF&CC O.M. dated 7/10/2014.	Total land is under the possession of the company.	-																								
iii.	Existence of habitation & involvement of R&R, if any.	<p>Plant Site: No habitation exists within the plant site and R&R is not applicable.</p> <p>Study Area:</p> <table border="1"> <thead> <tr> <th>Habitation</th> <th>Distance (km)</th> <th>Direction</th> </tr> </thead> <tbody> <tr> <td>Gothra</td> <td>~0.50 Km</td> <td>NE</td> </tr> <tr> <td>Dhani Kanakawali</td> <td>~1.50 Km</td> <td>WSW</td> </tr> <tr> <td>Jhajhar</td> <td>~1.50 Km</td> <td>WNW</td> </tr> <tr> <td>Basawa</td> <td>~2.0 Km</td> <td>SSW</td> </tr> <tr> <td>Keswa Ki Dhani</td> <td>~2.0 Km</td> <td>NE</td> </tr> <tr> <td>Neharon Ki Dhani</td> <td>~3.0 Km</td> <td>SSE</td> </tr> <tr> <td>Bhairoo Ki Bas</td> <td>~3.0 Km</td> <td>NNW</td> </tr> </tbody> </table> <p>There are approx. 43 other villages in 10 km radius study area.</p>	Habitation	Distance (km)	Direction	Gothra	~0.50 Km	NE	Dhani Kanakawali	~1.50 Km	WSW	Jhajhar	~1.50 Km	WNW	Basawa	~2.0 Km	SSW	Keswa Ki Dhani	~2.0 Km	NE	Neharon Ki Dhani	~3.0 Km	SSE	Bhairoo Ki Bas	~3.0 Km	NNW	-
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iv.	Latitude and Longitude of all corners of the project site	<table border="1"> <thead> <tr> <th>Point</th> <th>Latitude</th> <th>Longitude</th> </tr> </thead> <tbody> <tr> <td>19.</td> <td>27°48'03.82"N</td> <td>75°19'47.11"E</td> </tr> </tbody> </table>	Point	Latitude	Longitude	19.	27°48'03.82"N	75°19'47.11"E	-																		
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S. No.	Particulars	Details submitted by the PP			Remarks						
		20.	27°47'33.39"N	75°20'32.69"E							
		21.	27°47'59.02"N	75°20'26.98"E							
		22.	27°47'14.43"N	75°20'27.46"E							
		23.	27°47'54.68"N	75°20'25.51"E							
		24.	27°47'22.98"N	75°19'41.33"E							
		25.	27°47'53.97"N	75°20'28.85"E							
		26.	27°47'35.64"N	75°19'37.49"E							
		27.	27°47'36.13"N	75°20'20.64"E							
		28.	27°47'35.92"N	75°19'44.51"E							
v.	Elevation of the project site	415 m to 422 m above mean sea level.			-						
vi.	Involvement of Forest land if any.	No Forest Land is involved in the plant site.			-						
vii.	Water body (Rivers, Lakes, Pond, Nala, Natural Drainage, Canal etc.) exists within the project site as well as study area	<p>Plant site: No water body exists within the plant site.</p> <p>Study area: Following water body fall within 10 km radius:</p> <table border="1"> <thead> <tr> <th>Water body</th> <th>Distance (km)</th> <th>Direction</th> </tr> </thead> <tbody> <tr> <td>Udaipur Lohagarh Ki Nadi</td> <td>~4.0 km</td> <td>ENE</td> </tr> </tbody> </table>			Water body	Distance (km)	Direction	Udaipur Lohagarh Ki Nadi	~4.0 km	ENE	-
Water body	Distance (km)	Direction									
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viii.	Existence of ESZ/ESA/national park/wildlife sanctuary/biosphere reserve/tiger reserve/elephant reserve etc. if any within the study area.	Nil.			-						
ix	Interlinked Project	<ul style="list-style-type: none"> Limestone Mine (ML No.: 47/2007& ML Area: 624 ha.) with existing production capacity of 3.2 Million TPA located at Village: Gothra, Tehsil: Nawalgarh, District: Jhunjhunu (Rajasthan). Environmental Clearance for the mine has been obtained from MoEF&CC, New Delhi vide letter no. J-11011/1173/2007-IA II (I) dated 15th July, 2009 (valid up to 14th July, 2039). To cater the limestone requirement after Expansion of Integrated Cement Plant from Environmental Clearance granted Capacity, a separate EC application for Gothra Limestone Mine with limestone production capacity from 3.2 to 6.822 Million TPA is under process with MoEF&CC. 									

24.4.10 The existing project was initially accorded Environmental Clearance from MoEF&CC, New Delhi for Integrated Cement Plant (Clinker: 2.0 Million TPA, Cement: 3.0 Million TPA),

CPP: 36 MW, WHRS: 15 MW and Limestone Mine (ML Area: 624 ha) with limestone production capacity of 3.2 Million TPA at Village: Gothra, Tehsil: Nawalgarh, District: Jhunjhunu (Rajasthan) of Shree Cement Ltd.; further validity of same for 3 years was extended vide letter dated 29th September, 2016; which was expired on 14th July, 2019 for Integrated Cement Plant, whereas the same EC is valid for Captive Limestone Mines upto 14th July, 2039. Due to expiry of earlier granted EC, a fresh EC of Integrated Cement Plant on same project site with revised capacities (Clinker: 2.0 Million TPA, Cement: 4.0 Million TPA, Waste Heat Recovery Power Generation: 20 MW, Captive Power Plant: 25 MW and D.G. Sets of 2000 KVA) was granted by MoEF&CC vide letter no. J-11011/1173/2007-IA.II (I) dated 03rd February 2021. Integrated Cement Plant with production capacity 2.0 Million TPA Clinker, 3.0 Million TPA Cement, located at Village: Gothra, Tehsil: Nawalgarh, District: Jhunjhunu (Rajasthan) of Shree Cement Limited granted by RSPCB vide letter no. F(CPM)/Jhunjhunu (Nawalgarh)/2(1)/2018-2019/ 7228-7230 and vide Order No. 2018-2019/CPM/5424 dated 28.02.2019, Validity: 14.06.2018 to 31.05.2023. Based on EC obtained from MoEF&CC, the project is under construction of utilities & infrastructure development and yet not operational. Consent to Establish for Integrated Cement Plant with production capacity 2.0 Million TPA Clinker, 3.0 Million TPA Cement, granted by RSPCB vide letter no. F(CPM)/Jhunjhunu (Nawalgarh)/2(1)/2018-2019/ 7228-7230 and vide Order No. 2018-2019/CPM/5424 dated 28.02.2019 Validity: 14/06/2018 to 31/05/2023, Consent to Establish for Additional Cement production capacity 1.0 Million TPA Cement granted by RSPCB vide letter no. F(CPM)/ Jhunjhunu (Nawalgarh)/ 2(1)/2018-2019/636-638 and vide Order No. 2021-2022/CPM/5701 dated 15.06.2021 with Validity: 02.03.2021 to 28.02.2026, & Captive Power Plant of 36 MW, WHRS of 20 MW granted by RSPCB vide letter no. F(CPM)/Jhunjhunu(Nawalgarh)/2(1)/2018-2019/7793-7795 and vide Order No. 2018-2019/CPM/5447 dated 26.03.2019 Validity: 14.06.2018 to 31.05.2023 and Residential Colony granted vide letter no. F(CPM)/Jhunjhunu(Nawalgarh)/2(1)/2018-2019/5858-5860 and vide Order No. 2021-2022/CPM/8544 dated 24.01.2022 Validity: 03.11.2021 to 31.10.2026.

Facilities Envisaged	Consent Status (CTE)	Implementation Status	Production details as per CTE
Clinker	Integrated Cement Plant with production capacity 2.0 Million TPA Clinker, 3.0 Million TPA Cement, located at Village: Gothra, Tehsil: Nawalgarh, District: Jhunjhunu (Rajasthan) of Shree Cement Limited granted by RSPCB vide letter no. F(CPM)/Jhunjhunu (Nawalgarh)/2(1)/2018-2019/ 7228-7230 and vide Order No. 2018-2019/CPM/5424 dated 28.02.2019 Validity: 14.06.2018 to 31.05.2023	At present, the project is under construction of utilities & infrastructure development and yet not operational.	2.0 Million TPA
Cement	Additional Cement production capacity 1.0 Million TPA Cement located at Village: Gothra, Tehsil: Nawalgarh, District: Jhunjhunu (Rajasthan) of Shree Cement Limited granted by RSPCB vide letter no. F(CPM)/ Jhunjhunu (Nawalgarh)/ 2(1)/2018-2019/636-638 and vide Order No. 2021-		3.0 Million TPA
			1.0 Million TPA

	2022/CPM/5701 dated 15.06.2021 Validity: 02.03.2021 to 28.02.2026		
CPP	Captive Power Plant of 36 MW, WHRS of 20 MW located at Village: Gothra, Tehsil: Nawalgarh, District: Jhunjhunu (Rajasthan) granted by RSPCB vide letter no. F(CPM)/Jhunjhunu(Nawalgarh)/2(1)/2018-2019/7793-7795 and vide Order No. 2018-2019/CPM/5447 dated 26.03.2019 Validity: 14/06/2018 to 31/05/2023	At present, the project is under construction of utilities & infrastructure development and yet not operational	36 MW
WHRs			20 MW

24.4.11 Implementation status of the existing EC:

S. No.	Facilities	Units	As per EC dated 03 rd February 2021	Implementation Status as on date	As per CTO
1.	Clinker	Million TPA	2.0	Not implemented	At present, the project is under construction for utilities & infrastructure development and yet not operational.
2.	Cement	Million TPA	4.0	Not implemented	
3.	WHRs	MW	20 MW	Not implemented	
4.	CPP	MW	25 MW	Not implemented	
5.	D.G. Sets	KVA	2000	Not implemented	

24.4.12 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 03 rd February, 2021						Proposed Unit*		Final (Existing + Proposed)	
		Total (A + B)		Implemented (A)		Un - implemented (B)		Config uration	Capacity	Config uration	Capacity
		Config uration	Capacity	Config uration	Capacity	Config uration	Capacity				
1.	Clinker*	Kiln: 1 x 6700 TPD	2.0 Million TPA	-	-	Kiln: 1 x 6700 TPD	2.0 Million TPA	Kiln: 1 x 7500 TPD	2.5 Million TPA	Kiln: 1 x 13500 TPD	4.5 Million TPA
2.	Cement	VRM / Ball mill with Roller Press: 1 x 13400 TPD	4.0 Million TPA	-	-	VRM / Ball mill with Roller Press: 1 x 13400 TPD	4.0 Million TPA	VRM 2 x 9000 TPH	2.0 Million TPA	VRM 18000 TPH	6.0 Million TPA
3.	CPP	CPP Boiler 1 x 136 TPH	25 MW	-	-	CPP Boiler 1 x 136 TPH	25 MW	-	-	CPP Boiler 1 x 136 TPH	25 MW

4.	WHRS	PH & AQC Boiler (20 MW)	20 MW	-	-	PH & AQC Boiler (20 MW)	20 MW	PH & AQC Boiler (20 MW)	20 MW	PH & AQC Boiler (40 MW)	40 MW
*Clinker will also be sent to the sister grinding units, market sale (through rail and road) and will also be received from outside or sister units of SCL, if clinker unit is not in operation or in case of shortfall of clinker.											

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

S. No.	Name of Raw Material	Quantity (MTPA)			Source	Distance from site (Kms)	Mode of Transportation
		Existing	Additio nal	Total			
For Clinker							
1.	Limestone	3.2	3.622	6.822	Captive limestone mine	Adjacent to the plant	Covered Conveyor belt
2.	Laterite/ Iron ore/ Mill scale/ Lead Zinc Slag	0.06	0.0075	0.0675	Laterite from Bhilwara, Lead zinc slag, Iron ore and red ochre from Chittorgarh (Raj.) and mill scale from Mandi Gobindgarh, Punjab	280 – 400 km	By Road

Raw material requirement - OPC/RHPC/SRC/PPC/PSC/Composite Cement

SN	Raw Material	Requirement (in Million TPA) for Cement Production ***								Source	Distance (in km) and Mode of transportation
		Existing Capacity as per granted EC **				Total Capacity after expansion					
		OPC / RHPC/ SRC	PPC	PSC	Composite Cement	OPC / RHPC/ SRC	PPC	PSC	Composite Cement		
1	Clinker*	2.00	2.32	1.52	1.52	5.58*	3.48	2.28	2.28	Expansion of clinker unit (4.5 Million TPA) Within Plant	via Covered Conveyor Belt
2	Gypsum	0.15	0.28	0.28	0.28	0.42	0.42	0.42	0.42	Mineral & Chemical Gypsum from Nagaur and Bikaner (Raj.); Synthetic Gypsum from sister units of SCL at Beawar (Ajmer) and Ras (Pali); Imported Gypsum from Oman & Pakistan via Kandla Port	170 to 300 By Road & Rail 950 Kandla Port By Road & Rail
3	Fly ash	-	1.4	-	1.4	-	2.10		2.10	Panipat Thermal	230 to 300

SN	Raw Material	Requirement (in Million TPA) for Cement Production ***								Source	Distance (in km) and Mode of transportation
		Existing Capacity as per granted EC **				Total Capacity after expansion					
		OPC / RHPC/ SRC	PPC	PSC	Composite Cement	OPC / RHPC/ SRC	PPC	PSC	Composite Cement		
										Power Station /Suratgarh Super Thermal Power Station (RVUNL), Suratgarh & CPP	By Road
4	Slag	-	-	2.2	0.8	-	-	3.30	1.20	Tata Steel Ltd., Jamshedpur; Rourkela Steel Plant, Rourkela; Bhilai Steel Plant, Bhilai, Tata Steel, Jamshedpur etc.	1400 to 1600 By Road & Rail
Total		2.15	4.0	4.0	4.0	6.0	6.0	6.0	6.0	-	-

* Clinker will also be sent to the sister grinding units, market sale and will also be received (rail and road) from outside if Clinkerization plant is not in operation or in case of shortfall of clinker.
** As per granted EC & CTE/ Under construction phase
*** Cement production will be done 6.0 Million TPA only either from various options as OPC/RHPC/SRC/PPC/PSC/Composite Cement.

24.4.14 The water requirement as per existing granted EC for Integrated Cement Plant is 750 KLD and the total water requirement after expansion will be 1000 KLD; which will be sourced from STP Treated Water of Nagar Palika, Nawalgarh/ Ground Water/ Mine Pit. Permission for withdrawal of 1200 KLD of Ground Water was obtained from CGWA vide NOC No. CGWA/NOC/IND/REN/1/2022/7128 which is valid up to 31st December, 2023 and an agreement has been signed on 21st July, 2020 between Shree Cement Limited and Nagar Palika, Nawalgarh for supply of 3 MLD treated sewage water to meet the requirement of non-potable industrial applications for the project.

24.4.15 The power requirement as per existing granted EC is 35.6 MW. Total requirement after expansion will be 65.37 MW; out of which 25 MW will be sourced from CPP, 40 MW will be sourced from WHRS and balance will be sourced from State Grid supply and DG Sets (plant lighting in case of emergency).

24.4.16 Baseline Environmental Studies:

Period	Winter Season (December, 2021 to February, 2022)
AAQ parameters at 12 locations	<ul style="list-style-type: none"> PM_{2.5} - 25.1 to 46.1 µg/m³ PM₁₀ - 51 to 83.7 µg/m³ SO₂ - 5.3 to 13.8 µg/m³ NO₂ - 10.6 to 25.5 µg/m³ CO - BDL to 0.78 mg/m³
Incremental GLC level	<ul style="list-style-type: none"> PM = 2.29 µg/m³ (Level at 100 m in SE direction) SO₂ = 2.41 µg/m³ (Level at 700 m in SE direction)

	<ul style="list-style-type: none"> • NO_x = 3.97 µg/m³ (Level at 900 m in SE direction) • CO = 0.000307 mg/m³ (Level at 100 m in SE direction) 															
Ground water quality at 09 locations	<ul style="list-style-type: none"> • pH - 7.63 to 7.96 • Total Hardness - 155.45 to 255.65 mg/l • Chlorides –79.65 to 186.32 mg/l • Fluoride - 0.76 to 1.16 mg/l • Heavy Metals - Iron as Fe: 0.14 to 0.26 mg/l 															
Surface water quality	Surface water sample could not be collected as the water body is seasonal water body (Udaipur Lohagarh Ki Nadi at ~4.0 Km in ENE direction) and was found dry during the monitoring period.															
Noise levels at 08 locations	Noise Level During Day Time –50.9 to 65.6 Leq dB (A) Noise Level During Night Time –40.9 to 43.6 Leq dB (A)															
Traffic assessment study findings	<ul style="list-style-type: none"> ▪ Traffic study has been conducted at SH –8 which is approximately 8.0 km in WNW direction and from Village Road connecting to MDR-25B; which is adjacent to plant site. ▪ Transportation of raw material & finished product will be done as per details given below: <ul style="list-style-type: none"> ▪ Limestone - via Covered Conveyor belt from Captive Limestone Mine ▪ Fly ash - 100% by road ▪ Gypsum (Mineral, Chemical & Imported) – 50% by road & 50 % by rail ▪ Slag - 50 % by road & 50 % by rail ▪ Iron ore - 50 % by road & 50 % by rail ▪ Bauxite - 50 % by road & 50 % by rail ▪ Clinker – 50 % by road & 50 % by rail ▪ Cement - 50 % by road & 50 % by rail. ▪ PCU load after proposed project will be 471.45 (Existing) + 247 (Additional) PCU/hr on SH –8 and 61.9 (Existing) + 199.75 (Additional) at on Village Road connecting to MDR-25B and level of service (LOS) will be: <table border="1"> <thead> <tr> <th>Road</th> <th>V (Volume in PCU/hr.)</th> <th>C (Capacity in PCU/hr.)</th> <th>Existing V/C Ratio</th> <th>LOS</th> </tr> </thead> <tbody> <tr> <td>SH– 8</td> <td>471.45 (Existing) + 247 (Additional)</td> <td>1200</td> <td>0.59</td> <td>C</td> </tr> <tr> <td>Village Road connecting to MDR-25B</td> <td>61.9 (Existing) + 199.75 (Additional)</td> <td>625</td> <td>0.42</td> <td>C</td> </tr> </tbody> </table> <p>* Capacity as per IRC- 64-1990 & 106-1990 Guidelines.</p> <p>Conclusion: The level of service will be “C” i.e., Good for SH - 8 and village road connecting to MDR-25B due to expansion project (before installation of railway siding).</p> <ul style="list-style-type: none"> ▪ PCU load after expansion project (After installation of Railway Siding) will be 471.45 (Existing) + 137 (Additional) PCU/hr. on SH –8 and 61.9 (Existing) + 111.25 (Additional) at on Village Road connecting to MDR-25B and level of service (LOS) will be: 	Road	V (Volume in PCU/hr.)	C (Capacity in PCU/hr.)	Existing V/C Ratio	LOS	SH– 8	471.45 (Existing) + 247 (Additional)	1200	0.59	C	Village Road connecting to MDR-25B	61.9 (Existing) + 199.75 (Additional)	625	0.42	C
Road	V (Volume in PCU/hr.)	C (Capacity in PCU/hr.)	Existing V/C Ratio	LOS												
SH– 8	471.45 (Existing) + 247 (Additional)	1200	0.59	C												
Village Road connecting to MDR-25B	61.9 (Existing) + 199.75 (Additional)	625	0.42	C												

	Road	V (Volume in PCU/hr.)	C (Capacity in PCU/hr.)	Existing V/C Ratio	LOS
	SH –8	471.45 (Existing) + 137 (Additional)	1200	0.50	C
	Village Road connecting to MDR-25B	61.9 (Existing) + 111.25 (Additional)	625	0.27	B
* Capacity as per IRC- 64-1990 & 106-1990 Guidelines.					
Conclusion: The level of service will be “C” i.e., Good for SH- 8 and “B” i.e., Very Good for village road connecting to MDR-25B after including additional traffic due to expansion project (after installation of railway siding).					
SCL’s proposal for installation of railway siding will turns out to be beneficial to the environment in terms of global CO₂ emission reduction, reduction in GHG emission and ultimately will lead to achieve Sustainable Development Goal for the Indian Railway sector.					
Flora and fauna	Two schedule - I species i.e., Indian Peafowl (<i>Pavo cristatus</i>) & Desert Cat (<i>Felis libyca</i>) recorded in the study area during field survey; which are categorized as Schedule - I according to (IWPA) Indian Wildlife Protection Act’ 1972. Wildlife Conservation Plan for all the Schedule- I species has been authenticated by PCCF (Wildlife) Jaipur on 26 th Nov., 2020.				

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

S. No.	Type of Waste	Waste	Source	Quantity Generated (Approx.)	Mode of Treatment / Disposal
1.	SW	Dust	Cement Plant	1.0625 TPA	Dust collected from various APCEs will be totally recycled back into the process.
2.	SW	Fly ash	CPP	438 TPD	Will be utilized in cement manufacturing process (PPC & Composite Cement)
3.	SW	STP Sludge	STP	6 Kg/day	Will be used as manure in horticulture and greenbelt development.
3.	HW	Used / Spent Oil (5.1) and Waste	Plant maintenance	100 KL / Annum	Will be generated as per Schedule- I of Hazardous and Other Wastes (Management and Transboundary Movement) Rules, 2016; which will be sold to CPCB/ SPCB authorized recycler. Used Oil/ Spent oil will be filled in Empty barrels and further sold to CPCB/ SPCB authorized recycler.
		Waste/ Residue (contaminated cotton rags) containing oil(Cat 5.2)		2.0 Tonnes/ Annum	
		Empty Barrels		300 Barrels/ Annum	
		E-Waste		0.15 Tonnes/Annum	
		Used Lead acid batteries		100 Nos./Annum	
					Will be sold to registered vendors as per E-Waste Management Rules, 2016.
					Will be stored in the designated storage area and will be disposed-off/ sold to registered vendors as per Battery Waste Management

S. No.	Type of Waste	Waste	Source	Quantity Generated (Approx.)	Mode of Treatment / Disposal
					Rules 2020.
4.	MSW	Bottles, paper, cans, textile, etc.	Plant and Colony	404 TPA	Municipal Solid Waste will be collected & segregated into bio- degradable & non-degradable. Further, Bio- degradable waste will be converted into organic manure by installation of Organic Waste Converter (OWC) machine and manure will be used for greenbelt development & plantation and non-degradable waste will be sold to authorized vendor from CPCB/SPCB as per scientifically in compliance of Solid Waste Management rules 2016, as amended thereof.
5.		Kitchen and canteen/ Green waste			

24.4.18 Public Consultation:

Details of advertisement given	Public Hearing Notice published in Newspapers "Dainik Bhaskar" and "Rajasthan Patrika" on 17 th September, 2022
Date of Public Consultation	21 st October, 2022 at 11:00 am
Venue	Tehsil Office, Nawalgarh, Jhunjhunu (Rajasthan)
Presiding Officer	• Additional District Magistrate, Jhunjhunu
Major issues raised	Issues related to Employment, Environment & Pollution, Plantation, Socio-economic development related, water, land, Health etc.

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

S. No.	Concerns raised during the Public Hearing	Physical activity to be done	Unit of Measurement						Tentative Budget (Rs. in lacs)
			1 st Year		2 nd Year		3 rd Year		
			Location / Area	Budget in Lakhs	Location / Area	Budget in Lakhs	Location / Area	Budget in Lakhs	
1	Employment Related	Establishment of Skill Development Training Centre	01 Centre	60	01 Centre	60	01 Centre	60	180
			(Village Gothra & Basawa)		(For Villages Parasrampura & Jhajhar)		(Chaoudhani & Deogaon)		
2	Women Empowerment	Development of Women Empowerment Centre for Socio economic development (Skill Development training)	01 Centre	50	01 Centre	40	01 Centre	40	130
			(For Village Parasrampura & Gothra)		(For Village Deogaon)		(For Village Jhajhar)		
3	Education and Sports	Upgradations/ Renovation of	Village Gothra, Jhajhar &	142	Village Parasrampura	50	Village Basawa	50	242

S. No.	Concerns raised during the Public Hearing	Physical activity to be done	Unit of Measurement						Tentative Budget (Rs. in lacs)		
			1 st Year		2 nd Year		3 rd Year				
			Location / Area	Budget in Lakhs	Location / Area	Budget in Lakhs	Location / Area	Budget in Lakhs			
	Facilities	Classrooms in Schools of nearby Villages	Choudhani								
		Development & modification of Playground and providing necessary sports equipment	Village Parasrampura & Gothra	120	Village Deogaon	60	Village Keswa Ki Dhani	40	220		
4	Rural Infrastructure Development	Construction of Stadium facilities	Village Parasrampura	200	Village Parasrampura	160	Village Parasrampura	160	520		
		Construction and Strengthening of road network at nearby Villages connecting with SH-8 & SH-37	01 No	(Village Gothra, Project site & Village Choudhani)	02 No.	(Villages Jhajhar & Nawalgarh)	200	02 No.	(Villages Dholakhera)	200	700
			(Village Gothra & Deogaon)		02 No.			(Villages Choudhani & Basawa)			
		Construction of Toilets in Nearby Villages.	02 No.	(Villages Khirod & Basawa)	02 Nos	(Villages Gothra & Parasrampura)	40	02 No.	(Village Chaurhani & Jhajhar)	40	120
			(Villages Khirod & Basawa)		02 Nos			(Villages Choudhani & Basawa)			
		Installation of Solar lights	20 Nos	(Villages Gothra & Basawa)	20 No.	(Villages Deogaon & Choudhani)	20	20 No.	(Villages Khirod & Pujaron ki Dhani)	20	60
			(Villages Gothra & Basawa)		02 Nos			(Villages Choudhani & Basawa)			
		Restoration of Water ponds / percolation tanks by desilting, clearing the water paths, strengthening	02 No.	(Villages Gothra & Jhajar)	02 Nos	(Villages Basawa & Keswa Ki Dhani)	80	02 No.	(Villages Todpura & Parasrampura)	80	240
			(Villages Gothra & Jhajar)		02 Nos			(Villages Basawa & Keswa Ki Dhani)			

S. No.	Concerns raised during the Public Hearing	Physical activity to be done	Unit of Measurement						Tentative Budget (Rs. in lacs)
			1 st Year		2 nd Year		3 rd Year		
			Location / Area	Budget in Lakhs	Location / Area	Budget in Lakhs	Location / Area	Budget in Lakhs	
		the banks etc., and Development of wells and stepwells							
		Rain water harvesting on Govt. School Building	03 No. (Villages Gothra, Parasrampura & Basawa)	30	02 Nos (Villages Chaurhani & Poojari Ki Dhani)	20	01 Nos (Village Devgaon)	10	60
6	Safe Drinking Water	Construction of Water Tanks in Nearby Villages	03 Nos. (Villages Gothra, Khirod, Todpura)	30	02 Nos (Villages Balriya & Parasrampura)	20	01 No. (Village Poojari Ki Dhani)	20	70
		Installation of Water Coolers to provide safe drinking water at community places & Schools	05 No. (Village Gothra , Basawa, Pujaron ki Dhani, Jhajhar & Keswa ki Dhani)	50	04 No. (Villages Choudhani, Devipura, Khirod & Todpura)	40	04 No. (Village Parasrampura, Beri, Bhijnagar & Nawalgarh)	40	130
		Providing Mobile Medical Van (medicine & checkup) and organizing Health camps in nearby Villages	02 Nos (Villages Gothra, Basawa & Poojari ki dhani)	40	02 Nos. (Villages Parasrampura & Khirod)	40	01 No. (Villages Todpura)	20	100
		Renovation and construction of Community health center Health Centre	02 Nos (Village Khirod & Gothra)	40	02 Nos (Villages Basawa & Parasrampura)	40	01 Nos (Village Pujari Ki Dhani)	20	100
7	Health	Provide medical investigating equipment and need based support Material set	02 Nos (Village Gothra & Deogaon)	20	02 Nos (Villages Todpura & Khirod)	20	01 No. (Village Parasrampura)	10	50
		Plantation & Agricultural and animal Husbandry	2 no. (Village Gothra & Deogaon)	10	2 no. (Village Chaurhani & Basawa)	10	01 Nos (Village Jhajhar)	10	30

S. No.	Concerns raised during the Public Hearing	Physical activity to be done	Unit of Measurement						Tentative Budget (Rs. in lacs)
			1 st Year		2 nd Year		3 rd Year		
			Location / Area	Budget in Lakhs	Location / Area	Budget in Lakhs	Location / Area	Budget in Lakhs	
		Awareness and aid for organic farming in the nearby villages	03 Nos. (Villages Gothra, Khirod, Deogaon)	30	02 Nos. (Villages Parasrampura & Basawa)	20	01 No. (Village Jhajhar & Pujaro Ki Dhani)	10	60
		Additional avenue plantation equal to 7% (i.e. 25000 tress) of the project site area will be done along the roads of nearby villages; new connecting road constructed from Gothra to Parasarampura; railway siding area and in the nearby villages outside the project site	25000 nos. saplings (Villages Gothra, Choudhani, Parashrampura, Basawa and Deogaon)	75	-	-	-	-	75
Sub Total				1457		1040		910	3407
Total									3407*

Note: *However expenditure of 6.75 Crores has already been done under CER/CSR activities & PH commitments in the nearby area of the site. Villages can be interchanged as per situation demand. Activities may be changed as per situation and community requirement.

24.4.19 Existing capital cost of the project was Rs. 1660 Crores. The capital cost for the after expansion is Rs. 3407.1 Crores & the capital cost for environmental protection measures is proposed as Rs. 184.79 Crores. The annual recurring cost towards the environmental protection measures for expansion is Rs. 8.81 Crores/ annum. The employment generation from the expansion project is 1500 people. The details of cost for environment protection measures are as follows:

S. No.	Description of Item	Existing (Rs. In Crores)		Proposed (Rs. In Crores)	
		Capital Cost	Recurring Cost	Capital Cost	Recurring Cost
i.	Air Pollution Control/ Noise Management	45	0.6	142.1	5.83
ii.	Water Pollution Control	0.5	0.06	17.2	1.9725
iii.	Environment Monitoring and	3	0.3	3.66	0.4205

S. No.	Description of Item	Existing (Rs. In Crores)		Proposed (Rs. In Crores)	
		Capital Cost	Recurring Cost	Capital Cost	Recurring Cost
	management				
iv.	Greenbelt Development	0.2	0.02	6.175	0.3088
v.	Hazardous Waste Storage & Handling	-	-	0.5	0.075
vi.	Occupational Health & Safety	0.3	0.02	0.75	0.075
vii.	Organic Waste Converter & Its Facilities	-	-	0.15	0.0225
viii.	Others (Housekeeping and Municipal Waste Management)	-	-	0.5	0.075
	Total	50	1.00	171.04	8.81
ix.	Addressal of Public Consultation concerns	16.3	-	12.5	-
x.	Details of adaption of village, if any	-	-	1.25	-
	Grand Total	66.3	1.00	184.79	8.81

24.4.20 Greenbelt & Plantation is being / will be developed in ~49.40 ha which is about ~33 % of the total effective project area of 149.70 ha. Existing greenbelt has already been developed in 3.7 ha area (6476 Nos saplings) which is about 2.47% of the total project area, balance 45.70 ha (1,17,024 Nos saplings) will be developed. Native Plant species such as Neem, Amla, Imli, Shisham, Bargad, Pipal, Karanj, Mango, Gulmohar, Amaltas, Senjana, Shahtut, Siris, Gurhal, Arjun, Dubai Tree, Semal, Saptaparni, Palash, Jamun etc. is being/ will be planted @ 2500 Trees per hectare with 90% survival rate as per consultation with local forest officer and as per CPCB guidelines. Additional avenue plantation equal to 7% (i.e. 25000 tress) of the project site area will be done along the roads of nearby villages; new connecting road constructed from Gothra to Parasarampura; railway siding area and in the nearby villages outside the project site.

24.4.21 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

24.4.22 The Status of compliance of earlier EC was obtained from Integrated Regional Officer, Jaipur vide File IV/ENV/R/IND-112/750/2009 dated 18th May, 2022 in the name of M/s. Shree Cement Ltd. The site was inspected on 20th April, 2022. IRO has reported that the construction and establishment work is under process wherein construction activity of industrial unit is just initiated. Thus IRO in its report has examined the compliance of conditions and has reported that most of the conditions has been agreed to be complied by the company and few are complied.

Findings of EAC (Industry-1) sub-committee during visit:

24.4.23 The observations and recommendations of the EAC (Industry-1) sub-committee based on the site visit to M/s. Shree Cement Limited, located at Village: Gothra, Tehsil: Nawalgarh, District: Jhunjhunu, Rajasthan during 13-14th January 2022 are as follows:

Observation of Sub-committee:

1. The committee visited three Schools located outside the boundary of the project and discussed with principal/head of the concerned School. It was observed that the Schools 1, 2 and 3 were located at village Dhahar Wali Johari Gothara (Govt. School), Bhakhariyon Ki Dhani (Govt. School) and Sarswati Sec. School, Gothara (Private School) with student capacity of 10, 30 and 438, respectively. Further, information about the school was observed on- and the on-line Report cards of the Schools are submitted.
2. A multi layered green belt plantation was observed towards school.
3. Total Four Houses (with about 13-14 families) in two clusters were observed within the project boundary. In one cluster, only one house was there which was locked. In another cluster, 3 houses were present and 2 were locked and a person residing in one house (having 4 families) was available for discussion. As per interaction with the available resident, one house (which was found locked) shifted to Punjab and in other 2 houses some families are residing. Both clusters of houses have been temporarily excluded/separated from the project site with a temporary boundary wall.
4. With a view to see the CER activity undertaken by the PP against 2021 EC, the committee observed a sports complex under construction at Parasrampura Village and RCC road for local community developed by PP in Gothra village. The committee visited a Gaushala a Gothra village which was renovated by PP.

Recommendations of Sub-committee:

1. Considering the fact regarding the occurrence of all the three schools at the distance of 35 meters, 115 meters and 55 meters from the project boundary, and 970 meters, 570 meters and 1170 meters from the Stack, respectively, a dense vegetation of multi-layered plantation must be developed adjacent to schools and habitation.
2. Considering the environmental sensitivity to the adjacent area, PP to ensure a thick Green belt all around project boundary within the project site with three tier system.
3. PP to expedite the acquisition/possession of remaining houses which has not yet been vacated with proper negotiation.
4. Regarding the fulfilment of raw material and water consumption, sources and treatment should be deliberated by EAC as the matter is mostly conceptual in nature.
5. During the operation phase, PP is advised to conduct air monitoring in the vicinity of adjoining schools and human habitations to assess environmental/ecological impact. The PP should implement a project specific AQMP (Air Quality Management Plan) with Best practices.
6. The PP should develop a control strategy and mitigation plan that incorporates the pollution control measures. The Clean Air practices shall be adopted like mechanical collectors, wet scrubbers, fabric filters (baghouses), electrostatic precipitators, etc.

7. The PP should monitor cement dust exposures in clinker, grinding and packing areas using personal and area air samplers and to compare the results of cement dust (8 hours' average exposures) with permissible limits based on free silica content of air borne respirable dust.
8. Rain water harvesting system should be developed/ implemented in the plant area.
9. PP shall develop green belt around the school boundary/premises and shall provide basic facilities to the nearby School as part of Corporate Social Responsibility (CSR).

24.4.24 Based on the points raised by the EAC during its 19th EAC meeting held during 16th & 19th December 2022, and the recommendations made by the EAC (Industry-1) sub-committee, the project proponent submitted its reply vide letter dated 02.02.2023 uploaded on PARIVESH portal on 08.02.2023. Point-wise is as follows:

A. Reply to the issues raised by EAC during its 19th EAC meeting held during 16th & 19th December 2022		
S. No.	ADS Point	Reply/Response of PP
i	The existing project was initially accorded EC from MoEF&CC, New Delhi for Integrated Cement Plant (Clinker: 2.0 Million TPA, Cement: 3.0 Million TPA), CPP: 36 MW, WHRS: 15 MW and Limestone Mine (ML Area: 624 ha) with limestone production capacity of 3.2 Million TPA; further validity of same for 3 years was extended vide letter dated 29th September, 2016; which was expired on 14th July, 2019 for Integrated Cement Plant, whereas the same EC is valid for Captive Limestone Mines upto 14th July, 2039. Due to expiry of earlier granted EC, a fresh EC of Integrated Cement Plant on same project site with revised capacities (Clinker: 2.0 Million TPA, Cement: 4.0 Million TPA, Waste Heat Recovery Power Generation: 20 MW, Captive Power Plant: 25 MW and D.G. Sets of 2000 KVA) was granted by MoEF&CC vide letter dated 3rd February 2021. Integrated Cement Plant with production capacity 2.0 Million TPA Clinker,	<p>The EC for existing project was initially accorded by MoEF, New Delhi on 15th July, 2009 for Integrated Cement Plant (Clinker: 2.0 Million TPA, Cement: 3.0 Million TPA), CPP: 36 MW, WHRS: 15 MW and Limestone Mine (ML Area: 624 ha) with limestone production capacity of 3.2 Million TPA; which was expired on 14th July, 2019 for Integrated Cement Plant, whereas the same EC is valid for Captive Limestone Mines up to 14th July, 2039. Due to expiry of earlier granted EC, a fresh EC of Integrated Cement Plant on same project site with revised capacities (Clinker: 2.0 Million TPA, Cement: 4.0 Million TPA, Waste Heat Recovery Power Generation: 20 MW, Captive Power Plant: 25 MW and D.G. Sets of 2000 KVA) was granted by MoEF&CC vide letter dated 3rd February 2021.</p> <p>As per the Earlier granted EC dated 3rd February, 2021 company has obtained Consent to Establish (CTE) from RSPCB and at present, the project is under construction of utilities & infrastructure development and yet not operational.</p>

A. Reply to the issues raised by EAC during its 19th EAC meeting held during 16th & 19th December 2022

S. No.	ADS Point	Reply/Response of PP
	<p>3.0 Million TPA Cement, granted by RSPCB vide letter dated 28.02.2019. Based on EC obtained from MoEF&CC, the project is under construction of utilities & infrastructure development and yet not operational.</p>	
ii	<p>The EAC noted that instant proposal is a part of Interlinked project. Limestone Mine (ML No.: 47/2007 & ML Area: 624 ha.) with existing production capacity of 3.2 Million TPA located at Village: Gothra, Tehsil: Nawalgarh, District: Jhunjhunu (Rajasthan). Environmental Clearance for the mine has been obtained from MoEF&CC, New Delhi vide letter no. J-11011/1173/2007-IA II (I) dated 15th July, 2009 (valid up to 14th July, 2039). To cater the limestone requirement after Expansion of Integrated Cement Plant from Environmental Clearance granted Capacity, a separate EC application (Proposal No. IA/RJ/MIN/272197/2022 dated 11.05.2022) for increase of limestone production capacity from 3.2 to 6.822 Million TPA was submitted to MoEF&CC. The proposal was considered in the 53rd EAC meeting of Non-Coal Mining (NCM) Sector held during 28th – 29th June, 2022. The project proponent submitted the proposal for Terms of Reference for Expansion in Limestone Production Capacity from 3.2 Million TPA to</p>	<p>To fulfil the limestone requirement for expansion, PP has applied a proposal to MoEF&CC for Terms of Reference (ToR) approval for Expansion in Limestone Production Capacity from 3.2 Million TPA to 6.822 Million TPA (Total Excavation: 27.298 Million TPA i.e. Limestone: 6.822 Million TPA, Top Soil: 0.118 Million TPA, Waste: 20.0 Million TPA, ROM Reject: 0.358 Million TPA) and installation of Crushers 1200 TPH & 400 TPH along with Wobbler in our existing Gothra Limestone Mine (ML No.: 47/2007 & ML Area: 624 ha.) for the aforesaid Gothra Limestone Mine on 11.05.2022 information of the interlink proposal was submitted to MoEF&CC in EC application.</p> <p>The proposal was considered by EAC (Non-Coal Mines) in 53rd Meeting held on 28.06.2022. During meeting EAC, MoEF&CC has asked to submit some additional information & clarification.</p> <p>SCL has submitted the reply to above ADS points to MoEF&CC for further consideration of the project and grant of EC vide letter no. SCL/ Gothra Limestone Mine/Nawalgarh/EC-ToR/2022-23/3236, dated 02.02.2023.</p>

A. Reply to the issues raised by EAC during its 19th EAC meeting held during 16th & 19th December 2022

S. No.	ADS Point	Reply/Response of PP
	<p>6.822 Million TPA (Total Excavation: 27.298 Million TPA). After, the detailed deliberations, the Committee (NCM) noted that the project proponent has started production in the year 2021-22 and has achieved a production of 478.18 tonnes only out of the 3.2 MTPA production limit granted in the earlier Environmental Clearance letter dated 15.07.2009. Also, the Committee (NCM) observed that that there will be an instant shock load on the environment by jumping twice the production capacity granted in previous Environmental Clearance. The EAC (NCM) felt that the Environmental Management Plan (EMP) which is in place cannot be fully tested at this juncture since the production capacity reached by the project proponent is way beyond the prescribed limit. The EAC (NCM) was of the opinion that this project must first achieve at least 50% capacity of the EC granted for generating pragmatic baseline data for appraisal by the Committee. Furthermore, the project proponent is advised to submit the compliance in terms of plantation, efficacy of EMP on the maximum production that it achieves before seeking expansion. Therefore, the Committee (NCM) deferred the proposal. The EAC noted that PP has hid this information and these facts are not submitted before the EAC neither in presentation nor</p>	

A. Reply to the issues raised by EAC during its 19th EAC meeting held during 16th & 19th December 2022

S. No.	ADS Point	Reply/Response of PP
	<p>in the Report. In view of the same, the EAC (Industry-1) seeks clarification from the PP regarding fulfilling the limestone requirement for the proposed expansion in the instant application.</p>	
iii	<p>On perusal of kml file, the EAC noted that there are number of the schools adjacent to the project site (Three corners of the boundary of the project) and within the study area. However, PP has not reported this neither in the EIA/EMP Report nor in the Presentation. The EAC also observed that there is a habitation inside the project boundary, though PP has reported that there is no habitation within the plant site and hence R&R is not applicable. Further PP has reported that the nearest habitation to the project site include Gothra (0.5 Km, NE), Dhani Kanakawali (1.5 km, WSW), Jhajhar (1.5 km, WNW), Basawa (2 km, SSW), Keswa Ki Dhani (2 Km, NE), Neharon Ki Dhani (3 km, SSE) and Bhairoo Ki Bas (3 km, NNW). There are approx. 43 other villages in 10 km radius study area of the project site. Considering the Environmental Sensitivity to the adjacent schools and habitation in the area, the EAC opined that it is prudent to inspect the area for understanding the ground reality as the area appears to have rich habitation.</p>	<p>There are 3 (three) Schools located near to site details of the same along with distance from project boundary & stack are as follows:</p> <ol style="list-style-type: none"> 1. GPS Dhahar Wali Johari Gothara - Govt. School, established in 1999, 2 Class Rooms, approx. 9 Students. – 35 meters from Boundary & 970 meters from Stack 2. GPS Bhakhariyon Ki Dhani - Govt. School, established in 1999, 2 Class Rooms, approx. 24 Students. – 115 meters from Boundary & 570 meters from Stack 3. Sarswati Sec. School, Gothara - Private School, established in 2007, 12 Class Rooms, approx. 442 Students. – 55 meters from Boundary & 1170 meters from Stack <p>PP has proposed 15 meters greenbelt & plantation all along the periphery of plant boundary, we have planned multi-layer greenbelt & plantation of minimum 50 meters towards Schools and habitation.</p> <p>Whereas the SCL has proposed & earmarked to develop the 33% (i.e., ~49.40 ha) area under greenbelt & plantation of the total effective project area with 1,23,500 numbers of plant in upcoming 3 years with density of plantation is 2500 trees per ha. Out of which, as on date (14.01.2023) SCL has done plantation in 5.62 ha area (11276 Nos saplings) with recently planted 4800 numbers of plants under mass Plantation Program conducted on 06.01.2023 at our plant site towards locations of existing schools & habitations.</p>

A. Reply to the issues raised by EAC during its 19th EAC meeting held during 16th & 19th December 2022

S. No.	ADS Point	Reply/Response of PP																																	
iv	1000 m ³ /day water is proposed for the expansion project which is proposed to be sourced from STP Treated Water of Nagar Palika, Nawalgarh/ Ground Water/ Mine Pit. The EAC deliberated on water consumption and consequently the ETP/STP capacity and is of the view that the quantity of water requirement is not justified and there is a need to understand the water balance along with the source of water available near the project site as PP has also proposed the ground water as source of water.	<p>To fulfil the water requirement for the project including Cement plant, Limestone Mines & Residential Township, SCL has obtained CGWA NOC/Permission for withdrawal/ abstract of 1200 KLD groundwater vide NOC No. CGWA/NOC/IND/REN/1/2022/7128, which is valid up to 31st Dec., 2023.</p> <p>Apart from this, SCL has also signed an agreement with Nagar Palika, Nawalgarh for supply of 3 MLD treated sewage water on 21st July, 2020 to meet the non-potable industrial applications requirements for the project.</p> <p>Whereas, as per observation of the Hon'ble EAC Member, SCL has modified & revised the water balance based on the peak water requirement of the project including greenbelt & plantation development has been submitted along with ADS reply.</p>																																	
v	The PP shall submit the compliance status of earlier commitments and its implementation status along with details of expenditures on the issues raised during the PH while granting the EC in February 2021.	<p>Details of CSR Activities done in the nearby villages as per the existing EC and requirement of the nearby villages has been submitted along with ADS reply as shown below-</p> <table border="1"> <thead> <tr> <th rowspan="2">S. No.</th> <th rowspan="2">Activity Heads</th> <th colspan="3">Years (Rs. In Lakhs)</th> </tr> <tr> <th>2021-22</th> <th>2022-23</th> <th>Total</th> </tr> </thead> <tbody> <tr> <td>1.</td> <td>Educational Programme</td> <td>-</td> <td>5.5</td> <td>5.5</td> </tr> <tr> <td>2.</td> <td>Health & Family Welfare</td> <td>5.3</td> <td>6.5</td> <td>11.8</td> </tr> <tr> <td>3.</td> <td>Social Development & Welfare</td> <td>11.7</td> <td>21.45</td> <td>33.15</td> </tr> <tr> <td>4.</td> <td>Infrastructure Development</td> <td>89.9</td> <td>364.67</td> <td>624.57</td> </tr> <tr> <td colspan="2">Grand Total</td> <td>106.9</td> <td>398.12</td> <td>675.02</td> </tr> </tbody> </table>	S. No.	Activity Heads	Years (Rs. In Lakhs)			2021-22	2022-23	Total	1.	Educational Programme	-	5.5	5.5	2.	Health & Family Welfare	5.3	6.5	11.8	3.	Social Development & Welfare	11.7	21.45	33.15	4.	Infrastructure Development	89.9	364.67	624.57	Grand Total		106.9	398.12	675.02
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vi	Existing greenbelt (GB) is developed in 3.7 ha area (6476 Nos saplings) only which is about	The EC for project was initially accorded by MoEF, New Delhi on 15th July, 2009 for Integrated Cement Plant with limestone having production capacity of 3.2 Million TPA at Village: Gothra, Tehsil: Nawalgarh, District: Jhunjhunu (Rajasthan) of																																	

A. Reply to the issues raised by EAC during its 19th EAC meeting held during 16th & 19th December 2022

S. No.	ADS Point	Reply/Response of PP
	<p>2.47% of the total project area. The Committee deliberated that EC was granted long back in 2009 and further in 2021 and still the greenbelt development is very poor. The GB width along plot boundary is too small. It must be around 40 m to incorporate 3 tier GB design. Further for 49.40 ha of Gb the PP to plant 123500 trees. PP shall ensure around 1200 cum water per day for the proposed GB sustainability.</p>	<p>Shree Cement Limited. The Consent for establishment (CTE) of Integrated Cement Plant with production capacity 2.0 Million TPA Clinker, 3.0 Million TPA Cement, granted by RSPCB vide letter dated 28.02.2019. Due to expiry of earlier granted EC, a fresh EC of Integrated Cement Plant on same project site with revised capacities (Clinker: 2.0 Million TPA, Cement: 4.0 Million TPA, Waste Heat Recovery Power Generation: 20 MW, Captive Power Plant: 25 MW and D.G. Sets of 2000 KVA) was granted by MoEF&CC vide letter dated 3rd February 2021.</p> <p>Based on the LOI for limestone mine and based on the State Government notification for requirement land for Cement Plant 20.01.2007, 25.06.2008 & 28.06.2008 the EC was granted in 2009.</p> <p>Finally, land was allotted on 12.05.2015 and lease deed was executed on 01.06.2016, but the complete physical possession of land was handover to us in Dec. 2020 by intervention of RIICO & Collector – Jhunjhunu, Government of Rajasthan, whereas still 13-14 families not vacant the houses, for which SCL is under negotiation with them. However, SCL has constructed a temporary boundary wall to isolate thus habitation from the site and planned the greenbelt on that area after vacant by families.</p> <p>Since, the complete land was not possession with SCL, thus project proponent could not initiate the execution of project and plantation & greenbelt development at site. After physical possession of land, SCL started the construction of boundary wall to secure the land and also started plantation in peripheral area of plant, colony & mines from 2021. Accordingly, while appeared for EC appraisal presentation after submission of Final EIA, the status of existing greenbelt (GB) development was 3.7 ha area with 6476 Nos saplings, which was about 2.47% of the total project area. Whereas, the SCL has proposed & earmarked to develop the 33% (i.e., ~49.40 ha) area under greenbelt & plantation of the total effective project area with 1,23,500 numbers of plant in upcoming 3 years with density of plantation is 2500 trees per ha. Out of which, as on date</p>

A. Reply to the issues raised by EAC during its 19th EAC meeting held during 16th & 19th December 2022

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		<p>(14.01.2023) SCL has done plantation in 5.62 ha area (11276 Nos saplings) with recently planted 4800 numbers of plants under mass Plantation Program conducted on 06.01.2023.</p> <p>Plantation & Greenbelt development is ongoing process for under development site and Shree Cement committed for sustainable development of the site and surrounding area of the project, therefor they have planned to complete the greenbelt & planation development in coming 3 years to achieve the proposed number of tree/ plants i.e. 1,23,500 numbers with density of plantation is 2500 trees per ha. with minimum width of 15 meters in the periphery of boundary and minimum 50 meters width greenbelt & plantation towards nearby the Schools.</p> <p>Native Plant species such as Neem, Amla, Imli, Shisham, Bargad, Pipal, Karanj, Mango, Gulmohar, Amaltas, Senjana, Shahtut, Siris, Gurhal, Arjun, Dubai Tree, Semal, Saptaparni, Palash, Jamun etc. is being/ will be planted, as per CPCB guidelines. Detailed plan of Greenbelt development is as follows:</p> <table border="1"> <thead> <tr> <th>S. No.</th> <th>Year Wise plantation after EC & CTE</th> <th>Area in ha.</th> <th>Numbers of Plantation</th> <th>Survival Rate</th> </tr> </thead> <tbody> <tr> <td>1.</td> <td>Existing and planned upto March, 2023</td> <td>5.62*</td> <td>14,050</td> <td>90%</td> </tr> <tr> <td>2.</td> <td>1st year</td> <td>22.00 ha</td> <td>55,000</td> <td>90%</td> </tr> <tr> <td>3.</td> <td>2nd year</td> <td>21.78 ha</td> <td>54,450</td> <td>90%</td> </tr> <tr> <td></td> <td>Total</td> <td>49.40</td> <td>1,23,500</td> <td>90%</td> </tr> </tbody> </table> <p>* Existing 11,276 number of plantations has been done in 5.62 ha. area as on 1st Feb. 2023; which will be further dense @ 2500 trees / ha upto March, 2023.</p>	S. No.	Year Wise plantation after EC & CTE	Area in ha.	Numbers of Plantation	Survival Rate	1.	Existing and planned upto March, 2023	5.62*	14,050	90%	2.	1 st year	22.00 ha	55,000	90%	3.	2 nd year	21.78 ha	54,450	90%		Total	49.40	1,23,500	90%
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vii	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/environmental sensitivity of the area to the schools and local habitation, fulfilment of	Inspection & site visit of Sub-committee of EAC (Industry - 1) of the EAC was conducted from 13 th -14 th Jan. 2023 and site visit report with some recommendations issued on 02.02.2023.																									

A. Reply to the issues raised by EAC during its 19th EAC meeting held during 16th & 19th December 2022

S. No.	ADS Point	Reply/Response of PP
	raw material (limestone), water consumption, sources & treatment proposed in project, greenbelt development at the project site.	

B. Recommendations of the Sub-Committee along with the compliance and further commitments by SCL are as follows:

S. No.	Recommendations of the Sub-Committee	Compliance and commitments by SCL
1.	Considering the fact regarding the occurrence of all the three schools at the distance of 35 meters, 115 meters and 55 meters from the project boundary, and 970 meters, 570 meters and 1170 meters from the stack, respectively, a dense vegetation of multi-layered plantation must be developed adjacent to school and habitation.	SCL has proposed 15 meters Greenbelt & plantation all along the periphery of plant boundary and also planned multi-layer greenbelt & plantation of minimum 50 meters towards Schools and habitation. Amended plant layout showing greenbelt & plantation has been provided at slide no. 10. SCL has proposed & earmarked to develop the 33% (i.e., ~49.40 ha) area under greenbelt & plantation of the total effective project area with 1,23,500 numbers of plant in upcoming 3 years with density of plantation is 2500 trees per ha. Out of which, as on date (14.01.2023) SCL has done plantation in 5.62 ha area (11276 Nos saplings) with recently planted 4800 numbers of plants under mass Plantation Program conducted on 06.01.2023.
2.	Considering the environmental sensitivity to the adjacent area, PP to ensure a thickness green belt all around project boundary within the project site with three tier system.	
3.	PP to expedite the acquisition/ possession of remaining houses which has yet not been vacated with proper negotiation.	Noted and will be complied
4.	Regarding the fulfilment of raw material and water	Limestone (Raw material) will be fulfilled by captive limestone mines, whereas the raw water requirement will be fulfilled by treated water

B. Recommendations of the Sub-Committee along with the compliance and further commitments by SCL are as follows:

S. No.	Recommendations of the Sub-Committee	Compliance and commitments by SCL																																
	consumption, sources and treatment should be deliberated by EAC as the matter is mostly conceptual in nature	received from STP of Nawalgarh Town through pipelines for which an agreement has been executed. Apart from this, the NOC from CGWA for abstraction of ground water has been obtained to fulfill the fresh drinking & domestic water requirements of cement plant, limestone mines & residential township, apart from this the rainwater collected in bottom most pit of mines will also be utilized in the project																																
5.	During the operation phase, PP is advised to conduct air monitoring in the vicinity of adjoining schools and human habitations to assess environmental/ ecological impact. The PP should implement a project specific AQMP (Air Quality Management Plan) with Best practices.	<p>Noted and hereby committed to comply the same.</p> <p>A detailed Air Quality Management Plan along with Air Pollution Control Equipment and Covered Storage Facilities proposed in the project has been prepared and is given on the next slides, same will be complied during execution of the project.</p> <table border="1"> <thead> <tr> <th rowspan="2">Emissions</th> <th colspan="2">Source</th> <th rowspan="2">Mitigation Measures Provided / to be provided</th> </tr> <tr> <th>Plant Unit</th> <th>Section</th> </tr> </thead> <tbody> <tr> <td rowspan="4">PM</td> <td rowspan="4">Cement Plant</td> <td>Raw Mill & Kiln</td> <td>Bag House (1 no.)</td> </tr> <tr> <td>Coal Mill</td> <td>Bag House (1 no.)</td> </tr> <tr> <td>Cooler</td> <td>ESP (1 no.)</td> </tr> <tr> <td>Cement Mill</td> <td>Bag House (2 nos.)</td> </tr> <tr> <td>SO₂</td> <td>Cement Plant</td> <td>Raw Mill & Kiln</td> <td>Due to the interaction of raw materials and kiln gases, rotary kiln systems have inherent SO₂ removal efficiencies ranging between 40-99% of the sulphur input to the system.</td> </tr> <tr> <td>NO_x</td> <td>Cement Plant</td> <td>Raw Mill & Kiln</td> <td> <ul style="list-style-type: none"> ○ Low NO_x burners. ○ Incline Calciner for low NO_x formation. ○ Installation of analyzer at the inlet of Kiln to monitor O₂ & NO_x. </td> </tr> <tr> <td>Fugitive Emission</td> <td>Cement Plant</td> <td>Raw Material Handling & Storage</td> <td>○ Bag filters (168 nos.) at various material handling & transfer points will be provided.</td> </tr> <tr> <td></td> <td></td> <td>Transportation activity</td> <td>○ Covered Conveyor belts for transfer of raw</td> </tr> </tbody> </table>	Emissions	Source		Mitigation Measures Provided / to be provided	Plant Unit	Section	PM	Cement Plant	Raw Mill & Kiln	Bag House (1 no.)	Coal Mill	Bag House (1 no.)	Cooler	ESP (1 no.)	Cement Mill	Bag House (2 nos.)	SO ₂	Cement Plant	Raw Mill & Kiln	Due to the interaction of raw materials and kiln gases, rotary kiln systems have inherent SO ₂ removal efficiencies ranging between 40-99% of the sulphur input to the system.	NO _x	Cement Plant	Raw Mill & Kiln	<ul style="list-style-type: none"> ○ Low NO_x burners. ○ Incline Calciner for low NO_x formation. ○ Installation of analyzer at the inlet of Kiln to monitor O₂ & NO_x. 	Fugitive Emission	Cement Plant	Raw Material Handling & Storage	○ Bag filters (168 nos.) at various material handling & transfer points will be provided.			Transportation activity	○ Covered Conveyor belts for transfer of raw
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6.	The PP should develop a control strategy and mitigation plan that incorporates the pollution control measures. The Clean Air practices shall be adopted like mechanical collectors, wet scrubbers, fabric filters (baghouse), electrostatic precipitators etc.																																	
7.	The PP should monitor cement dust exposures in clinker, grinding and packing areas using personal and area air samplers and to compare the results of cement dust (8 hours average exposures) with permissible limits based																																	

B. Recommendations of the Sub-Committee along with the compliance and further commitments by SCL are as follows:

S. No.	Recommendations of the Sub-Committee	Compliance and commitments by SCL			
	on free silica content of air borne respirable dust				<p>materials/ finished products inside the plant.</p> <ul style="list-style-type: none"> ○ Fly ash received through closed bulkers & fed into silo through pneumatic system. ○ Clinker will be stored in tank while Fly Ash and Cement will be stored in the silos. ○ Gypsum, Slag, Dolochar, Biomass, Coal and Petcoke will be stored in the covered sheds. ○ Iron Ore, & Pond ash will be stored in the covered sheds/Yards. ○ Water sprinkling will be done to control dust Proper maintenance of vehicles to reduce gaseous emissions. ○ All the movement area/ roads will be concreted. ○ Using Vacuum sweeping machine for better housekeeping. ○ Greenbelt & plantation is being/ will be done along the plant boundary to attenuate air pollution.

Following Air Pollution Control Equipment are proposed in the Project:

S. No	Location of APCE	Type of APCE		Total After Expansion	Design Efficiency (%)
		Existing As per Granted EC	Additional		
1.	Raw Mill	Bag	-	1	99.99

B. Recommendations of the Sub-Committee along with the compliance and further commitments by SCL are as follows:

S. No.	Recommendations of the Sub-Committee	Compliance and commitments by SCL								
			and Kiln House							
		2.	Clinker Cooler	Cooler ESP	-	1 99.95				
		3.	Cement Mill	Bag House	Bag House	2 99.99				
		4.	Coal Mill	Bag House	-	1 99.99				
		5.	Transfer Points	Bag filters	Bag filters	168 99.99				
Following Covered Storage Facilities are proposed in the Project:										
		S.No	Section		Unit	Capacity				
1.	Limestone Stock Pile	Tonnes	2 x 100000	2.	Clinker tank	Tonnes	3 X 75000			
3.	OPC silo	Tonnes	2 X 10000	4.	PPC silo	Tonnes	2 X 10000			
5.	PSC & RHPC silo	Tonnes	2 X 10000	6.	SRC & Composite Silo	Tonnes	2 X 10000			
7.	Iron Ore/ Laterite	Tonnes	20000	8.	Fly Ash Silo	Tonnes	10000			
9.	Pond ash	Tonnes	10000	10.	Gypsum	Tonnes	15000			
11.	Coal/Petcoke/Dolochar/Biomass	Tonnes	100000	12.	Slag	Tonnes	10000			
13.	Alternative Fuel and Raw Material (AFR)	Tonnes	15000	6	Rain water harvesting system should be developed/ implemented in the plant area	25 Nos. Rainwater Harvesting (RWH) Structure with capacity of 885 cum for Cement Plant and Residential Township has been proposed. Apart from this, 1 Rain Water Harvesting Pond with capacity of 110715 cum is also proposed to accumulated & collect the rainwater for further uses and reduces the fresh and raw water requirements of the project.				
7	PP shall develop greenbelt around the school boundary/premises and shall provide basic facilities to the nearby School as part of Corporate Social	Company has proposed 15 meters wide greenbelt & plantation all along the periphery of plant boundary, and also, planned multilayer greenbelt & plantation of minimum 50 meters towards Schools. Apart from this, the detailed CSR plan proposed for the nearby Schools are given as below**								

B. Recommendations of the Sub-Committee along with the compliance and further commitments by SCL are as follows:

S. No.	Recommendations of the Sub-Committee	Compliance and commitments by SCL
	Responsibility (CSR)	

24.4.25 Based on the above submission of PP, the proposal was reconsidered during 24th meeting of the EAC for Industry-I sector held on 28th February – 1st March, 2023. The deliberations and recommendations of EAC are as follows:

Written representations:

24.4.26 During the meeting, based on the deliberations made by the EAC, the project proponent vide letter dated 28.02.2023 through email dated 28.02.2023 submitted the following information:

S. No.	Additional Observations / ADS Point of EAC	Reply submitted by the PP
1	PP should increase the Cost of Action Plan including PH commitments 1% of the expansion project cost.	The PP has revised and detailed out the plan for socio-economic development including PH commitments equal to 1% (i.e. 34.07 Crores) of the project cost (i.e. 3407 Crores). However, expenditure of Rs 6.75 Crores has already been done under CER/CSR activities & PH commitments in the nearby area of the site. The detailed plan of socio-economic development including PH commitments is submitted and updated at para 24.4.18 above.
2	PP should plan and submit the details of additional 7% (i.e. 25000 tress) under avenue plantation along the roads, railway siding in the nearby villages outside the project site.	Additional avenue plantation equal to 7% (i.e. 25000 tress) of the project site area will be done along the roads of nearby villages; new connecting road constructed from Gothra to Parasarampura; railway siding area and in the nearby villages outside the project site. Details of the same have been incorporated in detailed socio-economic development plan submitted.

Deliberations by the Committee

24.4.27 The Committee noted the following:

- i. The instant proposal is for expansion in existing Environmental Clearance granted capacity of Integrated Cement Plant - Clinker: 2.0 to 4.5 Million TPA, Cement: 4.0 to 6.0 Million TPA, Waste Heat Recovery Power Generation: 20 to 40 MW. DG Sets of 2000 KVA (1000/500/250/125 KVA) along with Railway Siding. Further, PP during the presentation during 24th meeting of the EAC for Industry-I sector held on 28th February – 1st March, 2023 submitted that in order to fulfil the requirement of greenbelt

development towards School, plant layout has also been amended and proposal for installation of Captive Power Plant of 25 MW (Thermal) is now dropped out. The Committee deliberated the issues.

- ii. 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.
- iii. 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.
- iv. 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.
- v. The existing project was initially accorded Environmental Clearance from MoEF&CC, New Delhi for Integrated Cement Plant (Clinker: 2.0 Million TPA, Cement: 3.0 Million TPA), CPP: 36 MW, WHRS: 15 MW and Limestone Mine (ML Area: 624 ha) with limestone production capacity of 3.2 Million TPA at Village: Gothra, Tehsil: Nawalgarh, District: Jhunjhunu (Rajasthan) of Shree Cement Ltd.; further validity of same for 3 years was extended vide letter dated 29th September, 2016; which was expired on 14th July, 2019 for Integrated Cement Plant, whereas the same EC is valid for Captive Limestone Mines upto 14th July, 2039. Due to expiry of earlier granted EC, a fresh EC of Integrated Cement Plant on same project site with revised capacities (Clinker: 2.0 Million TPA, Cement: 4.0 Million TPA, Waste Heat Recovery Power Generation: 20 MW, Captive Power Plant: 25 MW and D.G. Sets of 2000 KVA) was granted by MoEF&CC vide letter no. J-11011/1173/2007-IA.II (I) dated 03rd February 2021. Integrated Cement Plant with production capacity 2.0 Million TPA Clinker, 3.0 Million TPA Cement, located at Village: Gothra, Tehsil: Nawalgarh, District: Jhunjhunu (Rajasthan) of Shree Cement Limited granted by RSPCB vide letter no. F(CPM)/Jhunjhunu (Nawalgarh)/2(1)/2018-2019/ 7228-7230 and vide Order No. 2018-2019/CPM/5424 dated 28.02.2019, Validity: 14.06.2018 to 31.05.2023. Based on EC obtained from MoEF&CC, the project is under construction of utilities & infrastructure development and yet not operational.
- vi. The EAC noted that instant proposal is a part of Interlinked project. Limestone Mine (ML No.: 47/2007& ML Area: 624 ha.) with existing production capacity of 3.2 Million TPA located at Village: Gothra, Tehsil: Nawalgarh, District: Jhunjhunu (Rajasthan). Environmental Clearance for the mine has been obtained from MoEF&CC, New Delhi vide letter no. J-11011/1173/2007-IA II (I) dated 15th July, 2009 (valid up to 14th July, 2039). To cater the limestone requirement after Expansion of Integrated Cement Plant

from Environmental Clearance granted Capacity, a separate EC application (Proposal No. IA/RJ/MIN/272197/2022 dated 11.05.2022) for increase of limestone production capacity from 3.2 to 6.822 Million TPA was submitted to MoEF&CC. The proposal was considered in the 53rd EAC meeting of Non-Coal Mining (NCM) Sector held during 28th – 29th June, 2022. After, the detailed deliberations, the Committee (NCM) noted that the project proponent has started production in the year 2021-22 and has achieved a production of 478.18 tonnes only out of the 3.2 MTPA production limit granted in the earlier Environmental Clearance letter dated 15.07.2009. Also, the Committee (NCM) observed that that there will be an instant shock load on the environment by jumping twice the production capacity granted in previous Environmental Clearance. The EAC (NCM) felt that the Environmental Management Plan (EMP) which is in place cannot be fully tested at this juncture since the production capacity reached by the project proponent is way beyond the prescribed limit. The EAC (NCM) was of the opinion that this project must first achieve at least 50% capacity of the EC granted for generating pragmatic baseline data for appraisal by the Committee. Furthermore, the project proponent is advised to submit the compliance in terms of plantation, efficacy of EMP on the maximum production that it achieves before seeking expansion. Therefore, the Committee (NCM) deferred the proposal.

- vii. Based on the site visit conducted by EAC (Industry-1) sub-committee during 13-14th January, 2023, the EAC noted the following:

Observation of Sub-committee:

- 1. The committee visited three Schools located outside the boundary of the project and discussed with principal/head of the concerned School. It was observed that the Schools 1, 2 and 3 were located at village Dhahar Wali Johari Gothara (Govt. School), Bhakhariyon Ki Dhani (Govt. School) and Sarswati Sec. School, Gothara (Private School) with student capacity of 10, 30 and 438, respectively. Further, information about the school was observed on- and the on-line Report cards of the Schools are submitted.*
- 2. A multi layered green belt plantation was observed towards school.*
- 3. Total Four Houses (with about 13-14 families) in two clusters were observed within the project boundary. In one cluster, only one house was there which was locked. In another cluster, 3 houses were present and 2 were locked and a person residing in one house (having 4 families) was available for discussion. As per interaction with the available resident, one house (which was found locked) shifted to Punjab and in other 2 houses some families are residing. Both clusters of houses have been temporarily excluded/ separated from the project site with a temporary boundary wall.*
- 4. With a view to see the CER activity undertaken by the PP against 2021 EC, the committee observed a sports complex under construction at Parasrampura Village and RCC road for local community developed by PP in Gothra village. The committee visited a Gaushala a Gothra village which was renovated by PP.*

Recommendations of Sub-committee

- 1. Considering the fact regarding the occurrence of all the three schools at the distance of 35 meters, 115 meters and 55 meters from the project boundary, and 970*

- meters, 570 meters and 1170 meters from the Stack, respectively, a dense vegetation of multi-layered plantation must be developed adjacent to schools and habitation.*
2. *Considering the environmental sensitivity to the adjacent area, PP to ensure a thick Green belt all around project boundary within the project site with three tier system.*
 3. *PP to expedite the acquisition/possession of remaining houses which has not yet been vacated with proper negotiation.*
 4. *Regarding the fulfilment of raw material and water consumption, sources and treatment should be deliberated by EAC as the matter is mostly conceptual in nature.*
 5. *During the operation phase, PP is advised to conduct air monitoring in the vicinity of adjoining schools and human habitations to assess environmental/ecological impact. The PP should implement a project specific AQMP (Air Quality Management Plan) with Best practices.*
 6. *The PP should develop a control strategy and mitigation plan that incorporates the pollution control measures. The Clean Air practices shall be adopted like mechanical collectors, wet scrubbers, fabric filters (baghouses), electrostatic precipitators, etc.*
 7. *The PP should monitor cement dust exposures in clinker, grinding and packing areas using personal and area air samplers and to compare the results of cement dust (8 hours' average exposures) with permissible limits based on free silica content of air borne respirable dust.*
 8. *Rain water harvesting system should be developed/ implemented in the plant area.*
 9. *PP shall develop green belt around the school boundary/premises and shall provide basic facilities to the nearby School as part of Corporate Social Responsibility (CSR).*
- viii. The EAC deliberated the site visit report and its recommendations and the EAC is of the view that the PP shall implement all the recommendations/suggestion made by the sub-committee during of the visit.
- ix. Total Land Area of the Integrated Cement Plant Site including township is 153.62 ha; Out of which, 3.92 ha land widening and construction of connecting area excluded for Road. The Effective land area of Integrated Cement Plant including residential colony is 149.70 ha; Out of 149.70 ha i.e., effective area of the site, 135.34 ha is for the Integrated Cement Plant (including 49.2 ha common area of plant & mine lease) and remaining 14.36 ha area is reserve for residential Colony.
- x. The nearest habitation to plant are Gothra (0.5 Km, NE), Dhani Kanakawali (1.5 km, WSW), Jhajhar (1.5 km, WNW), Basawa (2 km, SSW), Keswa Ki Dhani (2 Km, NE), Neharon Ki Dhani (3 km, SSe) and Bhairoo Ki Bas (3 km, NNW). There are approx. 43 other villages in 10 km radius study area of the project site. Further, the three schools are at the distance of 35 meters, 115 meters and 55 meters from the project boundary, and 970 meters, 570 meters and 1170 meters from the Stack respectively. The EAC deliberated on the mitigation measures through greenbelt development and found it satisfactory.
- xi. Udaipur Lohagarh Ki Nadi flows at a distance of 4 km in the ENE direction from the project site. 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.

- xii. The total water requirement after expansion is proposed to be 1000 KLD; which will be sourced from STP Treated Water of Nagar Palika, Nawalgarh/ Ground Water/ Mine Pit. The EAC deliberated on the modified & revised the water balance based on the peak water requirement of the project including greenbelt & plantation development and found it satisfactory.
- xiii. Greenbelt & Plantation is being / will be developed in ~49.40 ha which is about ~33 % of the total effective project area of 149.70 ha. Existing greenbelt has already been developed in 3.7 ha area (6476 Nos saplings) which is about 2.47% of the total project area, balance 45.70 ha (1,17,024 Nos saplings) will be developed. Company has planned multi-layer greenbelt & plantation of minimum 50 meters towards Schools and habitation and 15 meters greenbelt & plantation all along the periphery of plant boundary. Additional avenue plantation equal to 7% (i.e. 25000 trees) of the project site area will be done along the roads of nearby villages; new connecting road constructed from Gothra to Parasarampura; railway siding area and in the nearby villages outside the project site. The committee deliberated on the revised greenbelt development plan and the avenue plantation as submitted and found it satisfactory.
- xiv. Two schedule - I species i.e., Indian Peafowl (*Pavo cristatus*) & Desert Cat (*Felis libyca*) recorded in the study area during field survey; which are categorized as Schedule - I according to (IWPA) Indian Wildlife Protection Act' 1972. Wildlife Conservation Plan for all the Schedule- I species has been authenticated by PCCF (Wildlife) Jaipur on 26th November, 2020.
- xv. The Committee has found that the baseline data and incremental GLC due to the proposed project within NAAQ standards.
- xvi. The committee deliberated details of carbon foot prints and carbon sequestration study w.r.t. proposed project and found them to be satisfactory.
- xvii. The EAC deliberated on the compliance status of earlier commitments and its implementation status along with details of expenditures on the issues raised during the PH while granting the EC in February 2021 and noted that PP has spent around Rs. 675.02 Lakhs on educational programme, health & family welfare, social development & welfare and infrastructural development and advised to fulfil the commitments as per the action plan. The Committee also deliberated on the public hearing issues along with revised action plan for the instant proposal submitted by the proponent to address the issues raised during the public hearing and found it satisfactory.
- xviii. The Committee deliberated upon the written submission of the Project Proponent and found it satisfactory.
- xix. 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.
- xx. 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

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

A. Specific conditions:

- (i) The PP shall comply with all the environmental protection measures and safeguards proposed in the documents submitted to the Ministry. All the recommendations made in the EIA/EMP in respect of environmental management, and risk mitigation measures relating to the project shall be implemented.
- (ii) The project proponent shall utilize modern technologies for capturing of carbon emitted and shall also develop carbon sink/carbon sequestration resources capable of capturing more than emitted. The implementation report shall be submitted to the IRO, MoEF&CC in this regard.
- (iii) The nearest habitation to plant are are Gothra (0.5 Km, NE), Dhani Kanakawali (1.5 km, WSW), Jhajhar (1.5 km, WNW), Basawa (2 km, SSW), Keswa Ki Dhani (2 Km, NE), Neharon Ki Dhani (3 km, SSE) and Bhairoo Ki Bas (3 km, NNW). There are approx. 43 other villages in 10 km radius study area of the project site. Further, three schools are within the vicinity of the plant. Project Proponent shall take appropriate environmental safeguard measures to minimise the impact on the habitation of the locals. The PP shall also include some of these locations in its environmental monitoring programme.
- (iv) During the operation phase, PP shall conduct air monitoring in the vicinity of adjoining schools and human habitations to assess environmental/ecological impact. The PP should implement a project specific AQMP (Air Quality Management Plan) with Best practices.
- (v) Udaipur Lohagarh Ki Nadi flows at a distance of 4 km in the ENE direction from the project site. A robust and full proof Drainage Conservation scheme to protect the natural drainage and its flow parameters; along with Soil conservation scheme and multiple Erosion control measures shall be implemented.
- (vi) As committed, PP shall adopt villages and formulate Village Adoption program consisting of need-based community development activities, to develop them into model villages.
- (vii) The total water requirement after expansion of 1000 KLD shall be sourced from STP Treated Water of Nagar Palika, Nawalgarh/ Ground Water/ Mine Pit. Necessary permissions shall be obtained from the Competent Authority in this regard. PP shall explore the possibility of limiting the use of ground water to reduce dependency.
- (viii) Three tier Green Belt shall be developed with majority in the 1st year covering at least 33% of the total project area as per the submitted plan with native species all along the

periphery of the project site of adequate width and tree density shall not be less than 2500 per ha. Survival rate of green belt developed shall be monitored on periodic basis to ensure that damaged plants are replaced with new plants in the subsequent years. Additional avenue plantation equal to 7% (i.e. 25000 trees) of the project site area shall be done along the roads of nearby villages; new connecting road constructed from Gothra to Parasarampura; railway siding area and in the nearby villages outside the project site. PP shall also develop greenbelt in the form of shelter belt comprising of total of 6 rows of 2x2 m plantation with tall trees & broad leaves with thick canopy along with windshield inside the plant premises to act as green barrier for air pollution & noise levels towards the villages namely Gothra (0.5 Km, NE), Dhani Kanakawali (1.5 km, WSW), Jhajhar (1.5 km, WNW), Basawa (2 km, SSW), Keswa Ki Dhani (2 Km, NE), Neharon Ki Dhani (3 km, SSE) and Bhairoo Ki Bas (3 km, NNW) and multi-layer greenbelt & plantation of minimum 50 meters towards Schools as per the submitted plan. Compliance status in this regard, shall be submitted to concerned Regional Office of the MoEF&CC.

- (ix) The PP shall develop green belt around the school boundary/premises and shall provide basic facilities to the nearby School as part of Corporate Social Responsibility (CSR).
- (x) Greening and Paving shall be implemented in the plant area to arrest soil erosion and dust pollution from exposed soil surface.
- (xi) PP shall complete the acquisition/possession of remaining houses which has not yet been vacated with proper negotiation as per Rules and Regulations.
- (xii) The PP should monitor cement dust exposures in clinker, grinding and packing areas using personal and area air samplers and to compare the results of cement dust (8 hours' average exposures) with permissible limits based on free silica content of air borne respirable dust.
- (xiii) 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.
- (xiv) 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.
- (xv) 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.
- (xvi) 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.
- (xvii) 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.
- (xviii) Dioxin and furans shall be monitored twice a year during co-processing of hazardous waste and report shall be submitted to the Regional Office of the MoEF&CC.
- (xix) Particulate matter emissions from all the stacks shall be less than 30 mg/Nm³.
- (xx) DeSOx system shall be provided dry type. NOx level shall be maintained below 600 mg/Nm³ by using best available technology.
- (xxi) Petcoke dosing shall be controlled automatically to control SO₂ emission from chimney within the prescribed limits.

- (xxii) PP shall identify the Source of fluoride emissions and action plan to mitigate the same shall be implemented.
- (xxiii) A proper action plan must be implemented to dispose of the electronic waste generated in the industry.
- (xxiv) Action Plan for fire fighting system including provision for flame detectors, temperature actuated heat detectors with alarms, automatic sprinkler system, fixing the location of fire water tanks, separate power system for fire fighting, involvement of qualified and trained fire personnel, nearest fire station & time required to reach the proposed site shall be prepared and implemented.
- (xxv) All the recommendations made in the risk assessment report shall be implemented and compliance status in this regard shall be furnished to the Regional Office of the MoEF&CC along with the six monthly compliance report.
- (xxvi) All the commitments made to the public during the Public Hearing/Public Consultation shall be satisfactorily implemented. The action plan based on the social impact assessment study of the project as per the EMP in accordance to the Ministry's OM dated 30.09.2020 shall be strictly implemented and progress shall be submitted to the Regional Office of MoEF&CC.
- (xxvii) The Plastic Waste Management Rules 2016, inter-alia, mandated banning of identified Single Use Plastic (SUP) items with effect from 01/07/2022. In this regard, CPCB has issued a direction to all the State Pollution Control Boards (SPCBs)/Pollution Control Committees (PCCs) on 30/06/2022 to ensure the compliance of Notification published by Ministry on 12/08/2021. The technical guidelines issued by the CPCB in this regard is available at <https://cpcb.nic.in/technical-guidelines-3/>. All the project proponents are hereby requested to sensitize and create awareness among people working within the Project area as well as its surrounding area on the ban of SUP in order to ensure the compliance of Notification published by this Ministry on 12/08/2021. A report, along with photographs, on the measures taken shall also be included in the six monthly compliance report being submitted by the project proponents.
- (xxviii) The project proponent shall adopt the Clean Air practices like mechanical collectors, wet scrubbers, fabric filters (bag houses), electrostatic precipitators, combustion systems (thermal oxidizers), condensers, absorbers, adsorbers, and biological degradation. Controlling emissions related to transportation shall include emission controls on vehicles as well as use of cleaner fuels. Sufficient numbers of additional truck mounted Fog/Mist water cannons shall be procured and operated regularly inside the project premises and also in the surrounding villages to arrest suspended dust in the atmosphere.
- (xxix) The recommendations of the approved Site-Specific Wildlife Management Plan shall be implemented in consultation with the State Forest Department. The implementation report shall be furnished along with the six-monthly compliance report to the concerned Regional Office of the MoEF&CC.

B. General conditions

I. Statutory compliance:

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

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

II. Air quality monitoring and preservation

- i. The project proponent shall install 24x7 continuous emission monitoring system with respect to standards prescribed in Environment (Protection) Rules 1986 vide G.S.R. No. 612 (E) dated 25th August, 2014 (Cement) and subsequent amendment dated 9th May, 2016 (Cement) and 10th May, 2016 (in case of Co-processing Cement); as amended from time to time; and connected to SPCB and CPCB online servers and calibrate these system from time to time according to equipment supplier specification through labs recognized under Environment (Protection) Act, 1986 or NABL accredited laboratories.
- ii. The project proponent shall monitor fugitive emissions in the plant premises at least once in every quarter through labs recognised under Environment (Protection) Act, 1986.
- iii. The project proponent shall install system carryout to Ambient Air Quality monitoring for common/criterion parameters relevant to the main pollutants released (e.g. PM10 and PM2.5 in reference to PM emission, and SO2 and NOx in reference to SO2 and NOx emissions) within and outside the plant area at least at four locations (one within and three outside the plant area at an angle of 120°each), covering upwind and downwind directions.
- iv. The project proponent shall submit monthly summary report of continuous stack emission and air quality monitoring and results of manual stack monitoring and manual monitoring of air quality /fugitive emissions to Regional Office of MoEF&CC, Zonal office of CPCB and Regional Office of SPCB along with six-monthly monitoring report.
- v. Appropriate Air Pollution Control (APC) system shall be provided for all the dust generating points including fugitive dust from all vulnerable sources, so as to comply prescribed stack emission and fugitive emission standards.
- vi. The project proponent shall provide leakage detection and mechanised bag cleaning facilities for better maintenance of bags.
- vii. Pollution control system in the cement plant shall be provided as per the CREP Guidelines of CPCB.
- viii. Sufficient number of mobile or stationery vacuum cleaners shall be provided to clean plant roads, shop floors, roofs, regularly.
- ix. Ensure covered transportation and conveying of raw material to prevent spillage and dust generation; Use closed bulkers for carrying fly ash.
 - x. Provide wind shelter fence and chemical spraying on the raw material stock piles; and
 - xi. Provide Low NOX burners as primary measures and SCR /NSCR technologies as secondary measure to control NOX emissions.
- xii. Have separate truck parking area and monitor vehicular emissions at regular interval.
- xiii. Efforts shall be made to reduce impact of the transport of the raw materials and end products on the surrounding environment including agricultural land by the use of covered conveyor belts/railways as a mode of transport
- xiv. Ventilation system shall be designed for adequate air changes as per ACGIH document for all tunnels, motor houses, cement bagging plants.

III. Water quality monitoring and preservation

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

IV. Noise monitoring and prevention

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

V. Energy Conservation measures

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

VI. Waste management

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

VII. Green Belt

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

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

VIII. Public hearing and Human health issues

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

IX. Environment Management

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

X. Miscellaneous

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

- iii. The project proponent shall upload the status of compliance of the stipulated environment clearance conditions, including results of monitored data on their website and update the same on half-yearly basis.
- iv. The project proponent shall monitor the criteria pollutants level namely; PM10, SO2, NOx (ambient levels as well as stack emissions) or critical sectoral parameters, indicated for the projects and display the same at a convenient location for disclosure to the public and put on the website of the company.
- v. The project proponent shall submit six-monthly reports on the status of the compliance of the stipulated environmental conditions on the website of the ministry of Environment, Forest and Climate Change at environment clearance portal.
- vi. The project proponent shall submit the environmental statement for each financial year in Form-V to the concerned State Pollution Control Board as prescribed under the Environment (Protection) Rules, 1986, as amended subsequently and put on the website of the company.
- vii. The project proponent shall inform the Regional Office as well as the Ministry, the date of financial closure and final approval of the project by the concerned authorities, commencing the land development work and start of production operation by the project.
- viii. The project proponent shall abide by all the commitments and recommendations made in the EIA/EMP report, commitment made during Public Hearing and also that during their presentation to the Expert Appraisal Committee.
- ix. The PP shall put all the environment related expenditure, expenditure related to Action Plan on the PH issues, and other commitments made in the EIA/EMP Report etc. in the company web site for the information to public/public domain. The PP shall also put the information on the left over funds allocated to EMP and PH as committed in the earlier ECs and shall be carried out and spent in next three years, in the company web site for the information to public/public domain.
- x. No further expansion or modifications in the plant shall be carried out without prior approval of the Ministry of Environment, Forests and Climate Change (MoEF&CC).
- xi. Concealing factual data or submission of false/fabricated data may result in revocation of this environmental clearance and attract action under the provisions of Environment (Protection) Act, 1986.
- xii. The Ministry may revoke or suspend the clearance, if implementation of any of the above conditions is not satisfactory.
- xiii. The Ministry reserves the right to stipulate additional conditions if found necessary. The Company in a time bound manner shall implement these conditions.
- xiv. The Regional Office of this Ministry shall monitor compliance of the stipulated conditions. The project authorities should extend full cooperation to the officer (s) of the Regional Office by furnishing the requisite data / information/monitoring reports.
- xv. Any appeal against this EC shall lie with the National Green Tribunal, if preferred, within a period of 30 days as prescribed under Section 16 of the National Green Tribunal Act, 2010.

Consideration in Terms of Reference (TOR)

Agenda No. 24.5

24.5 Integrated Proposed DRI Plant (Sponge Iron 135000 TPA), WHRB 10MW, AFBC Power Plant 3.5MW, Submerged Electric Arc Furnace 7 MVA (Ferro Manganese 12600 TPA), Table top furnace (Brown Fused Alumina 10500 TPA) by M/s Shri Baba Baidnath Ispat Pvt. Ltd., located at Sy. No 339/1, 339/3, 340, 341, 348/1, 348/2, 349/1, 349/2, 349/3, 349/4, 349/5, 350/1, 350/2, 350/3, 350/4, 351/1, 359/1, 351/2, 359/2, 351/3, 359/3, 352, 353, 354, 355/1, 355/2, 356, 360, 362 and 363/2, Village Gaitra & Raikheda, Tehsil Tilda, District Raipur, Chhattisgarh – Consideration of TOR.

[Proposal No. IA/CG/IND1/410582/2022; File No. IA-J-11011/503/2022-IA-II(IND-I)]

[Consultant: Parivesh Environmental Engineering Services; Valid upto: 11.11.2024]

24.5.1 M/s. Shri Baba Baidnath Ispat Private Limited has made an application online vide proposal no. IA/CG/IND1/410582/2022 dated 16th December 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 Sl. No. 3(a) Metallurgical Industries (Ferrous and Non-ferrous) and 1(d) Thermal Power Plant under Category “A” of the schedule of the EIA Notification, 2006 and appraised at Central Level.

24.5.2 Name of the EIA consultant: M/s. Parivesh Environmental Engineering Services [List of ACOs with their Certificate / Extension Letter No: NABET/EIA/2124/IA0092 (Rev.01) valid till 11.11.2024, as on February 27, 2023].

Details submitted by Project proponent

24.5.3 The project of M/s Shri Baba Baidnath Ispat Private Limited located in Sy. No. 339/1, 339/3, 340, 341, 348/1, 348/2, 349/1, 349/2, 349/3, 349/4, 349/5, 350/1, 350/2, 350/3, 350/4, 351/1, 359/1, 351/2, 359/2, 351/3, 359/3, 352, 353, 354, 355/1, 355/2, 356, 360, 362 and 363/2, Gaitra & Raikheda Village, Tilda Tehsil, Raipur District, Chhattisgarh is for setting up of a Proposed DRI Plant (Sponge Iron 135000 TPA), WHRB 10MW, AFBC Power Plant 3.5MW, Submerged Electric Arc Furnace 7 MVA (Ferro Manganese 12600 TPA), Table top furnace (Brown Fused Alumina 10500 TPA).

24.5.4 Environmental site settings:

S.No.	Particulars	Details	Remarks
i.	Total land	6.529 ha [Private land]	Land use: Industrial Use
ii.	Land acquisition details as per MoEF&CC O.M. dated 7/10/2014	Land completely acquired	-
iii.	Existence of habitation &	Project site: Nil	No R & R involved

S.No.	Particulars	Details			Remarks																																																																						
	involvement of R&R, if any.	Study Area: The nearest human settlement from the project site is: <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th>Habitation</th> <th>Distance</th> <th>Direction</th> </tr> </thead> <tbody> <tr> <td>Gaitra</td> <td>0.650</td> <td>SSW</td> </tr> </tbody> </table>			Habitation	Distance	Direction	Gaitra	0.650	SSW	The boundary of the village is started at a distance of 0.650 km but actual habitation (As per survey by Patwari) distance of village Gaitra is approx. 1.010 km from proposed project site																																																																
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iv.	Latitude and Longitude of all corners of the project site.	<table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th>Point</th> <th>Latitude</th> <th>Longitude</th> </tr> </thead> <tbody> <tr><td>1.</td><td>21°28'11.69"N</td><td>81°51'10.44"E</td></tr> <tr><td>2.</td><td>21°28'7.72"N</td><td>81°51'10.61"E</td></tr> <tr><td>3.</td><td>21°28'8.23"N</td><td>81°51'8.36"E</td></tr> <tr><td>4.</td><td>21°28'6.95"N</td><td>81°51'7.23"E</td></tr> <tr><td>5.</td><td>21°28'6.95"N</td><td>81°51'6.94"E</td></tr> <tr><td>6.</td><td>21°28'0.53"N</td><td>81°51'6.80"E</td></tr> <tr><td>7.</td><td>21°27'59.37"N</td><td>81°51'6.07"E</td></tr> <tr><td>8.</td><td>21°27'59.83"N</td><td>81°51'5.00"E</td></tr> <tr><td>9.</td><td>21°28'3.45"N</td><td>81°51'5.13"E</td></tr> <tr><td>10.</td><td>21°28'3.63"N</td><td>81°51'3.95"E</td></tr> <tr><td>11.</td><td>21°28'5.19"N</td><td>81°51'4.12"E</td></tr> <tr><td>12.</td><td>21°28'6.65"N</td><td>81°51'4.89"E</td></tr> <tr><td>13.</td><td>21°28'6.82"N</td><td>81°51'3.04"E</td></tr> <tr><td>14.</td><td>21°28'6.22"N</td><td>81°51'2.83"E</td></tr> <tr><td>15.</td><td>21°28'6.61"N</td><td>81°51'1.04"E</td></tr> <tr><td>16.</td><td>21°28'5.49"N</td><td>81°51'0.73"E</td></tr> <tr><td>17.</td><td>21°28'5.95"N</td><td>81°50'58.33"E</td></tr> <tr><td>18.</td><td>21°28'11.08"N</td><td>81°50'59.28"E</td></tr> <tr><td>19.</td><td>21°28'10.97"N</td><td>81°50'59.97"E</td></tr> <tr><td>20.</td><td>21°28'11.91"N</td><td>81°51'0.05"E</td></tr> <tr><td>21.</td><td>21°28'11.74"N</td><td>81°51'2.15"E</td></tr> <tr><td>22.</td><td>21°28'12.63"N</td><td>81°51'2.42"E</td></tr> <tr><td>23.</td><td>21°28'11.60"N</td><td>81°51'7.50"E</td></tr> </tbody> </table>	Point	Latitude	Longitude	1.	21°28'11.69"N	81°51'10.44"E	2.	21°28'7.72"N	81°51'10.61"E	3.	21°28'8.23"N	81°51'8.36"E	4.	21°28'6.95"N	81°51'7.23"E	5.	21°28'6.95"N	81°51'6.94"E	6.	21°28'0.53"N	81°51'6.80"E	7.	21°27'59.37"N	81°51'6.07"E	8.	21°27'59.83"N	81°51'5.00"E	9.	21°28'3.45"N	81°51'5.13"E	10.	21°28'3.63"N	81°51'3.95"E	11.	21°28'5.19"N	81°51'4.12"E	12.	21°28'6.65"N	81°51'4.89"E	13.	21°28'6.82"N	81°51'3.04"E	14.	21°28'6.22"N	81°51'2.83"E	15.	21°28'6.61"N	81°51'1.04"E	16.	21°28'5.49"N	81°51'0.73"E	17.	21°28'5.95"N	81°50'58.33"E	18.	21°28'11.08"N	81°50'59.28"E	19.	21°28'10.97"N	81°50'59.97"E	20.	21°28'11.91"N	81°51'0.05"E	21.	21°28'11.74"N	81°51'2.15"E	22.	21°28'12.63"N	81°51'2.42"E	23.	21°28'11.60"N	81°51'7.50"E	-
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v.	Elevation of the project site	MSL of Project Site -307m to 310m above mean sea level			-																																																																						
vi.	Involvement of Forest land if any.	No involvement of Forest Land			-																																																																						
vii.	Water body (Rivers, Lakes, Pond, Nala,	Project site: None			-																																																																						

S.No.	Particulars	Details			Remarks
	Natural Drainage, Canal etc.) exists within the project site as well as study area	Study area			
		Water body	Distance (in KM)	Direction	
		Pond	adjacent to project site	East	
		Pond near Tarashiv	1.55	North	
		Pond near Bhatapara	1.61	South	
		Pond near Chataud	2.8	North	
		Unnamed Pond near Keotara	3.64	NE	
		Kumhari Tank	4.77	East	
		Pond near mohrenga	4.85	SSE	
		Kirna Tank	5.38	West	
		Pindraon Tank	5.53	South	
		Pond near Marhi	5.59	SW	
		Pond near Rajia	5.69	North	
		Pond near, Bharuwadih Kalan	5.97	ESE	
		Pond near Deori	6.70	North	
		Pond near Chhapora	6.88	NNE	
		Pikridih Tank	8.03	Souh	
		Pond near Bhatagaon	8.37	SW	
	Pond near Manpur	8.85	NNE		
	Pond near Bepantola	8.87	SSE		
viii.	Existence of ESZ/ESA/ national park/ wildlife sanctuary/ biosphere reserve/ tiger reserve/ elephant reserve etc. if any within the study area	Study area: Nil			
		List of Reserved and protected forests:			
		1. Mohrenga PF – 2.21 km, SE,			
		2. Khaulidabri PF – 5.36 km, SE			

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

S. No	Plant Equipment/ Facility	Proposed units	
		Configuration	CAPACITY(TPA)
1	DRI Plant (Sponge Iron)	1 x 350 TPD Kiln 1 x 100 TPD Kiln	1,35,000TPA
2	Submerged Electric Arc	1 x 7 MVA	Ferro Manganese -12,600

	Furnace (FeMn)		TPA
3	WHRB	10 MW	10 MW
4	CPP (AFBC)	1 x3.5	3.5 MW
5	Table Top Furnace (Brown Fused Alumina)	35 TPD	10,500 TPA

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

Sr. No.	Raw material	Quantity (TPA)	Source	Distance from site (km)	Mode of Transportation
Raw Material for Sponge Iron Production (DRI Plant)					
1	Iron Ore/Pellet	2,16,000/1,92,825	Barbil, Orissa NMDC, Chhattisgarh	416	By Rail/ Road Through Covered Trucks
2	Coal Indian	1,98,450	SECL Chhattisgarh	193	By rail & road (through covered trucks)
	Coal Imported	1,21,500	South Africa	8250	Through sea route, rail route & by road
3	Dolomite	7,650	Open Market		By road
Raw Material for Brown Fused Alumina					
1	Calcined Bauxite	21,000	Sister industry	193	by road
Raw Material for Power Plant (AFBC)					
1	Dolochar	43598	Own Project	-	-
2	Coal	45,000	E- auction/open market	193	By Road
Raw Material for Ferro Alloys Plant(ferro manganese)					
1	Manganese ore	25,200	Open Market	300	By Road
2	Coke	4725	Open Market	604	By Road
3	Coal	2772	SECL mine/Open Market	193	By Road
4	Flux (Dolomite)	2520	Open Market	94	By Road

24.5.7 The water requirement for the proposed project is estimated as 748 KLD, out of which 600 KLD of fresh water requirement will be obtained from the ground water and the remaining requirement of 148 KLD will be met from the recycled water. The permission for drawl of groundwater / surface water will be obtained from concerned authority.

- 24.5.8 The power requirement for the proposed project is estimated as 13.5MW, out which 13.5. MW will be sourced from CPP& WHRB.
- 24.5.9 The capital cost of the project is Rs 45.00 Crores and the capital cost for environmental protection measures is proposed as Rs 4.25 Crores. The employment generation from the proposed project is 500 (Direct -200 Nos., Indirect -300 Nos.).
- 24.5.10 It is submitted that there is no violation under EIA notification 2006/no court cases/no show cause/no direction related to the project under consideration.
- 24.5.11 Proposed Terms of Reference: [Baseline data collection period: 1st October 2022 to 31st December 2022]

Attributes	Parameters	Sampling		Remarks
		No. of stations	Frequency	
A. Air				
a Meteorological parameters	Meteorological Wind Speed Wind Direction Max. Temperature Min. Temperature Relative Humidity Rain fall	1 location at project site	One hourly continuous for one season	Secondary data from nearest IMD for data verification and selection of sampling locations
b. AAQ parameters	PM ₍₁₀₎ , PM _(2.5) , SO ₂ , NO _x , CO	8 locations, one at project site and 07 in buffer area	24 hourly twice a week for 3 months	Interpretation based on CPCB NAAQ standards 2009
B. Noise	Hourly equivalent noise levels dB(A) Day Time Noise Levels (Leq _{day}) dB(A) Night time Noise Levels (Leq _{night}) dB(A)	08 locations, one at project site and 07 in buffer area	on hourly basis for 24 hours at each station (Once in season)	CPCB /OSHA
C. Water				
Surface water/ Ground water quality parameters	Ground water Color; pH; Turbidity; Dissolved solids; Aluminium as Al;Ammonia (, as total ammonia-N); Anionic Detergents as MBAS; Barium as Ba; Boron as B;Calcium as	Set of grab samples during study period at the above mentioned 8 locations for ground water.	Once in season	Parameters monitored as per IS 10500

Attributes	Parameters	Sampling		Remarks
		No. of stations	Frequency	
	Ca;Chloramines as Cl ₂ Chloride as Cl;Copper as Cu; Fluoride as F; Free Residual Chlorine; Iron as Fe; Magnesium as Mg; Manganese as Mn;Nitrate as NO ₃ ; Phenolic Compounds as C ₆ H ₅ OH;Selenium as Se;Sulphate as SO ₄ . Total Alkalinity as CaCO ₃ .Total Hardness as CaCO ₃ .Zinc as Zn, Cd; Pb; Hg; As;Ni;Cr Surface water pH;Turbidity;Total Hardness (as CaCO ₃); Total Alkalinity (asCaCO ₃);Chlorides (as Cl);Sulphate (as SO ₄); Nitrate (as NO ₃); Fluoride (as F); BOD ₃ Days at 27°C;COD; Phenolic Compounds (as C ₆ H ₅ OH);Lead (as Pb); Iron (as Fe); Arsenic (as As); Cadmium (as Cd); Total Chromium (as Cr); Mercury (as Hg); Copper (as Cu); Zinc (as Zn);Selenium (as Se);Oil & grease; Colour; Dissolved solids; Residual free chlorine; Boron (as B);Calcium (as Ca);Magnesium (as Mg);DO;	Set of grab samples during study period		Parameters monitored as per BIS 2296
D. Land				
a. Soil quality	Soil:			

Attributes	Parameters	Sampling		Remarks
		No. of stations	Frequency	
b. Land use	<p>Particle size distribution; Texture; pH. Electrical conductivity; Bulk density; Organic carbon; Sodium (Na); Potassium (K); Moisture content; Total Nitrogen; Available phosphorous; organic matter; Total Soluble Chloride; Total Soluble sulphate; Water holding capacity; Porosity;</p> <p>Land use/Land cover Location code Total project area Topography Drainage (natural) Cultivated, forest, plantations, water bodies, roads and settlements</p>	<p>08 locations, One location at project site and 07locations in buffer area</p> <p>Study area</p>	<p>Once in season</p> <p>At least 20 known vectors for geo referencing and verification</p>	
E. Biological a. Aquatic b. Terrestrial	<ul style="list-style-type: none"> • Incentivization of floral and faunal species in core and buffer zone • Density in core zone • Importance value index (IVI) of trees, • Biodiversity index • Identification of rare threatened and endangered species 	Study Area	Five-Seven days in a season	
F. Socio-economic parameters	<p>Demographic structure; Infrastructure resource base; Economic resource base;</p> <p>Health status; Morbidity pattern; Working pattern; Cropping pattern</p>	Study area	In two phases of the project	

Deliberation by the Committee

24.5.12 The Committee noted the following:

- i. The instant proposal is for setting up of a Proposed DRI Plant (Sponge Iron 135000 TPA), WHRB 10MW, AFBC Power Plant 3.5MW, Submerged Electric Arc Furnace 7 MVA (Ferro Manganese 12600 TPA), Table top furnace (Brown Fused Alumina 10500 TPA).
- ii. The EAC noted that earlier the project site was with M/s Arvind Inorganics Pvt. Ltd. which was a chemical plant and was operational since 2008 with valid CTO obtained from CECB dated 27.10.2008 and same was renewed from time to time. The last CTO was renewed on 10.10.2017 by CECB which was valid upto 31.05. 2018. After that plant was not in operation since 2018. Now, Shri Baba Baidnath Ispat Private Limited acquired the project (vide certificate no IN-CG3202015861320U dated 5 July 2022) from the M/s Arvind Inorganics Pvt Ltd. Demolition of Existing Structure will be done and waste generated from demolition like Steel Structures (100 Ton) will be send to Sister Steel Industry in Raipur and Construction Aggregate Waste (11000 cu.m.) will be used at site for leveling & backfilling. Now Shri Baba Baidnath Ispat Private Limited acquired the project. There was no litigation pending with earlier project. Project will be demolished as per MOEFCC/CPCB norms and existing plantation will be retained.
- iii. Total project area is 6.529 ha which is private land and under the possession of the company.
- iv. The nearest habitation to the project site is Gaitra which is at a distance of 0.65 km in the SSW direction.
- v. There area numerous ponds in the vicinity of the project site within the study area. The EAC is of the opinion that the water bodies shall not be disturbed.
- vi. The total water requirement is 748 KLD, out of which 600 KLD of fresh water requirement will be obtained from the ground water and the remaining requirement of 148 KLD will be met from the recycled water.

Recommendations of the Committee

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

- (i) The PP shall obtain site inspection report from CECB on the demolition of chemical plant of previous occupier i.e. M/s Arvind Inorganics Pvt. Ltd. The PP shall follow all the procedure and SOP for dismantling of the chemical Unit. The SPCB should ensure that there shall not be any contaminated due to dismantling of chemical plant.
- (ii) The nearest habitation to the project site is Gaitra which is at a distance of 0.65 km in the SSW direction. Project Proponent shall prepare an action plan for environmental safeguard measures to minimise the impact on the habitation of the locals. The company shall also include some of these locations in its environmental monitoring programme.

- (iii) There are numerous ponds in the vicinity of the project site within the study area of 10 km of the project site. The PP shall include in the EIA/EMP report suitable steps /conservation plan along with contouring (close intervals), Run -off calculations, disposal etc. A robust and full proof Micro-Drainage Conservation scheme to protect the natural drainage/water bodies and its flow parameters; along with Soil conservation scheme and multiple Erosion control measures shall be provided.
- (iv) Water required for the proposed project will be 748 KLD, out of which 600 KLD of fresh water requirement is planned to be obtained from the ground water and the remaining requirement of 148 KLD will be met from the recycled water. PP shall explore the possibility of shifting to alternate source of water to reduce dependency on groundwater.
- (v) Detailed description of micro flora and fauna (terrestrial and aquatic) existing in the study area with special reference to rare, endemic and endangered species.
- (vi) Explore possibilities for recycling and reusing of treated water in the unit to reduce the fresh water demand and waste disposal.
- (vii) 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.
- (viii) PP shall submit action plan for rainwater harvesting system.
- (ix) PP shall submit a letter from SPCB certifying that the proposed project do not fall under CPA/SPA.
- (x) Action plan for 100 % solid waste utilization shall be submitted.
- (xi) 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.
- (xii) 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.
- (xiii) 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.
- (xiv) 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.

- (xv) 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.
- (xvi) Action plan for the stock piles with impervious floor, provision of garland drains and catch pits to trap run off material shall be submitted.
- (xvii) Action plan to limit the dust emission from all the stacks below 30 mg/Nm³ shall be furnished.
- (xviii) Air Cooled condensers shall be used in the captive power plant.
- (xix) A Plan of Action for disposal of e-waste must be drawn up and implemented.
- (xx) PP shall explore the possibility of plastic waste utilization in the Plant/Unit process.
- (xxi) Action Plan for fire fighting system including provision for flame detectors, temperature actuated heat detectors with alarms, automatic sprinkler system, location of fire water tanks & capacity, separate power system for fire fighting, details of qualified and trained fire personnel & their job specifications, nearest fire station & time required to reach the proposed site shall be submitted.
- (xxii) The PP to prepare 3 separate drawings. In drg 1 PP to show complete layout, Road network, Parking, Plant construction along with area statement, proper indexing with colour codes etc. In drag 2 PP to show road networking with existing and proposed green belt with area calculations with its % against plot area. In drg 3 PP to prepare contour drawing with road networking, drainage disposal system, RWH system with drawings, designs and calculations along with indexing and colour code for drainage network etc.

DAY 2: MARCH 1, 2023 (WEDNESDAY)

Consideration of Environmental Clearance Proposals

Agenda No. 24.6

- 24.6 Expansion of Cement Plant (1.20 to 3.00 MTPA) and Clinker (1.10 to 2.21 MTPA) with 8.5 MW WHRS located in 48.71 ha, M/s Shree Digvijay Cement Company Ltd., located at P.O. Digvijaygram, Sikka, District Jamnagar, Gujarat- Consideration of Environmental Clearance.**

[Proposal No. IA/GJ/IND1/415935/2023; File No. IA-J-11011/409/2019-IA-II(IND-I)]

[Consultant: MIN MEC Consultancy Pvt. Ltd.; Valid Upto: 29.03.2025]

24.6.1 M/s Shree Digvijay Cement Company Ltd. has made an online application vide proposal no. IA/GJ/IND1/415935/2023 dated 27.01.2023 along with copy of EIA/EMP report, Forms (Part A, B and C) and certified compliance report seeking Environment Clearance (EC) under the provisions of the EIA Notification, 2006 for the project mentioned above. The proposed project activity is listed at S. No. 3(b) Cement Plants under Category “A” of the schedule of the EIA Notification, 2006 and appraised at central level.

24.6.2 Name of the EIA consultant: M/s. MIN MEC Consultancy Pvt. Ltd. [List of ACOs with their Certificate / Extension Letter no. NABET/EIA/2225/IA0096; Valid up to 29.03.2025, as on February 27, 2023].

Details submitted by Project proponent

24.6.3 The details of the ToR are furnished as below:

Date of application	Consideration	Details	Date of accord	ToR Validity
01.06.2022	Standard ToR granted	Terms of Reference	07.07.2022	07.07.2025

24.6.4 The project of M/s Shree Digvijay Cement Company Limited located at P.O. Digvijaygram, Sikka, Jamnagar District, Gujarat State is for enhancement of production capacity of Cement from 1.20 to 3.00 MTPA and Clinker from 1.10 to 2.21 MTPA along with existing 8.5 MW WHRS.

24.6.5 Environmental Site Settings:

Sl. No	Particulars	Details	Remarks												
i.	Total land	Land: 48.71 ha	Land use : 100% industrial												
ii.	Land acquisition details as per MoEF&CC O.M. dated 7/10/2014	The existing plant area is already in possession of the company and expansion shall be undertaken within the existing land. No additional land shall be required for proposed expansion of project.													
iii.	Existence of habitation & involvement of R&R, if any.	<p>Project site : No habitation exist in the plant area so there is no R&R needed</p> <p>Study area:</p> <table border="1"> <thead> <tr> <th>Habitation</th> <th>Distance</th> <th>Direction</th> </tr> </thead> <tbody> <tr> <td>SDCCL Colony</td> <td>20 m</td> <td>West</td> </tr> <tr> <td>Sikka</td> <td>10 m</td> <td>East to North</td> </tr> <tr> <td>Nimaz</td> <td>20 m</td> <td>South west</td> </tr> </tbody> </table>	Habitation	Distance	Direction	SDCCL Colony	20 m	West	Sikka	10 m	East to North	Nimaz	20 m	South west	
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SDCCL Colony	20 m	West													
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Sl. No	Particulars	Details			Remarks															
		Colony																		
		Mungni village	750	South																
		GSECL (TPS) colony	400 m	South East																
iv.	Latitude and Longitude of the project site	Point	Plant Area																	
			Latitude	Longitude																
		North most	22°26'3.51"N	69°50'6.69"E																
		East most	22°25'52.45"N	69°50'21.96"E																
		South most	22°25'26.81"N	69°50'7.01"E																
		West most	22°25'34.60"N	69°49'50.40"E																
v.	Elevation of the project site	8-17 m above mean sea level																		
vi.	Involvement of Forest land if any.	No forest land involved																		
vii.	Water body exists within the project site as well as study area	<p>Project Site: A seasonal nala enters through the SSE direction into the plant boundary and exits in south western direction and covers a short distance of 375 m in the south side of plant area.</p> <p>Study area :</p> <table border="1"> <thead> <tr> <th>River/ Nala</th> <th>Distance (km)</th> <th>Direction</th> </tr> </thead> <tbody> <tr> <td>Gulf of Kachch</td> <td>0.5</td> <td>NW</td> </tr> <tr> <td>Sasoi River</td> <td>6.6</td> <td>E</td> </tr> <tr> <td>Phuljar River</td> <td>8.4</td> <td>SSW</td> </tr> <tr> <td>Bed Dam</td> <td>7.9</td> <td>E</td> </tr> </tbody> </table>			River/ Nala	Distance (km)	Direction	Gulf of Kachch	0.5	NW	Sasoi River	6.6	E	Phuljar River	8.4	SSW	Bed Dam	7.9	E	Project is outside CRZ area which has been certified by National Centre for Sustainable Coastal Management (NCSCM) (MoEF&CC), Chennai in January 2020
River/ Nala	Distance (km)	Direction																		
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Sasoi River	6.6	E																		
Phuljar River	8.4	SSW																		
Bed Dam	7.9	E																		
viii.	Existence of ESZ/ ESA/ national park/ wildlife sanctuary/ biosphere reserve/ tiger reserve/ elephant	<p>Study area</p> <p>Name of the ESZ/ESA: (1) Marine National Park, (2) ESZ, (3) Marine Sanctuary</p> <p>Status of Notification: 22.08.2013 of ESZ</p> <p>Distance of project from ESZ/ESA: (1) Marine National Park 3.48 km, (2) ESZ 4.36 km, (3) Marine Sanctuary 1.48 km</p> <p>Authenticated map of ESZ projecting distance of ESZ from project site: received</p>																		

Sl. No	Particulars	Details	Remarks																		
	reserve etc. if any within the study area	<p>from Deputy Conservator of Forest, Marine National Park, Jamnagar, Gujarat</p> <p>Status of NBWL approval: Not applicable</p> <p>List of reserved and protected forests within study area :</p> <table border="1"> <thead> <tr> <th>Name of forest</th> <th>Distance (km)</th> <th>Direction</th> </tr> </thead> <tbody> <tr> <td>RF Near Sarmat</td> <td>8.1</td> <td>ENE</td> </tr> <tr> <td>RF Near Khatia Bareja</td> <td>9.2</td> <td>SSW</td> </tr> <tr> <td>Mangrove Swamp Near Sikka</td> <td>1.8</td> <td>NE</td> </tr> <tr> <td>Mangrove Swamp Near Patra Van Creek</td> <td>6.6</td> <td>NE</td> </tr> <tr> <td>Mangrove Swamp Near Mangeti Khadi</td> <td>9.4</td> <td>WNW</td> </tr> </tbody> </table>	Name of forest	Distance (km)	Direction	RF Near Sarmat	8.1	ENE	RF Near Khatia Bareja	9.2	SSW	Mangrove Swamp Near Sikka	1.8	NE	Mangrove Swamp Near Patra Van Creek	6.6	NE	Mangrove Swamp Near Mangeti Khadi	9.4	WNW	
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24.6.6 The Company was established during 1944 and started commercial production of Cement / Clinker through wet process technology in the year of 1949. Dry Process Technology Cement / Clinker Plant's commercial production commenced on 1st September 1985. Thus, the Cement Plant was in operation prior to the EIA Notification of 1994 & 2006. The cost of project was less than Rs. 50 crores at the time of notification of the EIA Notification 1994 i.e. it was Rs. 32.61 crore at time of establishment of dry process in 1985 based on the certificate from Chartered Accountant submitted. Hence, the project was exempted from requirement of environment clearance under EIA notification 1994. No expansion was undertaken thereafter till date. The existing project was accorded latest Consent to Operate by Gujarat Pollution Control Board, vide Consent Order No.AWH-102081 dated 03.06.2019 valid till 25.03.2024.

24.6.7 Implementation status of the existing CTE/CTO:

Sl. No.	Facilities	Units as per CTE	Implementation status as on	Production as per CTO
			Jan 2023	
1	Cement Plant (with clinker manufacturing)	1.20 MTPA	100% operational	1.20 MTPA
2	Power generation from Waste heat	8.5 MW	100% installed but recovery 3.6 MW during operation.	8.5 MW

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

Sl. No.	Plant Equipment/ Facility	Existing facilities		Proposed Units		Final (Existing + Proposed)		Remarks
		Configuration	Capacity	Configuration	Capacity	Configuration	Capacity	
1.	Cement plant	1 no. X 1.2 MTPA	1.2 MTPA	1 no. X 1.8 MTPA	1.8 MTPA	1 no. X 1.2 + 1 no. X 1.8 MTPA	3.0 MTPA	
2.	Clinker plant	1 no. X 1.10MTPA	1.10MTPA	1 no. X 1.11 MTPA	1.11 MTPA	1 X 1.10 + 1 no. X 1.11 MTPA	2.21 MTPA	Not mentioned separately In CTO
3.	Power generation from Waste heat	8.5 MW	8.5 MW	0	0	8.5 MW	8.5 MW	100% installed but recovery 3.6 MW during operation

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

Sl. No.	Raw material	Quantity required per annum			Source	Distance from site (Kms)	Mode of transportation
		Existing (TPA)	Expansion (TPA)	Total (TPA)			
1	Limestone	1668303	1675869	3344172	Own Mines - production capacity : <ul style="list-style-type: none"> • Gop- 0.25 MTPA • Pachhtar - 1 MTPA • Chorbedi- 0.9 MTPA • Pachhtardi - 0.35 MTPA 	95 – 125 km	By trucks
					Purchase from Local Market	100 – 150 km	
2	Sandstone	34398	34554	68952	Gujarat	200 - 250 km	By trucks
3	Iron Ore	17199	17277	34476	Gujarat (usually Chotila)	300 -400 km	By trucks
4	1) Coal / Pet coke	170814	148848	319662	Imported Coal/ Domestic Coal/ Petcoke/ Lignite	Imported (port ~50 km)/ Domestic	By trucks / By dumpers / By Sea
	2) Alternate Fuel (Plastic waste /				Gujarat	~500	By trucks / By tankers

Sl. No.	Raw material	Quantity required per annum			Source	Distance from site (Kms)	Mode of transportation
		Existing (TPA)	Expansion (TPA)	Total (TPA)			
	Municipal waste / RDF / etc.)						
5	Clinker	898696	1284104	2182800	in house & purchase	Within plant, Within Gujarat (when purchased)	Conveyors, Trucks (when purchased)
6	Fly ash	235974	418026	654000	Local (Various Power Plants)	20 – 400 km	By trucks / bulkers
7	Mineral Gypsum/ Marine Gypsum/ Chemical gypsum/ Phospho gypsum/ PP Mold / etc.	65330	97870	163200	Local/ Import	100 – 300 km	By trucks / By Sea
	Total	3090714	3676548	6767262			

24.6.10 Existing Water requirement is 150 m³/day, water requirements is obtained from the existing tube wells within the plant premises and permission for the same has been obtained from Central Ground Water Authority (CGWA), Govt. of India vide NOC letter no. CGWA/NOC/IND/ORIG/2021/12448 dated 13/07/2021 valid till 12/07/2024 for a quantity of 250 m³/day. The additional water requirement for the proposed project is estimated as 90 m³/day and will be met from same ground water source and permission.

24.6.11 Existing power requirement of 15.1 MW is obtained from WHRS (3.6 MW) and state electricity grid (11.5 MW). The power requirement for the proposed project is estimated as additional 15.9 MW, out of which 4.9 MW will be obtained from the WHRS and 12.5 MW from the state electricity grid.

24.6.12 Baseline Environmental Studies:

Period	March to May 2021
AAQ parameters at 8 Locations(min and max)	<ul style="list-style-type: none"> PM_{2.5} = 52.2 to 88.0 µg/m³ PM₁₀ = 28.7 to 51.5 µg/m³ SO₂ = 10.0 to 28.0 µg/m³ NO_x = 13.7 to 34.9 µg/m³ CO = 0.115 to 0.802 mg/m³
Incremental GLC level	<ul style="list-style-type: none"> Due to expansion based on air quality prediction modelling: PM 10 = 2.838 µg/m³; (level at 300 m in E direction) PM2.5 = 0.612 µg/m³; (level at 300 m, E direction) SO₂ = 3.014 µg/m³ (level at 1.6 km in E direction) NO_x = 13.264 µg/m³ (level at 1.6 km in E direction)

Ground water quality at 8 locations	pH: 7.2 to 7.5, Total Hardness: 308 to 1448 mg/l, Chlorides: 102 to 982 mg/l, Fluoride: 0.23 to 0.72 mg/l. Heavy metals are within the limits.																																			
Surface water quality at 8 locations	pH:7.3 to 8.8, DO: 2.5 to 7.5 mg/l, BOD: 9 to 240 mg/l and COD: 19 to 670 mg/l																																			
Noise levels Leq (day and night)	50.39 to 68.78 dBA for the day time and 40.80 to 63.37 dBA for the Night time at 9 locations																																			
Traffic assessment study findings	<ul style="list-style-type: none"> ● Traffic study has been conducted at (1) T1- Road from Plant to National Highway 947 near material gate., (2) T2- Road from Nani Khavdi Village to NH947, near H P Petrol- Pump and (3) T3-Road from Jamnagar to Khambhlia, at toll plaza near Bed village. ● Transportation of raw material, fuel & finished product will be done almost 100% by road. ● Existing PCU and Level of Service (LoS) is given below: <table border="1"> <thead> <tr> <th>Road</th> <th>V (Volume in PCU/hr.)</th> <th>C (Capacity in PCU/ hr.)</th> <th>Existing V/C Ratio</th> <th>LoS</th> </tr> </thead> <tbody> <tr> <td>Plant to National Highway 947, near material gate.</td> <td>761</td> <td>1286</td> <td>0.59</td> <td>C</td> </tr> <tr> <td>Nani Khavdi Village to NH947, near H P Petrol- Pump</td> <td>1260</td> <td>1714</td> <td>0.78</td> <td>C</td> </tr> <tr> <td>Jamnagar to Khambhlia, toll plaza near Bed village</td> <td>3970</td> <td>5143</td> <td>0.77</td> <td>C</td> </tr> </tbody> </table> <ul style="list-style-type: none"> ● PCU load after proposed project will be Existing volume as given in above table + 78 (additional PCU/hr) and level of service (LOS) will be as follows: <table border="1"> <thead> <tr> <th>Road</th> <th>V (Volume in PCU/ day)</th> <th>C (Capacity PCU/ day)</th> <th>Proposed V/C Ratio</th> <th>LoS</th> </tr> </thead> <tbody> <tr> <td>Plant to National Highway 947, near material gate.</td> <td>839</td> <td>1286</td> <td>0.652</td> <td>C</td> </tr> <tr> <td>Nani Khavdi Village to</td> <td>1338</td> <td>1714</td> <td>0.78</td> <td>C</td> </tr> </tbody> </table>	Road	V (Volume in PCU/hr.)	C (Capacity in PCU/ hr.)	Existing V/C Ratio	LoS	Plant to National Highway 947, near material gate.	761	1286	0.59	C	Nani Khavdi Village to NH947, near H P Petrol- Pump	1260	1714	0.78	C	Jamnagar to Khambhlia, toll plaza near Bed village	3970	5143	0.77	C	Road	V (Volume in PCU/ day)	C (Capacity PCU/ day)	Proposed V/C Ratio	LoS	Plant to National Highway 947, near material gate.	839	1286	0.652	C	Nani Khavdi Village to	1338	1714	0.78	C
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	NH947, near H P Petrol- Pump				
	Jamnagar to Khambhliya, toll plaza near Bed village	4048	5143	0.787	C
Note: Capacity as per IRC-106-1990 Guide line for capacity for roads.					
Conclusion: The level of service will C after including additional traffic due to proposed project.					
Flora and fauna	Peafowl and Monitor Lizard are the schedule I fauna. Site Specific Wildlife Conservation Plan has been submitted to The Deputy Conservator of Forest, Jamnagar, Gujarat vide Letter no. SDCCL/EHS/F-14 dated 05.08.2022. We have also received letter from PCCF (WL), Gandhinagar stating that our WL Conservation Plan is under approval process vide letter no. WL/TEI/2022-23/1102 dated 21.02.2023.				

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

Sl. No.	Type of waste	Quantity			Mode of disposal	Agreement details for disposal
		Existing	Proposed	Total		
1	Solid Waste (ESP, bagfilters and housekeeping (TPA))	7,88,214	7,69,048	15,57,262	100% will be recycled in the plant itself.	In-house
2	Hazardous Waste (Used oil & grease) (kg/ annum))	7,440*	5,000	12,440	will be handed over to authorized CPCB/ SPCB authorized recycling vendors / co-processed.	-

24.6.14 Public Consultation:

Details of advertisement given	English Newspaper - The Times of India dated 15.12.2022 Gujarati News paper - Sandesh dated 15.12.2022 (typing error correction published on 16.12.2022)
Date of public consultation	17.01.2023
Venue	Open Plot in premises of Digvijay Cement Company Limited, Old Survey. No. 51/1, (New Survey. No. 393) & Old Survey. No. 52, (New Survey. No. 402) Near Shree Dham Guest House, Village

	Digvijaygram, Sikka, Taluka Jamnagar, District Jamnagar
Presiding Officer	District Collector and District Magistrate, Jamnagar
Major issues raised	i. Education ii. Health Care iii. Pollution control iv. Livelihood Support v. Restoration of Sports and religious festivals vi. Roads vii. Community infrastructure development viii. Employment

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

Sl. No.	Physical activity and action plan		Year of Implementation			Total Expenditure
			(Budget in Rs. lakhs)			(In Rs. lakhs)
	Name of the Activity	Physical Target	Year 1	Year 2	Year 3	Total
1	Education		25	25	25	75
1.1	School infrastructure development and additional support for needy children	Support to poor children (~20 nos.) of villages Sikka, Bhunga, Ramnagar & Mungani Free computer training (~15 students) & stitching classes (~15 students) in above 4 villages	15	15	15	45
1.2	Promotion of girl education and higher studies	Monitory support for needy and from poor background girl children (Max. 10) for education and higher studies of villages Sikka, Bhunga, Ramnagar & Mungani	10	10	10	30
2	Health Care		20	25	25	70
2.1	Provision of Health care	Quarterly health check-up by a team of Doctor, Paramedical staffs, technicians with free distribution of medicines in villages Sikka, Bhunga, Ramnagar, Shree Jee Colony & Mungani in rotation	5	10	10	25
2.2	Awareness programmes on health issues	Health awareness programmes on water borne, vector borne, communicable diseases and other health related issues annually in	5	5	5	15

Sl. No.	Physical activity and action plan		Year of Implementation			Total Expenditure
			(Budget in Rs. lakhs)			(In Rs. lakhs)
		above 5 villages.				
2.3	Assistance to old age people / Persons with Disabilities	Necessary guidance to old age persons by CSR team to get maximum benefit under different Central/ State govt. schemes in PPP mode in above 5 villages	5	5	5	15
2.4	Animal Health Camp/ Veterinary Services	Doctor on call will cater the needs of the surrounding population.	5	5	5	15
3	Pollution control		20	20	20	60
3.1	Water sprinkling	On approach roads towards raw material gate	5	5	5	15
3.2	Concreting of roads	Construction of Roads (Year 1 - Captive jetty to plant & public road near G-Type; Year 2- Road of Sikka to Digvijaygram, year 3- road connecting Rokadia Hanuman Temple to Sikka)	10	10	10	30
3.3	Collection and processing of Solid Waste from nearby villages	Collection system for plastic waste and consumption as alternate fuel (collection truck 1 no. with manpower). Installation of 15 nos. dustbins at public places of villages Sikka, Bhunga, Ramnagar & Mungani.	5	5	5	15
4	Livelihood Support		10	10	10	30
4.1	Support to SHG	Providing skill development training and financial as well as other supports will be extended for promotion of livelihood programmes. - Distribution of sewing machine to nearby community (7 nos.) - Training & education on computer & stitching classes for dependents & ladies (12 nos.)	10	10	10	30

Sl. No.	Physical activity and action plan		Year of Implementation			Total Expenditure
			(Budget in Rs. lakhs)			(In Rs. lakhs)
		Target villages : Sikka, Ramnagar, Bhunga, Housing Board, Shree jee colony				
5	Restoration of Sports and religious festivals		15	15	15	45
5.1	Financial assistance for cultural programme	Financial assistance for different cultural programmes in periphery villages	10	10	10	30
5.2	Sport activities	Promote sports activities in villages - Creating sports ground at Kalyan Kendra, Digvijaygram - Development of cricket ground at DCC - Volleyball ground at Kalyan Kendra, Digvijaygram - Children play area near market area, Digvijaygram	5	5	5	15
6	Roads		10	10	10	30
6.1	Maintenance of road	Repairing and maintenance of road in villages of Sikka, Ramnagar, Bhunga, Housing Board & Mungani	10	10	10	30
7	Community infrastructure development		30	30	30	90
7.1	Development of community infrastructure	Different community infrastructure like Club, Kalyan mandap etc in phased manner (Year 1 - Construction of cultural mandap near Bhunga / Ramnagar village)	15	15	15	45
7.2	Development of Village infrastructure	- Development of connection of water supply (Near Bhunga / Ramnagar) - Drinking water source near market area	15	15	15	45

Sl. No.	Physical activity and action plan		Year of Implementation			Total Expenditure
			(Budget in Rs. lakhs)			(In Rs. lakhs)
		- Water harvesting project, street lights, drainage system, temple, etc. in villages of Sikka, Ramnagar, Bhunga, Housing Board & Mungani				
8	Employment					
8.1	Local employment	Skill enhancement programs for workers in villages of Sikka, Bhunga, Mungani, to support local employment based on their skill, capability, qualification, experience etc. at the time of employment.	10	10	10	30

24.6.15 The existing capital cost of project was Rs. 32.61 crore at time of establishment of dry process in 1985. The capital cost of the proposed project is Rs. 675 Cr and the capital cost for environmental protection measures is proposed as Rs 43.68 Crore. The annual recurring cost towards the environmental protection measures is proposed as Rs 6.62 Crore. The employment generation from the proposed project/ expansion is 379 (direct) & 780 (indirect) persons. The details of the cost for environmental protection measures is as follows:

Description	Existing (Rs. in lakhs)		Proposed (Rs. in lakhs)	
	Capital Cost	Recurring cost	Capital Cost	Recurring cost
Air pollution control	207.00	775.56	4115.00	612.39
Water pollution control	108.00	18.58	36.00	1.68
Noise pollution control	10.00	3.17	10.00	0.33
Environment Monitoring	99.10	32.50	160.50	15.00
Occupational health	49.5	18.04	12.5	4.41
Green belt	6.45	2.54	34.05	4.54
Others	0.00	32.81	0.00	24.14
Total	480.05	883.2	4368.05	662.49

24.6.16 Existing greenbelt has been developed in 2.58 ha area which is about 5.3% of the total project area of 48.71 ha with total sapling of 38000 trees. Proposed greenbelt will be developed in 13.61 ha which is about 27.9% of the total project area. Thus, total of 16.19 ha area (33.26% of total project area) will be developed as greenbelt. A 4 to 200 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 33645 saplings will be planted and nurtured in 13.61 ha in 5 years.

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

Certified compliance report from CPCB

24.6.18 The status of compliance of consent to operate (CCA Order No. AWH-102081 dt. 03.06.2019) was obtained from Regional Office, Jamnagar of GPCB vide letter no. GPCB-CCA-JMN-145(15)/ID-17132/684346 dated 15.10.2022 to MoEF&CC. As per the report of IRO, all conditions have been complied with.

Deliberations by the Committee

24.6.19 The Committee noted the following:

1. The instant proposal is for enhancement of production capacity of Cement from 1.20 to 3.00 MTPA and Clinker from 1.10 to 2.21 MTPA along with existing 8.5 MW WHRS.
2. As reported by PP, the company was established during 1944 and started commercial production of Cement / Clinker through wet process technology in the year of 1949. Dry Process Technology Cement / Clinker Plant's commercial production commenced on 1st September 1985. Thus, the Cement Plant was in operation prior to the EIA Notification of 1994 & 2006. The cost of project was less than Rs. 50 crores at the time of notification of the EIA Notification 1994. Hence, the project was exempted from requirement of environment clearance under EIA notification 1994. PP shall submit the cost of the project as on 27.01.1994 and the basis for the same. The EAC is also of the opinion that PP shall submit an affidavit in this regard that have not exceeded the production levels and have not committed any violation under EIA Notification, 2006 in the instant case.
3. Sikka (10 m, East to North), Nimaz Colony (20 m, South west), Mungni village (750m, South) and GSECL (TPS) colony (400 m, South East) falls within 10 km radius study area of the project site. Also, there are two schools present adjacent to the project site namely SDDCL Public School (arial 20 m from plant boundary) and SDDCL Pre Primary & Primary School (arial 45 m from plant boundary). Considering the Environmental Sensitivity to the habitation in the area, the EAC opined that it is prudent to inspect the area for understanding the ground reality as the area appears to have rich habitation.
4. A seasonal nala enters through the SSE direction into the plant boundary and exits in south western direction and covers a short distance of 375 m in the south side of plant area. Gulf of Kachchh is at a distance of 0.5 km in the NW direction. The EAC is of the opinion that water bodies are required to be conserved. Drainage Conservation scheme to protect the natural drainage and its flow parameters; along with Soil conservation scheme and multiple Erosion control measures is not submitted. Further during preparation of drainage conservation plan, PP shall prepare a contour map showing contour interval, proper Bench Mark, Drainage disposal with design and calculations, Rain Water Harvesting Plan with design and calculation including the invert level of disposal point in order to achieve ZLD.

5. As reported, Marine National Park is at a distance of 3.48 km and its ESZ at a distance of 4.36 km. Also Marine Sanctuary is at a distance of 1.48 km from the project site. ESZ from the project site along with the authenticated map from State Forest Department and also ensuring the coordinates of the project site are to be mentioned in the certificate. Also, comments of ESZ division of MoEF&CC may be obtained whether the proposal falls outside the ESZ boundary of the Marine National Park and Marine Sanctuary.
6. There is no proper Engineering drawing of a layout. It is missing area statement, index etc. The PP shall prepare 3 separate drawings as a layout details. In Drg 1 PP shall cover Road networking, Plan Layout, Parking along with area statement showing % of all ingredients i.e. roads, Buildings, Parking, with indexing, scale of drawing etc. In no case road shall be abruptly terminated at any point. It shall have proper looping. PP also to show traffic flow in the drawing along road with entry and exit. In drg 2 PP shall show a layout indicating road networking, Existing Green belt and proposed Green Belt with its % against plot area including no of species WRT 2500 density per ha. In drg3 PP shall show contour map with Bench mark, Road network and drainage network along road side with drainage flow, disposal of drainage flow at lowest point with invert level etc. Further PP to show RWH details in the same drawing with calculations.
7. Further, PP shall undertake village adoption and formulate Village Adoption program consisting of need-based community development activities, to develop them into model villages. PP shall submit details of the villages to be adopted.
8. The EAC deliberated on the baseline data and observed that the maximum values of PM10 and PM2.5 are very high. Also, some of the parameters of ground water such as Total hardness, chlorides and parameters of surface water such as BOD and COD are very high. Considering the Environmental Sensitivity to the habitation in the area, the EAC opined that it is prudent to inspect the area for understanding the ground reality as the area appears to have rich habitation.
9. The Committee deliberated on the incremental GLC due to the proposed project and observed that incremental GLC for CO has not been submitted in the brief. In this regard, the EAC is of the opinion complete information in this regard shall be submitted.
10. Two Schedule-I species namely Peafowl and Monitor Lizard were found within 10 km radius of the study area of the plant site during biological study. It is reported that Site Specific Wildlife Conservation Plan has been submitted to The Deputy Conservator of Forest, Jamnagar, Gujarat vide Letter no. SDCCL/EHS/F-14 dated 05.08.2022 and PP has also received letter from PCCF (WL), Gandhinagar stating that our WL Conservation Plan is under approval. In this regard PP needs to submit the updated status on the approval of conservation plan.
11. The EAC deliberated on the details submitted pertaining to solid and hazardous waste generation along with its mode of treatment/ disposal and observed that PP has not taken into account all the major solid wastes generated out of operations. PP needs to re-visit the details and include the same in the EIA/EMP report.
12. The Committee deliberated on the proposed mitigation measure towards Air, Water, Noise and Soil pollutions and the associated EMP cost and found it unsatisfactory. The

EAC is of the opinion that that the EMP cost do not commensurate with the project cost. The EMP measures and associated cost needs to be revisited.

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 is of the view that the action plan does not justify the addressal of issues effectively. PP needs to revise the action plan in conformity to MoEF&CC O.M. F.No. 22-65/2017-IA.III dated 30/09/2020.
14. The EAC noted, PP has reported that existing greenbelt has been developed in 2.58 ha area which is about 5.3% of the total project area of 48.71 ha with total sapling of 38000 trees. Considering that the plant operations are running for more than seven decades, PP has not been able to develop 33% greenbelt. PP shall submit the justification in this regard along with details of the greenbelt and photographs. Also, PP shall re-verify figures submitted in brief pertaining to planted saplings which appears to be wrong figure.
15. PP shall also submit the measures undertaken for conservation of mangroves.
16. The total water requirement of 240 m³/day after expansion is proposed to be obtained from ground water. PP shall explore the possibility to identify alternate source of water to fulfill its water requirement.
17. PP shall also submit the list of any show cause notices received from SPCB and their closure action, during last 3 years.
18. PP shall submit the details of jetty involved in the itegrated project and whethere required permissions have been obtained from the Competent Authority.
19. Action Plan for fire fighting system including provision for flame detectors, temperature actuated heat detectors with alarms, automatic sprinkler system, fixing the location of fire water tanks, separate power system for fire fighting, involvement of qualified and trained fire personnel, nearest fire station & time required to reach the proposed site shall be submitted.
20. The PP/Consultant has to revise the EIA/EMP Report along with all the details as per the provisions of the EIA Notification, 2006.
21. Thus, in view of the above observations the EAC is of the opinion that it is pertinent to undertake site visit of the sub-committee of the EAC to understand the ecological/environmental sensitivity of the area/ complexity of the project/ size of the project and the various other issues involved in the project as mentioned above. In view of crucial project in terms of location and enormous number of issues are involved, the EAC is suggests to conduct the site visit through sub-committee so that all the issues are addressed accordingly for this project.

Recommendations of the Committee:

In view of the foregoing and after deliberations, the Committee recommended **to defer the proposed project and recommended for site visit** of the proposed project area by a sub-committee of EAC Industry-1 members comprising of Dr. Hemant Sahasrabuddhe, Dr. Sanjay

Bist, and Representative of MoEFCC, New Delhi to conduct the site visit and submit the factual Report covering all the issues. The proposal shall be appraised based on the findings of the sub-committee and deliberation of EAC in the next meeting.

Agenda No. 23.7

24.7 Proposed 56,000 TPA Green Field Coal Tar Distillation Plant for production of 30,800 TPA of Coal Tar Pitch; 22,120 TPA of Creosote Oil (light and heavy) and 1680 TPA of Crude Naphthalene by M/s B S Tar Pvt. Ltd., located at Export Promotion Industrial Park (EPIP), under WBSIDC Ltd., Village: Bamunara, Mouza: Bamunara, P.S.: Kanksa, District: Paschim Bardhaman, West Bengal - Consideration of Environmental Clearance.

**[Proposal No. IA/WB/IND1/412998/2023; File No. IA-J-11011/2/2023-IA-II(I)
[Consultant; Envirotech East Pvt. Ltd. ; Valid Upto: 25.03.2023]**

24.7.1 M/s. Sakthi Ferro Alloys (India) Private Limited has made an online application vide proposal no. IA/WB/IND1/412998/2023 dated 20.02.2023 along with copy of EIA/EMP report, Forms (Part A, B and C) seeking Environment Clearance (EC) under the provisions of the EIA Notification, 2006 for the project mentioned above. The proposed project activity is listed at S. No. 4(b)(ii) Coal Tar Processing Units under Category “B1” of the schedule of the EIA Notification, 2006 and attracts general condition due to project activity falling within 5 Km. of the boundary of Durgapur Municipal Corporation area, which is declared as Severely Polluted Area and therefore being appraised at central level.

Deliberations by the Committee

24.7.2 The Committee noted the following:

1. The instant proposal is for a Coal Tar Distillation Plant to produce 30,800 TPA of Coal Tar Pitch, 22,120 TPA of Creosote Oil (light and heavy) and 1,680 TPA of Naphthalene.
2. The EAC noted that M/s B. S. Tar Pvt. Ltd. had initially made an online application SEIAA West Bengal and the matter was considered by the SEAC in its 50th meeting held on 31.08.2022. The SEAC considered the O.M. of MoEF&CC vide F No. 22-23/2018.IA.III [E 115231] dated 05.07.2022 along with O.M. dated 31.10.2019 and 30.12.2019 and observed that the project activity falls within 5 Km. of the boundary of Durgapur Municipal Corporation area, which is declared as Severely Polluted Area, the same may be considered at MoEF&CC as directed in the O.M.s referred above.
3. Further, the EAC noted that the proposed project activity is listed at S. No. 4(b)(ii) Coal Tar Processing Units of the schedule of the EIA Notification, 2006 and the same is being dealt by Industry-II sector of IA Division of MoEF&CC. However, the Consultant has selected the wrong category of the project as S. No. 4(b)(i) Coke Oven, so the same is generated as Ind1 project ID.
4. Further, the project proponent/consultant also admitted that they have wrongly selected the 4(b)(i) Coke oven schedule; However the correct category as S. No. 4(b)(ii) Coal Tar

Processing Units. Due to mistake by the Consultant, the proposal is submitted to Industry-I sector of IA Division.

Recommendations of the Committee

- 24.7.3 In view of the foregoing and after detailed deliberations, the committee recorded that the instant proposal pertains to 4(b)(ii) Coal Tar Processing Units schedule of the EIA Notification, 2006 which is being dealt by Industry-II sector of IA Division of MoEF&CC, therefore EAC advised the Member Secretary, Industry-I, MoEF&CC to forward the proposal to Industry-II sector of IA Division of MoEF&CC for their consideration.

Agenda No. 24.8

- 24.8 Modification-cum-Expansion of Ferro Alloy Plant (under violation) Modification of existing 2x5 MVA SEAF's to 2x6 MVA SEAF, Modification of existing 1x7.5 MVA SEAF to 1x9 MVA SEAF, Existing 1x9.0 MVA SEAF, establishment new 1x9 MVA SEAF & new 12MT per batch CLU Converter for refining liquid HC FeMn to MC/LC FeMn by M/s Bihar Foundry & Castings Limited, located at Plot No 1405(P), Ramgarh Industrial Area, Marar Village, Ramgarh Tehsil & District, Jharkhand- Consideration of Environmental Clearance under Violation category.**

[Proposal No. IA/JH/IND1/417175/2023; File No. J-11011/384/2010-IA-II(IND-I)]

[Consultant: Pioneer Enviro Laboratories & Consultants Pvt. Ltd.; Valid upto 11.03.2023]

- 24.8.1 M/s. Bihar Foundry & Castings Limited has made an online application vide proposal no. IA/JH/IND1/417175/2023, dated 20th February 2023 along with copy of EIA/EMP report, Form (A, B and C) and Certified Compliance report seeking Environment Clearance (EC) under the provisions of the EIA Notification, 2006 for the project mentioned above. The proposed project activity is listed at S. No. 3(a) Metallurgical industries (ferrous & non-ferrous) under Category "A" of the schedule of the EIA Notification, 2006 and appraised at central level.
- 24.8.2 Name of the EIA consultant: M/s Pioneer Enviro Laboratories & Consultants Pvt. Ltd. [List of ACOs with their Certificate / Extension Letter no. NABET/EIA/1922/SA 0148; valid upto 11.03.2023, as on February 27, 2023].

Details submitted by the project proponent

- 24.8.3 The detail of the ToR is furnished as below:

Date of application	Consideration	Details	Date of accord	ToR Validity
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12 th September 2020	24 th meeting of EAC Dt. 27 th to 29 th October 2020	Terms of Reference	24.11.2020	23.11.2024
21 st October 2022	16 th meeting of EAC dated 3 rd November 2022	Terms of Reference (Amended-under violation)	19.12.2022	

24.8.4 The project of M/s. Bihar Foundry & Castings Limited located in Plot No 1405(P), Ramgarh Industrial Area, Marar Village, Ramgarh Tehsil & District, Jharkhand is for Modification cum Expansion of Ferro Alloy Plant of existing 2x5 MVA SEAF's to 2x6 MVA SEAF, Modification of existing 1x7.5 MVA SEAF to 1x9 MVA SEAF, Existing 1x9.0 MVA SEAF, New 1x9 MVA SEAF & New 12MT per batch CLU Converter for refining liquid HC FeMn to MC/LC FeMn.

24.8.5 Environmental site settings

S.No.	Particulars	Details submitted by the PP																		
1.	Total land	<ul style="list-style-type: none"> Total 2.91 Ha. (7.18 Acres), of land has taken on lease from Jharkhand Industrial Area Development Authority (JIADA) for a period of 30 years. 2.91 Ha. (7.18 Acres) of Existing plant land is Industrial land. The proposed expansion will be taken up in the existing plant premises only. Additional land of 1.385 Ac. (0.56 Ha.) has been acquired for development of Greenbelt to comply with 40% of 2.91 Ha. (7.18 Acres) as the plant is situated in Ramgarh industrial area which is Severely Polluted Area . 																		
2.	Land acquisition details as per MoEF&CC,O.M.dated7/10/2014.	Total 2.91 Ha. (7.18 Acres), of land has taken on lease from Jharkhand Industrial Area Development Authority (JIADA) for a period of 30 years.																		
3.	Existence of habitation & involvement of R&R, if any.	<p>Project site: No habitation exists in the plant site</p> <p>Study Area :</p> <table border="1"> <thead> <tr> <th>Habitation</th> <th>Distance</th> <th>Direction</th> </tr> </thead> <tbody> <tr> <td>Palamu Colony</td> <td>0.4 kms.</td> <td>NE</td> </tr> <tr> <td>Marar</td> <td>0.8 kms.</td> <td>N</td> </tr> </tbody> </table>	Habitation	Distance	Direction	Palamu Colony	0.4 kms.	NE	Marar	0.8 kms.	N									
Habitation	Distance	Direction																		
Palamu Colony	0.4 kms.	NE																		
Marar	0.8 kms.	N																		
4.	Latitude and Longitude of all corners of the plant site	<p>The following are the Coordinates of the Plant site</p> <table border="1"> <thead> <tr> <th>S.No.</th> <th>Point</th> <th>Coordinates</th> </tr> </thead> <tbody> <tr> <td>1.</td> <td>Point # 1</td> <td>23°39'33.79"N, 85°30'20.85"E</td> </tr> <tr> <td>2.</td> <td>Point # 2</td> <td>23°39'33.67"N, 85°30'24.03"E</td> </tr> <tr> <td>3.</td> <td>Point # 3</td> <td>23°39'26.99"N, 85°30'25.12"E</td> </tr> <tr> <td>4.</td> <td>Point # 4</td> <td>23°39'25.39"N, 85°30'23.90"E</td> </tr> <tr> <td>5.</td> <td>Point # 5</td> <td>23°39'25.35"N, 85°30'19.63"E</td> </tr> </tbody> </table>	S.No.	Point	Coordinates	1.	Point # 1	23°39'33.79"N, 85°30'20.85"E	2.	Point # 2	23°39'33.67"N, 85°30'24.03"E	3.	Point # 3	23°39'26.99"N, 85°30'25.12"E	4.	Point # 4	23°39'25.39"N, 85°30'23.90"E	5.	Point # 5	23°39'25.35"N, 85°30'19.63"E
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5.	Point # 5	23°39'25.35"N, 85°30'19.63"E																		
5.	Elevation of the project site	199.5 m to 200.5 m																		
6.	Involvement of Forest Land, if	Nil																		

S.No.	Particulars	Details submitted by the PP		
	any			
7.	Water body (Rivers, Lakes, Pond, Nala, Natural Drainage, Canal etc.) exists within the project site as well as study area	Study area:		
		Habitation	Distance	Direction
		Damodar River	1.4 Kms.	S
		Raura Nala	2.5 kms.	E
		Meramgarh Nala	5.4 Kms	E
		Unnamed stream	0.5 Kms	W
		Ramgarh Village pond	4.0 Kms	S
		Seota village Pond	1.5Kms	NE
8.	Existence of ESZ / ESA / National Park / Wildlife Sanctuary / Biosphere Reserve / Tiger Reserve / Elephant Reserve etc. if any within the study area	There are no ESZ/ESA/National Park/ Wild life sanctuary / Biosphere reserve / Tiger Reserve / Elephant Reserve within 10 km. radius of the plant.		
9.	Industrial areas / cluster (MoEF&CC Office Memorandum dated 13 th January 2010) and its subsequent amendments	Ramgarh is declared Severely Polluted area (SPA) with CEPI index 65.11 by CPCB vide No.B29012/ESS(CPA)/2015-16/ dated 26th April 2016. Compliance of all the conditions applicable to CEPI is prepared. Particulate emission will be less than 30 mg/Nm ³ .Greenbelt of 40% of the project area will be developed. CER allocation will be 1.5 times of the normal calculated amount i.e. Rs.1.34 Crores.		

24.8.6 The existing project was accorded environmental clearance vide F. No. J-11011/384/2010-IA (II) (I) dated 31.10.2011. Consent to Operate for the existing unit was accorded by JSPCB vide no. JSPCB/HO/RNC/CTO-4412165/2020/1819 dated 10.11.2020 (which is in the name of GAUTAM FERRO ALLOYS (UNIT OF BFCL) which is valid upto 31-12-2025. Subsequently name of the plant in CTO has been changed to Bihar Foundries & Castings Limited vide order dated 23.01.2023 and is valid till 31.12.2025.

S. No.	EC/CTE /EC Extension Permissions	Units permitted	Date of permission	Remarks
1	CTE vide No. 3937	SEAF – 2x5 MVA 26 TPD (SiMn)	24.02.2000	CTE obtained in the Name of M/s. Gautam Ferro Alloys
2	CTE vide No.2577	SEAF – 2x7.5 MVA 30 TPD (SiMn)	20.05.2009	CTE obtained in the Name of M/s. Bihar Foundry & Castings Ltd.
3	EC (for Expansion) (MoEF, New Delhi) Vide no. J- 11011 /	SEAF – 1x9 MVA (40 TPD-FeMn) along with existing	31.10.2011	CTO obtained in the Name of M/s. Bihar Foundry & Castings Ltd. in 2015

S. No.	EC/CTE /EC Extension Permissions	Units permitted	Date of permission	Remarks
	384 /2010 - IA (II) (I)	2x5 MVA (26 TPD)1x7.5 MVA (30 TPD), TOTAL 96 TPD		
4	CTO Vide Ref. no.- B-910	2x5 MVA (26 TPD)	18.03.2014	CTO obtained in the Name of M/s. Bihar Foundry & Castings Ltd (Gautam Ferro Alloys)
5	CTO vide no. D-1924(C)	70 TPD (30+40 TPD)	07.07.2014 VALID UP TO 30.06.2015	CTO obtained in the Name of M/s. Bihar Foundry & Castings Lt. Unit Gautam Ferro Alloys
6	Consent-to-Establish (CTE) vide no. D-1510(N),	40 TPD (1x9 MVA)	21.05.2014	CTO obtained in the Name of Gautam Ferro Alloys unit of BFCL
7	Consent to operate vide no.-B-635	96 TPD (2x5 MVA + 1x7.5 MVA+ 1x9 MVA)	12.03.2015	CTO obtained in the Name of M/s. Bihar Foundry & Castings Ltd UNIT Gautam Ferro Alloys
8	Consent to operate vide no.-B-42	96 TPD (2x5 MVA + 1x7.5 MVA+ 1x9 MVA)	06.01.2016	CTO obtained in the Name of M/s. Bihar Foundry & Castings Ltd UNIT Gautam Ferro Alloys
9	Consent to operate vide no.1819	96 TPD (2x5 MVA + 1x7.5 MVA+ 1x9 MVA)	10.11.2020 valid up to 31.12.2025	CTO obtained in the Name of GAUTAM FERRO ALLOYS (UNIT OF BFCL)
10	Auto Renewal of CTO vide no.1341	96 TPD (2x5 MVA + 1x7.5 MVA+ 1x9 MVA)	23.01.2023 valid up to 31.12.2025	CTO obtained in the Name of BIHAR FOUNDRY & CASTING LIMITED , Ferro Alloys Unit

24.8.7 Implementation Status of existing EC:

S No	Facilities As per EC dated 31/10/2011	Implementation Status as on 24/11/2020	Production as per CTO
1	Ferro Alloys Plant of 96 TPD (2x5 MVA SAF's and 1x7.5+1x9 MVA SAF's with Jigging unit and Micro Pelletizing facility)	Ferro Alloy Plant of 96 TPD (2x5 MVA + 1x7.5 MVA + 1x9 MVA SEAF's with Jigging unit and Micro Pelletizing facility)	96 TPD (SiMn/ FeMn)

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

S No	Name	Existing Units		Proposed Units (Modification-Cum-expansion)		Total (Existing + Proposed)	
		Configuration	Production TPA	Configuration	Production TPA	Configuration	Production TPA
1	Ferro Alloy unit	2x5+1x7.5 +1x9 MVA SAF With Jigging unit and Micro Pelletizing facility	34,080 (96 TPD) (SiMn / FeMn)	Modification of existing 2x5 MVA to 2x6 MVA SEAFs Modification of existing 1x7.5 MVA to 1x9 MVA SEAF Existing 1x9 MVA SEAF New 1x9 MVA SEAF* New 12MT per batch CLU Converter for refining liquid HC FeMn to MC/LC FeMn	SiMn-24,495 TPA (69 TPD) (or) FeMn-59,995 TPA (169 TPD)	2x6 MVA + 3x9 MVA SEAFs + 12MT CLU Converter With Jigging unit and Micro Pelletizing facility	SiMn- 58,575 TPA (165 TPD) (or) HC/MC/LC FeMn-94,075 TPA (265 TPD)

Note:

* PP has reported that they have constructed 5th Furnace i.e New 1 x 9 MVA SAF & CLU converter is under construction (70% work completed). Hence PP has applied under Violation as per SOP dated 07.07.2021.

24.8.9 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 After Expansion (TPA)	Sources	Mode of Transport
1	For Ferro Alloys (2x6 MVA + 3x9 MVA SEAFs)			
(i)	Ferro Manganese – 94,075 TPA			
a)	Manganese ore	2,35,188	Imported (South Africa)	By Rail & Road (through covered trucks)
b)	Coke	70,556	Local market / Imported (Australia)	By Rail & Road (through covered trucks)
c)	Electrode Paste	1410	Local market	By road (through covered trucks)
d)	Quartz	28,222	Localmarket	By road (through covered trucks)
e)	Dolomite	23,518	Imported (Bhutan)	By Rail & Road (through covered trucks)
	(OR)			
(ii)	Silico Manganese – 58,575 TPA			

S.No.	Raw Material	Quantity After Expansion (TPA)	Sources	Mode of Transport
a)	Manganese Ore	1,46,438	Imported (South Africa)	By Rail & Road (through covered trucks)
b)	Coke	43,930	Local market / Imported (Australia)	---
c)	Carbon paste	878	Local market	----
d)	Dolomite	14,643	Imported (Bhutan)	By road (through covered trucks)
e)	Fe-Mn Slag	29,288	Inhouse	By road (through covered trucks)

24.8.10 The total water requirement for existing plant is 35 m³/day which is being met from Groundwater source. NOC from CGWA has been obtained to abstract ground water of 35 m³/day for industrial use vide letter No. CGWA/NOC/IND/ORIG/2021/10628 dated 02/01/2021 which is valid upto 01/01/2024. The water requirement for the proposed expansion project is estimated as 148 m³/day, which will be sourced from Damodar River. The permission for drawl of surface water has been obtained from DVRRC, Damodar River (Tenughat Reservoir) Vide Lr. No. MD/DVRR/W-6(145)/2022/738-43 Dated 20-12-2022.

24.8.11 Total power consumption is 33 MW, in which meet from DVC 28.5 MW & 4.5 MW from Captive power plant of adjacent unit of BFCL.

24.8.12 Baseline Environmental Studies

Period	1st December 2019 to 29th February 2020 by M/s. Ampl Environ Pvt. Ltd. Hyderabad. Subsequently the Baseline data has been revalidated by Pioneer Enviro Laboratories & Consultants Pvt. Ltd. by collecting additional 1 month data i.e. from 1st May, to 31st May 2022.
AAQ parameters at 8 locations	<p>(1stDecember 2019 to 29thFebruary 2020)</p> <ul style="list-style-type: none"> • PM_{2.5} = 34.7 to 42.8 µg/m³ • PM₁₀ = 68.9 to 86.3 µg/m³ • SO₂ = 7.8 to 13.5 µg/m³ • NO_x = 17.4 to 26.2 µg/m³ • CO = 410 to 600 µg/m³ <p>(1stMay to 31st May 2022)</p> <ul style="list-style-type: none"> • PM_{2.5} = 34.9 to 46.2 µg/m³ • PM₁₀ = 69.1 to 79.4 µg/m³ • SO₂ = 7.8 to 13.3 µg/m³ • NO_x = 15.5 to 27.1 µg/m³ • CO = 384 to 744 µg/m³

AAQ modelling	<p>PM₁₀ = 0.48 µg/m³ (1500 m in SE) PM₁₀(vehicular) = 0.10 µg/m³ SO₂ = There will not be any incremental SO₂ concentrations (24 hourly) due to the proposed expansion project. NO_x = 2.99 µg/m³ (1500 m in SE), NO_x(vehicular) = 0.80 µg/m³ CO (vehicular) = 0.52 µg/m³</p>																																							
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Noise levels	<p>The equivalent day noise levels are ranging from 52.10 dBA to 68.40 dBA & equivalent Night noise levels are ranging from 42.70 dBA to 55.30 dBA in the study zone during 1st December 2019 to 29th February 2020 carried out by M/s. AMPL ENVIRON PVT LTD.</p> <p>Further Noise levels collected during revalidation of Noise levels in May 2022, the equivalent day noise levels are ranging from 47.80 dBA to 66.80 dBA & equivalent Night noise levels are ranging from 36.80 dBA to 53.20 dBA in the study zone .</p>																																							
Traffic assessment study findings	<p>Traffic study has been conducted at National Highway # 20(Ranchi – Hazaribagh) which is at 7.0 Kms from the plant site.</p> <p>Transportation of raw material, fuel & finished product will be done by Rail & road.</p> <p>Existing PCU is 1085 PCU/hr on NH#20 and existing Level of Service(LOS) is :C</p> <table border="1"> <tr> <td>Ramgarh to Kuju</td> <td>(V)</td> <td>(C)</td> <td>Existing</td> <td>LOS</td> </tr> </table>				Ramgarh to Kuju	(V)	(C)	Existing	LOS																															
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	(Ramgarh City Road)	(PCU/hr)	(Capacity in PCU/hr)	V/C ratio	
	PCU/Hour	810.9	1500	0.54	C
PCU load after proposed expansion project will be 810.9 PCU/hr (Existing) + 48 PCU/hr (Additional) PCU/hr and level of service (LOS) will be: C					
	Ramgarh to Kuju (Ramgarh City Road)	(V) (PCU/hr)	(C) (Capacity in PCU/hr)	Proposed V/C ratio	LOS
	PCU/Hour	858.9	1500	0.57	C
Level of Service (LOS) of the Road as per IRC 106: 1990					
		V/C	LOS	Performance	
		0.0 – 0.2	A	Excellent	
		0.2 – 0.4	B	Very Good	
		0.4 – 0.6	C	Good	
		0.6 – 0.8	D	Fair/ Average	
		0.8 – 1.0	E	Poor	
		1.0 & Above	F	Very Poor	
The level of service will C (Good) after including additional traffic due to proposed project. <i>Hence the existing road is capable of taking the additional vehicular traffic due to the proposed expansion project.</i>					
Flora and fauna	No schedule -1 fauna found in the study area. Hence preparation of conservation plan is not applicable .				

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

S. No	Waste / By Product	Quantity (TPA)			Method of disposal
		Existing	Proposed	After expansion	
1.	Slag from FeMn	13,820	28,780	42,600	After Jigging, it will be reused in manufacture of SiMn as it contains high SiO ₂ and Silicon.
2.	Slag from SiMn	20,450	18,850	39,300	After Jigging, will be used for Road construction / Used in Filling low lying areas etc.
3.	APCS dust	840	730	1575	Will be sent to Briquetting unit.
4.	Waste oil	80	160	240	Will be given to SPCB authorized recyclers/reprocessors.
		Ltr/Annum	Ltr/Annum	Ltr/Annum	

Hazardous waste generation, storage & disposal:

1.Waste oil: 0.24 KL / Annum

This will be stored in covered HDPE drums in a designated area and will be given to SPCB authorized recyclers & re-processors..

2. Used Batteries

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

24.8.14 Public Consultation

Details of advertisement given	10 th February 2021 (Hindi) "THE PIONEER", (English) "HINDUSTHAN"
Date of public consultation	15 th March 2021
Venue	Public Hearing has been conducted at Gym Khana Club Ranchi road, Ramgarh, Ramgarh Tehsil & District, Jharkhand.
Chaired by	Additional District Magistrate
Issues are	<ul style="list-style-type: none"> • Employment Local people • Skill development training program. • Proper utilization of CSR fund • Pollution Control Measures • Water sprinkling on haul roads

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

- As per the Normal calculation CER budget will be Rs.0.893 Crores
- Considering the location of the plant in severely Polluted area CER budget will be 1.5 times of the normal calculated amount i.e. Rs. 1.34 Crores
- M/s. BFCL (Ferro Alloy unit) is also proposing to adopt the Marar Village as a part of Social infrastructure development and has earmarked Rs. 1.34 Crores for Social & Infrastructure developmental activities based on Social Impact Assessment (SIA) after completion of Public Hearing

S.NO.	MAJOR ACTIVITY HEADS		YEAR OF IMPLEMENTATION			TOTAL EXPENDITURE (Rs. in Lakhs)
			1 st Year (Rs. in Lakhs)	2 nd Year (Rs. in Lakhs)	3 rd Year (Rs. in Lakhs)	
A). Based on SIA Study						
1	Community & Infrastructure Development Programmes					
	i) Construction of public toilets	Physical Nos. & village	1 no. in Marar (v)	1no. in Phulsarai(v)	1 no. in Manuan(v) & 1 Nos. in Digwar(v)	10
		Budget in Lakhs	2.5	2.5	5	
ii) Providing LED Street lighting with solar panels	Physical Nos. & village	2 nos. in Hathimara (v) & 3	2nos. in Manuan (v) &	2 nos. in Digwar (v) 3 nos.	3	

S.NO.	MAJOR ACTIVITY HEADS		YEAR OF IMPLEMENTATION			TOTAL EXPENDITURE (Rs. in Lakhs)
			1 st Year (Rs. in Lakhs)	2 nd Year (Rs. in Lakhs)	3 rd Year (Rs. in Lakhs)	
			Nos. in Marar (v)	3 Nos. in Phulsarai (v)	Pochra (v)	
		Budget in Lakhs	1	1	1	
	iii) Mineral water plants	Physical Nos. & village	1 nos. in Marar (v)	1 nos. in Phulsarai (v)	1no. in Manuan (v)	9
		Budget in Lakhs	3	3	3	
	iii) Village road repair & maintenance	Physical Nos. & village	1 nos. in Marar (v)	---	---	7
		Budget in Lakhs	7	---	---	
					Total	29
2	Education					
	i) Providing Sport kits for schools	Physical Nos. & village	5 nos. in Kanjgi (v) & 10 Nos. in Marar (v)	5 no. in Manuan (v) & 10 Nos. in Digwar (v)	10 nos. in Phulsarai(v) & 10 Nos. in Painki (v)	5
		Budget in Lakhs	1.5	1.5	2	
	ii) Construction of class rooms in schools of size 8m x 5m x3 m	Physical Nos. & village	2 nos. in Kanjgi (v)	2 nos. in Seota (V)	2 nos. in Marar (V)	15
		Budget Rs in Lakhs	5	5	5	
	iii) Providing Model Anganwadi Centre in consultation with State Women and Child Development Department	Physical Nos. & village	---	Digwar (v) - 1 No.	Painki (v) - 1 No.	20
		Budget Rs in Lakhs	---	10	10	
					Total	40
3	RWH pits in the surrounding villages & De-siltation of	Physical Nos. & village	Marar (v) pond desiltation	Seota (v) pond desiltation	---	20

S.NO.	MAJOR ACTIVITY HEADS	YEAR OF IMPLEMENTATION			TOTAL EXPENDITURE (Rs. in Lakhs)	
		1 st Year (Rs. in Lakhs)	2 nd Year (Rs. in Lakhs)	3 rd Year (Rs. in Lakhs)		
	ponds		1.5m depth	1.5m depth		
		Budget in Lakhs	10	10	---	
					TOTAL (A)	
					89	
B). Based on Public Consultation/Hearing						
1	Impart training to the local villagers for skill development. a)DISHA Centre” along with necessary infrastructure for various vocational training program for employment generation in association with National Skill Development Mission (Automobile Repair, Welding, Electrical, Computer Hardware, Soft skills like computer programs etc.)	Physical Nos. & village	One DISHA centre in Ramgarh Town			45
		Budget in Lakhs	15	15	15	
					Total (B)	
					45	
		TOTAL	45	48	41	
			Grand Total (A+B)			134
Recurring expenditures under CSR as per companies Act 2014						
<ul style="list-style-type: none"> Health checkup will be carried out periodically in surrounding villages i.e. Marar, Phulsarai, Hathimara villages @ Rs 5.0 Lakhs every year. 						

Management Compliance to Issues Raised during Public Hearing

S.No.	Issue raised	Management Response	Time schedule	Budgetary allocation
1.	Employment for local people	The proposed expansion project will generate direct employment to 750 nos. which includes skilled, semi-skilled & unskilled.	---	----

S.No.	Issue raised	Management Response	Time schedule	Budgetary allocation
		Local people will be given top priority in employment based on their qualification & experience. Skill development training program will be conducted.	2023-24 2024-25 2025-26	Rs.0.15 Cr Rs.0.15 Cr Rs.0.15 Cr Total Rs. 0.45 Cr
2.	Proper utilization of CSR fund	M/s. BFCL (Ferro Alloy unit) is also proposing to adopt the following Marar Village as a part of Social welfare development and has earmarked Rs. 1.34 Crores for Social & Infrastructure developmental activities based on Social Impact Assessment (SIA).	2023-24 2024-25 2025-26	Rs.0.45 Cr Rs.0.48 Cr Rs.0.41 Cr Total Rs. 1.34 Cr for Social & Infrastructure developmental activities
3.	Pollution Control Measures	<ul style="list-style-type: none"> In the existing plant Emission control systems such as 4th Hole Fume Extraction system with bagfilters have been provide to SEAFs and dust suppression system at unloading areas. The flue gas emissions are within the stipulated norms. Pucca internal roads has been laid in the plant area. CEMS data shows the emissions are within the stipulated norms. Zero liquid discharge is followed. All solid wastes are utilized/disposed as per permitted procedures. Greenbelt development in the existing plant helps in further mitigation of impacts due to the plant operations. SPCB has issued CTO for the plant which is valid till 31/12/2025. <p>Hence there is no adverse impact on health of people due to existing plant operations.</p> <p>In the proposed expansion project following environment protection measures will be provided for duly complying with norms stipulated by MOEF&CC / CECB:</p> <ul style="list-style-type: none"> 4th Hole Fume Extraction system with bagfilters will be provided to proposed SEAF to bring down the particulate emission to less than 30 mg/Nm³. 	2023-24 2024-25 2025-26	Budget of Rs. 4.5 Crores is earmarked for Environment Protection Measures

S.No.	Issue raised	Management Response	Time schedule	Budgetary allocation
		<ul style="list-style-type: none"> Net resultant Ground level concentrations during operation of the plant after superimposing the incremental concentrations over the maximum baseline concentrations are well within the National Ambient Air Quality Standards. As the Plant is situated in Severely Polluted area (SPA) it is proposed to develop 40% of Greenbelt. in an extent of 1.17 Ha. (2.9 Acres) by October 2023. To meet the requirement of 40% greenbelt development it is proposed to acquire additional land outside the existing plant. Effluent will be treated in ETP consisting of RO plant also and after ensuring compliance with the norms, it will be utilised for dust suppression, ash conditioning and for greenbelt development within the premises. No effluent will be discharged outside the premises. Zero liquid discharge will be followed. 		
4.	Water sprinkling on haul roads	Water tanker with water sprinkling system has been provided in the plant for regular water sprinkling on Roads.	-----	Recurring cost of Rs.5.0 Lakhs/annum

24.8.15 The capital cost of the expansion project is Rs. 89.3 Crores and the capital cost for environmental protection measures is proposed as Rs. 4.5Crores. The annual recurring cost towards the environmental protection measures is proposed as Rs. 0.72 Crores. The employment generation from the proposed existing & expansion project is 750 direct & 200 Indirect. The details of cost for environmental protection measures is as follows:

S. No	Particulars	Capital Cost (Rs.in Crores)	Recurring Cost / Annum (Rs.in Lakhs)
1	Air Emission Management		
	· 4 th Hole FES with bag filters & Stacks	2.00	20
	· other APCS & Conveyor systems	0.50	5
	· for Water Sprinkling	0.10	0.5

S. No	Particulars	Capital Cost (Rs.in Crores)	Recurring Cost / Annum (Rs.in Lakhs)
2	Wastewater Management		
	· for STP	0.40	10
	· for Garland drains	0.03	1
	· for Settling ponds	0.02	0.2
3	Solid waste Management		
	· Slag Handling & Disposal	0.20	5.0
4	Greenbelt development	0.10	2.0
6	Noise Management	0.10	1.5
7	RWH in Plant	0.10	0.2
8	Fire Safety Systems	0.50	5.0
9	Environmental Monitoring	---	4.1
	· CEMS	0.20	3.0
10	Occupational Health & Safety		
	· Occupational Health centre with Ambulance	0.15	4.5
	· Personal Protective Equipment's (PPEs)	0.10	10
	TOTAL	4.50	72.0

24.8.16 Total land after proposed expansion will be 2.91 Ha. (7.18 Acres). As the Plant is situated in Severely Polluted area (SPA) it is proposed to develop 40% of Greenbelt as part of the expansion i.e. in an extent of 1.17 Ha. (2.9 Acres).

- Additional safeguards such as 40% green belt within the plant premises & outside the plant premises over an extent of 1.17 Ha. (2.9 Acres).
- Total 3000 nos. of plants will be developed over an extent of 1.17 Ha. (2.9 Acres).
- The total Greenbelt area proposed within the Plant premises is 1.515 Acres (0.61 Ha.) which is inclusive of existing Greenbelt.
- To meet the requirement of 40% greenbelt development it is proposed to acquire additional land outside the existing plant.

24.8.17 **Summary of Violation under EIA Notification, 2006:**

- The company has started installation of the 5th Submerged Arc Furnace of 1x9 MVA & CLU converter without completing the process of Environment Clearance because of the following reasons (Reasons for violation).
- Due to COVID restrictions and social lockdown wherein all the physical activities were restricted, PP could not move ahead with the study, interaction with officials and accordingly could not complete the process of EC due to delay from their end.
- PP also gave a completion date of 31st Dec 2021 for its 5th furnace project to its consortium of banks.
- If the completion date is exceeded by a period of 6 months, the loan account would have slipped into a NPA (Non-Performing Asset) category.
- This situation would have led to bankruptcy of the company as well.

- Thus, to avoid such situation, installation of the 5th furnace was completed along with CLU converter (70% work completed).

Present status of 5th Submerged Electric Arc Furnace & CLU converter:

- Installation of 5th Submerged Electric Arc Furnace (SEAF) of 9 MVA capacity has been completed.
- Production is not yet started in 5th SEAF
- Regarding installation of CLU converter, 70% of civil work, plant & machinery has been completed.

Accordingly TOR amendment has been obtained under violation category from the Ministry vide letter dated 19.12.2022. Now application has been submitted for EC appraisal under violation category.

Budget of remediation plan and natural and community resource augmentation plan corresponding to the ecological damage is shown below

- JSPCB has initiated action against violation.
- Application submitted for EC under violation and accordingly JSPCB has filed a case in the Hon'ble Magistrate court of Ramgarh vide no complainant case/ 117/2023 vide dated 07-01-2023
- The remediation plan and the natural and community resource augmentation plan has been prepared as an independent chapter (13) in the EIA report.

Remediation Plan and Budgetary Provisions for 3 years

Sr. No.	Environmental component	Activities Proposed	Budgetary provision			Total (in Rs.)
			1 st Year	2 nd Year	3 rd Year	
1.	Air Environment a) Ambient Air b) Air Pollution	<ul style="list-style-type: none"> • Dust Suppression and water sprinkling. • Provision of Barricades 	65,000	55,000	46,500	1,66,500
2	Noise Environment	Supply of personnel projective equipments	1,00,000	80,000	60,000	2,40,000
3	Water Environment	<ul style="list-style-type: none"> • STP and ETP • Rain water harvesting structure 	50,00,000	----	----	50,00,000
4	Land Environment	Leachate proof storage facility for productive soil and waste material	20,000	20,000	20,000	60,000
5	Ecology	Plantation in and around plant site Provision made in EMP for Rs. 10 lakhs	10,00,000	-----	----	10,00,000
6	Solid and hazardous waste	<ul style="list-style-type: none"> • Provision of coloured 	25,000	25,000	20,000	70,000

Sr. No.	Environmental component	Activities Proposed	Budgetary provision			Total (in Rs.)
			1 st Year	2 nd Year	3 rd Year	
		bins • Provision of storage facility				
7	Socio-economic (occupational health)	First aid kit and health check up	20,000	10,000	5,000	35,000
8	Energy consumption	Construction of Solar panels	1,00,000	1,00,000	50,000	2,50,000
		TOTAL	63,30,000	2,90,000	2,01,500	68,21,500
Rs. 68,21,500 (out of which 50 lakhs provision for STP, ETP, RWH and plantation and 10 Lakhs for greenbelt in and around plant site)						
NET AMOUNT: Rs. 8,21,500						

Natural Resources Augmentation Plan

Sr. No.	Activities Proposed	Yearwise Implementation and Budgetary provision in Rs.			Total Cost (Rs.)
		1 st Year	2 nd Year	3 rd Year	
1.	Development of Greenery in the surrounding area and road side plantation (along the state highway abutting the project side (100 trees in the surrounding area and 100 trees roadside Total 200 with maintenance @ 500/- per tree, total cost Rs. 1,00,000/-)	50,000	25,000	25,000	1,00,000
2	Provision of drinking water facilities through hand pumps/ dugwells/ tubewells (hand pump/ well per year in the nearby villages each year with maintenance) i.e. two tubewells per village in 3 villages	30,000	30,000	30,000	90,000
3	Repair and maintenance of roads in the nearby 6 villages with the help of gram panchayat considering 2 villages each year	40,000	40,000	40,000	1,20,000
	TOTAL	1,20,000	95,000	95,000	3,10,000

Community Augmentation Plan

Sr. No.	Activities Proposed	Year wise Implementation and Budgetary provision in Rs.	Total cost (Rs.)
---------	---------------------	---	------------------

		1st Year	2nd Year	3rd Year	
1.	Development of sanitation facilities in (provision of 2 toilets in each village)	2,00,000	2,00,000	2,00,000	6,00,000
2	Medical check-up camp in nearby areas for villages and supply of medicines (2 villages per year)	1,00,000	1,00,000	1,00,000	3,00,000
3	Assistance in providing study materials, uniforms, books to the poor students (50 students) each year	50,000	50,000	50,000	1,50,000
	TOTAL	3,50,000	3,50,000	3,50,000	10,50,000

Summary of Remediation plan, Natural Resource and Community Augmentation Plan

Sr. No.	Activity Proposed	Total(Rs.)
1	Cost of damage / Remediation plan	Rs. 8,21,500 (excluding provisions of EMP cost of Rs.60 lakhs)
2	Natural Resource Augmentation Plan	Rs.3,10,000/-
3	Community Augmentation Plan	Rs.10,50,000/-
	Total	Rs.21,81,500/-

Detail of Court Cases: Application submitted for EC under violation and accordingly JSPCB has filed a case in the Hon'ble Magistrate court of Ramgarh vide no complainant case/ 117/2023 vide dated 07-01-2023.

Deliberation on Severely Polluted area (SPA)

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

Environment	Stipulation of Conditions	Compliance of Mitigation measures
Air	i. Stack emission levels should be stringent than existing standards in terms of the identified critical pollutants.	The company is maintaining the limit of particulate matter emission below prescribed standard. We assure that the Particulate Emission at the Chimney Outlet will be maintained less than 30 mg/Nm ³ .
	ii. CEMS may be installed in all large/medium red category industries (air polluting) and connected to SPCB and CPCB server.	CEMS installed in stack of all Units and connected with SPCB/CPCB Server.
	iii. Effective fugitive emission	Transportation of raw materials/ solid wastes

Environment	Stipulation of Conditions	Compliance of Mitigation measures
	control measures should be imposed in the process, transportation, packing etc.	is ensured through covered trucks only. Regular Water Sprinkling is being done using Water Tankers. Major raw material is kept in closed shed Conveyor belts are used where ever required. All vehicle movements roads within all premises are pucca and regular road sweeping is being carried through road sweeping machine.
	iv. Transportation of materials by rail/conveyor belt, wherever feasible	Major raw material transportation will be by rail upto the nearest railway station and from there by road in tarpaulin covered truck. Hence road transport is minimised
	v. Encourage use of cleaner fuels (pet coke/furnace oil/LSHS may be avoided).	Coke is used instead of Pet Coke
	vi. Best available Technology may be used. For example, usage of EAF/SAF/IF in Cupola furnace. Usage of supercritical technology in place of sub-critical technology.	Ferro alloys will be manufactured through Submerged Electric Arc Furnace.
Air	vii. Increase of greenbelt cover by 40% of the total land area beyond the permissible requirement of 33%, wherever feasible.	<ul style="list-style-type: none"> • 40% green belt is proposed to developed within the plant premises & outside the plant premises over an extent of 1.17 Ha. (2.9 Acres) • Total land after proposed expansion will be 2.91 Ha. (7.18 Acres). • <u>As the Plant is situated in Severely Polluted area (SPA) it is proposed to develop 40% of Greenbelt as part of the expansion i.e. in an extent of 1.17 Ha. (2.9 Acres).</u> • The total Greenbelt area within the Plant premises is 1.515 Acres (0.61 Ha.). • To meet the requirement of 40% greenbelt development it is proposed to acquire additional land outside the existing plant. • The details of additional land where greenbelt can be developed outside the premises is as follows ❖ Plot No. 1364P (E1) - 0.504 Acre (2039.6 SQM)

Environment	Stipulation of Conditions	Compliance of Mitigation measures
		<ul style="list-style-type: none"> ❖ Plot No. 1405 (C18) - 0.339 Acre (1373.05 SQM) ❖ Plot No. 1364P (C2&C3) - 0.025 Ac. (103.1238 SQM) ❖ Plot No. 1405P (20C) - 0.517 Ac. (2093.65 SQM) <p>Hence the total greenbelt will be 2.9 Acres [1.515 Ac (Plant Premises) + 1.385 Ac (outside plant premises) which amounts to 40 % of total land].</p>
	viii. Stipulation of greenbelt outside the project premises such as avenue plantation, plantation in vacant areas, social forestry, etc.	Avenue plantation/road side has been carried out.
	ix. Assessment of carrying of transportation load on roads inside the industrial premises if the roads required to be widened, shall be prescribed as a condition.	<p>Site is adjacent to Ramgarh City Road & NH # 20 (Ranchi – Hazaribagh) is at a distance of 7.0 Kms.</p> <p>No. of trucks required after expansion project will be 50 trucks /day or transporting raw materials, products and wastes .</p> <p>Existing road is capable of taking the additional vehicular traffic due to the proposed expansion.</p>
WATER	Stipulation of conditions such as:	Noted for compliance.
	i. Reuse /recycle of treated wastewater, wherever feasible.	Treated wastewater is being used for make-up of cooling purpose as maximum as possible.
	ii. Continuous monitoring of effluent quality/quantity in large and medium red category industries (water polluting).	Not applicable as it is only Ferro Alloy plant
	iii. A detailed water harvesting plan may be submitted by the project proponent	<p>Permission obtained from CGWA of 35 KLD for domestic use.</p> <p>The potential rain water that can be recharged / utilized to meet the plant water requirement is 16,500 m³ / year. Accordingly, the net water requirement will reduce.</p> <p>In the existing plant also rain water harvesting structure has been constructed. Now as part of expansion It is proposed to construct 2 nos. of Recharge structure as per design and all the Roof water inlet join to Recharge well so that Roof top water & surface run off storm water</p>

Environment	Stipulation of Conditions	Compliance of Mitigation measures
		recharge into ground.
	iv. Zero liquid discharge wherever techno-economically feasible.	ZLD maintained.
	v. In case, domestic waste water generation is more than 10 KLD, the industry may install STP	30 KLD of STP will be installed and treated water will be used for greenbelt development.
Land	i. Increase of green belt cover by 40% of the total land area beyond the permissible requirement of 33%, wherever, feasible for new projects.	40 % of the land area will be covered with green belt.
	ii. Stipulation of greenbelt outside the project premises such as avenue plantation in vacant areas, social forestry, etc.	Avenue plantation/road side plantation has been carried out.
	iii. Dumping of waste (fly ash, slag, red mud, etc.) may be permitted only at designated locations approved by SPCBs/PCCs.	Not applicable as it is a Ferro Alloy plant
	iv. More stringent norms for management of hazardous waste generated should be preferably utilized in co-processing.	The unit is followed the guidelines of Hazardous and other wastes (Management and Transboundary Movement) rules, 2016.
Other Condition (Additional)	i. Monitoring of compliance of EC conditions may be submitted with third party audit every year.	Being Done
	ii. The % of the CER may be at least 1.5 times the slabs given in the OM dated 01.05.2018 for SPA and 2 times for CPA in case of Environmental Clearance.	Noted for compliance.

Certified Compliance Report from IRO, MoEF&CC

24.8.19 The Status of compliance of earlier EC was obtained from Integrated Regional Office, Ranchi vide letter no. 103-325/11/EPE/98, dated 11-02-2022 in the name of M/s. BIHAR FOUNDRY & CASTINGS LIMITED, Ferro Alloys Unit. The Action taken report regarding the partially/non-complied condition has been submitted to IRO, MoEF&CC vide dated 15-11-2022. MoEF&CC (IRO), Ranchi evaluated the same and has issued letter no. 103-325/11/EPE/742 dated 01.12.2022. The details of the observations made by IRO in the report dated 01.12.2022 along with its re-assessment / present status as furnished by the PP is given as below:

Non- compliances reported	Corrective action taken	Present status
i) Greenbelt has not been developed as per the CPCB norms	PP has acquired additional land adjacent to the existing plant for greenbelt development. PP assures that they will comply 40% of greenbelt area by Next monsoon i.e. October 2023. IRO has also mentioned in his report that they have developed plantation all along the boundary of the industry and due to constraints of space within the plant, PP has acquired additional land, outside the plant measuring around 1.1 Acre over which it is proposed to raise plantation.	PP has submitted an undertaking to the IRO that they would develop green belt by October 2023.
ii) The Prescribed method for collection and treatment of runoff rain water from the Raw material storage area has not been followed	Presently, Plant is under construction and here PP do assure that, they will provide Collection and Treatment of runoff of rainwater from the Raw material storage area by April 2023.	PP has submitted undertaking to IRO for the same.

Deliberations by the Committee

24.8.20 The Committee noted the following:

1. The instant proposal is for Modification cum Expansion of Ferro Alloy Plant of existing 2x5 MVA SEAF's to 2x6 MVA SEAF, Modification of existing 1x7.5 MVA SEAF to 1x9 MVA SEAF, Existing 1x9.0 MVA SEAF, New 1x9 MVA SEAF & New 12MT per batch CLU Converter for refining liquid HC FeMn to MC/LC FeMn.
2. The EAC, constituted under the provision of the EIA Notification, 2006 comprising Expert Members/domain experts in various fields, examined the proposal submitted by the Project Proponent in desired format along with EIA/EMP reports prepared and submitted by the Consultant accredited by the QCI/ NABET on behalf of the Project Proponent.
3. The EAC noted that the Project Proponent has given an undertaking that the data and information given in the application and enclosures are true to the best of his knowledge and belief and no information has been suppressed in the EIA/EMP reports. If any part of data/information submitted is found to be false/ misleading at any stage, the project will be rejected and Environmental Clearance given, if any, will be revoked at the risk and cost of the project proponent.
4. The Committee noted that the EIA reports are in compliance of the ToR issued for the project, reflecting the present environmental status and the projected scenario for all the environmental components. The Committee deliberated on the proposed mitigation measure towards Air, Water, Noise and Soil pollutions. The Committee suggested that the storage of toxic/explosive raw materials/products shall be undertaken with utmost precautions and following the safety norms and best practices.

5. The existing project was accorded environmental clearance vide F. No. J-11011/384/2010-IA (II) (I) dated 31.10.2011. Consent to Operate for the existing unit was accorded by JSPCB vide no. JSPCB/HO/RNC/CTO-4412165/2020/1819 dated 10.11.2020 (which is in the name of GAUTAM FERRO ALLOYS (UNIT OF BFCL) which is valid upto 31-12-2025. Subsequently name of the plant in CTO has been changed to Bihar Foundries & Castings Limited vide order dated 23.01.2023 and is valid till 31.12.2025.
6. The EAC noted the following chronology w.r.t. instant Modification cum Expansion proposal
- M/s. Bihar Foundry & Casting Limited had initially obtained ToR vide letter dated 24.11.2020 for expansion of the existing unit for manufacturing of Ferro Alloys SiMn / FeMn based on Sub Merged Arc (SAF) technology.
 - Post compliance of ToR, PP applied for EC vide proposal no. IA/JH/IND/223909/2020 dated 23/08/2021 wherein the EAC in its 44th meeting held on 13 – 14th September, 2021 recommended to return the proposal in its present form due to shortcomings.
 - The project proponent then applied for fresh ToR vide proposal No. IA/JH/IND1/400084/2022 dated 21.10.2022 and decided to come before the committee for appraisal of proposal under violation category as per the provisions contained in the MoEF&CC Standard Operating Procedures dated 07.07.2021 pertaining to consideration of violation cases as PP has reported that they have constructed 5th Furnace i.e. New 1x9 MVA SAF & CLU converter is under construction without prior environmental clearance.
 - The EAC noted that it is a fit case of violation and to be apprised based on the provisions of the SOP dated 07.07.2021 [Violation Cases].
 - The EAC also took into consideration the request of PP submitted through written representation vide letter dated 03.11.2022 for appraisal of the proposal dated 21.10.2022 as modification/ amendment in TOR granted vide letter No. J-11011/384/2010-IAII(I) dated 24.11.2020 under violation category instead of issuance of fresh TOR.
 - After deliberations, the Committee recommended the project proposal for modification in TOR letter No. J-11011/384/2010-IAII(I) dated 24.11.2020 w.r.t. appraisal of proposal under violation category as per the provisions contained in the MoEF&CC Standard Operating Procedures dated 07/07/2021 pertaining to consideration of violation cases with stipulation of additional specific conditions. Accordingly, TOR Amendment was granted by MoEF&CC vide letter dated 19.12.2022.
7. The EAC further noted the following w.r.t. violation:
- The company has started installation of the 5th Submerged Arc Furnace of 1x9 MVA & CLU converter without completing the process of Environment Clearance because of the following reasons (Reasons for violation).
 - Due to COVID restrictions and social lockdown wherein all the physical activities were restricted, PP could not move ahead with the study, interaction with officials and accordingly could not complete the process of EC due to delay from their end.

- PP also gave a completion date of 31st Dec 2021 for its 5th furnace project to its consortium of banks.
 - If the completion date is exceeded by a period of 6 months, the loan account would have slipped into a NPA (Non-Performing Asset) category.
 - This situation would have led to bankruptcy of the company as well.
 - Thus, to avoid such situation, installation of the 5th furnace was completed along with CLU converter (70% work completed).
 - The company has prepared a Natural and Community Resource Augmentation plan for an amount of Rs. 21,81,500/- [Cost of damage / Remediation – Rs. 8,21,500/-, Natural Resource Augmentation Plan - Rs.3,10,000/- and Community Augmentation Plan - Rs.10,50,000/-]
 - Application submitted for EC under violation and accordingly JSPCB has filed a case in the Hon'ble Magistrate court of Ramgarh vide no complainant case/ 117/2023 vide dated 07-01-2023.
8. The EAC deliberated on the Natural and Community Resource Augmentation plan and found it satisfactory.
 9. JSPCB has filed a case in the Hon'ble Magistrate court of Ramgarh vide no complainant case/ 117/2023 vide dated 07-01-2023 to initiate credible action against M M/s. Bihar Foundry & Casting Limited for the offence committed u/s 19 of Environment (Protection) Act, 1986. This is filed as per provisions of the SOP dated 07.07.2021.
 10. The EAC observed that the project falls in the Ramgarh district of Jharkhand. Ramgarh is declared as Severely Polluted area (SPA) with CEPI index 65.11 by CPCB vide No. B29012/ESS(CPA)/2015-16/ dated 26th April 2016. The EAC advised PP to comply with all the conditions applicable to CEPI.
 11. Total project land is 2.91 ha (7.18 Acres) which is taken on lease from Jharkhand Industrial Area Development Authority (JIADA) for a period of 30 years. Existing plant land is Industrial land. The proposed expansion will be taken up in the existing plant premises only. Additional land of 1.385 Ac. (0.56 Ha.) has been acquired for development of Greenbelt to comply with 40% of 2.91 Ha. (7.18 Acres) as the plant is situated in Ramgarh industrial area which is Severely Polluted Area.
 12. The nearest human settlement from the project site is Palamu Colony (0.4 km, NE) and Marar (0.8 km, N).
 13. Damodar River (1.4 Km, S), Raura Nala (2.5 km, E), Meramgarh Nala (5.4 Km, E), Unnamed stream (0.5 Km, W), Ramgarh Village pond (4.0 Km, S) and Seota village Pond (1.5 Km, NE) exists within the study area of 10 km from the project site. The EAC is of the opinion that water bodies shall not be disturbed. Mitigation measures w.r.t. safeguarding the water bodies shall be implemented.
 14. The water requirement for the proposed expansion project is estimated as 148 m³/day, which will be sourced from Damodar river.
 15. As the Plant is situated in Severely Polluted area (SPA) it is proposed to develop 40% of Greenbelt as part of the expansion i.e. in an extent of 1.17 Ha. (2.9 Acres). Total 3000 nos. of plants will be developed over an extent of 1.17 Ha. (2.9 Acres). The total Greenbelt area proposed within the Plant premises will be 1.515 Acres (0.61 Ha.) which is inclusive of existing. Greenbelt The EAC deliberated on the greenbelt action plan and found it satisfactory.

16. The Committee has found that the baseline data and incremental GLC due to the proposed project within NAAQ standards.
17. The committee deliberated details of carbon foot prints and carbon sequestration study w.r.t. proposed project and found them to be satisfactory.
18. 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.
19. 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.
20. 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:

24.8.21 In view of the foregoing and after detailed deliberations, the committee **recommended** the instant proposal for grant of Environment Clearance under the provisions of EIA Notification, 2006 and SOP dated 07.07.2021 and subject to the stipulation of following specific conditions and general conditions;

A. Specific Conditions:

- ii. The PP needs to comply all the points of TOR for Violation Project and follow SOP dated 07.07.2021 issued by the Ministry of Environment, Forest & Climate Change, for identification & handling of Violation cases under EIA notification 2006.
- iii. The project proponent shall comply with all the environmental protection measures and safeguards proposed in the documents submitted to the Ministry. All the recommendations made in the EIA/EMP in respect of environmental management, and risk mitigation measures relating to the project shall be implemented.
- iv. The project proponent shall utilize modern technologies for capturing of carbon emitted and shall also develop carbon sink/carbon sequestration resources capable of capturing more than emitted. The implementation report shall be submitted to the IRO, MoEF&CC in this regard.
- v. **The total amount of Rs. 21.815 Lakhs shall be spent on Remediation plan and Natural Resource Augmentation Plan and Community Resource Augmentation Plan which**

shall be implemented in a period of 3 years as per the action plan details given in EIA Report and summarized below.

A. Remediation Plan and Budgetary Provisions for 3 years

Sr. No.	Environmental component	Activities Proposed	Budgetary provision			Total (in Rs.)
			1 st Year	2 nd Year	3 rd Year	
1.	Air Environment a) Ambient Air b) Air Pollution	<ul style="list-style-type: none"> Dust Suppression and water sprinkling. Provision of Barricades 	65,000	55,000	46,500	1,66,500
2	Noise Environment	Supply of personnel projective equipments	1,00,000	80,000	60,000	2,40,000
3	Water Environment	<ul style="list-style-type: none"> STP and ETP Rain water harvesting structure 	50,00,000	----	----	50,00,000
4	Land Environment	Leachate proof storage facility for productive soil and waste material	20,000	20,000	20,000	60,000
5	Ecology	Plantation in and around plant site Provision made in EMP for Rs. 10 lakhs	10,00,000	-----	----	10,00,000
6	Solid and hazardous waste	<ul style="list-style-type: none"> Provision of coloured bins Provision of storage facility 	25,000	25,000	20,000	70,000
7	Socio-economic (occupational health)	First aid kit and health check up	20,000	10,000	5,000	35,000
8	Energy consumption	Construction of Solar panels	1,00,000	1,00,000	50,000	2,50,000
		TOTAL	63,30,000	2,90,000	2,01,500	68,21,500

Rs. 68,21,500 (out of which 50 lakhs provision for STP, ETP, RWH and plantation and 10 Lakhs for greenbelt in and around plant site) : NET AMOUNT: Rs. 8,21,500

B. Natural Resources Augmentation Plan

Sr. No.	Activities Proposed	Yearwise Implementation and Budgetary provision in Rs.			Total Cost (Rs.)
		1 st Year	2 nd Year	3 rd Year	
1.	Development of Greenery in the surrounding area and road side plantation (along the state highway abutting the project side (100 trees in the surrounding area and 100 trees	50,000	25,000	25,000	1,00,000

Sr. No.	Activities Proposed	Yearwise Implementation and Budgetary provision in Rs.			Total Cost (Rs.)
		1 st Year	2 nd Year	3 rd Year	
	roadside Total 200 with maintenance @ 500/- per tree, total cost Rs. 1,00,000/-)				
2	Provision of drinking water facilities through hand pumps/ dugwells/ tubewells (hand pump/ well per year in the nearby villages each year with maintenance) i.e. two tubewells per village in 3 villages	30,000	30,000	30,000	90,000
3	Repair and maintenance of roads in the nearby 6 villages with the help of gram panchayat considering 2 villages each year	40,000	40,000	40,000	1,20,000
	TOTAL	1,20,000	95,000	95,000	3,10,000

C. Community Augmentation Plan

Sr. No.	Activities Proposed	Year wise Implementation and Budgetary provision in Rs.			Total cost (Rs.)
		1st Year	2nd Year	3rd Year	
1.	Development of sanitation facilities in (provision of 2 toilets in each village)	2,00,000	2,00,000	2,00,000	6,00,000
2	Medical check-up camp in nearby areas for villages and supply of medicines (2 villages per year)	1,00,000	1,00,000	1,00,000	3,00,000
3	Assistance in providing study materials, uniforms, books to the poor students (50 students) each year	50,000	50,000	50,000	1,50,000
	TOTAL	3,50,000	3,50,000	3,50,000	10,50,000

Total: Summary of Remediation plan, Natural Resource and Community Augmentation Plan

Sr. No.	Activity Proposed	Total (Rs.)
1	Cost of damage / Remediation plan	Rs. 8,21,500 (excluding provisions of EMP cost of Rs.60 lakhs)
2	Natural Resource AugmentationPlan	Rs.3,10,000/-
3	Community Augmentation Plan	Rs.10,50,000/-
	Total	Rs. 21,81,500/-

- vi. The project proponent shall submit a bank guarantee of an amount of Rs. 21.815 lakhs towards Remediation plan and Natural and Community Resource Augmentation plan with the CPCB prior to the grant of environmental clearance (EC) as per SOP 07.07.2021.
- vii. Project proponent shall ensure that the plan shall be completed in three years whereas the bank guarantee shall be for five years. The bank guarantee shall be released by the CPCB after successful implementation of Remediation plan, Natural Resource Augmentation Plan and Community Resource Augmentation plan.
- viii. Project proponent has to submit Rs. 89.296 Lakhs towards penalty provisions as per SOP dated 07.07.2021 to the SPCB prior to the grant of EC as penalty for the violation activity in addition to Damage Assessment cost. The cost of Penalty as per MoEF&CC's OM dated 07.07.2021 is detailed as below:

Particulars	Value (Rs. In Lakhs)	1% Penalty Cost (Rs. In Lakhs)
Cost of the construction of SAF	1817.80	18.178
Cost of the construction of CLU convertor	7111.80	71.118
Total Cost of Penalty		89.296

he project falls in the Ramgarh district of Jharkhand declared as Severely Polluted area (SPA), PP shall comply with all the conditions applicable to CEPI as per the Ministry's OM. A Report has to be submitted to IRO, MoEF&CC in this regard.

- x. The total water requirement is estimated as 148 m³/day, which shall be sourced from Damodar river. PP shall obtain necessary permission from the Competent Authority.
- xi. 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.
- xii. 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.
- xiii. Performance test shall be conducted on all pollution control systems every year and report shall be submitted to Regional Office of the MoEF&CC.
- xiv. PP shall carry out periodically occupational health survey as per the applicable norms.
- xv. The 4th hole extraction system shall be provided in the Submerged Arc Furnaces.
- xvi. 100% of the slag generated through the process shall be utilised.
- xvii. No Ferro-chrome production shall be carried out without prior Environmental clearance from MOEF&CC.
- xviii. AOD (Argon Oxygen Decarburisation) Convertor shall have Secondary Fume extraction facility.
- xix. 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.

- xx. 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.
- xxi. The nearest human settlement from the project site is Palamu Colony (0.4 km, NE) and Marar (0.8 km, N).
- xxii. Damodar River (1.4 Km, S), Raura Nala (2.5 km, E), Meramgarh Nala (5.4 Km, E), Unnamed stream (0.5 Km, W), Ramgarh Village pond (4.0 Km, S) and Seota village Pond (1.5 Km, NE) exists within the study area of 10 km from the project site. The EAC is of the opinion that water bodies shall not be disturbed. Mitigation measures w.r.t. safeguarding the water bodies shall be implemented.
- xxiii. As reported, PP shall adopt Marar Village and prepare and implement a robust plan to develop it into model villages in next 10 years.
- xxiv. Briquetting and Jigging plant shall be installed in Ferro Alloys Plant.
- xxv. A proper action plan must be implemented to dispose of the electronic waste generated in the industry.
- xxvi. Three tier Green Belt shall be developed in at least 40% of the project area in a time frame of one year with native species all along the periphery of the project site of adequate width and tree density shall not be less than 2500 per ha. Survival rate of green belt developed shall be monitored on periodic basis to ensure that damaged plants are replaced with new plants in the subsequent years. PP shall develop greenbelt in the form of shelter belt comprising of total of 6 rows of 2x2 m plantation with tall trees & broad leaves with thick canopy alongwith windshield inside the plant premises to act as green barrier for air pollution & noise levels towards Palamu Colony (0.4 km, NE) and Marar (0.8 km, N). Compliance status in this regard, shall be submitted to concerned Regional Office of the MoEF&CC.
- xxvii. Greening and Paving shall be implemented in the plant area to arrest soil erosion and dust pollution from exposed soil surface.
- xxviii. Particulate matter emission from stacks shall be less than 30 mg/Nm³. Dry gas cleaning systems shall be provided by the project proponent to meet particulate matter emission norms of less than 30mg/Nm³ for the furnace flue gases.
- xxix. The PP shall minimize the evaporation losses in jigging operation to less than 10% using suitable advanced process.
- xxx. The PP shall install CO sensors at the furnace top level and the monitoring report shall be submitted to the IRO, MoEFCC in this regard.
- xxxi. Action Plan for fire fighting system including provision for flame detectors, temperature actuated heat detectors with alarms, automatic sprinkler system, fixing the location of fire water tanks, separate power system for fire fighting, involvement of qualified and trained fire personnel, nearest fire station & time required to reach the proposed site shall be prepared and implemented.
- xxxii. The Piezometric wells shall be established in all directions surrounding the project area to monitor groundwater levels and determine aquifer parameters such as transmissibility, hydraulic conductivity, storage, to sample groundwater for chemical/ heavy metals/ toxic leachates and microbiological analysis.

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

B. General Conditions

I. Statutory compliance:

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

II. Air quality monitoring and preservation

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

- iii. Appropriate Air Pollution Control (APC) system shall be provided for all the dust generating points including fugitive dust from all vulnerable sources, so as to comply prescribed stack emission and fugitive emission standards.
- iv. The project proponent shall provide leakage detection and mechanized bag cleaning facilities for better maintenance of bags.
- v. Recycle and reuse iron ore fines, coal and coke fines, lime fines and such other fines collected in the pollution control devices and vacuum cleaning devices in the process after briquetting/ agglomeration.
- vi. The project proponent shall ensure covered transportation and conveying of ore, coal and other raw material to prevent spillage and dust generation.
- vii. The project proponent shall provide primary and secondary fume extraction system at all melting furnaces.
- viii. Design the ventilation system for adequate air changes as per prevailing norms for all tunnels, motor houses, Oil Cellars.

III. Water quality monitoring and preservation

- i. The project proponent shall install 24x7 continuous effluent monitoring system with respect to standards prescribed in Environment (Protection) Rules 1986 (G.S.R 414 (E) dated 30th May 2008; G.S.R 277 (E) dated 31st March 2012 (applicable to IF/EAF); as amended from time to time and connected to SPCB and CPCB online servers and calibrate these system from time to time according to equipment supplier specification through labs recognised under Environment (Protection) Act, 1986 or NABL accredited laboratories.
- ii. The project proponent shall monitor regularly ground water quality at least twice a year (pre- and post-monsoon) at sufficient numbers of piezometers/sampling wells in the plant and adjacent areas through labs recognised under Environment (Protection) Act, 1986 and NABL accredited laboratories.
- iii. Sewage Treatment Plant shall be provided for treatment of domestic wastewater to meet the prescribed standards.
- iv. The project proponent shall provide the ETP for effluents of rolling mills to meet the standards prescribed in G.S.R 277 (E) 31st March 2012 (applicable to IF/EAF) as amended from time to time.
- v. Garland drains and collection pits shall be provided for each stock pile to arrest the run-off in the event of heavy rains and to check the water pollution due to surface run off.
- vi. Tyre washing facilities shall be provided at the entrance/exit of the plant gates.

IV. Noise monitoring and prevention

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

V. Energy Conservation measures

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

VI. Waste management

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

VII. Green Belt

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

VIII. Public hearing and Human health issues

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

IX. Environment Management

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

X. Miscellaneous

- i. The project proponent shall make public the environmental clearance granted for their project along with the environmental conditions and safeguards at their cost by prominently advertising it at least in two local newspapers of the District or State, of

which one shall be in the vernacular language within seven days and in addition this shall also be displayed in the project proponent's website permanently.

- ii. The copies of the environmental clearance shall be submitted by the project proponents to the Heads of local bodies, Panchayats and Municipal Bodies in addition to the relevant offices of the Government who in turn has to display the same for 30 days from the date of receipt.
- iii. The project proponent shall upload the status of compliance of the stipulated environment clearance conditions, including results of monitored data on their website and update the same on half-yearly basis.
- iv. The project proponent shall monitor the criteria pollutants level namely; PM10, SO2, NOx (ambient levels as well as stack emissions) or critical sectoral parameters, indicated for the projects and display the same at a convenient location for disclosure to the public and put on the website of the company.
- v. The project proponent shall submit six-monthly reports on the status of the compliance of the stipulated environmental conditions on the website of the ministry of Environment, Forest and Climate Change at environment clearance portal.
- vi. The project proponent shall submit the environmental statement for each financial year in Form-V to the concerned State Pollution Control Board as prescribed under the Environment (Protection) Rules, 1986, as amended subsequently and put on the website of the company.
- vii. The project proponent shall inform the Regional Office as well as the Ministry, the date of financial closure and final approval of the project by the concerned authorities, commencing the land development work and start of production operation by the project.
- viii. The project proponent shall abide by all the commitments and recommendations made in the EIA/EMP report, commitment made during Public Hearing and also that during their presentation to the Expert Appraisal Committee.
- ix. The PP shall put all the environment related expenditure, expenditure related to Action Plan on the PH issues, and other commitments made in the EIA/EMP Report etc. in the company web site for the information to public/public domain. The PP shall also put the information on the left over funds allocated to EMP and PH as committed in the earlier ECs and shall be carried out and spent in next three years, in the company web site for the information to public/public domain.
- x. No further expansion or modifications in the plant shall be carried out without prior approval of the Ministry of Environment, Forests and Climate Change (MoEF&CC).
- xi. Concealing factual data or submission of false/fabricated data may result in revocation of this environmental clearance and attract action under the provisions of Environment (Protection) Act, 1986.
- xii. The Ministry may revoke or suspend the clearance, if implementation of any of the above conditions is not satisfactory.
- xiii. The Ministry reserves the right to stipulate additional conditions if found necessary. The Company in a time bound manner shall implement these conditions.
- xiv. The Regional Office of this Ministry shall monitor compliance of the stipulated conditions. The project authorities should extend full cooperation to the officer (s) of the Regional Office by furnishing the requisite data / information/monitoring reports.

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

Re-Consideration of Environmental Clearance Proposal

Agenda No. 24.9

24.9 Installation of Induction Furnace & Rolling Mill for production of Ingots, Billets 5,00,000 TPA and TMT Bars & Long product: 5,00,000 TPA respectively (In addition to Existing 3,24,000 TPA Sponge Iron Plant, 0.216 MTPA Coal Washery & 25 MW Power Plant) of M/s Lloyds Metals and Energy Limited, located at Plot A-1 and A-2, MIDC Area, Ghugus, Chandrapur, Maharashtra – Consideration of Environmental Clearance.

[Proposal No.: IA/MH/IND1/404101/2022; and IA/MH/IND1/417900/2023 File No. IA-J-11011/243/2019-IA-II(IND-I)]

[Consultant: Pollution and Ecology Control Services; Valid upto 10.04.2023]

24.9.1 M/s. Lloyds Metals & Energy Limited has made an online application vide proposal no. IA/MH/IND1/404101/2022 dated 19th December 2022 along with copy of EIA/EMP report, Forms (Part A, B and C) and certified compliance report seeking Environment Clearance (EC) under the provisions of the EIA Notification, 2006 for the project mentioned above. The proposed project activity is listed at S. No. 3(a) Metallurgical industries (ferrous & non-ferrous) and 1(d) Thermal Power Plants under Category “A” of the schedule of the EIA Notification, 2006 and appraised at Central Level.

24.9.2 Name of the EIA consultant: M/s Pollution and Ecology Control Services, Nagpur [List of ACOs with their Certificate / Extension Letter no. QCI/NABET/ENV/ACO/23/2634; valid upto 10.04.2023, as on February 27, 2023].

Details submitted by Project proponent

24.9.3 The details of the ToR are furnished as below:

Date of Application	Consideration	Details	Date of Accord	Validity
24.06.2019	13 th Meeting of Re-constituted EAC (Industry-1) held on 27 th to 29 th	Terms of Reference	10 th February 2020	9 th February 2023

	November, 2019			
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24.9.4 The project of M/s Lloyds Metals & Energy Limited located in Plot No. A-1 and A-2, MIDC Area, Ghugus, Chandrapur, Maharashtra is for installation of Induction Furnace & Rolling Mill for production of Ingots, Billets 5,00,000 TPA and TMT Bars & Long product: 5,00,000 TPA (In addition to Existing 3, 24,000 TPA Sponge Iron Plant, 0.216MTPA OR 150 TPH Coal Washery & 25 MW Power Plant). Further, company has decided to drop the installation of the 2 X 9 MVA Submerged Arc Furnace permitted for production of 25,000 TPA Ferro alloys in the ToR dated 10.02.2020.

24.9.5 Environmental Site Settings:

S. No.	Particulars	Details submitted by the PP			Remarks																				
i.	Total land	93.52 ha [MIDC Land]			Land use: Industrial																				
ii.	Land acquisition details as per MoEF&CC O.M. dated 7/10/2014	Total land is in possession. Additional 8.56 ha adjacent private land was considered at the time of ToR. Now, the proposed project of Induction furnace and rolling mill will be installed in existing plant premises. No Additional land is required.																							
iii.	Existence of habitation & involvement of R&R, if any.	Project site: None Study Area: <table border="1"> <thead> <tr> <th>Habitation</th> <th>Distance</th> <th>Direction</th> </tr> </thead> <tbody> <tr> <td>Ghugus</td> <td>0.5 Km</td> <td>N</td> </tr> </tbody> </table>			Habitation	Distance	Direction	Ghugus	0.5 Km	N	No R&R involved.														
Habitation	Distance	Direction																							
Ghugus	0.5 Km	N																							
iv.	Latitude and Longitude of all corners of the project site.	<table border="1"> <thead> <tr> <th>Point</th> <th>Latitude</th> <th>Longitude</th> </tr> </thead> <tbody> <tr> <td>A</td> <td>19°56'30.56"N</td> <td>79° 6'56.83"E</td> </tr> <tr> <td>B</td> <td>19°56'30.22"N</td> <td>79° 7'1.57 "E</td> </tr> <tr> <td>C</td> <td>19°56'14.10"N</td> <td>79° 7'15.52"E</td> </tr> <tr> <td>D</td> <td>19°55'28.81"N</td> <td>79° 7'20.75"E</td> </tr> <tr> <td>E</td> <td>19°55'13.75"N</td> <td>79° 7'4.87"E</td> </tr> <tr> <td>F</td> <td>19°55'14.36"N</td> <td>79° 6'57.21"E</td> </tr> </tbody> </table>	Point	Latitude	Longitude	A	19°56'30.56"N	79° 6'56.83"E	B	19°56'30.22"N	79° 7'1.57 "E	C	19°56'14.10"N	79° 7'15.52"E	D	19°55'28.81"N	79° 7'20.75"E	E	19°55'13.75"N	79° 7'4.87"E	F	19°55'14.36"N	79° 6'57.21"E	-	
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E	19°55'13.75"N	79° 7'4.87"E																							
F	19°55'14.36"N	79° 6'57.21"E																							
v.	Elevation of the project site	189 m above mean sea level			-																				
vi.	Involvement of Forest land if any.	No involvement of Forest Land			-																				
vii.	Water body exists within the project site as well as study area	Project site: There are two seasonal drains passing through project site Study area <table border="1"> <thead> <tr> <th>Water body</th> <th>Distance</th> <th>Direction</th> </tr> </thead> <tbody> <tr> <td>Anuradha Lake</td> <td>620 m</td> <td>W</td> </tr> </tbody> </table>			Water body	Distance	Direction	Anuradha Lake	620 m	W	-														
Water body	Distance	Direction																							
Anuradha Lake	620 m	W																							

		Wardha River	2.5 Km	SW	
		Nirguda Nala	3.0 Km	SSW	
		Penganga River	5.0 Km	SE	
		Sarai Nala	6.5 Km	NE	
viii.	Existence of ESZ/ ESA/ national park/ wildlife sanctuary/ biosphere reserve/ tiger reserve/ elephant reserve etc. if any within the study area	Nil. List of Reserved and protected forests: Pardi Reserved Forest, 6.0 Km (SW)			
ix.	CPA/SPA	The Project site is located in Chandrapur District which was declared as Critically Polluted Area vide NGT order dated 10.07.2019 and lifting of abeyance of Ministry's OM is published on 5 th July 2022. PP proposes to comply all the conditions given in MOEF & CC issued letter No-Q-16017/38/2018-CPA dated 24 th October 2019. The compliance of the conditions given in MOEF & CC issued letter No-Q-16017/38/2018-CPA dated 24 th October 2019 is submitted in EIA/EMP report.			

24.9.6 The existing projects for sponge iron manufacturing plant was accorded the NOC vide Ir.no. Env (NOC)2005/747/CR.97/D.I, dated 28th December 2005, for coal washery environmental clearance was accorded vide Ir.no. J-11015/272/2007-IA.II (M) dated 9th April 2008 and for waste Heat Recovery Based Captive Power Plant of 25 MW capacity environmental clearance was accorded vide Ir.no. J-13012/123/07-IA-II dated 12th October 2009. Consent to Operate was accorded by Maharashtra State pollution Control Board vide Ir. no. Format1.0/CAC/UAN No. MPCBCONSENT- 0000123174/CO/2203001536 validity of CTO is up to 31.12.2023.

24.9.7 Implementation status of the existing EC

Sr. No.	Facilities	Units	As per NOC/EC dated 28 th December 2005, 9 th April 2008 & 12 th October, 2009	Implementation status	Production as per CTO
1.	Sponge Iron plant	TPA	3,24,000 TPA or 27000 TPM	Installed & in operation	27000 TPM
2.	Coal Washery	MTPA	0.216 OR 150 TPH Capacity	Installed & in operation	Washed Coal 4,72,500 TPA
3.	Power Plant	MW	25	Installed & in	25 MW

	[WHRB+AFBC (only for standby)]		[WHRB+AFBC (only for standby)]	operation	
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24.9.8 The unit configuration and capacity of existing and proposed project is given as below:

S. No.	Plant Equipment/ Facility	As per EC dated 28th December 2005, 9th April 2008 & 12th October 2009		Proposed capacity as part of Expansion capacity		Total capacity After expansion capacity	
		Configuration	Capacity	Configuration	Capacity	Configuration	Capacity
1	Sponge Iron plant	1 x 500 TPD & 4 x 100 TPD	3,24,000 TPA	-	-	1 x 500 TPD & 4 x 100 TPD	3,24,000 TPA
2	Coal Washery	0.216 MTPA OR 150 TPH	0.216 MTPA OR 150 TPH	-	-	0.216 MTPA OR 150 TPH	0.216 MTPA OR 150 TPH
3	Power Plant	25 MW	25 MW	-	-	25 MW	25 MW
4	Induction Furnace	-	-	6 x 30 T	5,00,000 TPA	6 x 30 T	5,00,000 TPA
5	Rolling Mill	-	-	5,00,000 TPA	5,00,000 TPA	5,00,000 TPA	5,00,000 TPA

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

Sr. No.	Name of the Product	Raw Material	Requirement in TPA	Source and Distance	Mode of Transportation
Existing Plant					
For Sponge Iron Plant					
1	Iron Ore	Iron Ore	507384	Own mines located at Gadchiroli & open market	Road 180 km
2	Coal	Coal	435456	WCL Mines	Road 5-50 km
3	Dolomite	Dolomite	46656	Yavatmal & open market	Road 50 km
For Coal Washery					
1	Coal	Coal	738215	WCL Mines	Road 5-50 km
Proposed Plant					
1	M. S. Billets	M.S. Scrap/Tail cutting	1,44,000	Local Market / Inhouse Rolling Mill	By Road 200-500 km/ Truck

Sr. No.	Name of the Product	Raw Material	Requirement in TPA	Source and Distance	Mode of Transportation
		Sponge Iron	3,96,000	3,24,000 TPA from in-house i.e. Ghugus plant and remaining 72000 TPA will be from proposed plant at Konsari, District Gadchiroli	Conveyor/Road 150-200 km
		Silico Manganese as additives	5000	Local Market	By Road 30 km
2	Hot Rolled long products/ TMT Bars	Molten M.S. Billets for hot charging	5,00,000	In-house	Direct Charging

24.9.10 The existing water requirement is 2674 m³/day, which will be sourced from Wardha River. The water requirement for the proposed project is estimated as 1627 m³/day, will be sourced from Wardha River and an agreement has been signed with Irrigation Department, Chandrapur for supply of water.

24.9.11 Total Power required for proposed expansion project is 30 MW which will be sourced from own captive power plant and MSEDCL.

24.9.12 Baseline Environmental Studies:

Period	15/09/2020 to 15/12/2020
AAQ parameters at 8 Locations (min and max)	<ul style="list-style-type: none"> PM₁₀: 40.9 to 79.4 µg/m³ PM_{2.5}: 24.0 to 43.2 µg/m³ SO₂: 10.7 to 35.6 µg/m³ NO_x: 17.5 to 46.3 µg/m³
Incremental GLC level	<ul style="list-style-type: none"> PM₁₀ = 1.03 µg/m³ (Level at 0.5 km in SE Direction) SO₂ = 8.1 µg/m³ (Level at 0.8 km in SE Direction) NO_x = 3.12 µg/m³ (Level at 0.8 km in SE Direction)
Ground water quality at 8 locations	pH: 7.47 to 7.75, Total Hardness: 240 to 1022 mg/l, Chlorides: 9.9 to 332.5 mg/l, Fluoride: 0.684 to 1.19 mg/l. Heavy metals: ND
Surface water quality at 8 locations	pH: 7.01 to 7.54, DO: 6.4 to 7.1 mg/l, BOD: <3mg/l & COD: <5mg/l.
Noise levels Leq (Day and Night)	35.6 to 54.8 for the day time and 34.5 to 50.2 for the Night time.
Traffic assessment study findings	<ul style="list-style-type: none"> Traffic study has been conducted at State Highway which is adjacent from the plant site. Transportation of raw material, fuel & finished product will be done by road.

Period	15/09/2020 to 15/12/2020														
	<ul style="list-style-type: none"> Existing PCU is 1162 PCU/day on MIDC road and existing level of service (LOS) is: <table border="1"> <thead> <tr> <th>Road</th> <th>V (Volume in PCU/day.)</th> <th>C (Capacity in PCU/day.)</th> <th>Proposed V/C Ratio</th> <th>LOS</th> </tr> </thead> <tbody> <tr> <td>MIDC road</td> <td>1162</td> <td>5000</td> <td>0.23</td> <td>A-Very Good</td> </tr> </tbody> </table> <p>* Note: Capacity as per IRC-73:1980 Guide line for capacity for roads.</p> <p>Conclusion: The level of service will be A-Very Good after including additional traffic due to proposed project</p>					Road	V (Volume in PCU/day.)	C (Capacity in PCU/day.)	Proposed V/C Ratio	LOS	MIDC road	1162	5000	0.23	A-Very Good
Road	V (Volume in PCU/day.)	C (Capacity in PCU/day.)	Proposed V/C Ratio	LOS											
MIDC road	1162	5000	0.23	A-Very Good											
Flora and fauna	No schedule I animals are found in the study area.														

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

Solid Waste	Quantity (TPA)	Mitigation Measures
Existing		
A. Solid Waste		
Char	48000	Sold to local entrepreneurs for making coal briquettes
Bottom Ash	9855	Brick Manufacturing and Land Filling
Accretion	3650	Land Filling
Fly Ash	39785	Low land filling and brick manufacturing
Dust from ESP	7300	Brick manufacturing
Washery reject	91250	Sold to third party
B. Hazardous Waste		
Used/Spent oil	3.65 Kl/ Annum	Sold to authorized vendors
Proposed		
A. Solid Waste		
Slag	25,000	A slag crusher will be installed to crush slag. Iron particles will be separated by using magnetic separator and will be reused in Induction Furnace. Initially Slag Residual slag will be used for levelling of plot and hardening of working area & construction of plant internal roads. In future possibilities will be explored to use slag for construction of internal village roads.
Tail cutting	15,000	100% reuse in induction furnace
B. Hazardous Waste		
There is no generation of hazardous waste except used oil from machineries and transformers. This waste oil will be used for secondary purpose and will be sold to authorized vendors / recyclers		

24.9.14 Public Consultation:

Details of advertisement given	19 th June 2021
Date of public consultation	30 th June 2021
Venue	Project Site (Plot A-1 and A-2, MIDC Area, Ghugus, Chandrapur, Maharashtra)
Presiding Officer	Additional District Magistrate
Major issues raised	<ul style="list-style-type: none"> • Pollution Control • Employment • CSR activities

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

S.N.	MAJOR ACTIVITY HEADS	YEAR OF IMPLEMENTATION			TOTAL EXPENDITURE (Rs. in Lakhs)	
		1 st Year (Rs. in Lakhs)	2 nd Year (Rs. in Lakhs)	3 rd Year (Rs. in Lakhs)		
A)Based on Need Based & SIA Study						
1.	Training will be provided to the local youths for skill development in coordination with the local ITI centre.	Physical Nos and Villages	Training to the eligible unemployed, interested youth of, Ghughus, Shengaon, Nakoda and Dhanora	Training to the eligible unemployed, interested youth from Ghughus, Belur, Wadha and Anturla	Training to the eligible unemployed, interested youth from Pandharkawada, Pipri and Ghughus	30.00
		Budget in Lakhs Rs.	10.00	10.00	10.00	
2. Community and Infrastructure Development						
	Augmentation of water supply to existing toilets (under Swacha Bharat Scheme).	Physical Nos and Villages	At village Ghugus, Dhanora, Pandharkawada, Nakoda, Anturla and Pipri	Maintenance	Maintenance	15.00
		Budget in Lakhs Rs.	10.00	3.00	2.00	
	LED solar light will be provided in the street with solar panel	Physical Nos and Villages	At Ghugus, Shengaon, Nakoda, Dhanora and Usgaon	Maintenance	Maintenance	40.00
		Budget in Lakhs Rs.	25.00	10.00	5.00	
c.	Providing	Physical	Providing 1	Maintenance	Maintenance	65.00

S.N.	MAJOR ACTIVITY HEADS		YEAR OF IMPLEMENTATION			TOTAL EXPENDITURE (Rs. in Lakhs)
			1 st Year (Rs. in Lakhs)	2 nd Year (Rs. in Lakhs)	3 rd Year (Rs. in Lakhs)	
	Truck mounted road sweeping machine	Nos and Villages	machine for cleaning of adjoining connecting village roads operated by LMEL.			
		Budget in Lakhs Rs.	45.00	10.00	10.00	
d.	Providing mobile mist sprinklers and fugitive dust controller machines to nearby villages	Physical Nos and Villages	Providing 2 machine to surrounding villages	Maintenance	Maintenance	65.00
		Budget in Lakhs Rs.	45.00	10.00	10.00	
e.	Provision of Drinking water Facility	Physical Nos and Villages	Construction of borewell along with provision of RO plant (Water Purification withdispenser) in the village Ghugus,Usgao, Dhanora and Pipri	Maintenance	Maintenance	60.00
		Budget in Lakhs	40.00	10.00	10.00	
f.	Provision of Ambulance & Funeral vehicle	Physical Nos and Villages	2 No. of Ambulance Vehicle and 1 No. of Funeral Vehicle for surrounding village	Maintenance and Operation	Maintenance and Operation	90.00
		Budget in Lakhs Rs.	50.00	20.00	20.00	
3. Education						
a.	Training Program	To support 3 Rural schools in Chandrapur			200.00	

S.N.	MAJOR ACTIVITY HEADS		YEAR OF IMPLEMENTATION			TOTAL EXPENDITURE (Rs. in Lakhs)
			1 st Year (Rs. in Lakhs)	2 nd Year (Rs. in Lakhs)	3 rd Year (Rs. in Lakhs)	
	from 7 th Std to 10 th Std Students from Janata Vidyalaya Ghugus, New English High School & Jr. College Pandharkawada, Priyadarshini Kanya Vidyalaya Ghugus	Taluka, B) TO facilitate teachers' capacity building training for enabling them to impart quality education. C) To undertake holistic development programmes with the students from academic overall progress and development of students. D) to ensure schools have appropriate infrastructure to improve the quality of education being imparted.				
	Budget in Lakhs Rs.	200.00				
Total (A)					565.00	
B) BASED ON PUBLIC HEARING /CONSULTATION						
1.	Health camps including medicine in the nearby villages	Villages	Health camps will be organized in Ghugus, Usgaon and Dhanora Village.	Health camps will be organized in Mahtardevi, Wadha and Chandur Village.	Health camps will be organized in Nakoda, Shengaon and Ghugus Village.	30.00
		Budget in Lakhs Rs.	10.00	10.00	10.00	
2.	Improvement in the Facilities in primary health center	Villages	Provision of various medical kits/ medical equipment to primary health centers at Ghugus village.	Provision of various medical kit/ medical equipment to primary health centers at Shengaon village.	Provision of various medical kit /medical equipment to primary health centers at Usgaon village.	60.00
		Budget in Lakhs Rs.	40.00	10.00	10.00	
3.	Plantation	Physical Nos and Villages	Avenue plantation in nearby villages : Ghugus Mhtardevi, Nakoda, Shengaon, Usgaon and Dhanora Village.			45.00
		Budget in Lakhs Rs.	15.00	15.00	15.00	

S.N.	MAJOR ACTIVITY HEADS		YEAR OF IMPLEMENTATION			TOTAL EXPENDITURE (Rs. in Lakhs)
			1 st Year (Rs. in Lakhs)	2 nd Year (Rs. in Lakhs)	3 rd Year (Rs. in Lakhs)	
4.	development of Road for decongestion of traffic at southern end of the plant connected to Nakoda village	Physical Nos and Villages	Development of Road for decongestion of traffic			150.00
		Budget in Lakhs Rs.	150			
Total (B)					285.00	
Total (A + B)					850.00	

PP hereby confirmed that PP will adopt the following 2 nos. of villages for taking up developmental activities:

S.N.	Activities (Year 2022-2024)	Proposed Expenditure and Activities (All figures in Rs. Lakhs)		
		Usgaon Village	Mhatardevi Village	Total
1.	Model Anganwadi – Improvement in infrastructure Basic amenities and teaching learning material.	20.00	20.00	40.00
2.	Construction of Concrete Road and Closed Drains (Nali)	50.00	150.00	200.00
3.	Renovation of Primary School and providing a library and computer lab in the school	35.00	35.00	70.00
4.	Shamshan Bhumi Infrastructural Development (Construction of Shed, flooring work, etc)	10.00	10.00	20.00
5.	Vocational training Center	10.00	10.00	20.00
6.	Sanitization (Construction of Public Toilet, disinfection equipments etc)	15.00	15.00	30.00
7.	High Mast will be installed as required	15.00	15.00	30.00
8.	Based on 12th std. results, Scholarship for meritorious students for Graduation of technical studies - 2 students from each village.	10.00	10.00	20.00
9.	Medical equipments to elderly people	15.00	15.00	30.00
Expenditure for Adopted Village Development				460.00 Lakhs

24.9.15 The capital cost of the proposed expansion project is Rs. 660 Crores and the capital cost for environmental protection measures is proposed as Rs. 12.2 Crores. The annual recurring cost towards the environmental protection measures is proposed as Rs. 1.003 Crores. The total

employment generation from the project is 600 nos. of people. The details of cost for environmental protection measures is as follows:

S.N.	Particulars	Capital Cost (in Crores Rs.)	Operation and Maintenance (in Crores Rs./Annum)
Proposed EMP cost for Air Pollution Control			
1.	Bag filter with stack for SMS (2 No. with Teflon Bags) & Dust Collector and fume hood (dust extraction system)	5	0.5
Proposed EMP cost for Water Pollution Control			
2.	Settling Tank for Industrial Water Treatment	0.25	0.02
3.	STP for Domestic Water Treatment	0.40	0.01
4.	Wheel washing System (1 No.)	0.05	0.003
5.	Dust Sweeping Machine and Water Sprinkler	0.5	0.05
6.	Rain Water Harvesting	5.0	0.15
7.	Environmental Monitoring (CAAQMS and online stack monitoring system)	0.5	0.2
8.	Solid Waste Management	0.4	0.03
9.	Green Belt Development	0.1	0.04
10.	Funds for social welfare as per OM dated 30.09.2020	13.1	2% of net profit per year as per Ministry of Company Act
	Total	25.3	1.003

24.9.16 Existing green belt has been developed in 47.7 ha. area which is about 51% of the total project area of 93.52 ha., 2,34,650 nos. of trees are planted and 1,05,000 nos. survived till date. Further gap filling will be done. About 15000 nos. of trees will be planted. A 10m wide greenbelt, consisting of at least 3 tiers around plant boundary will be developed as greenbelt as per CPCB/MoEF&CC, New Delhi guidelines. Local and native species will be planted with a density of 2500 trees per hectare.

24.9.17 It is submitted by the PP that there is no violation under EIA notification 2006, however there is Lokayukta Maharashtra State Complaint No.: LA/COM/3729/2021 (T-6) dated 10.11.2021. A complaint was filed by the Complainant with the Hon'ble Lokayukta regarding the action taken by the Hon'ble NGT Bench Pune in 2014 after passing the final order for banning the sponge iron factories. MPCB vide letter O.No. MPC/ROC/579/2022 dated 11.11.2022 has stated that *"the office of M.P.C.B. Chandrapur visited the industry on 01/08/2022. As per the error during the inspection, raised a show cause notice was issued to the industry dated 04/08/2022. Also Proposed directions were also issued vide letter dated 13/09/2022 by the board. On the said directive, the industry submitted its compliance report to this office vide letter dated 14/09/2022. This office visited to the industry on dtd. 10/11/2022 to verify the compliance of the industry."* The said letter concludes that "it is observed that the industry has complied with the earlier directives issued by the Board dated 23/04/2015, the directives regarding restart of industries issued on 22/02/2018 and the proposed directives issued on 13/09/2022. Complied to a large extent."

Certified Compliance report from Integrated Regional office MoEFCC

24.9.18 The Status of compliance of earlier EC was obtained from Regional Office, vide letter dated 10.11.2021 in the name of M/s. Lloyds Metals & Energy Limited. ATR was submitted by the PP vide letter No. NIL dated 27.10.2022. IRO has reviewed the ATR and has issued a closure report no. 3-36/2008 (ENV)/10724, 3-36/2008 (ENV)/10725 and 3-36/2008 (ENV)/10726 dated 7th December 2022 according to which PP has complied with the partially complied conditions.

Compliance to CEPI Guidelines

24.9.19 The proposed project falls in the Critically Polluted Area of Chandrapur as notified by Central Pollution Control Board (CPCB). The compliance of the conditions as per Ministry's guideline dated 24th October 2019 are as follows:

Sl. No.	Stipulated Conditions / Recommendations	Measures to comply CEPI Recommendation as reported by the PP
Air Environment		
i.	Stack emission levels should be stringent than the existing standards in terms of the identified critical pollutants.	<p>Existing Sponge Iron Plant: As per the renewed Consent to operate the maximum limit of PM emission is 50 mg/Nm³. In the existing Sponge Iron Plant 3 fields ESP's are upgraded/modified by spending Rs 400 Lacs. Addition of one more field is proposed if required.</p> <p>The online results for the month of January shows that PM emission is in the range of 21.42 to 47.75 mg/m³.</p> <p>Power Plant:- As per the renewed Consent to operate the maximum limit of PM emission is 50 mg/Nm³. In the existing Power Plant 4 fields ESP will be modified to bring down PM emission upto 30 mg/Nm³.</p> <p>Coal Washery : Bag filters (188 No. of Tafflon Bags) is installed.</p> <p>Proposed Steel Melting Shop: Fume Extraction System followed by 2 Bag filters one each for 3 x 30 T IF (180 Teflon bags each) are proposed with dust collector and followed by stack of 42 meter.</p>
ii.	CEMS may be installed in all large/medium red category industries (air polluting) and connected to SPCB and CPCB servers.	<p>All existing stacks are equipped with continuous emission monitoring system (CEMS) along with remote calibration facility for gaseous parameters and in expansion also CEMS will be installed & will be connected to MPCB and CPCB servers. All existing CEMS are connected to MPCB and CPCB servers.</p> <p>Existing:-</p> <p>Sponge Iron Plant:</p> <p>Kiln 1 and Kiln 2: Common Stack and Separate ESP with each kiln. Kiln 3 and Kiln 4: Common Stack and Separate ESP with each kiln.</p> <p>Kiln 5: Stack and ESP with kiln.</p> <p>Power Plant: Stack and ESP</p> <p>Proposed:-</p> <p>SMS: 2 Stacks connected with fume extraction system followed by bag filter to 6 x 30T</p>

Sl. No.	Stipulated Conditions / Recommendations	Measures to comply CEPI Recommendation as reported by the PP
		After expansion there will be a total 6 Nos. Opacity meters as OCEMS (4 Nos. existing + 2 No. proposed).
iii.	Effective fugitive emission control measures should be imposed in the process, transportation, packing etc.	<ul style="list-style-type: none"> ● All Internal roads will be concretized to prevent the fugitive dust emission due to vehicular movement. (80% work completed & 20% work will be completed within 1 month) ● Speed limit in plant premises is in control. ● All transportation vehicles carry/ will carry a valid PUC (Pollution under Control) Certificate. ● Flow of vehicles is being/will be maintained. ● Proper traffic management is being/will be undertaken. ● Regular servicing & maintenance of vehicles is being/will be carried out. ● Proper dust masks are being/will be provided to workers coming in direct contact of fugitive emissions ● Adequate greenbelt has already been developed in the plant area which will be further strengthen in the proposed expansion project. Greenbelt acts as a surface for settling of dust particles and thus reduces the concentration of particulate matter in air. ● Water Sprinkling is being /will be done to reduce fugitive emission in the plant and maintain the ambient air quality within CPCB standard. ● Existing No. of water sprinklers:100 Nos. ● Proposed No. of water sprinklers:100 Nos. ● Total No. of Water Sprinklers:200 Nos. ● Adequate spares of critical components of dust and gas collection systems will be kept to ensure trouble - free operations and continuous compliance to emission norms. ● Ambient air quality is being/will be regularly monitored, so as to keep a check on the emissions of different pollutants. ● Fugitive emission sources are being identified and monitored on a regular basis. <p>It is proposed to acquire one no. mechanical sweeping machine for cleaning of the roads.</p>
iv.	Transportation of materials by rail/ conveyor belt, wherever feasible.	<p>The raw material required for the existing sponge iron plant, coal washery is being transported by tarpaulin covered trucks by road.</p> <p>For proposed unit 1,44,000 TPA scrap will be transported by tarpaulin covered trucks by road. Sponge iron used in SMS Plant will be transported by closed conveyor as 3,24,000 TPA from in-house i.e. Ghugus plant and remaining 72000 TPA will be sourced from the proposed plant at Konsari, District Gadchiroli by tarpaulin covered trucks.</p> <p>Billets in Molten stage will be transferred to Rolling Mill via ladder & caster as long products/ TMT Bars will be produced by</p>

Sl. No.	Stipulated Conditions / Recommendations	Measures to comply CEPI Recommendation as reported by the PP
		Hot Rolled Technology.
v.	Encourage use of cleaner fuels (pet coke/ furnace oil/ LSHS may be avoided).	Electricity will be used as fuel in Induction Furnace. For manufacturing of TMT Bars Hot Rolled Technology will be used. No fuel will be used.
vi.	Best Available Technology may be used. For example; usage of EAF/SAF/ IF in place of Cupola furnace. Usage of Supercritical technology in place of sub-critical technology.	Induction Furnace will be used for Billet production and Hot Rolled Technology will be used for production of Long Products / TMT Bars. Both these technologies are proven and best available.
vii.	Increase of green belt cover by 40% of the total land area beyond the permissible requirement of 33%, Wherever feasible.	Total area of the project is 93.52 ha. Out of the total area, green belt development is done in 47.7 ha (51%) of plant area of A-1 & A-2. The plant has been in operation since 1994-95 and 2,34,650 nos. of trees are planted and 1,05,000 nos. survived till date. Further gap filling will be done. About additional 15000 nos. of trees will be planted.
viii.	Stipulation of greenbelt outside the project premises such as avenue plantation, plantation in vacant areas, social forestry, etc.	LMEL has planted and maintained about 1,00,000 trees in residential colony at 2 kms away from the plant. In addition to this it is committed to do plantations at locations suggested by Nagar Parishad Ghugus, Nearest Gram Panchayat Usgaon & Mhatardevi.
ix.	Assessment of carrying capacity of transportation load on roads inside the industrial premises. If the roads are required to be widened, shall be prescribed as a condition.	Adequate Roads of proper size are present inside the plant premises further strengthening and widening of roads is in progress. Roads with their sizes are given in Plant layout.

Water Environment

i.	Reuse/recycle of treated wastewater, wherever feasible.	100% reuse of waste water after proper treatment is being practiced. Domestic wastewater from the existing plant is being treated in STP and Domestic wastewater from the proposed plant will be treated in proposed STP for reuse in Plantation/Road cleaning.
ii.	Continuous monitoring of effluent quality/quantity in large and medium Red Category Industries (water polluting).	The plant is maintaining zero liquid discharge. The wastewater from sponge iron plant & power plant is being treated in ETP and reused for dust suppression and wastewater from coal washery is being reused in process. The domestic wastewater is being treated in STP and reused for plantation. In the proposed plant 312 KLD of wastewater generated will be treated in settling tank and reused in the process. Continuous monitoring of effluent quality/quantity is not applicable as ours is not water polluting industry.
iii.	A detailed water harvesting plan	Rain water harvesting has been already developed in the existing

Sl. No.	Stipulated Conditions / Recommendations	Measures to comply CEPI Recommendation as reported by the PP
	may be submitted by the project proponent	plant to harvest the rain water to recharge the ground water level. The details of the proposed rain water harvesting are given in Chapter 10 of the EIA Report.
iv.	Zero liquid discharge wherever techno - economically feasible.	The plant is maintaining zero liquid discharge. The wastewater from sponge iron plant & power plant is being treated in ETP and reused for dust suppression and wastewater from coal washery is being reused in process. The domestic wastewater is being treated in STP and reused for plantation. In the proposed plant 312 KLD of wastewater generated will be treated in settling tank and reused in the process.
v.	In case, domestic waste water generation is more than 10 KLD, the industry may install STP.	Domestic waste water from the existing plant is being treated in STP and 25 KLD STP is proposed for domestic waste water treatment & reused for expansion phase.

Land Environment

i.	Increase of green belt cover by 40% of the total land area beyond the permissible requirement of 33%, wherever feasible for new projects.	Total area of the project is 93.52 ha. Out of the total area, green belt development is done in 47.7 ha (51%) of plant area of A-1 & A-2. The plant has been in operation since 1994-95 and 2,34,650 nos. of trees are planted and 1,05,000 nos. survived till date. Further gap filling will be done. About additional 15000 nos. of trees will be planted.																		
ii.	Stipulation of greenbelt outside the project premises such as avenue plantation, plantation in vacant areas, social forestry, etc.	LMEL has planted and maintained about 1,00,000 trees in residential colony at 2 kms away from the plant. In addition to this LMEL is committed to do plantations at locations suggested by Nagar Parishad Ghugus, Nearest Gram Panchayat Usgaon & Mhatardevi.																		
iii.	Dumping of waste (fly ash, slag, red mud, etc.) may be permitted only at designated locations approved by SPCBs / PCCs.	There is no dumping of any solid waste outside plant boundary is being carried out for existing plant. Existing Solid Waste Generation <table border="1"> <thead> <tr> <th>Solid Waste</th> <th>Quantity TPA</th> <th>Mitigation Measures</th> </tr> </thead> <tbody> <tr> <td>Char</td> <td>48000</td> <td>Sale to local entrepreneurs for making coal briquettes & use in CPP if required</td> </tr> <tr> <td>Bottom Ash</td> <td>9855</td> <td>Brick Manufacturing and Land Filling</td> </tr> <tr> <td>Accretion</td> <td>3650</td> <td>Land Filling</td> </tr> <tr> <td>Fly ash</td> <td>39785</td> <td>Low land filling and brick manufacturing</td> </tr> <tr> <td>Dust from ESP</td> <td>7300</td> <td>Brick manufacturing</td> </tr> </tbody> </table>	Solid Waste	Quantity TPA	Mitigation Measures	Char	48000	Sale to local entrepreneurs for making coal briquettes & use in CPP if required	Bottom Ash	9855	Brick Manufacturing and Land Filling	Accretion	3650	Land Filling	Fly ash	39785	Low land filling and brick manufacturing	Dust from ESP	7300	Brick manufacturing
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Sl. No.	Stipulated Conditions / Recommendations	Measures to comply CEPI Recommendation as reported by the PP		
		Washery reject	91250	Sold to third party
		Proposed Solid Waste Generation		
		Solid Waste	Quantity	Mitigation Measures
		Slag	25,000 TPA	A slag crusher will be installed to crush slag. Iron particles will be separated by using magnetic separator and will be reused in Induction Furnace. Initially Slag will be used for levelling of plot and hardening of working area & construction of plant internal roads. In future possibilities will be explore to use slag for construction of internal village roads.
		Tail cutting	15,000 TPA	100% reuse in induction furnace
iv.	More stringent norms for management of hazardous waste. The waste generated should be preferably utilized in co-processing.	Storage and handling of hazardous waste is being done as per provisions of Hazardous Waste Rules, 2016. 3.65 KLA Used or Spent oil is sold to authorized party for recycle.		
Other Condition (Additional)				
i.	Monitoring of compliance of EC conditions may be submitted with a third party audit every year.	Six Monthly Compliances are being sent to Regional office MOEFCC, Nagpur regularly Certified compliance report from IRO, Nagpur is enclosed with Final EIA Report. Yearly Audit of Compliance of EC Conditions by third party will be initiated by coming financial year i.e. April 2023.		
ii.	The % of the CER may be at least 1.5 times the slabs given in the OM dated 01.05.2018 for SPA and 2 times for CPA in case of Environmental Clearance.	As per OM dated 01.05.2018 the CER amount comes to Rs.3.3 Cr. As per this mechanism this amount will be Rs.6.6 Cr. Whereas LMEL is committed to spend 2% of Capital Investment i.e. Rs 13.1 cr.		

24.9.20 M/s. Lloyds Metals & Energy Limited had initially made an online application vide proposal no. IA/MH/IND1/404101/2022 dated 19th December 2022 and the proposal was considered during 21st meeting of the EAC for Industry-I sector held on 16-17th January, 2023 wherein the committee recommended to defer the proposal to address the technical shortcomings. The deliberations and recommendations of the Committee during 21st EAC meeting area as follows:

Deliberations by the Committee (EAC during 16-17th January, 2023)

The Committee noted the following:

1. The proposed project falls in the Critically Polluted Area of Chandrapur as notified by Central Pollution Control Board (CPCB). The EAC deliberated on the compliance of the conditions as per Ministry's guideline dated 24th October 2019 and found it unsatisfactory. The EAC is of the opinion that robust and quantified mitigation plan shall be prepared.
2. The PP/Consultant presented the drone video of the project site and the EAC is of the opinion that housekeeping of the plant area needs to be improved and detailed action plan needs to be submitted.
3. Total land leased by MIDC to M/s Lloyds Metals & Energy Limited (LMEL) is 93.52 ha in which plot no. A-1 is 4.00 ha & A-2 is 89.52 ha. No Additional land is required. The EAC is of the view that details of land involved in the project [Total area of the land; Type of land; Details of possession of land in the name of PP; Copy of proof of land with area of the land; Conversion of land for industrial purpose from the State Government] needs to be submitted.
4. The EAC noted that the water requirement has been increased from 260 KLD to 1627 KLD, power requirement reduced from 35 MW to 30 MW and employment generation from 750 to 600 in comparison to the granted ToR dated 10.02.2020 for the instant proposal. However, PP has not pointed out the same during the appraisal of the project. The EAC is of the view that such facts shall be specifically stated in the EIA/EMP Report and also presented during the appraisal of the project. The EAC also advised PP/Consultant to present such changes in a tabular form for each parameter with the quantity defined in ToR, PH and EIA/EMP Report.
5. The EAC deliberated on water balance diagram and is of the view that industry shall revisit on water quantity demarcated to greenbelt development, evaporation losses and other operations, and submit the revised water balance.
6. The EAC noted that existing green belt has been developed in 47.7 ha. area which is about 51% of the total project area of 93.52 ha., 2,34,650 nos. of trees are planted and 1,05,000 nos. survived till date which less than CPCB norms of 2500 saplings/ha. The EAC opined that gap filling shall be undertaken and maximum plantation shall be completed within 1st year. Also, Greening and Paving shall be implemented in the plant area and road side to arrest soil erosion and dust pollution from exposed soil surface. PP shall submit a revised greenbelt development plan alongwith an undertaking in this regard.
7. Two drains are flowing within the project site. The EAC deliberated on the intake and outflow of drain water and is of the opinion that a periodic monitoring shall be undertaken in this regard. 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.

8. Anuradha Lake (620 m, W), Wardha River (2.5 Km, SW), Nirguda Nala (3.0 Km, SSW), Penganga River (5.0 Km, SE) and Sarai Nala (6.5 Km, NE) are flowing within 10 Km. radius of the plant site. The EAC is of the opinion that 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.
9. The EAC deliberated on the raw material requirement and observed that molten M.S. Billets for hot charging will be used for producing Hot Rolled long products/ TMT Bars. The EAC is of the view that 100% of billets shall be rolled directly in hot stage. Natural gas shall be used as a fuel. PP shall submit an undertaking in this regard.
10. The nearest habitation to plant is Ghugus village located at 0.5 km away from the project site boundary in North direction. Project Proponent shall submit environmental safeguard measures that will be undertaken to minimise the impact on the habitation of the locals.
11. 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 details of the villages to be adopted.
12. The Committee deliberated on the public hearing issues along with action plan submitted by the proponent to address the issues raised during the public hearing and opined that action plan submitted to address the PH issues and socio-economic development of the nearby villages shall be revised and submitted as per Ministry's OM dated 30.09.2020.
13. The EAC is of the opinion that PP shall also submit the status of implementation of the action plan in order to address the issues raised during the previous PH.
14. The Committee deliberated on the baseline data and observed that submitted atmospheric inversion data needs to be reverified. Also the maximum value of total hardness has been found to be beyond the prescribed standard. PP shall submit justification along with mitigation measures.
15. The Committee deliberated on the incremental GLC due to the proposed project and observed that incremental GLC for CO has not been submitted in the brief. In this regard, the EAC is of the opinion complete information in this regard shall be submitted.
16. The EAC noted that there is Lokayukta Maharashtra State Complaint No.: LA/COM/3729/2021 (T-6) dated 10.11.2021 filed regarding the action taken by the Hon'ble NGT Bench Pune in 2014 after passing the final order for banning the sponge iron factories. MPCB vide letter O.No. MPC/ROC/579/2022 dated 11.11.2022 has stated that *"the office of M.P.C.B. Chandrapur visited the industry on 01/08/2022. As per the error during the inspection, raised a show cause notice was issued to the industry dated 04/08/2022. Also Proposed directions were also issued vide letter dated 13/09/2022 by the board. On the said directive, the industry submitted its compliance report to this office vide letter dated 14/09/2022. This office visited to the industry on dtd. 10/11/2022 to verify the compliance of the industry."* The EAC is of the opinion that PP/Consultant shall submit the summary of the case with the latest updates and requisite documents. The EAC also advised PP/Consultant to give the details of details of other case, if any against the instant project.

17. Representations have been received through email dated 13.01.2023 and 16.01.2023 requesting for stay in the grant of Environment Clearance on multiple issues raised pertaining to the said project. The EAC is of the opinion that the project proponent shall submit the pointwise clarification on the issues raised in the representation dated 13.01.2023 and 16.01.2023. The EAC advised the Ministry to forward the representation to project proponent for their clarification. In this context, representation has been forwarded to PP.
18. The EAC noted that the Date of Advertisement is wrongly given as 19th June, 2021 in the brief, however the actual date is 19th April, 2021. The EAC warned the PP/Consultant to be careful while submitting the information.
19. In view of above facts, EAC advised PP to revise the EIA/EMP report covering all the desired information for further consideration.
20. The PP/Consultant agreed to the suggestions of EAC and requested EAC to allow reappear after the revision of the application incorporating the desired information.

Recommendations of the Committee (EAC during 16-17th January, 2023)

In view of the foregoing and after detailed deliberations, the committee recommended to **defer the proposal** to address the shortcomings enumerated at para no. 24.9.19 above. The proposal may be considered after submission of the requisite information.

24.9.21 M/s. Lloyds Metals & Energy Limited has submitted a fresh online application vide proposal no. IA/MH/IND1/417900/2023 dated 21st February 2023 addressing the technical issues raised during 21st meeting of the EAC for Industry-I sector held on 16-17th January, 2023 which is as follows:

Sl. No.	ADS raised by EAC	Submission of PP
1.	The proposed project falls in the Critically Polluted Area of Chandrapur as notified by Central Pollution Control Board (CPCB). The EAC deliberated on the compliance of the conditions as per Ministry's guideline dated 24 th October 2019 and found it unsatisfactory. The EAC is of the opinion that robust and quantified mitigation plan shall be prepared.	PP has submitted the revised compliance of the conditions as per Ministry's guideline dated 24 th October 2019. The same is updated at para 24.9.19 above.
2.	The PP/Consultant presented the drone video of the project site and the EAC is of the opinion that housekeeping of the plant area needs	More improvement in housekeeping following actions are implemented and some are proposed. <ul style="list-style-type: none"> • A mechanical sweeping machine will be procured by April 2023 at the cost of Rs. 45 Lacs

Sl. No.	ADS raised by EAC	Submission of PP																
	to be improved and detailed action plan needs to be submitted.	<ul style="list-style-type: none"> Number of housekeeping staff/labours will be increased from 15 nos. to 25 nos. Greening and Paving shall be implemented in plant area and internal road side. (After completion of concretization of internal roads) All internal roads will be of concrete. Work of about 80 % of CC Roads of internal roads is completed & work for balance 20% is in progress. It will be completed by March 2023. 																
3.	Total land leased by MIDC to M/s Lloyds Metals & Energy Limited (LMEL) is 93.52 ha in which plot no. A-1 is 4.00 ha & A-2 is 89.52 ha. No Additional land is required. The EAC is of the view that details of land involved in the project [Total area of the land; Type of land; Details of possession of land in the name of PP; Copy of proof of land with area of the land; Conversion of land for industrial purpose from the State Government] needs to be submitted.	<ul style="list-style-type: none"> The land use of project site is industrial land and is acquired by project proponent. The total land leased by MIDC to M/s Lloyds Metals & Energy Limited (LMEL) is 93.52 hectare in which plot no. A-1 is 4.00 Ha & A- 2 is 89.52 Ha MIDC. Out of the total area, green belt development is done in 47.7 ha (51%) of plant area of A-1 & A-2. 5.0 ha land for project under consideration is part of 93.52 ha land. 																
4.	The EAC noted that the water requirement has been increased from 260 KLD to 1627 KLD, power requirement reduced from 35 MW to 30 MW and employment generation from 750 to 600 in comparison to the granted ToR dated 10.02.2020 for the instant proposal. However, PP has not pointed out the same during the appraisal of the project. The EAC is of the view that such facts shall be specifically stated in the EIA/EMP Report and also presented during the appraisal of the project. The EAC also advised PP/Consultant to present such changes in a tabular form for each parameter with the quantity defined in ToR, PH and EIA/EMP Report.	<p>ToR for EIA study for the proposed project of Installation of Induction Furnace, Rolling Mill & Submerged Arc Furnace for production of Ingots, Billets 5,00,000 TPA, TMT & Long product 5,00,000 TPA and Ferro alloys 25,000 TPA respectively at Plot No. A-1 and A-2, MIDC Area, Ghugus, Chandrapur, Maharashtra ToRs vide letter No. J-11011/243/2019-IA.II(I) dated 10.02.2020. But now company has decided to drop the installation of the 2 X 9 MVA Submerged Arc Furnace for production of 25,000 TPA Ferro alloys.</p> <p>Revised water quantity, Power Requirement & Employment generation are as follows:-</p> <table border="1"> <thead> <tr> <th>Requirement as per</th> <th>Water in KLD</th> <th>Power in MW</th> <th>Employment generation</th> </tr> </thead> <tbody> <tr> <td>TOR</td> <td>260</td> <td>35</td> <td>750</td> </tr> <tr> <td>PH Document</td> <td>1627</td> <td>30</td> <td>600</td> </tr> <tr> <td>EIA/EMP report</td> <td>1627</td> <td>30</td> <td>600</td> </tr> </tbody> </table>	Requirement as per	Water in KLD	Power in MW	Employment generation	TOR	260	35	750	PH Document	1627	30	600	EIA/EMP report	1627	30	600
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Sl. No.	ADS raised by EAC	Submission of PP																											
		Revised EIA/EMP Report	1627	30	600																								
		Reason for deviation	After detailed engineering the water quantity is revised.	After detailed engineering and dropping of SAF unit the power requirement is revised	Due to dropping of SAF unit the employment generation is reduced by 150 Nos.																								
5.	The EAC deliberated on water balance diagram and is of the view that industry shall revisit on water quantity demarcated to greenbelt development, evaporation losses and other operations, and submit the revised water balance.	<p>Water requirement for the proposed project will be about 1627 KLD which will be sourced from Wardha River.</p> <p>Proposed Water Requirement during Operation Phase (m³/day)</p> <table border="1"> <thead> <tr> <th>Particulars</th> <th>Water Requirement</th> <th>Waste Water Generation</th> <th>Method of Disposal</th> </tr> </thead> <tbody> <tr> <td>SMS(Make up Water for SMS)</td> <td>777</td> <td>Nil</td> <td>-</td> </tr> <tr> <td>Rolling Mill (Make up Water for Rolling Mill for cooling of machines)</td> <td>720</td> <td>288</td> <td>The wastewater will be taken to a tank, where accumulated oil, if any, will be skimmed. After skimming and holding it for 1-2 hours, the water will be recycled for cooling in Rolling Mill. There will be no discharge outside the plant premises.</td> </tr> <tr> <td>Domestic</td> <td>30</td> <td>24</td> <td>For the treatment of sewage STP is proposed. And treated water will be used for gardening/Sprinkling.</td> </tr> <tr> <td>Plantation (@0.1 m³/sq.m)</td> <td>100</td> <td>Nil</td> <td>-</td> </tr> <tr> <td></td> <td>1627</td> <td>312</td> <td>-</td> </tr> </tbody> </table>				Particulars	Water Requirement	Waste Water Generation	Method of Disposal	SMS(Make up Water for SMS)	777	Nil	-	Rolling Mill (Make up Water for Rolling Mill for cooling of machines)	720	288	The wastewater will be taken to a tank, where accumulated oil, if any, will be skimmed. After skimming and holding it for 1-2 hours, the water will be recycled for cooling in Rolling Mill. There will be no discharge outside the plant premises.	Domestic	30	24	For the treatment of sewage STP is proposed. And treated water will be used for gardening/Sprinkling.	Plantation (@0.1 m ³ /sq.m)	100	Nil	-		1627	312	-
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6.	The EAC noted that existing green belt has been developed in 47.7 ha.	<ul style="list-style-type: none"> Total area of the project is 93.52 ha. Out of this, green belt is in 47.7 ha (51%) of plant area A-1 & A-2. 																											

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	<p>area which is about 51% of the total project area of 93.52 ha., 2,34,650 nos. of trees are planted and 1,05,000 nos. survived till date which less than CPCB norms of 2500 saplings/ha. The EAC opined that gap filling shall be undertaken and maximum plantation shall be completed within 1st year. Also, Greening and Paving shall be implemented in the plant area and road side to arrest soil erosion and dust pollution from exposed soil surface. PP shall submit a revised greenbelt development plan alongwith an undertaking in this regard.</p>	<ul style="list-style-type: none"> • The plant is in operation since 1994-95 and 2,34,650 nos. of trees are planted and 1,05,000 nos. survived till date. • Further gap filling will be done. About 15000 nos. of trees will be planted. The 15000 nos. of trees proposed for the gap filling will be planted in six months.
7.	<p>Two drains are flowing within the project site. The EAC deliberated on the intake and outflow of drain water and is of the opinion that a periodic monitoring shall be undertaken in this regard. 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.</p>	<p>There are two natural drainages passing through project site. A detailed drain conservation plan is prepared and submitted in Revised EIA/EMP report.</p> <p>There will be no discharge of untreated or treated industrial and domestic effluent outside plant premises.</p> <p>A well storm water drainage network is already constructed in plant premises.</p> <p><u>Drainage Conservation Plan</u></p> <ul style="list-style-type: none"> • There are two seasonal drains passing through the project site which are concreted. The drains collect surface runoff from the region.
8.	<p>Anuradha Lake (620 m, W), Wardha River (2.5 Km, SW), Nirguda Nala (3.0 Km, SSW), Penganga River (5.0 Km, SE) and Sarai Nala (6.5 Km, NE) are flowing within 10 Km. radius of the plant site. The EAC is of the opinion that 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.</p>	<ul style="list-style-type: none"> • A thick plantation has been developed on both sides of the drain. The drain is not diverted, closed, or disturbed and nor in the future will be done. • The first drain passes from west to east and the second drain passes from north to east, however, both drains converged at approximately 0.6 km away from the proposed site and eventually the drains meet at the Wardha River (Figure 1). • The size of the drain is unsymmetrical and the average bottom width is about 2.50 m and the depth varies from 1.50m to 2.50m and the bed gradient of the seasonal drain (SD1) and seasonal drain (SD2) is approximately 1 in 250 and 1 in 300 respectively upto the confluence and overall, 1 in 400 till the tributary of the Wardha river. • One of the natural drains is passing through the area where

Sl. No.	ADS raised by EAC	Submission of PP
		<p>a railway siding is proposed.</p> <ul style="list-style-type: none"> The total length of drains passing within the boundary of the proposed project to the intersection is 2000 m. The estimated cost for reconstructing the drain in proper shape and pitching in the inner side slope and bed will be Rs 3.00 Lakhs per year.
9.	<p>The EAC deliberated on the raw material requirement and observed that molten M.S. Billets for hot charging will be used for producing Hot Rolled long products/ TMT Bars. The EAC is of the view that 100% of billets shall be rolled directly in hot stage. Natural gas shall be used as a fuel. PP shall submit an undertaking in this regard.</p>	<p>It is confirmed that 100% of molten billets shall be rolled directly in hot stage. There will be no installation of Re-heating furnace hence there will be no fuel including Natural Gas in the process.</p>
10.	<p>The nearest habitation to plant is Ghugus village located at 0.5 km away from the project site boundary in North direction. Project Proponent shall submit environmental safeguard measures that will be undertaken to minimise the impact on the habitation of the locals.</p>	<ul style="list-style-type: none"> It is to be noted that when plant was established in 1994-95 the nearest habitation is at more than one km from plant site. During over the last 30 years people start constructing their houses etc. and came near the plant. A thick plantations is developed and now the plants are of 20-30 years old all round the plant. In addition to this the approach road from SH to plant Main Gate is under concentration and additional plantation is also proposed on both side of approach road. All existing Air Pollution Control Equipments are upgraded and some has been replaced with more efficient Air Pollution Control Equipments to minimize the concentration levels. In the proposed IF& RM also are efficient Air Pollutions Control Equipments are proposed to maintain emission level within 30 mg/Nm³. All existing stacks are equipped with OCEMS and attached to MPCB & CPCB servers and proposed stacks will also be equipped with OCEMS with attachment to MPCB & CPCB Servers. Display Board is also installed at Main Gate to display the concentration of various pollutants.
11.	<p>PP shall undertake village adoption and formulate Village Adoption program consisting of need-based community development activities,</p>	<p>It is proposed to adopt two villages i.e. (1) Usgaon & (2) Mathardevi. A budget of Rs 4.6 Cr is kept for developing various social infrastructure in these two villages. The action plan is updated at para 24.9.14 above.</p>

Sl. No.	ADS raised by EAC	Submission of PP
	shall be prepared to develop them into model villages. PP shall submit details of the villages to be adopted.	
12.	The Committee deliberated on the public hearing issues along with action plan submitted by the proponent to address the issues raised during the public hearing and opined that action plan submitted to address the PH issues and socio-economic development of the nearby villages shall be revised and submitted as per Ministry's OM dated 30.09.2020.	As per the recommendations of the Honorable committee the fund for PH issues and socio-economic development of the nearby villages has been revised to 13 Crores. The action plan is updated at para 24.9.14 above.
13.	The EAC is of the opinion that PP shall also submit the status of implementation of the action plan in order to address the issues raised during the previous PH.	It is to be noted that this is the first Public Hearing conducted at LMEL for any Project. Previously Public Hearing was not applicable being in Notified Industrial area.
14.	The Committee deliberated on the baseline data and observed that submitted atmospheric inversion data needs to be reverified. Also the maximum value of total hardness has been found to be beyond the prescribed standard. PP shall submit justification along with mitigation measures.	Site specific mixing depth (mixing height or convective stable boundary layer and inversion height or nocturnal stable boundary layer) is also an important input parameter for computation and assessment of realistic dispersion of pollutants. There are different methods for generating these parameters, but in the present case data published by CPCB in Spatial distribution of hourly mixing depth over Indian region have been used. Total hardness is more than the desirable limit. Hardness is a natural feature of the water supply in this area. It's caused by the presence of minerals (calcium and magnesium) picked up by source water on its journey through the ground. (International Journal of Recent Trends in Science and Technology, ISSN 2277-2812 E-ISSN 2249-8109, Volume 4, Issue 3, 2012 pp 120-124).
15.	The Committee deliberated on the incremental GLC due to the proposed project and observed that incremental GLC for CO has not been submitted in the brief. In this regard, the EAC is of the opinion complete information in this regard shall be submitted.	There will be emission of CO in proposed plant only due to Vehicular emissions. Maximum predicted incremental rise in concentration due to vehicular Emissions from the proposed project = 0.03 ($\mu\text{g}/\text{m}^3$)
16.	The EAC noted that there is	<ul style="list-style-type: none"> • Mr. Vinesh Madanya Kalwal complained to Honorable

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	<p>Lokayukta Maharashtra State Complaint No.: LA/COM/3729/2021 (T-6) dated 10.11.2021 filed regarding the action taken by the Hon'ble NGT Bench Pune in 2014 after passing the final order for banning the sponge iron factories. MPCB vide letter O.No. MPC/ROC/579/2022 dated 11.11.2022 has stated that <i>“the office of M.P.C.B. Chandrapur visited the industry on 01/08/2022. As per the error during the inspection, raised a show cause notice was issued to the industry dated 04/08/2022. Also Proposed directions were also issued vide letter dated 13/09/2022 by the board. On the said directive, the industry submitted its compliance report to this office vide letter dated 14/09/2022. This office visited to the industry on dtd. 10/11/2022 to verify the compliance of the industry.”</i> The EAC is of the opinion that PP/Consultant shall submit the summary of the case with the latest updates and requisite documents. The EAC also advised PP/Consultant to give the details of details of other case, if any against the instant project.</p>	<p>Lokayukta Maharashtra. During hearing Honorable Lokayukta observed that “Despite action been taken by this office on his complaint the complainant was smiling sarcastically and he is saying that nothing is done it is obvious that the complainant is a habituate of making such complaints.</p> <ul style="list-style-type: none"> • He is therefore removed from the complaint and the enquiry will be conducted by me suo moto”. • The Final hearing was held on 13th January 2023, and during the hearing representative of state pollution Control board and the Lloyds Metals and Energy limited were present. Honorable Lokayukta in the court disposed off the case without any penalty. <p>Details of the Case:</p> <table border="1"> <thead> <tr> <th>Date</th> <th>Particulars</th> <th>Remarks</th> </tr> </thead> <tbody> <tr> <td>13.01.2022</td> <td>Letter from Honorable Lokayukta Maharashtra to State Pollution Control Board, keeping Lloyds Metals and Energy Limited in CC.</td> <td>The Lokayukta Maharashtra direct State Pollution Control board to inform complainant and others about the online hearing on 7th April 2022.</td> </tr> <tr> <td>13.04.2022</td> <td>Letter from Honorable Lokayukta Maharashtra to State Pollution Control Board for hearing.</td> <td>The Lokayukta Maharashtra direct State Pollution Control board to inform complainant and others about the online hearing on 11th May 2022.</td> </tr> <tr> <td>26.05.2022</td> <td>Letter from Honorable Lokayukta Maharashtra Lloyds Metals and Energy Limited for hearing on 8th August 2022.</td> <td>-</td> </tr> </tbody> </table>	Date	Particulars	Remarks	13.01.2022	Letter from Honorable Lokayukta Maharashtra to State Pollution Control Board, keeping Lloyds Metals and Energy Limited in CC.	The Lokayukta Maharashtra direct State Pollution Control board to inform complainant and others about the online hearing on 7th April 2022.	13.04.2022	Letter from Honorable Lokayukta Maharashtra to State Pollution Control Board for hearing.	The Lokayukta Maharashtra direct State Pollution Control board to inform complainant and others about the online hearing on 11 th May 2022.	26.05.2022	Letter from Honorable Lokayukta Maharashtra Lloyds Metals and Energy Limited for hearing on 8th August 2022.	-
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17.	Representations have been received through email dated 13.01.2023 and 16.01.2023 requesting for stay in the	The EAC/Ministry has received representation dated 13.01.2023 & 16.01.2023.												

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	grant of Environment Clearance on multiple issues raised pertaining to the said project. The EAC is of the opinion that the project proponent shall submit the pointwise clarification on the issues raised in the representation dated 13.01.2023 and 16.01.2023. The EAC advised the Ministry to forward the representation to project proponent for their clarification. In this context, representation has been forwarded to PP.	Point wise clarification and compliances is submitted by the PP, as below.
Sr. No.	Points	Compliance
1.	<p>The objector is a society registered under the Societies Registration Act, having Registration No.MH-298/2015. The Aim & Object of the Objector Society is to protect environment throughout the length and breadth of Maharashtra and more particularly in Chandrapur District, which district is one of the most polluted district of India. As your good-selves are well aware, Chandrapur is at Sr.No.15 in the National Index of most polluted districts and at Sr.No.5 of Maharashtra State Index of most polluted District. Additionally, there is mushroom growth of industries in Ghugus area and therefore, permission to install the furnace and rolling mill in Ghugus would cause lot of pollution.</p>	<p>As per the OM No. J-11013/5/2010-IA.II(I) dated 15th March 2010 published by Ministry of Environment, Forest and Climate Change, New Delhi (copy enclosed) only 4 pockets of Chandrapur District (Sr. No. 4 in the list) i.e. 1. MIDC Chandrapur, 2. Tadali, 3. Ghugus, 4. Ballarpur are declared as Critically Polluted Industrial Areas and Clusters with CEPI score of 83.88. Entire Chandrapur District is never declared as most polluted district.</p> <p>As per order passed by Honorable National Green Tribunal, Principal Bench, New Delhi on 10th July 2019 against Original Application no. 1038/2018, Chandrapur is Sr. no. 27 in the list with improved CEPI score 76.41. copy of order is enclosed.</p> <p>As per secondary data and our information there are no major industries proposed in Ghugus area. Only expansion in Lloyds Metals & Energy Ltd is proposed.</p> <p>The proposed expansion will be carried out in existing premises to produce long product. The major raw material for proposed unit will be available from existing operational sponge iron unit & shall be transported through closed conveyors. After melting sponge iron & scrap, liquid steel is transferred to rolling mill through ladle and caster to produce long products. No reheating or additional fuel will be used. By transporting DRI through conveyor belt, shall reduce the emission caused due to movement of trucks. GLC for PM is 1.03 µg/m³ after expansion when superimposed on the baseline concentrations are within norms hence, stating there shall be lots of pollution is not based on facts.</p>
2.	<p>The objector is intensely opposing the proposed project since it would cause huge air pollution. In the industrial areas respectively and rural areas of Ghugus and its surroundings. The concentrations of PM₁₀, PM_{2.5}, SO₂, NO_x are not at all within the National Ambient Air Quality Standard. The PM₁₀ of the surrounding area where the</p>	<p>Previous months reports are attached which shows that AAQ and stack monitoring results of Lloyds Metals & Energy Ltd are within limit.</p> <p>1 AAQ under NAMP Station is installed at Office of Municipal Council Ghugus, Tal. Dist. Chandrapur. As per the report the air quality is moderate in January 2023 except on 18.01.2023. copy of report is enclosed. It is to be noted that the location of this AAQ under NAMP is at 0.8 km from nearest boundary of LMEL and in</p>

Sl. No.	ADS raised by EAC	Submission of PP
	<p>project is proposed to be started is more than 100 UG/M³. Likewise, PM_{2.5} is more than 60 UG/M³, SO₂ is more than 80 UG/M³ and NO_x is also more than 80 UG/M³. This clearly demonstrates that the concentrations are not within the National Ambient Air Quality standard. The Air quality allegedly monitored by the project proponent at 8 locations are not only unreal but false. No details and specifications of such locations have been mentioned by the project proponent in the executive summary. Thus, the locations are farce and imaginary. The impacts on air quality would be huge. Even the emissions released from the stack during the operation will cause severe air pollution and would hugely impact the air quality. The fugitive dust emissions from raw materials handling areas would be extremely high.</p>	<p>middle of densely crowded area of Ghugus town with huge local transportation and other activities. Distance of nearest boundary of WCL railway siding is 0.4 km from AAQ under NAMP, distance of nearest truck parking yard of ACC cement is 0.44 km from AAQ under NAMP, distance from major bus stand and taxi stand of the town is at 0.4 km from AAQ under NAMP and distance from check post of WCL truck loading is at 0.75 km from AAQ under NAMP. From above facts it is evident that there are number of sources contributing the air quality index of Ghugus town. Locations of above mentioned sources marked in google map is enclosed</p> <p>The details and selection criteria of AAQ monitoring station are mentioned in EIA report chapter no. 3 page no. 75. Copy of same is enclosed.</p> <p>All details as desired are mentioned in EIA reports which were also circulated as per norms. The details are also mentioned in the Executive Summary in English & Marathi.</p> <p>There are 2 major raw materials to be used in proposed project. One raw material i.e. Sponge Iron will be transported by closed conveyor belt from in house Sponge Iron Plant. Second raw material will be M.S. Scrap.</p> <p>It is to be noted that M.S. Scrap is not in powder form and does not add any fugitive emission from raw material handling area.</p>
3.	<p>In view of the aforesaid factual scenario, the objector submits that the project proponent is not taking all measures to effectively control the air emissions and periodic monitoring of the stack emissions. The project proponent is taking no care and mitigation measures to control the Air emissions in the existing TPA Sponge Iron plant, coal washery and power plant.</p>	<p>Lloyds Metals & Energy Ltd. invested about Rs. 1360.75 lacs for upgradation/replacement of existing Pollution Control System in year 2021-22. Detailed activities carried out are mentioned in a letter to Regional Officer, Maharashtra Pollution Control Board, Chandrapur on 31.03.2022. copy of the letter is enclosed.</p> <p>All precautions have been taken to minimize the pollution level due to exiting plant.</p> <p>It is to be noted that all process stacks in operational unit are equipped with OCEM systems and 2 continuous AAQ monitoring stations are installed and they are connected to MPCB/CPCB Server. In addition to this monthly AAQ, stack monitoring is being carried out by MoEF&CC and NABL accredited Laboratory as per Consent to Operate Conditions and submitting the monthly reports to MPCB.</p>
4.	<p>Likewise, the water samples have not been analysed by project proponent in terms of EIA Notifications, 2006 and they are not as per the standard methods for analysis of water and waste water, APHA publication. In reality, the project if allowed to operate, would cause severe damage to water environment. The proposed project would also cause much impact on water in as much as the water requirement for the proposed project would be sourced from Wardha river, which itself is hugely polluted at present. There will be huge discharge of waste water too and such industrial waste water would be causing severe damage to the locality.</p>	<p>The samples of Surface water (8 nos) and Ground water (8 nos) are collected and analysed as per standard methods for the examination of water and wastewater, published by APHA, AWWA, 22nd Edition, 2012. The results are given in EIA report chapter 3 Page no 88-93.</p> <p>The project has been designed based on ZERO discharge principle. The water is mainly consumed for machinery / equipment cooling (direct & Indirect). Waste water generated shall be treated and reused for relevant use.</p> <p>There will be no discharge of treated or untreated water from plant outside the plant boundary.</p>
5.	<p>Once the proposed project is allowed to</p>	<p>As per the NGT order dated 10th July 2019 Chandrapur is CPA with</p>

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	<p>operate, there shall be no monitoring of ground water level and its quality as well as quantity. In the circumstances, the citizens would be deprived off good quantity and quality of water mainly in summer season, where citizens are already facing tonnes of problems of clan and unpolluted water as well as the citizens are, at present, not getting appropriate quantity of water. Resultantly, if the consent to operate the proposed project is granted. It is the citizens who would be the wickedest sufferers. In summer season and pre-monsoon season, the village wells go dry on account of scarcity of water. If the proposed project is allowed to operate,, the nearby villages would additionally suffer on account of Wells going dry due to dewatering, in addition, there will be a huge problem of sewage on account of waste water.</p>	<p>critical air quality but normal water and land quality with CEPI score 23.75 for both. Copy of NGT order is enclosed.</p> <p>We have applied for additional water requirement to irrigation department. We do not have any proposal to use ground water. Our plant is zero liquid discharge plant. 1 piezometer will be installed in Municipal Council Premises with their permission to monitor ground water level.</p> <p>RWH structures are provided to harvest the rain water from around the plant area and roof top. The collected rain water is being utilized for plant use to minimize the raw water requirement.</p> <p>During summer LMEL provides drinking water facility free of cost to nearby villages through Nagar Parishad.</p>
6.	<p>Even noise levels at present for residential area of Ghugus are much above the prescribed limitation of 55 (db)(A) for residential area and 75 (dB)(A) for Industrial area. The existing noise environment is enormously dangerous and noise levels are beyond the limits of given in MOES gazette notification for National Ambient Noise Level Standard. As such, if the project is given green signal, the same would add to the woes of public who are already facing severe noise pollution. If the project proponent permitted to go ahead with the project, major noise arising out of electric motors, loading section etc. would cause severe noise pollution and impact of noise levels on the surrounding will be extremely significant causing severe noise pollution. The noise due to vibration etc. would be so huge that the residents of nearby areas would suffer terribly.</p>	<p>It was observed that in the study area, noise levels ranged from 34.5 - 54.8 dB (A) at all eight stations.</p> <p>To achieve the far field noise limitations, various noise generating equipment's are fitted with appropriate devices to control the noise levels e.g., steam vent pipes shall be fitted with silencers; bypass valves, the de-super heater and the relevant piping are covered with acoustic insulation, feed water pump sets are covered by separate enclosure.,</p> <p>In addition, reduction in noise levels in the high noise machinery area will be achieved by adoption of preventive measures such as proper building layout in which the equipment are to be located, adding sound barriers, use of acoustics enclosures with suitable absorption material, etc. in proposed plant.</p> <p>The noise levels will not exceed the standards stipulated by Central Pollution Control Board at any point of time. The equipments will have inbuilt noise control devices. The measured noise level produced by any equipment will not exceed 85 dB(A) at a distance of 1.0-m from its boundary in any direction under any load condition. The noise produced in valves and piping associated with handling compressible and incompressible fluids will be attenuated to 75 dB(A) at a distance of 1.0 m from the source by the use of low noise trims, baffle plate silencers/line silencers, acoustic lagging (insulation), thick walled pipe work as and where necessary.</p> <p>All PPEs like ear plugs, helmets, safety goggles, safety shoes, hand gloves, fire suits, safety harness belts, night reflector jackets, nose mask etc. are provided to all workers, labours, staff in existing plant & will be provided in proposed expansion also.</p>
7.	<p>The proposed project would also be cause of concern for even the land environment. The soil conditions around the proposed project site are already beyond the prescribed limits.</p>	<p>As per the NGT order dated 10th July 2019 Chandrapur is CPA with critical air quality but normal water and land quality with CEPI score 23.75 for both.</p> <p>Samples collected from different land use classifications indicating all the major nutrients were present, namely, Nitrogen's presence is average, phosphorus is good in quantity and</p>

Sl. No.	ADS raised by EAC	Submission of PP
		<p>potassium is less to average in quantity.</p> <p>The proposed expansion will be carried out in existing and in possession MIDC land which is in industrial use since 1994-95.</p> <p>There will be no dumping of any solid waste which can affect the soil condition around the proposed project.</p>
8.	<p>Even the Impact would be on biological environment if the project proponent is allowed go ahead with the project. The fugitive emissions and transportation activity would impact the terrestrial flora. The settlement of dust on the laminar surface of plants would definitely affect the productivity of plants and would cause severe impact on ecology in the area which is almost dry now. Solid waste generation would also be very huge and the project proponent has not given any good proposal for solid waste management and mitigation measures. The solid waste such as char, bottom ash, fly ash, dust from ESP, Washery reject etc. would be very huge and no mitigation measures as required by law and even been suggested by the project proponent.</p>	<p>It is to noted that there are about 1,05,000 nos of trees are planted & well grown is plant premises 51% i.e. 47 Ha of total land is developed as thick green belt area in existing operational plant. In addition to this about 15000 nos more trees of about 6 ft height) also proposed to plant to improve the density of plantation.</p> <p>The emissions from the Induction furnaces will be sucked through suction hoods and will pass through a fume extraction system with bag filters and then the treated fumes will be discharged into the atmosphere through 2 no. of stacks each of 42 m height to 3 x 30 T Induction Furnaces for effective dispersion of emissions into the atmosphere. The outlet dust emission in the exhaust gases will be less than 30 mg/Nm³.</p> <p>The solid waste from the proposed will be slag from IF furnace and tail cuttings from Rolling Mill. Slag will be crushed for recovery of iron for reuse in IF. Crushed slag will be used in brick manufacturing, hardening of working area. Slag analysis report is enclosed. 100 % tail cuttings from rolling mill will be reused in IF.</p> <p>The solid waste from operational plant is being regularly disposed/reuse scientifically. Details of generation and disposal of solid waste from existing and proposed units are enclosed.</p>
9.	<p>The project proponent is guilty of not carrying out the environmental monitoring on regular basis in accordance with the CPCB guidelines for the existing project itself. There is no Ambient Air Quality, water quality and noise environment monitoring being one by the project proponent for the existing project also. Therefore, the measures suggested by the project proponent for the proposed project are just and eyewash.</p>	<p>It is to be noted that all 4 process stacks in operational unit are equipped with OCEM systems and 2 continuous AAQ monitoring stations are installed and they are connected to MPCB/CPCB Server. Results of OCEMs are enclosed. Results of CAAQMS are enclosed. In addition to this monthly AAQ, stack monitoring is being carried out by MoEF&CC and NABL accredited Laboratory as per Consent to Operate Conditions and submitting the monthly reports to MPCB. Copies of last 2 months environmental monitoring by NABL accredited and MoEF&CC recognized laboratory is enclosed.</p>
10.	<p>If the proposed project is permitted to be operated, the objector submits that it would be wholly against the letter and spirit of Environmental Impact Assessment Notification, 1994 and subsequent amendments thereto. The proposed project would also cause huge inconvenience to the citizens of Ghugus.</p>	<p>It is clear from the EIA report that the proposed project will not cause any significant impact on the surrounding area, as adequate mitigative measures will be implemented so that the all the parameters will remain within the prescribed standards. The existing plant is in operation with Environmental Clearance from respective authority and with Valid Consent to operate. Due to existing operational plant and proposed plant additional employment will be generated for local people which will definitely improve living standard of local people. In addition to this Rs. 13.1 Cr. will be spent in three years on various social development activities in an around Ghugus</p> <p>The proposed expansion will be initiated only after grant of EC and Consent to Establish.</p>
11.	<p>It is a matter of record and known to all and sundry that the proponent never uses delay</p>	<p>Not Applicable, seems copied from somewhere without looking at the configuration of the proposed project. This issue is related to mining</p>

Sl. No.	ADS raised by EAC	Submission of PP
	<i>detonators for blasting and therefore no mitigation measures for control of ground vibration are taken by the proponent.</i>	<i>industry. There will be no mining activity in existing and proposed units.</i>
12.	<i>There is no progressive Afforestation Plan proposed to be implemented by proponent along with roads and Infrastructure as well as the embankment and vacant land. Therefore, such a project if allowed to operate, would escalate the problems of pollution being already hugely faced by the citizens.</i>	<i>This issue is also related to mining industry. There is no tree cutting involved in existing and proposed units. This also seems copied from somewhere without looking at the location and nature of the project. Out of the total area, green belt development is done in 47.7 ha (51%) of plant area of A-1 & A-2 in MIDC Ghugus. The plant is in operation since 1994-95 and 2,34,650 nos. of trees are planted and 1,05,000 nos. survived till date. Further gap filling will be done. About 15000 nos. of trees will be planted. Avenue plantation will be done in near by villages under CER.</i>
13.	<i>When it is a familiar fact that Ghugus MIDC area is already hugely air polluted on account of various industries being operational, it would be extremely hazardous if the proposed project is permitted to operate.</i>	<i>It is noted that there are only 2 industries are installed & in operation in Ghugus MIDC, one is LMEL & second is ACC Cement. Adequate mitigative measures will be followed in proposed expansion also so that all the parameters will remain well within the prescribed standards.</i>
14.	<i>The residents of the locality and nearby villages would suffer respiratory and dust problems, thereby causing asthmatic and other chest infection diseases. Which are already ben suffered by them on account of existing industries including that of the proponent. In this Covid-19 pandemic era, it is a well-known scenario that people suffering from respiratory problems are more prone to getting infected with Covid-19 and many such people have lost their lives. In such a situation, the objector is sure that the project would not be approved at the cost of lives of several innocent citizens.</i>	<i>As per the periodic medical examination done for the workers none of our workers are found to be suffered from any respiratory and dust generated problems. The detailed report is enclosed. It is for kind information that all our workers, staff and their families are staying in Ghugus and near by villages. Occupational health center is in operation in plant for workers, labours & their family. LMEL is conducting health check up of all its employees including all workers through Government approved Hospitals. In additional to this it is proposed to spend Rs. 2.10 Crores towards various Health Programme in social welfare activities.</i> <ol style="list-style-type: none"> 1. Rs. 90 lacs towards provision of 2 ambulance and 1 funeral vehicle. 2. Rs. 30 lacs towards health camp including medicine in Ghugus and surrounding villages. 3. Rs.60 lacs towards improvement in PHC of nearby villages. 4. Rs.30 lacs towards provision of medical equipment to elderly people in Ghugus and nearby villages. <i>This amount will be spent in 3 years. 80% of the amount will be spent in 1st year and balance 20% in 2nd and 3rd year.</i>
15.	<i>Not only this the Objector submitted its objection in the public hearing, deliberately the Objector's objection is not sent by the Officers of Pollution Control Board.</i>	<i>The objector has not attended the Public Hearing & regarding submission of any objection to authority is not known.</i>
16.	<i>The objector is herewith enclosing the documents which shows that Lloyds Metals were given various stringent directions which demonstrates that the Lloyds Metals is guilty of polluting the environment and is already an Industry which is major cause of pollution. The details of the same are as under:-</i>	
1)	<i>On 01.04.2014 Maharashtra pollution Control Board informed Lloyds Metals</i>	<i>It is very surprising that the objector was well known in advance i.e. on 01.04.2014 about the Honorable National Green Tribunal order</i>

Sl. No.	ADS raised by EAC	Submission of PP
	<p><i>& Engineering Ltd. that Hon'ble National Green Tribunal has passed an order dated 14.05.2014 that a team comprising of MPCB & CPCB had visited the premises of Lloyd Metal and that after inspection it was found that pollution emission are exceeding the consented standards. The said Committee after joint commission had given recommendation to minimize the</i></p>	<p><i>dated 14.05.2014.</i></p> <p><i>However As per the recommendation of the committee modification upgradation was carried out & reports were submitted to Honorable NGT time to time.</i></p> <p><i>On 16.05.2014 Honorable NGT passed the order to close the case. Copy of order is enclosed as Annexure XX with EIA report. Copy of same order is enclosed.</i></p>
2)	<p><i>Vide letter dated 23.04.2015 again Lloyd Metals were directed to comply with the recommendation made after the inspection done as stated above.</i></p>	<p><i>Copy of letter dated 23.04.2015 issued by Maharashtra Pollution Control Board is enclosed.</i></p>
3)	<p><i>Vide letter dated 07.02.2018 Maharashtra Pollution Control Board directed Lloyds Metals to comply with the directions of inspection dated 09.01.2018 and warned that electricity and water supply would be disconnected.</i></p>	<p><i>Copy of letter dated 07.02.2018 issued by Maharashtra Pollution Control Board is enclosed.</i></p>
4)	<p><i>Again on 22.02.2018 conditional directions were issued by Maharashtra Pollution Control Board to Lloyds Metals and directed to take necessary steps as mentioned in the said letter failing with the Board shall take stringent action against Lloyds Metals.</i></p>	<p><i>After complying all the conditions, on 22.02.2018 Maharashtra Pollution Control Board issued conditional restart order against closure order dated 7.02.2018 Copy of letter 22.02.2018 issued by Maharashtra Pollution Control Board is enclosed.</i></p>
5)	<p><i>On 06.05.2022 Maharashtra Pollution Control Board has informed Hon'ble LokAyukt that Lloyds Metals has not followed the direction to control the pollution and that therefore Bank Guarantee of Rs. 5 lakh of Lloyds Metals has been seized.</i></p>	<p><i>MPCB has submitted their reply on 06.05.2022 to Honorable LokAyukt, Maharashtra State regarding complaint give by Mr. Vinesh Kolwal.</i></p> <p><i>In the said reply in concluding para RO, MPCB has replied that the order issued by Honorable NGT has been complied which maximum extent & it is also replied that MPCB carries out inspection time to time & against minor non complies BG of Rs 5 Lac for fitted.</i></p> <p><i>Copy of Maharashtra Pollution Control Board report dated 06.05.2022 submitted to Honorable LokAyukt, Maharashtra State is enclosed</i></p> <p><i>On dated 13.01.2023 Honorable LokAyukt, Maharashtra State after hearing the matter has given order stating in I am informed by the Ld. Counsel appearing on behalf of the company that 90% of the direction given by national Green Tribunal have been followed and the remaining 10% directions will be complied within a period of one month statement is accepted. In view this, nothing survives in the complaint. Complaint is closed with no penalty.</i></p> <p><i>Copy of order is enclosed.</i></p> <p><i>Maharashtra Pollution Control Board renewed the Consent to operate for existing and operational plant wide letter no. Format1.0/CAC/UAN No.MPCB- CONSENT – 0000123174/CO/2203001536. Dated 29.03.2022 and valid up to 31.12.2023. copy of renewed consent to operate is enclosed.</i></p> <p><i>Maharashtra Pollution Control Board issued consent to establish for</i></p>

Sl. No.	ADS raised by EAC	Submission of PP
		expansion phase wide letter no. Format1.0/CAC/UAN No.0000110966/CE/2205000821. Dated 13.05.2022. Copy of consent to establish is enclosed.
17.	The objector earnestly requests your good-self to independently collect air, water and soil samples, which would definitely show that the existing index of the same are much beyond the prescribed limits. in such circumstances, it would be tremendously dangerous to allow the project proponent to go ahead with the proposed project.	The data has been collected by MOEF&CC & NABL accredited laboratory. Regular monitoring is being carried out by MOEF&CC& NABL accredited laboratory. In addition 2 CAAQMS and 4 CEMS are installed & in operation with connection to MPCB & CPCB servers. All data's are within prescribed limit. Copy of latest Data of CAAQMS & CEMS are enclosed.
18.	The objector submits that in view of mushrooming growth of industries in Ghugus, there are severe environmental problems, particularly issue related to air, water as well as noise pollution and they are of immediate concern. The objection has been rigorously following the said issue of environmental related problems in Ghugus area and in Chandrapur district and is seeking immediate action for amelioration of the situation. Considering the intensity of the situation, it is now need of the hour to stop granting environmental clearance to any new project, unless and until the present situation regarding serious pollution in Ghugus area is accurately controlled.	As per secondary data and our information there are no major industries proposed in Ghugus area. Only expansion in Lloyds Metal & Energy Ltd is proposed.
19.	The objector submits that the summary of the project submitted by the proponent, is just imaginary. The figures and data submitted are only a fantasy. The environment management plan and the post project monitoring submitted by proponent is just with a view to obtain the environmental clearance at the cost of lives of citizens. The data placed by proponent is fully unsatisfactory and based on surmises and assumptions only. The proposal does not even prima-facie demonstrate that the detailed study has been undertaken by the proponent for seeking consent to operate. Pollution Control Measures as required by settled standards are not reflected in the proposal. Taking into consideration the environmental impacts, the mitigation measures suggested by the proponent are extremely feeble and scrawny and therefore consent to operate cannot at all be granted. The objector submits that no environmental clearance and consent to operate can be	The EIA report is prepared as per EIA Notification 2006 & its various amendment.

Sl. No.	ADS raised by EAC	Submission of PP
	<i>granted on the strength of a proposal which is totally underserving and unworthy.</i>	
20.	<i>In fact, the proponent has made vague and irresponsible statements in the proposal summary with a view to prejudice this Hon'ble Authority as well as Government of India, Ministry of Environment and Forests with the sole intention of obtaining environmental clearance by misleading the authorities.</i>	<i>The EIA report is prepared as per EIA Notification 2006 & its various amendment.</i>
21.	<i>The objector wishes to point out that Hon'ble Supreme Court of India has time and again cautioned the Pollution Control Board as well as Environmental Clearance Authorities, not to grant environmental clearance to such aspirants who intend to cause severe pollution for the purpose of their commercial establishment/s.</i>	<i>No comment</i>
22.	<i>In the above circumstances, the objector is placing on record its objection with a request to this Hon'ble Authority to grant personal hearing to the objector and the objector reserves right to place additional material in support of this objection at the time of personal hearing and thereafter. The said opportunity of hearing deserves to be granted to the objector in view of specific provision of hearing envisage them EIA Notification.</i>	<i>No comment</i>
23.	<i>Thanking your good-selves in anticipation and with the hope and trust that appropriate cognizance shall be taken in respect of the present objection.</i>	<i>No comment</i>
18.	The EAC noted that the Date of Advertisement is wrongly given as 19 th June, 2021 in the brief, however the actual date is 19 th April, 2021. The EAC warned the PP/Consultant to be careful while submitting the information.	Mentioning the different date in brief has happened inadvertently. Proper care will be taken in future.
19.	In view of above facts, EAC advised PP to revise the EIA/EMP report covering all the desired information for further consideration.	Revised EIA/EMP report is uploaded covering all the information as desired in 21st meeting of the Honorable EAC (Industry I).
20.	The PP/Consultant agreed to the suggestions of EAC and requested EAC to allow reappear after the revision of the application incorporating the desired information.	Request the Honorable EAC (Industry-I) to reconsider the proposal for further appraisal.

24.9.22 Based on the above submission of project proponent, the proposal is considered during 24th meeting of the EAC for Industry-I sector held on 28th February – 1st March, 2023. The deliberations and recommendations of the Committee are as follows:

Deliberations by the Committee

24.9.23 The Committee noted the following:

1. The instant proposal is for installation of Induction Furnace & Rolling Mill for production of Ingots, Billets 5,00,000 TPA and TMT Bars & Long product: 5,00,000 TPA (In addition to Existing 3, 24,000 TPA Sponge Iron Plant, 0.216MTPA OR 150 TPH Coal Washery & 25 MW Power Plant). Further, company has decided to drop the installation of the 2 X 9 MVA Submerged Arc Furnace permitted for production of 25,000 TPA Ferro alloys in the ToR dated 10.02.2020.
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 projects for sponge iron manufacturing plant was accorded the NOC vide lr.no. Env (NOC)2005/747/CR.97/D.I, dated 28th December 2005, for coal washery environmental clearance was accorded vide lr.no. J-11015/272/2007-IA.II (M) dated 9th April 2008 and for waste Heat Recovery Based Captive Power Plant of 25 MW capacity environmental clearance was accorded vide lr.no. J-13012/123/07-IA-II dated 12th October 2009. Consent to Operate was accorded by Maharashtra State pollution Control Board vide lr. no. Format1.0/CAC/UAN No. MPCBCONSENT-0000123174/CO/2203001536 validity of CTO is up to 31.12.2023.
6. The proposed project falls in the Critically Polluted Area of Chandrapur as notified by Central Pollution Control Board (CPCB). The EAC deliberated on the revised compliance of the conditions as per Ministry's guideline dated 24th October 2019 and found it satisfactory.

7. Total land leased by MIDC to M/s Lloyds Metals & Energy Limited (LMEL) is 93.52 ha in which plot no. A-1 is 4.00 ha & A-2 is 89.52 ha. The land use of project site is industrial land and is acquired by project proponent. No Additional land is required.
8. The nearest habitation to plant is Ghugus village located at 0.5 km away from the project site boundary in North direction. The EAC deliberated on environmental safeguard measures undertaken to minimise the impact on the habitation of the locals and found it satisfactory. Further, PP has advised to strengthen the greenbelt layer towards the village.
9. There are two natural drainages passing through project site. Anuradha Lake (620 m, W), Wardha River (2.5 Km, SW), Nirguda Nala (3.0 Km, SSW), Penganga River (5.0 Km, SE) and Sarai Nala (6.5 Km, NE) are flowing within 10 Km. radius of the plant site. The EAC deliberated on the drainage conservation plan and found it satisfactory.
10. The existing water requirement is 2674 m³/day, which will be sourced from Wardha River. The water requirement for the proposed project is estimated as 1627 m³/day, will be sourced from Wardha River and an agreement has been signed with Irrigation Department, Chandrapur for supply of water. PP has also clarified that water requirement for the proposed project is 1627 m³/day as per the PH documents & EIA/EMP report.
11. Existing green belt has been developed in 47.7 ha. area which is about 51% of the total project area of 93.52 ha., 2,34,650 nos. of trees are planted and 1,05,000 nos. survived till date. Further gap filling will be done. About 15000 nos. of trees will be planted. Further PP has submitted an undertaking dated 30.01.2023 for ensuring gap filling of existing plantation within six months along with greening and paving in plant area and approach road from SH to Main gate of the plant. The EAC deliberated on the greenbelt action plan and found it satisfactory.
12. The Committee has found that the baseline data and incremental GLC due to the proposed project and the mitigation measures proposed by the proponent and is of the opinion that regular monitoring shall be carried and stringent measures shall be undertaken to keep all the parameters within NAAQ standards.
13. The committee deliberated details of carbon foot prints and carbon sequestration study w.r.t. proposed project and found them to be satisfactory.
14. The Committee also deliberated on the public hearing issues along with revised action plan submitted by the proponent to address the issues raised during the public hearing and found it satisfactory.
15. The EAC noted that there is Lokayukta Maharashtra State Complaint No.: LA/COM/3729/2021 (T-6) dated 10.11.2021 filed regarding the action taken by the Hon'ble NGT Bench Pune in 2014 after passing the final order for banning the sponge iron factories. MPCB vide letter O.No. MPC/ROC/579/2022 dated 11.11.2022 has submitted its statement. The PP further has submitted that the Final hearing was held on 13th January 2023, and during the hearing representative of state pollution Control board and the Lloyds Metals and Energy limited were present. Honorable Lokayukta in the court disposed off the case without any penalty.
16. The Committee deliberated upon the certified compliance report of IRO and action taken report submitted by PP with respect to the partial/non complied conditions alongwith review report of IRO and found it satisfactory.
17. The EAC deliberated on the ADS reply of project proponent on the issues raised during 21st EAC meeting and found it satisfactory.

18. The EAC deliberated on the pointwise clarification on the issues raised in the representation dated 13.01.2023 and 16.01.2023 requesting for stay in the grant of Environment Clearance and found it satisfactory. The EAC also observed that the mitigation measures as raised in the representations has already been included in the EIA/EMP Report. The EAC is of the view that the PP shall implement all the mitigation measures and strict compliances.
19. 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.
20. 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

24.9.24 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 Parivesh Portal under the provisions of EIA Notification, 2006 subject to stipulation of following specific conditions and general conditions as per the Ministry's Office Memorandum No. 22-34/2018-III dated 9/8/2018 based on project specific requirements:

A. Specific conditions:

- (i) The project proponent shall abide by all the orders and judicial pronouncement, made from time to time pertaining to Lokayukta Maharashtra State Complaint No.: LA/COM/3729/2021 (T-6) dated 10.11.2021 filed regarding the action taken by the Hon'ble NGT Bench Pune in 2014 after passing the final order for banning the sponge iron factories.
- (ii) The PP shall comply with all the environmental protection measures and safeguards proposed in the documents submitted to the Ministry. All the recommendations made in the EIA/EMP in respect of environmental management, and risk mitigation measures relating to the project shall be implemented.
- (iii) The project proponent shall comply with all the environmental protection measures and safeguards proposed in the documents submitted to the Ministry. All the recommendations made in the EIA/EMP in respect of environmental management, and risk mitigation measures relating to the project shall be implemented.
- (iv) The project proponent shall utilize modern technologies for capturing of carbon emitted and shall also develop carbon sink/carbon sequestration resources capable of capturing

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

- (v) In pursuance to MoEF&CC OMs dated 31st October, 2019 & 30th December, 2019 issued in compliance of the order of Hon'ble NGT in OA No. 1038/2018 dated 19th August, 2019, the compliance of all the conditions applicable to CEPI shall be implemented as per the submitted plan.
- (vi) The nearest habitation to plant is Ghugus village located at 0.5 km away from the project site boundary in North direction. Project Proponent shall implement the action plan for environmental safeguard measures to minimise the impact on the habitation of the locals as submitted. The company shall also include this location in its environmental monitoring programme and strengthen the greenbelt layer towards the village.
- (vii) There are two natural drainages passing through project site. Anuradha Lake (620 m, W), Wardha River (2.5 Km, SW), Nirguda Nala (3.0 Km, SSW), Penganga River (5.0 Km, SE) and Sarai Nala (6.5 Km, NE) are flowing within 10 Km. radius of the plant site. A robust and full proof Drainage Conservation scheme to protect the natural drainage and its flow parameters; along with Soil conservation scheme and multiple Erosion control measures shall be implemented.
- (viii) The water requirement for the proposed project estimated as 1627 m³/day, shall be sourced from Wardha River after obtaining necessary permission from the Competent Authority. No ground water abstraction is permitted.
- (ix) As committed, PP shall adopt two villages namely Usgaon and Mathardevi. PP shall implement village Adoption program consisting of need-based community development activities, to develop them into model villages.
- (x) Performance test shall be conducted on all pollution control systems every year and report shall be submitted to Integrated Regional Office of the MoEF&CC.
- (xi) Three tier Green Belt shall be developed in a atleast 50% of total project area as per the submitted action plan with native species all along the periphery of the project site of adequate width and tree density shall not be less than 2500 per ha. Survival rate of green belt developed shall be monitored on periodic basis to ensure that damaged plants are replaced with new plants in the subsequent years. Gap filling of existing plantation shall be completed within six months as per the commitment. PP shall develop greenbelt in the form of shelter belt comprising of total of 6 rows of 2x2 m plantation with tall trees & broad leaves with thick canopy alongwith windshield inside the plant premises to act as green barrier for air pollution & noise levels towards Ghugus villages. Compliance status in this regard, shall be submitted to concerned Regional Office of the MoEF&CC.
- (xii) The PP shall construct a Wind shield/ Acoustic barrier besides three rows of tall thick, broad leaved evergreen tree species in order to protect the villagers from dust and noise pollution.
- (xiii) Greening and Paving shall be implemented in the plant area to arrest soil erosion and dust pollution from exposed soil surface.
- (xiv) Rejects from coal washery shall only be used either in the captive power plant (or) in the Thermal Power Plants meeting emission standards.
- (xv) Solid waste utilization

- a. PP shall install a slag crusher to convert steel slag into aggregate for use in construction industry, fine sand for use as flux in steel plant, sand in brick making and as lime in cement making.
 - b. PP shall recycle/reuse solid waste generated in the plant as far as possible.
 - c. Used refractories shall be recycled as far as possible.
- (xvi) Following additional arrangements to control fugitive dust shall be provided:
- a. Fog / Mist Sprinklers at all on bulk raw material storage area (at the transfer points) like Iron Ore, Coal and for Fly Ash and similar solid waste storage areas.
 - b. Proper covered vehicle shall be used while transport of materials.
 - c. Wheel washing mechanism shall be provided in entry and exit gates with complete recirculation system.
- (xvii) Fourth hole extraction shall be provided in the furnaces to control secondary emissions.
- (xviii) Secondary fume extraction system shall be installed on converters of Steel Melting Shop.
- (xix) 100% of molten billets shall be rolled directly in hot stage. There shall be no installation of Re-heating furnace.
- (xx) Wind breaking walls around the storage area and covered storage area for material transportation and paved roads shall be provided.
- (xxi) Housekeeping of the plant area shall be improved.
- (xxii) Dust emission from all the stacks shall be less than 10 mg/Nm³.
- (xxiii) Air Cooled condensers shall be used in the captive power plant.
- (xxiv) During operational phase at Captive Power Plant, PP shall measure coal dust exposures and to maintain coal dust exposures within stipulated standards at coal handling areas. PP shall identify extreme hot areas through heat stress survey as well as noise monitoring within process plants to ensure that workers not exposed above 90 dBA levels as per Factories Act, 1948.
- (xxv) Action Plan for fire fighting system including provision for flame detectors, temperature actuated heat detectors with alarms, automatic sprinkler system, fixing the location of fire water tanks, separate power system for fire fighting, involvement of qualified and trained fire personnel, nearest fire station & time required to reach the proposed site shall be prepared and implemented.
- (xxvi) Rain water harvesting shall be implemented to recharge/harvest water as per the action plan submitted in the EIA/EMP report.
- (xxvii) The proposed project shall be designed as "Zero Liquid Discharge" Plant. ETP shall be installed and there shall be no discharge of effluent from the plant. Domestic effluent shall be treated in Sewage Treatment Plant. MSW waste shall be treated in digester and recovered gas shall be used in the canteen.
- (xxviii) A proper action plan must be implemented to dispose of the electronic waste generated in the industry.
- (xxix) 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.
- (xxx) 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.

- (xxxix) 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 04 Nos. Continuous Ambient Air Quality Station (CAAQS) for monitoring AAQ parameters with respect to standards prescribed in Environment (Protection) Rules 1986 as amended from time to time. The CEMS and CAAQMS shall be connected to SPCB and CPCB online servers and calibrate these systems from time to time according to equipment supplier specification through labs recognized under Environment (Protection) Act, 1986 or NABL accredited laboratories.
- ii. The project proponent shall monitor fugitive emissions in the plant premises at least once in every quarter through laboratories recognized under Environment (Protection) Act, 1986 or NABL accredited laboratories.
- iii. Sampling facility at process stacks and at quenching towers shall be provided as per CPCB guidelines for manual monitoring of emissions.
- iv. Appropriate Air Pollution Control (APC) system shall be provided for all the dust generating points including fugitive dust from all vulnerable sources, so as to comply prescribed stack emission and fugitive emission standards.
- v. The project proponent shall provide leakage detection and mechanized bag cleaning facilities for better maintenance of bags.

- vi. Sufficient number of mobile or stationery vacuum cleaners shall be provided to clean plant roads, shop floors, roofs, regularly.
- vii. Recycle and reuse iron ore fines, coal and coke fines, lime fines and such other fines collected in the pollution control devices and vacuum cleaning devices in the process after briquetting/ agglomeration.
- viii. The project proponent use leak proof trucks/dumpers carrying coal and other raw materials and cover them with tarpaulin.
- ix. Facilities for spillage collection shall be provided for coal and coke on wharf of coke oven batteries (Chain conveyors, land based industrial vacuum cleaning facility).
- x. Land-based APC system shall be installed to control coke pushing emissions.
- xi. Monitor CO, HC and O₂ in flue gases of the coke oven battery to detect combustion efficiency and cross leakages in the combustion chamber.
- xii. Vapor absorption system shall be provided in place of vapour compression system for cooling of coke oven gas in case of recovery type coke ovens.
- xiii. Wind shelter fence and chemical spraying shall be provided on the raw material stock piles.
- xiv. Design the ventilation system for adequate air changes as per prevailing norms for all tunnels, motor houses, Oil Cellars.

III. Water quality monitoring and preservation

- i. The project proponent shall install 24x7 continuous effluent monitoring system with respect to standards prescribed in Environment (Protection) Rules 1986 vide G.S.R 277 (E) dated 31st March 2012 (Integrated iron & Steel); G.S.R 414 (E) dated 30th May 2008 (Sponge Iron) as amended from time to time; S.O. 3305 (E) dated 7th December 2015 (Thermal Power Plants) as amended from time to time and connected to SPCB and CPCB online servers and calibrate these system from time to time according to equipment supplier specification through labs recognized under Environment (Protection) Act, 1986 or NABL accredited laboratories.
- ii. The project proponent shall monitor regularly ground water quality at least twice a year (pre- and post-monsoon) at sufficient numbers of piezometers/sampling wells in the plant and adjacent areas through labs recognized under Environment (Protection) Act, 1986 and NABL accredited laboratories.
- iii. Sewage Treatment Plant shall be provided for treatment of domestic wastewater to meet the prescribed standards.
- iv. Garland drains and collection pits shall be provided for each stock pile to arrest the run-off in the event of heavy rains and to check the water pollution due to surface run off.
- v. Tyre washing facilities shall be provided at the entrance of the plant gates.
- vi. Water meters shall be provided at the inlet to all unit processes in the steel plants.

IV. Noise monitoring and prevention

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

V. Energy Conservation measures

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

VI. Waste management

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

VII. Green Belt

- i. Green belt shall be developed in an area equal to 33% of the plant area with native tree species in accordance with CPCB guidelines. The greenbelt shall inter alia cover the entire periphery of the plant
- ii. The project proponent shall prepare GHG emissions inventory for the plant and shall submit the program for reduction of the same including carbon sequestration by trees in the plant premises.
- iii. Project proponent shall submit a study report on Decarbonisation program, which would essentially consist of company's carbon emissions, carbon budgeting/ balancing, carbon sequestration activities and carbon offsetting strategies. Further, the report shall also contain time bound action plan to reduce its carbon intensity of its operations and supply chains, energy transition pathway from fossil fuels to Renewable energy etc. All these activities/ assessments should be measurable and monitorable with defined time frames.

VIII. Public hearing and Human health issues

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

IX. Environment Management

- i. The project proponent shall comply with the provisions contained in this Ministry's OM vide F.No. 22-65/2017-IA.III dated 30/09/2020.
- ii. The company shall have a well laid down environmental policy duly approved by the Board of Directors. The environmental policy should prescribe for standard operating

procedures to have proper checks and balances and to bring into focus any infringements/deviation/violation of the environmental / forest / wildlife norms / conditions. The company shall have defined system of reporting infringements / deviation / violation of the environmental / forest / wildlife norms / conditions and / or 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. No further expansion or modifications in the plant shall be carried out without prior approval of the Ministry of Environment, Forests and Climate Change (MoEF&CC).
- x. The PP shall put all the environment related expenditure, expenditure related to Action Plan on the PH issues, and other commitments made in the EIA/EMP Report

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

- xi. Concealing factual data or submission of false/fabricated data may result in revocation of this environmental clearance and attract action under the provisions of Environment (Protection) Act, 1986.
- xii. The Ministry may revoke or suspend the clearance, if implementation of any of the above conditions is not satisfactory.
- xiii. The Ministry reserves the right to stipulate additional conditions if found necessary. The Company in a time bound manner shall implement these conditions.
- xiv. The Regional Office of this Ministry shall monitor compliance of the stipulated conditions. The project authorities should extend full cooperation to the officer (s) of the Regional Office by furnishing the requisite data / information/monitoring reports.
- xv. Any appeal against this EC shall lie with the National Green Tribunal, if preferred, within a period of 30 days as prescribed under Section 16 of the National Green Tribunal Act, 2010.

Consideration in Terms of Reference Proposals

Agenda No. 24.10

24.10 Proposed expansion of existing Steel Plant for replacement of existing 2x7 T Induction Furnaces by 2x15 T Induction Furnaces, installation of new 2x15 T Induction Furnaces with 6/11 three strands Continuous Casting Machine (2,00,000 TPA Billets) & 1x15 TPH Slag Crusher unit, 1x30 T capacity AOD and Hot Rolling Mill (450 TPD) for production of TMT Bars, Wire Rod, Structure with 1x15 TPH Reheating Furnace (reheating by Piped-Gas or Coal or 1x45,00,000 Kcal/hr capacity Coal based Gasifier) by M/s CRM Ispat Private Limited, located at Bamunara Industrial Area, Village Bamunara, P.S. Kanksa, P.O. Gopalpur, District Paschim Bardhman, West Bengal – Consideration of TOR.

**[Proposal No. IA/WB/IND1/408712/2022; File No. IA-J-11011/73/2023-IA-II(IND-I)]
[Consultant: Envirotech East Pvt. Ltd ; Valid upto: 25.03.2023]**

24.10.1 M/s. CRM Ispat Private Limited has made an application online vide proposal no. IA/WB/IND1/408712/2022 dated 14th February, 2023 along with the application in prescribed format (Form-I), copy of pre-feasibility report and proposed ToRs for undertaking detailed EIA study as per the EIA Notification, 2006 for the project mentioned above. The proposed project activity is listed at Sl. No. 3(a) Metallurgical Industries (Ferrous and Non-ferrous) under Category “B1” of the schedule of the EIA Notification, 2006 and attract general condition as proposed project site falls within 5 km from the boundary of Durgapur Municipal Area i.e Severely Polluted Area and therefore appraised at Central Level.

24.10.2 Name of the EIA consultant: M/s. Envirotech East Pvt. Ltd. [List of ACOs with their Certificate / Extension Letter No: QCI/NABET/ENV/ACO/22/2625 valid till 25.03.2023, as on February 27, 2023].

Details submitted by Project proponent

24.10.3 The project of M/s CRM Ispat Private Limited located at Bamunara Industrial Area, Village Bamunara, P.S. Kanksa, P.O. Gopalpur, District Paschim Bardhman in West Bengal is for expansion of existing steel plant for production of 0.1485 MTPA TMT Bars, Wire Rod, Structure.

24.10.4 Environmental site settings:

S. No.	Particulars	Details	Remarks															
i.	Total Land	Proposed replacement and expansion project shall be installed on the available land, within the existing plant premises comprising of total 4.0 Hectares (9.9 acres) of land.																
ii.	Land acquisition details as per MoEF&CC O.M. dated 7/10/2014	Land is acquired by the Company.																
iii.	Existence of habitation & involvement of R&R, if any.	Project Site : Village Bamunara Study Area: <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th>Habitation</th> <th>Distance</th> <th>Direction</th> </tr> </thead> <tbody> <tr> <td>Durgapur Steel City</td> <td>8.0 km</td> <td>North-west from the Project site</td> </tr> </tbody> </table>	Habitation	Distance	Direction	Durgapur Steel City	8.0 km	North-west from the Project site	No R&R issue involved in the proposed project									
Habitation	Distance	Direction																
Durgapur Steel City	8.0 km	North-west from the Project site																
iv.	Latitude and Longitude of all corners of the project site.	<table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th>POINT</th> <th>LATITUDE</th> <th>LONGITUDE</th> </tr> </thead> <tbody> <tr> <td>A</td> <td>23°29'55.97"N</td> <td>87°22'3.54"E</td> </tr> <tr> <td>B</td> <td>23°29'55.10"N</td> <td>87°22'8.50"E</td> </tr> <tr> <td>C</td> <td>23°29'47.06"N</td> <td>87°22'8.05"E</td> </tr> <tr> <td>D</td> <td>23°29'50.63"N</td> <td>87°22'2.03"E</td> </tr> </tbody> </table>	POINT	LATITUDE	LONGITUDE	A	23°29'55.97"N	87°22'3.54"E	B	23°29'55.10"N	87°22'8.50"E	C	23°29'47.06"N	87°22'8.05"E	D	23°29'50.63"N	87°22'2.03"E	
POINT	LATITUDE	LONGITUDE																
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C	23°29'47.06"N	87°22'8.05"E																
D	23°29'50.63"N	87°22'2.03"E																
v.	Elevation of the project site	74 m above mean sea level (AMSL).																
vi.	Involvement of Forest land if any.	No forest land is involved in the project site.																
vii.	Water body (Rivers, Lakes Pond, Nala, Natural Drainage, Canal etc.) exists within the project site as well as study area	River Damodar is passing about 6.0 km distance in south direction w.r.t the project site in the study area.																
viii.	Existence of ESZ/ ESA/ national park/	Nil.																

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

24.10.5 The existing project was accorded Consent to Establish vide Memo No. 516 - 2N - 136 / 2006 (E) dated 01.08.2006 for installation of Induction Furnaces (2x7 T) for production of 4117 TPM M.S Ingots (Project Cost: Rs. 6.87 Crores). The plant was implemented after getting NOC from WBPCB as per the prevailing notification (published in the year 1994) of MoEF&CC, as per which No Environmental Clearance (EC) was required for this project. Consent to Operate for the existing unit was accorded by West Bengal Pollution Control Board vide Memo No. 49-7 / WPBD-Cont (2975)/06 dated 05.01.2023. The validity of CTO is up to 31.08.2027.

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

Unit	Units as per NOC dated 01.08.2006	Proposed Project	Ultimate Capacity
Induction Furnace	2x7 T Induction Furnaces (Ingots - 49,392 TPA (4116 TPM))	<ul style="list-style-type: none"> Replacement of existing 2x7 T Induction Furnaces by 2x15 T Induction Furnaces (Liquid Steel - 99,000 TPA) (Billets - 97,500TPA). 2x15 T Induction Furnaces (New) (Liquid Steel - 99,000 TPA) (Billets - 97,500 TPA) <p>along with Matching LRF, AOD (1x30 T) & CCM (2,00,000 TPA), 1x15 TPH Slag Crusher unit and Scrap baling machine (1x50 TPD).</p>	<p>4x15 T Induction Furnaces (Liquid Steel - 1,98,000 TPA) (Billets - 1,95,000 TPA)</p> <p>along with Matching LRF, AOD (1x30 T) & CCM (2,00,000 TPA), 1x15 TPH Slag Crusher unit and Scrap baling machine (1x50 TPD).</p>
Rolling Mill with reheating furnace	--	450 TPD (1,48,500 TPA) capacity Rolling Mill for production of M.S.TMT, Wire Rod, Structural along with 1x15 TPH reheating furnace (reheating by Piped-Gas or Coal or 1x45,00,000 Kcal/hr capacity Coal based Gasifier).	450 TPD (1,48,500 TPA) capacity Rolling Mill for production of M.S.TMT, Wire Rod, Structural along with 1x15 TPH reheating furnace (reheating by Piped-Gas or Coal or 1x45,00,000 Kcal/hr capacity Coal based Gasifier).

Unit	Units as per NOC dated 01.08.2006	Proposed Project	Ultimate Capacity
DG Sets	1x125 KVA *	2X500 KVA	2X500 KVA
* Note: Existing 1x125 KVA DG set will be replaced by proposed 2x500 KVA DG Sets. - Induction Furnace @10 heats per day in 330 working days			

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

Sl. No	Raw Material	Annual Requirement (in TPA)			Source	Mode of Transportation
		Existing *	Proposed	Total		
4x15 T INDUCTION FURNACES						
1	Sponge Iron	-	1,80,000	1,80,000	Local Market	Road
2	Pig Iron	-	30,000	30,000	Local Market	Road
3	Scraps	-	42,000	42,000	Local Market	Road
4	Ferro Alloys	-	1,550	1,550	Local Market	Road
* Note: Replacement of Existing 2x7 T Induction Furnaces by 2x15 T Induction Furnaces.						

24.10.8 Existing Water requirement is 40 m³/day. The water requirement for the proposed project is estimated as 90 m³/day. Thus, total water requirement after expansion will be 130 m³/day. The permission for drawl of ground water is under process.

24.10.9 The total power requirement after expansion will be estimated as 25 MW which will be sourced from West Bengal State Electricity Distribution Company Limited (WBSEDCL).

24.10.10 The capital cost of the proposed expansion project is Rs. 75 Crores. The employment generation from the proposed project during operational phase will be 150 persons.

24.10.11 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.

24.10.12 Proposed Terms of Reference: [1st December, 2022 to 28th February, 2023 (Winter Season)]

Attributes	Sampling		Parameters
	No. of Stations	Frequency	
A. Air			
a. Meteorological Parameters	1	Continuous on 24-hourly basis	Temperature, Relative Humidity, Atmospheric Pressure, Wind Speed, Wind Direction, Rainfall.
b. AAQ Parameters	8	Twice in a week	PM ₁₀ , PM _{2.5} , SO ₂ , NO ₂ & CO
B. Noise	10	Once (Day & Night)	L _{eq} [dB (A)]
C. Water			

Attributes	Sampling		Parameters
	No. of Stations	Frequency	
a. Surface Water	10	Once in the study period	Physical, Chemical & Biological
b. Ground Water	9	Once in the study period	Physical, Chemical & Biological
D. Land			
a. Soil Quality	4	Once in the study period	Physical and Chemical
b. Land Use	Study Area	Once in the study period	Land use using Satellite Imagery
E. Biological			
a. Aquatic	Study Area	Once in the study period	Enlist local Flora and Fauna
b. Terrestrial	Study Area	Once in the study period	Enlist local Flora and Fauna
F. Socio-economic Parameters	Study Area	Based on Latest census data and sample survey	Population & Infrastructure Facilities

24.10.13 **Action plan for the different criteria for SPA as per MoEF&CC OM dated 31st October, 2019**

Environment	Mitigation Measures
Air	<p><u>Stipulation of conditions such as:</u></p> <p>i. Stack emission levels should be stringent than the existing standards in terms of the identified critical pollutants.</p> <p>Reply: Sufficient APC measures like Bag Filters including a stack of proper height will be installed to control the stack emission levels so that ultimately the levels are well below the existing standard for PM.</p> <p>ii. CEMS may be installed in all large/medium red category industries (air polluting) and connected to SPCB and CPCB server.</p> <p>Reply: CEMS shall be installed, if required and shall be connected to SPCB and CPCB server.</p> <p>iii. Effective fugitive emission control measures should be imposed in the process, transportation, packing etc.</p> <p>Reply: Dust extraction system shall be installed with the Induction Furnaces. Besides, There will be number of Water Sprinklers at all relevant locations inside the plant area. There will be sufficient Greenbelt (40% of the plant area), which will also help to mitigate fugitive emissions.</p>

Environment	Mitigation Measures
	<p>iv. Transportation of materials by rail/conveyor belt, wherever feasible.</p> <p>Reply: Transportation of raw materials, Products as well as solid waste will be through both Rail & Road. In case of Road transportation, it will be done through covered trucks to avoid pollution emissions. Loading and unloading will be conducted under closed system. There will be no spillage/leakage.</p> <p>v. Encourage use of cleaner fuels (pet coke/furnace oil/LSHS may be avoided).</p> <p>Reply: Only HSD will be used in standby DG Sets which will be used in case of Power failure.</p> <p>vi. Best available technology may be used. For example, usage of EAF/SAF/IF in place of sub-critical technology.</p> <p>Reply: Best available technology shall be adopted. Induction Furnace along with Rolling Mill shall be installed in the proposed project.</p> <p>vii. Increase of green belt cover by 40% of the total land area beyond the permissible requirement of 33%, wherever feasible.</p> <p>Reply: The Company has allocated 40% (3.96 Acres) of the total land area (9.9 Acres) for the purpose of Greenbelt development inside the plant.</p> <p>viii. Stipulation of green belt outside the project premises such as avenue plantation, plantation in vacant areas, social forestry etc.</p> <p>Reply: Plants will be planted outside the project premises in consultation with the local authority.</p> <p>ix. Assessment of carrying capacity of transportation load on roads inside the industrial premises. If the roads required to be widened, shall be prescribed as a condition.</p> <p>Reply: There will be a movement of small numbers of vehicles (heavy & medium). This small traffic load will have an insignificant effect on roads both inside & outside the plant as per IRC Guidelines.</p>
Water	<p><u>Stipulation of conditions such as:</u></p> <p>i Reuse/recycle of treated wastewater, wherever feasible.</p> <p>Reply: The wastewater after proper treatment will be used for non-critical purposes inside the plant premises.</p> <p>ii Continuous monitoring of effluent quality/quantity in large and medium red category</p>

Environment	Mitigation Measures
	<p>industries (water polluting)</p> <p>Reply: Zero Liquid Discharge concept shall be adopted. There will not be any waste water discharge outside the plant boundary.</p> <p>iii A detailed water harvesting plan may be submitted by the project proponent.</p> <p>Reply: The detail water harvesting plant will be submitted in the EIA-EMP Report</p> <p>iv Zero liquid discharge wherever techno economically feasible.</p> <p>Reply: Zero Liquid Discharge concept shall be adopted.</p> <p>v In case, domestic waste water generation is more than 10 KLD, the industry may install STP.</p> <p>Reply: Domestic waste water generation will be treated in the septic tank soak pit system.</p>
Land	<p><u>Stipulation of conditions such as:</u></p> <p>i Increase of green belt cover by 40% of the total land area beyond the permissible requirement of 33%, wherever feasible for new projects.</p> <p>Reply: The Company has allocated 40% (3.96 Acres) of the total land area (9.9 Acres) for the purpose of Greenbelt development inside the plant.</p> <p>ii Stipulation of green belt outside the project premises such as avenue plantation, plantation in vacant areas, social forestry etc.</p> <p>Reply: Plants will be planted outside the project premises in consultation with the local authority.</p> <p>iii Dumping of waste (fly ash, slag, red mud, etc) may be permitted only at designated locations approved by SPCBs / PCCs.</p> <p>Reply: The Induction Furnace Slag will be used for Land filling / Road construction purpose after metal recovery.</p> <p>iv More stringent norms for management of hazardous waste. The waste generated should be preferably utilized in co-processing.</p> <p>Reply: Negligible quantity of used / spent oil will be generated from the project which will be disposed through authorized recyclers.</p>
Other	<p>i Monitoring of compliance of EC conditions may be submitted with third party audit</p>

Environment	Mitigation Measures
Condition (Additional) :	<p>every year.</p> <p>Reply: Compliance monitoring of EC conditions will be submitted with third party audit every year.</p> <p>ii The % of the CER may be at least 1.5 times the slabs given in the OM dated 01.05.2018 for SPA and 2 times for CPA in case of Environmental clearance.</p> <p>Reply: The CER shall be undertaken as per MoEF&CC OM dated 30.09.2020.</p>

Written representations:

24.10.14 During the meeting, based on the deliberations made by the EAC, the project proponent vide letter dated 01.03.2023 through email dated 01.03.2023 submitted the following information:

Sl. No.	Points raised by EAC	Submission of PP
1.	Revised Plant Layout	As advised, PP will revise the Plant Layout by properly showing the roads along with the path circulation inside the plant area. Apart from this, PP will explicitly show the Contouring along with the Drainage Pattern particularly along the road network inside the plant area, in the Contour Map.
2.	Undertaking pertaining to project not under violation	The plant was implemented after getting NOC dated 01.08.2006 from WBPCB as per the prevailing notification (published in the year 1994) of MoEF&CC, as per which No Environmental Clearance (EC) was required for this project. This project does not come under the purview of any violation cases.
3.	Undertaking for Greenbelt in 40% of Project area	As suggested, PP will develop total 40% greenbelt of the total plant area, out of which 33% shall be completed in the upcoming Monsoon Season.
4.	Action plan for the different criteria for SPA as per MoEF&CC OM dated 31st October, 2019	As advised, the action plan for the different criteria for SPA area as per MoEF&CC OM dated 31 st October, 2019 has been submitted and incorporated at para 24.10.13 above.

Deliberation by the Committee

24.10.15 The Committee noted the following:

- i. The instant proposal is for expansion of existing steel plant for production of 0.1485 MTPA TMT Bars, Wire Rod, Structure.

- ii. The proposal falls under Category “B” of the schedule of the EIA Notification, 2006, however, general condition is applicable proposed project site falls within 5 km from the boundary of Durgapur Municipal Area i.e Severely Polluted Area and therefore the proposal being appraised at Central Level as Category ‘A’.
- iii. The existing project was accorded Consent to Establish vide Memo No. 516 - 2N - 136 / 2006 (E) dated 01.08.2006 for installation of Induction Furnaces (2x7 T) for production of 4117 TPM M.S Ingots (Project Cost: Rs. 6.87 Crores). The EAC deliberated and is of the view that the plant was implemented after getting NOC from WBPCB and there was no requirement of Environmental Clearance (EC) for this project under the provisions of EIA Notification, 1994.
- iv. Total project area is 4.0 ha which is private land and under the possession of the company. Proposed replacement and expansion project is proposed to be installed on the available land, within the existing plant premises.
- v. River Damodar is passing at a distance of about 6.0 km in south direction w.r.t the project site in the study area.
- vi. The total water requirement after proposed expansion project will be 130 m³/day, which is proposed to be obtained from the ground water.
- vii. The Committee deliberated upon the written submission of the Project Proponent and found it satisfactory.
- viii. The PP has submitted the Action plan for the different criteria for SPA as per MoEF&CC OM dated 31st October, 2019 as below:

Environment	Mitigation Measures
Air	<p><u>Stipulation of conditions such as:</u></p> <p>i. Stack emission levels should be stringent than the existing standards in terms of the identified critical pollutants.</p> <p>Reply: Sufficient APC measures like Bag Filters including a stack of proper height will be installed to control the stack emission levels so that ultimately the levels are well below the existing standard for PM.</p> <p>ii. CEMS may be installed in all large/medium red category industries (air polluting) and connected to SPCB and CPCB server.</p> <p>Reply: CEMS shall be installed, if required and shall be connected to SPCB and CPCB server.</p> <p>iii. Effective fugitive emission control measures should be imposed in the process, transportation, packing etc.</p> <p>Reply: Dust extraction system shall be installed with the Induction Furnaces. Besides, There will be number of Water Sprinklers at all relevant locations inside the plant area. There will be sufficient Greenbelt (40% of the plant area), which will also help to mitigate fugitive emissions.</p>

Environment	Mitigation Measures
	<p>iv. Transportation of materials by rail/conveyor belt, wherever feasible.</p> <p>Reply: Transportation of raw materials, Products as well as solid waste will be through both Rail & Road. In case of Road transportation, it will be done through covered trucks to avoid pollution emissions. Loading and unloading will be conducted under closed system. There will be no spillage/leakage.</p> <p>v. Encourage use of cleaner fuels (pet coke/furnace oil/LSHS may be avoided).</p> <p>Reply: Only HSD will be used in standby DG Sets which will be used in case of Power failure.</p> <p>vi. Best available technology may be used. For example, usage of EAF/SAF/IF in place of sub-critical technology.</p> <p>Reply: Best available technology shall be adopted. Induction Furnace along with Rolling Mill shall be installed in the proposed project.</p> <p>vii. Increase of green belt cover by 40% of the total land area beyond the permissible requirement of 33%, wherever feasible.</p> <p>Reply: The Company has allocated 40% (3.96 Acres) of the total land area (9.9 Acres) for the purpose of Greenbelt development inside the plant.</p> <p>viii. Stipulation of green belt outside the project premises such as avenue plantation, plantation in vacant areas, social forestry etc.</p> <p>Reply: Plants will be planted outside the project premises in consultation with the local authority.</p> <p>ix. Assessment of carrying capacity of transportation load on roads inside the industrial premises. If the roads required to be widened, shall be prescribed as a condition.</p> <p>Reply: There will be a movement of small numbers of vehicles (heavy & medium). This small traffic load will have an insignificant effect on roads both inside & outside the plant as per IRC Guidelines.</p>
Water	<p><u>Stipulation of conditions such as:</u></p> <p>i Reuse/recycle of treated wastewater, wherever feasible.</p> <p>Reply: The wastewater after proper treatment will be used for non-critical purposes inside the plant premises.</p> <p>ii Continuous monitoring of effluent quality/quantity in large and medium red</p>

Environment	Mitigation Measures
	<p>category industries (water polluting)</p> <p>Reply: Zero Liquid Discharge concept shall be adopted. There will not be any waste water discharge outside the plant boundary.</p> <p>iii A detailed water harvesting plan may be submitted by the project proponent.</p> <p>Reply: The detail water harvesting plant will be submitted in the EIA-EMP Report</p> <p>iv Zero liquid discharge wherever techno economically feasible.</p> <p>Reply: Zero Liquid Discharge concept shall be adopted.</p> <p>v In case, domestic waste water generation is more than 10 KLD, the industry may install STP.</p> <p>Reply: Domestic waste water generation will be treated in the septic tank soak pit system.</p>
Land	<p><u>Stipulation of conditions such as:</u></p> <p>i Increase of green belt cover by 40% of the total land area beyond the permissible requirement of 33%, wherever feasible for new projects.</p> <p>Reply: The Company has allocated 40% (3.96 Acres) of the total land area (9.9 Acres) for the purpose of Greenbelt development inside the plant.</p> <p>ii Stipulation of green belt outside the project premises such as avenue plantation, plantation in vacant areas, social forestry etc.</p> <p>Reply: Plants will be planted outside the project premises in consultation with the local authority.</p> <p>iii Dumping of waste (fly ash, slag, red mud, etc) may be permitted only at designated locations approved by SPCBs / PCCs.</p> <p>Reply: The Induction Furnace Slag will be used for Land filling / Road construction purpose after metal recovery.</p> <p>iv More stringent norms for management of hazardous waste. The waste generated should be preferably utilized in co-processing.</p> <p>Reply: Negligible quantity of used / spent oil will be generated from the project which will be disposed through authorized recyclers.</p>
Other Condition	<p>i Monitoring of compliance of EC conditions may be submitted with third party audit every year.</p>

Environment	Mitigation Measures
(Additional) :	<p>Reply: Compliance monitoring of EC conditions will be submitted with third party audit every year.</p> <p>ii The % of the CER may be at least 1.5 times the slabs given in the OM dated 01.05.2018 for SPA and 2 times for CPA in case of Environmental clearance.</p> <p>Reply: The CER shall be undertaken as per MoEF&CC OM dated 30.09.2020.</p>

Recommendations of the Committee

24.10.16 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) Water required for the proposed project will be 130 m³/day, which is proposed to be obtained from the ground water. PP shall explore the possibility of shifting to alternate source of water to reduce dependency on groundwater.
- (ii) In pursuance to MoEF&CC OMs dated 31st October, 2019 & 30th December, 2019 issued in compliance of the order of Hon'ble NGT in OA No. 1038/2018 dated 19th August, 2019, the compliance of all the conditions applicable to CEPI shall be included in the EIA/EMP report. Greenbelt shall be planned in 40% of the project area. As committed, 33% shall be completed in the upcoming Monsoon Season of 2023. Allocation for socio economic development of nearby villages shall be 1.5 times of the normal calculated amount.
- (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) 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.
- (ix) 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.

- (x) 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.
- (xi) 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.
- (xii) 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.
- (xiii) Action plan for the stock piles with impervious floor, provision of garland drains and catch pits to trap run off material shall be submitted.
- (xiv) Action plan to limit the dust emission from all the stacks below 30 mg/Nm³ shall be furnished.
- (xv) A Plan of Action for disposal of e-waste must be drawn up and implemented.
- (xvi) PP shall explore the possibility of plastic waste utilization in the Plant/Unit process.
- (xvii) The PP to prepare 3 separate drawings. In drg 1 PP to show complete layout, Road network, Parking, Plant construction along with area statement, proper indexing with colour codes etc. In drag 2 PP to show road networking with existing and proposed green belt with area calculations with its % against plot area. In drg 3 PP to prepare contour drawing with road networking, drainage disposal system, RWH system with drawings, designs and calculations along with indexing and colour code for drainage network etc.
- (xviii) Action Plan for fire fighting system including provision for flame detectors, temperature actuated heat detectors with alarms, automatic sprinkler system, location of fire water tanks & capacity, separate power system for fire fighting, details of qualified and trained fire personnel & their job specifications, nearest fire station & time required to reach the proposed site shall be submitted.

Agenda No. 24.11

24.11 Expansion for production of 150,000 TPA of Crude Steel by M/s Satyam Smelters Private Limited (SSPL), located at Plot No. 111-143; 152-160; 354/2054; 153/2068 Ikrah, Jamuria Industrial Area, Dist-Paschim Bardhaman, West Bengal – Consideration of TOR.

[Proposal No. IA/WB/IND1/410587/2022; File No. IA-J-11011/405/2021-IA-II(IND-I)]

24.11.1 Consideration of the proposal was **deferred** as the Project Proponent did not attend the meeting. The Member Secretary appraised the Committee that the Consultant of the instant proposal M/s Greencindia Consulting Private Limited vide email dated 24.02.2023 informed that they will not be able to attend the meeting as they are in the process of the extension of their accreditation which is expired on 22nd February, 2023. Taking into consideration the communication from the Consultant, EAC if of the view that this is very unprofessional on the part of PP as there is no communication from PP and furthermore since this is a ToR proposal, PP had an option presenting the case on their own. PP/Consultant have simply wasted the time of the EAC and further requested the Ministry to place the proposal in the EAC meeting only after receiving further request/communication from project proponent.

Agenda No. 24.12

24.12 Proposed Standalone Grinding Unit of 72,000 TPA White Cement by M/s NGS White Cements AP Private Limited, located at Peddaveedu Village, Mattam Palle Mandal, Suryapet District, Telangana– Consideration of TOR.

[Proposal No. IA/TG/IND1/416448/2023; File No. IA-J-11011/48/2023-IA-II(IND-I)]

24.12.1 Consideration of the proposal was **deferred** as the Project Proponent did not attend the meeting. The Member Secretary appraised the Committee that M/s NGS White Cements AP Private Limited vide letter dated 28.02.2023 sent through email dated 28.02.2023 informed that they will not be able to attend the meeting due to some unavoidable circumstances. Taking into consideration the communication from the PP, EAC requested the Ministry to place the proposal in the EAC meeting only after receiving further request/communication from project proponent.

The meeting ended with thanks to the Chair.

Standard ToR in line with Appendix III of the EIA, 2006.
applicable to Proposals Under Industry-1 Sector

Preliminary requirements:

- i. EIA/EMP report cover page shall consist of project title with location, applicable schedule of the EIA Notification, 2006, ToR letter No. with date, study period along with EIA consultant & laboratory details with QCI/NABET/NABL accreditation certificate detail.
- ii. Besides, following points shall be compiled as per QCI/NABET norms:
 - a. Disclaimer by the EIA consultant.
 - b. Declaration by the Functional Area Experts contributed to the EIA study and declaration by the head of the accredited consultant organization/authorized person.
 - c. Undertaking by the project proponent owning the contents (information and data) of the EIA/EMP report.
 - d. Undertaking by the EIA consultant regarding compliance of ToR issued by MoEF&CC.
 - e. Consultant shall submit the Plagiarism Certificate for the EIA/EMP Report.

Structure of EIA/EMP report**Executive Summary**

- i. Table of Contents of the EIA report including list of tables/figures/annexures/abbreviations/symbols/notations.
- ii. Point wise compliance to the ToR issued by MoEF&CC.
- iii. Executive Summary
 - I. Introduction
 - i. Name of the project along with applicable schedule and category as per EIA, 2006.
 - ii. Location and accessibility
 - II. Project description
 - i. Resource requirements (Land; water; fuel; manpower)
 - ii. Operational activity
 - iii. Key pollution concerns
 - III. Baseline Environment Studies
 - i. Ambient air quality
 - ii. Ambient Noise quality
 - iii. Traffic study
 - iv. Surface water quality
 - v. Ground water quality
 - vi. Soil quality
 - vii. Biological Environment
 - viii. Land use
 - ix. Socio-economic environment
 - IV. Anticipated impacts
 - i. Impact on ambient air quality

- ii. Impact on ambient noise quality
 - iii. Impact on road and traffic
 - iv. Impact on surface water resource and quality
 - v. Impact on ground water resource and quality
 - vi. Impact on terrestrial and aquatic habitat
 - vii. Impact on socio-economic environment
- V. Alternative analysis
- VI. Environmental Monitoring program
- i. Ambient air, noise, water and soil quality
 - ii. Emission and discharge from the plant
 - iii. Green belt
 - iv. Social parameters
- VII. Additional studies
- i. Risk assessment
 - ii. Public consultation
 - iii. Action plan to address the issues raised during public consultation as per MoEF&CC O.M. dated 30/09/2020
- VIII. Project benefits
- IX. Environment management plan
- i. Air quality management plan
 - ii. Noise quality management plan
 - iii. Solid and hazardous waste management plan
 - iv. Effluent management plan
 - v. Storm water management plan
 - vi. Occupational health and safety management plan
 - vii. Green belt development plan
 - viii. Socio-economic management plan
 - ix. Project cost and EMP implementation budget.

EIA/EMP Report

1. Introduction

- i. Background about the project
- ii. Need of the project
- iii. Purpose of the EIA study
- iv. Scope of the EIA study

2. Project description

A. Site Details

- i. Location of the project site covering village, Taluka/Tehsil, District and State.
- ii. Site accessibility
- iii. A digital toposheet in pdf or shape file compatible to google earth of the study area of radius of 10km and site location preferably on 1:50,000 scale. (including all eco-sensitive areas and environmentally sensitive places).
- iv. Latest High-resolution satellite image data having 1 m - 5 m spatial resolution like quickbird, Ikonos, IRS P-6 pan sharpened etc., along with delineation of plant

boundary co-ordinates. Area must include at least 100 m all around the project location.

- v. Environment settings of the site and its surrounding along with map.
- vi. A list of major industries with name, products and distance from plant site within study area (10km radius) and the location of the industries shall be depicted in the study area map.
- vii. In case if the project site is in vicinity of the water body, 50 meters from the edge of the water body towards the site shall be treated as no development/construction zone. If it's near the wetland, Guidelines for implementing Wetlands (Conservation and Management) Rules, 2017 may be followed.
- viii. In case if the project site is in vicinity of the river, the industry shall not be located within the river flood plain corresponding to one in 25 years flood, as certified by concerned District Magistrate/Executive Engineer from State Water Resources Department (or) any other officer authorized by the State Government for this purpose as per the provisions contained in the MoEF&CC Office Memorandum dated 14/02/2022.
- ix. In case of canal/ nala/ seasonal drain and any other water body passing through project site, the PP shall submit the suitable steps /conservation plan/mitigation measures along with contouring, Run -off calculations, disposal etc. A robust and full proof Drainage Conservation scheme to protect the natural drainage/water bodies and its flow parameters; along with Soil conservation scheme and multiple Erosion control measures shall be provided in the report.
- x. Type of land, land use of the project site needs to be submitted.
- xi. Status of acquisition of land. If acquisition is not complete, stage of the acquisition process as per the MoEF&CC O.M. dated 7/10/2014 shall be furnished.
- xii. Project proponent shall prepare Engineering layout plan showing all internal roads minimum 6 m width and 9 m turning radius for smooth traffic flow inside including fire tender as per NBC. Road network shall connect all service areas in layout. This drawing shall include area statement showing plot area, area under roads, parking, green belt with calculations and % with respect to plot area of project site and proper indexing. If located within an Industrial area/Estate/Complex, layout of Industrial Area indicating location of unit within the Industrial area/Estate.
- xiii. Project proponent shall submit contour map of project site along with drainage disposal system with calculations and drawings supported with proper indexing including Rain Water Harvesting details with calculations mentioning about GW recharge along with relevant drawing.
- xiv. A detailed report covering all aspects of Fire Safety Management and Fire Emergency Plan shall be submitted.
- xv. Details of drone survey for the site, needs to be included in report and presented before the EAC during appraisal of the project.

B. Forest and wildlife related issues (if applicable):

- i. Status of Forest Clearance for the use of forest land shall be submitted.

- ii. Copy of application submitted for clearance under the Wildlife (Protection) Act, 1972, to the Standing Committee of the National Board for Wildlife if the project site located within notified Eco-Sensitive Zone, 10 km radius of national park/sanctuary wherein final ESZ notification is not in place as per MoEF&CC Office Memorandum dated 8/8/2019.
- iii. The projects to be located within 10 km of the National Parks, Sanctuaries, Biosphere Reserves, Migratory Corridors of Wild Animals, Eco-sensitive Zone and Eco-sensitive areas, the project proponent shall submit the map duly authenticated by Divisional Forest Officer showing the distance between the project site and the said areas.
- iv. Wildlife Conservation Plan duly authenticated by the Competent Authority of the State Government for conservation of Schedule I fauna along with budget and action plan, if any exists in the study area.

C. Salient features of the project

- i. Products with capacities in **Tons per Annum** for the proposed project.
- ii. If expansion project, status of implementation of existing project, details of existing/proposed products with production capacities in Tons per Annum.
- iii. Site preparatory activities.
- iv. List of raw materials required and their source along with mode of transportation.
- v. Other than raw materials, other chemicals and materials required with quantities and storage capacities.
- vi. Manufacturing process details along with process flow diagram of proposed units.
- vii. Consolidated materials and energy balance for the project.
- viii. Total requirement of surface/ ground water and power with their respective sources, status of approval.
- ix. Water balance diagram
- x. Details of Emission, effluents, hazardous waste generation and mode of disposal during construction as well as operation phase.
- xi. Man-power requirement.
- xii. Cost of project and scheduled time of completion.
- xiii. In case of expansion projects, project proponent shall submit structural stability certificate showing whether existing structure withstand for proposed expansion activity.
- xiv. Brief on present status of compliance (Expansion/modernization proposals)
 - a. Cumulative Environment Impact Assessment for the existing as well as the proposed expansion/modernization shall be carried out.
 - b. In case of ground water drawl for the existing unit, action plan for phasing out of ground water abstraction in next two years except for domestic purposes and shall switch over to 100 % use of surface water from nearby source.
 - c. Copy of all the Environment Clearance(s) including Amendments/validity of extension/transfer of EC, there to obtained for the project from MoEF&CC/SEIAA shall be attached as Annexures. A Certified Compliance Report (CCR) of the Integrated Regional Office of the Ministry of Environment, Forest and Climate Change/ or concerned authority as per OM No. IA3-22/10/2022-IA.III [E 1772581], dated 8th June, 2022 on the status of

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

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

3. Description of the Environment

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

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

Attributes	Sampling		Remarks
	Network	Frequency	
area			<p>parameters.</p> <ul style="list-style-type: none"> The monitoring stations shall be based on the NAAQM standards as per GSR 826(E) dated 16/11/2009 and take into account the predominant wind direction, population zone and sensitive receptors including reserved forests, Raw data of all AAQ measurement for 12 weeks of all stations as per frequency given in the NAAQM Notification of 16/11/2009 along with min., max., average and 98% values for each of the AAQ parameters from data of all AAQ stations should be provided as an annexure to the EIA Report.
B. Noise			
<ul style="list-style-type: none"> Hourly equivalent noise levels 	At least 8-12 locations	As per CPCB norms	-
C. Water			
<p>Parameters for water quality</p> <ul style="list-style-type: none"> pH, temp, turbidity, magnesium hardness, total alkalinity, chloride, sulphate, nitrate, fluoride, sodium, potassium, salinity Total nitrogen, total phosphorus, DO, 	<p>Samples for water quality should be collected and analyzed as per:</p> <ul style="list-style-type: none"> IS: 2488 (Part 1-5) methods for sampling and testing of Industrial effluents Standard methods for examination of water and wastewater analysis published by American Public Health Association. 		

Attributes	Sampling		Remarks
	Network	Frequency	
BOD, COD, Phenol <ul style="list-style-type: none"> • Heavy metals • Total coliforms, faecal coliforms • Phyto-plankton • Zoo-plankton • Microalgae/microalgal bloom 			
For River Bodies <ul style="list-style-type: none"> • Total Carbon • pH • Dissolved Oxygen • Biological Oxygen Demand • Free NH₄ • Boron • Sodium Absorption Ratio • Electrical Conductivity • TDS 	<ul style="list-style-type: none"> • Surface water quality of the nearest River (60m upstream and downstream) and other surface water bodies 	<ul style="list-style-type: none"> • Yield of water sources to be measured during critical season • Standard methodology for collection of surface water (BIS standards) 	
For Ground Water	<ul style="list-style-type: none"> • Ground water monitoring data should be collected at minimum of 8 locations (from existing wells /tube wells/existing current records) from the study area and shall be included. 		
D. Traffic Study			
<ul style="list-style-type: none"> • Type of vehicles • Frequency of vehicles for transportation of materials • Additional traffic due to proposed project • Parking arrangement 	-		
E. Land Environment			
Soil <ul style="list-style-type: none"> • Particle size distribution • Texture • pH • Electrical conductivity • Cation exchange 	Soil samples be collected as per BIS specifications		

Attributes	Sampling		Remarks
	Network	Frequency	
capacity <ul style="list-style-type: none"> • Alkali metals • Sodium Absorption Ratio (SAR) • Permeability • Water holding capacity • Porosity 			
Land use/Landscape <ul style="list-style-type: none"> • Location code • Total project area • Topography • Drainage (natural) • Cultivated, forest, plantations, water bodies, roads and settlements 	-		
E. Biological Environment			
Aquatic <ul style="list-style-type: none"> • Primary productivity • Aquatic weeds • Enumeration of phyto plankton, zoo plankton and benthos • Fisheries • Diversity indices • Trophic levels • Rare and endangered species • Marine Parks/ Sanctuaries/ closed areas /coastal regulation zone (CRZ) Terrestrial <ul style="list-style-type: none"> • Vegetation-species list, economic importance, forest produce, medicinal value • Importance value index (IVI) of trees • Fauna • Avi fauna 			<ul style="list-style-type: none"> • Detailed description of flora and fauna (terrestrial and aquatic) existing in the study area shall be given with special reference to rare, endemic and endangered species. Indicator species which indicate ecological and environment degradation should be identified and included to clearly state whether the proposed project would result in to any adverse effect on any species. • Samples to collect from upstream and downstream of discharge point, nearby tributaries at downstream, and also from dug wells close to activity site. • For forest studies, direction of wind should be considered while selecting forests. • Secondary data to collect from Government offices, NGOs, published literature.

Attributes	Sampling		Remarks
	Network	Frequency	
<ul style="list-style-type: none"> • Rare and endangered species • Sanctuaries / National park / Biosphere reserve • Migratory routes 			
F. Socio-economic			
<ul style="list-style-type: none"> • Demographic structure • Infrastructure resource base • Economic resource base • Health status: Morbidity pattern • Cultural and aesthetic attributes • Education 			<ul style="list-style-type: none"> • Socio-economic survey is based on proportionate, stratified and random sampling method. • Primary data collection through questionnaire • Secondary data from census records, statistical hard books, topo sheets, health records and relevant official records available with Govt. agencies

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

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

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

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

Activity	Environment	Ecological	Socio-economic
Construction phase			
Operation phase			

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

- Construction phase
- 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 N o	Physical activity and action plan		Year of implementation (Budget in INR)			Total Expenditure (Rs. in Crores)
	Name of the Activity	Physical Targets	1 st	2 nd	3 rd	

viii. Risk assessment

- Methodology
- Hazard identification
- Frequency analysis
- Consequence analysis
- Risk assessment outcome

ix. Emergency response and preparedness plan

8. Project Benefits

- i. Environment benefits
- ii. Social infrastructure
- iii. Employment and business opportunity
- iv. Other tangible benefits

9. Environment Cost Benefit Analysis

- i. Net present value
- ii. Internal rate of return
- iii. Benefit cost ratio
- iv. Cost effectiveness analysis

10. Environment Management Plan (Construction and Operation phase)

- i. Air quality management plan
- ii. Noise quality management plan
- iii. Action plan for hazardous waste management
- iv. Action plan for solid waste management
- v. Action plan for e-waste management.

- vi. Action plan for plastic waste management.
- vii. Action plan for construction and demolition waste management.
- viii. Effluent management plan
- ix. Storm water management plan
- x. Rain water harvesting plan
- xi. Plan for maximum usage of waste water/treated water in the Unit
- xii. Occupational health and safety management plan
- xiii. Green belt development plan: An action plan for Green Belt development consisting of 3 tiers of plantations of native species all along the periphery of the project of adequate width shall be raised in 33% of total area with a tree density shall not less than 2500 per ha within a time frame of one year shall be submitted. Survival rate of green belt shall be monitored on periodic basis to ensure that survival rate not be less than 80 %.
- xiv. Socio-economic management plan
- xv. Wildlife conservation plan (In case of presence of schedule I species)
- xvi. Total capital cost and recurring cost/annum for environment pollution control measures shall be included.

11. Conclusion of the EIA study

12. In addition to the above, any litigation pending against the project and/or any direction/order passed by any Court of Law against the project, if so, details thereof shall also be included. Has the unit received any notice under the Section 5 of Environment (Protection) Act, 1986 or relevant Sections of Air and Water Acts? If so, details thereof and compliance/ATR to the notice(s) and present status of the case.

Standard ToRs FOR CEMENT INDUSTRY [3(b)]

1. Limestone and coal linkage documents along with the status of environment clearance of limestone and coal mines.
2. Quantum of production of coal and limestone from coal & limestone mines and the projects they cater to;
3. Present land use shall be prepared based on satellite imagery. High-resolution satellite image data having 1m-5m spatial resolution like quickbird, Ikonos, IRS P-6 pan sharpened etc. for the 10 Km radius area from proposed site. The same shall be used for land used/land-cover mapping of the area.
4. If the raw materials used have trace elements, an environment management plan shall also be included.
5. Plan for the implementation of the recommendations made for the cement plants in the Corporate Responsibility for Environmental Protection (CREP) guidelines shall be prepared.
6. Energy consumption per ton of clinker and cement grinding
7. Provision of waste heat recovery boiler
8. Arrangement for co-processing of hazardous waste in cement plant.
9. Provision of Alternate fuels.
10. Details of Implementation of Fly Ash Management Rules
11. Emission/Effluent norms as per GSR 496 (E) dated 9/5/2016 [EPA Rules 1986].
12. Action plan for the stock piles with impervious floor, provision of garland drains and catch pits to trap run off material shall be submitted.
13. Action plan to limit the particulate matter emission from all the stacks below 30 mg/Nm³ shall be furnished.
14. PP shall explore the possibility of plastic waste utilization in the Plant/Unit process.
15. Action plan for 100 % solid waste utilization shall be submitted.
16. PM (PM₁₀ and P_{2.5}) present in the ambient air must be analysed for source analysis – natural dust/RSPM generated from plant operations (trace elements) of PM₁₀ to be carried over.

Standard ToRs FOR INTEGRATED STEEL PLANT [3(a)]

1. Iron ore/coal linkage documents along with the status of environment clearance of iron ore and coal mines.
2. Quantum of production of coal and iron ore from coal & iron ore mines and the projects they cater to. Mode of transportation to the plant and its impact.
3. For Large ISPs, a 3-D view i.e. DEM (Digital Elevation Model) for the area in 10 km radius from the proposal site. MRL details of project site and RL of nearby sources of water shall be indicated.
4. Recent land-use map based on satellite imagery. High-resolution satellite image data having 1m-5m spatial resolution like quickbird, Ikonos, IRS P-6 pan sharpened etc. for the 10 Km radius area from proposed site. The same shall be used for land used/land-cover mapping of the area.

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

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

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

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

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

1. A note on pulp washing system capable of handling wood pulp shall be included.
2. Manufacturing process details for the existing and proposed plant shall be included. Chapter on Pulping & Bleaching shall include: no black liquor spillage in the area of pulp mill; no use of elemental chlorine for bleaching in mill; installation of hypo preparation plant; no use of potcher washing and use of counter current or horizontal belt washers. Chapter on Chemical Recovery shall include: no spillage of foam in chemical recovery plant, no discharge of foul condensate generated from MEE directly to ETP; control of suspended particulate matter emissions from the stack of fluidized bed recovery boiler and ESP in lime kiln

3. Studies shall be conducted and a chapter shall be included to show that Soda pulping process can be employed for Eucalyptus/Casuarina to produce low kappa (bleachable) grade of pulp.
4. Commitment that only elemental Chlorine-free technology will be used for the manufacture of paper and existing plant without chemical recovery plant will be closed within 2 years of issue of environment clearance.
5. A commitment that no extra chlorine base bleaching chemicals (more than being used now) will be employed and AOx will remain within limits as per CREP for used based mills. Plan for reduction of water consumption.
6. Undertaking to comply with the norms stipulated in the S.O. 3187 (E) dated 7/10/2016 for the projects located in Ganga basin.
7. Action plan for the stock piles with impervious floor, provision of garland drains and catch pits to trap run off material shall be submitted.
8. Action plan to limit the particulate matter emission from all the stacks below 30 mg/Nm³ shall be furnished.
9. Action plan for 100 % waste utilization shall be submitted.

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

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

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

1. Justification for selecting recovery/non-recovery (beehive) type batteries with the proposed unit size.
2. Details of proposed layout clearly demarcating various facilities such as coal storages, coke making, by-product recovery area, etc within the plant.
3. Details of coke oven plant (recovery/non-recovery type) including coal handling, coke oven battery operations, coke handling and preparation.

4. Scheme for coal changing, charging emission centre, Coke quenching technology, pushing emission control.
5. Scheme for coke oven effluent treatment plant details including scheme for meeting cyanide standard.
6. Emission/effluent norms as per G.S.R 894 (E) dated 4/12/2019. Provision of CDQ in case of coke oven plant of 0.8 MTPA and above.
7. Action plan to limit the particulate matter emission from all the stacks below 30 mg/Nm³ shall be furnished.
8. Action plan for 100 % solid waste utilization shall be submitted.
9. Action plan for the stock piles with impervious floor, provision of garland drains and catch pits to trap run off material shall be submitted.

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

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

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

1. Details regarding pollution control measures to be adopted in the mineral handling area, loading and unloading areas including all transfer points shall be submitted.

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

Executive Summary

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

- i. Project name and location (Village, Dist, State, Industrial Estate (if applicable))
- ii. Products and capacities. If expansion proposal, then existing products with capacities and reference to earlier EC.
- iii. Requirement of land, raw material, water, power, fuel, with source of supply (Quantitative)
- iv. Process description in brief, specifically indicating the gaseous emission, liquid effluent and solid and hazardous wastes. Materials balance shall be presented.
- v. Measures for mitigating the impact on the environment and mode of discharge or disposal.
- vi. Capital cost of the project, estimated time of completion
- vii. Site selected for the project – Nature of land – Agricultural (single/double crop), barren, Govt/private land, status of its acquisition, nearby (in 2/3 km.) water body, population, with in 10km other industries, forest, eco/sensitive zones, accessibility, (note – in case of industrial estate this information may not be necessary)
- viii. Baseline environmental data – air quality, surface and ground water quality, soil characteristic, flora and fauna, socio/economic condition of the nearby population
- ix. Identification of hazards in handling, processing and storage of hazardous material and safety system provided to mitigate the risk.
- x. Likely impact of the project on air, water, land, flora/fauna and nearby population
- xi. Emergency preparedness plan in case of natural or in plant emergencies
- xii. Issues raised during public hearing (if applicable) and response given
- xiii. CSR plan with proposed expenditure.

- xiv. Occupational Health Measures
- xv. Post project monitoring plan

ANNEXURE-3

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

S. No.	Name	Position	28.02.2023	01.03.2023
1.	Shri Rajive Kumar	Chairman	<i>Present</i>	<i>Present</i>
2.	Dr. Dipankar Shome	Vice Chairman	<i>Present</i>	<i>Present</i>
3.	Dr. S. Ranganathan	Member	<i>Present</i>	<i>Present</i>
4.	Dr. Ranjit Prasad	Member	<i>Present</i>	<i>Present</i>
5.	Dr. S. K. Singh	Member	<i>Present</i>	<i>Present</i>
6.	Dr. Tejaswini Ananthkumar	Member	<i>Present</i>	<i>Present</i>
7.	Dr. Hemant Sahasrabuddhe	Member	<i>Present</i>	<i>Present</i>
8.	Dr. Jai Krishna Pandey	Member	<i>Present</i>	<i>Present</i>
9.	Dr. E V R Raju	Member	<i>Present</i>	<i>Present</i>
10.	Dr. B. N. Mohapatra, DG, (Representatives of NCCBM)	Member	<i>Absent</i>	<i>Present</i>
11.	Shri Nazimuddin, Scientist 'F' (Representative of CPCB)	Member	<i>Present</i>	<i>Present</i>
12.	Dr. S. Raghavan, Scientist 'D' (Representative of National Institute of Occupational Health (NIOH))	Member	<i>Present</i>	<i>Present</i>
13.	Dr. Sanjay Bist, Scientist 'E' (Representative of Indian Meteorological Department)	Member	<i>Present</i>	<i>Present</i>
14.	Dr. R.B. Lal, Scientist F, MoEFCC	Member Secretary	<i>Present</i>	<i>Present</i>
MoEFCC				
15.	Dr R P Rastogi	Scientist C	<i>Present</i>	<i>Present</i>
16.	Dr Sandeepan BS	Scientist B	<i>Present</i>	<i>Present</i>

Approval of EAC Chairman

Email

Additional Director MoEFCC Dr R B LAL

Re: Approval of Chairman for the Draft minutes of the 24th EAC Meeting held on February 28 & March 1, 2023-Regarding

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

Tue, Mar 07, 2023 10:35
AM

Subject : Re: Approval of Chairman for the Draft
minutes of the 24th EAC Meeting held
on February 28 & March 1, 2023-
Regarding

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

Cc : rajivekumar1983@gmail.com,
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eac industry1
<drjkpandey.eac.industry1@gmail.com
>

Dear Dr. Lal,

The minutes are approved. Kindly do the needful.

Best Wishes
Rajive Kumar
