

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

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**Dated: 18.07.2024**

*Date of Zero Draft MoM sent to EAC:10.07.2024*

*Approval by Chairman: 17.07.2024*

*Uploading on PARIVESH: 18.07.2024*

**MINUTES OF THE 62<sup>ND</sup> EXPERT APPRAISAL COMMITTEE**  
**(INDUSTRY-1 SECTOR) MEETING HELD ON 3<sup>RD</sup> – 5<sup>TH</sup> JULY, 2024**

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

**Time:** 10:30 AM onwards

**DAY-1: JULY 3, 2024 [WEDNESDAY]**

**(i) Opening Remarks by the Chairman, EAC**

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

Shri Rajive Kumar also appreciated the efforts of the Ministry's Team (Industry 1 Sector) for preparation and uploading the Agenda of the EAC meetings and draft record of discussion very scientifically, systematically, transparently and timely on Parivesh Portal. The EAC has also appreciated various decision tools available in Parivesh Portal such as KYA, GIS based DSS, Use of different layers for taking informed decision.

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

Dr. R. B. Lal, Scientist 'F' and 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 60<sup>th</sup> meeting of the EAC for Industry-I sector held on 11<sup>th</sup> - 12<sup>th</sup> June, 2024 and 61<sup>st</sup> meeting of the EAC for Industry-I sector held on 18<sup>th</sup> - 19<sup>th</sup> June, 2024 at MoEF&CC through Video Conferencing Mode.**

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 60<sup>th</sup> meeting of the EAC for Industry-I sector held on 11<sup>th</sup> - 12<sup>th</sup> June, 2024 and 61<sup>st</sup> meeting of the EAC for Industry-I sector held on 18<sup>th</sup> - 19<sup>th</sup> June, 2024 conducted through Video Conferencing Mode, and noted that there is a modification/factual correction, in the minutes of the 60<sup>th</sup> EAC meeting as follows:

**Agenda No. 60.7: Integrated Cement Plant of capacity 3.3 MTPA clinker, 2.8 MTPA cement and 16 MW Waste Heat Recovery System by M/s. Meghatop Cement Private Limited, located at Village Wahiajer Narpuh, Subdivision Khliehriat, district East Jaintia Hills, Meghalaya – Consideration of TOR.**

**[Proposal No. IA/ML/IND1/464398/2024; File no. IA-J-11011/89/2024-IA-II(Ind-I)]**  
**[Consultant: Perfact Enviro Solutions Pvt. Ltd.; Valid upto: 26.11.2025]**

The aforementioned proposal was considered and recommended by EAC in its 60<sup>th</sup> meeting of the held on 11-12<sup>th</sup> June, 2024. PP vide letter dated 27.06.2024 sent through email dated 28.06.2024 requested minor correction in MoM of 60<sup>th</sup> EAC as follows:

<b>S. No</b>	<b>Reference Point no. in MOM</b>	<b>Detail issued in MOM which requires corrigendum</b>	<b>Corrected details</b>	<b>Justification with Reference</b>
1	<b>Para 60.7.4- Environmental site settings</b>  Point no. 3- Existence of habitation & involvement of R&R, if any of section	Wahiajer- 2.40 km	Wahiajer- 4.0 km	This is a typographical error which was mentioned in presentation during the EAC meeting and also submitted in revised brief summary and presentation shared at the time of post submittals. Therefore, PP requests for revision.
2	<b>Para 60.7.13- Deliberations of EAC</b>  Point no. iv			

<b>S. No</b>	<b>Reference Point no. in MOM</b>	<b>Detail issued in MOM which requires corrigendum</b>	<b>Corrected details</b>	<b>Justification with Reference</b>
3	<b>Para 60.7.14- Recommendations of EAC</b>  Point no. ii			
4	<b>Para 60.7.6 – Raw Material requirement</b>  Point no. 1 (Clinker / Limestone)	<b>Source-</b> Captive Mine- Wahiajer limestone deposit, (Near Wahiajer Narpuh village, Khliehriat Jaintia hills)  <b>Transportation - Road</b>	<b>Source-</b> Captive Mine- Wahiajer limestone deposit, (Near Wahiajer Narpuh village, Khliehriat Jaintia hills, capacity- 5.0 MTPA) and 0.35 MTPA from Open market  <b>Transportation- Road/Pipe conveyer</b>	This is a typographical error which was mentioned in presentation during the EAC meeting and also submitted in revised brief summary and presentation shared at the time of post submittals. Therefore, PP requests for revision.

#### **Deliberations by the EAC:**

It was informed to the Committee members that PP has requested modifications in the MoM of 60<sup>th</sup> meeting of the EAC for Industry-I sector held on on 11<sup>th</sup> -12<sup>th</sup> June, 2024 pertaining to proposal agenda no. 60.7 as referred above. It was also conveyed PP has submitted that they submitted the wrong information inadvertently which were included in the meeting minutes.

The EAC deliberated 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, aforementioned details at para 60.7.4, 60.7.13, 60.7.14, 60.7.6 stands modified in the minutes of 60<sup>th</sup> EAC (Industry-1) meeting as detailed above. The other information mentioned will remain the same.

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Details of the proposals considered during the 62<sup>nd</sup> meeting **conducted** through **Hybrid Mode**, deliberations made and the recommendations of the Committee are explained in the respective agenda items as under:

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

#### **Agenda No. 62.1**

**62.1 Proposed Alumina Refinery of 3.0 MTPA along with co-generation power plant of 150MW by M/s Hindalco Industries Limited - Aditya Alumina Refinery Project, located at Kansarigurha village, Kashipur Tehsil, Rayagada District, Odisha- Consideration of Environmental Clearance.**

**[Proposal No.: IA/OR/IND1/460521/2024; File No. IA-J-11011/141/2004-IA-II(IND-I)]**  
**[Consultant: Visiontek Consultancy Services Pvt. Ltd.; Valid upto: 16/12/2024]**

62.1.1 M/s Hindalco Industries Limited has made an application online vide proposal no. IA/OR/IND1/460521/2024 dated 19.06.2024 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 and Non Ferrous) under Category “A” of the schedule of the EIA Notification, 2006 and appraised at Central Level.

62.1.2 Name of the EIA consultant: M/s. Visiontek Consultancy Services Pvt. Ltd. [Certificate / Extension Letter no. NABET/EIA/2021-24/SA 0215; valid upto 16.12.2024].

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

62.1.3 The details of the ToR are furnished as below:

<b>Date of application</b>	<b>Consideration</b>	<b>Details</b>	<b>Date of accord</b>	<b>ToR Validity</b>
29.08.2020	23 <sup>rd</sup> meeting of EAC held on 28-30 <sup>th</sup> September 2020	Terms of Reference	14.12.2020	13.12.2020
16.04.2024	58 <sup>th</sup> meeting of EAC held on 14-15 <sup>th</sup> May 2024	Amendment of Terms of Reference	10.06.2024	

62.1.4 The project of M/s Hindalco Industries Limited - Aditya Alumina Refinery Project, located at Kansarigurha village, Kashipur Tehsil, Rayagada District, Odisha is for setting up of Alumina Refinery of 3.0 MTPA along with co-generation power plant of 150 MW.

62.1.5 The proposal was considered during the 62<sup>nd</sup> meeting of the EAC for Industry-I sector held on 3<sup>rd</sup> – 5<sup>th</sup> July, 2024. The deliberations and recommendations of EAC are as follows:

### **Deliberations by the Committee**

62.1.6 The Committee noted the following:

1. The Project Proponent reported that the total land involved is 859.84 ha, of which 753.26 ha have been acquired. Additionally, an application for the acquisition of 57.69 ha was submitted to IDCO via a letter dated 05.01.2024, and is currently under consideration. The PP also mentioned that an application for the remaining 10.83 ha will be submitted shortly. The EAC discussed this matter and believes that the PP needs to complete the acquisition of all the land, including the conversion of the total proposed land for industrial purposes, and submit credible documents in accordance with the Ministry's Office Memorandum dated 07.10.2014.
2. Further, the EAC observed that out of the total land area of 859.84 ha, 38.062 ha falls under the forest land for which Stage I FC has been obtained vide letter no. 5-ORC568/2023-BHU, dated 29.12.2023. The EAC is of the view that PP shall submit the status of the Stage-II FC along with the supporting documents. The PP need to obtain a NOC from the DFO for cutting of trees if any after proper enumeration and submit the same to the Ministry.
3. The Project Proponent reported that a Rehabilitation and Resettlement (R&R) study was conducted, revealing approximately 141 displaced families in Kansarigurha and Puhundi villages of Rayagada district and 122 displaced families in Biriguda village of Koraput district. The initial R&R study, carried out in 2006-07, was submitted for approval according to the Odisha R&R Policy 2006. The proposal was considered during the 1<sup>st</sup> RPDAC meeting on 14<sup>th</sup> November, 2007, where the R&R plan for 141 displaced families and the construction of a resettlement colony were conditionally recommended. However, no R&R activities were executed due to financial, statutory limitations, and project changes. The PP further reported that the District Collector of Rayagada formed a committee via Letter No. 38/VI-05/2024 dated 12<sup>th</sup> February, 2024, to conduct a re-survey of the affected families for finalizing the list of Displaced Persons in accordance with the Odisha R&R Policy 2006, and to furnish a report promptly. An updated R&R plan will be prepared based on this report and submitted for approval. The EAC discussed the matter and noted the lack of significant progress in addressing R&R issues which is also non-compliance of the ToR condition. The PP is required to obtain necessary permissions, prepare a comprehensive R&R plan along with an appropriate Livelihood Plan in consultation with the State Government, and initiate the R&R process. Updates on this matter needs to be submitted accordingly.
4. The EAC observed that PP has proposed to obtain bauxite (raw material) from the Kodingamali mines located adjacent to the plant site and will be transported through closed conveyor. The EAC believes that the PP needs to conduct a feasibility study for the conveyor belt and submit a detailed plan with timelines for establishing the closed

conveyor belt, if feasible to the project. The PP also needs to submit the MoU made with other organisations for supply of bauxite.

5. The EAC reviewed the drone survey of the project site and the KML file on Google Earth presented by the project proponent, along with the DSS of the project site on PARIVESH and noted that there is a school which is reported to be demolished by the project proponent. Furthermore, the students of the school may be supported with their admission and education in a nearby school. The EAC is of the view that the project proponent needs to prepare a plan and submit an undertaking to ensure that there will be no disruption to the education of these students.
6. The Project proponent informed that they have planned to construct a road between the plant boundary and adjacent Pathagarha Nala in the north of the project site. The EAC is of the view that PP needs to submit a comprehensive Drainage conservation plan, Erosion control plan and Soil conservation plan for Pathagarha Nala and its watershed area. Additionally, the project proponent also needs to submit the NOC from the concerned State Irrigation Department.
7. The project proponent mentioned they are in process for conducting a comprehensive study on the environmental impacts of red mud generated from the Alumina Refinery. EAC is of the view that this study should also include an assessment of the current methods of red mud handling, storage, and disposal, as well as the potential risks to soil, water, and air quality. Based on the findings, the project proponent must develop a detailed Red Mud Management Plan, which outlines strategies for neutralizing the high alkaline environment of the Red mud and minimizing environmental impacts, including but not limited to, secure storage solutions, 100% recycling and reuse options, and remediation measures for any contamination. The Management Plan should also include a monitoring program to regularly assess the effectiveness of these strategies. This plan, along with the results of the study, must be submitted to the Ministry for review of EAC. Similarly, the PP shall consider all the relevant aspects in case of Ash Pond also.
8. The PP shall submit a detailed action plan in accordance to CPCB Guideline for Handling and Management of Red Mud Generated from Alumina Plants, May 2023. The same shall be provided as separate chapter with EIA/EMP Report.
9. The PP shall evaluate the current handling, storage, and disposal practices of red mud, w.r.t. potential leaching of NaOH into the surrounding environment, affecting soil, water, and air quality. Also, PP shall explore the feasibility of recovering NaOH from red mud and quantify the potential recovery rates and its reusability.
10. The PP reported that greenbelt will be developed in 283.75 ha which is about 33% of the total project area. Total no. of 8,34,531 saplings will be planted and nurtured in 283.75 hectares in 3 years. The EAC is of the view that PP shall submit a detailed year-wise plan for developing the greenbelt.
11. The PP submitted that the water requirement for the proposed project is estimated as 20,000 m<sup>3</sup>/day which will be obtained from Pathagarha river. PP has obtained recommendation from IPICOL vide letter dated 26.02.2024. The EAC opined that PP shall

submit the recommendation letter of IPICOL and the status of formal permission letter to be obtained from the Competent Authority.

12. The EAC also noted that the provisions made for meeting water requirement for greenbelt is not satisfactory. PP needs to rework on the water balance to accommodate sufficient quantity of water for greenbelt and submit the revised water balance diagram.
13. Project Proponent reported that 11 Schedule I species were identified in the study area as per the Wildlife Protection (Amendment) Act (WPA) 2022. A Site-Specific Wildlife Conservation Plan, incorporating 4 major Schedule I species as per WPA 1972, has been prepared and approved by the Principal Chief Conservator of Forests (Wildlife) & Chief Wildlife Warden Odisha, as per letter no. 10726/CWLW-FDWC-FD-0048-2022 dated November 25, 2022. The PP also mentioned that every 5 years, the list of flora and fauna will be updated in the Wildlife Conservation Plan, and appropriate amendments will be made to the action plan. The EAC deliberated on this matter and opined that, given the implementation of the WPA 2022, it is imperative to revise the Site-Specific Wildlife Conservation Plan in accordance with the Amendment Act and prepare a revised plan for its approval by the Competent Authority.
14. The Committee deliberated on the baseline data and incremental GLC due to the proposed project and observed that incremental GLC for SO<sub>2</sub> and NO<sub>x</sub> values are abrupt and needs to be rectified. The EAC further advised to submit the raw data collected.
15. The Committee deliberated on the public hearing issues along with action plan submitted by the proponent to address the issues raised during the public hearing and is of the view that the submitted action is not sufficient to address all the issues. The EAC advised PP to revise the action plan as per Ministry's O.M. dated 30.09.2020. Further, PP shall include targets pertaining to skill development, training and development of locals etc. in the action plan.
16. The PP has proposed to withdraw 20,000 m<sup>3</sup>/day from Pathagarha River through a pipeline. The EAC opined that PP shall additionally carry out an internal study to explore the possibility to supply water to the nearby villages.
17. The EAC reviewed the EIA/EMP and noted that PP has proposed the PM emission limit from Calciner as 50 mg/m<sup>3</sup>. However, as per the norms and also ToR condition, PP needs to keep the PM emission limit to 30 mg/m<sup>3</sup>. PP needs to revise the same accordingly.
18. The PP has proposed to establish a Sewage Treatment Plant (STP). The PP is of the view that a detailed plan with timelines needs to be submitted.
19. The EAC deliberated on the EMP budget, including that allocated budget for addressing PH issues as reported in the instant application and is of the view that the submitted budget is not sufficient to address all the Environmental issues effectively due to the proposed project activities and needs to be revised.
20. The PP shall also include in the EIA/EMP Report the management and disposal of E-waste generated during the operations in accordance with the E- Waste (Management) Rules, 2022 and subsequent amendments.

21. The PP reported that they also plan to develop a township within the proposed area. It was clarified that the PP has to add the same in minor activity as defined in the schedule of the EIA Notification, 2006 in their submitted application. This omission should be corrected by selecting the appropriate schedule under minor activity in the application form.
22. The EAC is of the view that there are lot of changes/modifications/additions required in the existing application and submitted documents. In view of above, the EAC opined that PP/Consultant shall apply for EC with the revised EIA/EMP report.
23. The PP may submit a Decarbonisation Roadmap, 100% waste utilisation Plan (based on Circular economy principles), Villages adoption Plan for this specific project.
24. The PP may submit the Mass Balance for the alkali used in the process. Details of plan for lining in the Red Mud pond.
25. **Further, it was informed that the PP vide letter dated 04.07.2024 through email dated 04.07.2024 stated that they want to revise the EC application, EIA/EMP Report along with the documents.**

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

- 62.1.7 In view of the aforementioned **discrepancies and the request of PP dated 4<sup>th</sup> July 2024** to revise the application, the Committee **recommended to return the proposal in its present form** due to the shortcomings mentioned in para above and submit the revised application as per the provisions of EIA Notification, 2006.

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#### **Agenda No. 62.2**

- 62.2 Expansion of production capacity (MS Billets /SS Billets capacity from existing 45,885 TPA to 2,41,500 TPA and Rolling mill capacity from existing 60,000 TPA to 2,27,000 TPA) by M/s Shyam Ferrous Limited, located at Sy. Nos. 67/2 & 68/2 Devarapally (V), Hindupur (M), Sri Satya Sai District, Andhra Pradesh- Consideration of Environmental Clearance.**

**[Proposal No.: IA/AP/IND1/466091/2024; File No. IA-J-11011/634/2009-IA-II(IND-I)]**

**[Consultant: Pridhvi Envirotech (P) Ltd.; Valid upto: 12/05/2026]**

- 62.2.1 M/s. Shyam Ferrous Limited has made an online application vide proposal no IA/AP/IND1/466091/2024 dated 03.06.2024 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 schedule no. S. No. 3(a) Metallurgical Industries (ferrous & non-ferrous), under Category "A" of the schedule of the EIA Notification, 2006 and attracts general condition



due to Interstate Boundary of Andhra Pradesh and Karnataka at a distance of 1.7 KM (S) and therefore appraised at Central Level.

62.2.2 Name of the EIA consultant: M/s. Pridhvi Envirotech (P) Ltd. [List of ACOs with their Certificate/Extension Letter vide letter no. NABET/EIA/23-26/RA 0321; valid up to 12.05.2026; as on June 26, 2024].

**Details submitted by Project proponent**

62.2.3 The details of the ToR are furnished as below:

<b>Date of application</b>	<b>Consideration</b>	<b>Details</b>	<b>Date of accord</b>	<b>ToR Validity</b>
24.02.2022	Standard Terms of Reference	Terms of Reference	26.02.2022	25.02.2026
27.04.2023	30 <sup>th</sup> meeting of EAC held on 15.05.2023	Amendment in ToR	06.07.2023	

62.2.4 The project of M/s. Shyam Ferrous Limited located in Sy. Nos. 67/2 & 68/2 Devarapally Village, Hindupur Mandal (Tehsil), Sri Satya Sai District, Andhra Pradesh is for expansion of production capacity (MS Billets /SS Billets capacity from existing 45,885 TPA to 2,41,500 TPA and Rolling mill capacity from existing 60,000 TPA to 2,27,000 TPA).

62.2.5 Details of EDS:

<b>S. No.</b>	<b>EDS raised on 09.04.2024</b>	<b>Replied by PP on 03.06.2024</b>
1	In the section for Name of the Project, PP has simply mentioned "M/s. Shyam Ferrous Limited" which is the name of organisation. The name of the project shall reflect the facilities proposed in the proposal with capacity/configuration. It is also to be noted that generation of ToR/EC is an online process and data is fetched automatically from the system. The details cannot be changed by the Ministry further. Therefore, it is advised that the same shall be rectified and revised	In the On line form at 1.1 the name of the project is given as M/s Shyam Ferrous Limited. PP has given following are given at 1.5  At the present stage of the application there is no edit option in the CAF section for Name of the project and hence PP is unable to edit 1.1 column

S. No.	EDS raised on 09.04.2024	Replied by PP on 03.06.2024
	application shall be submitted.	
2	On perusal of the kml file, it is observed that greenbelt is not developed properly along the project boundary. PP shall submit the justification and complete details of the greenbelt developed so far along with the photographs and action plan for completing the balance greenbelt.	The existing Greenbelt area is 1.55 Acres. As PP is not meeting green belt requirements, PP has purchased additional land of 3.27 acres to develop Green belt and use for ETP/STP. The Proposed additional green belt will 2.794 acres. After expansion, the green belt will be 4.344 Acres i.e. 34.23 % of the total land area 12.69 Acres. This information is also given in TOR Photographs of the green belt and lay out plan giving current & Proposed green belt is herewith submitted
3	It is reported that the proposed expansion proposal involves additional land. PP shall demarcate the boundaries of existing and additional land in the Kml file separately in different colours	Now PP is showing the kml file Existing land of Industry is 9.9 Acres is showing in Red colour and proposed additional Land is 3.27 acres is showing in yellow colour.
4	Under section for brief summary on the proposed baseline collection, PP shall submit the summarised baseline data collected for each parameter	<ul style="list-style-type: none"> <li>• The Ground water results reflect the nature of the area. The details of analysis of results are discussed below:</li> <li>• The pH concentration of the water samples collected from the study area varies from 7.23 to 7.91, and is within acceptable limits.</li> <li>• The totals dissolved solids (TDS) ranges from 594 to 1662 mg/l, and are within permissible limits of 2000 mg/l indicating it's suitable for drinking, domestic, and industrial use. High concentrations of TDS is reported in Project site, Thumakunta village and Halaganahalli village.</li> <li>• Chloride concentrations are within the permissible limits (1000 mg/l) of 73.81 to 557.93 mg/l. Highest is reported at project site.</li> <li>• The sodium concentration ranges from 59.3 to 227.61.</li> <li>• Sulphates concentrations vary from 67.14 to 173.98 mg/l which is within the acceptable limit.</li> <li>• Health hazards of high hardness are insignificant. But high hardness (Ca + Mg) can cause scaling of pipes and hot water appliances. The hardness of samples collected in the area varies 263.76 to 976.3 mg/l. Two samples collected at the project site and in the village of Thumukunta have higher than the acceptable limits of 600 mg/l.</li> </ul>

S. No.	EDS raised on 09.04.2024	Replied by PP on 03.06.2024
		<ul style="list-style-type: none"> <li>• There is wide variation in the Fluoride concentrations of the Ananthapur district. But the Fluorides in the study area is within the acceptable limit of 1.00 mg/l, indicating its healthy concentration 0.61 -0.71 mg/lit, and thus leaving no scope for the spread of water-borne diseases like fluorosis, osteosclerosis, etc.</li> <li>• Nitrate concentrations are in the range of 17.38 to 29.47 mg/l indicating the area is not affected with the activities of anthropogenic sources.</li> <li>• Metallic ionic concentrations like iron and manganese are within the acceptable limits of less than 0.30 mg/l.</li> </ul> <p>The <b>Surface Water</b> results indicate the water with:</p> <ul style="list-style-type: none"> <li>• pH ranging from 7.09 to 7.42 and fall in the average natural type pH range of 6.5 to 8.5.</li> <li>• BOD and DO indicates contamination of surface water from anthropogenic activities.</li> <li>• Chlorides of the samples ranges between 7 mg/l and 14 mg/l.</li> <li>• Total Hardness of surface water ranges between 41 mg/l and 57 mg/l.</li> <li>• Total Dissolved Solids ranged from 85 mg/l to 112 mg/l.</li> <li>• The dissolved oxygen is varying between 4.3 to 5.4 mg/lit.</li> <li>• Overall, the surface water quality in the region comes in the Class “C” &amp; Class “D” norms of IS 2296:1982 and not fit for drinking purpose with out treatment.</li> </ul> <p><b><u>Soil:</u></b></p> <p>The pH of soil samples ranges from Neutral to Mildly Alkaline alkaline. The cation exchange capacity of the soils is very high. The level of nitrogen of the samples very less and the potassium levels are medium to high. The base saturation of the samples is very strongly leached. The calcium magnesium ratios of the samples reflect calcium is low in samples. Bulk density of soil of impact varies from 1.42 – 1.71 g/cc. Soil texture is predominantly Sandy clay. The soil permeability in the project site is 19.6 mm/hr, Hunasenhalli is 15.24 mm/hr, Nakkalaplli is 18.54 mm/hr and Gaudasandra is 18.03 mm/ hr which indicates soils are permeable soils. Organic carbon medium in the range, Available Nitrogen are in Low Range, Available P are high in the range, and Available Potasium are high in the range</p> <p>Overall soil analysis indicates soils have good fertility and do not have any contamination in the study area. Soils permeability is good indicates good scope for ground water re-charge from precipitation</p> <p><b><u>Ambient Air Quality:</u></b></p>

S. No.	EDS raised on 09.04.2024	Replied by PP on 03.06.2024
		<p>The maximum air quality concentration in the project site and buffer area are</p> <ul style="list-style-type: none"> <li>• PM10 ranged between 56.2 µg/m<sup>3</sup> to 80.1 µg/m<sup>3</sup>.</li> <li>• PM 2.5 values varied from 20.7 µg/m<sup>3</sup> to 43.8 µg/m<sup>3</sup>.</li> <li>• SO<sub>2</sub> varied from 11.3 µg/m<sup>3</sup> to 19.4 µg/m<sup>3</sup>.</li> <li>• NO<sub>2</sub> ranged between 15.7 µg/m<sup>3</sup> to 24.6 µg/m<sup>3</sup>.</li> <li>• CO is ranging from 1.1 mg/ m<sup>3</sup> to 3.6 mg/ m<sup>3</sup>.</li> </ul> <p><b><u>Noise:</u></b></p> <ul style="list-style-type: none"> <li>• The day equivalent noise levels are ranged from 49.6 dB(A) to 85.2 dB(A) and night equivalent noise levels are ranged from 39.4 dB(A) to 73.5 dB(A)</li> </ul> <p><b><u>Traffic:</u></b></p> <p>Traffic study is conducted on the State High way near the plant and data is presented in the table. The total volume of traffic on both directions on this double lane road is 2664 PCUs/Day. As per the IRC code 64-1990 Guidelines for capacity of the two-lane road in plane area with a gentle slope in low curvature is 15000 PCUs/day.</p>
5	<p>As reported, there are sensitive areas within the study area of the project site. PP shall submit the mitigation measures that will be undertaken to minimise the impact of project activities on these sensitive areas.</p>	<p>Site sensitive map and description within 15 kms radius of the project site. Devara pally Village is nearest habitation in SW direction at 1.41 KM from the site. The predominant down wind direction in the study period is West and NW direction. There is one more village in this direction by name Appalakunta at a distance of 1.46 KM from the site. Base line station is established Appalakunta Village and the base line PM10 is 75.5 µg/m<sup>3</sup> and PM 2.5 is 32.7 µg/m<sup>3</sup> The Maximum predicted value at this station is PM10 is 77.25 µg/m<sup>3</sup>. The concentration even after the project implementation is within the notified norms.</p> <p>Mitigation measures: Air pollution control measures are Bagfilters for all Induction and Re heating furnaces and coal pulveriser to meet 50 mg/Nm<sup>3</sup> norm which is more stringent than State PCB norm of 115 mg/Nm<sup>3</sup> is proposed. Water sprinkling on roads, closed shed for storage raw materials are there to control fugitive emissions.</p> <p>The Mill cooling water is settled and re-cycled back. Furnace cooling water is completely recycled. It is proposed ETP to treat the oil &amp; grease and TSS from Mill waste water and to recycle completely. It is proposed STP to treat the domestic waste water and re-use of plantations purposes</p> <p>Acoustic enclosure is there for DG set to control the noise level out side the factory premises.</p>
6	<p>Under Part B of Form, Section for water</p>	<p>Water Requirement during the Construction phase is 50 KLD. The Total water requirement estimated for operational phase is 137 KLD and out</p>

<b>S. No.</b>	<b>EDS raised on 09.04.2024</b>	<b>Replied by PP on 03.06.2024</b>
	requirement during construction and operational stage has not been filled. PP is requested to furnish all the relevant details as desired in the form.	of this fresh water requirement is 50 KLD and recycled water is 87 KLD and these details are incorporated in Part B
7	PP shall provide the Action plan to address the issues based on socio-economic survey as per OM dated 30.09.2020 along-with physical targets and year-wise timelines.	As per the suggestions received from the Local villagers and Representations received in the Public Hearing the CER Activities are Revised and presented in EIA report and uploaded in Section 3 of part B.
8	The baseline data for PM10 and PM2.5 during baseline collection is recorded too high. PP shall submit the reasons for the same along with the list of industries within the study area and mitigation measures to minimise the same.	<p>The unit located near Thumukunta and Gollapuram Industrial Areas during the baseline period PM10 Valued observed 56.2 µg/m<sup>3</sup> to 80.1 µg/m<sup>3</sup>. and PM 2.5 observed from 20.7 µg/m<sup>3</sup> to 43.8 µg/m<sup>3</sup>. The reasons for higher concentrations is due to presence of steel re-rolling mills in the Thumukunta Industrial area.</p> <p>A list of industries located in both the industrial areas with type of industries is presented in EIA report in chapter 1. And same is now enclosed for ready reference.</p> <p>Shyam Ferrous limited upgraded scrubbing systems to Bagfilter for current running furnaces. Also proposed upgrade filters for higher emissions likely to be generated from new furnaces proposed. It is also proposed bag filter for Reheating furnace, slag crusher, Coal purlverliser and regular water sprinkling to suppress fugitive dust emissions.</p>
9	PP has submitted the CCR dated 08.02.2024 wherein IRO has observed some non/partially complied conditions. PP needs to submit the ATR submitted to IRO and closure report obtained for the same	A Letter issued by IRO Vijayawada vide its File No. IRO/VIJ/EPA/EC-A/101/01-100/2021 dt. 20.05.2024 on our Action taken report for non/partially complied conditions. Again we had submitted our Replies on this conditions issued by IRO on 20.05.2024 is submitted to MoEF & CC monitoring cell along with supporting documents on 29.05.2024.
10	Details of Raw material and its linkage and its mitigation measure during transportation needs to be submitted under section for	This is existing induction furnace and rolling mill unit and manufacturing the MS Billets and TMT Bars The main raw material is sponge Iron, Iron Scrap, Ferro alloys, pig iron All raw materials sourced from local sources and from Bellary in Karnataka. There will be multiple sources as purchase is depending on pricing criteria hence no linkages are required for them

<b>S. No.</b>	<b>EDS raised on 09.04.2024</b>	<b>Replied by PP on 03.06.2024</b>
	requirement of minerals involved in the project.	Small quantity of coal is used during operation which is sourced from open market locally Mitigation measures: All the Raw materials transported through the road transportation only. All trucks Raw materials carrying are covered with tarpaulins.
11	The PP needs to submit the details of activities/CTEs/CTOs in tabular form showing its details of CTEs/CTO vis-à-vis production capacity since grant of CTE/CTO to check the violation, if any. All old CTEs/CTOs/ HW Authorization to be uploaded to verify the violation, if any.	PP has submitted the detail. List of EC's, CFE's and CFO's obtained by Shyam Ferrous Limited since 2009 is presented in Table 1.1 in Chapter-1 of EIA Report
12	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 and uploaded the data accordingly. English translation of land documents authenticated from notary shall be submitted.	The Existing land of Industry is 9.9 Acres and acquired the land through private parties. The land is converted for industrial use vide order No. 1636/2008/G dated 10.10.2008 and same are uploaded under additional documents. An additional Land is 3.27 acres, is now acquired to develop green belt and this land will be converted for industrial use. As there nearly 67 documents of 146plots are for the newly acquired and size of the file is crossing permitted space, we uploaded list document numbers and extent of land
13	Details of court case, directions issued by SPCB, if any, pending needs to be submitted.	There are no court cases against the industry and same is filled form I and Form II also.
14	PP shall clarify whether the project falls under CPA/SPA? If yes, then compliance	The existing Unit is located at Sy. No. 67/2 & 68/2 of Devarapally (V), Hindupur (M) of Sri Satya Sai District which does not come under Critically polluted areas and severely polluted areas (CPAs/SPAs) and the same is given in Form II at 11 (b). Hence CEPI guidelines are not applicable to this project.

S. No.	EDS raised on 09.04.2024	Replied by PP on 03.06.2024
	to the CEPI guidelines shall be submitted. QA	
15	PP shall revise the complete application in conformity to Ministry's requirement and resubmit the application.	PP is submitting the revised application and documents with prescribed format.

62.2.6 Environmental Site Settings:

S.No.	Particulars	Details	Remarks																																				
1.	Total land	<ul style="list-style-type: none"> <li>The existing project area is 9.9 acres(4.0Ha)</li> <li>Additional Land area of 3.27 Acres (1.32 Ha)</li> <li>Total Land Area after expansion- 13.17 Acres (5.32 Ha)</li> </ul>	---																																				
2.	Land acquisition details as per MoEF & CC O.M. dated 7/ 10/ 2014	The current project site is owned by the Industry	In Sy.No. 68/2 Additional Land area of 3.27 Acres (1.32 Ha) acquired to develop green belt and to construct STP and ETP. Total area of Land after expansion will be 13.17 Acres (5. 32 Ha)																																				
3.	Existence of habitation & involvement of R&R, if any.	Devarapally Village- 1.41 Km -WSW	As this is Metallurgical industries R&R is Not applicable																																				
4.	Latitude and Longitude of all corners of the project site.	<table border="1"> <thead> <tr> <th>S. No.</th> <th>Latitude</th> <th>Longitude</th> </tr> </thead> <tbody> <tr> <td colspan="3"><b>Co-ordinates of Plant Area</b></td> </tr> <tr> <td>1</td> <td>13°44'36.75"N</td> <td>77°30'10.87"E</td> </tr> <tr> <td>2</td> <td>13°44'36.79"N</td> <td>77°30'13.57"E</td> </tr> <tr> <td>3</td> <td>13°44'22.01"N</td> <td>77°30'15.01"E</td> </tr> <tr> <td>4</td> <td>13°44'21.75"N</td> <td>77°30'12.18"E</td> </tr> <tr> <td colspan="3"><b>Co-ordinates of Proposed ETP&amp;STP Area</b></td> </tr> <tr> <td>1</td> <td>13°44'23.52"N</td> <td>77°30'15.23"E</td> </tr> <tr> <td>2</td> <td>13°44'23.82"N</td> <td>77°30'17.65"E</td> </tr> <tr> <td>3</td> <td>13°44'22.47"N</td> <td>77°30'17.86"E</td> </tr> <tr> <td>4</td> <td>13°44'22.16"N</td> <td>77°30'15.39"E</td> </tr> <tr> <td colspan="3"><b>Co-ordinates of Proposed Greenbelt Area</b></td> </tr> </tbody> </table>	S. No.	Latitude	Longitude	<b>Co-ordinates of Plant Area</b>			1	13°44'36.75"N	77°30'10.87"E	2	13°44'36.79"N	77°30'13.57"E	3	13°44'22.01"N	77°30'15.01"E	4	13°44'21.75"N	77°30'12.18"E	<b>Co-ordinates of Proposed ETP&amp;STP Area</b>			1	13°44'23.52"N	77°30'15.23"E	2	13°44'23.82"N	77°30'17.65"E	3	13°44'22.47"N	77°30'17.86"E	4	13°44'22.16"N	77°30'15.39"E	<b>Co-ordinates of Proposed Greenbelt Area</b>			
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S.No.	Particulars	Details		Remarks
		1	13°44'22.06"N	77°30'15.39"E
		2	13°44'22.02"N	77°30'15.00"E
		3	13°44'36.81"N	77°30'13.63"E
		4	13°44'36.81"N	77°30'13.41"E
		5	13°44'29.09"N	77°30'14.55"E
		6	13°44'29.49"N	77°30'16.92"E
		7	13°44'32.18"N	77°30'16.52"E
		8	13°44'31.89"N	77°30'14.23"E
5.	Elevation of the project site	621 M above MSL		--
6.	Involvement of Forest land if any.	None		--
7.	Water body (Rivers, Lakes, Pond, Nala, Natural Drainage, Canal etc.) exists within the project site as well as study Area	Appalakunta Lake – 1.29 Km (WNW) Penner River – 1.88 Km (W) Kirikera Lake – 2.32 Km (WNW) Pond near Kotipi – 2.46 Km (NE), Santebidanur Lake – 2.70 Km (W) Pond near Melya – 4.90 Km (ESE) Pond near Kadahathur – 5.12 Km (W) Kumadvati and Kudar River – 6.57 Km (W) Pond near Gopindavarapalli – 6.56 Km (E)		The site is not falling under buffer zones of any water bodies
8.	Existence of ESZ/ ESA/ national park/ wildlife sanctuary/ biosphere reserve/ tiger reserve/ elephant reserve etc. if any within the study area	None		--

62.2.7 The existing project was accorded environmental clearance vide order No. F-J-11011/634/2009- IA II (I) dated 23<sup>rd</sup> November, 2010 to enhance production of MS Billets to 51,250 TPA and TMT Bars of 60,000 TPA with 1x15 Tons (2 crucibles) and 1x 9 T (2 crucibles), Laddle Refining furnace of 1x 17.5 Tons and Continuous casting machine of 51,250 TPA capacity & Mould castings 29,700 TPA. The Unit obtained CFE for expansion vide Order No. 236/APP/PCB/CFE/RO-KNL/HO/2016 dated 13.06.2016. Consent to Operate for the existing unit was accorded by Andhra Pradesh State Pollution Control Board vide Order No. 420158/APP/PCB/KNL/ATP/CFO&HWA/HO/2022 dated 12.10.2022. The validity of CTO is up to 31.07.2027.

62.2.8 Implementation status of the existing EC:



S. No.	Facilities	Units	As per EC dated 23.11.2010	Implementation Status as on date	Production as per CTO
1	Induction furnace	TPH	4 TPH	Implemented	MS Billets-133 TPD (47,215 TPA) TMT Bars -5,000 TPM (60,000 TPA)
2	Induction furnace	TPH	15 TPH	Not Implemented	
3	Ladle Refining furnace	TPH	17.5 TPH	Implemented	
4	CCM	TPA	51,250 TPA	Implemented	
5	Rolling mill	TPA	60,000 TPA	Implemented	

62.2.9 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 23.11.2010								Proposed Units		Final (Existing + proposed)		Remarks
		Total (A + B)		Implemented (A)		Un-Implemented (B)		As per CTO		Configuration	Capacity	Configuration	Capacity	
		Configuration	Capacity	Configuration	Capacity	Configuration	Capacity	Configuration	Capacity					
1	Induction furnace	15 TPH	-	4 TPH	-	-	-	*4 TPH	-	25 TPH	-	25 TPH	-	None
2	Induction furnace	9 TPH	-	9 TPH	-	-	-	**8 TPH	-	25 TPH	-	25 TPH	-	The unit did not implemented the 15 TPH furnace and continued with old 9 TPH Furnace
3	Ladle Refining furnace	17.5 TPH	-	17.5 TPH	-	-	-	-	-	25 T	-	25 T	-	None
4	CCM	51,250 TPA	-	51,250 TPA	-	-	-	-	-	284000 TPA	-	2,84,000 TPA	-	None
5	Rolling mill	60,000 TPA	-	60,000 TPA	-	-	-	-	-	233590 TPA	-	2,33,590 TPA	-	None
6	DRF	-	-	-	-	-	-	-	-	25 T	-	25 T	-	None

S. No.	Plant Equipment/ Facility	Existing facilities as per EC dated 23.11.2010								Proposed Units		Final (Existing + proposed)		Remarks
		Total (A + B)		Implemented (A)		Un-Implemented (B)		As per CTO		Configuration	Capacity	Configuration	Capacity	
		Configuration	Capacity	Configuration	Capacity	Configuration	Capacity	Configuration	Capacity					
7	Slag Crusher	-	-	-	-	-	-	-	-	10 T	-	10 T	-	None
8	Re heating Furnace	-	-	-	-	-	-	8 TPH	-	8TPH	-	8TPH	-	(Stand by Furnace)
9	Coal Crusher	-	-	-	-	-	-	-	-	3TPH	-	3TPH	-	None

Note: \* The unit did not establish 15 T/Heat furnace and continued with old 4 T/heat Furnace and 9 T/Heat Furnace with one re-heating furnace with capacity of 8 T/hour, and Rolling mill.  
\*\* in the CFO Copy the Capacity of Furnace wrongly mentioned as 8 TPH instead of 9 TPH, PP has given a letter to SPCB.

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

S. No	Raw Material	Quantity		Source	Distance	Mode of Transport
		TPD	TPA			
1	Sponge Iron	483	1,66,635	Bellary (Karnataka)	190 KM	Trucks
2	Iron Scrap	35.0	12,075	Local & Imported sources	90 to 380 KM	Trucks
3	Pig Iron	35	12075	Bellary (Karnataka)	190 KM	Trucks
4	Ferro Alloys	7	2415	Local & Bellary (Karnataka)	70- 190KM	Trucks
<b>Total</b>		<b>819</b>	<b>2,82,555</b>			

62.2.11 Existing Water requirement is 69.0 m<sup>3</sup>/day, which is met from Ground water. The water requirement for the proposed project is estimated as 137.0 m<sup>3</sup>/day, out of which 50.0 m<sup>3</sup>/day of fresh water requirement will be met from the ground water and the remaining requirement of 87.0 m<sup>3</sup>/day is met by recycling (out of which 75 m<sup>3</sup>/day of Cooling water is continuously recycled after settling and 12 m<sup>3</sup>/day STP Treated water will be used for Greenbelt). The permission for drawl of groundwater is obtained from Ground water department, Andhra Pradesh vide Lr. No. 152/ Shyam Ferrous Pvt. Ltd/Industries/T/2023-24/ dated 25.08.2023.

62.2.12 The existing power requirement of 10 MW is obtained from APTRANSCO the Power Requirement for proposed expansion activity is 14 MW is obtained from Andhra Pradesh Power Distribution Corporation Limited (APPDCL).

62.2.13 Baseline Environmental Studies:

Period	September 2021 - November 2021																				
AAQ Parameters at 8 Locations	<ul style="list-style-type: none"> <li>• PM10 = 56.2 µg/m<sup>3</sup> to 80.1 µg/m<sup>3</sup></li> <li>• PM2.5= 20.7 µg/m<sup>3</sup> to 43.8 µg/m<sup>3</sup></li> <li>• SO2 = 11.3 µg/m<sup>3</sup>to 19.4 µg/m<sup>3</sup></li> <li>• NO2 = 15.7 µg/m<sup>3</sup> to 24.6 µg/m<sup>3</sup></li> <li>• CO = 1.1 mg/m<sup>3</sup> to 3.6 mg/m<sup>3</sup></li> <li>• All the parameters in all locations are within the NAAQ 2009 Standards</li> </ul>																				
Incremental GLC level	<ul style="list-style-type: none"> <li>• PM10 = 3.56 µg/m<sup>3</sup> (Project Site)</li> <li>• SO2 = 4.99 µg/m<sup>3</sup> (0.8 Km, East)</li> <li>• NOx = 2.85 µg/m<sup>3</sup> (0.8 Km, East)</li> <li>• AERMOD 9.9.0 Software is used for modelling</li> </ul>																				
Ground water quality at 8 Locations	<ul style="list-style-type: none"> <li>• pH: 7.23 to 7.91</li> <li>• Total Hardness: 263.76 to 976.3,</li> <li>• Chlorides: 73.81 to 557.93 mg/l,</li> <li>• Flourides: 0.087 to 0.71 mg/l,</li> <li>• Heavy metals: &lt;0.01-0.063 mg/l</li> </ul>																				
Surface water quality at 5 Locations	<ul style="list-style-type: none"> <li>• pH: 7.09 to 7.42,</li> <li>• DO: 4.3 - 5.4 mg/l,</li> <li>• BOD: 3-5 mg/lit,</li> <li>• COD: 12-15 mg/lit</li> </ul>																				
Noise levels Leq (Day and Night)	<p>Day time: 49.6 dB(A) to 85.2 dB(A)                      Night time: 39.4 dB(A) to 73.5 dB(A)</p>																				
Traffic assessment study findings	<p>The traffic study is conducted on Hindupur to Gauribidanuru State Highway (SH9 at 0.54Km from the plant site)                      The Major road access to the site is <b>SH9</b> which is at a distance of 0.45 KM on the West. Project Site to Appalakunta Road is adjacent to the plant site which connects to State Highway                      Transportation of raw material, fuel &amp; finished product will be done 100 % by road                      Existing PCU is 111 PCU/hr on SH9 on existing level of service (LOS) is: 3</p> <table border="1"> <thead> <tr> <th>Road</th> <th>V (Volume in PCU/hr)</th> <th>C (Capacity in PCU/hr.)</th> <th>Existing V/C Ratio</th> <th>LOS</th> </tr> </thead> <tbody> <tr> <td>SH9 Hindupur to Gouribidanur</td> <td>111</td> <td>625</td> <td>0.17</td> <td>3</td> </tr> </tbody> </table> <p>PCU load after proposed project will be 111 (Existing) + 3.33 (Additional) PCU/hr. Total 114.33 PCU/hr and level of service (LOS) will be:3</p> <table border="1"> <thead> <tr> <th>Road</th> <th>V (Volume in PCU/hr)</th> <th>C (Capacity in PCU/hr.)</th> <th>Existing V/C Ratio</th> <th>LOS</th> </tr> </thead> <tbody> <tr> <td>SH9 Hindupur to Gouribidanur</td> <td>114.33</td> <td>625</td> <td>0.18</td> <td>3</td> </tr> </tbody> </table> <p>Note: Capacity as per IRC-64-1990 Guide line for capacity for roads.</p>	Road	V (Volume in PCU/hr)	C (Capacity in PCU/hr.)	Existing V/C Ratio	LOS	SH9 Hindupur to Gouribidanur	111	625	0.17	3	Road	V (Volume in PCU/hr)	C (Capacity in PCU/hr.)	Existing V/C Ratio	LOS	SH9 Hindupur to Gouribidanur	114.33	625	0.18	3
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	Conclusion: The level of service with this traffic volume is marginal and existing road can take after including additional traffic due to proposed project.
Flora and fauna	No Schedule-I Species are found in the Study Area

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

S No	Type of Waste	Source	Quantity		Disposal
			Present TPA	After Expansion TPA	
1	Slag	Induction furnace	6859	36225	Disposed for filling low level areas and construction sites. Also extensively being used for brick manufacturing
2	Mill waste	Rolling mill	1500	6025.0	Sold to Ferro Silicon units
3	STP Sludge	STP	-	5.0	Used as manure for Green Belt
4	End Cuttings	Rolling Mill	1800	6025.0	Will be re-used in the induction furnace of steel melting division.
5	Ash	Re-heating Furnace	150	150	Disposed to brick makers and cement plants. Currently Re-heating Furnace is kept as stand by and very little ash is generated
6	Trapped Dust	Bag filters and other pollution control equipments	72	420	To be sent as land fill material along with crushed slag

62.2.15 Public Consultation:

Details of advertisement given	Notice made through Paper advertisement in the Newspapers Sakshi and The New Indian Express on 16.10.2023
Date of public consultation	15.11.2023
Venue	At Shyam Ferrous Limited
Presiding Officer	Collector & District Magistrate, Sri Satya Sai District
Major issues raised	Local Employment, Skill Development Program, Greenbelt Development, Air Pollution Control Equipment's, Waste Water Management, Provide ESI and PF facilities to Employees, Health Camps in Nearby villages, RO plants in nearby villages

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

S. No	Name of the Activity	Year of implementation (Budget in INR Lakhs)			
		1 <sup>st</sup>	2 <sup>nd</sup>	3 <sup>rd</sup>	Total

1	Augmentation Drinking water facilities in the nearby villages	2.8	2.8	2.8	8.4
2	Health Camps in the nearby villages and strengthening of Hospital Infrastructure	2.8	2.8	2.8	8.4
3	Contribution to primary school for infrastructure in the nearby village	2.8	2.8	2.8	8.4
4	Skill Development and Training Programs to Unemployed youth & Women	2.8	2.8	2.8	8.4
5	Contributing to Rain water harvesting & Plantation programme in the nearby villages	2.8	2.8	2.8	8.4
<b>Total</b>		<b>14.0</b>	<b>14.0</b>	<b>14.0</b>	<b>42.0</b>

62.2.16 The existing capital cost of project was 55 Crores. The capital cost of the proposed project is Rs. 20 Crores and the capital cost for environmental protection measures is proposed as Rs 4.50 Crores. The annual recurring cost towards the environmental protection measures is proposed as Rs. 0.635 Crores. The employment generation from the proposed expansion project is 50 people in additional to the existing 150 people. The details of cost for environmental protection measures is as follows:

S No	Description	Existing (Rs.in Crores/Lakhs)			Proposed (Rs.in Crores/Lakhs)	
		Capital Cost in Rs. Lakhs Committed	Implementation with Budget in Lakhs of Rs.	Recurring cost in Lakhs/Annum	Proposed Capital Cost in Rs. Lakhs	Proposed Recurring Cost in Rs. Lakhs/Annum
1	Air Pollution Control measures	88.71	Scrubbers Rs.60 Lakhs. Now upgraded to bag filters with 1.2 crores	35.0	250.0	85.0
2	Water Pollution Control Measures	17.0	25 Lakhs	5.0	50.0	8.0
3	Noise Pollution Control Measures	2.0	5 lakhs	0.5	5.0	1.0
4	Solid Waste management	7.0	50 Lakhs crusher shed	3.0	20.0	5.0
5	Green belt	5.0	8 lakhs	0.5	70.0	20.0
6	Environmental monitoring	4.29	Online monitoring system-5 lakhs	2.0	55.0	11.0
<b>Total</b>		<b>124.0</b>	<b>276.0</b>	<b>61.0</b>	<b>450</b>	<b>130.0</b>

62.2.17 Existing green belt has been developed in 0.62 ha area which is about 11.82% of the total project area of 13.17 Acres with total sapling of 3000 Trees. Proposed greenbelt will be developed in 1.127 ha which is about 21.18% of the total project area. Thus total of 1.747 ha area (33% of total project area) will be developed as greenbelt. A 3 m wide greenbelt, consisting of at least 3 tiers around plant boundary will be developed as greenbelt and green cover as per CPCB/MoEF&CC, New Delhi guidelines. Local and native species will be planted with a density of 2500 trees per hectare. Total no. of 5970 saplings will be planted and nurtured in 1.127 hectares in 3 years.

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

**Certified compliance report from IRO MoEFCC**

62.2.19 The Status of compliance of earlier EC was obtained from Integrated Regional Office, Vijayawada vide letter no. IRO/VIJ/EPA/EC-A/101/01-100/2021, dated 07.02.2024 in the name of M/s. Shyam Ferrous Limited. The Action taken report regarding the partially/non-complied condition was submitted to Monitoring Division MoEF&CC, on 29.05.2024:

S. No	Non-Compliances	Observation of RO (abridged) dated 29.07.2023	Condition No.			Re- Assessment by RO/PP dated 29.05.2024
			EC Date	Specific	General	
1	Partial Compliance	It is required to provide dispensary with a budget of Rs. 1 Crore with free medicines as a part of CSR. Implementation of such programmes should be ensured accordingly in a time bound manner.	23.11.2010	Condition No. ix	-	<p>The project cost given at the time of expansion was Rs. 20 crores. However, Shyam Ferrous Limited had not implemented the project fully and amount spent on the project is only Rs. Rs. 7.5 Crores.</p> <p>Thus total amount to be spent @ 5% of total cost is Rs. 37.5 lakhs.</p> <p>Dispensary has setup near the main gate of the industry with the budget of 10 lakhs and free medicines are supplied as a part of CSR activity.</p> <p>The Unit spent Rs.22.0 Lakhs under CSR Activities like Medicines Distribution, Books and Stationary distribution in nearby village, RO Water Plant Setup, Food Donation During Covid situation and other social</p>

S. No	Non-Compliances	Observation of RO (abridged) dated 29.07.2023	Condition No.			Re- Assessment by RO/PP dated 29.05.2024
			EC Date	Specific	General	
						<p>activities for the last five years.</p> <p>Another 5.5 Lakhs is planned to spend this year in the nearby villages.</p> <p>Hence PP request to review this condition</p>
2	Partial Compliance	It is required to submit the detailed compliance report of all the environmental protection measures and safeguards recommended in the EIA/ EMP report.	2311.2010	-	ix	PP had submitted compliance report of all the environmental protection measures and safeguards recommended in the EIA/ EMP report EMP Compliance Report on 22.05.2024 to IRO Vijayawada through mail
3	Observation	It has been observed that the Pas have commissioned the expansion EC component 1x9T furnace after expiry of EC validity.	23.11.2010	-	-	<p>PP obtained Environmental Clearance dated 23.11.2010. As per the SO No. 886 dated 29.4.2015 the validity of EC got extended for 7 years i.e up to 22.112017. An application made to MOEF&amp;CC for further extension of our EC vide proposal number IA/AP/IND/61021/2009 on 11.10.2017.</p> <p>Further the unit obtained TOR for further expansion and implementation of unimplemented portion of the EC vide TOR J-11011/634/2009- IA.II(I) dated 17.03.2017</p> <p>The proposal came for hearing on 36<sup>th</sup> EAC meeting held during 9-10<sup>th</sup> October 2018 agenda item number 36.28 concluded that “it was mutually agreed that the extension of validity is not required because the purpose is going to be achieved</p>

S. No	Non-Compliances	Observation of RO (abridged) dated 29.07.2023	Condition No.			Re- Assessment by RO/PP dated 29.05.2024
			EC Date	Specific	General	
						<p>through compliance of TOR process “</p> <p>Further the unit obtained CFO from state Pollution Control Board Vide Order No.APPCB/KNL/ATP/144 /CFO/HO/2018 dated 27.03.2018 for completed portion of EC</p> <p>Hence PP states that they do not fall under violation category</p>

62.2.20 Further it was also informed to the EAC that the Action taken report regarding the partially/non-complied condition was submitted to IA Monitoring Division MoEF&CC on 29.05.2024, and is under consideration at C&MD in Ministry.

**Written submission by the PP:**

62.2.21 During the meeting, based on the deliberations made by the EAC, the project proponent vide letter dated 04.07.2024 through email dated 04.07.2024 submitted the following information:

S. No.	Query	Reply of PP
1	Note on compliance to the existing Environment Clearance granted on 23.11.2010	<ol style="list-style-type: none"> <li>1. M/s. Shyam Ferrous Limited situated in Sy No.67/2 &amp; 86/2 of Devarapally (V), Hindupur (M), Sri satya sai (D), Andhra Pradesh has obtained CTO from the Board vide order No. APPCB/ZO-KNL/ATP-144/CFO/2009-119 dated 23.05.2009 to manufacture 54 TPD of MS Ingots. As the capacity is less than 30,000 TPA hence not covered under EIA notification.</li> <li>2. Further the unit obtained CTE from the A.P Pollution Control Board for the Rolling Mill a capacity to produce 5000 TPA of TMT Bars vide order No.ATP-144/PCB/ZOK/C.Estt/2007-635 dated on 25.11.2009 and obtained CTO for the same vide order No. APPCB/KNL/ATP/144/CFO/HO/2014-709 dated 04.12.2014.</li> <li>3. The unit obtained Environmental Clearance in 2010 for expansion capacity of 51,250 TPA of MS Billets, Mould Castings 29,700 TPA vide EC order No. J-11011/634/2009-IA II(I) dated 23.11.2010 which was valid up to 2015.</li> <li>4. Further the EC got extended for 2 years as per the SO No.886 dated 29.04.2015 the validity of EC was up to 22.11.2017 with a provision further extend for another 3 years based on the request from entrepreneur.</li> <li>5. M/s Shyam ferrous installed 9TPH induction furnace which was</li> </ol>



S. No.	Query	Reply of PP
		<p>grated in the EC and could not implement establishment of 15 TPH furnace due to financial constraints and market limitations before the expiry time of the EC. The total expenditure incurred for the project was Rs.7.5 crores only.</p> <p>6. M/s Shyam ferrous Limited obtained CTE from the Board vide order No.236/APPCB/CFE/RO-KNL/HO/2016 dated 13.06.2016 for the Environmental clearance obtained</p> <p>7. As the project could not be completed, the unit obtained TOR from MOEF&amp;CC vide order No. J-11011/634/2009-IA.II(I) dated 17.03.2017 to upgrade 4TPH furnace to 15 TPH furnace and to add additional 20 TPH furnace to increase the overall production from sanctioned capacity of 51,250 TPA to 1,11,250 TPA of MS Billets, the rolling mill capacity 74,000 TPA to 1,44,000 TPA and Mould castings with a capacity of 29,700 TPA with the project cost of Rs.25 Crores.</p> <p>8. An application was submitted to the MOEF&amp;CC for extension of validity of the EC by the proponent vide proposal number IA/AP/IND/61021/2009 dated 11.10.2017 with in the expiry period of the EC.</p> <p>9. The proposal was considered in 36<sup>th</sup> EAC meeting held on 9-10<sup>th</sup> October 2018 with agenda item number 36.28 and the “Committee noted that instant proposal was made for extension of validity in November 2017 and the proposal was considered during the EAC meeting held in December 2017, However the project proponent did not attend the meeting and has already obtained TOR for expansion of existing project, inter alia including 1 X 15 ton induction furnace for which extension of validity was sought. The project proponent has not given any substantiating justification for non-implementation of the units. Since, unimplemented activities under the EC already granted are also part of the TOR granted during March 2017, it was mutually agreed that the extension of validity is not required because the purpose is going to be achieved through compliance of TOR process.” Therefore, the committee advised to prepare the EIA report as per the TOR already given to the in March 2017.</p> <p>10. M/s Shyam Ferrous Limited made an application to A. P state Pollution Control Board for grant of CTO for completed portion of activities given in the EC on 26.01.2018. A.P Pollution Control Board granted CTO vide order No. APPCB/KNL/ATP/144/CFO/HO/2018 dated 27.03.2018 based on the fact that Shyam Ferrous Limited made application for grant of EC extension and TOR for the expansion for balance portion unimplemented furnace of 15 TPH and new furnace of 20 TPH.</p> <p>11. Thus PP applied for validity extension before the expiry of the EC on 11.10.2017 and taken fresh TOR also on 17.03.2017 and presented their case before EAC on 9-10<sup>th</sup> October, 2018, and they had no intention to violate the time lines prescribed in the EC granted in 2010. PP could not implement the project due to</p>

S. No.	Query	Reply of PP
		financial constraints.
2	Affidavit in regards of greenbelt and occupational health centre facility.	PP has submitted the following affidavits: <ul style="list-style-type: none"> <li>• PP has undertaken to complete the planting of saplings in an additional area of 17,580 Square meters in the land purchased adjacent to their unit in the eastern side and along with approach road to their unit from State Highway with total 5,970 saplings within 3 months' time i.e., on or before 02.10.2024.</li> <li>• PP has undertaken to complete the establishment of full-fledged health facility with all essential equipment within 3 months' time i.e., on or before 02.10.2024</li> </ul>
3	Configuration details of existing and proposed	The same is updated at relevant para above.
4	Map showing the distance of the nearest school from the industry	Google Map Showing the School Distance from the Plant which is 1.37 km is submitted.

### **Deliberations by the Committee**

62.2.22 The Committee noted the following:

1. The instant proposal is for expansion of production capacity (MS Billets /SS Billets capacity from existing 45,885 TPA to 2,41,500 TPA and Rolling mill capacity from existing 60,000 TPA to 2,27,000 TPA).
2. The EAC, constituted under the provision of the EIA Notification, 2006 comprising Expert Members/domain experts in various fields, examined the proposal submitted by the Project Proponent in desired format along with EIA/EMP reports prepared and submitted by the Consultant accredited by the QCI/ NABET on behalf of the Project Proponent.
3. The EAC noted that the Project Proponent has given an undertaking that the data and information given in the application and enclosures are true to the best of his knowledge and belief and no information has been suppressed in the EIA/EMP reports. If any part of data/information submitted is found to be false/ misleading at any stage, the project will be rejected and Environmental Clearance given, if any, will be revoked at the risk and cost of the project proponent.
4. The Committee noted that the EIA reports are in compliance of the ToR issued for the project, reflecting the present environmental status and the projected scenario for all the environmental components. The Committee deliberated on the proposed mitigation measure towards Air, Water, Noise and Soil pollutions. The Committee suggested that the storage of toxic/explosive raw materials/products shall be undertaken with utmost precautions and following the safety norms and best practices.
5. The existing project was accorded environmental clearance vide order No. F-J-11011/634/2009- IA II (I) dated 23<sup>rd</sup> November, 2010 to enhance production of MS

Billets to 51,250 TPA and TMT Bars of 60,000 TPA with 1x15 Tons (2 crucibles) and 1x 9 T (2 crucibles), Laddle Refining furnace of 1x 17.5 Tons and Continuous casting machine of 51,250 TPA capacity & Mould castings 29,700 TPA. The Unit obtained CFE for expansion vide Order No. 236/APPCB/CFE/RO-KNL/HO/2016 dated 13.06.2016. Consent to Operate for the existing unit was accorded by Andhra Pradesh State Pollution Control Board vide Order No. 420158/APPCB/KNL/ATP/CFO&HWA/HO/2022 dated 12.10.2022. The validity of CTO is up to 31.07.2027.

6. The PP further submitted the following chronology with respect to the existing project:
- (i) M/s. Shyam Ferrous Limited situated in Sy No.67/2 & 86/2 of Devarapally (V), Hindupur (M), Sri satya sai (D), Andhra Pradesh has obtained CTO from the Board vide order No. APPCB/ZO-KNL/ATP-144/CFO/2009-119 dated 23.05.2009 to manufacture 54 TPD of MS Ingots. As the capacity is less than 30,000 TPA hence not covered under EIA notification.
  - (ii) Further the unit obtained CTE from the A.P Pollution Control Board for the Rolling Mill a capacity to produce 5000 TPA of TMT Bars vide order No.ATP-144/PCB/ZOK/C.Estt/2007-635 dated on 25.11.2009 and obtained CTO for the same vide order No. APPCB/KNL/ATP/144/CFO/HO/2014-709 dated 04.12.2014.
  - (iii) The unit obtained Environmental Clearance in 2010 for expansion capacity of 51,250 TPA of MS Billets, Mould Castings 29,700 TPA vide EC order No. J-11011/634/2009-IA II(I) dated 23.11.2010 which was valid up to 2015.
  - (iv) Further the EC got extended for 2 years as per the SO No.886 dated 29.04.2015 the validity of EC was up to 22.11.2017 with a provision further extend for another 3 years based on the request from entrepreneur.
  - (v) M/s Shyam ferrous installed 9TPH induction furnace which was granted in the EC and could not implement establishment of 15 TPH furnace due to financial constraints and market limitations before the expiry time of the EC. The total expenditure incurred for the project was Rs.7.5 crores only.
  - (vi) M/s Shyam ferrous Limited obtained CTE from the Board vide order No.236/APPCB/CFE/RO-KNL/HO/2016 dated 13.06.2016 for the Environmental clearance obtained
  - (vii) As the project could not be completed, the unit obtained TOR from MOEF&CC vide order No. J-11011/634/2009-IA.II(I) dated 17.03.2017 to upgrade 4TPH furnace to 15 TPH furnace and to add additional 20 TPH furnace to increase the overall production from sanctioned capacity of 51,250 TPA to 1,11,250 TPA of MS Billets, the rolling mill capacity 74,000 TPA to 1,44,000 TPA and Mould castings with a capacity of 29,700 TPA with the project cost of Rs.25 Crores.
  - (viii) An application was submitted to the MOEF&CC for extension of validity of the EC by the proponent vide proposal number IA/AP/IND/61021/2009 dated 11.10.2017 with in the expiry period of the EC.
  - (ix) The proposal was considered in 36<sup>th</sup> EAC meeting held on 9-10<sup>th</sup> October 2018 with agenda item number 36.28 and the “Committee noted that instant proposal was made for extension of validity in November 2017 and the proposal was considered during the EAC meeting held in December 2017, However the project proponent did not attend the meeting and has already obtained TOR for expansion of existing project, inter alia including 1 X 15 ton induction furnace for which extension of validity was sought. The project proponent has not given any substantiating justification for non-implementation of the units. Since, unimplemented activities under the EC already granted are also part of the TOR granted during March 2017, it was mutually agreed

that the extension of validity is not required because the purpose is going to be achieved through compliance of TOR process.” Therefore, the committee advised to prepare the EIA report as per the TOR already given in March 2017.

- (x) M/s Shyam Ferrrous Limited made an application to A. P. State Pollution Control Board for grant of CTO for completed portion of activities given in the EC on 26.01.2018. A.P Pollution Control Board granted CTO vide order No. APPCB/KNL/ATP/144/CFO/HO/2018 dated 27.03.2018 based on the fact that Shyam Ferrrous Limited made application for grant of EC extension and TOR for the expansion for balance portion unimplemented furnace of 15 TPH and new furnace of 20 TPH.
  - (xi) Thus PP applied for validity extension before the expiry of the EC on 11.10.2017 and taken fresh TOR also on 17.03.2017 and presented their case before EAC. PP has submitted that they have not undertaken any construction activity outside the validity of the EC.
7. The EAC also took into consideration the drone survey of the project site and kml file on the Google Earth presented by the project proponent along with DSS of the project site on PARIVESH and made following deliberations accordingly.
  8. Total project area after expansion is 13.17 Acres (5.32 Ha) [Existing: 9.9 acres (4.0Ha); Additional: 3.27 Acres (1.32 Ha)]. PP has reported that total project land is acquired by the company. PP has further reported that in Sy. No. 68/2 Additional Land area of 3.27 Acres (1.32 Ha) is acquired to develop green belt and to construct STP and ETP.
  9. There is a rich habitation along with other sensitive areas within the study area of the project site. The EAC opined that proponent shall take appropriate environmental safeguard measures to minimise the impact on the habitation of the locals. The project proponent needs to strengthen green belt all around the plant area to reduce the dust pollution. The PP shall also include some of these locations in its environmental monitoring programme.
  10. As reported, there are several water bodies within the study area of the project site. The EAC opined 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 implemented.
  11. The water requirement for the proposed project is estimated as 137.0 m<sup>3</sup>/day, out of which 50.0 m<sup>3</sup>/day of fresh water requirement will be met from the ground water and the remaining requirement of 87.0 m<sup>3</sup>/day is met by recycling (out of which 75 m<sup>3</sup>/day of Cooling water is continuously recycled after settling and 12 m<sup>3</sup>/day STP Treated water will be used for Greenbelt). The EAC deliberated on the water requirement is of the opinion that PP shall obtain necessary permission from the Competent Authority in this regard.
  12. The Committee has deliberated on the baseline data and incremental GLC due to the proposed project and observed that PM<sub>2.5</sub> and PM<sub>10</sub> values are recorded on a higher side. The EAC opined that PP shall undertake stringent measures to minimise the levels of PM<sub>2.5</sub> and PM<sub>10</sub>.
  13. The Committee also deliberated on the public hearing issues along with action plan submitted by the proponent to address the issues raised during the public hearing and found

it satisfactory. The committee advised the PP to implement the PH action plan in a time bound manner.

14. The PP has submitted that existing green belt has been developed in 0.62 ha area which is about 11.82% of the total project area of 13.17 Acres with total sapling of 3000 Trees. Proposed greenbelt will be developed in 1.127 ha which is about 21.18% of the total project area. Thus total of 1.747 ha area (33% of total project area) will be developed as greenbelt. Total no. of 5970 saplings will be planted and nurtured in 1.127 hectares in 3 years. The EAC deliberated on the greenbelt layout plan along with action plan and the budget earmarked and is of the opinion that greenbelt shall be completed within 3 months' time i.e., on or before 02.10.2024 as committed.
15. The committee deliberated details of carbon foot prints and carbon sequestration study w.r.t. proposed project and found them to be satisfactory.
16. The Committee deliberated on the certified compliance report along with ATR and is of the opinion that partially-complied conditions shall be strictly addressed and committee noted that Action taken report regarding the partially/non-complied condition was submitted to Monitoring Division MoEF&CC, on 29.05.2024, is under consideration at C&MD in Ministry.
17. The EAC also deliberated on the written submission of the project proponent and found it satisfactory.
18. The EAC deliberated on the proposal with due diligence in the process as notified under the provisions of the EIA Notification, 2006, as amended from time to time and accordingly made the recommendations to the proposal. The Experts Members of the EAC found the proposal in order and recommended for grant of environmental clearance.
19. The environmental clearance recommended to the project/activity is strictly under the provisions of the EIA Notification 2006 and its subsequent amendments. It does not tantamount/construe to approvals/consent/permissions etc. required to be obtained or standards/conditions to be followed under any other Acts/ Rules/ Subordinate legislations, etc., as may be applicable to the project. The project proponent shall obtain necessary permission as mandated under the Water (Prevention and Control of Pollution) Act, 1974 and the Air (Prevention and Control of Pollution) Act, 1981, as applicable from time to time, from the State Pollution Control Board, prior to construction & operation of the project.
20. The EAC also reviewed the EC conditions (specific and general) pertaining to Industry-I projects and observed that some of the specific conditions stipulated so far in the previously recommended EC projects are common and applicable to most of the projects in general. In view of the same, the General Conditions (in case of EC projects) have been revised through reallocation of these common conditions from specific to General Conditions (in case of EC projects). Accordingly, the instant project is also being stipulated with the modified General conditions.

**Recommendations of the Committee:**

62.2.23 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 and Action closer report of IA [C&MD] on portal** under the provisions of EIA Notification, 2006 subject to the stipulation of following specific conditions and general conditions based on project specific requirements:

**A. Specific Condition:**

- i. **This Environmental clearance is granted subject to final outcome of Hon'ble Supreme Court of India, Hon'ble High Court, Hon'ble NGT and any other Court of Law, if any, as may be applicable to this project.**
- ii. The project proponent shall comply with all the environmental protection measures and safeguards proposed in the documents submitted to the Ministry. All the recommendations made in the EIA/EMP in respect of environmental management, and risk mitigation measures relating to the project shall be implemented.
- iii. The project proponent shall utilize modern technologies for capturing of carbon emitted and shall also develop carbon sink/carbon sequestration resources capable of capturing more than emitted. The implementation report shall be submitted to the IRO, MoEF&CC in this regard.
- iv. There is a rich habitation along with other sensitive areas within the study area of the project site. Proponent shall take appropriate environmental safeguard measures to minimise the impact on the habitation of the locals. The project proponent needs to strengthen green belt all around the plant area to reduce the dust pollution. The PP shall also include some of these locations in its environmental monitoring programme.
- v. As reported, there are several water bodies within the study area of the project site. A robust and full proof Drainage Conservation scheme to protect the natural drainage and its flow parameters; along with Soil conservation scheme and multiple Erosion control measures shall be implemented.
- vi. The water requirement of 137.0 m<sup>3</sup>/day, shall be met from the ground water [50.0 m<sup>3</sup>/day] and the remaining requirement of 87.0 m<sup>3</sup>/day will be met by recycling (out of which 75 m<sup>3</sup>/day of Cooling water is continuously recycled after settling and 12 m<sup>3</sup>/day STP Treated water will be used for Greenbelt). PP shall obtain necessary permission from the Competent Authority in this regard.
- vii. PP shall undertake stringent measures to minimise the levels of PM<sub>2.5</sub> and PM<sub>10</sub>.
- viii. PP shall strictly address the partially-complied conditions reported by IRO.
- ix. Three tier Green Belt shall be developed in atleast 33% of the project area within 3 months, as committed, 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 sensitive areas nearby project site. PP shall develop greenbelt on the approach road from State Highway to plant site. Compliance status in this regard, shall be submitted to concerned Regional Office of the MoEF&CC.

- x. The PP is advised to implement the 'Ek Ped Maa Ke Naam' Campaign which was launched on 5<sup>th</sup> June 2024 on the occasion of the World Environment Day to increase the forest cover across the Country.
- xi. All the commitments made towards socio-economic development of the nearby villages shall be satisfactorily implemented. The action plan based on the social impact assessment study of the project as per the EMP in accordance to the Ministry's OM dated 30.09.2020 amounting to Rs. 0.42 Crores shall be strictly implemented and progress shall be submitted to the Regional Office of MoEF&CC.
- xii. The project proponent shall undertake village adoption programme and prepare and implement the action plan to develop them into a model village.
- xiii. As committed, PP shall establish full-fledged health facility with all essential equipment within 3 months' time i.e., on or before 02.10.2024.

## **B. General Conditions**

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

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

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

- i. The project proponent shall install 24x7 continuous emission monitoring system at process stacks to monitor stack emission as well as Continuous Ambient Air Quality Station (CAAQMS) for monitoring AAQ parameters with respect to standards prescribed in Environment (Protection) Rules 1986 as amended from time to time. The CEMS and CAAQMS shall be connected to SPCB and CPCB online servers and calibrate these systems from time to time according to equipment supplier specification through labs recognized under Environment (Protection) Act, 1986 or NABL accredited laboratories.
- ii. The project proponent shall carryout Continuous Ambient Air Quality monitoring for common/criterion parameters relevant to the main pollutants released (e.g. PM<sub>10</sub> and PM<sub>2.5</sub> in reference to PM emission, and SO<sub>2</sub> and NO<sub>x</sub> in reference to SO<sub>2</sub> and NO<sub>x</sub> emissions) within and outside the plant area covering upwind and downwind directions.
- iii. The project proponent shall monitor fugitive emissions in the plant premises at least once in every quarter through laboratories recognized under Environment (Protection) Act, 1986 or NABL accredited laboratories.
- iv. Sampling facility at process stacks shall be provided as per CPCB guidelines for manual monitoring of emissions.
- v. Appropriate Air Pollution Control (APC) system shall be provided for all the dust generating points including fugitive dust from all vulnerable sources, so as to comply prescribed stack emission and fugitive emission standards.
- vi. The project proponent shall provide leakage detection and mechanized bag cleaning facilities for better maintenance of bags.

- vii. Sufficient number of mobile or stationery vacuum cleaners shall be provided to clean plant roads, shop floors, roofs, regularly.
- viii. Ensure covered transportation and conveying of raw material to prevent spillage and dust generation. The project proponent use leak proof trucks/dumpers carrying coal and other raw materials and cover them with tarpaulin.
- ix. Recycle and reuse iron ore fines, coal and coke fines, lime fines and such other fines collected in the pollution control devices and vacuum cleaning devices in the process after briquetting/ agglomeration.
- x. The project proponent shall provide primary and secondary fume extraction system at all heat treatment furnaces.
- xi. Wind shelter fence and chemical spraying shall be provided on the raw material stock piles.
- xii. Design the ventilation system for adequate air changes as per prevailing norms for all tunnels, motor houses, Oil Cellars.
- xiii. Pollution control system in the plant shall be provided as per the CREP Guidelines of CPCB.
- xiv. The project proponent shall adopt the Clean Air practices like mechanical collectors, wet scrubbers, fabric filters (bag houses), electrostatic precipitators, combustion systems (thermal oxidizers), condensers, absorbers, adsorbers, and biological degradation. Controlling emissions related to transportation shall include emission controls on vehicles as well as use of cleaner fuels. Sufficient numbers of additional truck mounted Fog/Mist water cannons shall be procured and operated regularly inside the project premises and also in the surrounding villages to arrest suspended dust in the atmosphere.
- xv. Bag filters shall be cleaned regularly and efficiency of bag filter system shall be monitored at regular intervals.
- xvi. Water Sprinklers/Water mist system shall be installed near raw material yards, operational units and other strategic locations to control fugitive emissions from the plant.
- xvii. The particulate matter emissions from the process stacks shall be less than 30 mg/Nm<sup>3</sup> and measures shall be undertaken as per the submitted action plan. Efficient Air monitoring equipment shall be installed.
- xviii. Following additional arrangements to control fugitive dust shall be provided:
  - a. Fog / Mist Sprinklers at all on bulk raw material storage area (at the transfer points) like Iron Ore, Coal and for Fly Ash and similar solid waste storage areas.
  - b. Proper covered vehicle shall be used while transport of materials.
  - c. Wheel washing mechanism shall be provided in entry and exit gates with complete recirculation system.
- xix. Online stack monitoring system for IF and RHF shall be installed and monitoring report shall be submitted to the concerned Regional Office of the MoEF&CC along with the six monthly compliance report.
- xx. Low NO<sub>x</sub> Burners will be installed at Reheating Furnace for control of Gaseous emissions generated while using PNG.

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



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

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

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

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

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

## **VI. Waste management**

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

## **VII. Green Belt**

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

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

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

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

## **IX. Environment Management**

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

## **X. Miscellaneous**

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

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

**Agenda No. 62.3**

- 62.3 Expansion of Asbestos & Non Asbestos Cement Sheets and Pressure Pipes from 2,40,000 MTPA to 3,36,000 MTPA by M/s ARL Infratech Ltd., located at Khasra Nos. 718, 719, 720, 721, 885/722 & 717 (part), Village – Dahami Khurd, Bagru, Tehsil – Sanganer, District– Jaipur, Rajasthan - Consideration of Environmental Clearance.**

**[Proposal No.: IA/RJ/IND1/462920/2024; File No. IA-J-11011/343/2007-IA-II(IND-I)]**

**[Consultant: Paramarsh Servicing Environment and Development; Valid upto: 01.08.2024]**

- 62.3.1 M/s. ARL Infratech Ltd. has made an online application vide proposal no. IA/RJ/IND1/462920/2024 dated 04.06.2024 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 para 7(ii) of the EIA Notification, 2006 for the project mentioned above. The proposed project activity is listed at S. No. 4 (c) Asbestos milling & asbestos based products under Category “A” of the schedule of the EIA Notification, 2006 and appraised at Central Level.
- 62.3.2 Name of the EIA consultant: M/s. Paramarsh Servicing Environment and Development [List of ACOs with their Certificate / Extension Letter vide QCI/NABET/ENV/ACO/24/3214; valid upto 01.08.2024, as on June 26, 2024].

**Details submitted by Project proponent**

- 62.3.3 The project of M/s ARL Infratech Ltd. located at Khasra Nos. 718, 719, 720, 721, 885/722 & 717(part), Village – Dahami Khurd, Bagru, Tehsil – Sanganer, District– Jaipur, Rajasthan is for expansion of existing unit for production of Asbestos & Non Asbestos Cement Sheets and Pressure Pipes from 2,40,000 MTPA to 3,36,000 MTPA, i.e 40% in two phases [**20% in Phase I (from 2,40,000 TPA to 2,88,000 TPA) (sought in the instant proposal)**] and subsequent 20% in Phase II (total 3,36,000 MTPA)] under para 7(ii) of EIA Notification, 2006 [OM dated 11.04.2022].
- 62.3.4 **Justification for applying under the provisions of para 7(ii) of EIA Notification, 2006:**  
As per the OM dated 11<sup>th</sup> April 2022 para-5, subject to fulfilment of the para 4(i) to (viii), if intended change is upto 20 % based on successful compliance of previous environmental safeguard conditions & up-to 40 % based on successful compliance of previous environmental safeguard conditions related to expansion of 20%, Revised EIA/EMP required to be prepared and same shall be appraised by Appraisal Committee, as stated above 40% expansion in production capacity is proposed which will be done in 2 phases viz. 20% in Phase I (from 2,40,000 MTPA to 2,88,000 MTPA) and subsequent 20% in Phase II (total 3,36,000 MTPA).

Point-wise Compliance to the conditions mentioned in the Para 4 of the Ministry's O.M. F.No. IA3-22/10/2022-IA.III [E 177258] dated 11.04.2022 is given as below:

S. No.	Conditions	Reply of PP		
1.	The project should have gone through the public hearing process, at least once, for its existing EC capacity on which expansion is being sought, except those categories of projects which have been exempted as per para 7 III (i) of EIA Notification 2006 and its amendments.	Public hearing was conducted for increase in production capacity from 1,60,000 MTPA to 2,40,000 MTPA on dated 06.11.2019. Now the proposal is for expansion in production capacity from 2,40,000 MTPA to 3,36,000 MTPA. Total expansion in production capacity will be 40% which will be done in 2 phases viz. 20% in Phase I (from 240,000 MTPA to 2,88,000 MTPA) and subsequent 20% in Phase II (from 2,88,000 MTPA to 3,36,000 MTPA).		
2.	There should not be change in Category of the project from 'B2' to 'B1' or 'A' due to proposed modernisation or expansion.	There is no change in project Category. The project activity i.e. "Manufacturing of Asbestos & Non-Asbestos Cement Sheets and Pressure Pipes Unit" is categorized under item 4 (c) {Asbestos milling & asbestos based products} of the EIA Notification, 2006 which comes under category "A" and there is no change in the project category due to the expansion activity		
3.	There is no additional land acquisition or forest land diversion involved for the proposed expansion or there is no increase in lease area with regard to mining vis-a-vis the area mentioned in the EC, based on which public hearing has been held earlier.	There is no additional land requirement. The proposed expansion is coming up with the same land area / premises admeasuring 72,263 sq. m. for which EC was granted by MoEF&CC on dated 01.12.2020		
4.	The proposed expansion shall not be more than 50% of production capacity as mentioned in the prior EC, issued on the basis of public hearing held and the same shall be allowed in minimum three phases.	The proposal is for expansion in production capacity from 2,40,000 MTPA to 3,36,000 MTPA i.e. 40%. The same will be done in 2 phases viz. 20% in Phase I (from 240,000 MTPA to 2,88,000 MTPA) and subsequent 20% in Phase II (total 3,36,000 MTPA).		
5.	Predicted environmental quality parameters arising out of proposed expansion / modernization shall be within the prescribed norms and the same shall be maintained as per prescribed norms.	Predicted environmental quality parameters as a result of the proposed expansion will be well within the permissible norms. Effective EMP has been proposed for the same. The summary of the baseline values, predicted values and the resultant values are given as under:		
		Maximum Baseline Concentration	Predicted GLC at Site due to proposed sources	Cumulative GLC (Baseline + Predicted)

S. No	Conditions						Reply of PP									
	AAQM Location Name	Max Baseline Conc.PM <sub>10</sub>	Max Baseline Conc.PM <sub>2.5</sub>	Max Baseline Conc.SO <sub>2</sub>	Max Baseline Conc.NO <sub>2</sub>	Max Baseline Conc. CO	Predicted GLC (µg/m <sup>3</sup> ) –PM <sub>10</sub>	Predicted GLC (µg/m <sup>3</sup> ) – PM <sub>2.5</sub>	Predicted GLC (µg/m <sup>3</sup> ) –SO <sub>2</sub>	Predicted GLC (µg/m <sup>3</sup> ) –NO <sub>x</sub>	Predicted Conc. CO	Total GLC (µg/m <sup>3</sup> ) –PM <sub>10</sub>	Total GLC (µg/m <sup>3</sup> ) – PM <sub>2.5</sub>	Total GLC (µg/m <sup>3</sup> ) –SO <sub>2</sub>	Total GLC (µg/m <sup>3</sup> ) –NO <sub>x</sub>	Total Conc. CO (mg/m <sup>3</sup> )
	Project Site	77.1	48.4	19.7	34.5	1.26	0.01581	0.0119	0.04931	2.0667	0.005101	77.11581	48.4119	19.74931	36.5667	1.265101
	Dahami Khurd	59.8	37.9	8	15.6	0.802	0.00064	0.00043	0.00102	0.03699	0.000183	59.80064	37.90043	8.00102	15.63699	0.802183
	Tilawas	59.7	39.8	7.8	15.8	0.802	0.00152	0.00114	0.00468	0.17002	0.000489	59.70152	39.80114	7.80468	15.97002	0.802489
	Kalwara	59.3	38.2	7.9	15.7	0.802	0.00079	0.00059	0.00244	0.08346	0.000254	59.30079	38.20059	7.90244	15.78346	0.802254
	Palri	59.5	38.7	7.9	15.8	0.802	0.00117	0.00088	0.00365	0.12543	0.000378	59.50117	38.70088	7.90365	15.92543	0.802378
	Hasampura	59.9	38.6	7.8	15.6	0.687	0.00112	0.00084	0.00344	0.11869	0.000362	59.90112	38.60084	7.80344	15.71869	0.687362
	Bagru IND Area	75.6	42.9	13.7	18.8	1.031	0.00107	0.0008	0.00331	0.09925	0.000343	75.60107	42.9008	13.70331	18.89925	1.031343
	Ghegha	59.4	37.6	7.9	15.5	0.687	0.00049	0.00037	0.0015	0.0515	0.000158	59.40049	37.60037	7.9015	15.5515	0.687158
6.	The proposed expansion should not result in reduction in the greenbelt area as stipulated in the earlier EC, or if the existing ratio of greenbelt is more than 33%, after expansion it should not reduce below 33%.						As per the earlier EC Granted total greenbelt area is 23846.79 sq.m (33%), which will not be altered for the proposed expansion i.e. the total green area after the proposed expansion will be 23846.79 sq.m (33%) Further, no trees cutting is involved for the proposed expansion works.									
7.	The project proponent should have satisfactorily complied the conditions stipulated in the existing EC(S) and satisfactorily fulfilled all the commitments made during the earlier public hearing/ consultation proceedings and also the commitments given while granting previous expansion, as may be applicable. This shall be duly recorded in the certified compliance report issued by the IRO/CPCB/ SPCB, which should not						Certified EC Compliance to the conditions laid in the previous EC has been obtained from the office of MoEF&CC vide letter no. IV/Env/Raj/Ind-606/1037/2023 on dated 24.10.2023. All the commitments made during the earlier public hearing proceedings have been fulfilled detailed given below:									

S. No.	Conditions	Reply of PP	
	be more than one year old at the time of submission of application.		
<b>ACTION PLAN FOR ISSUES RAISED DURING PUBLIC HEARING</b>			
S. No.	Issue raised	Action Plan	Actual expenditure done
1	<b>Employment to locals</b>	Presently, about 200 employees from Village Dahmi Kalan, Bagru are working in the company. Locals will be hired in the company based upon eligibility in future as well.	--
2.	<b>Water related issues</b>	Existing 11 no. of Rain water harvesting structure has been constructed in the existing plant for the recharge of water.	For in-situ RWH structures: Rs. 60.0 Lac/-
3.	<b>Environment management - Greenbelt &amp; plantation</b>	Saplings are distributed & plantation is being carried out in the buffer zone.	An amount of Rs. 29.0 Lac has been spent on plantation
4.	<b>CER activities &amp; development of the area</b>	Presently, the company is carrying out CSR activities in various sectors. Focus of our CER activities will primarily be on nearby villages in the future.	An amount of Rs. 2.50 Cr. has been spent for CER activities
8.	Public Consultation shall be undertaken [if applicable as per table below] by obtaining response in writing, as per para 7 III (ii) (b) of EIA Notification 2006, except those category of projects which have been exempted as per para 7 III (i) of EIA Notification 2006 and its amendments.	Not Applicable. The project is categorized under scenario no. 3 of para 5 of O.M. dated 11.04.2022 in which requirement of fresh public consultation is not needed as the proposal is for expansion in production capacity upto 40% which will be done in 2 phases i.e. 20% expansion in phase 1 ( from 240,000 MTPA to 2,88,000 MTPA) and subsequent 20% in Phase II (from 2,88,000 MTPA to 3,36,000 MTPA).	
9.	Effluent monitoring including air quality monitoring systems as specified in the existing EC, if stipulated, should have been installed.	The effluent generated from the process is recirculated in closed loop within the process. Thus, there is no effluent stream requiring ETP. Thus, no effluent monitoring system is required and installed. CAAQMS & Continuous Emission Monitoring System (CEMS) have been installed at site. Photographs showing the same are submitted.	

#### 62.3.5 Details of EDS:



S. No.	Details of EDS Sought	Reply of PP																																																											
1.	On perusal of the kml file, it is observed that greenbelt is not developed properly along the project boundary. PP shall submit the justification and complete details of the greenbelt developed so far along with the photographs and action plan for completing the balance greenbelt.	<p>The existing area under greenbelt and plantation is 23846.79 sq. m. (33% of 72263 sq.m. Plant area) with 6904 no. of trees planted till date. The greenbelt has been developed inside the plant near operational units, plant boundary, road and open areas.</p> <p>Total trees required are <math>23846.79/4 = 5961.69</math> nos. (says 5962)</p> <p>2 x 2 m greenbelt of minimum 15 m width on plant periphery with native trees has been planted.</p> <p>Photographs showing existing plantation and details of existing plants with Landscape plan submitted.</p>																																																											
2.	As reported, there are sensitive areas within the study area of the project site. PP shall submit the mitigation measures undertaken to minimize the impact of project activities on these sensitive areas.	<p>As reported in our application, the following are the sensitive areas within 15 km buffer zone:</p> <table border="1"> <thead> <tr> <th>S. No.</th> <th>Particulars</th> <th>Distance (Km) (From Project Boundary)</th> <th>Direction</th> </tr> </thead> <tbody> <tr> <td colspan="4"><b>P.F/R.F</b></td> </tr> <tr> <td>1.</td> <td>Muhana R.F.</td> <td>13.1</td> <td>ESE</td> </tr> <tr> <td colspan="4"><b>National Park</b></td> </tr> <tr> <td>1.</td> <td>None within 15 Km radius</td> <td>--</td> <td>--</td> </tr> <tr> <td colspan="4"><b>Wildlife Sanctuary</b></td> </tr> <tr> <td>1.</td> <td>None within 15 Km radius</td> <td>--</td> <td>--</td> </tr> <tr> <td colspan="4"><b>Water Bodies</b></td> </tr> <tr> <td>1.</td> <td>Sadriya Nadi</td> <td>1.3</td> <td>S</td> </tr> <tr> <td>2.</td> <td>Nevata Talav</td> <td>10.5</td> <td>ESE</td> </tr> <tr> <td>3.</td> <td>Hingoniya Sagar</td> <td>11.6</td> <td>WSW</td> </tr> <tr> <td>4.</td> <td>Bandi River</td> <td>13.5</td> <td>WSW</td> </tr> <tr> <td colspan="4"><b>Habitation</b></td> </tr> <tr> <td>1.</td> <td>Dahami Khurd</td> <td>1.3</td> <td>NNE</td> </tr> </tbody> </table> <p><i>Source: - All distances are taken with respect to Toposheet</i></p> <p>*Nearest Nahargarh Wildlife Sanctuary is at a distance of 27.50 Km towards ENE and Jamwa Ramgarh Wildlife Sanctuary - 53.50 Km towards ENE.</p> <p>The measures undertaken to reduce the adverse impact on these sensitive areas are as follows:</p> <ul style="list-style-type: none"> <li>• Water sprinkling is being regularly carried out in and around the plant area as well as transportation route.</li> <li>• Fully automated airtight BOD Installed at site.</li> <li>• Vehicles with PUC Certificate will be hired.</li> </ul>				S. No.	Particulars	Distance (Km) (From Project Boundary)	Direction	<b>P.F/R.F</b>				1.	Muhana R.F.	13.1	ESE	<b>National Park</b>				1.	None within 15 Km radius	--	--	<b>Wildlife Sanctuary</b>				1.	None within 15 Km radius	--	--	<b>Water Bodies</b>				1.	Sadriya Nadi	1.3	S	2.	Nevata Talav	10.5	ESE	3.	Hingoniya Sagar	11.6	WSW	4.	Bandi River	13.5	WSW	<b>Habitation</b>				1.	Dahami Khurd	1.3	NNE
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S. No.	Details of EDS Sought	Reply of PP
		<ul style="list-style-type: none"> <li>• Fly-Ash is transported in closed containers &amp; transferred to closed silos through pneumatic conveying system.</li> <li>• Covered transportation of raw material and finished product is already implemented and same shall be continued in future also.</li> <li>• Green Belt has already been developed all around the plant area covering 33% of the total project area. Local species have been planted over the green belt area i.e. Neem, Sesham, Karanj, Gulmohar, etc.</li> <li>• STP is provided for treatment of domestic waste water and the treated water is used for watering the green belt area and in the process.</li> <li>• Continuous Ambient Air Quality Monitoring Stations (CAAQMS) &amp; Continuous Emission Monitoring System (CEMS) have been installed at site to monitor the pollution level.</li> <li>• Periodic monitoring by NABL accredited environmental laboratory for monitoring of Air, Water, Noise, stack emissions from the plant on regular basis has been done.</li> </ul>
3.	Under section for brief summary on the proposed baseline collection, PP shall submit the summarized baseline data collected for each parameter.	<p>The data has been generated during Pre-monsoon season from 1<sup>st</sup> March 2023 to 31<sup>st</sup> May 2023 in accordance with the requirement of statutory agencies by SCS Enviro Services Private Limited {NABL accredited (certificate no. TC-13363; Validity period: 27.03.2024 to 26.03.2026) and MoEF&amp;CC recognized (F.No.15018/29/2015-CPW dated 15.11.2018). The monitoring and testing has been done as per the guidelines of MoEF&amp;CC and the IS standards. Monitoring was conducted for the following parameters:</p> <p><b>1.0 AMBIENT AIR</b></p> <p>Ambient air monitoring (24 hourly samples) was done twice a week for 3 months for one season for the parameters PM<sub>10</sub>, PM<sub>2.5</sub>, SO<sub>2</sub>, NO<sub>x</sub> &amp; CO. One station was in core zone and 7 stations in buffer zone. Out of 7 Stations, 2 stations were in downwind, 1 in upwind, 2 in cross-wind direction, and 2 station represent habitation.</p> <p>Results of air monitoring are as under:-</p>

S. No.	Details of EDS Sought	Reply of PP		
		<b>Parameter</b>	<b>Minimum</b>	<b>Maximum</b>
		Particulate Matter (PM <sub>10</sub> )	45.2 µg/m <sup>3</sup>	77.1 µg/m <sup>3</sup>
		Particulate Matter (PM <sub>2.5</sub> )	28.1 µg/m <sup>3</sup>	48.4 µg/m <sup>3</sup>
		Sulphur Dioxide (SO <sub>2</sub> )	6.0 µg/m <sup>3</sup>	19.7 µg/m <sup>3</sup>
		Oxides of Nitrogen (NO <sub>x</sub> )	9.3 µg/m <sup>3</sup>	34.5 µg/m <sup>3</sup>
		Carbon Monoxide (CO)	0.458 mg/m <sup>3</sup>	1.26 mg/m <sup>3</sup>
		<p>All the parameters have been found to be within NAAQS at all the monitoring locations.</p> <p><b>1.1 Work-Zone Monitoring</b> Asbestos fiber Concentration Monitoring at Project site has been done at 12 locations.</p> <p><b>1.2 Meteorological</b> Meteorological parameters measured at hourly duration simultaneously at one air monitoring station for 3 months. Parameters: Wind speed, wind direction, Relative humidity, Temperature, Precipitation, ceiling height, cloud cover.</p> <p><b>2.0 WATER</b> <b>Ground Water:</b> 8 locations for collection of ground water in study area (10 km radius) including core zone. Parameters tested for physical and chemical as well as biological parameters according to applicable standards. All the analysed parameters in ground water except for total hardness, total dissolved solids, fluoride &amp; Nitrates indicate the increased concentration beyond the maximum permissible limit as per IS 10500:2012.</p> <p><b>Surface Water:</b> 1 locations were identified for collection of surface water. The analysis results indicate that pH of the Chirota Bandh is 8.45. The TDS was found to be 212 mg/l, Dissolved Oxygen (2.5 mg/l), BOD (4.3 mg/l).</p> <p><b>3.0 SOIL QUALITY</b></p>		

S. No.	Details of EDS Sought	Reply of PP
		<p>Soil samples have been collected from 8 no. of stations (1 in core zone &amp; 7 in buffer zone). pH of the soil samples ranged from 7.82 to 8.50, which reflects that the soil is near to moderately alkaline in nature indicating that soils do not pose a problem of salinity.</p> <p>The organic carbon in the soil samples ranged from &lt;0.50 % to 0.96 %. The concentration of available Nitrogen, Phosphorous and Potassium in the soil samples is 34 to 80 mg/100 gm, 14.7 to 42.4 kg/ha, 28.9 to 45.5 mg/100 gm respectively.</p> <p><b>4.0 NOISE LEVEL</b></p> <p>Hourly readings were taken for 24 hours (Leq) and Noise monitoring was done at 8 no. of stations (one in core zone, 7 in buffer zone). Minimum and maximum noise levels recorded during the day time were from 52.8 Leq dB and 68.2 Leq dB respectively and minimum and maximum level of noise during night time was 43.0 Leq dB and 55.5 Leq dB respectively. The noise level at all the monitored locations is within prescribed limit given in Noise Pollution (Regulation &amp; Control) Rules, 2000.</p> <p><b>5.0 TRAFFIC DENSITY</b></p> <p>Traffic study report of the area has been carried out at NH-48 Road. The V/C ratio is found out to be 0.011 on NH-48, the project will result in a modified V/C ratio during the post expansion phase i.e. to be 0.013 on NH-8. Current Level of service (LOS) is 'A' and post expansion it will remain same. Thus the additional load on the carrying capacity of the concern roads is not likely to have any significant adverse affect.</p> <p><b>6.0 LAND USE-LAND COVER</b></p> <p>Interpretation of Satellite Imagery of study period, Land use land cover analysis of 10 km study area based on IRS-P6 LISS IV data has been done. The total area cover was calculated 325.043 sq. km. The analysis reveals that agricultural classes cover the largest area with 132.121 sq. km area of irrigated crop land and 100.865 sq. km area of unirrigated crop land together contribute to 71.68% of the total study area followed by Forest and tree cover (17.69%), Built area (8.29%), waterbodies (1.19%) and barren land (1.15%).</p> <p><b>7.0 BIOLOGICAL ENVIRONMENT</b></p>

S. No.	Details of EDS Sought	Reply of PP					
		Particular	Trees, Shrub & Herbs	Mammals	Avifauna	Herpetofauna	Butterflies
		Core zone (Project site)	19	1	7	1	3
		Buffer Zone	179	10	125	15	11
		<p>Presence of Schedule-I species i.e. <i>Pavo cristatus</i> (Indian Peafowl), <i>Accipiter badius</i> (Shikra) and <i>Varanus bengalensis</i> (Monitor Lizard) has been registered in the study area &amp; conservation plan for the same has been submitted to Dy. Conservator of Forest for authentication on dated 12.01.2024 and query reply submitted on 28.05.2024.</p> <p><b>8.0 SOCIO-ECONOMIC PARAMETER</b>  A. Various amenities, demography, employment pattern of 10 km study area  B. socio-economic survey of Nearby villages</p>					
4.	As mentioned in the application form, validity of consultant is expired on 05.01.2024, kindly update the same in form at S. No. 19 and submit the validity extension certificate, if extension has been obtained.	Accreditation validity is upto 01.05.2024 which has been obtained from NABET-QCI. NABET Accreditation certificate is submitted.					
5.	PP has applied the proposal for expansion under para 7(ii) of EIA Notification, 2006. PP shall submit the compliance in a tabular form of para 4 and 5 of Ministry's O.M. dated 11.04.2022 pertaining to guidelines for granting EC under para 7(ii) to check whether the instant proposal qualifies to be appraised under para 7(ii) (a).	The proposal is for expansion in production capacity from 2,40,000 MTPA to 3,36,000 MTPA. Total expansion in production capacity will be 40% which will be done in 2 phases viz. 20% in Phase I (from 240,000 MTPA to 2,88,000 MTPA) and subsequent 20% in Phase II (total 3,36,000 MTPA) under para 7(ii) of EIA Notification, 2006. The compliance to Para 4 & 5 of MoEFCC OM dated 11.04.2022 pertaining to guidelines for granting EC under para 7(ii) is submitted.					
6.	PP shall ensure that the Addendum EIA report inter-alia cover the following points:						

S. No.	Details of EDS Sought	Reply of PP
	(A) Implementation status of the existing Environmental Clearance.	The details of Implementation of existing units as per Environmental Clearance is submitted.
	(B) Details of the earlier Public consultation conducted along with its proceedings.	Earlier public hearing was conducted for increase in production capacity from 1,60,000 MTPA to 2,40,000 MTPA on dated 06.11.2019 at Rajeev Gandhi Sewa kendra, Village Dahmi kalan, Bagru, Tehsil Sanganer, Jaipur (Raj). Earlier Public Hearing Proceedings originally in Hindi version are provided.
	(C) Summary of issues raised during the earlier Public Consultation and its implementation status.	Major issues raised during earlier Public hearing were: 1. Employment to locals 2. Water related issues 3. Environment management - Greenbelt & plantation 4. CER activities & development of the area Summary of issues along with implementation status of activities is provided.
	(D) Existing baseline conditions based on the periodic environmental monitoring program	The baseline monitoring for the proposed expansion was conducted on 01 <sup>st</sup> March to 31 <sup>st</sup> May 2023. The details of Baseline monitoring are provided in EIA report. All values of Environmental parameters are within prescribed limits. The project Authorities have installed Online CEMS and Online CAAQMS inside the plant at strategic locations for continuous monitoring of Air. Apart from this, the plant has also involved NABL accredited environmental laboratory for monitoring of Air, Water, Noise, stack emissions from the plant on regular basis. All the values of Environmental Parameters are within respective prescribed limits. The reports of latest Environmental monitoring are provided.
	(E) Proposed Expansion or Modernization or Change of product mix vis-à-vis with granted EC capacity along with percentage of increase in production.	The existing unit is operating with production capacity of 240,000 MTPA as per earlier EC dated 01.12.2020. The present proposal is for expansion in production capacity from 2,40,000 MTPA to 3,36,000 MTPA. The proposed expansion in production capacity will be 40% which will be done in 2 phases viz. 20% in Phase I (from 240,000 MTPA to 2,88,000 MTPA) and subsequent 20% in Phase II (total 3,36,000 MTPA) as per Ministry's O.M. Dated 11.04.2022
	(F) Proposed plant layout vis-à-vis with layout for which Environmental Clearance was granted.	There is no additional land requirement. Since the proposed expansion will be done in the same existing premises. The plant layout showing existing and proposed layout is submitted.
	(G) Proposed resources requirement (Land/raw materials/water/power) vis-à-	The proposed resource requirement with respect to granted environmental Clearance is provided. Summary of resource requirement is under:

S. No.	Details of EDS Sought					Reply of PP						
						Particulars	Existing as per EC dated 01.12.2020	Proposed resource requirement for expansion in (%)				
	vis with granted Environmental Clearance.					Land	72263 Ha	0				
						Raw material	689.367 MTPD	40				
						Water requirement	90 KLD	~32				
						Power requirement	1700 kVA	~12				
						Manpower	450	~7				
	(H) Pollution load calculations (Air/Water/Solid & hazardous waste/traffic) vis-à-vis with granted Environmental Clearance					The pollution load calculations with respect to granted environmental Clearance is provided.						
	(I) AAQ modelling predicting maximum Ground Level Concentration vis-à-vis with GLC max for which Environmental Clearance was granted.					The maximum GLC for the proposed expansion is PM <sub>10</sub> - 1.13078 µg/m <sup>3</sup> , SO <sub>2</sub> - 0.66278 µg/m <sup>3</sup> , NO <sub>x</sub> - 4.5246 µg/m <sup>3</sup> , CO- 0.011 mg/m <sup>3</sup> which are at a distance of 238 m from site. The maximum GLC for previous expansion for which Environment Clearance was granted is PM <sub>10</sub> - 7.20183 µg/m <sup>3</sup> , SO <sub>2</sub> - 0.09227 µg/m <sup>3</sup> , NO <sub>x</sub> - 6.8392 µg/m <sup>3</sup> , CO - 0.00387 mg/m <sup>3</sup> .						
	(J) Risk assessment with mitigation measures if any, required for the proposed Expansion or Modernization or Change of product mix.					The risk assessment with mitigation measures is provided.						
7.	Details of Raw material and its linkage and its mitigation measure during transportation needs to be submitted under section for requirement of minerals involved in the project.											
	S. No.	Raw material	Nature	Unit	Existing quantity	Proposed Quantity		Total quantity		Source of Supply	Distance (W.R.T. Plant)	Mode of Transport
						Phase-I	Phase-II	Phase-I	Phase-II			
	1	Asbestos Fibre*	Solid	MTPD	55	11	11	66	77	imported directly from Countries like Russia, Brazil and Kazakhstan, etc.	1250 Km	By ship to the Mundra port and by Road from Port
	2	Fly-Ash	Solid	MTPD	178	35.6	35.6	213.6	249.2	Fly Ash is obtained from Thermal Power Plants in Jharli, Suratgarh & Dadri.	400 Km	By Road
	3	Cement	Solid	MTPD	358	71.6	71.6	429.6	501.2	Cement is purchased directly from manufacturer s majorly from Rajasthan	350 Km	By Road

S. No.	Details of EDS Sought						Reply of PP					
										only like Wonder, Lafarge & Ultra-tech cement.		
4	Others (Pulp / Dry Waste etc.)	Solid	MTP D	95	19	19	114	133	Purchased locally from Indian market (Tamil Nadu)	2300 Km	By Road	
5	PVA Fibre**	Solid	MTP D	3.3	0.66	0.66	3.96	4.62	Imported from China	1250 Km	By Ship to port and by road from port.	
6	Additives (Performance Enhancers)**	Liquid	MTP D	0.067	0.0134	0.0134	0.0804	0.0938	Purchased locally from Indian market	200 Km	By Road	
	<b>Total</b>		<b>MT PD</b>	<b>689.367</b>	<b>137.8734</b>	<b>137.8734</b>	<b>827.2404</b>	<b>965.1138</b>				
<p><b>* used only in asbestos based cement sheet &amp; pipe;      ** used only in non-asbestos based cement sheet &amp; pipe</b></p> <p>Mitigation measures proposed during transportation and storage of raw material:</p> <ul style="list-style-type: none"> <li>✓ Vehicles with PUC Certificate will be hired.</li> <li>✓ Regular maintenance of vehicles will be done to ensure smooth running of vehicle.</li> <li>✓ Vehicles will be fully covered with a tarpaulin &amp; not over loaded.</li> <li>✓ Designated parking lots for trucks. No vehicle will be allowed to park outside the plant.</li> <li>✓ Un-necessary blowing of horn will be avoided.</li> <li>✓ Roads will be maintained in good condition to reduce noise due to traffic.</li> <li>✓ Greenbelt of appropriate quality &amp; width has already been developed &amp; same will be maintained.</li> </ul>												
8.	PP shall submit the status of approval of Wildlife Conservation Plan along with supporting documents.			As per Wildlife (Protection) Amendment Act 2022, there were three Schedule-I species i.e <i>Varanus bengalensis</i> , <i>Accipiter badius</i> and <i>Pavo cristatus</i> . Accordingly, Wildlife conservation plan was prepared and submitted to Dy. Conservator of Forest, Jaipur on dated 12.01.2024 and query reply submitted on 28.05.2024. It is under approval from the competent authority. Duly Authenticated flora fauna list from the Deputy Conservator of Forest (Wildlife), Chidiyaghar, Jaipur vide								



S. No.	Details of EDS Sought	Reply of PP										
		letter no क्रमांक एफ()एफसीए/उवस./जू/2023-24/1353 dated 23.02.2024 submitted.										
9.	PP has submitted the self-certified six-monthly compliance report. PP needs to submit the CCR obtained from IRO/SPCB along with the ATR and closure report for the non-compliances, if any as per Ministry's OM.	The Status of compliance of earlier EC was obtained from IRO, MoEF&CC, Jaipur vide letter no. IV/Env/Raj/Ind-606/1037/2023 dated 24.10.2023 in the name of M/s ARL Infratech Ltd. Inspection was carried out by IRO, Jaipur, MoEF&CC on 18.08.2023. As reported by IRO, MoEF&CC, Jaipur, there are no Non-Compliances or Partial Compliances of the EC conditions. Copy of Certified Compliance submitted.										
10.	The PP needs to submit the details of activities/ECs/CTEs/CTOs in tabular form showing its details of ECs/CTEs/CTO vis-à-vis production capacity since grant of CTE/CTO to check the violation, if any. All old CTEs/CTOs/ HW Authorization to be uploaded to verify the violation, if any.	The details of EC/CTE/CTO/ HW Authorization in tabular form is submitted.										
11.	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 and uploaded the data accordingly. English translation of land documents authenticated from notary shall be submitted.	<p>This is an existing unit situated at Khasra Nos. 718, 719, 720, 721, 885/722 &amp; 717(part), Village – Dahami Khurd, Bagru, Tehsil – Sanganer, District– Jaipur (Rajasthan). Proposed expansion is coming up within the same premises admeasuring 72,263 sq. m. for which EC was granted by MoEF&amp;CC on dated 01.12.2020. No additional land is required for proposed expansion. Copy of Land documents along with its English translation authenticated by public notary, Jaipur (Raj) dated 08.04.2024 is submitted. Chronology of land documents are as under: -</p> <table border="1"> <thead> <tr> <th>Khasra No.</th> <th>Details</th> </tr> </thead> <tbody> <tr> <td></td> <td>Lease was initially in the name of M/s. Roofit Industries Ltd as Agricultural Land</td> </tr> <tr> <td>719, 720, 721</td> <td>Land Converted for the use of manufacturing Asbestos cement sheets and pipe and lease deed registered on dated 04.04.2000 for 99 years</td> </tr> <tr> <td></td> <td>Lease hold rights transferred to the name of M/s. Ankit Pipes Pvt. Ltd. on 09.12.2004 and registered on dated 17.02.2005.</td> </tr> <tr> <td></td> <td>Name change on Lease deed from M/s. Ankit Pipes Pvt. Ltd. to M/s. Ankit Roofing Ltd. on dated 11.03.2008</td> </tr> </tbody> </table>	Khasra No.	Details		Lease was initially in the name of M/s. Roofit Industries Ltd as Agricultural Land	719, 720, 721	Land Converted for the use of manufacturing Asbestos cement sheets and pipe and lease deed registered on dated 04.04.2000 for 99 years		Lease hold rights transferred to the name of M/s. Ankit Pipes Pvt. Ltd. on 09.12.2004 and registered on dated 17.02.2005.		Name change on Lease deed from M/s. Ankit Pipes Pvt. Ltd. to M/s. Ankit Roofing Ltd. on dated 11.03.2008
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S. No.	Details of EDS Sought	Reply of PP	
			Name change on Lease Deed from M/s. Ankit Roofing Ltd. to M/s. ARL Infratech Ltd. on dated 16.06.2011.
		718	Sale deed between M/s. Roofit Industries and M/s. Ankit Pipes Pvt. Ltd. executed on dated 12.01.2005 and transferred to the name of M/s. ARL Infratech Ltd on dated 14.06.2019
		717 (part)	Lease deed registered in the favour of M/s. Ankit Roofing Ltd. on dated 13.08.2009 for 99 years.
		885/722	Lease transferred from Mr. R.C. Roongta, Mr. Anil Roongta, Mrs. Deepali and Mr. Ajay Roongta to M/s. ARL Infratech Ltd. on Dated 13.12.2010.
12.	Details of court case, directions issued by SPCB, if any, pending needs to be submitted.	There is no litigation against the project &/or project site in any court of law including NGT. No directions have been received from SPCB against the project till date. Undertaking by the authorized signatory of ARL in this regard is submitted.	
13.	PP shall clarify whether the project falls under CPA/SPA? If yes, then compliance to the CEPI guidelines shall be submitted.	The project site is located in Village – Dahami Khurd, Bagru, Tehsil – Sanganer, District– Jaipur (Rajasthan). There is no CPA/SPA declared by CPCB within its 10 km radius area. The nearest CPA Mansarovar industrial area, Jaipur is at a distance (aerial) of 20.0 km towards East Direction from project site.	
14.	It is mentioned that the processing of EC proposal, in the Ministry, is through Parivesh Portal only, therefore providing the requisite information/documents shall be in compliance as per Form and accordingly the PP are kindly requested to revise the complete application in the Form and resubmit the same.	Contents of para 14 are duly noted and have been complied with. Application has been revised as per EDS and in conformity to requirement of MoEF&CC.	
15.	As per the EDS reply, the accreditation validity of Consultant is upto 01.05.2024. Kindly update the same in Form at S.No. 19 as the whole process is online on portal and submit the validity extension certificate, if extension has been obtained.	Accreditation validity extension till 31.08.2024 has been obtained from NABET-QCI vide letter no. QCI/NABET/ENV/ACO/ 24/3214 dated 01.05.2024 for NABET accreditation Certificate no. NABET/EIA/2124/RA 0224 dated 30.12.2021. NABET Accreditation certificate along with letter for validity extension is submitted.	
16.	EDS reply is not satisfactory as the validity of accreditation of	Accreditation validity extension till 01.08.2024 has been obtained from NABET-QCI vide letter no.	

S. No.	Details of EDS Sought	Reply of PP
	Consultant is still not updated in the section for Consultant details in Part A of the Form at S No. 19. This happens either the accreditation of Consultant has been expired or QCI, NABET has not updated in their record, as the data of the same is fetching using API. In this regard the PP shall update the same. If issue may call at Helpdesk number. This is not good practice on behalf of Consultant and the Consultant is directed to check the Forms before submission of application.	QCI/NABET/ENV/ACO/ 24/3214 dated 01.05.2024 for NABET accreditation Certificate no. NABET/EIA/2124/RA 0224 dated 30.12.2021. The corrected details are now visible in Form-A at S. No. 19. as well. NABET Accreditation certificate along with letter for validity extension is submitted.

#### 62.3.6 Environmental Site Settings:

S. No	Particulars	Details	Remarks																											
i.	Total land	7.2263 Ha [72,263 sq.m.]	No additional land is required																											
ii.	Land acquisition details as per MoEF&CC O.M. Dated 7/10/2014	The proposed expansion will be executed on the existing land only. Land document area in favour of ARL Infratech Limited.																												
iii.	Existence of Habitation & Involvement of R&R, if any.	<p><b>Project site:</b> Nil</p> <p><b>Study Area:</b></p> <table border="1"> <thead> <tr> <th>Habitation</th> <th>Distance</th> <th>Direction</th> </tr> </thead> <tbody> <tr> <td>Dahmi Khurd</td> <td>1.3</td> <td>NNE</td> </tr> </tbody> </table>	Habitation	Distance	Direction	Dahmi Khurd	1.3	NNE	No R&R issue involved.																					
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iv.	Latitude and Longitude of <u>all corners</u> of the project site.	<table border="1"> <thead> <tr> <th>Point</th> <th>Latitude</th> <th>Longitude</th> </tr> </thead> <tbody> <tr> <td><b>Point 1</b></td> <td>26°49'4.04"N</td> <td>75°34'26.78" E</td> </tr> <tr> <td><b>Point 2</b></td> <td>26°48'57.66"N</td> <td>75°34'25.80" E</td> </tr> <tr> <td><b>Point 3</b></td> <td>26°48'56.11"N</td> <td>75°34'16.10" E</td> </tr> <tr> <td><b>Point 4</b></td> <td>26°48'59.60"N</td> <td>75°34'16.75" E</td> </tr> <tr> <td><b>Point 5</b></td> <td>26°49'0.10"N</td> <td>75°34'13.60" E</td> </tr> <tr> <td><b>Point 6</b></td> <td>26°49'4.03"N</td> <td>75°34'13.90" E</td> </tr> <tr> <td><b>Point 7</b></td> <td>26°49'3.95"N</td> <td>75°34'17.63" E</td> </tr> <tr> <td><b>Point 8</b></td> <td>26°49'4.95"N</td> <td>75°34'17.94" E</td> </tr> </tbody> </table>	Point	Latitude	Longitude	<b>Point 1</b>	26°49'4.04"N	75°34'26.78" E	<b>Point 2</b>	26°48'57.66"N	75°34'25.80" E	<b>Point 3</b>	26°48'56.11"N	75°34'16.10" E	<b>Point 4</b>	26°48'59.60"N	75°34'16.75" E	<b>Point 5</b>	26°49'0.10"N	75°34'13.60" E	<b>Point 6</b>	26°49'4.03"N	75°34'13.90" E	<b>Point 7</b>	26°49'3.95"N	75°34'17.63" E	<b>Point 8</b>	26°49'4.95"N	75°34'17.94" E	
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v.	Elevation of the project site	387 m above mean sea level (average)																												
vi.	Involvement of Forest land if any.	No Forest Land is involved within the plant site.																												

S. No	Particulars	Details	Remarks																
vii.	Water body (Rivers, Lakes, Pond, Nala, Natural Drainage, Canal etc.) exists within the project site as well as study area	<p><b>Project site: Nil</b></p> <p><b>Study area</b></p> <table border="1"> <thead> <tr> <th>Water body</th> <th>Distance (km)</th> <th>Direction</th> </tr> </thead> <tbody> <tr> <td>Sadriya Nadi</td> <td>1.3</td> <td>S</td> </tr> <tr> <td>Nevata Talav</td> <td>10.5</td> <td>ESE</td> </tr> <tr> <td>Hingoniya Sagar</td> <td>11.6</td> <td>WSW</td> </tr> <tr> <td>Bandi River</td> <td>13.5</td> <td>WSW</td> </tr> </tbody> </table>	Water body	Distance (km)	Direction	Sadriya Nadi	1.3	S	Nevata Talav	10.5	ESE	Hingoniya Sagar	11.6	WSW	Bandi River	13.5	WSW		
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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	<p><b>Study area- Nil</b></p> <p><b>Name of the ESZ/ESA: NA</b></p> <p><b>Status of Notification: NA.</b></p> <p><b>Distance of project from ESZ/ESA: NA</b></p> <p><b>Authenticated map of ESZ projecting distance of ESZ from project site: NA</b></p> <p><b>Status of NBWL approval: NBWL is not applicable.</b></p> <p><b>List of Reserved and protected forests:</b></p> <table border="1"> <thead> <tr> <th>S. No.</th> <th>Particulars</th> <th>Distance (Km)</th> <th>Direction</th> </tr> </thead> <tbody> <tr> <td colspan="2"></td> <td colspan="2"><b>(From Project Boundary)</b></td> </tr> <tr> <td colspan="4"><b>P.F/R.F</b></td> </tr> <tr> <td>1.</td> <td>Muhana R.F.</td> <td>13.1</td> <td>ESE</td> </tr> </tbody> </table>	S. No.	Particulars	Distance (Km)	Direction			<b>(From Project Boundary)</b>		<b>P.F/R.F</b>				1.	Muhana R.F.	13.1	ESE	
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<b>P.F/R.F</b>																			
1.	Muhana R.F.	13.1	ESE																

62.3.7 Initially, the project was granted EC to M/s Ankit Roofings Ltd vide Ir. No. J-11011/ 343/ 2007 -IA.II (I) dated 27.08.2007. Consequent upon name change of the company, the Ministry changed the name of the company in the EC letter vide letter no. J11011/343/2007IA.II(I) dated 24.01.2020. The project was then accorded Environment Clearance vide letter.no. J-11011/63/99 IA II (I) dated 01.12.2020 for expansion in production capacity of Asbestos & Non Asbestos Cement Sheets and Pressure Pipes from 1,60,000 MTPA to 2,40,000 MTPA. Consent to Operate for the existing unit was accorded by Rajasthan State Pollution Control Board vide letter. no. F(Tech)/JAIPUR(Sanganer)/6761(1)/ 2021-2022/4170-4172 Dated 24/11/2021. The validity of CTO is up to 28.02.2026.

62.3.8 Implementation status of the existing EC/CTE/CTO:

Sl. No.	Facilities	Unit	As per EC dated 01.12.2020	Implementation Status as on 25.06.2024	Production as per CTO
1.	Asbestos & Non-Asbestos Cement sheets and pressure pipes	MTPA	2,40,000	Implemented and Operational	2,40,000

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

Sl. No.	Plant Equipment/ Facility	Existing facilities as per EC dated 01.12.2020		Proposed Units		Final (Existing + Proposed)	
		Configuration	Capacity	Configuration	Capacity	Configuration	Capacity
<b>Phase-I (20%)</b>							
1.	Asbestos & Non-Asbestos Cement sheets and pressure pipes	Asbestos & Non-Asbestos Cement sheets and pressure pipes	2,40,000 MTPA	Asbestos & Non-Asbestos Cement sheets and pressure pipes	48,000 MTPA	Asbestos & Non-Asbestos Cement sheets and pressure pipes	2,88,000 MTPA

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

S. No.	Raw material	Quantity (MTPD)					Source of Supply	Distance	Mode of Transport
		Existing	Proposed		Total				
			Phase-I	Phase-II	Phase-I	Phase-II			
1	Asbestos Fibre*	55	11	11	66	77	imported directly from Countries like Russia, Brazil and Kazakhstan, etc.	700 Km	By ship to the Mundra port and by Road from Port
2	Fly-Ash	178	35.6	35.6	213.6	249.2	Fly Ash I obtained from Thermal Power Plants in Jharli, Suratgarh and Dadri	300 Km	By Road
3	Cement	358	71.6	71.6	429.6	501.2	Cement is purchased directly from manufacturers majorly from Rajasthan only like Wonder, Lafarge & Ultra-tech cement	250 Km	By Road
4	Others (Pulp / Dry Waste etc.)	95	19	19	114	133	Purchased locally from Indian market (Tamil Nadu)	1500 Km	By Road
5	PVA Fibre**	3.3	0.66	0.66	3.96	4.62	Imported from China	2500 Km	By Ship to port and by road from port.

S. No.	Raw material	Quantity (MTPD)					Source of Supply	Distance	Mode of Transport
		Existing	Proposed		Total				
			Phase-I	Phase-II	Phase-I	Phase-II			
6	Additives (Performance Enhancers)* *	0.067	0.0134	0.0134	0.0804	0.0938	Purchased locally from Indian market	200 Km	By Road
		<b>689.367</b>	<b>137.8734</b>	<b>137.8734</b>	<b>827.2404</b>	<b>965.1138</b>			

62.3.11 Existing water requirement is 90 m<sup>3</sup>/day (Fresh-75 m<sup>3</sup>/day, Recycled-15 m<sup>3</sup>/day), fresh water requirement is obtained from Ground water supply and permission for the same has been obtained from CGWA vide letter no. CGWA/ NOC/IND/REN/2/2023/7397 valid upto 31.12.2024. The water requirement for the proposed project is estimated as 118.6 m<sup>3</sup>/day out of which 75 m<sup>3</sup>/day of fresh water requirement will be obtained from the Ground water and 25 m<sup>3</sup>/day of fresh water requirement will be obtained from Stored Rain water and the remaining requirement of 18.6 m<sup>3</sup>/day will be met from the Recycled water. The permission for drawl of groundwater is obtained from CGWA vide letter no. CGWA/ NOC/IND/REN/2/2023/7397 valid upto 31.12.2024.

62.3.12 Existing power requirement of 1.7 MW is obtained from JVVNL. The power requirement for the project after expansion is estimated as 0.2 MW, the same will be obtained from the JVVNL.

62.3.13 Baseline Environmental Studies:

Period	March, April and May'2023 (Pre-Monsoon Season)
AAQ parameters at 8 Locations (min and max)	<ul style="list-style-type: none"> <li>PM<sub>2.5</sub> = 28.1 to 48.4 µg/m<sup>3</sup></li> <li>PM<sub>10</sub> = 45.2 to 77.1 µg/m<sup>3</sup></li> <li>SO<sub>2</sub> = 6.0 to 19.7 µg/m<sup>3</sup></li> <li>NO<sub>x</sub> = 9.3 to 34.5 µg/m<sup>3</sup></li> <li>CO = 0.458 to 1.26 mg/m<sup>3</sup></li> </ul>
Incremental GLC level	<ul style="list-style-type: none"> <li>PM<sub>10</sub> = 1.13078 µg/m<sup>3</sup> (Level at 0.238 km in SSE Direction)</li> <li>PM<sub>2.5</sub> = 0.71546 µg/m<sup>3</sup> (Level at 0.238 km in SSE Direction)</li> <li>SO<sub>2</sub> = 0.66278 µg/m<sup>3</sup> (Level at 0.238 km in SSE Direction)</li> <li>NO<sub>x</sub> = 4.5246 µg/m<sup>3</sup> (Level at 0.238 km in SSE Direction)</li> <li>CO = 0.011 mg/m<sup>3</sup> (Level at 0.238 km in SSE Direction)</li> </ul>
Ground water quality at 8 locations	pH: 7.41 to 8.43, Total Hardness: 128 to 1048 mg/l, Chlorides: 35.99 to 1651.49 mg/l, Fluoride: 0.8 to 2.07 mg/l. Heavy metals (Lead):0.01-0.01 mg/l
Surface water quality at 1 location	pH: 8.45; DO: 2.5 mg/l; BOD: 4.3 mg/l, COD- 25.5 mg/l
Noise levels Leq (Day and Night)	52.8 to 68.2 for the day time and 43.0 to 55.5 for the Night time.

Traffic assessment study findings	<ul style="list-style-type: none"> <li>• Traffic study has been conducted at NH-48 which is 1.20 km from the plant site.</li> <li>• Transportation of raw material, fuel &amp; finished product will be done 100% by road.</li> <li>• Existing PCU is 41 PCU/hr on (NH-48) and existing level of service (LOS) is:</li> </ul>				
	<b>Road</b>	<b>V (Volume in PCU/hr.)</b>	<b>C (Capacity in PCU/hr.)</b>	<b>Existing V/C Ratio</b>	<b>LOS</b>
	NH-48	41	3600	0.011	A
	<ul style="list-style-type: none"> <li>• PCU load after proposed expansion project will be 41 (Existing) + 15 (Additional) PCU/hr and level of service (LOS) will be:</li> </ul>				
	<b>Road</b>	<b>V (Volume in PCU/hr.)</b>	<b>C (Capacity in PCU/hr.)</b>	<b>Proposed V/C Ratio</b>	<b>LOS</b>
	NH-48	41+15= 56	3600	0.015	A
<p><i>*Note: Capacity as per IRC-106:1990 Guideline for capacity for roads.</i>  <b>Conclusion:</b> The level of service will "A" i.e. excellent after including additional traffic due to proposed expansion project.</p>					
Flora and fauna	<p>3 nos of Schedule-I Species i.e. <i>Pavo cristatus</i> (Indian peafowl), <i>Varanus bengalensis</i> (Monitor Lizard), <i>Accipiter badius</i> (Shikra), were observed in study area.  <i>Conservation plan for three species schedule- I found in the study area has been prepared and the same is also been submitted to Deputy conservator of Forest department, Jaipur for approval vide letter dated 12.01.2024 and query reply submitted on 28.05.2024. The same is under process for approval.</i></p>				

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

#### Solid Waste

S. No.	Type of Waste	Source	Quantity			Mode of Disposal
			Existing	Proposed	Total	
1.	Municipal Solid waste	Domestic Activity	68 TPA	4 TPA	72 TPA	Waste food & organic waste is being sent to compost pit located within site premises Twin-bin segregation system is being used for collection of waste & is being disposed off through approved vendor to municipal disposal site.
2.	Dry waste from APCD	APCD	0.5 MT/Month	--	0.5 MT/Month	Mixed with water to form slurry, which will be recycled into the process.

### Hazardous Waste

Particulars	Category	Quantity			Management
		Existing	Proposed	Total	
Asbestos-containing residues	15.1	2880 TPA	1100 TPA	3980 TPA	Reuse in process/CTDF Udaipur
Used/Spent oil	5.1	15 KLA	3 KLA	18 KLA	MoU with Authorized Recyclers
Empty barrels/containers/liners contaminated with hazardous chemicals /wastes	33.1	300 Nos./Annum	75 Nos./Annum	375 Nos./Annum	MoU with Authorized Recyclers

#### 62.3.15 Public Consultation:

The earlier public hearing was conducted for increase in production capacity from 1,60,000 TPA to 2,40,000 TPA on dated 06.11.2019. Public hearing has been exempted from this project in pursuance to the Ministry's O.M. dated 11.04.2022 for appraisal of instant proposal under para 7(ii) of EIA Notification, 2006.

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

The earlier public hearing for the existing capacity was carried out on 06.11.2019, actions for the commitment made during the public hearing was implemented and the compliance status of the same is detailed as under:

#### Implementation status for issues raised during earlier public hearing are:

S. No.	Issue raised	Action Plan	Actual expenditure done
1.	Employment to locals	Presently, about 200 employees from Village Dahami Kalan, Bagru are working in the company. Locals will be hired in the company based upon eligibility in future as well.	--
2.	Water related issues	Existing 11 no. of Rain water harvesting structure has been constructed in the existing plant for the recharge of water.	For in-situ RWH structures: Rs. 60.0 Lac/-
3.	Environment management - Greenbelt & plantation	Saplings are distributed & plantation is being carried out in the buffer zone.	An amount of Rs. 29.0 Lac has been spent on plantation



S. No.	Issue raised	Action Plan	Actual expenditure done
4.	<b>CER activities &amp; development of the area</b>	Presently, the company is carrying out CSR activities in various sectors. Focus of our CER activities will primarily be on nearby villages in the future.	An amount of Rs. 2.50 Cr. has been spent for CER activities

**Expenses under Social EMP by PP:**

S. No.	Sector of Work	Yearly Expenses Details			
		2020-21	2021-22	2022-23	2023-24
1	Education	6,95,940	38,83,036	37,50,000	1500000
2	Improving Health	18,87,036	40,01,506	10,00,000	500000
3	Eradication of Hunger, Poverty and Malnutrition	15,45,642	3,43,135	4,60,000	400000
4	Animal Welfare	2,24,111	54,100	3,45,000	100000
5	Environment (Rain water harvesting, Tree plantation, Drainage improvement, Pest control)	6,16,019	54,400	12,50,000	1000000
6	Support and Care (Physically Challenged, Orphan and Born with Critical disease)	-	1,66,610	8,14,702	200000
7	Skill Development	-	-	1,25,000	100000
	<b>Total</b>	<b>49,68,748</b>	<b>85,02,787</b>	<b>77,44,702</b>	<b>38,00,000</b>

62.3.16 Existing capital cost of project was 71.83 crore. The capital cost of the proposed expansion project is Rs 10.0 Crores and the capital cost for environmental protection measures is proposed as Rs 117.6 Lacs. The annual recurring cost towards the environmental protection measures is proposed as Rs 35.2 lacs. The employment generation from the proposed expansion is 30 persons. The details of cost for environmental protection measures is as follows:

S. No.	Description of Item	COST OF EMP (in Lac)			
		Existing		Proposed	
		Capital Cost	Recurring Cost	Capital Cost	Recurring Cost
1	Air Pollution Control measures	42.0	2.5	17.0	3.0
2.	Water Environment (Existing: STP of 35 KLD of MBBR Technology)	22.0	1.0	--	4.0

3	Rain water Harvesting/Storage Tank (Existing- 11 RW Structure + Proposed 4 Storage tanks )	60	1.5	16	4
4	Environmental Monitoring (Air, Water, Noise and Soil) and including OCEMS and CAAQMS installation	82.5	1.5	--	4.2
5	Green Belt	8.75	1.5	0.60	7.5
6	Occupational Health and Safety (PPE) (Training, Medical Checkup & Awareness programme)	27.67	1.0	--	10.0
7.	Solid Waste management & disposal	30	0.5	2.0	0.50
8.	EMP-Social	13	--	10.0	2.0
9.	Conservation Plan (Schedule-I species- Indian Peafowl, Shikra, Monitor Lizard)	2.5	--	72.0	--
10.	Rooftop Solar PV Plant	156.07	--	--	--
<b>Total</b>		<b>444.49</b>	<b>9.5</b>	<b>117.6</b>	<b>35.2</b>

62.3.17 Existing green belt has been developed in 2.362679 ha area which is about 32.70 % of the total project area of 7.2263 ha with total sapling of 6904 Trees. Proposed greenbelt will be developed in 0.022 Ha which is about 0.30% of the total greenbelt area. Thus total of 2.384679 ha area (33 % of total project area) will be developed as greenbelt. A 2m 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 6959 saplings (6904 existing and 55 proposed) will be planted and nurtured in 2.384679 hectares in 1 year.

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

Particulars	As per EC dated 01.12.2020	After proposed change under para 7(ii)	%Change
Land	72,263 sq.m.	-	-
Greenbelt	23,846.79 sq.m.	-	-
Water	90 KLD	118.6 KLD	~32
Power	1700 kVA	1900 kVA	~12
Raw materials	689.367 MTPD	965.1138 MTPD	40
Products	2,40,000 MTPA	3,36,000 MTPA	40

62.3.19 Pollution Load Assessment

Particulars	As per EC dated 01.12.2020	After proposed change under para 7(ii)	%Change
<b>Air</b>	Maximum GLC PM <sub>10</sub> – 7.20183 µg/m <sup>3</sup> SO <sub>2</sub> – 0.09227 µg/m <sup>3</sup> NO <sub>x</sub> – 6.8392 µg/m <sup>3</sup> CO - 0.00387 mg/m <sup>3</sup>	Maximum GLC PM <sub>10</sub> - 1.13078µg/m <sup>3</sup> , SO <sub>2</sub> – 0.66278 µg/m <sup>3</sup> NO <sub>x</sub> – 4.5246 µg/m <sup>3</sup> CO- 0.011 mg/m <sup>3</sup>	

Particulars	As per EC dated 01.12.2020	After proposed change under para 7(ii)	%Change
<b>Water (in KLD)</b>			
Domestic Waste water generated	18	21	~17
Fresh water demand	75.0	100.0	~33.5
Recycled water	15.0	18.6	24
<b>Municipal Solid waste</b>	68 TPA	72 TPA	~6
<b>Hazardous waste</b>			
Asbestos-containing residues	2880 TPA	3980 TPA	~38
Used/Spent oil	15 KLA	18 KLA	20
Empty barrels/containers/ liners contaminated with hazardous chemicals /wastes	300 Nos./Annum	375 Nos./Annum	25
<b>Traffic load (No. of trucks per day)</b>	35	49	40

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

**62.3.21 Certified compliance report from Regional Office, MoEFCC**

The Status of compliance of earlier EC was obtained from Joint Director/Scientist D, MoEF&CC, Jaipur Vide letter no IV/Env/Raj/Ind-606/1037/2023 dated 24.10.2023 in the name of M/s ARL Infratech Ltd. As reported by IRO, MoEF&CC, Jaipur, there are no Non-Compliances or Partial Compliances of the EC conditions.

**Written submission by the PP:**

62.3.22 During the meeting, based on the deliberations made by the EAC, the project proponent vide letter dated 03.07.2024 sent through email dated 04.07.2024 submitted the following information:

S. No.	Details sought	Response by Project Proponent
1.	Thick greenbelt should be developed and maintained at the nearest school	Three row green belt of thickness 10-15 m consisting of tall trees will be provided at the boundary of Maheshwari Public School.
2.	Additional plantation of 500 nos. of trees within the plant premises under "Ek Ped Maa ke Naam"	Additional plantation of 500 nos. of trees within the plant premises under "Ek Ped Maa ke Naam Campaign" will be provided. The geotagged photographs of the

		plantation will be uploaded on the LIFE website.
3.	Provide photograph of the display board showing ambient air monitoring results.	The photograph of the display board showing ambient air monitoring results is submitted.
4.	Provide the valid NABET certificate of the consultant.	The NABET certificate of ACO along with status of accreditation is submitted.
5.	Reply of para 4 of OM dated 11.04.2022	The reply of para 4 of OM dated 11.04.2022 is submitted and updated at relevant para.

### **Deliberations by the Committee**

62.3.23 The Committee noted the following:

1. The instant proposal is for expansion of existing unit for production of Asbestos & Non Asbestos Cement Sheets and Pressure Pipes from 2,40,000 MTPA to 3,36,000 MTPA, i.e 40% in two phases [**20% in Phase I (from 2,40,000 TPA to 2,88,000 TPA) (sought in the instant proposal)**] and subsequent 20% in Phase II (total 3,36,000 MTPA)] under para 7(ii) of EIA Notification, 2006 [OM dated 11.04.2022].
2. The EAC deliberated on the justification provided by the Project Proponent for appraisal of instant proposal under para 7(ii) of EIA Notification, 2006 in pursuance to the Ministry's O.M. dated 11.04.2022 and found it satisfactory. Further, since PP has prepared the Addendum EIA/EMP for seeking expansion of production capacity of Asbestos & Non Asbestos Cement Sheets and Pressure Pipes upto 40% in two phases, and considering the provisions mentioned in the O.M. dated 11.04.2022, **the EAC agreed to apprise the proposal for expansion for the proposed 20% expansion in Phase-I from 2,40,000 MTPA to 2,88,000 MTPA of production capacity of Asbestos & Non Asbestos Cement Sheets and Pressure Pipes in the instant case.**
3. Initially, the project was granted EC to M/s Ankit Roofings Ltd vide Ir. No. J-11011/ 343/ 2007 -IA.II (I) dated 27.08.2007. Consequent upon name change of the company, the Ministry changed the name of the company in the EC letter vide letter no. J11011/343/2007IA.II(I) dated 24.01.2020. The project was then accorded Environment Clearance vide letter.no. J-11011/63/99 IA II (I) dated 01.12.2020 for expansion in production capacity of Asbestos & Non Asbestos Cement Sheets and Pressure Pipes from 1,60,000 MTPA to 2,40,000 MTPA. Consent to Operate for the existing unit was accorded by Rajasthan State Pollution Control Board vide letter. no. F(Tech)/JAIPUR (Sanganer)/6761(1)/2021-2022/4170-4172 Dated 24/11/2021. The validity of CTO is up to 28.02.2026.
4. The EAC, constituted under the provision of the EIA Notification, 2006 comprising Expert Members/domain experts in various fields, examined the proposal submitted by the Project Proponent in desired format along with addendum to the EIA/EMP reports prepared and submitted by the Consultant accredited by the QCI/ NABET on behalf of the Project Proponent.

5. The EAC noted that the Project Proponent has given an undertaking that the data and information given in the application and enclosures are true to the best of his knowledge and belief and no information has been suppressed in the reports. If any part of data/information submitted is found to be false/ misleading at any stage, the project will be rejected and Environmental Clearance given, if any, will be revoked at the risk and cost of the project proponent.
6. The EAC also took into consideration the drone survey of the project site and kml file on the Google Earth presented by the project proponent along with DSS of the project site on PARIVESH and made following deliberations accordingly.
7. The total project area is 7.2263 Ha [72,263 sq.m.] and the entire land has been acquired and in possession for the existing Asbestos & Non Asbestos Cement Sheets and Pressure Pipes project. The proposed expansion will be carried out within the existing plant premises. No additional land is required for expansion of proposed project.
8. As reported, Dahmi Khurd is at a distance of 1.3 km in NNE direction of project site along with other sensitive areas including school within the study area of the project site. The EAC is of the opinion that PP shall prepare and strictly implement the environmental safeguard measures to minimise the impact of the project activities on these sensitive areas.
9. Sadriya Nadi is at a distance of 1.3 km in South of the project site along with other water bodies within study area of the project site. The EAC is of the opinion that water bodies shall not be disturbed. Mitigation measures w.r.t. safeguarding the water bodies shall be implemented.
10. The total water requirement after expansion will be 208.6 m<sup>3</sup>/day, out of which 150 m<sup>3</sup>/day of freshwater requirement will be obtained from ground water, 25 m<sup>3</sup>/day of fresh water requirement will be obtained from Stored Rain water and the remaining requirement of 33.6 m<sup>3</sup>/day will be met from recycled water. The EAC deliberated on the water requirement and is of the opinion that PP shall obtain necessary permission from the Competent Authority.
11. The Committee has deliberated on the baseline data and incremental GLC due to the proposed project and is of the opinion that PP shall strictly implement the mitigation measures to minimise the pollution.
12. As per the Wildlife Protection (Amendment) Act, 2022 there are 3 nos of Schedule-I Species i.e. *Pavo cristatus* (Indian peafowl), *Varanus bengalensis* (Monitor Lizard), *Accipiter badius* (Shikra), were observed in study area. Conservation plan for the species schedule- I has been prepared and the same is also been submitted to Deputy conservator of Forest department, Jaipur for approval vide letter dated 12.01.2024. The same is under process for approval. The EAC opined that PP shall strictly comply with the recommendations made in the Wildlife Conservation Plan as per the approval.
13. The Committee also deliberated on the earlier public hearing issues and the status of compliance of action plan submitted by the proponent to address the issues raised during the public hearing and found it satisfactory.

14. The Committee deliberated on the baseline data along with pollution load assessment reported and observed that emission load is slightly increasing after the proposed expansion. Accordingly, the EAC found it satisfactory to appraise the instant proposal under para 7(ii) of EIA Notification, 2006.
15. The EAC noted that the existing green belt has been developed in 2.362679 ha area which is about 32.70 % of the total project area of 7.2263 ha with total sapling of 6904 Trees. Proposed greenbelt will be developed in 0.022 Ha which is about 0.30% of the total greenbelt area. Thus total of 2.384679 ha area (33 % of total project area) will be developed as greenbelt. Total no. of 6959 saplings (6904 existing and 55 proposed) will be planted and nurtured in 2.384679 hectares in 1 year. Additionally, three row green belt of thickness 10-15 m consisting of tall trees will be provided at the boundary of Maheshwari Public School. Also Additional plantation of 500 nos. of trees within the plant premises under “Ek Ped Maa ke Naam Campaign” will be provided. The EAC deliberated on the greenbelt layout plan along with action plan and the budget earmarked and is of the opinion that greenbelt shall be completed within a period of 1 year.
16. The committee deliberated details of carbon foot prints and carbon sequestration study w.r.t. proposed project and found them to be satisfactory.
17. The Committee deliberated upon the certified compliance report of IRO, MoEF&CC and found it satisfactory.
18. The EAC also deliberated on the written submission of the project proponent 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.
21. The EAC also reviewed the EC conditions (specific and general) pertaining to Industry-I projects and observed that some of the specific conditions stipulated so far in the previously recommended EC projects are common and applicable to most of the projects in general. In view of the same, the General Conditions (in case of EC projects) have been revised through reallocation of these common conditions from specific to General Conditions (in case of EC projects). Accordingly, the instant project is also being stipulated with the modified General conditions.

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

62.3.24 In view of the foregoing and after detailed deliberations, the committee **recommended** the instant proposal **subject to uploading of written submission on PARIVESH portal** for grant of Environment Clearance under the provisions of para 7(ii) of EIA Notification, 2006 for **20% expansion in Phase-I from 2,40,000 MTPA to 2,88,000 MTPA of production capacity of Asbestos & Non Asbestos Cement Sheets and Pressure Pipes** subject to the stipulation of following specific conditions and general conditions based on project specific requirements:

**A. Specific Condition:**

- i. **This Environmental clearance is granted subject to final outcome of Hon'ble Supreme Court of India, Hon'ble High Court, Hon'ble NGT and any other Court of Law, if any, as may be applicable to this project.**
- ii. The project proponent shall comply with all the environmental protection measures and safeguards proposed in the documents submitted to the Ministry. All the recommendations made in the EIA/EMP in respect of environmental management, and risk mitigation measures relating to the project shall be implemented.
- iii. The project proponent shall utilize modern technologies for capturing of carbon emitted and shall also develop carbon sink/carbon sequestration resources capable of capturing more than emitted. The implementation report shall be submitted to the IRO, MoEF&CC in this regard.
- iv. As reported, Dahmi Khurd is at a distance of 1.3 km in NNE direction of project site along with other sensitive areas including school within the study area of the project site. Proponent shall take appropriate environmental safeguard measures to minimise the impact on the habitation of the locals. The project proponent needs to strengthen green belt all around the plant area to reduce the dust pollution. The PP shall also include some of these locations in its environmental monitoring programme.
- v. Sadriya Nadi is at a distance of 1.3 km in South of the project site along with other water bodies within study area of the project site. A robust and full proof Drainage Conservation scheme to protect the natural drainage and its flow parameters; along with Soil conservation scheme and multiple Erosion control measures shall be implemented.
- vi. The water requirement of 208.6 m<sup>3</sup>/day, out of which 150 m<sup>3</sup>/day of freshwater requirement will be obtained from ground water, 25 m<sup>3</sup>/day of fresh water requirement will be obtained from Stored Rain water and the remaining requirement of 33.6 m<sup>3</sup>/day will be met from recycled water. PP shall obtain necessary permission from the Competent Authority.
- vii. PP shall strictly implement the mitigation measures to minimise the pollution and undertake continuous monitoring of pollutants.
- viii. Three tier Green Belt shall be developed in at least 33% of the project area in a period of 1 year along 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 sensitive

areas nearby project site. Additionally, three row green belt of thickness 10-15 m consisting of tall trees will be provided at the boundary of Maheshwari Public School. Compliance status in this regard, shall be submitted to concerned Regional Office of the MoEF&CC.

- ix. The PP is advised to implement the 'Ek Ped Maa Ke Naam' Campaign which was launched on 5<sup>th</sup> June 2024 on the occasion of the World Environment Day to increase the forest cover across the Country.
- x. All the commitments made towards socio-economic development of the nearby villages shall be satisfactorily implemented. The action plan based on the social impact assessment study of the project as per the EMP in accordance to the Ministry's OM dated 30.09.2020 shall be strictly implemented and progress shall be submitted to the Regional Office of MoEF&CC.
- xi. The project proponent shall undertake village adoption programme and prepare and implement the action plan to develop them into a model village.
- xii. 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.
- xiii. Full face masks of reputed makes shall be provided to the workers in the plant.
- xiv. Asbestos fiber emission shall be restricted to 0.1 fiber/cc for eight-hour exposure.
- xv. Occupational health studies for all staff once in six months shall be carried out.
- xvi. Fiber monitoring shall be carried out at the work zone and around the premises once in three months.
- xvii. Insurance under PLI Act shall be obtained and a copy of the same shall be submitted to the concerned regulatory authorities.
- xviii. The bag filters installed should achieve the norms of 0.1 fibre/cc.

## **B. General Conditions:**

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

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

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

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



- ii. The project proponent shall carryout Continuous Ambient Air Quality monitoring for common/criterion parameters relevant to the main pollutants released (e.g. PM<sub>10</sub> and PM<sub>2.5</sub> in reference to PM emission, and SO<sub>2</sub> and NO<sub>x</sub> in reference to SO<sub>2</sub> and NO<sub>x</sub> emissions) within and outside the plant area covering upwind and downwind directions.
- iii. Sampling facility at process stacks 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. Ensure covered transportation and conveying of raw material to prevent spillage and dust generation. The project proponent use leak proof trucks/dumpers carrying coal and other raw materials and cover them with tarpaulin.
- viii. The project proponent shall provide primary and secondary fume extraction system at all heat treatment furnaces.
- ix. Wind shelter fence and chemical spraying shall be provided on the raw material stock piles.
- x. Design the ventilation system for adequate air changes as per prevailing norms for all tunnels, motor houses, Oil Cellars.
- xi. Pollution control system in the plant shall be provided as per the CREP Guidelines of CPCB.
- xii. 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.
- xiii. Bag filters shall be cleaned regularly and efficiency of bag filter system shall be monitored at regular intervals.
- xiv. Water Sprinklers/Water mist system shall be installed near raw material yards, operational units and other strategic locations to control fugitive emissions from the plant.
- xv. The project proponent shall monitor fugitive emissions including asbestos fibre count in the plant premises at least once in every quarter through laboratories recognised under Environment (Protection) Act, 1986 or NABL accredited NIOH / ITRC / NCB or any other approved agency.
- xvi. The project proponent shall provide appropriate dust collectors to Fibre mill, Bag opening device (BOD), Cement and Fly ash silos. Bag filters followed by wet washer shall be provided at automatic bag opening machine, bag shredder, fibre mill and to cement silo to collect the dust and recycle the same into the process.

- xvii. High Efficiency Particulate Air filters (HEPA) preceded by primary filters shall be installed on all asbestos contaminated areas.
- xviii. Total dust emission limit of 2 mg/Nm<sup>3</sup> as notified under the Environment (Protection) Act, 1986 shall be complied. Adequate measures shall be adopted to control the process emission and ensure that the stack emission of asbestos fibre shall not exceed the emission limit of 0.2 fibre/cc. Asbestos fibre in work zone environment shall be maintained within 0.1 fibre/cc.
- xix. Bring the cement in closed tankers, fly ash in covered trucks and asbestos in impervious bags opening inside a closed mixer.
- xx. The bags containing asbestos fibre including damaged bags, if any shall be stored in enclosed area.
- xxi. Place the asbestos contaminated materials (non-encapsulated) for off-site removal in sealed packaging such as double sealed heavy duty (700 gauge) plastic bags, suitably labelled.
- xxii. Empty and damaged fibre bags shall be shredded into fine particles in a bag-shredder and recycled into the process.
- xxiii. AC sheets shall be piled in wet condition only.

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

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

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

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

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

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

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

- i. Oil Collection pits shall be provided in oil cellars to collect and reuse/recycle spilled oil.
- ii. Kitchen waste shall be composted or converted to biogas for further use.
- iii. 100% utilization of fly ash shall be ensured. All the fly ash shall be provided to cement and brick manufacturers for further utilization and Memorandum of Understanding in this regard shall be submitted to the Ministry's Regional Office.
- iv. The Plastic Waste Management Rules 2016, inter-alia, mandated banning of identified Single Use Plastic (SUP) items with effect from 01/07/2022. In this regard, CPCB has issued a direction to all the State Pollution Control Boards (SPCBs)/Pollution Control Committees (PCCs) on 30/06/2022 to ensure the compliance of Notification published by Ministry on 12/08/2021. The technical guidelines issued by the CPCB in this regard is available at <https://cpcb.nic.in/technical-guidelines-3/>. All the project proponents are hereby requested to sensitize and create awareness among people working within the Project area as well as its surrounding area on the ban of SUP in order to ensure the compliance of Notification published by this Ministry on 12/08/2021. A report, along with photographs, on the measures taken shall also be included in the six monthly compliance report being submitted by the project proponents.
- v. A proper action plan must be implemented to dispose of the electronic waste generated in the industry.
- vi. The PP shall ensure that the entire solid waste generated including process rejects, cement, fly ash, dust from bag filters and empty asbestos bag shall be recycled back in the manufacturing process. There will be no solid waste disposal outside the plant premises. Asbestos fibres which cannot be further recycled due to contamination of iron dust shall be stored in HDPE lined secured landfill. The disposal facilities for asbestos waste shall be in accordance with the Bureau of Indian Standard Code.

#### **VII. Green Belt**

- i. The project proponent shall prepare GHG emissions inventory for the plant and shall submit the programme for reduction of the same including carbon sequestration by trees.
- ii. Project proponent shall submit a study report on Decarbonisation program, which would essentially consist of company's carbon emissions, carbon budgeting/ balancing, carbon

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

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

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

- i. Emergency preparedness plan based on the Hazard identification and Risk Assessment (HIRA) and Disaster Management Plan shall be implemented.
- ii. The project proponent shall carry out heat stress analysis for the workmen who work in high temperature work zone and provide Personal Protection Equipment (PPE) as per the norms.
- iii. Provision shall be made for the housing of construction labour within the site with all necessary infrastructure and facilities such as fuel for cooking, mobile toilets, mobile STP. Safe drinking water, medical health care, creche etc. The housing may be in the form of temporary structures to be removed after the completion of the project.
- iv. Occupational health surveillance of the workers shall be done on a regular basis and records maintained.
- v. There shall be no manual handling/opening of asbestos fibre bags. The company shall install fully automatic asbestos fibre debagging system.
- vi. To educate the workers, all the work places where asbestos dust may cause a hazard shall be clearly indicated as a dust exposure area through the use of display signs which identifies the hazard and the associated health effects.
- vii. Regular medical examination of the workers and health monitoring of all the employees shall be carried out and if cases of asbestosis are detected, necessary compensation shall be arranged under the existing laws. The proponent shall create in-house facilities for spirometry test. A competent occupational health physician shall be appointed to carry out medical surveillance. Occupational health of all the workers shall be monitored for lung function test, Spirometry test, chest x-ray, sputum for acid-fast-bacilli (AFC) and asbestos body (AB), urine for sugar and albumen, blood tests for TLC, DLC, ESR, Hb and records maintained for at least 40 years from the beginning of the employment or 15 years after the retirement or cessation of employment whichever is later. Occupational Health Surveillance shall be carried out as per the directives of the Hon'ble Supreme Court including the Kalyaneswari case.

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

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

- ii. The company shall have a well laid down environmental policy duly approved by the Board of Directors. The environmental policy should prescribe for standard operating procedures to have proper checks and balances and to bring into focus any infringements/deviation/violation of the environmental / forest / wildlife norms / conditions. The company shall have defined system of reporting infringements / deviation / violation of the environmental / forest / wildlife norms / conditions and / or shareholders / stake holders. The copy of the board resolution in this regard shall be submitted to the MoEF&CC as a part of six-monthly report.
- iii. A separate Environmental Cell both at the project and company head quarter level, with qualified personnel shall be set up under the control of senior Executive, who will directly to the head of the organization.
- iv. Performance test shall be conducted on all pollution control systems every year and report shall be submitted to Integrated Regional Office of the MoEF&CC.

## **X. Miscellaneous**

- i. The project proponent shall make public the environmental clearance granted for their project along with the environmental conditions and safeguards at their cost by prominently advertising it at least in two local newspapers of the District or State, of which one shall be in the vernacular language within seven days and in addition this shall also be displayed in the project proponent's website permanently.
- ii. The copies of the environmental clearance shall be submitted by the project proponents to the Heads of local bodies, Panchayats and Municipal Bodies in addition to the relevant offices of the Government who in turn has to display the same for 30 days from the date of receipt.
- iii. The project proponent shall upload the status of compliance of the stipulated environment clearance conditions, including results of monitored data on their website and update the same on half-yearly basis.
- iv. The project proponent shall monitor the criteria pollutants level namely; PM10, SO2, NOx (ambient levels as well as stack emissions) or critical sectoral parameters, indicated for the projects and display the same at a convenient location for disclosure to the public and put on the website of the company.
- v. Action plan for developing connecting and internal road in terms of MSA as per IRC guidelines shall be implemented
- vi. The project proponent shall submit six-monthly reports on the status of the compliance of the stipulated environmental conditions on the website of the ministry of Environment, Forest and Climate Change at environment clearance portal.
- vii. The project proponent shall submit the environmental statement for each financial year in Form-V to the concerned State Pollution Control Board as prescribed under the Environment (Protection) Rules, 1986, as amended subsequently and put on the website of the company.
- viii. The project proponent shall inform the Regional Office as well as the Ministry, the date of financial closure and final approval of the project by the concerned authorities, commencing the land development work and start of production operation by the project.

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

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## **Re-Consideration of Environmental Clearance Proposal**

### **Agenda No. 62.4**

- 62.4 Expansion of Cement Plant - Clinker (3.0 to 7.0 Million TPA), Cement (3.5 to 8.0 Million TPA) along with installation of WHRS (32 MW) at Villages: Majhigawan, Kariyajhar, Malgaon, Piparaon and Dhaurhara, Tehsil: Rampur Naikin, District: Sidhi (Madhya Pradesh) by M/s. UltraTech Cement Ltd. (Unit: Sidhi Cement Works)- Re-Consideration of Environmental Clearance**

**[Proposal No.: IA/MP/IND1/422274/2023; File No. IA-J-11011/51/2007-IA-II(IND-I)]**

**[Consultant: J. M. Environet Pvt. Ltd.; Valid upto: 07.08.2026]**

62.4.1 M/s. UltraTech Cement Limited (Unit: Sidhi Cement Works) has made an online application vide Proposal No. IA/MP/IND1/422274/2023 dated 16<sup>th</sup> October, 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 and 1(d) Thermal Power Plants under Category “A” of the schedule of the EIA Notification, 2006 and appraised at Central Level.

62.4.2 Name of the EIA consultant: M/s. J. M. Environet Pvt. Ltd. [List of ACOs with their Certificate/Extension Letter vide letter no. NABET/EIA/23-26/RA 0308; valid up to 07.08.2026; as on June 26, 2024].

**Details submitted by Project proponent**

62.4.3 The details of the ToR are furnished as below:

Date of application	Consideration	Details	Date of accord	ToR Validity
05.03.2021	Standard Terms of Reference issued	Terms of Reference	09.03.2021	08.03.2025

62.4.4 The project of M/s. UltraTech Cement Limited (Unit: Sidhi Cement Works) is located in Majhigawan, Kariyajhar, Malgaon, Piparaon and Dhaurhara Villages, Rampur Naikin Tehsil, Sidhi District, Madhya Pradesh is for expansion of Cement Plant - Clinker (3.0 Million TPA to 7.0 Million TPA), Cement (3.5 Million TPA to 8.0 Million TPA) along with the installation of WHRS (32 MW).

62.4.5 Environmental Site Settings:

S. No.	Particulars	Details	Remarks									
1.	Total land	Total Plant area is 127.65 ha.	Land use: Industrial Land									
2.	Land acquisition details as per MoEF&CC O.M. dated 7/10/2014	The total land is already under the possession of the company. The proposed expansion will be done within the existing plant premises (i.e., 127.65 ha).	The land use has already been converted to industrial. Thus, there will be no change in land use.									
3.	Existence of habitation & involvement of R&R, if any.	<p><b>Plant Site:</b> No habitation exists within the plant site.</p> <p><b>Study Area:</b> Villages falling near to the plant site are as given below:</p> <table border="1"> <thead> <tr> <th>Habitation</th> <th>Distance (km)</th> <th>Direction</th> </tr> </thead> <tbody> <tr> <td>Village Daurhera</td> <td>1.0</td> <td>East</td> </tr> <tr> <td>Village Majhgawan</td> <td>1.0</td> <td>SSE</td> </tr> </tbody> </table>	Habitation	Distance (km)	Direction	Village Daurhera	1.0	East	Village Majhgawan	1.0	SSE	R & R is not applicable
Habitation	Distance (km)	Direction										
Village Daurhera	1.0	East										
Village Majhgawan	1.0	SSE										

S. No.	Particulars	Details			Remarks
		Village Kariyajhar	1.0	NE	
		Village Sarada	1.19	SSW	
		Village Piparaon	1.5	SE	
		Village Patna	1.56	SSW	
		Village Budgauna	1.73	East	
		Village Bahera	2.0	ENE	
		Village Hinauti	2.5	SW	
		Village Malgaon	2.5	ESE	
		There are in total 90 villages in the study area.			
4.	Latitude and Longitude of all corners of the project site	<b>Point</b>	<b>Latitude</b>	<b>Longitude</b>	-
		<b>Plant Area</b>			
		1	24°19'17.46"N	81°19'25.49"E	
		2	24°19'18.26"N	81°19'26.10"E	
		3	24°19'35.31"N	81°19'31.74"E	
		4	24°19'41.79"N	81°19'32.36"E	
		5	24°19'45.80"N	81°19'34.41"E	
		6	24°19'49.55"N	81°19'34.47"E	
		7	24°19'51.35"N	81°19'37.54"E	
		8	24°19'56.37"N	81°19'39.16"E	
		9	24°19'48.82"N	81°19'48.11"E	
		10	24°19'48.01"N	81°19'52.37"E	
		11	24°19'45.69"N	81°19'52.82"E	
		12	24°19'44.19"N	81°19'55.29"E	
		13	24°19'41.43"N	81°19'57.33"E	
		14	24°19'41.42"N	81°19'57.76"E	
		15	24°19'40.48"N	81°19'57.18"E	
		16	24°19'38.52"N	81°20'03.70"E	
		17	24°19'39.91"N	81°20'08.09"E	
		18	24°19'37.49"N	81°20'13.22"E	
		19	24°19'28.49"N	81°20'09.27"E	
		20	24°19'27.39"N	81°20'07.95"E	
		21	24°19'23.80"N	81°20'12.67"E	
		22	24°19'22.75"N	81°20'10.29"E	
		23	24°19'23.12"N	81°20'08.79"E	
		24	24°19'22.60"N	81°20'06.83"E	
		25	24°19'22.97"N	81°20'06.10"E	
		26	24°19'21.66"N	81°20'5.56"E	
		27	24°19'21.02"N	81°20'6.76"E	
		28	24°19'16.66"N	81°19'57.74"E	
		29	24°19'18.21"N	81°19'56.67"E	
		30	24°19'16.77"N	81°19'54.35"E	
		31	24°19'15.23"N	81°19'55.00"E	
		32	24°19'13.30"N	81°19'50.87"E	



S. No.	Particulars	Details			Remarks
		33	24°19'14.75"N	81°19'49.47"E	
		34	24°19'12.96"N	81°19'49.15"E	
		35	24°19'13.90"N	81°19'41.79"E	
		36	24°19'12.49"N	81°19'40.05"E	
		37	24°19'11.43"N	81°19'34.72"E	
		38	24°19'13.27"N	81°19'33.94"E	
		39	24°19'12.85"N	81°19'32.34"E	
		<b>Colony Area</b>			
		A	24°19'36.34"N	81°20'13.79"E	
		B	24°19'39.12"N	81°20'24.02"E	
		C	24°19'42.68"N	81°20'31.51"E	
		D	24°19'46.35"N	81°20'35.10"E	
		E	24°19'40.27"N	81°20'41.56"E	
		F	24°19'39.47"N	81°20'40.09"E	
		G	24°19'40.98"N	81°20'38.22"E	
		H	24°19'37.16"N	81°20'37.34"E	
		I	24°19'36.60"N	81°20'38.27"E	
		J	24°19'33.85"N	81°20'32.67"E	
		K	24°19'35.07"N	81°20'29.00"E	
		L	24°19'33.34"N	81°20'27.80"E	
		M	24°19'30.65"N	81°20'25.62"E	
		N	24°19'31.64"N	81°20'21.01"E	
		O	24°19'30.35"N	81°20'20.28"E	
		P	24°19'29.65"N	81°20'22.20"E	
		Q	24°19'28.56"N	81°20'21.88"E	
		R	24°19'26.88"N	81°20'18.48"E	
		S	24°19'25.56"N	81°20'15.88"E	
		T	24°19'24.58"N	81°20'14.14"E	
		U	24°19'24.82"N	81°20'11.76"E	
		V	24°19'25.29"N	81°20'10.97"E	
		W	24°19'26.92"N	81°20'11.12"E	
		X	24°19'28.30"N	81°20'11.36"E	
		Y	24°19'27.87"N	81°20'10.36"E	
5.	Elevation of the project site	323 to 347 m above mean sea level.			-
6.	Involvement of Forest land if any.	No Forest Land is involved in the plant site.			Clarification letter for non-involvement of forest land in the total plant area has been obtained from DFO, Sidhi vide Letter No. S.No./Ma.Chi./5929 dated 22 <sup>nd</sup> Sept., 2023.
7.	Water body (Rivers, Lakes, Pond, Nala, Natural Drainage, Canal)	<b>Plant site:</b> No water body exists within the plant site. <b>Study area:</b> Following water bodies are falling in the study area:			-

S. No.	Particulars	Details	Remarks
	etc.) exists within the project site as well as study area	<ul style="list-style-type: none"> <li>• <u>River</u>: Son River (8.0 km in SE direction)</li> <li>• <u>Canal</u>: Ban Sagar Canal (0.05 km in SE direction)</li> <li>• <u>Dam</u>: Ban Sagar Dam (8.5 km in SSW direction)</li> <li>• <u>Nala</u>: Eight nos. of Nalas with other small Nalas are found in the 10 km radius of the Plant Site.</li> </ul>	
8.	Existence of ESZ/ESA/national park/wildlife sanctuary/biosphere reserve/tiger reserve/elephant reserve etc. if any within the study area.	<p><b>Study area:</b></p> <p><b>Name of the ESZ/ESA:</b> Son Ghariyal Wildlife Sanctuary and its Eco-Sensitive Zone.</p> <p><b>Status of Notification:</b> Final Notification for Son Ghariyal Wildlife Sanctuary and its Eco-Sensitive Zone has been notified <i>vide</i> S.O. 1780 (A) dated 13<sup>th</sup> Dec., 2016.</p> <p><b>Distance of project from ESZ/ ESA:</b> The plant site is located at distance 7.5 km from the Son Ghariyal Wildlife Sanctuary and 6.5 km from the boundary of its Eco-Sensitive Zone.</p> <p><b>Authenticated map of ESZ projecting distance of ESZ from project site:</b> Location map showing distance from ESZ of Son Ghariyal Wildlife Sanctuary has been authenticated by Chief Wildlife Warden (CWW) and Principal Chief Conservator of Forest (Wildlife), Madhya Pradesh.</p> <p><b>Status of NBWL approval:</b> Not Applicable</p> <p><b>List of Reserved and Protected Forest:</b></p> <ul style="list-style-type: none"> <li>○ Govindgarh Reserve Forest (Adjacent in North direction)</li> <li>○ Duwaria Protected Forest (3.5 km in SSW direction)</li> <li>○ Jhinna Protected Forest (5.0 km in South direction)</li> <li>○ BakuraPahar Protected Forest (6.5 km in SE direction)</li> </ul>	-

S. No.	Particulars	Details	Remarks
		<ul style="list-style-type: none"> <li>○ SairhaiPahar Reserve Forest (7.5 km in South direction)</li> <li>○ Baradila Reserve Forest (8.25 km in ESE in direction)</li> <li>○ Shikarganj Protected Forest (8.5 km in ESE in direction)</li> <li>○ Papra Reserve Forest (9.5 km in WSW direction)</li> </ul> <p>Apart from these, many small patches of RF/ PF are also found in the 10 km radius of the study area.</p>	
9.	Details of inter-linked Projects needs to be submitted	<ul style="list-style-type: none"> <li>✓ Seven nos. of Captive Limestone Mines having total production capacity of 5.82 Million TPA. Environmental Clearance for all the captive mines have been obtained from MoEFCC/ SEIAA.</li> <li>✓ To cater the additional limestone requirement for the Proposed Expansion project, company is proposing expansion in four captive limestone mines, application for the same has been submitted on Parivesh 2.0.</li> </ul>	

62.4.6 The existing Integrated Cement Plant at Sidhi was established by Jaiprakash Associated Limited (JAL) having following capacities:

- Cement Plant (Line - I) - Clinker (1.5 Million TPA), Cement (2.0 Million TPA) & CPP (35 MW) for which EC has been obtained from MoEFCC, New Delhi dated 09<sup>th</sup> Aug., 2007; Corrigendum on 17<sup>th</sup> Sept., 2007 and amended on 09<sup>th</sup> March, 2016.
- Cement Plant (Line - II) - Cement (2.0 Million TPA to 3.5 Million TPA) for which EC has been obtained from MoEFCC, New Delhi dated 08<sup>th</sup> Nov., 2011.
- Captive Thermal Power Plant (2 x 60 MW) for which EC has been obtained from MoEFCC, New Delhi dated 30<sup>th</sup> Jan., 2012 and amended on 11<sup>th</sup> Aug., 2020.

After that, plant was taken over by M/s. UltraTech Cement Ltd. (UTCL) in 2017; and Transfer of ECs from JAL to UTCL was obtained from MoEFCC, New Delhi on 06<sup>th</sup> Nov., 2017 (Line - I), 27<sup>th</sup> Nov., 2017 (Line - II) and 16<sup>th</sup> Nov., 2018 (CPP). Consent to Operate for Clinker (3.0 Million TPA), Cement (3.5 Million TPA) and Captive Power Plant (35 MW) was issued by M.P.PCB *vide* Consent No. AW - 56670 dated 16<sup>th</sup> Sept., 2022 which is valid up to 30<sup>th</sup> Sept., 2024. Consent to Operate for CPP (2 x 60 MW) was issued by Madhya Pradesh Pollution Control Board *vide* Consent No: AW - 56825 dated 07<sup>th</sup> Oct., 2022 which is valid up to 31<sup>st</sup> Aug., 2024.

62.4.7 Implementation status of the existing EC's:

S. No.	Facilities	Units	As per Existing ECs	Implementation Status as on date	Production as per CTO
1.	Clinker	Million TPA	3.0	Implemented	3.0
2.	Cement	Million TPA	3.5	Implemented	3.5
3.	Captive Power Plant - I	MW	1 x 35	Implemented	1 x 35
4.	Captive Power Plant - II	MW	2 x 60	Implemented	2 x 60

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

S. No.	Plant Equipment / Facility	Existing Facilities as per Existing ECs								Proposed Unit		Final (Existing + Proposed)	
		Total (A + B)		Implemented (A)		Un - implemented (B)		As per CTO					
		Con.	Cap.	Con.	Cap.	Con.	Cap.	Con.	Cap.	Con.	Cap.	Con.	Cap.
1	Kiln for Clinker	1 x 4200 TPD + 1 x 4500 TPD	3.0 MTPA	1 x 4200 TPD + 1 x 4500 TPD	3.0 MTPA	Nil	Nil	1 x 4200 TPD + 1 x 4500 TPD	3.0 MTPA	• 1 x 800 TPD + 1 x 1500 TPD + 1 x 10600 TPD	4.0 MTPA	• 1 x 5000 TPD + 1 x 6000 TPD + 1 x 10600 TPD	7.0 MTPA
2	Cement Mill	1 x 300 TPH + 1 x 160 TPH	3.5 MTPA	1 x 300 TPH + 1 x 160 TPH	3.5 MTPA	Nil	Nil	1 x 300 TPH + 1 x 160 TPH	3.5 MTPA	• 1 x 20 TPH + 1 x 70 TPH + 2 x 350 TPH	4.5 MTPA	• 1 x 320 TPH + 1 x 230 TPH + 2 x 350 TPH	8.0 MTPA
3	CPP - I (Boiler)	35 MW	35 MW	35 MW	35 MW	Nil	Nil	35 MW	35 MW	Nil	Nil	35 MW	35 MW
4	CPP - II (Boiler)	2 x 60 MW	2 x 60 MW	2 x 60 MW	2 x 60 MW	Nil	Nil	2 x 60 MW	2 x 60 MW	Nil	Nil	2 x 60 MW	2 x 60 MW
5	WHRS	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	32 MW	32 MW	32 MW	32 MW
6	D.G. Set	2 x 10.5 MW	2 x 10.5 MW	2 x 10.5 MW	2 x 10.5 MW	Nil	Nil	2 x 10.5 MW	2 x 10.5 MW	Nil	Nil	2 x 10.5 MW	2 x 10.5 MW

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

Raw Material	Quantity (Million TPA)	Source
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S. No.		Existing	Expansion	Total		Distance from site (Km)	Mode of Transportation
1.	Limestone	4.44	5.92	10.36	Captive Limestone Mines	0.2 - 10	By Belt Conveyor from crusher to plant
2.	Laterite/ Red Mud	0.237	0.316	0.553	Local Traders near Katni & Satna District	60 - 100	By Road
					Red Mud - Hindalco, Renukoot and others sources.	450	By Rail: Renukoot to Bela
						47	By Road; Bela to Plant
3.	Gypsum (Mineral/ Chemical/ Industrial)	0.075	0.10	0.175	Oman/ Iran and Birla Copper, Dahej and others sources.	1000	By Rail: Gangawaram & Paradeep Port to Bela
						47	By Road; Bela to Plant
4.	Fly Ash	1.225	1.575	2.80	Own CPP, Hindalco, Moser Baer, J.P. Nigrie (Madhya Pradesh), others nearby sources.	0.5 - 200	By Road

*Note: Partly Clinker will be sent to split grinding units of UTCL*

62.4.10 Existing total water requirement for the plant is 3300 KLD, additional water requirement for the expansion project will be 1500 KLD. Thus, the total water requirement after expansion will be 4800 KLD; which is being/ will be sourced from sourced from Surface water (Ban Sagar Canal) and Rain water stored in Mine pits of Captive Mines. The permission for drawl of surface water is obtained from Water Resource Department (WRD) vide Letter No. V.P.N.M.31/Tech/Ra.Str.-94/2007/309 dated 19<sup>th</sup> June, 2020.

62.4.11 Existing power requirement for the plant is 40 MW. Additional requirement for proposed expansion project will be 35 MW. Thus, the total power requirement after expansion will be 75 MW; which is being/ will be sourced from Captive Power Plant, Proposed WHRS, Solar Power Plant and Grid.

62.4.12 Baseline Environmental Studies:

Period	Summer Season (March to May, 2021)
AAQ parameters at 08 locations (min and max)	<ul style="list-style-type: none"> <li>• PM<sub>2.5</sub> - 26.7 to 48.8 µg/m<sup>3</sup></li> <li>• PM<sub>10</sub> - 56.2 to 89.8 µg/m<sup>3</sup></li> <li>• SO<sub>2</sub> - 5.7 to 18.9 µg/m<sup>3</sup></li> <li>• NO<sub>x</sub> - 12.0 to 27.2 µg/m<sup>3</sup></li> <li>• CO - BDL to 1.16 mg/m<sup>3</sup></li> </ul>

Incremental GLC level	<ul style="list-style-type: none"> <li>PM<sub>10</sub> - 2.84 µg/m<sup>3</sup> (Level at ~ 0.81 km in NE direction)</li> <li>SO<sub>2</sub> - 3.39 µg/m<sup>3</sup> (Level at ~ 1.6 km in NE Direction)</li> <li>NO<sub>x</sub> - 4.44 µg/m<sup>3</sup> (Level at ~ 1.7 km in NE Direction)</li> <li>CO - 0.002 mg/m<sup>3</sup> (Level at ~ 1.5 km in NE Direction) - Negligible</li> </ul>																														
Ground water quality at 08 locations	<ul style="list-style-type: none"> <li>pH - 7.57 to 7.97</li> <li>Total Hardness - 251.40 to 408.87 mg/l</li> <li>Chlorides - 103.31 to 166.28 mg/l</li> <li>Fluoride - 0.89 to 1.21 mg/l</li> <li>Heavy Metals - Iron as Fe: 0.17 to 0.34 mg/l</li> </ul>																														
Surface water quality at 03 locations	<ul style="list-style-type: none"> <li>pH - 7.69 to 7.83</li> <li>DO - 6.6 to 7.4 mg/l</li> <li>BOD - 1.9 to 3.3 mg/l</li> <li>COD - 9.2 to 16.4 mg/l</li> </ul>																														
Noise levels Leq (Day and Night)	52.8 to 70.2 Leq dB (A) for day time and 42.8 to 58.9 Leq dB (A) for the night time.																														
Traffic assessment study findings	<ul style="list-style-type: none"> <li>Traffic study has been conducted at Road connecting to NH - 75 which is adjacent to plant site and NH - 75 which is 1.5 km in NE direction.</li> <li>Transportation of raw material, fuel &amp; finished product will be done 100 % by road.</li> <li>Existing PCU is 0.11 PCU/hr on Road connecting to NH - 75 &amp; 0.116 PCU/hr on NH - 75 and existing level of service (LOS) is A for both roads.</li> </ul> <table border="1"> <thead> <tr> <th>Road</th> <th>V (Volume in PCU/hr)</th> <th>C (Capacity in PCU/hr)</th> <th>Existing V/C Ratio</th> <th>LOS</th> </tr> </thead> <tbody> <tr> <td>Road connecting to NH - 75</td> <td>133.75</td> <td>1200</td> <td>0.11</td> <td>A</td> </tr> <tr> <td>NH - 75</td> <td>349.91</td> <td>1500</td> <td>0.233</td> <td>B</td> </tr> </tbody> </table> <p>* Capacity as per IRC- 106-1990 Guidelines for capacity of roads.</p> <p>✓ PCU load at Road connecting to NH - 75 after proposed expansion project will be 133.75 (Existing) + 87.625 (Additional) PCU/hr and level of service (LOS) will be A. PCU load at NH - 75 after proposed expansion project will be 349.91 (Existing) + 87.625 (Additional) PCU/hr and level of service (LOS) will be B.</p> <table border="1"> <thead> <tr> <th>Road</th> <th>V (Volume in PCU/hr)</th> <th>C (Capacity in PCU/hr)</th> <th>Existing V/C Ratio</th> <th>LOS</th> </tr> </thead> <tbody> <tr> <td>Road connecting to NH - 75</td> <td>87.625 + 133.75 = 221.375</td> <td>1200</td> <td>0.18</td> <td>A</td> </tr> <tr> <td>NH - 75</td> <td>87.625 + 349.91 = 437.535</td> <td>1500</td> <td>0.29</td> <td>B</td> </tr> </tbody> </table> <p>* Capacity as per IRC- 106-1990 Guidelines for capacity of roads.</p> <p><b>Conclusion:</b> The level of service is “A” for Road connecting to NH - 75 and “B” for NH - 75 after including the additional traffic due to the proposed expansion. Company is also planning for railway siding.</p>	Road	V (Volume in PCU/hr)	C (Capacity in PCU/hr)	Existing V/C Ratio	LOS	Road connecting to NH - 75	133.75	1200	0.11	A	NH - 75	349.91	1500	0.233	B	Road	V (Volume in PCU/hr)	C (Capacity in PCU/hr)	Existing V/C Ratio	LOS	Road connecting to NH - 75	87.625 + 133.75 = 221.375	1200	0.18	A	NH - 75	87.625 + 349.91 = 437.535	1500	0.29	B
Road	V (Volume in PCU/hr)	C (Capacity in PCU/hr)	Existing V/C Ratio	LOS																											
Road connecting to NH - 75	133.75	1200	0.11	A																											
NH - 75	349.91	1500	0.233	B																											
Road	V (Volume in PCU/hr)	C (Capacity in PCU/hr)	Existing V/C Ratio	LOS																											
Road connecting to NH - 75	87.625 + 133.75 = 221.375	1200	0.18	A																											
NH - 75	87.625 + 349.91 = 437.535	1500	0.29	B																											

Flora and fauna	Six Schedule - I species of fauna- Monitor Lizard ( <i>Varanus bengalensis</i> ), Gharial ( <i>Gavialis gangeticus</i> ), Crocodile/ Mugger ( <i>Crocodylus palustris</i> ), Indian Rock Python ( <i>Python</i> ), Common Leopard ( <i>Panthera pardus</i> ), Peafowl ( <i>Pavo cristatus</i> ) have been observed and recorded as Schedule - I species of IWPA, 1972 during the field survey in the study area. The Wildlife Conservation Plan has been authenticated by Chief Wildlife Warden (CWW) and Principal Chief Conservator of Forest (PCCF - Wildlife) Madhya Pradesh vide Letter No. V.Prof./Ma.chi./MINE-137/8000 dated 12 <sup>th</sup> September, 2023.
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62.4.13 The details of solid waste generation along with its mode of treatment/disposal is furnished as below:

S. No.	Type of Waste	Source	Quantity generated (TPA)	Mode of Treatment / Disposal
1.	Dust	APCEs	137511	Dust collected from various APCEs will be totally recycled into the process.
2.	Fly ash	CPP	4015000	Used in manufacturing of PPC Grade cement.
3.	STP Sludge	STP	26.4	Used as manure for greenbelt development / plantation.
4.	Used or Spent Oil	Plant Maintenance	315	Sold to CPCB registered recycler.
5.	Contaminated cotton rags or other cleaning materials	Plant Maintenance	1.2	Sold to CPCB registered recycler.
6.	Empty barrels/containers/ liners	Plant Maintenance	18	Will be sold to CPCB registered recyclers per Hazardous Waste Management Rules, 2016.
7.	Municipal Solid Waste	Plant Canteen and Colony	3.44	After vermi-compost, it is being/ will be utilized as manure for greenbelt development / plantation.

62.4.14 Public Consultation:

Details of advertisement given	Public Hearing Notice published in Newspapers “ <b>Star Samachar</b> ” & <b>Dainik Jagran</b> ” dated 01 <sup>st</sup> Feb., 2022, “ <b>Times of India</b> ” & <b>Dainik Raj Express</b> ” dated 02 <sup>nd</sup> Feb., 2022 and “ <b>Dainik Bhaskar</b> ” dated 03 <sup>rd</sup> Feb., 2022.
Date of Public Consultation	3 <sup>rd</sup> March, 2022 at 11 AM
Venue	Aditya Birla Public School, Village: Piparaon, Tehsil: Rampur Naikin, District: Sidhi (Madhya Pradesh)
Presiding Officer	Additional District Magistrate, Sidhi (Madhya Pradesh)
Major issues raised	Employment, Health, Environmental Pollution, Education, Socio-Economic Development, Plantation.

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

Based on the issues raised during Public Hearing, total cost allotted for Socio Economic Developmental Activities is Rs. 12.66 Crores (~ 1.7% of the total project cost). Out of which Rs. 8.1 Crores have been earmarked for implementation of the commitments made during Public Hearing as per MoEFCC OM dated 30<sup>th</sup> Sept., 2020 & OM dated 20<sup>th</sup> Oct., 2020 and Rs. 4.5 Crores have been earmarked for Model Village Development.

S. No.	Concerns raised during the Public Hearing	Physical activity to be done	Unit of Measurement						Tentative Budget (Rs. in lacs)
			1 <sup>st</sup> Year		2 <sup>nd</sup> Year		3 <sup>rd</sup> Year		
			Nos. / Location	Budget in Lakhs	Nos. / Location	Budget in Lakhs	Nos. / Location	Budget in Lakhs	
1	Employment / Skill Development	Providing hand cart, constructing tea stalls and Gumti project to generate employment opportunities	10 in each village	6.6	10 in each Village	4.4	-	-	11
			(Village Majhigawan), (Village Kariyajhar) & (Village Dhaurhara)		(Village Malgaon and Village Pipraon)				
		Construction of Vocational training center for Self-employment oriented training in trades of - Sewing, Dress making, Computer, Beautician, House wiring, Carpentry & Plumbing	01 Centre	20	01 Centre	20	01 Centre	20	60
			(Village Majhigawan)		(Village Kariyajhar)				
		Construction of Farmer Training cum demonstration Centre to provide services regarding Modern Agriculture & Horticultural practices and promotion of Farmer Producer Organization for Sustainable Livelihood.	02 Centres	19	-	-	-	-	19
			(01 No. in Village Pipraon & 01 No. in Village Kariyajhar)						
		Establishment of Livestock Development Centre for Fodder & Breed improvement	01 Centre	5	01 Centre	5	-	-	10
(Village Majhigawan and Village Kariyajhar)	(Village Dhaurhara and Village Malegaon)								
Establishment of Organic Manure Production and	01 Centre each	5	-	0	-	-	5		
	(Village Kariyajhar,								



S. No.	Concerns raised during the Public Hearing	Physical activity to be done	Unit of Measurement						Tentative Budget (Rs. in lacs)
			1 <sup>st</sup> Year		2 <sup>nd</sup> Year		3 <sup>rd</sup> Year		
			Nos. / Location	Budget in Lakhs	Nos. / Location	Budget in Lakhs	Nos. / Location	Budget in Lakhs	
		Demonstration Centre for Low-cost manure production for Sustainable Livelihood promotion	Malgaon and Majhigawan)						
		Distribution of Tool kits for Self-Employment in different trades-Barber, Beautician, Carpenter, Auto Repair, Welding	15 kits in each village (Village Majhigawan, Village Kariyajhar & Village Dhaurhara)	11.25	15 kits in each Village (Village Malgaon & Village Pipraon)	7.5	-	-	18.75
		Women empowerment center by providing Income generation training in Farm and Non-Farm activity.	01 Centre (Village Budhgawana)	16	01 Centre (Village Pipraon)	16	01 Centre (Village Kariyajhar)	16	48
2	<b>Health</b>	Renovation of Primary / Sub Health Centre	01 Centre (Village Bharatpur)	16	01 Centre (Village Bhaghwar)	16	01 Centre (Village Pipraon)	16	48
		Distribution of medical equipment (Hospital beds - 02, Water Cooler - 01, Labor room furniture stretcher - 01, Oxygen concentrator - 01, Wheel chair-01)	01 Centre (Village Rampur Naikin)	15	01 Centre (Village Rampur)	15	-	-	30
		Assistance to government hospital to eradicate malnutrition in nearby villages	Village Budhgawana	12	Village Baghwar	12	Village Pipraon	12	36
3	<b>Pollution</b>	Deployment of water tanker on road for dust suppression	01 tanker (Village Majhigawan & Mines)	4	-	-	-	-	4

S. No.	Concerns raised during the Public Hearing	Physical activity to be done	Unit of Measurement						Tentative Budget (Rs. in lacs)
			1 <sup>st</sup> Year		2 <sup>nd</sup> Year		3 <sup>rd</sup> Year		
			Nos. / Location	Budget in Lakhs	Nos. / Location	Budget in Lakhs	Nos. / Location	Budget in Lakhs	
4	<b>Plantation</b>	Distribution of plant saplings & tree guards, boring, fencing and plant security.	1500 saplings and 70 tree guards	15	1500 saplings and 25 tree guards	4.7	200 tree guards	1	20.7
			(Villages Malgaon, Sangouni and Pipraon)		(Village Budhgawana)		(Village Baghwar)		
5	<b>Education</b>	Development of computer lab to promote smart education	01 Computer Lab	30	01 Computer Lab	30	-	-	60
			(Village Pipraon)		(Village Kariyajhar)				
		Distribution of furniture in schools	02 schools	20	02 schools	20	02 schools	20	60
			(Village Pipraon)		(Village Majhigawan)		(Village Patna)		
		Employment of qualified teachers etc.	01 school each	7	01 school	5	01 school	5	17
			(Village Majhigawan and Pipraon)		(Village Dhaurhara)		(Village Patna)		
		Develop government schools	01 school	12	01 school	12	01 school	12	36
(Village Majhigawan)	(Village Kariyajhar)		(Village Pipraon)						
Upgradation of school building (Construction of stage for cultural activities and playground)	01 No.	25	01 No.	25	01 No.	25	75		
	(Village Majhigawan)		(Village Kariyajhar)		(Village Malgaon)				
6	<b>Socio-Economic Development</b>	Construction of drains to avoid seepage and to benefit farmers	Village Kariyajhar	25	Village Malgaon	3	-	-	28
		Construction / Renovation of Aganwadi Centers	01 centre	10	01 centre	3	-	-	13
			(Village Dhaurhara)		(Village Kariyajhar)				
		Distribution of utensils, toys etc. in Aganwadi Centers	Village Malgaon	1	Village Dhaurhara	0.25	-	-	1.25
		Installation of RO Filter for treatment of dirty water	01 No.	2	01 No.	2	-	-	4
			(Village Malgaon)		(Village Pipraon)				
		Road maintenance / Road repair	300 m from main road to school Village Majhigawan	6	-	-	-	-	6
Construction of CC Road	03 roads of 600m	35	-	-	-	-	35		

S. No.	Concerns raised during the Public Hearing	Physical activity to be done	Unit of Measurement						Tentative Budget (Rs. in lacs)	
			1 <sup>st</sup> Year		2 <sup>nd</sup> Year		3 <sup>rd</sup> Year			
			Nos. / Location	Budget in Lakhs	Nos. / Location	Budget in Lakhs	Nos. / Location	Budget in Lakhs		
			(Village Baghwar)							
	Pond maintenance work	Beautification, pond deepening and construction of steps (Village Majhigawan) and Pond deepening work (Village Budgauna)	22		Beautification of pond (Village Pipraon and Patna)	20	-	-	42	
	Conduction of awareness program/support at villages	(Villages Majhigawan, Pipraon, Patna, Kariyajhar)	4		(Villages Malgaon, Sarada, Bhagawana)	3		(Villages Budgauna, Dhaudahara, Godhatola)	3	10
	Construction and installation of handpumps	01 No.	1.5	01 No.	1.5	1.5	1	4		
		(Village Majhigawan)		(Village Sagouni)					(Village Budhgawana)	
	Development of community building	01 No.	15	01 No.	12	-	-	27		
		(Village Budhgawan)		(Village Majhigawan)						
	Installation of Solar Lights	16 (Village Pipraon) and 03 (Village Malgaon)	15.2		03 lights in each village (Villages Patna, Sharda, Kariyajhar and Dhaurhara)	9.6		06 lights out of which 03 lights with pole (Village Majhigawan)	4.8	29.6
	Installation of solar operated overhead tank	01 No.	7	01 No.	7	-	-	14		
		(Village Malgaon)		(Village Dhaurhara)						
	Installation of Borewell with handpump	01 No.	7.5	-	-	-	-	7.5		
		(Village Budgauna)								
	Maintenance of Bridge	01 No.	15	-	-	-	-	15		
		(Village Majhigawan)								
	Formation of Farmer's Club for agriculture support, awareness and education	01 No.	15	-	-	-	-	15		
		(Village Pipraon)								
<b>Total</b>									<b>809.8</b>	

*Note: First year will start from date of commissioning of Plant.*

For Model Village Development, company is proposing to adopt 06 no. of villages namely Majhgawan, Pipraon, Dhaurhara, Karhana, Bahera and Budhgauna

S. No.	Particulars	Activities to be done	Unit of Measurement						Tentative Budget (Rs. in Lakhs)
			1 <sup>st</sup> Year		2 <sup>nd</sup> Year		3 <sup>rd</sup> Year		
			Nos. / Location	Budget in Lakhs	Nos. / Location	Budget in Lakhs	Nos. / Location	Budget in Lakhs	
1	<b>Skill Development</b>	Providing coaching for competitive examinations for NEET / JEE	100 trainees / Covering all 6 villages	10.00	100 trainees / Covering all 6 villages	10.00	100 trainees / Covering all 6 villages	10.00	30.00
		Providing Trainings to farmers regarding New Technologies & Techniques in Irrigation, conservation of water & Soil, etc.	Covering all 6 villages	50.00	Covering all 6 villages	35.00	Covering all 6 villages	23.75	108.75
		Spoken English course in that locality with the help of a graduate teacher in English	Covering all 6 villages	5.00	Covering all 6 villages	5.00	Covering all 6 villages	6.00	16.00
2	<b>Rural &amp; Infrastructure Development</b>	Provision of Solar Panels in the Government / Municipal / other public schools, hospitals and Dispensaries in nearby villages	20 / Covering all 6 villages	3.00	20 / Covering all 6 villages	3.00	20 / Covering all 6 villages	3.00	9.00
		Installation of CCTV cameras for security purpose at places of major gatherings	4 / Village Bahera & Budhgauna	2.00	4 / Village Dhaurhara & Karhana	2.00	4 / Village Majhgawan & Pipraon	2.00	6.00
		Installation of Dustbins at schools, parks, hospitals & other places of worship & community centers	20 / Village Bahera & Budhgauna	5.00	20 / Village Dhaurhara & Karhana	2.00	20 / Village Majhgawan & Pipraon	2.00	9.00

S. No.	Particulars	Activities to be done	Unit of Measurement						Tentative Budget (Rs. in Lakhs)
			1 <sup>st</sup> Year		2 <sup>nd</sup> Year		3 <sup>rd</sup> Year		
			Nos. / Location	Budget in Lakhs	Nos. / Location	Budget in Lakhs	Nos. / Location	Budget in Lakhs	
		Widening & maintenance of Rural Pathways	Village Bahera & Burhgawna	37.00	Village Dhaurhara & Karhana	5.00	Village Majhigawan & Pipraon	5.00	47.00
		Construction of computer centers	1 center with the capacity 30 systems / Village Bahera & Budhgauna	25.00	1 center with the capacity 30 systems / Village Dhaurhara & Karhana	25.00	1 center with the capacity 30 systems / Village Majhigawan & Pipraon	25.00	75.00
		Construction of Public Libraries with reading room	2 / Village Bahera & Budhgauna	5.00	2 / Village Dhaurhara & Karhana	5.00	2 / Village Majhigawan & Pipraon	5.00	15.00
3	<b>Water Conservation</b>	Construction of Rainwater & roof-top Harvesting Structures	3 / Village Bahera & Budhgauna	2.00	3 / Village Dhaurhara & Karhana	2.00	2 / Village Majhigawan & Pipraon	2.00	6.00
4	<b>Safe Drinking Water</b>	Installation of RO filters in the Government / Municipal / other public schools, hospitals and Dispensaries in nearby villages	3 / Covering all 6 villages	4.00	3 / Covering all 6 villages	4.00	3 / Covering all 6 villages	4.00	12.00
5	<b>Education</b>	Strengthening of school infrastructure to create model school	2 / Village Bahera & Budhgauna	12.00	2 / Village Dhaurhara & Karhana	12.00	2 / Village Majhigawan & Pipraon	12.00	36.00
		Development of Smart classes/ e-classrooms for quality education	3 / Village Bahera & Budhgauna	6.00	3 / Village Dhaurhara & Karhana	6.00	3 / Village Majhigawan & Pipraon	6.00	18.00
		Providing Sports Kit to schools (cricket kit / Table Tennis / basketball / badminton kit etc)	4 / Covering all 6 villages	6.00	4 / Covering all 6 villages	6.00	4 / Covering all 6 villages	6.00	18.00
6	<b>Health and sanitation</b>	Construction of dispensary center and providing first aid kits in	4 / Village Bahera & Budhgauna	2.00	4 / Village Dhaurhara & Karhana	2.00	4 / Village Majhigawan & Pipraon	2.00	6.00

S. No.	Particulars	Activities to be done	Unit of Measurement						Tentative Budget (Rs. in Lakhs)
			1 <sup>st</sup> Year		2 <sup>nd</sup> Year		3 <sup>rd</sup> Year		
			Nos. / Location	Budget in Lakhs	Nos. / Location	Budget in Lakhs	Nos. / Location	Budget in Lakhs	
		schools & community centers							
		Installation of various public boards & posters to create awareness regarding communicable diseases & public hygiene	5 / Covering all 6 villages	5.00	5 / Covering all 6 villages	5.00	5 / Covering all 6 villages	5.00	15.00
7	<b>Afforestation</b>	Raising of Avenue Plantations and Plantations in Public/ Community Areas	1000	10.00	1000	10.00	800	10.00	30.00
				<b>189.00</b>		<b>139.00</b>		<b>128.75</b>	
<b>Grand Total</b>									<b>456.75</b>
<i>Note: First year will start from date of commissioning of Plant.</i>									

62.4.15 The existing capital cost of the project was Rs. 1883 Crores. The capital cost of the proposed expansion project is Rs. 750 Crores and the capital cost for Environmental Protection Measures is proposed as Rs. 65.5 Crores. The annual recurring cost towards the environmental protection measures is proposed as Rs. 3.0 Crores/ annum. The employment generation from the expansion project is about 2138 persons. The details of cost for environmental protection measures are as follows:

S. No.	Particulars	Existing (in Crores)		Proposed (in Crores)		Total (in Crores)	
		Capital Cost	Recurring Cost	Capital Cost	Recurring Cost	Capital Cost	Recurring Cost
1.	Air Pollution Control Measures	118.11	5.29	62.47	1.5	180.58	6.79
2.	Water Pollution Control and Rain Water Harvesting Measures	0.5	0.3	0.5	0.4	1.0	0.7
3.	Noise Pollution Control	6.25	0.05	1.5	Nil	7.75	0.05
4.	Environment Monitoring and Management	0.65	1	0.8	0.3	1.45	1.3
5.	Green Belt Development	2.64	0.2	0.23	0.8	2.87	1.0
<b>Sub -Total</b>		<b>128.15</b>	<b>6.84</b>	<b>65.0</b>	<b>3.0</b>	<b>193.65</b>	<b>9.84</b>

S. No.	Particulars	Existing (in Crores)		Proposed (in Crores)		Total (in Crores)	
		Capital Cost	Recurring Cost	Capital Cost	Recurring Cost	Capital Cost	Recurring Cost
6.	Addressal of Public Consultation Concerns	Nil	Nil	8.1	Nil	8.1	Nil
7.	Details of adoption of villages	Nil	Nil	4.5	Nil	4.5	Nil
<b>Grand Total</b>		<b>128.15</b>	<b>6.84</b>	<b>78.1</b>	<b>3.0</b>	<b>206.25</b>	<b>9.84</b>

62.4.16 Existing greenbelt has been developed in 43.35 ha area; which is about 34% of the total existing Plant area i.e., 127.65 ha with total saplings of 96,847 trees. At present, about 91,547 saplings have been planted with density of 2100 saplings/ ha. Further, 11,528 trees will be planted by gap filling to maintain the density by 2500 saplings/ ha. A 30 m wide greenbelt, consisting of at least 3 tiers around plant boundary has been developed as greenbelt and green cover as per CPCB/ MoEF&CC, New Delhi guidelines. Local and native species will be planted with a density of 2500 trees per hectare. Total no. of 11,528 saplings will be planted and nurtured as a gap filling.

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

**Certified compliance report from Regional Office**

62.4.18 The status of compliance of the conditions stipulated in existing EC letters has been certified by Integrated Regional Office Bhopal (after Site Visit on 19<sup>th</sup> March, 2023), vide File No. 5-27/2007(ENV) dated 07<sup>th</sup> June, 2023. As per the certified compliance report issued by IRO, Bhopal; in which the conditions related to installation of WHRS were found partially complied; for which Action Taken Report (ATR) has been submitted to IRO, Bhopal vide Letter No. UTCL/SDCW/Plant L-3/2023/42 dated 20<sup>th</sup> June, 2023. Now, M/s. UltraTech Cement Ltd. is proposing installation of WHRS of 16 MW capacity with the existing cement plant and another 16 MW with the new line - III, which has already been considered in the present proposal. PP has further undertaken that the proposed 32 MW WHRS will be installed in 2 phases - first phase includes 16 MW in existing Lines (Line - I & II) and second phase includes remaining 16 MW in proposed Line - III. For existing Lines, feasibility study is in progress, after that, engineering, ordering, installation & commissioning will take approx. 14 to 16 months. Additional 16 MW WHRS will be linked with the new Line - III proposal.

62.4.19 It was informed to the EAC that Action taken report regarding the partially/non-complied condition was submitted and PP requested Monitoring Division to issue action clouser letter, on 28.06.2024, and is under consideration at C&MD in Ministry.

62.4.20 The proposal was initially considered during the 48<sup>th</sup> meeting of the EAC for Industry-I sector held on 8<sup>th</sup> – 9<sup>th</sup> November, 2023 wherein EAC deferred the proposal seeking additional information. The deliberations and recommendations of EAC are as follows:

**Deliberations by the Committee (EAC during 8<sup>th</sup> – 9<sup>th</sup> November, 2023)**

The Committee noted the following:

1. The EAC observed that the current project is an interlinked with seven captive limestone mines, with a combined production capacity of 5.82 Million TPA limestone, for which the PP has reported obtaining Environmental Clearance (EC) from MoEFCC/SEIAA. However, the reported raw material requirement of limestone in the instant expansion proposal stands at 10.36 Million TPA, proposed to be sourced from these captive limestone mines as well as Majhgawan and Majhgawan Extension Limestone Mine. Additionally, the PP has stated that, to address the increased limestone demand for the proposed expansion project, the PP intends to expand operations in five captive limestone mines. After thorough deliberation, the EAC advises the PP/Consultant to furnish comprehensive details regarding the interconnected captive mines. This should include the status of permissions such as EC/FC/CTE/CTO obtained, along with their current implementation status. Furthermore, the PP is required to provide a breakdown of the quantitative distribution of limestone supply from each source to meet the 10.36 Million TPA limestone requirement for the instant project. Additionally, the PP/Consultant should outline the expansion plan for the captive limestone mines, along with the status of proposals submitted to MoEFCC/SEIAA.
2. The EAC took into consideration kml file on the Google Earth presented by the project proponent along with DSS of the project site shown on PARIVESH and observed that there is a forest area near to the project site. PP shall submit a letter from the State Forest department certifying that there is no involvement of forest land in the proposed site. Also, the letter shall have the geographical coordinates of the project site.
3. The EAC also noted that there is a rich habitation nearby along with other sensitive areas within the study area of the project site. PP shall submit a stringent action plan to minimise the impact of the project activities on these sensitive areas. PP also needs to rework on the engineering layout plan keeping these sensitive areas into consideration.
4. The EAC noted that Ban Sagar Canal (0.05 km in SE direction) and Eight nos. of Nalas with other small Nalas are found in the 10 km radius of the Plant Site are within the study area of the project site. The EAC is of the opinion that PP shall submit the No Objection Certificate from the Irrigation Department.
5. PP reported that the plant site is located at distance 7.5 km from the Son Ghariyal Wildlife Sanctuary and 6.5 km from the boundary of its Eco-Sensitive Zone. PP shall submit the details/certificate from the Competent Authority certifying the distance along with the authenticated map and whether the instant project is outside of ESZ or not.
6. Six Schedule - I species of fauna- Monitor Lizard (*Varanus bengalensis*), Gharial (*Gavialis gangeticus*), Crocodile/ Mugger (*Crocodylus palustris*), Indian Rock Python (*Python*), Common Leopard (*Panthera pardus*), Peafowl (*Pavo cristatus*) have been observed and recorded as Schedule - I species of IWPA, 1972 during the field survey in the study area. The Wildlife Conservation Plan has been authenticated by Chief Wildlife Warden (CWW) and Principal Chief Conservator of Forest (PCCF - Wildlife) Madhya Pradesh vide Letter No. V.Prof./Ma.chi./MINE-137/8000 dated 12<sup>th</sup> September, 2023. The PP/Consultant



reported that NBWL Clearance has been obtained by the previous occupier M/s. Jaiprakash Associated Limited (JAL). The EAC opined that PP/Consultant shall clarify whether the same has been transferred in the name of M/s. UltraTech Cement Ltd. and also submit the requisite documents.

7. The EAC noted that the expansion is proposed within the existing plant premises of 127.65 ha area. The EAC deliberated on the greenbelt plan and is of the opinion that PP shall submit a comparison of the status of greenbelt developed within the existing project and status of greenbelt post expansion. This should include a layout with clear demarcation to assess any changes in the greenbelt area after the expansion.
8. The Committee has deliberated on the baseline data and incremental GLC due to the proposed project and observed that PM<sub>2.5</sub> and PM<sub>10</sub> values are recorded on a higher side. PP/Consultant shall submit stringent plan to minimise the levels of PM<sub>2.5</sub> and PM<sub>10</sub>.
9. The EAC acknowledged that the compliance status of the previous EC was obtained from the IRO, MoEFCC Bhopal, dated 07.06.2023. The EAC observed that as per the certified compliance report issued by IRO, Bhopal; Four partly complied conditions were observed and all the conditions are about installation of WHRS; for which Action Taken Report (ATR) has been submitted to IRO, Bhopal vide Letter No. UTCL/SDCW/Plant L-3/2023/42 dated 20<sup>th</sup> June, 2023. The EAC is of the opinion that PP shall submit the closure/review report of IRO based on the ATR submitted. Further, the Ministry may seek comments from the IA Monitoring Division of MoEF&CC, if any Show-cause Notice/letter has been issued against the existing project.
10. The EAC also opined that PP shall submit a revised roadmap for carbon neutral.
11. The PP shall rework on the Compliance of ToR point no. 11 (i) i.e. “Adequate funds (at least 2.5 % of the project cost) shall be earmarked towards the Enterprise Social Commitment based on Public Hearing issues and item-wise details along with time bound action plan shall be included. Socio-economic development activities need to be elaborated upon”.
12. The EAC also observed that the validity of accreditation of the Consultant M/s. J. M. Environet Pvt. Ltd. has expired on 31.10.2023 (as per list ACOs on the QCI website). The Consultant has mentioned that the accreditation has been extended by QCI/NABET for another 3 months. The EAC is of the opinion that the Consultant shall submit their extension of accreditation letter.
13. The EAC advised PP/Consultant to represent the case again with revised proposal presentation for consideration of the proposal.
14. The EAC agreed to the request of PP/Consultant and allowed them to reappear after the revision of the application incorporating the desired information.

**Recommendations of the Committee (EAC during 8<sup>th</sup> – 9<sup>th</sup> November, 2023):**

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

62.4.21 The proponent submitted the ADS reply vide letter dated 19.06.2024 uploaded on PARIVESH on 20.06.2024. Point-wise reply of ADS is given as below:

S. No.	ADS Point by EAC	Reply of PP
1.	<p>The EAC observed that the current project is an interlinked with seven captive limestone mines, with a combined production capacity of 5.82 Million TPA limestone, for which the PP has reported obtaining Environmental Clearance (EC) from MoEFCC/SEIAA. However, the reported raw material requirement of limestone in the instant expansion proposal stands at 10.36 Million TPA, proposed to be sourced from these captive limestone mines as well as Majhgawan and Majhgawan Extension Limestone Mine. Additionally, the PP has stated that, to address the increased limestone demand for the proposed expansion project, the PP intends to expand operations in five captive limestone mines. After thorough deliberation, the EAC advises the PP/Consultant to furnish comprehensive details regarding the interconnected captive mines. This should include the status of permissions such as EC/FC/CTE/CTO obtained, along with their current implementation status. Furthermore, the PP is required to provide a breakdown of the quantitative distribution of limestone supply from each source to meet the 10.36 Million TPA limestone requirement for the instant project. Additionally, the PP/Consultant should outline the expansion plan for the captive limestone mines, along with the</p>	<p>The total limestone requirement after the proposed expansion will be 10.36 Million TPA, which will be sourced from 7 Captive Limestone Mines. Presently, company is having combined limestone production capacity of 5.82 Million TPA in all seven Limestone Mines. For the balance limestone requirement i.e. 4.54 Million TPA, company has submitted application for EC for expansion in the 4 mines.</p> <p>The breakdown of the quantitative distribution of limestone supply from each source and the complete details of the existing EC/ FC/ CTE/ CTO along with their implementation status of all the 7 Limestone mines has been submitted with the ADS Reply</p>

S. No.	ADS Point by EAC	Reply of PP
	status of proposals submitted to MoEFCC/SEIAA.	
2.	The EAC took into consideration kml file on the Google Earth presented by the project proponent along with DSS of the project site shown on PARIVESH and observed that there is a forest area near to the project site. PP shall submit a letter from the State Forest department certifying that there is no involvement of forest land in the proposed site. Also, the letter shall have the geographical coordinates of the project site.	No forest land is involved in the plant site. a letter has been issued by Divisional Forest Officer, Sidhi mentioning noninvolvement of forest land with authenticated map mentioning the geographical corner coordinates of the plant site <i>vide</i> Letter no. 707 dated 31 <sup>st</sup> Jan., 2024, which has been submitted along with the ADS Reply.
3.	The EAC also noted that there is a rich habitation nearby along with other sensitive areas within the study area of the project site. PP shall submit a stringent action plan to minimize the impact of the project activities on these sensitive areas. PP also needs to rework on the engineering layout plan keeping these sensitive areas into consideration.	The following mitigation measures is being undertaken to minimize the impacts of the project on the sensitive areas (habitation, schools, etc.) and same will be followed after the expansion also: <ul style="list-style-type: none"> <li>○ 34% (i.e., 43.35 ha) of the total existing plant area (i.e. 127.65 ha) has already been developed under greenbelt / plantation.</li> <li>○ The company has developed 30 m wide 3 tier greenbelt at the plant boundary towards the school. Also, plantation has been done along the school boundary to create an effective barrier to arrest the dust and noise pollution and the same will be enhance in future.</li> <li>○ Company has installed high efficiency and latest technology Air Pollution Control Equipment (APCEs) like RABH at Raw Mill and Kiln (02 nos.), ESP at Clinker Cooler (02 nos.), Bag house at Cement Mill (02 nos.), Bag house at Coal Mill (02 nos.), ESP at CPP Boilers (04 nos.) and Bag Filters (115 nos.) at various material handling &amp; transfer points to maintain the emission level within the prescribed limits and the same practice will be adopted for the proposed expansion also.</li> <li>○ The CPCB guidelines are being followed strictly for control of fugitive dust emission, and various measures has been adopted i.e., regular sweeping machine (Existing: 04 and Additionally 01 Mechanized sweeping</li> </ul>

S. No.	ADS Point by EAC	Reply of PP
		<p>machine and 1 truck mounted vacuum cleaner), Permanent water sprinkling (Existing: 100; Additional: 60), covered belt conveyors and additionally water fogging machine will be provided. All the raw materials and finished products are being stored in the Covered sheds and Silos etc. and same practice will be followed for expansion.</p> <ul style="list-style-type: none"> <li>○ There is no effluent discharge outside the plant as it is based on the Dry manufacturing process; thus, there is no impact on the nearby water bodies.</li> <li>○ All stacking /Storage and loading areas has been provided with proper garland drains equipped with baffles to prevent wash offs from reaching the downstream of nearby surface water bodies.</li> <li>○ Leak-proof containers are used for storage and transportation to prevent contamination by oil and grease.</li> <li>○ The engineering layout plan has been prepared considering that no major plant machineries will be installed towards the sensitive areas (habitation &amp; schools).</li> </ul>
4.	<p>The EAC noted that Ban Sagar Canal (0.05 km in SE direction) and Eight nos. of Nalas with other small Nalas are found in the 10 km radius of the Plant Site are within the study area of the project site. The EAC is of the opinion that PP shall submit the No Objection Certificate from the Irrigation Department.</p>	<p>No Objection Certificate obtained from the Irrigation Department has been obtained and the same has been submitted with the ADS Reply.</p>
5.	<p>PP reported that the plant site is located at distance 7.5 km from the Son Ghariyal Wildlife Sanctuary and 6.5 km from the boundary of its Eco-Sensitive Zone. PP shall submit the details/certificate from the Competent Authority certifying the distance along with the authenticated map and whether the instant project is outside of ESZ or not.</p>	<ul style="list-style-type: none"> <li>▪ Certificate from the Competent Authority certifying the distance along with the authenticated map has been obtained and has been submitted along the ADS reply.</li> <li>▪ As per Letter issued by DFO, Sidhi dated 22<sup>nd</sup> Sept., 2023, the ESZ of Son Ghariyal Wildlife Sanctuary is 6.580 km from the nearest Khasra no. of the Plant site and same has been submitted with the ADS Reply.</li> </ul>

S. No.	ADS Point by EAC	Reply of PP																
6.	<p>Six Schedule - I species of fauna-Monitor Lizard (<i>Varanus bengalensis</i>), Gharial (<i>Gavialis gangeticus</i>), Crocodile/ Mugger (<i>Crocodylus palustris</i>), Indian Rock Python (<i>Python</i>), Common Leopard (<i>Panthera pardus</i>), Peafowl (<i>Pavo cristatus</i>) have been observed and recorded as Schedule - I species of IWPA, 1972 during the field survey in the study area. The Wildlife Conservation Plan has been authenticated by Chief Wildlife Warden (CWW) and Principal Chief Conservator of Forest (PCCF - Wildlife) Madhya Pradesh vide Letter No. V.Prof./Ma.chi./MINE-137/8000 dated 12<sup>th</sup> September, 2023. The PP/Consultant reported that NBWL Clearance has been obtained by the previous occupier M/s. Jaiprakash Associated Limited (JAL). The EAC opined that PP/Consultant shall clarify whether the same has been transferred in the name of M/s. UltraTech Cement Ltd. and also submit the requisite documents.</p>	<ul style="list-style-type: none"> <li>▪ The Son Gariyal Wildlife Sanctuary is located at a distance of 7.5 km from the plant boundary and earlier the ESZ of the same was not notified by MoEFCC. Therefore, NBWL Clearance was obtained by the previous occupier M/s. Jaiprakash Associated Limited (JAL) as the Wildlife Sanctuary is located within 10 km radius of study area.</li> <li>▪ Thereafter, MoEFCC has notified the ESZ of the Son Ghariyal Wildlife Sanctuary and as per the Notification S.O. 1780 (A) dated 13<sup>th</sup> Dec., 2016, the extent of its Eco-Sensitive Zone (ESZ) falls at a distance of 1.0 km from the boundary of the Son Ghariyal Wildlife Sanctuary.</li> <li>▪ M/s. UltraTech Cement Ltd. has taken over the Plant from M/s. Jaiprakash Associated Limited (JAL) in June 2017 and application for Name Change in NBWL was submitted.</li> <li>▪ Since, the Son Ghariyal Wildlife Sanctuary and its ESZ falls at a distance of 7.5 km and 6.5 km respectively from the Plant boundary, therefore, in present scenario, NBWL Clearance is not applicable.</li> </ul>																
7.	<p>The EAC noted that the expansion is proposed within the existing plant premises of 127.65 ha area. The EAC deliberated on the greenbelt plan and is of the opinion that PP shall submit a comparison of the status of greenbelt developed within the existing project and status of greenbelt post expansion. This should include a layout with clear demarcation to assess any changes in the greenbelt area after the expansion.</p>	<p>Out of the total existing plant area of 127.65 ha, 34% (i.e., 43.35 ha) has already been developed under greenbelt / plantation. At present, about 96,847 saplings have been planted with density of 2234 saplings/ ha. Details of comparison of the status of greenbelt developed within the existing project and status of greenbelt post expansion is given below:</p> <table border="1"> <thead> <tr> <th>S. No.</th> <th>Particular</th> <th>Existing</th> <th>After Expansion</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>Area Covered under greenbelt/plantation (ha)*</td> <td>43.35 (34%)</td> <td>43.35 (34%)</td> </tr> <tr> <td>2</td> <td>No. of Saplings</td> <td>96,847</td> <td>1,08,375</td> </tr> <tr> <td>3.</td> <td>Density</td> <td>2234</td> <td>2500</td> </tr> </tbody> </table> <p>The comparison of plant layout with clear demarcation of existing greenbelt and additional greenbelt after expansion has been submitted with the ADS Reply.</p>	S. No.	Particular	Existing	After Expansion	1	Area Covered under greenbelt/plantation (ha)*	43.35 (34%)	43.35 (34%)	2	No. of Saplings	96,847	1,08,375	3.	Density	2234	2500
S. No.	Particular	Existing	After Expansion															
1	Area Covered under greenbelt/plantation (ha)*	43.35 (34%)	43.35 (34%)															
2	No. of Saplings	96,847	1,08,375															
3.	Density	2234	2500															

S. No.	ADS Point by EAC	Reply of PP	
8.	The Committee has deliberated on the baseline data and incremental GLC due to the proposed project and observed that PM2.5 and PM10 values are recorded on a higher side. PP/Consultant shall submit stringent plan to minimize the levels of PM2.5 and PM10.	<p>The maximum value of PM10 and PM2.5 was recorded at Captive mine site as in mining lease, Bansagar canal work is under construction due to which PM10 and PM2.5 values are observed on higher side.</p> <p>Also, The Monitoring was done in summer season which is a dry season in the area and the agricultural fields were dry &amp; devoid of any vegetation cover due to which the loose soil is blown with wind velocity and observed results were slightly on higher side. Detailed Action plan to minimize the levels of PM2.5 and PM10 at Plant &amp; Mines are given below:</p>	
		<p><b>Mitigation measures adopted at Plant site</b></p> <ul style="list-style-type: none"> <li>➤ Installation of Bag House, Bag Filters and ESP.</li> <li>➤ Covered belt conveyor is being used for transfer of raw materials / finished products inside the plant and / will be after the proposed expansion.</li> <li>➤ Fly ash (2.80 Million TPA) is being received through closed bulkers &amp; fed into silo through pneumatic system and same will be done after the proposed expansion.</li> <li>➤ Clinker (2 x 25000 Tonnes, 1 x 20000 Tonnes &amp; 1,00,000 Tonnes), Fly ash (2 x 5000 Tonnes) and Cement (2 x 19500 Tonnes) is being stored in the silos and same will be practiced</li> </ul>	<p><b>Mitigation measures adopted at Mines</b></p> <ul style="list-style-type: none"> <li>➤ Greenbelt has been developed along the periphery of the mine site so that the dust can be suppressed and contained within the boundary of the mine site.</li> <li>➤ Control blasting with proper delay detonators and explosives are being/ will be used for mitigation of dust generation blasting operations.</li> <li>➤ Use of drills fitted with wet drilling and dust extractors are being used in order to control generation of dust.</li> <li>➤ Only PUC certified vehicles has been deployed during the routine activities to restrict exhaust emission.</li> <li>➤ Regular vehicle maintenance has</li> </ul>

S. No.	ADS Point by EAC	Reply of PP	
		<p>after the proposed expansion.</p> <ul style="list-style-type: none"> <li>➤ Installation of Bag House, Bag Filters and ESP.</li> <li>➤ Covered belt conveyor is being used for transfer of raw materials / finished products inside the plant and / will be after the proposed expansion.</li> <li>➤ Fly ash (2.80 Million TPA) is being received through closed bulkers &amp; fed into silo through pneumatic system and same will be done after the proposed expansion.</li> <li>➤ Clinker (2 x 25000 Tonnes, 1 x 20000 Tonnes &amp; 1,00,000 Tonnes), Fly ash (2 x 5000 Tonnes) and Cement (2 x 19500 Tonnes) is being stored in the silos and same will be practiced after the proposed expansion.</li> </ul>	<p>been/ will be carried out to address the air pollution.</p> <ul style="list-style-type: none"> <li>➤ The company is being/ will take stringent action against the overload vehicles.</li> <li>➤ Sprinkling of water is being done on the unpaved roads.</li> <li>➤ Maintenance of paved roads is being done.</li> </ul>
9.	<p>The EAC acknowledged that the compliance status of the previous EC was obtained from the IRO, MoEFCC Bhopal, dated 07.06.2023. The EAC observed that as per the certified compliance report issued by IRO, Bhopal; Four partly complied conditions were observed and all the conditions are about installation of WHRS; for which Action Taken Report (ATR)</p>	<p>The certified compliance report has been issued by IRO, Bhopal in which the conditions related to installation of WHRS are partially complied. In this regard, this is to apprise that the plant was taken over from M/s. Jaiprakash Associated Limited (JAL) and at that time WHRS was not installed with the existing cement plant.</p> <p>Now, M/s. UltraTech Cement Ltd. is proposing installation of WHRS of 16 MW capacity with the existing cement plant and another 16 MW with the</p>	

S. No.	ADS Point by EAC	Reply of PP
	<p>has been submitted to IRO, Bhopal vide Letter No. UTCL/SDCW/Plant L-3/2023/42 dated 20<sup>th</sup> June, 2023. The EAC is of the opinion that PP shall submit the closure/review report of IRO based on the ATR submitted. Further, the Ministry may seek comments from the IA Monitoring Division of MoEF&amp;CC, if any Show-cause Notice/letter has been issued against the existing project.</p>	<p>new line - III, which has already been considered in the present proposal. In this regard, company is submitting undertaking which has been submitted with the ADS Reply.</p>
10.	<p>The EAC also opined that PP shall submit a revised roadmap for carbon neutral.</p>	<ul style="list-style-type: none"> <li>• UltraTech commits to Net Zero Concrete Roadmap announced by GCCA. Aligning to which, UltraTech's net <i>CO2 emission intensity has reduced 12% from base year 2017 to 556 kg/tonne</i> of cementitious products making significant progress towards its goal of achieving <i>Net Zero by 2050 and</i> agreeing to an ambitious intermediate goal of preventing 5 billion tonnes of CO2 emissions by 2030 which equals a quarter of its emissions.</li> <li>• Our Company's net CO<sub>2</sub> emission intensity has <i>decreased to 556 kg/tonne of cementitious products in FY24 compared to 632 kg/tonne of cementitious products in 2017</i>, in line with its target of a 27% reduction in carbon intensity by 2032.</li> <li>• Ultratech plans to increase the overall share of <i>Green energy in its total energy mix to 85% by 2030</i>. As an interim target UltraTech plans to increase its total Green Energy share to 60% by FY26.</li> <li>• The Company has committed to reduce <i>Scope 1 GHG intensity by 27 per cent by 2032 from the base year of 2017</i>. UltraTech has also committed to reduce <i>Scope 2 GHG intensity by 69 per cent by 2032 from the base year of 2017</i>.</li> <li>• As part of its RE100 commitment led by the Climate Group in partnership with CDP, the Company aims to meet <i>100 per cent of its electricity requirement through renewables sources by 2050</i>.</li> </ul>



S. No.	ADS Point by EAC	Reply of PP
		<ul style="list-style-type: none"> <li>• UltraTech has 719 MW of green energy capacity which includes 264 MW of WHRS installed capacity and 455 MW of contracted renewable energy. Cumulatively this translate to 24 % of UltraTech’s current energy requirements.</li> <li>• Additionally, PP has utilised 28.24 million tonnes i.e. 20.60 %, of alternative raw materials and recycled materials. Subsequently have reduced 2% of Clinker content in total cement production in FY23.</li> <li>• 34000 Native Trees have been planted at Five of Ultratech Integrated manufacturing units through Miyawaki Afforestation method.</li> <li>• Ultratech has utilised 33.64 Million Tonnes of Recycled and Alternative Raw material in Cement production in FY24, including 1.59 Million tonnes of Alternative fuels.</li> <li>• Ultratech has significantly increased its renewable energy capacity by 77% and Waste Heat Recovery System WHRS capacity by 32% from FY23.</li> <li>• Ultratech was 3.26 times plastic negative in FY24.</li> <li>• Our agreement with Coolbrook, a Finland based company, for large-scale deployment of their patented technology - RotoDynamic Heater™ for kiln electrification allows using 100% renewable energy, boosted our decarbonization efforts.</li> <li>• The focus remains on reducing our carbon emissions through decarbonization of our operations. Taking a step further in this direction, our subsidiary Star Cement signed a co-operation agreement with Cemex UAE.</li> </ul>
11.	<p>The PP shall rework on the Compliance of ToR point no. 11 (i) i.e., “Adequate funds (at least 2.5 % of the project cost) shall be earmarked towards the Enterprise Social Commitment based on Public Hearing issues and item-wise details along with time bound action plan shall be included. Socio-economic development activities need to be elaborated upon”.</p>	<p>Total cost allotted for Socio Economic Developmental Activities is 12.66 Crores (~ 1.7% of the total project cost). Out of which Rs. 8.1 Crores have been earmarked for implementation of the commitments made during Public Hearing as per MoEFCC OM dated 30<sup>th</sup> Sept., 2020 &amp; OM dated 20<sup>th</sup> Oct., 2020 and Rs. 4.5 Crore have been earmarked for model village development.</p>

S. No.	ADS Point by EAC	Reply of PP
12.	The EAC also observed that the validity of accreditation of the Consultant M/s. J. M. EnviroNet Pvt. Ltd. has expired on 31.10.2023 (as per list ACOs on the QCI website). The Consultant has mentioned that the accreditation has been extended by QCI/NABET for another 3 months. The EAC is of the opinion that the Consultant shall submit their extension of accreditation letter.	Sir, at the time of submission of application, extension in Validity of NABET Certificate of M/s. J. M. EnviroNet Pvt. Ltd. was obtained vide Letter No. QCI/NABET/ENV/ACO/23/3011 dated valid till 31 <sup>st</sup> Oct., 2023. However, after the NABET Re-assessment; renewed NABET certificate has been issued by NABET / QCI in the name of Consultant organization i.e., J.M. EnviroNet Pvt. Ltd. vide certificate no. NABET/EIA/23-26/RA0308 issued on 29 <sup>th</sup> Nov., 2023 (Valid up to 07 <sup>th</sup> Aug., 2026). Copy of the valid NABET Certificate has been submitted with the ADS Reply.
13.	The EAC advised PP/Consultant to represent the case again with revised proposal presentation for consideration of the proposal.	The details have been revised as per the ADS issued by MS, MoEFCC vide their 48 <sup>th</sup> meeting of EAC (Industry - I) and PP will present the case again with the revised details and presentation for further consideration of the proposal.
14.	The EAC agreed to the request of PP/Consultant and allowed them to reappear after the revision of the application incorporating the desired information.	We thank Hon'ble EAC for giving us the opportunity to revise the details of the application and allowed us to reappear after the revision of the application to present our proposal.

62.4.22 Based on the above submission of PP, the proposal was re-considered during the 62<sup>nd</sup> meeting of the EAC for Industry-I sector held on 3<sup>rd</sup> – 5<sup>th</sup> July, 2024. The deliberations and recommendations of EAC are as follows:

**Written submission by the PP:**

62.4.23 During the meeting, based on the deliberations made by the EAC, the project proponent vide letter dated 03.07.2024 through email dated 03.07.2024 submitted the undertaking for greenbelt development and WHRS installation as following -

1. Out of the total existing plant area of 127.65 ha, 34% (i.e., 43.35 ha) has already been developed under greenbelt / plantation. At present, about 96,847 saplings have been planted with density of 2234 saplings/ ha. The company will additionally plant approx. 11528 saplings to increase the density from 2234 saplings / ha to 2500 saplings / ha which will be completed by October, 2024.
2. The proposed 32 MW WHRS will be installed in 2 phases - first phase includes 16 MW in existing Lines (Line - I & II) and second phase includes remaining 16 MW in proposed Line - III. For existing Lines, feasibility study is in progress, after that, engineering, ordering, installation & commissioning will take approx. 14 to 16 months. Additional 16 MW WHRS will be linked with the new Line - III proposal.

## **Deliberations by the Committee**

62.4.24 The Committee noted the following:

1. The instant proposal is for expansion of Cement Plant - Clinker (3.0 Million TPA to 7.0 Million TPA), Cement (3.5 Million TPA to 8.0 Million TPA) along with the installation of WHRS (32 MW).
2. The existing Integrated Cement Plant at Sidhi was established by Jaiprakash Associated Limited (JAL) having following capacities:
  - Cement Plant (Line - I) - Clinker (1.5 Million TPA), Cement (2.0 Million TPA) & CPP (35 MW) for which EC has been obtained from MoEFCC, New Delhi dated 09<sup>th</sup> Aug., 2007; Corrigendum on 17<sup>th</sup> Sept., 2007 and amended on 09<sup>th</sup> March, 2016.
  - Cement Plant (Line - II) - Cement (2.0 Million TPA to 3.5 Million TPA) for which EC has been obtained from MoEFCC, New Delhi dated 08<sup>th</sup> Nov., 2011.
  - Captive Thermal Power Plant (2 x 60 MW) for which EC has been obtained from MoEFCC, New Delhi dated 30<sup>th</sup> Jan., 2012 and amended on 11<sup>th</sup> Aug., 2020.

After that, plant was taken over by M/s. UltraTech Cement Ltd. (UTCL) in 2017; and Transfer of ECs from JAL to UTCL was obtained from MoEFCC, New Delhi on 06<sup>th</sup> Nov., 2017 (Line - I), 27<sup>th</sup> Nov., 2017 (Line - II) and 16<sup>th</sup> Nov., 2018 (CPP). Consent to Operate for Clinker (3.0 Million TPA), Cement (3.5 Million TPA) and Captive Power Plant (35 MW) was issued by M.P.PCB *vide* Consent No. AW - 56670 dated 16<sup>th</sup> Sept., 2022 which is valid up to 30<sup>th</sup> Sept., 2024. Consent to Operate for CPP (2 x 60 MW) was issued by Madhya Pradesh Pollution Control Board *vide* Consent No: AW - 56825 dated 07<sup>th</sup> Oct., 2022 which is valid up to 31<sup>st</sup> Aug., 2024.

3. The EAC, constituted under the provision of the EIA Notification, 2006 comprising Expert Members/domain experts in various fields, examined the proposal submitted by the Project Proponent in desired format along with EIA/EMP reports prepared and submitted by the Consultant accredited by the QCI/ NABET on behalf of the Project Proponent.
4. The EAC noted that the Project Proponent has given an undertaking that the data and information given in the application and enclosures are true to the best of his knowledge and belief and no information has been suppressed in the EIA/EMP reports. If any part of data/information submitted is found to be false/ misleading at any stage, the project will be rejected and Environmental Clearance given, if any, will be revoked at the risk and cost of the project proponent.
5. The Committee noted that the EIA reports are in compliance of the ToR issued for the project, reflecting the present environmental status and the projected scenario for all the environmental components. The Committee deliberated on the proposed mitigation measure towards Air, Water, Noise and Soil pollutions. The Committee suggested that the storage of toxic/explosive raw materials/products shall be undertaken with utmost precautions and following the safety norms and best practices.

6. The EAC also took into consideration the drone survey of the project site and kml file on the Google Earth presented by the project proponent along with DSS of the project site on PARIVESH and made following deliberations accordingly.
7. Total project area is 127.65 ha. The total land is already under the possession of the company and already converted for industrial use. The proposed expansion will be done within the existing plant premises. No forest land is involved in the plant site. A letter has been issued by Divisional Forest Officer, Sidhi mentioning non-involvement of forest land with authenticated map mentioning the geographical corner coordinates of the plant site *vide* Letter no. 707 dated 31<sup>st</sup> January, 2024.
8. There are rich habitation nearby along with other sensitive areas within the study area of the project site. The EAC opined that proponent shall take appropriate environmental safeguard measures to minimise the impact on the habitation of the locals. The project proponent needs to strengthen green belt all around the plant area to reduce the dust pollution. The PP shall also include some of these locations in its environmental monitoring programme.
9. Ban Sagar Canal (0.05 km in SE direction) and Eight nos. of Nalas with other water bodies are found in the 10 km radius of the Plant Site are within the study area of the project site. The EAC opined 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 implemented.
10. PP reported that the plant site is located at distance 7.5 km from the Son Ghariyal Wildlife Sanctuary and 6.5 km from the boundary of its Eco-Sensitive Zone. Certificate from the Competent Authority certifying the distance along with the authenticated map has been obtained. As per Letter issued by DFO, Sidhi dated 22<sup>nd</sup> Sept., 2023, the ESZ of Son Ghariyal Wildlife Sanctuary is 6.580 km from the nearest Khasra no. of the Plant site.
11. PP reported that the total limestone requirement after the proposed expansion will be 10.36 Million TPA, which will be sourced from 7 Captive Limestone Mines. Presently, company is having combined limestone production capacity of 5.82 Million TPA in all seven Limestone Mines. For the balance limestone requirement i.e. 4.54 Million TPA, company has submitted application for EC for expansion in the 4 mines. The breakdown of the quantitative distribution of limestone supply from each source and the complete details of the existing EC/ FC/ CTE/ CTO along with their implementation status of all the 7 Limestone mines has been submitted. The EAC deliberated on the same and is of the opinion that requisite permissions linked with these integrated projects shall be obtained to ensure the raw material security of the instant project.
12. The total water requirement after expansion will be 4800 KLD; which is being/ will be sourced from sourced from Surface water (Ban Sagar Canal) and Rain water stored in Mine pits of Captive Mines. The EAC deliberated on the water requirement is of the opinion that PP shall obtain necessary permission from the Competent Authority in this regard.
13. The Committee has deliberated on the baseline data and incremental GLC due to the proposed project and is of the opinion that PP shall strictly implement the mitigation measures to minimise the levels of particulate matter.

14. The Committee also deliberated on the public hearing issues along with action plan submitted by the proponent to address the issues raised during the public hearing and found it satisfactory.
15. The PP has submitted that existing greenbelt has been developed in 43.35 ha area; which is about 34% of the total existing Plant area i.e., 127.65 ha with total saplings of 96,847 trees. At present, about 91,547 saplings have been planted with density of 2100 saplings/ ha. Further, 11,528 trees will be planted by gap filling to maintain the density by 2500 saplings/ ha. Total no. of 11,528 saplings will be planted and nurtured as a gap filling. PP has further undertaken that the company will additionally plant approx. 11528 saplings to increase the density from 2234 saplings / ha to 2500 saplings / ha which will be completed by October, 2024.
16. The committee deliberated details of carbon foot prints and carbon sequestration study w.r.t. proposed project and found them to be satisfactory.
17. Regarding the partially complied condition in the CCR issued by IRO, PP has undertaken that the proposed 32 MW WHRS will be installed in 2 phases - first phase includes 16 MW in existing Lines (Line - I & II) and second phase includes remaining 16 MW in proposed Line - III. For existing Lines, feasibility study is in progress, after that, engineering, ordering, installation & commissioning will take approx. 14 to 16 months. Additional 16 MW WHRS will be linked with the new Line - III proposal. The EAC deliberated on the CCR obtained from IRO, MoEF&CC and is of the opinion that PP shall strictly comply as committed. **It was informed to the EAC that Action taken report regarding the partially/non-complied condition was submitted and PP requested Monitoring Division to issue action closure letter, on 28.06.2024, and is under consideration at C&MD in Ministry.**
18. The EAC also deliberated on the ADS reply of the project proponent and found it satisfactory.
19. The EAC also deliberated on the written submission of the project proponent and found it satisfactory.
20. The EAC deliberated on the proposal with due diligence in the process as notified under the provisions of the EIA Notification, 2006, as amended from time to time and accordingly made the recommendations to the proposal. The Experts Members of the EAC found the proposal in order and recommended for grant of environmental clearance.
21. The environmental clearance recommended to the project/activity is strictly under the provisions of the EIA Notification 2006 and its subsequent amendments. It does not tantamount/construe to approvals/consent/permissions etc. required to be obtained or standards/conditions to be followed under any other Acts/ Rules/ Subordinate legislations, etc., as may be applicable to the project. The project proponent shall obtain necessary permission as mandated under the Water (Prevention and Control of Pollution) Act, 1974 and the Air (Prevention and Control of Pollution) Act, 1981, as applicable from time to time, from the State Pollution Control Board, prior to construction & operation of the project.

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

**Recommendations of the Committee:**

62.4.25 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 portal and Action closure report of IA C&MD** under the provisions of EIA Notification, 2006 subject to the stipulation of following specific conditions and general conditions based on project specific requirements:

**A. Specific Condition:**

- i. **This Environmental clearance is granted subject to final outcome of Hon'ble Supreme Court of India, Hon'ble High Court, Hon'ble NGT and any other Court of Law, if any, as may be applicable to this project.**
- ii. The project proponent shall comply with all the environmental protection measures and safeguards proposed in the documents submitted to the Ministry. All the recommendations made in the EIA/EMP in respect of environmental management, and risk mitigation measures relating to the project shall be implemented.
- iii. The project proponent shall utilize modern technologies for capturing of carbon emitted and shall also develop carbon sink/carbon sequestration resources capable of capturing more than emitted. The implementation report shall be submitted to the IRO, MoEF&CC in this regard.
- iv. There are rich habitation nearby along with other sensitive areas within the study area of the project site. Proponent shall take appropriate environmental safeguard measures to minimise the impact on the habitation of the locals. The project proponent needs to strengthen green belt all around the plant area to reduce the dust pollution. The PP shall also include some of these locations in its environmental monitoring programme.
- v. Ban Sagar Canal (0.05 km in SE direction) and Eight nos. of Nalas with other water bodies are found in the 10 km radius of the Plant Site are within the study area of the project site. A robust and full proof Drainage Conservation scheme to protect the natural drainage and its flow parameters; along with Soil conservation scheme and multiple Erosion control measures shall be implemented.
- vi. PP shall obtain requisite permissions linked with the integrated projects to ensure the raw material security of the instant project.
- vii. Total water requirement of 4800 KLD shall be sourced from sourced from Surface water (Ban Sagar Canal) and Rain water stored in Mine pits of Captive Mines. PP shall obtain necessary permission from the Competent Authority in this regard.

- viii. PP shall strictly implement the mitigation measures to minimise the pollution and undertake continuous monitoring of pollutants.
- ix. Three tier Green Belt shall be developed in atleast 33% of the project area by October, 2024, as committed, 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 sensitive areas nearby project site. PP shall additionally undertake avenue plantation (2800 nos.), as committed. Compliance status in this regard, shall be submitted to concerned Regional Office of the MoEF&CC.
- x. All the commitments made towards socio-economic development of the nearby villages shall be satisfactorily implemented. The action plan based on the social impact assessment study of the project as per the EMP in accordance to the Ministry's OM dated 30.09.2020 amounting to Rs. 12.66 Crores shall be strictly implemented and progress shall be submitted to the Regional Office of MoEF&CC.
- xi. The project proponent shall undertake village adoption programme and prepare and implement the action plan to develop them into a model village.
- xii. As committed, PP shall strictly comply with the observation of IRO in the CCR.
- xiii. The industry shall monitor the health of the soil in the vicinity (5 K.M. radius), periodically (once a year) and report to the IRO.

## **B. General Conditions**

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

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

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

- i. The project proponent shall install 24x7 continuous emission monitoring system at process stacks to monitor stack emission as well as 06 Nos. Continuous Ambient Air Quality Station (CAAQMS) for monitoring AAQ parameters with respect to standards prescribed in Environment (Protection) Rules 1986 as amended from time to time. The CEMS and CAAQMS shall be connected to SPCB and CPCB online servers and calibrate these systems from time to time according to equipment supplier specification through labs recognized under Environment (Protection) Act, 1986 or NABL accredited laboratories.
- ii. The project proponent shall carryout Continuous Ambient Air Quality monitoring for common/criterion parameters relevant to the main pollutants released (e.g. PM<sub>10</sub> and PM<sub>2.5</sub> in reference to PM emission, and SO<sub>2</sub> and NO<sub>x</sub> in reference to SO<sub>2</sub> and NO<sub>x</sub> emissions) within and outside the plant area (at least at four locations one within and three outside the plant area at an angle of 120° each), covering upwind and downwind directions.

- iii. The project proponent shall monitor fugitive emissions in the plant premises at least once in every quarter through laboratories recognized under Environment (Protection) Act, 1986 or NABL accredited laboratories.
- iv. Sampling facility at process stacks shall be provided as per CPCB guidelines for manual monitoring of emissions.
- v. Appropriate Air Pollution Control (APC) system shall be provided for all the dust generating points including fugitive dust from all vulnerable sources, so as to comply prescribed stack emission and fugitive emission standards.
- vi. The project proponent shall provide leakage detection and mechanized bag cleaning facilities for better maintenance of bags.
- vii. Sufficient number of mobile or stationery vacuum cleaners shall be provided to clean plant roads, shop floors, roofs, regularly.
- viii. Ensure covered transportation and conveying of raw material to prevent spillage and dust generation. The project proponent use leak proof trucks/dumpers carrying coal and other raw materials and cover them with tarpaulin.
- ix. The project proponent shall provide primary and secondary fume extraction system at all heat treatment furnaces.
- x. Wind shelter fence and chemical spraying shall be provided on the raw material stock piles.
- xi. Design the ventilation system for adequate air changes as per prevailing norms for all tunnels, motor houses, Oil Cellars.
- xii. Pollution control system in the plant shall be provided as per the CREP Guidelines of CPCB.
- xiii. The project proponent shall adopt the Clean Air practices like mechanical collectors, wet scrubbers, fabric filters (bag houses), electrostatic precipitators, combustion systems (thermal oxidizers), condensers, absorbers, adsorbers, and biological degradation. Controlling emissions related to transportation shall include emission controls on vehicles as well as use of cleaner fuels. Sufficient numbers of additional truck mounted Fog/Mist water cannons shall be procured and operated regularly inside the project premises and also in the surrounding villages to arrest suspended dust in the atmosphere.
- xiv. Bag filters shall be cleaned regularly and efficiency of bag filter system shall be monitored at regular intervals.
- xv. Water Sprinklers/Water mist system shall be installed near raw material yards, operational units and other strategic locations to control fugitive emissions from the plant.
- xvi. The particulate matter emissions from the process stacks shall be less than 30 mg/Nm<sup>3</sup> and measures shall be undertaken as per the submitted action plan. Efficient Air monitoring equipment shall be installed.
- xvii. Following additional arrangements to control fugitive dust shall be provided:
  - a. Fog / Mist Sprinklers at all on bulk raw material storage area (at the transfer points).
  - b. Proper covered vehicle shall be used while transport of materials.
  - c. Wheel washing mechanism shall be provided in entry and exit gates with complete recirculation system.
- xviii. Provide Low NO<sub>x</sub> burners as primary measures and SCR /NSCR technologies as secondary measure to control NO<sub>x</sub> emissions.



- xix. The emission norms applicable for the cement plant shall be adhered to.
- xx. Dioxin and Furan monitoring shall be carried out once in six months at cement kiln stack.
- xxi. DeSOx system shall be provided dry type. NOx level shall be maintained below 600 mg/Nm<sup>3</sup> by using best available technology.
- xxii. Petcoke dosing shall be controlled automatically to control SO<sub>2</sub> emission from chimney within the prescribed limits.
- xxiii. PP shall identify the Source of fluoride emissions and action plan to mitigate the same shall be implemented.
- xxiv. Pollution control system in the cement plant shall be provided as per the CREP Guidelines of CPCB.
- xxv. During operational phase at Captive Power Plant, Action Plan to monitor coke/coal dust exposures in different process plants using personal and area air samplers and to compare with permissible limits as per Indian Factories Act, 1948 shall be implemented.
- xxvi. The coal dust should be monitored at coal unloading, crushing, furnace areas and should be within 2 mg/m<sup>3</sup>, respirable dust fraction containing less than 5% quartz as per Indian Factories Act, 1948.

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

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

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

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

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

- i. Provide solar power generation on roof tops of buildings, for solar light system for all common areas, street lights, parking around project area and maintain the same regularly;
- ii. Provide LED lights in their offices and residential areas.
- iii. The project proponent make efforts to achieve power consumption less than 65 units/tonne for Portland Pozzolona Cement (PPC) and 85 units/tonne for Ordinary Portland Cement (OPC) production and thermal energy consumption of 670 Kcal/Kg of clinker.
- iv. Maximize utilization of fly ash, slag and sweetener in cement blend as per BIS standards.
- v. Maximize utilization of alternate fuels and Co-processing to achieve best practice norms.
- vi. Waste heat recovery system shall be provided for kiln and cooler.

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

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

#### **VII. Green Belt**

- i. The project proponent shall prepare GHG emissions inventory for the plant and shall

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

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

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

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

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

## **X. Miscellaneous**

- i. The project proponent shall make public the environmental clearance granted for their project along with the environmental conditions and safeguards at their cost by prominently advertising it at least in two local newspapers of the District or State, of which one shall be in the vernacular language within seven days and in addition this shall also be displayed in the project proponent's website permanently.
- ii. The copies of the environmental clearance shall be submitted by the project proponents to the Heads of local bodies, Panchayats and Municipal Bodies in addition to the relevant offices of the Government who in turn has to display the same for 30 days from the date of receipt.
- iii. The project proponent shall upload the status of compliance of the stipulated environment clearance conditions, including results of monitored data on their website and update the same on half-yearly basis.
- iv. The project proponent shall monitor the criteria pollutants level namely; PM10, SO2, NOx (ambient levels as well as stack emissions) or critical sectoral parameters, indicated for the projects and display the same at a convenient location for disclosure to the public and put on the website of the company.
- v. Action plan for developing connecting and internal road in terms of MSA as per IRC guidelines shall be implemented
- vi. The project proponent shall submit six-monthly reports on the status of the compliance of the stipulated environmental conditions on the website of the ministry of Environment, Forest and Climate Change at environment clearance portal.
- vii. The project proponent shall submit the environmental statement for each financial year in Form-V to the concerned State Pollution Control Board as prescribed under the Environment (Protection) Rules, 1986, as amended subsequently and put on the website of the company.
- viii. The project proponent shall inform the Regional Office as well as the Ministry, the date of financial closure and final approval of the project by the concerned authorities, commencing the land development work and start of production operation by the project.
- ix. The project proponent shall abide by all the commitments and recommendations made in the EIA/EMP report, commitment made during Public Hearing and also that during their presentation to the Expert Appraisal Committee.
- x. The recommendations of the approved Site-Specific Wildlife Management Plan (in case of involvement of Schedule-I species) shall be implemented in consultation with the State Forest Department. The implementation report shall be furnished along with the six-monthly compliance report to the concerned Regional Office of the MoEF&CC.
- xi. The PP shall put all the environment related expenditure, expenditure related to Action Plan on the PH issues, and other commitments made in the EIA/EMP Report etc. in the company web site for the information to public/public domain. The PP shall also put the information on the left over funds allocated to EMP and PH as committed in the earlier ECs and shall be carried out and spent in next three years, in the company web site for the information to public/public domain.
- xii. No further expansion or modifications in the plant shall be carried out without prior approval of the Ministry of Environment, Forests and Climate Change (MoEF&CC).

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

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### **Consideration in TOR proposals**

#### **Agenda No. 62.5**

**62.5 Proposed Expansion of Clinker Plant Capacity (7.5 Million TPA to 17.5 Million TPA) & Cement Plant Capacity (8.6 Million TPA to 18.6 Million TPA) by M/s. Sanghi Industries Limited located at Survey No:- 95, 96, 97, 100, 101, 122, 123, 124, 125, 127, 128, 151, 341 of Motiber Village & Survey No.- 63, 64, 65, 66 of Village Hothiyay, Taluka: Abdasa, District: Kutch, Gujarat- Consideration of TOR.**

**[Proposal No. IA/GJ/IND1/469982/2024; File No. J-11011/337/2006-IA-II(IND-1)]  
[Consultant: Eco Chem Sales & Services; Valid upto March 15, 2026]**

- 62.5.1 M/s. Sanghi Industries Limited has made an application online vide proposal no. IA/GJ/IND1/469982/2024 dated 03.06.2024 along with the application in prescribed format (CAF, Form – I Part A & B), copy of pre-feasibility report and proposed ToRs for undertaking detailed EIA study as per the EIA Notification, 2006 for the project mentioned above. The proposed project activity is listed at schedule no. 3(b) Cement Plants under Category “A” of the schedule of the EIA Notification, 2006 and being appraised at Central Level.
- 62.5.2 Name of the EIA consultant: M/s. Eco Chem Sales & Services [List of ACOs with their Certificate/Extension Letter vide letter no. NABET/EIA/2326/RA 0292; valid up to 15.03.2026; as on June 26, 2024].

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

- 62.5.3 The project of M/s. Sanghi Industries Limited located at Survey No:-95, 96, 97, 99, 100, 101, 122, 123, 124, 125, 127, 128, 129, 150, 151, 45, 133, 143, 144, 145, 146, 147, 148, 149, 152 of

Motiber Village & Survey No.- 63, 64, 65, 66, 51 of Village Hothiyay, Taluka: Abdasa, District: Kutch, Gujarat is for expansion of Clinker Plant Capacity (7.5 Million TPA to 17.5 Million TPA) & Cement Plant Capacity (8.6 Million TPA to 18.6 Million TPA).

62.5.4 The proposal was considered during the 62<sup>nd</sup> meeting of the EAC for Industry-I sector held on 3<sup>rd</sup> – 5<sup>th</sup> July, 2024. The deliberations and recommendations of EAC are as follows:

#### **Deliberations by the Committee**

62.5.5 The Committee noted the following:

1. The EAC reviewed the drone survey of the project site and the KML file on Google Earth presented by the project proponent, along with the DSS of the project site on PARIVESH and noted that a portion of the proposed project site falls within a Reserved Forest area and another part includes a stream of water, the project is seeming to be located between two water streams, including 1<sup>st</sup> order drainage. To verify these observations, the EAC finds it prudent to undertake a site visit. The project proponent was advised to provide the details for ensuring a comprehensive assessment of the site conditions.
2. The EAC also observed that there are other water bodies flowing near to the project site. The EAC is of the opinion that PP needs to demarcate the same in the map. The water bodies are required to be conserved. Drainage Conservation scheme to protect the natural drainage and its flow parameters; along with Soil conservation scheme and multiple Erosion control measures shall be submitted. Further, during preparation of drainage conservation plan, PP shall prepare a contour map showing contour interval, proper Bench Mark, Drainage disposal with design and calculations, Rain Water Harvesting Plan with design and calculation including the invert level of disposal point in order to achieve ZLD.
3. Also, it is reported that Narayan Sarovar Wild Life Sanctuary is at distance of 2.21 km and its Eco sensitive zone at a distance of 0.004 km from the project site. Considering the Environmental Sensitivity in the area, the EAC opined that it is prudent to inspect the area for understanding the ground reality with the local State Forest Department.
4. The EAC observed that the current project is an interlinked with captive mines for supply of raw materials such as limestone, laterite, pozzolana clay, silica sand etc. However, PP has mentioned 'No' in the section for integrated/interdependent project in the application. After thorough deliberation, the EAC advises the PP/Consultant to furnish comprehensive details regarding the interlinked captive mines. This should include the status of permissions such as EC/FC/CTE/CTO obtained, along with their current implementation status. Furthermore, the PP is required to provide a breakdown of the quantitative distribution of each raw material supply from each source to meet the requirement for the instant project. Additionally, the PP/Consultant should outline the expansion plan for the captive mines, along with the status of proposals submitted to MoEFCC/SEIAA.
5. The PP reported that they also plan to develop a township within the proposed area. The Member Secretary clarified that the PP has not applied under the defined schedule of the

EIA Notification, 2006 in their submitted application. This omission should be corrected by selecting the appropriate schedule under minor activity in the application form.

6. The EAC observed that only 42.60 ha additional land is proposed for the expansion project in spite of a large increase in production of Clinker Plant Capacity from 7.5 Million TPA to 17.5 Million TPA & Cement Plant Capacity from 8.6 Million TPA to 18.6 Million TPA. Thus, in view of the above observations the EAC is of the opinion that EAC needs to understand the non-compliances aspects /ecological/environmental sensitivity of the area/ complexity of the project with respect to possibility of laying of conveyor belt/ and the other issues which may appear at the project site. In view of the same, the EAC is suggested to conduct the site visit with EAC sub-committee involving the representatives of EAC so that all the issues are addressed accordingly for this project.

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

- 62.5.6 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. E V R Raju, Dr. S.K. Chaturvedi and Representative of MoEFCC, 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.

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### **Agenda No. 62.6**

- 62.6 **Integrated Cement Plant with production capacity of Clinker: 2.65 Million TPA; Cement: 4.57 Million TPA (OPC, PPC, PSC, SRC, RHPC & Composite Cement); CPP: 25 MW; WHRS: 23 MW; Synthetic Gypsum: 1560 TPD (65 TPH) and DG Sets: 2500 KVA (1 x 2500 KVA or 2 x 1000 KVA & 1 x 500 KVA or 1 x 1000 KVA, 2 x 500 KVA & 2 x 250 KVA) at Village: Chher Moti, Taluka: Lakhpat, District: Kachchh Gujarat by M/s Shree Cement Limited (Unit: Bhuj Cement Plant) - Consideration of TOR.**

**[Proposal No. IA/GJ/IND1/463365/2024; File No. IA-J-11011/200/2023-IA-II(IND-I)]**  
**[Consultant: M/s. J. M. Environet Pvt. Ltd.; Valid upto August 07, 2026]**

- 62.6.1 Shree Cement Limited (Unit: Bhuj Cement Plant) has made an application online vide proposal no. IA/GJ/IND1/463365/2024 dated 05.06.2024 along with the application in prescribed format (CAF, Form – I Part A & B), copy of pre-feasibility report and proposed ToRs for undertaking detailed EIA study as per the EIA Notification, 2006 for the project mentioned above. The proposed project activity is listed at schedule no. 3(b) Cement Plants under Category “A” of the schedule of the EIA Notification, 2006 and being appraised at Central Level.

62.6.2 Name of the EIA consultant: M/s. J. M. Environet Pvt. Ltd. [List of ACOs with their Certificate/Extension Letter vide letter no. NABET/EIA/23-26/RA 0308; valid up to 07.08.2026; as on June 26, 2024].

**Details submitted by Project proponent**

62.6.3 The project of Shree Cement Limited (Unit: Bhuj Cement Plant) located in Village: Chher Moti, Taluka: Lakhat, District: Kachchh (Gujarat) is for setting up new Integrated Cement Plant for production of Clinker: 2.65 Million TPA; Cement: 4.57 Million TPA (OPC, PPC, PSC, SRC, RHPC & Composite Cement); CPP: 25 MW; WHRS: 23 MW; Synthetic Gypsum: 1560 TPD (65 TPH) and DG Sets: 2500 KVA (1 x 2500 KVA or 2 x 1000 KVA & 1 x 500 KVA or 1 x 1000 KVA, 2 x 500 KVA & 2 x 250 KVA).

62.6.4 Environmental site settings:

S. No.	Particulars	Details			Remarks																								
i.	Total land	The total area for the proposed plant is 52.25 ha; out of which private agriculture land is 51.65 ha (98.85%) & govt. waste land is 0.6 ha. (1.15%).			Land use: Present Land use of the project site is private agriculture & govt. waste land.																								
ii.	Land acquisition details as per MoEF&CC O.M. dated 7/10/2014	Out of total 52.25 ha. Land area, 40.38 ha. (77.28 %) Land has been purchased in the name of Applicant Company i.e. Shree Cement Limited & 11.27 ha. (21.57 %) Consent Letters received from Land Owners and remaining 0.60 ha. (1.15%) Govt. Land acquisition is under process.			-																								
iii.	Existence of habitation & involvement of R&R, if any.	<p><b>Project Site:</b> No habitation exists within the proposed project site.</p> <p><b>Study Area:</b></p> <table border="1"> <thead> <tr> <th>Habitation</th> <th>Distance (km)</th> <th>Direction</th> </tr> </thead> <tbody> <tr> <td>Chher Moti</td> <td>~ 0.515</td> <td>WNW</td> </tr> <tr> <td>Khengarpar</td> <td>~ 1.5</td> <td>East</td> </tr> <tr> <td>Fatehpur</td> <td>~ 1.5</td> <td>SW</td> </tr> <tr> <td>Chher Nani</td> <td>~ 2.0</td> <td>North</td> </tr> <tr> <td>Shinapar</td> <td>~ 4.0</td> <td>ENE</td> </tr> <tr> <td>Malda</td> <td>~ 4.0</td> <td>ESE</td> </tr> <tr> <td>Koriyani</td> <td>~ 5.0</td> <td>South</td> </tr> </tbody> </table> <p>Note: There are approx. 13 villages in 10 km radius study area</p>			Habitation	Distance (km)	Direction	Chher Moti	~ 0.515	WNW	Khengarpar	~ 1.5	East	Fatehpur	~ 1.5	SW	Chher Nani	~ 2.0	North	Shinapar	~ 4.0	ENE	Malda	~ 4.0	ESE	Koriyani	~ 5.0	South	R&R is not applicable.
Habitation	Distance (km)	Direction																											
Chher Moti	~ 0.515	WNW																											
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Koriyani	~ 5.0	South																											
iv.	Latitude and Longitude of all	<b>Point No</b>	<b>Latitude</b>	<b>Longitude</b>	-																								



S. No.	Particulars	Details			Remarks																								
	corners of the project site	1	23°45'48.33"N	68°39'46.86"E																									
		2	23°45'50.22"N	68°39'53.58"E																									
		3	23°45'51.63"N	68°40'15.76"E																									
		4	23°45'44.81"N	68°40'19.17"E																									
		5	23°45'45.44"N	68°40'12.17"E																									
		6	23°45'26.03"N	68°40'7.68"E																									
		7	23°45'26.74"N	68°40'0.30"E																									
		8	23°45'23.52"N	68°39'48.66"E																									
		9	23°45'31.98"N	68°39'48.46"E																									
		10	23°45'31.59"N	68°39'42.10"E																									
		11	23°45'37.81"N	68°39'42.94"E																									
		12	23°45'41.45"N	68°39'50.69"E																									
v.	Elevation of the project site	23 m AMSL to 32 m 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	<p><b>Plant site:</b> No water body is present within the project site</p> <p><b>Study area:</b> The following water bodies 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>Manmade Canal</td> <td>0.120</td> <td>East</td> </tr> <tr> <td>Kapurasi Nadi</td> <td>3.0</td> <td>SW</td> </tr> <tr> <td>Nathuwara Talav</td> <td>3.5</td> <td>SSE</td> </tr> <tr> <td>Kori Creek</td> <td>2.5</td> <td>NW</td> </tr> <tr> <td>Kali Nadi</td> <td>5.0</td> <td>East</td> </tr> <tr> <td>Khirsar Talav</td> <td>8.0</td> <td>SE</td> </tr> <tr> <td>Sangdiawala Talav</td> <td>9.0</td> <td>SSE</td> </tr> </tbody> </table>			Water body	Distance (km)	Direction	Manmade Canal	0.120	East	Kapurasi Nadi	3.0	SW	Nathuwara Talav	3.5	SSE	Kori Creek	2.5	NW	Kali Nadi	5.0	East	Khirsar Talav	8.0	SE	Sangdiawala Talav	9.0	SSE	-
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Sangdiawala Talav	9.0	SSE																											
viii.	Existence of ESZ/ ESA/ national park/ wildlife sanctuary/ biosphere reserve/ tiger reserve/ elephant reserve etc. if any within the study area.	<p><b>Study area</b></p> <p><b>Name of the ESA:</b> Narayan Sarovar Wildlife Sanctuary and its eco-sensitive zone.</p> <p><b>Status of Notification:</b> MoEF&amp;CC notification issued <i>vide</i> S.O. 1257 (E) dated 31<sup>st</sup> May, 2012 and its amendment <i>vide</i> S.O. 3515 (E) dated 7<sup>th</sup> Aug., 2023</p> <p><b>Distance of project from ESZ/ESA:</b> Narayan Sarovar Wildlife Sanctuary is located at a distance of 8.2 km in SSW direction and Eco-Sensitive Zone of Narayan Sarovar Wildlife Sanctuary is falling at a distance of 7.8 km in SSW direction from Project boundary.</p>			-																								

S. No.	Particulars	Details	Remarks															
		<p><b>Authenticated map of ESZ projecting distance of ESZ from project site:</b> Certificate obtained from Dy. CF Bhuj West, Forest Deptt. Bhuj vide No. A/LRR/Te. 11/08/24-25. Dated 12.04.2024. As stated in the certificate nearest distance from Project Site to Narayan Sarovar Wildlife Sanctuary is 8.2 km and 7.8 km from its Ec0-sensstive Zone.</p> <p><b>Status of NBWL approval:</b> Not applicable</p> <p><b>List of Reserved and Protected forests:</b> Reserve Forest exists within 10 km radius study area.</p> <table border="1"> <thead> <tr> <th>Reserve Forest</th> <th>Distance (km)</th> <th>Direction</th> </tr> </thead> <tbody> <tr> <td>Mudhvay Reserve Forest</td> <td>5.5</td> <td>SSE</td> </tr> <tr> <td>Kaiyari Reserve Forest</td> <td>6.0</td> <td>SW</td> </tr> <tr> <td>Naredi Reserve Forest</td> <td>8.5</td> <td>SSE</td> </tr> <tr> <td>Kaiyari Reserve Forest</td> <td>6.75</td> <td>SSW</td> </tr> </tbody> </table>	Reserve Forest	Distance (km)	Direction	Mudhvay Reserve Forest	5.5	SSE	Kaiyari Reserve Forest	6.0	SW	Naredi Reserve Forest	8.5	SSE	Kaiyari Reserve Forest	6.75	SSW	
Reserve Forest	Distance (km)	Direction																
Mudhvay Reserve Forest	5.5	SSE																
Kaiyari Reserve Forest	6.0	SW																
Naredi Reserve Forest	8.5	SSE																
Kaiyari Reserve Forest	6.75	SSW																

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

S. No.	Plant Equipment / Facility	Proposed Capacity	
		Configuration	Capacity
1.	Clinker	Kiln: 8000 TPD	2.65 Million TPA
2.	Cement	Mill: 571 TPH	4.57 Million TPA
3.	CPP	Boiler capacity: 136 TPH	25 MW
4.	WHRS	PH & AQC Boiler: 97.81 TPH	23 MW
5.	Synthetic Gypsum Plant	65 TPH	1560 TPD
6.	DG Sets	2500 KVA (1 x 2500 KVA or 2 x 1000 KVA & 1 x 500 KVA or 1 x 1000 KVA, 2 x 500 KVA & 2 x 250 KVA)	2500 KVA (1 x 2500 KVA or 2 x 1000 KVA & 1 x 500 KVA or 1 x 1000 KVA, 2 x 500 KVA & 2 x 250 KVA)

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

S. No.	Name of Raw Material	Quantity (Million TPA)	Source	Distance from site (Kms)	Mode of Transportation
1.	Limestone	3.98	Captive Limestone Mine of Mudhvay Sub Block- B	Nearby Plant through belt conveyor (~3.5)	By belt conveyor

S. No.	Name of Raw Material	Quantity (Million TPA)	Source	Distance from site (Kms)	Mode of Transportation
				km in SE direction)	
2.	Iron Ore	0.04	Boiler residue from GMDC and GSECL thermal plants and other GMDC Bauxite Mines	Less than ~65 km by Rail (till Naliya Railway Station) and then by Road ~60 km	By Rail & Road
3.	Bauxite	0.116	Boiler residue from GMDC and GSECL thermal plants and other GMDC Bauxite Mines	Less than ~65 km by Rail (till Naliya Railway Station) and then by Road ~60 km	By Rail & Road
4.	Gypsum (Mineral, Synthetic, Chemical Imported) &	0.18	Proposed in-house Sy. Gypsum Plant and Imported Gypsum through Mundra Port	Less than ~140 km by Rail (till Naliya Railway Station) and then by Road ~60 km	By Rail & Road
5.	Fly ash	0.93	CPP, Tata Power & Adani Power at Mundra	Less than ~200 km by Road	By Road
6.	Slag	1.45	Arcelor Mittal/Nippon Steel, Electrotherm at Hazira and Small industries at Bhachau	Less than ~540 km by Rail (till Naliya Railway Station) and then by Road ~60 km	By Rail & Road

#### Raw materials requirement for synthetic gypsum manufacturing unit

S. No.	Material	Requirement 65 TPH / 1560 TPD		Source
		%	TPD	
1	Limestone	62.0	968	Captive Limestone mine
2	H <sub>2</sub> SO <sub>4</sub> 98%	42.0	655	Local Market
3	Water	35.0	546	Ground Water & RO reject

#### Fuel & limestone requirement

S. No.	Name of Feed Stock	Quantity (Million TPA)	Source	Distance from site (Kms)	Mode of Transportation
<i>For Cement Plant</i>					

S. No.	Name of Feed Stock	Quantity (Million TPA)	Source	Distance from site (Kms)	Mode of Transportation
1.	Indian & Imported Coal	0.42	<i>Indigenous Coal:</i> GMDC Lignite Coal, Panandhro Lignite Coal & nearby sources	~50 km	By Road
			<i>Imported Coal:</i> USA, South Africa, Australia and Indonesia through Mundra Port	Mundra Port ~ 90 km by Rail (till Naliya Railway Station) and then by Road ~60 km	By Rail, Road & Sea
2.	Petcoke as feed stock	0.26	Petcoke Local Petroleum Refinery Jamnagar, Reliance & Essar/ USA / Saudi Arabia / Turkey / Canada etc.	Mundra Port – ~90 km by Rail (till Naliya Railway Station) and then by Road ~60 km	By Rail, Road & Sea
3.	Dolochar	0.28	Gallantt Metal, Electrotherm Steel at Samakhiyali/ Open Market / Nearby Sponge iron plants	~ 140 km by Rail (till Naliya Railway Station) and then by Road ~60 km	By Rail & Road
4.	Biomass	0.26	Nearby Agriculture fields	~100 km	By Road
For Captive Power Plant					
1	100% Indian Coal	0.23	GMDC Lignite Coal, Panandhro Lignite Coal & nearby sources	~50 km	By Road
2	100% Imported Coal	0.12	USA, South Africa, Australia and Indonesia through Mundra Port	Mundra Port ~ 90 km by Rail (till Naliya Railway Station) and then by Road ~60 km	By Rail, Road & Sea
3	Biomass	0.26	Nearby Agriculture fields	~100 km	By Road
4	Limestone	0.07	Captive Limestone Mine	Nearby Plant through belt conveyor (~3.5 km in SE direction)	By belt conveyor

62.6.7 The water requirement for the proposed project is estimated as 1627 m<sup>3</sup> /day, out of which 975 m<sup>3</sup> /day of fresh water requirement will be obtained from the Ground Water/Mine Pit and the remaining requirement of 652 m<sup>3</sup> /day will be met from Recycled water (from STP Treated, Blowdown & RO Reject. Permission for drawl of groundwater from CGWA is under process.

- 62.6.8 The power requirement for the proposed project is estimated as 48 MW; out of which 25 MW will be obtained from the proposed captive power plant, 23 MW from WHRS & State Grid and DG Sets of 2500 KVA capacity (for emergency backup).
- 62.6.9 The capital cost for the project is Rs. 2232 Crores and the capital cost for environmental protection measures is proposed as Rs. 230 Crores. The employment generation from the proposed project is 1270 persons (70 regular & 1200 contractual) during the construction phase and 800 persons (300 regular & 500 contractual) during the operation phase.
- 62.6.10 It is reported that there is no violation under EIA, 2006/court case/show cause/direction related to the project under consideration.
- 62.6.11 Proposed Terms of Reference: [Baseline data collection period: December, 2023 to February, 2024]

Attributes	Parameters	Sampling	
		No. of Monitoring / Sampling Locations	Frequency
<b>A. Air</b>			
a. Meteorological parameters	Wind Speed, Wind Direction, Humidity, Temperature, Rainfall, Wind speed (Hourly), Dry bulb temperature, Wet bulb temperature, Relative humidity, Solar radiation, Cloud cover, Environmental Lapse Rate	01 (Project site)	Hourly
b. AAQ Parameters	PM <sub>10</sub> , PM <sub>2.5</sub> , SO <sub>2</sub> , NO <sub>2</sub> , CO, HC (as per NAAQS Standards)	09	Twice a week (24 hourly)
<b>B. Noise</b>	Leq Day time & Leq Night time	08	Once in a season (Day & Nighttime)
<b>C. Water</b>			

Attributes	Parameters	Sampling	
		No. of Monitoring / Sampling Locations	Frequency
a. Surface Water	pH (at 25°C), Colour, Turbidity, Odour, Total Hardness as CaCO <sub>3</sub> , Calcium as Ca, Alkalinity as CaCO <sub>3</sub> , Chloride as Cl, Residual free Chlorine, Cyanide as CN, Magnesium as Mg, Total Dissolved Solids, Sulphate as SO <sub>4</sub> , Fluoride as F, Nitrate as NO <sub>3</sub> , Iron as Fe, Aluminum as Al, Boron, Phenolic Compounds, Anionic Detergents as MBAS, Hexa Chromium as Cr+6, Zinc as Zn, Copper as Cu, Manganese as Mn, Lead as Pb, Selenium as Se, Arsenic as As, Mercury as Hg, Phosphate as PO <sub>4</sub> , Total Suspended Solid, Biochemical Oxygen Demand, Chemical Oxygen Demand, Sodium as Na, Potassium as K, Conductivity, Nickel, Dissolve Oxygen, Total Carbon, Free Ammonia, Total Coliforms, Fecal coliforms, Phytoplankton & Zoo plankton.	06	Once in a season
b. Ground Water	pH (at 25°C), Colour, Turbidity, Odour, Taste, Total Hardness as CaCO <sub>3</sub> , Calcium as Ca, Alkalinity as CaCO <sub>3</sub> , Chloride as Cl, Cyanide as CN, Magnesium as Mg, Total Dissolved Solids, Sulphate as SO <sub>4</sub> , Fluoride as F, Nitrate as NO <sub>3</sub> -N, Iron as Fe, Aluminum as Al, Boron, Phenolic Compounds, Anionic Detergents as MBAS, Hexa Chromium as Cr+6, Chromium as Cr, Zinc as Zn, Copper as Cu, Manganese as Mn, Cadmium as Cd, Lead as Pb, Arsenic as As, Mercury as Hg, Sodium as Na, Potassium as K, Phosphate as PO <sub>4</sub> , Nickel, Conductivity, Total Suspended Solids, Total Carbon, Free Ammonia, Total Coliforms, Faecal coliforms.	08	Once in a season
<b>D. Land</b>			

Attributes	Parameters	Sampling	
		No. of Monitoring / Sampling Locations	Frequency
a. Soil quality	pH (at 25°C) (1:2.5 soil water suspension), Electrical Conductivity (1:2 soil water sus.), particle size distribution, Soil Texture, Colour, Water holding capacity, Bulk Density, Soluble Chloride, Exchangeable Calcium, Exchangeable Sodium, Available Potassium, Organic Matter, Exchangeable Magnesium as Mg, Available Nitrogen as N, Available Phosphorus, Total Zinc as Zn, Total Manganese as Mn, Total Chromium as Cr, Total Lead as Pb, Total Cadmium as Cd, Total Copper as Cu, Organic Carbon, SAR Value, Porosity, Cation Exchange capacity	08	Once in a season
b. Land Use	Land use/ Land Cover Map by Satellite Imagery including Location code, Total project area, Topography, Drainage (natural), Cultivated, forest, plantations, water bodies, roads and settlements	10 km radius study area	Once in a Season
<b>E. Biological</b> a. Aquatic b. Terrestrial	Flora and fauna	Study area	Once in a season
<b>F. Socio-Economic parameters</b>	Economic Demography	Study area	Once in a season

### **Deliberation by the Committee**

62.6.12 The Committee noted the following:

- i. The instant proposal is for setting up new Integrated Cement Plant for production of Clinker: 2.65 Million TPA; Cement: 4.57 Million TPA (OPC, PPC, PSC, SRC, RHPC & Composite Cement); CPP: 25 MW; WHRS: 23 MW; Synthetic Gypsum: 1560 TPD (65 TPH) and DG Sets: 2500 KVA (1 x 2500 KVA or 2 x 1000 KVA & 1 x 500 KVA or 1 x 1000 KVA, 2 x 500 KVA & 2 x 250 KVA).
- ii. The EAC took into consideration the drone survey of the project site and kml file on the Google Earth presented by the project proponent along with DSS of the project site on PARIVESH and made following deliberations accordingly.
- iii. The total area for the proposed plant is 52.25 ha; out of which private agriculture land is 51.65 ha (98.85%) & govt. waste land is 0.6 ha. (1.15%). Out of total 52.25 ha. Land area, 40.38 ha. (77.28 %) Land has been purchased in the name of Applicant Company i.e. Shree Cement Limited & 11.27 ha. (21.57 %) Consent Letters received from Land Owners and remaining 0.60 ha. (1.15%) Govt. Land acquisition is under process. The EAC is of

the opinion that land acquisition shall be completed and converted for industrial purpose and the related documents shall be submitted with EIA/EMP report.

- iv. Chher Moti is at 0.515 km in WNW direction from the project site along with other sensitive areas within the study area of the project site. The EAC is of the opinion that PP shall prepare and include in the EIA/EMP Report the environmental safeguard measures to minimise the impact of the project activities on these sensitive areas.
- v. There is a manmade canal at a distance of 0.12 km in East of project site along with other water bodies within the study area of the project site. The EAC is of the opinion that water bodies shall not be disturbed. PP shall submit the NOC from the irrigation department. Mitigation measures w.r.t. safeguarding the water bodies shall be prepared and submitted.
- vi. PP has reported that the Proposed Integrated Cement Project is interlinked with Captive Limestone Mine for which MoEF&CC has already accorded Environment Clearance vide EC Identification No. EC22A001GJ186980 & File No. IA-J-11015/23/2018-IA-II(M), Dated 04.04.2022. Shree Cement Limited is having Mudhvay Sub-Block B Limestone Mine” (Mining Lease Area: 233.5 ha) located near Village: Mudhvay, Tehsil: Lakhpat, District: Kachchh, Gujarat for Mining of 4.38 Million TPA Limestone (ROM basis: 12.88 Million TPA which includes 4.38 Million TPA Limestone Production, 8.14 Million TPA Over-burden & 0.36 Million TPA Inter-burden excluding Top-soil) and installation of 1200 TPH capacity Crusher to cater the required limestone of 4.38 Million TPA in Integrated Cement Project for its captive use.
- vii. Narayan Sarovar Wildlife Sanctuary is falling at a distance of 8.2 km in SSW direction and Eco-Sensitive Zone is falling at a distance of 7.8 km in SSW direction from Project boundary. The range of radius of the Eco-Sensitive Zone is 0 - 2.5 Km on all sides. As the plant site is located at a distance of 8.2 Km from the boundary of the Sanctuary; the plant site is outside the ESZ. Certificate has been obtained from Dy. CF Bhuj West, Forest Deptt. Bhuj vide No. A/LRR/Te. 11/08/24-25. dated 12.04.2024.
- viii. The water requirement for the proposed project is estimated as 1627 m<sup>3</sup>/day, out of which 975 m<sup>3</sup>/day of fresh water requirement will be obtained from the Ground Water/Mine Pit and the remaining requirement of 652 m<sup>3</sup>/day will be met from Recycled water (from STP Treated, Blowdown & RO Reject. The EAC is of the opinion that PP shall obtain necessary permission in this regard. PP shall also explore the possibility to draw water from the surface water to minimise the dependency on ground water.

### **Recommendations of the Committee**

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

- (i) Land acquisition shall be completed and converted for industrial purpose and the related documents shall be submitted with EIA/EMP report
- (ii) Chher Moti is at 0.515 km in WNW direction from the project site along with other sensitive areas within the study area of the project site. Proponent shall prepare appropriate



environmental safeguard measures to minimise the impact of the project activities on these sensitive areas.

- (iii) There is a manmade canal at a distance of 0.12 km in East of project site along with other water bodies within the study area of the project site. PP shall submit the NOC from the irrigation department. The PP shall include in the EIA/EMP report suitable steps /conservation plan along with contouring (close intervals), Run -off calculations, disposal etc. A robust and full proof Drainage Conservation scheme to protect the natural drainage and its flow parameters; along with Soil conservation scheme and multiple Erosion control measures shall be prepared and included in EIA/EMP Report. As observed from the KML file, there appears to be Coastal area, Mudflats, Estuary and Mangrove ecosystems nearby within the 10 km study area of the project. These aspects need to be studied and necessary Mitigation action plans are to be prepared in the EIA-EMP and submitted.
- (iv) Water requirement of 1627 m<sup>3</sup> /day is proposed to be met from Ground Water/Mine Pit (975 m<sup>3</sup> /day) & Recycled water (from STP Treated, Blowdown & RO Reject) (652 m<sup>3</sup> /day). PP shall obtain necessary water permission from the Competent Authority. PP shall also explore the possibility to draw water from the surface water to minimise the dependency on ground water.
- (v) The EAC also suggested the TOR conditions such as, (a) The “input” parameters used in the AAQ modelling must be reported in the E.I.A. Influence of the combinations of various parameters on the AAQ must be reported. (b) Wind Rose diagrams for all seasons of the year must be included in the E.I.A. Data from secondary sources such as IMD may be used for this purpose, this is apart for the mandatory study of meteorological factors for one season. (c) GLC modelling for CO emission from reactors must be included in the E.I.A. report. (d) The total PM expected to be emitted from the stacks must be modelled and reported. (e) Specific water consumption and specific CO<sub>2</sub> emission from the Plant must be predicted and documented. (f) Inversion level and Mixing height must be reported in the AAQ model.
- (vi) The PP is advised to implement the 'Ek Ped Maa Ke Naam' Campaign which was launched on 5<sup>th</sup> June 2024 on the occasion of the World Environment Day to increase the forest cover across the Country.

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### **Agenda No. 62.7**

- 62.7 Expansion of Steel Plant by Backward Integration of steel plant comprising of establishment of 2 x 350 TPD DRI Kilns to manufacture 2,31,000 TPA of Sponge Iron along with 2 x 10 MW WHRB Power Plant, 1 x 10 MW FBC Power Plant, 1 x 9 MVA Ferro Alloys Unit to manufacture FeSi - 7,000 TPA / FeMn - 25,200 TPA/ SiMn - 14,000 TPA / FeCr - 15,000 TPA / Pig Iron - 25,200 TPA, Briquetting Plant - 100 Kg/Hr., Brick Manufacturing unit (25,000 Bricks/day) & Slag Crushing Unit (40,000 TPA) by M/s Shambhavi Ispat located at Village: Gerwani, Tehsil and District: Raigarh, Chhattisgarh - Consideration of TOR (Request for withdrawal of the project )**

- 62.7.1 The Member Secretary (Industry-I) informed the Committee that the instant proposal was initially considered during the 57<sup>th</sup> meeting of EAC for Industry-1 sector held on 24<sup>th</sup> – 25<sup>th</sup> April 2024 wherein EAC had deferred the proposal based on the additional land involving 1.088 ha tribal land in the proposed expansion project. The project proponent submitted the reply to the ADS vide letter dated 04.06.2024 uploaded on PARIVESH project stating that they would like to drop the Tribal land of 1.088 Ha. from the total land of 11.505 Ha. and withdraw their instant application in order to submit a fresh proposal. The project proponent clarified vide email dated 25.06.2024, their intent to withdraw the application. The EAC deliberated on this request and agreed to accept the project proponent's request for withdrawal and **return the proposal in present form.**

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## DAY-2: JULY 4, 2024 [THURSDAY]

### Consideration of Environmental Clearance Proposal

#### Agenda No. 62.8

**62.8 Expansion of Steel Plant – DRI Kilns (Sponge Iron from 1,20,000 TPA to 4,50,000 TPA), Induction Furnaces along with CCM & LRF (Hot Billets/ MS Ingots / Billets from 65,000 TPA to 3,96,000 TPA), Ferro Alloys - 1 x 9 MVA (FeCr12,500 TPA/FeMn- 18,000 TPA) to 3 x 9 MVA (FeCr- 45,000 TPA /SiMn- 43,200 TPA/FeMn-75,600 TPA/FeSi-21,000 TPA /FeSi- 21,000 TPA /Pig Iron- 75,600 TPA), WHRB (DRI) based Power Plant from 5 MW to 24 MW, AFBC based Power Plant from 14 MW to 44 MW, new WHRB (BF gases) – 5.0 MW, New Sinter Plant (4,27,680 TPA), New 8,00,000 TPA of Pellet Plant along with Producer Gasifier 24,000 NM<sup>3</sup>/Hr, New Briquetting Plant - 300 Kg/Hr. & New Brick Manufacturing unit (68,100 Bricks/day) by M/s Beekay Steel Industries Ltd., located at Village: Rampei, Tehsil: Athagarh, District: Cuttack, Odisha- - Consideration of Environmental Clearance**

**[Proposal No.: IA/OR/IND1/456528/2023; File No. IA-J-11011/398/2022-IA-II(IND-I)]  
[Consultant: Pioneer Enviro Consultants Pvt. Ltd.; Valid upto: 21-09-2025]**

62.8.1 M/s. Beekay Steel Industries Ltd has made an online application vide proposal no. IA/OR/IND1/456528/2023 dated 13.06.2024 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 schedule no. S. No. 3(a) Metallurgical Industries (ferrous & non-ferrous), 2(a) Coal Washeries and 1(d) Thermal Power Plants under Category “A” of the schedule of the EIA Notification, 2006 and appraised at Central Level.

62.8.2 Name of the EIA consultant: M/s. Pioneer Enviro Consultants Private Limited [List of ACOs with their Certificate/Extension Letter vide letter no. NABET/EIA/2225/RA 0282; valid up to 21.09.2025; as on June 26, 2024].

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

62.8.3 The details of the ToR are furnished as below:

<b>Date of application</b>	<b>Consideration</b>	<b>Details</b>	<b>Date of accord</b>	<b>ToR Validity</b>
10.03.2023	Standard Terms of Reference	Terms of Reference	17.03.2023	16.03.2027

62.8.4 The project of M/s. Beekay Steel Industries Ltd located at Rampei Village, Athagarh Tehsil, Cuttack District, Orissa is for expansion of Steel Plant – DRI Kilns (Sponge Iron from 1,20,000 TPA to 4,50,000 TPA), Induction Furnaces along with CCM & LRF (Hot Billets/ MS Ingots / Billets from 65,000 TPA to 3,96,000 TPA), Ferro Alloys - 1 x 9 MVA (FeCr- 12,500

TPA/FeMn- 18,000 TPA) to 3 x 9 MVA (FeCr- 45,000 TPA /SiMn- 43,200 TPA/FeMn-75,600 TPA/FeSi-21,000 TPA /FeSi- 21,000 TPA /Pig Iron- 75,600 TPA), WHRB (DRI) based Power Plant from 5 MW to 24 MW, AFBC based Power Plant from 14 MW to 44 MW, New WHRB (BF gases) – 5.0 MW, New Sinter Plant (4,27,680 TPA), New 8,00,000 TPA of Pellet Plant along with Gasifier 24,000 NM<sup>3</sup>/Hr, New Briquetting Plant - 300 Kg/Hr. & New Brick Manufacturing unit (68,100 Bricks/day).

62.8.5 Details of EDS:

S.No.	EDS Point	Reply by PP
1.	<p>PP has reported that EC was accorded on 27.12.2007 to M/s. Maheshwari Ispat Limited (MIL) which encompassed project land area of 133.6 ha. However, only 73.2 ha of land could be acquired by MIL and same has been allotted by SBI to M/s. Beekay Steel Industries Limited. PP shall submit the EC transfer if obtained Also, PP shall clarify whether the EC transfer has been obtained with a project area of 73.2 ha.</p>	<ul style="list-style-type: none"> <li>• Total land as per Environmental Clearance order accorded to Maheshwari Ispat Limited on 27<sup>th</sup> December 2007 was 133.6 ha.</li> <li>• Maheshwari Ispat Limited has operated the plant and incurred heavy losses continuously and became a sick unit and was shut down since 2011. The unit was taken over by State Bank of India.</li> <li>• Subsequently State Bank of India, Stressed Assets Management Branch, Kolkata (SBI) has auctioned the company through <b>SARFAESI (Securitisation and Reconstruction of Financial Assets and Enforcement of Security Interest) Act, 2002</b> and was taken over by M/s. Beekay Steel Industries Limited on 09<sup>th</sup> December 2021. Subsequently SBI has issued sale confirmation advice vide letter dated 10<sup>th</sup> December 2021, certificate of sale of land vide order dated 09/03/2022 and certificate of sale for plant machinery vide order dated 28/03/2022.</li> <li>• 73.2 Ha. of land has been allotted by SBI to Beekay Steel Industries Limited through sale confirmation advice vide letter dated 10<sup>th</sup> December 2021, certificate of sale of land vide order dated 09/03/2022.</li> <li>• The expansion is also proposed in the same 73.2 Ha. of land only and no additional land is envisaged.</li> <li>• PP submits that M/s. Beekay Steel Industries Limited has obtained EC Transfer letter vide no: F.No. J-11011/659/2007-IA-II(I), Dated: 16<sup>th</sup> January, 2023 and the same is uploaded in Parivesh Portal for kind reference.</li> <li>• PP submits that PP has specified in EC transfer documentation also that the land given by SBI through auction to Beekay Steel Industries Limited is 73.2 Ha. We invite kind attention to 2 (iv) of the EC Transfer letter dated 16<sup>th</sup> January 2023 which shows the details of Certificate of sale of land (Immovable property) sold by State Bank of India to M/s. Beekay Steel Industries Limited vide order No. SAMB-I/BR/1187 dated 09<sup>th</sup> March 2022, in which, the total land was 180.88 Acres i.e 73.2 Ha. PP has uploaded the Certificate of Sale of Land (Immovable Property) in Parivesh portal for kind reference.</li> <li>• Hence, we kindly submit that in the EC transfer to Beekay steel Industries Limited the total plant area is 73.2 Ha (180.88 Acres.) and the present expansion is also proposed in the same 73.2 Ha only.</li> </ul>

S.No.	EDS Point	Reply by PP
2.	It is reported that baseline data was carried out during 1st March to 31st May, 2021. Thereafter one-month additional baseline monitoring was conducted in February, 2024. PP shall submit the clarification why only one month data has been recollected.	<ul style="list-style-type: none"> <li>• PP humbly submit that the Baseline data collection period of Beekay Steel Industries Limited was from 1<sup>st</sup> March 2022 to 31<sup>st</sup> May 2022.</li> <li>• PP submits that Chapter 3 of Final EIA report which was uploaded in Parivesh portal shows the Baseline Period from 1<sup>st</sup> March 2022 to 31<sup>st</sup> May 2022 and the same period has been mentioned in EC application, in Parivesh Portal.</li> <li>• PP humbly submit that our baseline data is valid for 3 years i.e. till February 2025.</li> </ul> <p>Hence, PP has not collected any additional baseline data in February 2024.</p>
i.	On perusal of the kml file, it is observed that greenbelt is not developed properly along the project boundary. PP shall submit the justification and complete details of the greenbelt developed so far along with the photographs and action plan for completing the balance greenbelt.	<ul style="list-style-type: none"> <li>• 73.2 Ha. (180.88 acres) of land has been acquired by Maheshwari Ispat Limited and same has been allotted by SBI to M/s. Beekay Steel Industries Limited through sale confirmation advice vide letter dated 10<sup>th</sup> December 2021, certificate of sale of land vide order dated 09<sup>th</sup> March 2022 and certificate of sale for plant machinery vide order dated 28<sup>th</sup> March 2022.</li> <li>• Accordingly, 24.28 Ha. i.e. 33.16% of land is envisaged for greenbelt.</li> <li>• Since the plant is under shutdown from past 12 years, the survival rate is less. At present, total number of plants existing in the plant premises are 24,280 no's.</li> <li>• As part of revamping of the existing plant, 12,140 no. of trees will be developed additionally by October 2024.</li> <li>• The additional 23,580 nos. of plants will be developed as part of the green belt plan in the proposed expansion.</li> <li>• Total of 60,700 nos. (including existing) of plants will be maintained in the plant premises at all times.</li> </ul>
ii.	As reported, there are sensitive areas within the study area of the project site. PP shall submit the mitigation measures undertaken to minimize the impact of project activities on these sensitive areas.	<p><b><u>MEASURES THAT WILL BE UNDERTAKEN TO MINIMISE THE IMPACT ON HABITATIONS &amp; SCHOOLS</u></b></p> <ul style="list-style-type: none"> <li>• Winds are predominantly blowing from SW to NE as per IMD Annual Wind Rose Atlas.</li> <li>• Khuntuni Village (West direction) is adjacent to the project site, additional greenbelt will be developed inside the plant area towards the village with 15m to 25 m width.</li> <li>• Plantation will be taken up in Khuntuni village &amp; nearby villages also.</li> <li>• All required environmental protection measures such as ESPs (with high efficiency Rigid discharge electrodes with transformer), Bagfilters, covered conveyers, dust suppression systems, pucca internal roads (designed as per IRC - 37), mechanical dust sweepers will be provided and operated duly ensuring compliance with the particulate emission norms of 30 mg/Nm<sup>3</sup>.</li> </ul>

S.No.	EDS Point	Reply by PP
		<ul style="list-style-type: none"> <li>• Interlocking system will be provided to ESPs and whenever the particulate emission exceeds the emission norm, the raw material feed to the unit will stop. Consequently, there will be no production in the unit till the ESP is rectified.</li> <li>• Auto Low NOx burners with 3-stage combustion, flue gas recirculation and auto combustion system will be provided to ensure NOx emission within 100 mg/Nm<sup>3</sup>.</li> <li>• Automated Lime dosing will be provided to bring down the SOx emission to within 100 mg/Nm<sup>3</sup>.</li> <li>• Ash will be stored in silos only and there will not be any open storage of ash.</li> <li>• All transport vehicles will be with PUC certification.</li> <li>• Wheel washing facility will be provided at entry and exit gates.</li> <li>• Zero liquid discharge will be maintained.</li> </ul>
iii.	PP shall submit copy of entire PH proceedings inter-alia including advertisements given for PH, SPCB cover letter, actual proceedings, attendance sheet, written representations & the response submitted by PP, Authenticated English translation of the PH proceedings if any.	Entire PH proceeding including advertisements given for PH, SPCB cover letter, actual proceedings, attendance sheet, written representations & the response submitted by PP, Authenticated English translation of the PH proceedings is uploaded the Parivesh Portal.
iv.	PP shall submit the status of approval of Wildlife Conservation Plan as per amendments in Act along with supporting documents.	<ul style="list-style-type: none"> <li>• Conservation plan is prepared considering guideline of the PCCF (Wildlife) &amp; Chief Wild Life Warden, Odisha vide Memo No 3332/CWLW-FDWC-MISC-0028-2021 dated 16th April, 2022 and Memo No 13323/ CWLW-FDWC-MISC-0028-2021 dated 14<sup>th</sup> December,2023 and as per GO issued for The Wildlife (Protection) Amendment Act, 2022 vide dt. 20<sup>th</sup> December 2022 and same is uploaded in Parivesh portal.</li> <li>• Site Specific Wildlife Conservation Plan (SSWLCP) has been prepared and submitted to State Forest Department on 17.06.2023 and approved by DFO on 09.02.2024.</li> <li>• Site Specific Wildlife conservation plan (SSWLCP) has been approved by the PCCF vide letter No. 3515/CWLW-FDWC-MISC-0001-2024 dt. 18.03.2024 with a budget of Rs 230.58 Lakhs to be spent over a period of 5 years, out of which Rs.175.38 Lakh will be deposited with Forest department and Rs. 55.20 lakhs will be spent directly by Beekay Steel industries Limited.</li> </ul>

S.No.	EDS Point	Reply by PP												
		<ul style="list-style-type: none"> <li>A copy of the PCCF approval letter is uploaded in Parivesh portal for kind reference.</li> </ul>												
v.	<p>PP has submitted the CCR report obtained from IRO along with ATR. PP shall submit the closure/review report of IRO based on the submission of ATR.</p>	<ul style="list-style-type: none"> <li>PP would like to inform that, CCR from IRO, MoEF&amp;CC, Bhubaneswar has been received vide File No. 101-311/23/EPE dt. 19.10.2023, with few observations.</li> <li>Accordingly, PP has submitted Action Taken Report (ATR) to IRO, MoEF&amp;CC, Bhubaneswar on observations vide our letter 12.02.2024.</li> <li>Later IRO, MoEF&amp;CC, Bhubaneswar has asked further additional informational with respect to our ATR submitted.</li> <li>Subsequently, PP has submitted additional information sought by IRO, MoEF&amp;CC, Bhubaneswar vide our letter vide BSIL/MoEF&amp;CC/2023-24/364 dt. 04.04.2024.</li> <li>Closure report based on submission of ATR is issued by IRO, MoEF&amp;CC, Bhubaneswar vide File no. 101-311/23/EPE dt. 13.05.2024 and same is uploaded in Parivesh portal.</li> </ul>												
vi.	<p>Details of Raw material and its linkage and its mitigation measure during transportation needs to be submitted under section for requirement of minerals involved in the project.</p>	<p>Details of Raw material is updated under section of requirement of minerals. And also MoU for Imported Coal and Iron Ore have been uploaded in the Parivesh portal.</p> <p><b><u>Mitigation measures during transportation:</u></b></p> <ul style="list-style-type: none"> <li>Major raw materials will be transported through railway rakes up to the nearest railway station ((i.e. Rajathagarh RS – 0.2 Kms. – By Road) and then to the site through road by covered trucks.</li> <li>All the trucks used for the transport of raw materials, products and wastes will be completely covered with tarpaulin and ensured no spillage during transportation.</li> <li>Pucca Internal roads.</li> <li>All the raw material yards are equipped with water sprinkling system, so as to avoid fugitive emission during the material handling.</li> <li>Only PUC certified trucks will be used for transportation.</li> <li>Avenue plantation development on both sides of Internal roads.</li> <li>Plant is well connected to Bhubaneswar - Sambhalpur Highway (NH # 42) at a distance of 2.3 Kms from the plant site and same is capable of absorbing additional truck movement due to transportation envisaged due to the expansion project.</li> </ul> <p>Same is updated under Section (Part B, 2.3) for requirement of mineral in the proposed project in Parivesh Portal</p>												
vii.	<p>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</p>	<p>Following are details of land:</p> <table border="1"> <tr> <td>Total area of the land</td> <td colspan="5">73.20 Ha.</td> </tr> <tr> <td>Type of land</td> <td>S. No</td> <td>Type of Land</td> <td>Area (in Ha)</td> <td>Area (in Acres)</td> <td>Remarks</td> </tr> </table>	Total area of the land	73.20 Ha.					Type of land	S. No	Type of Land	Area (in Ha)	Area (in Acres)	Remarks
Total area of the land	73.20 Ha.													
Type of land	S. No	Type of Land	Area (in Ha)	Area (in Acres)	Remarks									

S.No.	EDS Point	Reply by PP					
	<p>land with area of the land; Conversion of land for industrial purpose from the State Government] needs to be submitted and uploaded the data accordingly. English translation of land documents authenticated from notary shall be submitted.</p>		1.	Industrial Land	64.36	159.04	<p>Total land envisaged is 73.20 ha. <b>SBI has allotted 73.20 Ha. of land to Beekay Steel Industries Ltd.</b> through certificate of sale of land vide order dated 09<sup>th</sup> March 2022. <b>64.36 Ha. land is diverted &amp; remaining 8.84 Ha. is under process.</b></p>
2.	Private Land	8.84	21.84				
3.	Forest Land	Nil	Nil				
4.	Govt. Land	Nil	Nil				
	<b>Total</b>	<b>73.20</b>	<b>180.88</b>				
	Details of possession of Land in the name of PP	SBI has allotted 73.20 Ha. of land to Beekay Steel Industries Ltd. through certificate of sale of land vide order dated 09 <sup>th</sup> March 2022.					
	Copy of proof of land with area of the land	Copy of Land Documents are uploaded in Parivesh Portal.					
	Conversion of land for industrial purpose from the State Government	64.36 Ha. has already been diverted and diversion of remaining 8.84 Ha. of land is under process. Copy of documents are uploaded in Parivesh Portal.					
viii.	Details of court case, directions issued by SPCB, if	<ul style="list-style-type: none"> <li>A Case ID Case No. 70 of 2015 was filled against M/s. Maheshwari Ispat Limited (1<sup>st</sup> Party Management) in 2015, by Shri. Gagan Bihari Parida &amp; 106 others who were Ex- employees of M/s.</li> </ul>					



S.No.	EDS Point	Reply by PP
	any, pending needs to be submitted.	<p>Maheshwari Ispat Limited for refusal of employment with effect from 01.07.2013. in District Labour Office, Cuttack. Accordingly, notices were issued on 04.08.2014.</p> <ul style="list-style-type: none"> <li>• Sr. Manager of the M/s. Maheshwari Ispat Limited has appeared before the court of law and submitted that the plant was closed since 28.08.2011. Hence, DLO has issued show cause notice for the illegal stoppage of work and refusal of employment to the workmen for non- compliance of section 25- N and 25-O of Industrial Act. Also, as per the disputants demand, the industrial dispute was admitted for conciliation and notices were issued, for which MIL didn't cooperate, hence it referred to court.</li> <li>• Later, as per Ex-employees Plea, the Labour Court passed an order including Beekay Steel Industries Limited (3<sup>rd</sup> party Management) and Authorized Officer, State Bank of India (SAMB), Kolkata (2<sup>nd</sup> party Management) as part of the Managements in this case in October, 2022.</li> <li>• In due course, pleadings were completed in the matter and the said matter is mature for final arguments and disposal.</li> <li>• The court found M/s. Maheshwary Ispat Industries Limited is an 'industrial establishment' within the meaning of Sec. 25-L of Chapter V-B of the ID Act, and provisions of Sec.25-O (Sub. Sec-1 &amp; Sub. Sec-2) are clearly applicable. But M/s. Maheshwary Ispat Industries Limited failed to comply while closing the industry, Hence, the workers are entitled to the protection of section 25- N of the Act.</li> <li>• The order dated 27.09.2023 was issued by the Hon'ble court directing the Managements (1. M/s. Maheshwary Ispat Industries Limited., 2. Authorized Officer, State Bank of India (SAMB), Kolkata, 3. Beekay Steel Industries Limited.) to pay a lumpsum compensation of Rs. 1,30,000/-(Rupees One Lakh Thirty Thousand) only to each of the ex-employees towards back wages within 3 months from the date of the notification of the award by the appropriate Govt. and also directed Beekay Steel Industries Limited to re-engage (as per Sec. 25-H) the members of ex-employees who are of claim forthwith.</li> <li>• Beekay Steel Industries Limited received a copy of notification of the award of the court on 30.10.2023. In December 2023, Beekay Steel Industries Limited submitted a writ petition in the Hon'ble High Court of Orissa at Cuttack, challenging the order dated 12.10.2022, for adding Beekay Steel Industries Limited as one of the managements to the industrial dispute and subsequent award dated 27.09.2023 as Beekay Steel Industries Limited had purchased the moveable and immovable properties of 1<sup>st</sup> Party Management. Further submitted that Beekay Steel Industries Limited was purchaser in a sale proceeding made by the authorized representative of the bank under provisions in Securitization and Reconstruction of Financial Assets and Enforcement of Security Interest Act 2002. Hence it cannot be made responsible for</li> </ul>

S.No.	EDS Point	Reply by PP
		liabilities of 1 <sup>st</sup> Party management, including in respect of its employees. <ul style="list-style-type: none"> <li>• <u><i>The Hon.'ble High Court has granted stay order vide W.P.(C) No.43029 of 2023 and I.A No.20553 of 2023 on 03.01.2024 on the award issued by Labour court dated 27.09.2023. and it is valid till next hearing.</i></u></li> <li>• <u><i>The present status: Stay is continuing and next hearing is scheduled on 08<sup>th</sup> July 2024.</i></u></li> <li>• Copy of Court Details along with Stay Order are uploaded in the Parivesh Portal.</li> <li>• Other than above, there are no such pending court cases or directions issued from SPCB.</li> </ul>
ix.	PP shall clarify whether the project falls under CPA/SPA? If yes, then compliance to the CEPI guidelines shall be submitted.	PP confirms that Plant does not fall under the CPA/SPA.

#### 62.8.6 Environmental Site Settings:

S. No.	Particulars	Details	Remarks																					
1.	Total land	Total land 73.20 Ha. (180.88 Acres)	---																					
2.	Land acquisition details as per MoEF&CC O.M. dated October 2014	SBI has allotted 73.20 Ha. of land to Beekay Steel Industries Ltd. through certificate of sale of land vide order dated 09 <sup>th</sup> March 2022.	64.36 Ha. has already been diverted and diversion of remaining 8.84 Ha. of land is under process.																					
3.	Existence of habitation & involvement of R & R, if any.	<b>Project site:</b> Nearest habitation: Khuntuni village adjacent to the plant site in West Direction. There are no habitations in the total land envisaged for the project. Hence, no rehabilitation and resettlement is involved.	---																					
4.	Latitude and Longitude of the plant site	The Coordinates of the project site are following <table border="1"> <thead> <tr> <th>Point No.</th> <th>Latitude</th> <th>Longitude</th> </tr> </thead> <tbody> <tr> <td>1.</td> <td>20°33'56.20"N</td> <td>85°44'27.03"E</td> </tr> <tr> <td>2.</td> <td>20°33'57.33"N</td> <td>85°44'26.26"E</td> </tr> <tr> <td>3.</td> <td>20°33'58.98"N</td> <td>85°44'26.63"E</td> </tr> <tr> <td>4.</td> <td>20°34'0.09"N</td> <td>85°44'18.19"E</td> </tr> <tr> <td>5.</td> <td>20°34'12.95"N</td> <td>85°44'16.97"E</td> </tr> <tr> <td>6.</td> <td>20°34'12.85"N</td> <td>85°44'17.81"E</td> </tr> </tbody> </table>	Point No.	Latitude	Longitude	1.	20°33'56.20"N	85°44'27.03"E	2.	20°33'57.33"N	85°44'26.26"E	3.	20°33'58.98"N	85°44'26.63"E	4.	20°34'0.09"N	85°44'18.19"E	5.	20°34'12.95"N	85°44'16.97"E	6.	20°34'12.85"N	85°44'17.81"E	--
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5.	20°34'12.95"N	85°44'16.97"E																						
6.	20°34'12.85"N	85°44'17.81"E																						

S. No.	Particulars	Details	Remarks																			
		7. 20°34'24.93"N 85°44'16.10"E																				
		8. 20°34'31.64"N 85°44'24.66"E																				
		9. 20°34'29.76"N 85°44'24.77"E																				
		10. 20°34'29.77"N 85°44'29.52"E																				
		11. 20°34'30.92"N 85°44'29.85"E																				
		12. 20°34'30.70"N 85°44'31.26"E																				
		13. 20°34'29.17"N 85°44'32.69"E																				
		14. 20°34'25.56"N 85°44'33.09"E																				
		15. 20°34'25.80"N 85°44'35.19"E																				
		16. 20°34'29.52"N 85°44'34.48"E																				
		17. 20°34'29.69"N 85°44'37.08"E																				
		18. 20°34'31.27"N 85°44'37.15"E																				
		19. 20°34'31.05"N 85°44'43.98"E																				
		20. 20°34'29.44"N 85°44'48.02"E																				
		21. 20°34'24.44"N 85°44'48.08"E																				
		22. 20°34'20.37"N 85°44'42.77"E																				
		23. 20°34'20.65"N 85°44'38.98"E																				
		24. 20°34'14.72"N 85°44'39.41"E																				
		25. 20°34'12.77"N 85°44'45.85"E																				
		26. 20°34'5.41"N 85°44'46.27"E																				
		27. 20°34'3.51"N 85°44'41.01"E																				
		28. 20°34'0.87"N 85°44'42.23"E																				
		29. 20°33'58.08"N 85°44'37.18"E																				
		30. 20°33'59.45"N 85°44'33.45"E																				
		31. 20°33'55.68"N 85°44'33.21"E																				
		32. 20°33'55.35"N 85°44'30.96"E																				
		33. 20°33'57.20"N 85°44'29.89"E																				
5.	Elevation of the plant site	41 m to 56 m above MSL	--																			
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	<p><b>Project Site:</b></p> <table border="1"> <thead> <tr> <th>Water Body</th> <th>Distance</th> </tr> </thead> <tbody> <tr> <td>Nil</td> <td>NA</td> </tr> </tbody> </table> <p><b>Study area:</b></p> <table border="1"> <thead> <tr> <th>Water Body</th> <th>Distance (Kms.)</th> <th>Direction</th> </tr> </thead> <tbody> <tr> <td>Mahanadi River</td> <td>7.7</td> <td>SE</td> </tr> <tr> <td>Sapua nadi</td> <td>8.8</td> <td>SW</td> </tr> <tr> <td>Barkatia Jhor Stream</td> <td>2.5</td> <td>E</td> </tr> <tr> <td>Barha Jhor Stream</td> <td>0.8</td> <td>NW</td> </tr> </tbody> </table>	Water Body	Distance	Nil	NA	Water Body	Distance (Kms.)	Direction	Mahanadi River	7.7	SE	Sapua nadi	8.8	SW	Barkatia Jhor Stream	2.5	E	Barha Jhor Stream	0.8	NW	--
Water Body	Distance																					
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Barkatia Jhor Stream	2.5	E																				
Barha Jhor Stream	0.8	NW																				
8.	Existence of ESZ / ESA / National Park / Wildlife Sanctuary / Biosphere Reserve / Tiger Reserve /	No National Park / Biosphere Reserve / Tiger Reserve / Elephant Reserve exist within 10 Km. radius of the plant. Name of Wildlife Sanctuary & ESZ:	---																			

S. No.	Particulars	Details			Remarks
	Elephant Reserve etc. if any within the study area	<b>Name</b>	<b>Distance from plant boundary</b>	<b>Direction</b>	
		Kapilash Wildlife Sanctuary	5.7 Kms.	N	
		ESZ zone of Kapilash Wildlife Sanctuary	2.4 Kms.	NW	
	Status of NBWL approval: Not applicable List of Reserved and protected forests:				
		<b>Name</b>	<b>Distance (Kms.)</b>	<b>Direction</b>	
		Subasi RF	0.76	S	
		Ranibania RF	2.7	NW	
		Deulia RF	2.9	W	
		Sankhaipoi RF	3.4	EEN	
		Baniabandha RF	3.8	N	
		Oringa RF	4.1	SW	
		Kapilasa RF	4.7	NW	
		Suniamuhan RF	5.3	SE	
		Gadabola RF	6.2	NWW	
		Gobara RF	6.7	NE	
		Khalakhala RF	7.3	S	

62.8.7 Chronology of permissions obtained:

S. No.	Details of permission obtained with dates
1.	<b>Maheshwari Ispat Limited (MIL)</b> Obtained Consent to Establishment (CTE) from Odisha State Pollution Control Board (OSPCB) vide No. 28461/Ind-II-NOC/2987, dt. 25.9.2004 for establishment of Sponge Iron (3 x 100 TPD – 1,00,000 TPA), Steel billets (2 x 15 T, 1 x 15 T LRF & 1 x 400 TPD Steel Billet Caster – 1,28,000 TPA), Captive Power Plant (WHRB - 8.0 MW) & Sized Ore – 30 TPH.
2.	<b>MIL</b> Obtained Consent to Establishment (CTE) from OSPCB vide No. 35451/Ind-II-NOC-2987 dt.9.12.2005 for expansion of existing plant comprising Sponge Iron from (3 x 100 TPD – 1,00,000 TPA to 4 x 100 TPD – 1,20,000 TPA) Steel billets (2 x 10 T, 2 x 8T Induction Furnaces Along with 1 x 20T LRF & 1 x 400 TPD Steel Billet Caster – 1,28,000 TPA), Captive Power Plant (WHRB - 10 MW) & Sized Ore – 30TPH.
3.	<b>MIL</b> Obtained Environment Clearance (EC) from MoEF, New Delhi, vide F. No. J-11011/659/2007-IA II(I) dt. 27.12.2007 for expansion of Steel plant – Rolled Products (3,00,000 TPA), Ferro Alloys (30,500 TPA), Power Plant (WHRB from 10 MW to 24 MW) & AFBC (110 MW), DRI Grade Coal Washery – 2,75,000 TPA, Sponge Iron (From 1,20,000 to 3,65,000 TPA), Hot metal/ Pig Iron (3,30,000 TPA), Steel Billets (from 1,28,000 TPA to 4,02,000 TPA), Middling (Coal Washery- 1,75,000 TPA), Char (DRI) (from 39,000 TPA to 1,10,000 TPA).

S. No.	Details of permission obtained with dates
4.	<b>MIL</b> Obtained Consent to Establishment (CTE) from OSPCB vide No. 12105/Ind-II-NOC-4270 dt.30.07.2009 for expansion of steel plant in Phase # I-MBF(1 x 262m <sup>3</sup> - 1,65,000)and in Phase # II - Coal washery (0.5 MTPA – 4,50,000 TPA), MBF (1 x 262m <sup>3</sup> - 1,65,000TPA), Sinter (4,00,000 TPA), Coke oven plant (2,00,000 TPA), Steel Making by EAF(40 T EAF, 40 T LF, CCM – 2,72,000 TPA), Rolling Mill (3,00,000 TPA), CPP(MBF Gas -4 MW), Submerged Arc Furnace (2 x 9 MVA - FeCr - 12,500 TPA/ FeMn -18,000 TPA), Captive Power Plant (AFBC -1 x 14MW, 1 x 25MW, 1 x 43MW & 1 x 28 MW – 110MW).
5.	<b>MIL</b> Obtained 1st Consent To Operate from OSPCB vide no. 2045/Ind-I-Con-4814, dated 16.12.2009 for 14 MW CPP (AFBC Power Plant).
6.	<b>MIL</b> Obtained Consent to Operate vide no. 21520/Ind-I-4814, dated 30.12.2009 for Sponge Iron (Kiln # I, II, III & IV – 4 x 100 TPD), Induction Furnaces (1 x 10T + 1 x 8T) & Blast Furnace (Hot Metal - 1,65,000 TPA).
7.	<b>MIL</b> Obtained Consent to Operate vide no. 4789/Ind-I-Con-4814, dated 22.03.2010 for 0.45 MTPA Coal Washery & 1 x 9 MVA Submerged Arc Furnace (Ferro Alloys Plant).
8.	<b>MIL</b> Obtained Consent To Operate from OSPCB vide no. 19072/Ind-I-Con-4814, dated 12.11.2010 for 5 MW (WHRB Power Plant) & Re-rolling Mill.
9.	<b>EC transfer</b> from M/s. Maheshwari Ispat Limited to M/s. Beekay Steel Industries Limited has been obtained from MoEF&CC vide F.No. J-11011/659/2007 -IA II(I) dt. 16.01.2023.
10.	<b>Beekay Steel Industries Limited</b> (BSIL) has started refurbishment of some units which were not in operation since the year 2011. BSIL has obtained Consent To Operate from OSPCB vide no. 4679/Ind-I-Con-4814, dated 30.03.2024 for Sponge Iron (Kiln # III & IV – 2 x 100 TPD), WHRB Power Plant (5 MW) & Ferro Alloys Plant (Submerged Arc Furnace - 1 x 9 MVA).

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

S. No.	Units (Products) [1]	EX & CTE Obtained [2]	Last CTO obtained by Maheshwari Ispat Ltd. dt. 30.12.2009, 22.03.2010, & 12.11.2010 [3]	Latest CTO obtained by Beekay Steel Industries Ltd. dt. 30.03.2024 [4]	EC & CTE obtained but not implemented within the validity period [5]	Proposed Production Capacity (expansion) [6]	Total After Expansion Production Capacity (Plant Configuration) [7] = [3] + [6]
1.	Coal Washery (DRI Grade)	2,75,000 TPA	2,75,000 TPA	---	---	---	2,75,000 TPA
2.	Pellet Plant (Pellets)	---	---	---	---	8,00,000 TPA	8,00,000 TPA
3.	Producer Gas	---	---	---	---	3 X 8000 NM <sup>3</sup> /hr	3 X 8000 NM <sup>3</sup> /hr
4.	DRI Kilns (Sponge Iron)	1,20,000 TPA (4 X 100 TPD)	1,20,000 TPA (4 X 100 TPD)	60,000 TPA (Kiln – III & IV 2x100 TPD)	---	3,30,000 TPA (2 x 500 TPD)	4,50,000 TPA (4 X 100 & 2 x 500 TPD)
5.	Induction Furnace (Hot Billets/ Ingots/ Billets)	1,30,000*TPA (2 X 10 T & 2x 8 T With LRF 20 T)	65,000 TPA* (1 X 10 T & 1 X 8 T With LRF 10 T) This unit will be dismantled.	---	65,000 TPA (1 X 10 T & 1 X 8 T With LRF 10 T)	3,96,000 TPA (4 X 30 T)	3,96,000 TPA (4 X 30 T)

S. No.	Units (Products) [1]	EX & CTE Obtained [2]	Last CTO obtained by Maheshwari Ispat Ltd. dt. 30.12.2009, 22.03.2010, & 12.11.2010 [3]	Latest CTO obtained by Beekay Steel Industries Ltd. dt. 30.03.2024 [4]	EC & CTE obtained but not implemented within the validity period [5]	Proposed Production Capacity (expansion) [6]	Total After Expansion Production Capacity (Plant Configuration) [7] = [3] + [6]
			Hence production will be Nil.				
6.	Blast Furnace (Hot Metal/Pig Iron)	3,30,000 TPA (262 m <sup>3</sup> )	1,65,000 TPA	---	1,65,000 TPA	---	1,65,000 TPA
7.	Sinter Plant (Sinter feed to MBF)	45m <sup>2</sup>	---	---	45 m <sup>2</sup>	4,27,680 TPA (30m <sup>2</sup> )	4,27,680 TPA (30m <sup>2</sup> )
8.	Rolling Mill (Rolled products) (85 % Hot charging with Hot Billets and remaining 15% through RHF with LDO as fuel)	3,00,000 TPA	3,00,000 TPA	---	---	---	3,00,000 TPA
9.	Ferro Alloys	2 X 9MVA (FeCr- 12,500 TPA/ Fe Mn- 18,000 TPA)	1X 9 MVA (FeCr- 6,250 TPA/ Fe Mn- 9,000 TPA) <i>** The existing 9 MVA SEA will be upgraded to increase the production of FeCr from 6,250 TPA to 15,000 TPA / FeMn from 9,000 TPA to 25,200 TPA and also to produce FeSi-7,000 TPA / SiMn – 14,400 TPA/ Pig Iron – 25,200 TPA</i>	1x9 MVA (FeCr- 6,250 TPA / FeMn- 9,000 TPA)	1X 9 MVA (FeCr- 6,250 TPA/ Fe Mn- 9,000 TPA)	(2 X 9 MVA) (FeCr- 30,000 TPA/ SiMn- 28,800 TPA / FeMn- 50,400 TPA / FeSi- 14,000 TPA / Pig Iron- 50,400 TPA)	(3 X 9 MVA) (FeCr-45,000 TPA/ SiMn- 43,200 TPA / FeMn-75,600 TPA / FeSi- 21,000 TPA / Pig Iron- 75,600 TPA)  <i>** The existing 9 MVA SEA will be upgraded to increase the production of FeCr from 6,250 TPA to 15,000 TPA / FeMn from 9,000 TPA to 25,200 TPA and also to produce FeSi- 7,000 TPA / SiMn – 14,400 TPA/ Pig Iron – 25,200 TPA</i>
10.	WHRB Power Plant	24 MW	5MW	5 MW	19 MW	24 MW	29 MW

S. No.	Units (Products) [1]	EX & CTE Obtained [2]	Last CTO obtained by Maheshwari Ispat Ltd. dt. 30.12.2009, 22.03.2010, & 12.11.2010 [3]	Latest CTO obtained by Beekay Steel Industries Ltd. dt. 30.03.2024 [4]	EC & CTE obtained but not implemented within the validity period [5]	Proposed Production Capacity (expansion) [6]	Total After Expansion Production Capacity (Plant Configuration) [7] = [3] + [6]	
	Power Plant	AFBC Power Plant	110 MW (1 X 14 MW, 1 X 25 MW, 1 X 28 MW & 1 X 43 MW)	1X14 MW	1x14 MW Under refurbishment	96 MW	30 MW	44 MW
		WHRB power plant from BF gases	1 X 4 MW	---	---	4 MW	5 MW	5 MW
<b>Total</b>			138 MW	19 MW		119 MW	59 MW	78 MW
11.	Fly Ash Brick Manufacturing Unit	---	---		---	68,100 Bricks/Day	68,100 Bricks/Day	
12.	Briquetting unit	---	---		---	300 Kg/Hr	300 Kg/Hr	
<b>By Product</b>								
13.	Middling (Coal Washery)	1,75,000 TPA	1,75,000 TPA	---	---	---	---	1,75,000 TPA
14.	Char (DRI)	1,10,000 TPA	39,000 TPA	39,000 TPA	---	66,000 TPA	---	1,05,000 TPA
Note:								
* The existing 1 X 10 T & 1 X 8 T with LRF 10 T of induction furnace unit will be dismantled.								
** <u><i>-The existing 9 MVA SEA will be upgraded to increase the production of FeCr from 6,250 TPA to 15,000 TPA / Fe Mn from 9,000 TPA to 25,200 TPA and also to produce FeSi-7,000 TPA / SiMn – 14,400 TPA/ Pig Iron – 25,200 TPA.</i></u>								

62.8.9 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 (TPA)			Sources	Distance from site (Kms.)	Mode of Transport
		Existing	Expansion	Total			
1.	<b>Pellet Plant (Pellets)</b>						
a)	Iron Ore Concentrate / Fines	---	8,00,000	8,00,000	Odisha/ Chhattisgarh	~ 300	By rail & road (through covered trucks)
b)	Bentonite	---	6,400	6,400	Chhattisgarh	~ 300	By rail & road (through covered trucks)
c)	Limestone	---	12,000	12,000	Odisha / Chhattisgarh	~ 400	By road (through covered trucks)

S. No.	Raw Material		Quantity (TPA)			Sources	Distance from site (Kms.)	Mode of Transport
			Existing	Expansion	Total			
d)	Anthracite Coal		---	28,000	28,000	Odisha / Chhattisgarh	~ 400	By road (through covered trucks)
e)	LDO		---	20,411 KL/Annum	20,411 KL/Annum	IOCL Dept. Odisha	~ 100	Through tankers
f)	Coal for Gasifier	Indian	---	72,000 TPA	72,000 TPA	MCL Odisha / SECL Chhattisgarh	~ 300	By rail & road (through covered trucks)
		Imported	---	46,080 TPA	46,080 TPA	Indonesia / South Africa / Australia	~ 400 (from Vizag Port)	Through sea route, rail route & by road (through covered trucks)
<b>2. DRI Kilns (Sponge Iron)</b>								
a)	Pellets		1,74,000	4,78,500	6,52,500	Own generation	---	Through covered conveyers
OR								
b)	Iron ore		1,92,000	5,28,000	7,20,000	Odisha/Chhattisgarh	~ 300	By rail & road (through covered trucks)
c)	Coal	Indian (100%)	1,56,000	4,29,000	5,85,000	MCL Odisha / SECL Chhattisgarh	~ 300	By rail & road (through covered trucks)
		Imported (100%)	99,840	274560	3,74,400	Indonesia / South Africa / Australia and imported from other country	~ 400 (from Vizag Port)	Through sea route, rail route & by road (through covered trucks)
d)	Dolomite		6000	16,500	22,500	Odisha / Chhattisgarh	~ 300	By road (through covered trucks)



S. No.	Raw Material	Quantity (TPA)			Sources	Distance from site (Kms.)	Mode of Transport
		Existing	Expansion	Total			
3.	<b>Steel Melting Shop (Hot Billets / Billets/MS Ingots)</b>						
a)	Sponge Iron	---	4,00,000	4,00,000	Own generation	---	Through covered conveyers
b)	MS Scrap/ Pig Iron	---	59,000	59,000	Odisha/ Chhattisgarh	~ 300	By road (through covered trucks)
c)	Ferro alloys	---	20,000	20,000	Own generation	---	Through covered conveyers
4.	<b>For Ferro Alloys</b>						
4 (i)	<i>Ferro Silicon</i>						
a)	Quartz	---	30,800	30,800	Odisha / Chhattisgarh	~ 300	By road (through covered trucks)
b)	Mill scales & MS Scrap	---	6,300	6,300	Own Generation	----	Through covered conveyers
c)	Char Coal / Coke	---	21,700	21,700	Andhra Pradesh	~ 500	By road (through covered trucks)
d)	Electrode paste	---	1,400	1,400	Odisha / West Bengal	~ 500	By road (through covered trucks)
e)	Bagfilter dust	---	980	980	Own generation	---	Internal transfer Through covered trucks
(OR)							
4 (ii)	<i>Ferro Manganese</i>						
a)	Manganese Ore	21,600	1,20,960	1,42,560	Odisha / Chhattisgarh	~ 300	By Rail & Road (through covered trucks)
b)	Coke	2,700	15,120	17,820	Andhra Pradesh	~ 500	By road (through covered trucks)

S. No.	Raw Material	Quantity (TPA)			Sources	Distance from site (Kms.)	Mode of Transport
		Existing	Expansion	Total			
c)	MS Scrap / Mill scales	1,800	10,080	11,880	Own Generation	---	Through covered conveyers
d)	Electrode Paste	198	1,109	1,307	Odisha / West Bengal	~ 300	By road (through covered trucks)
(OR)							
4 (iii)	<i>Silico Manganese</i>						
a)	Manganese Ore	---	57,600	57,600	Odisha / Chhattisgarh	~ 300	By Rail & Road (through covered trucks)
b)	FeMn. Slag	---	12,960	12,960	Own generation	----	---
c)	Coke	---	8,640	8,640	Andhra Pradesh	~ 500	----
d)	Dolomite	---	8,640	8,640	Odisha / Chhattisgarh	~ 300	By road (through covered trucks)
e)	Electrode paste	---	576	576	Odisha / West Bengal	~ 300	By road (through covered trucks)
f)	Quartz	---	10,080	10,080	Odisha / Chhattisgarh	~ 300	By road (through covered trucks)
g)	Bagfilter dust	---	432	432	Own generation	---	Internal transfer Through covered trucks
(OR)							
4 (iv)	<i>Ferro Chrome</i>						
a)	Chrome Ore	15,000	72,000	87,000	Sukinda, Odisha	~ 50	By road

S. No.	Raw Material	Quantity (TPA)			Sources	Distance from site (Kms.)	Mode of Transport
		Existing	Expansion	Total			
					Imported	~ 400 (from vizag Port)	(through covered trucks) From Port By Road (through covered Trucks)
b)	Coke	3,125	15,000	18,125	Andhra Pradesh	~ 500	By road (through covered trucks)
c)	Quartz	381	1,830	2,211	Odisha / Chhattisgarh	~ 300	By road (through covered trucks)
d)	MS Scrap / Mill Scale	938	4,500	5,438	Own generation	---	Through covered conveyers
e)	Bauxite	938	4,500	5,438	Odisha / Chhattisgarh	~ 300	By road (through covered trucks)
f)	Electrode Paste	125	600	725	Odisha / West Bengal	~ 300	By road (through covered trucks)
g)	Bagfilter dust	125	600	725	Own generation	---	Internal transfer Through covered trucks
(OR)							
4 (v)	<i>Pig Iron</i>						
a)	Iron Ore	---	55,188	55,188	Odisha/Chhattisgarh	~ 300	By rail & road (through covered trucks)
b)	Mill Scale	---	32,760	32,760	Own Generation	---	Through covered conveyers
c)	Coke	---	31,651	31,651	Odisha / Chhattisgarh	~ 300	By road (through covered trucks)

S. No.	Raw Material	Quantity (TPA)			Sources	Distance from site (Kms.)	Mode of Transport
		Existing	Expansion	Total			
d)	Limestone	---	7,560	7,560	Odisha / Chhattisgarh	~ 400	By road (through covered trucks)
e)	Fluorspar	---	1,260	1,260	Odisha / West Bengal	~ 300	By road (through covered trucks)
f)	Dolomite	---	7,560	7,560	Odisha / Chhattisgarh	~ 300	By road (through covered trucks)
<b>5.</b>	<b>Sinter unit</b>						
a)	Iron ore fines	---	3,42,144	3,42,144	Odisha	~ 100	By rail & road (through covered trucks)
b)	Mill Scales	---	2,138	2,138	Own generation	----	Through covered conveyers
c)	Fluxes	---	21,384	21,384	Odisha / West Bengal	~ 300	By road (through covered trucks)
d)	Coke Fines	---	36,353	36,353	Odisha / West Bengal	~ 300	By road (through covered trucks)
e)	Dust from DRI, Pellet plant etc	---	42,768	42,768	Own generation	----	Through covered conveyers
f)	Sinter Returns	---	51,322	51,322	Own generation	----	Through covered conveyers
<b>6.</b>	<b>For FBC Boiler</b>						
a)	Indian Coal (100 %)	83,160	1,78,200	2,61,360	SECL Chhattisgarh / MCL Odisha	~ 500	By rail & road (through covered trucks)
<b>OR</b>							
b)	Imported Coal (100 %)	53,222	1,14,048	1,67,270	Indonesia / South Africa / Australia	~ 400 (from Vizag Port)	Through sea route, rail route & by road

S. No.	Raw Material		Quantity (TPA)			Sources	Distance from site (Kms.)	Mode of Transport
			Existing	Expansion	Total			
						and imported from other country	(through covered trucks)	
<b>OR</b>								
c)	Dolomitic + Indian Coal	Dolomitic	24,000	66,000	90,000	Own generation	---	through covered conveyors
		Indian Coal	71,160	1,45,200	2,16,360	SECL Chhattisgarh / MCL Odisha	~ 300	By rail & road (through covered trucks)
<b>OR</b>								
d)	Dolomitic + Imported Coal	Dolomitic	24,000	66,000	90,000	Own generation	---	through covered conveyors
		Imported Coal	45,542	92,928	1,38,470	Indonesia / South Africa / Australia and imported from other country	~ 400 (from Vizag Port)	Through sea route, rail route & by road (through covered trucks)
<b>7</b>	<b>Coal washery</b>							
a)	ROM Coal		3,65,000	---	3,43,750	Odisha/Chhattisgarh	~ 300	By rail & road (through covered trucks)
<b>8</b>	<b>Blast Furnace</b>							

S. No.	Raw Material	Quantity (TPA)			Sources	Distance from site (Kms.)	Mode of Transport
		Existing	Expansion	Total			
a)	Sinter	2,29,000	---	2,29,000	Odisha/ Chhattisgarh	~ 300	By rail & road (through covered trucks)
b)	Iron ore lump	66,000	---	66,000	Odisha	~ 200	By rail & road (through covered trucks)
c)	BF coke	92,400	---	92,400	Odisha/ Chhattisgarh	~ 300	By rail & road (through covered trucks)
d)	Quartzite	3,300	---	3,300	Odisha / Chhattisgarh	~ 300	By road (through covered trucks)
e)	Dolomite	9,000	---	9,000	Odisha / Chhattisgarh	~ 300	By road (through covered trucks)
f)	Limestone	10,000	---	10,000	Odisha / Chhattisgarh	~ 300	By road (through covered trucks)
<b>9</b>	<b>Rolling Mill</b>						
a)	Hot Billets	2,65,200	---	2,65,200	Own generation	---	through internal transfer
b)	Billets	49,500	---	49,500	Own generation	---	through internal transfer

62.8.10 Water required in the existing plant was 1,850 KLD and sourced from Mahanadi River, flowing at distance of 7.7 Kms. from project site. Water required for the proposed expansion project will be 2,340 KLD and same will be sourced from Mahanadi River. Total water requirement after the proposed expansion will be 4,190 KLD (~ 1.7 Cusecs). Water drawl permission from Water Resource Department, Odisha for expansion proposal has been obtained in the name of M/s. Beekay Steel Industries Limited vide letter no. SJ/MIPL-53(II), dt.01.09.2023 for 1.0 Cusec and permission for additional 1 cusec is under process with IPICOL. Air cooled condensers have been provided in existing power plant. In expansion also Air-cooled condensers will be provided.

62.8.11 The total power requirement after proposed Expansion project will be about 106.8 MW, and same Power required will be met partly from 78.3 MW Captive Power Plant and remaining 28.5 MW from State grid.

62.8.12 Baseline Environmental Studies:

Period	1 <sup>st</sup> March 2022 to 31 <sup>st</sup> May 2022				
AAQ parameters at 8 locations	<ul style="list-style-type: none"> <li>• PM<sub>2.5</sub> = 25.3 to 37.7 µg/m<sup>3</sup></li> <li>• PM<sub>10</sub> = 42.2 to 62.9 ug/m<sup>3</sup></li> <li>• SO<sub>2</sub> = 8.3 to 14.6 µg/m<sup>3</sup></li> <li>• NO<sub>x</sub> = 11.2 to 17.6 µg/m<sup>3</sup></li> <li>• CO = 465 to 1250 µg/m<sup>3</sup></li> </ul>				
AAQ modelling	<ul style="list-style-type: none"> <li>• Incremental GLCs due to the proposed expansion project:</li> <li>• PM<sub>2.5</sub> = 0.65 µg/m<sup>3</sup> (1100 m in E); PM<sub>2.5</sub> = 0.40 µg/m<sup>3</sup> (Vehicular)</li> <li>• PM<sub>10</sub> = 1.10 µg/m<sup>3</sup> (1100 m E); PM<sub>10</sub> = 0.65 µg/m<sup>3</sup> (Vehicular)</li> <li>• SO<sub>2</sub> = 4.90 µg/m<sup>3</sup> (2100 m in E)</li> <li>• NO<sub>x</sub> = 3.95 µg/m<sup>3</sup> (1200 m in E), NO<sub>x</sub> (vehicular) = 3.40 µg/m<sup>3</sup></li> <li>• CO (industrial) = 0.12 µg/m<sup>3</sup> CO (vehicular) = 2.20 µg/m<sup>3</sup></li> </ul>				
Ground water quality at 8 locations	<ul style="list-style-type: none"> <li>• pH : 7.1 to 7.9</li> <li>• TSS : 0.3 to 0.6mg/l</li> <li>• TDS : 320 to 445mg/l</li> <li>• Total Hardness: 180 to 315mg/l</li> <li>• Chlorides : 165 to 210mg/l</li> <li>• Fluoride : 0.35 to 0.50 mg/l</li> <li>• Heavy metals (Iron -Fe): 0.013 to 0.02 mg/l</li> </ul>				
Surface water quality	pH: 7.4 to 7.9, DO: 4.1 to 6.3 mg/l, BOD: 2.0 to 2.8 mg/l, COD: 5.6 to 11.5 mg/l, TDS: 255 to 595 mg/l, Chlorides: 68 to 172 mg/l, Sulphates: 96 to 185 mg/l				
Noise levels	The equivalent day-night noise levels in the study zone are ranging from 45.63 dBA to 64.80 dBA.				
Traffic assessment study Findings	<ul style="list-style-type: none"> <li>• Plant site is well connected to <b>NH # 42 (Sambalpur to Bhubaneswar)</b> which is at 2.3 Kms. from the plant site and is capable of absorbing additional truck movement due to proposed expansion project.</li> <li>• Major raw materials will be transported through railway rakes up to the nearest railway station (i.e. Rajathagarh RS – 0.2 Kms. – By Road) and then to the site through road by covered trucks.</li> <li>• Total no. of trucks required for transportation of raw materials, products &amp; Solid wastes during the operation of the project (Existing + Expansion) will be 14.875 per Hr.</li> </ul>				
		<b>V (Volume in PCU/Hr.)</b>	<b>C (Capacity in CU/Hr.)</b>	<b>V/C Ratio</b>	<b>LOS</b>
	Baseline	452.40	3600	0.13	A
	During operation of the proposed expansion project	573.93 (452.40 + 121.53)	3600	0.16	A
<b>Level of Service (LOS) of the Road as per IRC 106:1990</b>					

		V/C	LOS	Performance
		0.00 – 0.20	A	Excellent
		0.21 – 0.40	B	Very Good
		0.41 – 0.60	C	Good
		0.61 – 0.80	D	Fair/Average
		0.81 – 1.00	E	Poor
		1.1 & above	F	Very Poor

- The Level of Service (LOS) of the Road during operation of the expansion project =  $573.93 / 3600 = 0.16$ .
- As per the above the LOS of the ROAD is categorised under ‘A’, which implies “Excellent”.
- Hence the existing road is capable of taking the additional vehicular traffic due to the proposed expansion project.

Flora and fauna	<ul style="list-style-type: none"> <li>Kapilash Wildlife Sanctuary boundary starting point is at distance of 5.7 Kms. N direction from the plant boundary and ESZ zone of Kapilash Wildlife Sanctuary is at distance of 2.4 Kms.</li> <li>The following Schedule - 1 fauna exist within the study area area: <ul style="list-style-type: none"> <li>➤ <i>Elephas maximus indicus</i> (Indian Elephant)</li> <li>➤ <i>Melursus ursinus</i> (Sloth Bear)</li> <li>➤ <i>Python molurusmolurus</i> (Indian Rock Python)</li> <li>➤ <i>Vivericula Indica</i> (Civet)</li> <li>➤ <i>Vulpes bengalensis</i> (Fox)</li> <li>➤ <i>Canis aurus</i> (Jackals)</li> <li>➤ <i>Felis Chaus</i> (Jungle Cat)</li> <li>➤ <i>Naja Naja</i> (Indian Cobra)</li> <li>➤ <i>Chamaeleon zeylanicus</i> (Indian Chameleon)</li> <li>➤ <i>Rusa unicolor</i> (Sambar)</li> </ul> </li> <li>Site Specific Wildlife Conservation Plan (SSWLCP) has been prepared and the same has been approved by the PCCF vide letter No. 3515/CWLW-FDWC-MISC-0001-2024 dt. 18.03.2024.</li> <li>PCCF has approved with a Budget of Rs. 230.58 Lakhs to be spent over a period of 5 years. Out of this Rs 175.38 Lakhs will be deposited with Forest department and remaining Rs. 55.20 Lakhs will be spent by the company.</li> </ul>
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62.8.13 The details of solid 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.	ESP & Bagfilter dust from dedusting system of Pellet Plant	---	24,000	24,000	Will be utilised in proposed Brick manufacturing unit.



S.No.	Waste / By Product	Quantity (TPA)			Method of disposal
		Existing	Proposed	After expansion	
2.	Ash from DRI	21,600	59,400	81,000	Presently given to nearby brick manufacturing units and now it will be utilized in the proposed brick manufacturing unit.
3.	Dolochar	39,000	66,000	1,05,000	Utilized in the existing FBC boiler-based power plant. The same practice will be continued after expansion also.
4.	Kiln Accretion Slag	1,080	2,970	4,050	Presently given to road contractors for road construction & given to brick manufacturer and after proposed expansion will be utilized in the proposed brick manufacturing unit.
5.	Wet Scraper Sludge	4,800	13,200	18,000	Presently given to road contractors for road construction & given to brick manufacturer and after proposed expansion will be utilized in the proposed brick manufacturing unit.
6.	SMS Slag	---	39,600	39,600	Slag from SMS crushed and iron was recovered & then remaining non - magnetic material was given to contractors for road laying and same practice will be followed for proposed expansion.
7.	Mill Scales	900	---	900	Used in proposed Ferro Alloys plant captively
8.	End cuttings	9,000	---	9,000	Reused in SMS.
9.	Washery Rejects	90,000	---	90,000	Utilized in existing Power plant and the same practice will be continued after expansion also.
10.	Ash from Power Plant (with Indian Coal + dolochar)	43,020	1,04,940	1,47,960	Given to nearby brick manufacturing units and after expansion it will be utilized in the proposed brick manufacturing unit.
11.	Slag from FeMn	15,236	30,472	45,708	Will be reused in manufacture of SiMn as it contains high SiO <sub>2</sub> and Silicon.
12.	Slag from Pig Iron	10,836	21,672	32,508	Will be given to Slag Cement manufacturing unit.
13.	Slag from FeSi	1,686	3,371	5,057	Will be given to Cast iron foundries.
14.	Slag from SiMn	12,827	25,654	38,481	Used for Road construction / will be given to slag cement manufacturing

S.No.	Waste / By Product	Quantity (TPA)			Method of disposal
		Existing	Proposed	After expansion	
15.	Slag from FeCr	8,712	17,424	26,136	Processed in Jigging plant for Chrome recovery. After Chrome recovery, the left-over slag will be analyzed for Chrome content through TCLP test, if the Chrome content in the slag is within the permissible limits, then it will be utilized for Road laying. If Chrome content exceeds the permissible limits, it will be sent to nearest TSDF.
16.	BF Slag	49,500	---	49,500	Given to slag cement plant. The same practice will be continued after expansion also.
17.	Flue Dust	7,800	---	7,800	will be reused in sinter plant.
18.	GCP Sludge	3,450	---	3,450	Reused in sinter plant.
19.	Sinter Returns	---	51,322	51,322	Reused in Sinter plant.

#### Hazardous waste Generation:

- i. Used Oil & Waste Oil: 8.0 KL/Annum  
Disposal: This will be stored in covered HDPE drums in a designated area and will be given to SPCB approved recyclers/Reprocessors.
- ii. Used batteries will be given back to the supplier under buy back agreement with supplier.

#### 62.8.14 Public Consultation:

Details of advertisement given	Date of advertisement given - 25 <sup>th</sup> August 2023 The Sambad (Odiya newspaper) The New Indian Express (English newspaper)
Date of Public Consultation	27 <sup>th</sup> September 2023
Venue	In front of the main gate of the M/s. Beekay Steel Industries Limited, Mouza Rampei under Athaghar Tehsil of Cuttack District.
Presiding Officer	Joint collector & Additional District Magistrate
Major issues raised	The issues raised during Public Hearing are: <ul style="list-style-type: none"> <li>➤ Employment to the local youth</li> <li>➤ Drinking water facility in villages</li> <li>➤ Environmental pollution control measures to be implemented</li> <li>➤ Support of industry in peripheral development of the villages</li> <li>➤ Plantations in villages to be taken up</li> <li>➤ No use of ground water for industrial purpose. Only river water shall be used for industrial purpose</li> <li>➤ Street lights on the road connected from plant premises in the surrounding villages</li> <li>➤ Re-employment of ex-employees of Maheshwari Ispat Ltd</li> <li>➤ Restoring of water bodies in the surrounding villages</li> </ul>

	<ul style="list-style-type: none"> <li>➤ Providing primary health center</li> <li>➤ Supporting farmers in the surrounding villages in agriculture</li> <li>➤ Development of playground for children</li> <li>➤ Construction of compound wall &amp; providing main gate in schools</li> </ul>
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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)	
		1 <sup>st</sup> Year (Rs. in Lakhs)	2 <sup>nd</sup> Year (Rs. in Lakhs)	3 <sup>rd</sup> Year (Rs. in Lakhs)		
<b>A). Based on SIA Study</b>						
1	<b>Community &amp; Infrastructure Development Programmes</b>					
	Construction of public toilets	<b>Physical Nos. &amp; village</b>	---	2 nos. in Khuntuni(v) & 2 Nos. in Radhakishorpur (v)	2 nos. in Rahangol(v) & 2 Nos. in Kandarei (v)	20
		<b>Budget in Lakhs</b>	---	10	10	
	Supporting Women Self Help Groups	<b>Physical Nos. &amp; village</b>	in Rampei (v)	in Khuntuni (v)	in Radhakrushnapur (v)	100
		<b>Budget in Lakhs</b>	20	40	40	
	Renovation of School buildings	<b>Physical Nos. &amp; village</b>	in Khuntuni (v)	in Radhakrushnapur (v)	In Radhakishorpur (v)	15
		<b>Budget in Lakhs</b>	5	5	5	
	Laying of connecting road to villages & National Highway	<b>Physical Nos. &amp; village</b>	-----			400
		<b>Budget in Lakhs</b>	50	120	230	
	Construction of parks and	<b>Physical Nos. &amp; village</b>	in Rahangol (v)	in Khuntuni (v)	In Radhakishorpur (v)	45

S. NO	MAJOR ACTIVITY HEADS		YEAR OF IMPLEMENTATION			TOTAL EXPENDITURE (Rs. in Lakhs)
			1 <sup>st</sup> Year (Rs. in Lakhs)	2 <sup>nd</sup> Year (Rs. in Lakhs)	3 <sup>rd</sup> Year (Rs. in Lakhs)	
	plantation of trees	<b>Budget in Lakhs</b>	15	15	15	
					<b>Total</b>	<b>560</b>
2	<b>Education</b>					
	Construction of class rooms in schools of size 8m x 5m x 4 m	<b>Physical Nos. &amp; village</b>	6 nos. of rooms in Rampei (v)	8 nos. of rooms. in Radhakishorpur (v)	6 nos. of rooms in Kandarei (v)	85
		<b>Budget Rs in Lakhs</b>	25	35	25	
	<i>Assisting in Higher Education for meritorious students</i>	<b>Physical Nos. &amp; village</b>	<i>10 nos. of students in Rampei (V)</i>	<i>10 nos. of students in Radhakihorpur (V)</i>	<i>10 nos. of students in Khuntuni (V)</i>	30
		<b>Budget Rs in Lakhs</b>	10	10	10	
	Encouragement to locals in: a) fine engravings on brass & bell metal to make lamps, lamp stands during worship of deities. b) supporting Weaving of sarees. c) Supporting Artisans in making combs, flower vases, pen stands.  d) Supporting locals in making Baskets, hand	<b>Physical Nos. &amp; village</b>	in Rampei (v)	in Radhakishorpur (v)	in Kandarei (v)	85
		<b>Budget Rs in Lakhs</b>	20	20	45	

S. NO	MAJOR ACTIVITY HEADS	YEAR OF IMPLEMENTATION			TOTAL EXPENDITURE (Rs. in Lakhs)	
		1 <sup>st</sup> Year (Rs. in Lakhs)	2 <sup>nd</sup> Year (Rs. in Lakhs)	3 <sup>rd</sup> Year (Rs. in Lakhs)		
	fans, table mats woven from golden grass.  e) Supporting handicraft making such as shola pith work, lacquer work, zari work, glass beads, cloth garlands, jute carpets, etc.					
				<b>Total</b>	<b>200</b>	
3	<b>Health &amp; hygiene</b>					
	Napkins Vending Machine in High Schools in surrounding villages	<b>Physical Nos. &amp; village</b>	1 no. of Machine will be installed in each village i.e.Rampei(v) &Radhakis horpur (v)	1 no. of Machine will be installed in each village i.e.Rahangol(v) &Kandarei (v)	1 no. of Machine will be installed in each village i.e. Saraswatipur (v) &Mastapur (v)	
		<b>Budget in Lakhs</b>	12	12	12	36
				<b>Total</b>	<b>36</b>	
				<b>TOTAL (A)</b>	<b>816</b>	
<b>B). Based on Public Consultation/Hearing</b>						
1	Primary Health Centre	<b>Physical Nos. &amp; village</b>	---	Primary Health Centre in Rampei(v)	---	
		<b>Budget in Lakhs</b>	---	35	---	35
2	Restoring of water bodies in the surrounding	<b>Physical Nos. &amp; village</b>	Desiltation & Deepening	Desiltation & Deepening of pond in in	Desiltation & Deepening of pond in in	15

S. NO	MAJOR ACTIVITY HEADS	YEAR OF IMPLEMENTATION			TOTAL EXPENDITURE (Rs. in Lakhs)	
		1 <sup>st</sup> Year (Rs. in Lakhs)	2 <sup>nd</sup> Year (Rs. in Lakhs)	3 <sup>rd</sup> Year (Rs. in Lakhs)		
	villages (Desiltation & Deepening of ponds)		of pond in Radhakishorpur (v) 1.5m depth	KhamarNuagan (v) 1.5m depth	Khuntuni (v) 1.5m depth	
		<b>Budget in Lakhs</b>	5	5	5	
3	Plantation shall be developed in the plant premises & in villages also	<b>Physical Nos. &amp; village</b>	1000 no. of plants will be planted Rampei (v), Kandarei (v) & Mantiri (v)	1000 no. of plants will be planted in Kuntuni (v), Saraswatipur (v) & Mastapur (v)	1000 nos. of plants will be planted in Radhakishorpur (v) & Rahangol (v)	20
		<b>Budget in Lakhs</b>	7.5	7.5	5	
4	Development of playground & Providing Sport kits for schools	<b>Physical Nos. &amp; village</b>	Assistance in development of playground in Khuntuni (v)	Providing 15 Nos. of Sports Kits in Khuntuni (v)	Providing 15 Nos. of Sports Kits in each Rampei (v) & Mantiri (v)	20
		<b>Budget in Lakhs</b>	12.0	4.0	4.0	
5	Street lights on the road connected from plant premises in the surrounding villages	<b>Physical Nos. &amp; village</b>	20 nos. in Rampei(v) & 20 nos. in Radhakishorpur (v)	20 nos. in Khuntuni(v) & 20 Nos. in Mantiri(v)	20 nos. in Kandarei (v) & 20 Nos. in Radhakrushnapur(v)	20
		<b>Budget in Lakhs</b>	5	5	10	
6	Mineral water plants	<b>Physical Nos. &amp; village</b>	2 nos. of Mineral Water Plants in Rampei (v) &	2 nos. of Mineral Water Plants in Mantiri (v) &	2 nos. of Mineral Water Plants in Kandarei (v) &	

S. NO	MAJOR ACTIVITY HEADS	YEAR OF IMPLEMENTATION			TOTAL EXPENDITURE (Rs. in Lakhs)	
		1 <sup>st</sup> Year (Rs. in Lakhs)	2 <sup>nd</sup> Year (Rs. in Lakhs)	3 <sup>rd</sup> Year (Rs. in Lakhs)		
			2 nos. Mineral Water Plants in Radhakishorpur (v)	2 nos. Mineral Water Plants in Rahangol (v)	2 nos. Mineral Water Plants in Khuntuni (v)	30
		<b>Budget in Lakhs</b>	10	10	10	
7	Supporting farmers in the surrounding villages in agriculture	<b>Physical Nos. &amp; village</b>	in Rampei (v), Radhakishorpur (v) & Kandarei (v)	in Rahangol (v) & Kandarei (v) Radhakrushnapur (v)	in Saraswatipur (v) & Mastapur (v)	15
		<b>Budget in Lakhs</b>	5	5	5.0	
8	Construction of boundary wall and main gate	<b>Physical Nos. &amp; village</b>	In Rampei (v)	In Khuntuni (v)	In Radhakrushnapur (v)	15
		<b>Budget in Lakhs</b>	5	5	5	
9	Impart training to the local villagers for Skill Development Centre through Disha Centre	<b>Physical Nos. &amp; village</b>	In Rampei (v)	In Kuntuni (v)	In Radhakishorpur (v)	139
		<b>Budget in Lakhs</b>	30	50	59	
					<b>Total (B)</b>	<b>309</b>
		<b>TOTAL</b>	236.5	393.5	495	1125
			<b>Grand Total (A+B)</b>			<b>1125</b>
<p>Its is proposed to adopt following villages: Khuntuni, Rampei, Radhakishorpur, Rahangol, Kandarei, Radhakrushnapur, Mantiri, Saraswatipur</p> <p><b>Recurring expenditures under CSR as per companies Act 2014 (this is not part of SID)</b></p> <ul style="list-style-type: none"> <li>Health checkup will be carried out periodically in surrounding villages i.e. Rampei, Khuntuni, Rahangol, Radhakishorpur, Radhakrushnapur and Mastapur villages with a budget of Rs 5 Lakhs per annum.</li> </ul>						

62.8.15 The capital cost of the project is Rs.750.55 Crores and the capital cost for environmental protection measures is proposed as Rs.64.00 Crores. The annual recurring cost towards the environmental protection measures is proposed as Rs.7.168 Crores. The employment generation from the proposed expansion project is 800 nos (Direct + Indirect). The details of cost for environmental protection measures are as follows:

S.No.	Particulars	Capital Cost (Rs.in Crores)	Recurring Cost / Annum (Rs.in Crores)
1.	<b>Air Emission Management</b>		
	• Electro Static Precipitators	24.00	3.4
	• Fume Extraction system with bag filters	14.00	0.8
	• Other APCS & Conveyor systems	4.00	0.45
	• Stacks	5.00	0.15
	• Mechanical Dust sweepers	0.50	0.02
	• Water Sprinklers	0.20	0.005
2.	<b>Wastewater Management</b>		
	• ETP	1.00	0.10
	• STP	0.50	0.05
	• Garland drains	0.30	0.02
	• Settling ponds	0.05	0.003
3.	<b>Solid waste Management</b>		
	• Fly Ash Handling & disposal	4.00	0.6
	• Slag Handling & Disposal	0.70	0.05
	• Hazardous waste storage & disposal	0.20	0.05
	• Municipal solid waste storage & disposal	0.05	0.025
4.	<b>Greenbelt development</b>	1.30	0.36
5.	<b>Noise Management</b>	0.20	0.1
6.	<b>Drainage system &amp; RWH in Plant</b>	1.10	0.01
7.	<b>Fire Safety Systems</b>	3.70	0.15
8.	<b>Environmental Monitoring</b>		
	• CEMS	0.60	0.03
	• CAAQMS	1.60	0.4
	• Environment Monitoring	0.11	0.11
	• Performance monitoring of APCS	0.00	0.01
9.	<b>Occupational Health &amp; Safety</b>		
	• Occupational Health Centre	0.50	0.075
	• Personal Protective Equipment's (PPEs)	0.40	0.2
<b>TOTAL EMP BUDGET</b>		<b>64.00</b>	<b>7.168</b>

62.8.16 The total greenbelt area will cover 33% of the total area, amounting to 24.28 hectares (60 acres). Due to the plant being shut down for the past 12 years, the survival rate of plants has been low, with 24,280 plants currently existing on the premises. As part of the plant's revamping, an



additional 15,000 trees will be planted by September 2024. Furthermore, 21,420 more plants will be planted as part of the greenbelt plan over the next two years, with 11,420 in the first year and 10,000 in the second year. This will result in a total of 60,700 plants, maintaining a density of 2,500 plants per hectare in the 24.28 hectares of greenbelt area, in compliance with CPCB norms. Each year, any plants that do not survive will be replaced with fresh plants of 10 feet height, ensuring the maintenance of 60,700 plants at all times. A budget of Rs 1.31 crores has been allocated for greenbelt development.

#### 62.8.17 Court Case Details:

- A Case ID Case No. 70 of 2015 was filed against M/s. Maheshwari Ispat Limited (1<sup>st</sup> Party Management) by Shri. Gagan Bihari Parida & 106 others who were Ex- employees of M/s. Maheshwari Ispat Limited in 2015 for refusal of employment with effect from 01.07.2013. in District Labour Office, Cuttack. Accordingly, notices were issued on 04.08.2014.
- Sr. Manager of the M/s. Maheshwari Ispat Limited has appeared before the court of law and submitted that the plant was closed since 28.08.2011. Hence, DLO has issued show cause notice for the illegal stoppage of work and refusal of employment to the workmen for non-compliance of section 25- N and 25-O of Industrial Act. Also, as per the disputant's demand, the industrial dispute was admitted for conciliation and notices were issued, for which MIL didn't cooperate, hence it referred to court.
- Later, as per Ex-employees Plea, the Hon'ble Labour Court passed an order including Beekay Steel Industries Limited (3<sup>rd</sup> party Management) and Authorised Officer, State Bank of India (SAMB), Kolkata (2<sup>nd</sup> party Management) as part of the Managements in this case in October, 2022.
- In due course, pleadings were completed in the matter and the said matter is mature for final arguments and disposal.
- The court found M/s. Maheshwary Ispat Industries Limited is an 'industrial establishment' within the meaning of Sec. 25-L of Chapter V-B of the ID Act, and provisions of Sec.25-O (Sub. Sec-1 & Sub. Sec-2) are clearly applicable. But M/s. Maheshwary Ispat Industries Limited failed to comply while closing the industry, Hence, the workers are entitled to the protection of section 25- N of the Act.
- The order dated 27.09.2023 was issued by the court directing the Managements (1. M/s. Maheshwary Ispat Industries Limited., 2. Authorized Officer, State Bank of India (SAMB), Kolkata, 3. Beekay Steel Industries Limited.) to pay a lumpsum compensation of Rs. 1,30,000/- (Rupees One Lakh Thirty Thousand) only to each of the ex-employees towards back wages within 3 months from the date of the notification of the award by the appropriate Govt. and also directed Beekay Steel Industries Limited to re-engage (as per Sec. 25-H) the members of ex-employees who are of claim forthwith.
- Beekay Steel Industries Limited received a copy of notification of the award of the court on 30.10.2023. In December 2023, Beekay Steel Industries Limited submitted a writ petition in the High Court of Orissa at Cuttack, challenging the order dated 12.10.2022 adding Beekay Steel Industries Limited as one of the management to the industrial dispute and subsequent award dated 27.09.2023 as Beekay Steel Industries Limited had purchased the moveable and immovable properties of 1<sup>st</sup> Party Management. Further submitted that Beekay Steel Industries Limited was purchaser in a sale proceeding made by the authorized representative of the bank under provisions in Securitization and Reconstruction of Financial Assets and Enforcement of Security Interest Act 2002. Hence it cannot be made responsible for liabilities of 1<sup>ST</sup> Party management, including in respect of its employees.

- The Hon.'ble High Court has granted stay order vide W.P.(C) No.43029 of 2023 and I.A No.20553 of 2023 on 03.01.2024 on the award issued by Labour court dated 27.09.2023. and it is valid till next hearing.
- The present status: Stay is continuing and next hearing is scheduled on 08<sup>th</sup> July 2024.

### **Chronology of court case pertaining to compensation for ex-employees**

#### **A. CASE NO: MJC 2/2013 (Civil Judge, Sr. Div. at Athagarh)**

Order Dated 14/05/2015: The MJC Case was allowed on contest and the Ops. were directed to pay a sum of Rs. 12,89,450/- along with further compensation of Rs. 2000/- each to the Claimants (42nos.).

#### **B. CASE NO: ID 70 of 2015(Labour Court, Bhubaneswar) - A fresh case was filed against MIL on 24/9/2015 with the inflated amount and increased number of claimants (78 nos.). After Beekay acquired the assets of the plant, Beekay's name was also added by the claimant on 27/5 2022.On 27/09/2023 an Ex-parte order passed against all the Opposite Parties as under;**

- Compensation of Rs 130000/- to each complainants
- To give employment to the ex employees of MIL

#### **C. CASE NO: WP(C)43029 of 2023 ( High Court, Orissa)**

<b>S. No.</b>	<b>Case No</b>	<b>Case Date</b>	<b>Order Passed by the Hon'ble High Court, Orissa</b>
1	WP(C)43029 of 2023	28/12/2023	Writ Petition filed before the Hon'ble High Court, Orissa for Interim Order and squashing the name of Beekay Steel Industries Ltd. from the Award dated 27/09/2023 in ID Case No. 70/2015 (Notification published on 30/10/2023), as Beekay has purchased only the property under SARFEISI Act after paying the auctioned amount to the bank. If the hon'ble court decides any award to be paid, it should be paid by Maheswary or SBI or OL.
2	WP(C)43029 of 2023	03/01/2024	Stay Order passed by Hon'ble High Court (HC), Orissa against the impugned Award dated 27/09/2023 passed by the Labour Court, Bhubaneswar, till 30/01/2024.
3	WP(C)43029 of 2023	30/01/2024	Matter was not heard on the date. The interim order passed earlier shall continue.
4	WP(C)43029 of 2023	13/02/2024	Mr. S.K. Dhali (Advocate) appeared on behalf of O.P. No. 4 (Maheswari Ispat Karmachari Sangha) on the day and filed an affidavit along with minutes of meeting dated 14/12/2023. The interim stay order passed earlier shall continue till the next date, i.e. 06/03/2024.
5	WP(C)43029 of 2023	06/03/2024	Mr. Mahapatra (Advocate) appeared and filed an affidavit on behalf of SBI (OP No. 3) and Mrs. Bhuyan appeared on behalf of OP No. 4 and served a copy of the affidavit. Mr. Abhijit Pal on behalf of Petitioner (BSIL) has filed an objection in the form of an affidavit. The Matter was heard by the Hon'ble H.C. on the day and passed an order for extension of the interim order till the next date, i.e. 20/03/2024.

S. No.	Case No	Case Date	Order Passed by the Hon'ble High Court, Orissa
6	WP(C)43029 of 2023	20/03/2024	A separate Writ Petition was filed by SBI before the Hon'ble Court - WP(C)6555/2024 mentioning that they have deposited the money to OL, hence OL should be liable to pay the same. The Matter was heard on the date and passed Stay Order till the next date of hearing.
7	WP(C)43029 of 2023	15/04/2024	Matter was heard in the presence of all parties to the case. Mrs. Bhuyan appeared on behalf of O.P. No. 4 and requested an extension of time to file a counter affidavit and to allow till 29/04/2024. The interim order shall continue till the next date, i.e. 02/05/2024.
	WP(C)6555 of 2024	15/04/2024	All the parties to the case appeared through their Advocates but no one appeared on behalf of O.P. No. 2 (O.L.), in spite of receiving the summons. The interim order shall continue till the next date, i.e. 02/05/2024.
8	WP(C)43029 of 2023	26/04/2024	Mr. Mahapatra on behalf of the Petitioner (SBI) appeared and asked for time to serve a fresh copy to the O.P. 2 and it was allowed by the court.
	WP(C)6555 of 2024	26/04/2024	
9	WP(C)43029 of 2023	02/05/2024	The matter (Item No. 35) is not heard today. The Court got closed after Item No. 31 of the daily cause List. Extension of Interim order shall be continue till 16/05/2024
	WP(C)6555 of 2024	02/05/2024	
10	WP(C)43029 of 2023	16/05/2024	The court decided that both the Writ Petitions of BSIL & SBI i.e. WP(C)43029/2023 & WP(C)6555/2024 be tagged together and the matter will be listed on 08/07/2024 for the decision. Interim order will be continued till the next date of hearing.
	WP(C)6555 of 2024	16/05/2024	

### **Certified compliance report from Regional Office**

62.8.18 The Status of compliance of earlier EC was obtained from IRO, MoEF&CC, Bhubaneswar, Orissa Vide File No. 101-311/23/EPE Dated 19.10.2023 based on the site visit carried out on 08.09.2023 with few observations. Accordingly, PP has submitted Action Taken Report (ATR) to IRO, MoEF&CC, Bhubaneswar on observations vide letter dated 12.02.2024. Subsequently, PP has submitted additional information sought by IRO, MoEF&CC, Bhubaneswar vide letter dated 04.04.2024 Closure given by IRO, MoEF&CC, Bhubhaneshwar, Orissa based on ATR submitted on CCR vide File No. 101-311/23/EPE dt. 13.05.2024.

S.No.	Non-Compliance Reported	Corrective action taken	Remarks of Regional Office.
1.	Air Pollution control systems such as ESPs and Bag Filters are being installed and also are being renovated at present in the unit. ESP is being installed in DRI unit, blast furnace, power plant, bag filter is	PP is herewith submitting that, PP has received the CTO from the SPCB, dated 30.03.2024, for the existing DRI Unit, Captive Power Plant and Ferro Alloys Unit.	<b>Read As Below:</b> PP in its ATR has submitted an undertaking dated 12.04.2024, stating that they will abide by all the conditions stipulated in the EC and will comply all of

S.No.	Non-Compliance Reported	Corrective action taken	Remarks of Regional Office.
	being installed in induction furnace, ferro alloys, coal washery.	<p>A copy of the same is attached for your kind perusal and record. PP will be starting the trial production of DRI Unit in April 2024 and for Power plant and Ferro Alloys unit by June 2024 tentatively.</p> <p>One Stack attached to DRI &amp; One Stack attached to RM are under revamping stage and will be completed within June 2024. An undertaking has also been submitted to this effect.</p> <p>One Stack attached to SMS &amp; One Stack attached to MBF will be taken up at later stage.</p>	them before starting the commercial operations.
2.	<p>Partially Complied.</p> <p>i. Permission and recommendation from the State Forest Department has not been obtained so far.</p> <p>ii. But site-specific Wildlife Conservation Plan has been prepared by Project Proponent and has been submitted to State Forest Department for its approval.</p>	<p>Site Specific Wildlife Conservation Plan (SSWLCP) has been prepared and submitted to State Forest Department on 17.06.2023 and approved by DFO on 09.02.2024.</p> <p>The conservation plan has been approved by the PCCF vide letter No. 3515/CWLW-FDWC-MISC-0001-2024 dt. 18.03.2024.</p>	<p><b>Not Complied:</b></p> <p>Permission and recommendations of the State Forest Department regarding impact of the proposed plant on the surrounding reserve and protected forests has not been submitted. However, Site Specific Wildlife Conservation Plan (SSWLCP) has been approved by the PCCF vide letter No. 3515 / CWLW – FDWC – MISC - 0001 - 2024 dt. 18.03.2024. Amount has not been deposited with forest dept. yet. PP has assured that it will implement site-specific Conservation Plan.</p>
3.	Project Proponent is advised to carry out plantation in the project premise boundary as given in the EC condition	<p>The Company will carry out the plantation at the project premises as advised, as per the EC conditions and Rules &amp; Regulations of the SPCB. An undertaking has also been submitted to this effect.</p>	<p><b>Read As Below:</b></p> <p>PP has submitted an undertaking dated 12.04.2024 that they will carry out the plantation in the project premises along with the project boundary.</p>

S.No.	Non-Compliance Reported	Corrective action taken	Remarks of Regional Office.
4.	Medical examination report of workers has not been submitted in the report; however, health examination records of the worker are being maintained.	The medical examination will be taken up as per the schedule of Health & Safety Policy of the Company. A sample statement of the medical examination report of the worker is attached for your kind perusal. An undertaking has also been submitted to this effect.	<b>Read As Below:</b> Medical examination report of one worker have been submitted in the ATR. PP has also submitted an undertaking dated 12.04.2024 that health records of workers will be maintained and same would be submitted regularly to this office.
<b>Note:</b> Unit was under shutdown by Maheshwary Ispat Ltd. (Previous management) since the year 2011. Beekay Steel Industries Ltd. is refurbishing the plant. CTO has been take recently from SPCB for 2x100 TPD DRI kilns, Power plant-5 MW & Ferro Alloys unit – 1x9 MVA.			

**Written submission by the PP:**

62.8.19 During the meeting, based on the deliberations made by the EAC, the project proponent vide letter dated 04.07.2024 through email dated 04.07.2024 submitted the following information:

S. No.	Details sought	Reply by PP
1.	Revised PH Action plan	Revised PH Action plan is submitted and updated at relavant para above.
2.	Greenbelt development plan	<ul style="list-style-type: none"> <li>• Total Greenbelt area covering 1/3<sup>rd</sup> of total area is i.e. 24.28Ha. (60 acres).</li> <li>• Since the plant is under shutdown from past 12 years, the survival rate was less. At present, total number of plants exists in the plant premises are 24,280 no's.</li> <li>• <i>As part of revamping of the existing plant, 15,000 no. of trees will be planted additionally by the current monsoon i.e. September 2024.</i></li> <li>• Additional 21,420 nos. of plants will be planted as part of the green belt plan in 2 years time (1<sup>st</sup> year – 11,420 nos 2<sup>nd</sup> year – 10,000 nos.)</li> <li>• Total of 60,700 nos. of plants @2500 per Ha. (including existing) will be maintained as part of the greenbelt in 24.28 Ha. of land.</li> <li>• 2500 nos. plants per Hectare as per CPCB norms will be maintained within the premises.</li> <li>• Every year plants that does not survive, will be replenished with fresh plants of 10 feet height and at any given point of time total 60,700 nos. of plants will be maintained within the plant premises.</li> <li>• Budget of Rs 1.31 Crores has been earmarked for greenbelt development.</li> </ul>

<b>S. No.</b>	<b>Details sought</b>	<b>Reply by PP</b>
3.	Revised Social and Infrastructure Developmental activities	Revised Plan for Social and Infrastructure Development activity is submitted and updated at relevant para above.
4.	Road map with time lines for Decarbonization	Road map with clear time lines for Decarbonization is submitted.
5.	Details of Court case pertaining to compensation for ex-employees and its chronology	Chronology of the court case pertaining to compensation for ex-employees is submitted and updated at relevant para above.

### **Deliberations by the Committee**

62.8.20 The Committee noted the following:

1. The instant proposal is for expansion of Steel Plant – DRI Kilns (Sponge Iron from 1,20,000 TPA to 4,50,000 TPA), Induction Furnaces along with CCM & LRF (Hot Billets/ MS Ingots / Billets from 65,000 TPA to 3,96,000 TPA), Ferro Alloys - 1 x 9 MVA (FeCr- 12,500 TPA/FeMn- 18,000 TPA) to 3 x 9 MVA (FeCr- 45,000 TPA /SiMn- 43,200 TPA/FeMn- 75,600 TPA/FeSi-21,000 TPA /FeSi- 21,000 TPA /Pig Iron- 75,600 TPA), WHRB (DRI) based Power Plant from 5 MW to 24 MW, AFBC based Power Plant from 14 MW to 44 MW, New WHRB (BF gases) – 5.0 MW, New Sinter Plant (4,27,680 TPA), New 8,00,000 TPA of Pellet Plant along with Gasifier 24,000 NM<sup>3</sup>/Hr, New Briquetting Plant - 300 Kg/Hr. & New Brick Manufacturing unit (68,100 Bricks/day).
2. The existing project was initially granted CTE by OSPCB vide letter dated 25.9.2004 in the name of M/s. Maheshwari Ispat Limited (MIL) for establishment of Sponge Iron (3 x 100 TPD – 1,00,000 TPA), Steel billets (2 x 15 T, 1 x 15 T LRF & 1 x 400 TPD Steel Billet Caster – 1,28,000 TPA), Captive Power Plant (WHRB - 8.0 MW) & Sized Ore – 30 TPH. Thereafter, MIL obtained CTE vide letter dated 09.12.2005 for expansion of existing plant. Further, MIL Obtained Environment Clearance (EC) from MoEF, New Delhi, vide F. No. J-11011/659/2007-IA II(I) dt. 27.12.2007 for expansion of Steel plant - Rolled Products (3,00,000 TPA), Ferro Alloys (30,500 TPA), Power Plant (WHRB from 10 MW to 24 MW) & AFBC (110 MW), DRI Grade Coal Washery – 2,75,000 TPA, Sponge Iron (From 1,20,000 to 3,65,000 TPA), Hot metal/ Pig Iron (3,30,000 TPA), Steel Billets (from 1,28,000 TPA to 4,02,000 TPA), Middling (Coal Washery- 1,75,000 TPA), Char (DRI) (from 39,000 TPA to 1,10,000 TPA). EC transfer from M/s. Maheshwari Ispat Limited to M/s. Beekay Steel Industries Limited (BSIL) has been obtained from MoEF&CC vide F.No. J-11011/659/2007 -IA II(I) dt. 16.01.2023. BSIL has started refurbishment of some units which were not in operation since the year 2011. BSIL has obtained Consent To Operate from OSPCB vide no. 4679/Ind-I-Con-4814, dated 30.03.2024 for Sponge Iron (Kiln # III & IV – 2 x 100 TPD), WHRB Power Plant (5 MW) & Ferro Alloys Plant (Submerged Arc Furnace - 1 x 9 MVA).
3. The EAC, constituted under the provision of the EIA Notification, 2006 comprising Expert Members/domain experts in various fields, examined the proposal submitted by the Project

Proponent in desired format along with EIA/EMP reports prepared and submitted by the Consultant accredited by the QCI/ NABET on behalf of the Project Proponent.

4. The EAC noted that the Project Proponent has given an undertaking that the data and information given in the application and enclosures are true to the best of his knowledge and belief and no information has been suppressed in the EIA/EMP reports. If any part of data/information submitted is found to be false/ misleading at any stage, the project will be rejected and Environmental Clearance given, if any, will be revoked at the risk and cost of the project proponent.
5. The Committee noted that the EIA reports are in compliance of the ToR issued for the project, reflecting the present environmental status and the projected scenario for all the environmental components. The Committee deliberated on the proposed mitigation measure towards Air, Water, Noise and Soil pollutions. The Committee suggested that the storage of toxic/explosive raw materials/products shall be undertaken with utmost precautions and following the safety norms and best practices.
6. The EAC also took into consideration the drone survey of the project site and kml file on the Google Earth presented by the project proponent along with DSS of the project site on PARIVESH and made following deliberations accordingly.
7. Total project area is 73.20 Ha. (180.88 Acres). SBI has allotted 73.20 Ha. of land to Beekay Steel Industries Ltd. through certificate of sale of land vide order dated 9<sup>th</sup> March 2022. 64.36 Ha. has already been diverted for industrial purpose and diversion of remaining 8.84 Ha. of land is under process. The EAC opined that PP shall complete the conversion of land for industrial purpose prior to commencement of proposed expansion project.
8. Khuntuni village adjacent to the plant site in West Direction along with other sensitive areas within the study area of the project site. The EAC opined that proponent shall take appropriate environmental safeguard measures to minimise the impact on the habitation of the locals. The project proponent needs to strengthen green belt all around the plant area to reduce the dust pollution. The PP shall also include some of these locations in its environmental monitoring programme.
9. As reported, Barha Jhor Stream is at a distance of 0.8 km in NW of the project site along with other water bodies within the study area of the project site. The EAC opined 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 implemented.
10. The PP has reported that Kapilash Wildlife Sanctuary is at a distance of 5.7 km in North of project site and its ESZ at a distance of 2.4 km. The EAC opined that PP shall obtain the NBWL approval if applicable and also prepare and implement the protective measures to minimise the impact of project activities on the Wildlife Sanctuary.
11. The total water requirement after the proposed expansion will be 4,190 KLD (~ 1.7 Cusecs) which will be sourced from Mahanadi River. The EAC deliberated on the water requirement is of the opinion that PP shall obtain necessary permission from the Competent Authority in this regard.

12. The Committee has deliberated on the baseline data and incremental GLC due to the proposed project and found it satisfactory.
13. The Committee also deliberated on the public hearing issues along with revised action plan submitted by the proponent to address the issues raised during the public hearing and found it satisfactory.
14. 10 Nos. of Schedule-1 species found within the study area which includes *Elephas maximus indicus* (Indian Elephant), *Melursus ursinus* (Sloth Bear), *Python molurus molurus* (Indian Rock Python), *Viverricula Indica* (Civet), *Vulpes bengalensis* (Fox), *Canis aureus* (Jackal), *Felis chaus* (Jungle Cat), *Naja naja* (Indian Cobra), *Chamaeleon zeylanicus* (Indian Chameleon), and *Rusa unicolor* (Sambar). A Site-Specific Wildlife Conservation Plan (SSWLCP) has been prepared and approved by the Principal Chief Conservator of Forests (PCCF) vide letter No. 3515/CWLW-FDWC-MISC-0001-2024 dated 18.03.2024. The PCCF has approved a budget of Rs. 230.58 Lakhs to be spent over a period of five years. Out of this, Rs. 175.38 Lakhs will be deposited with the Forest Department, and the remaining Rs. 55.20 Lakhs will be spent by the company.
15. The PP has submitted that the total greenbelt area will cover 33% of the total area, amounting to 24.28 hectares (60 acres). Due to the plant being shut down for the past 12 years, the survival rate of plants has been low, with 24,280 plants currently existing on the premises. As part of the plant's revamping, an additional 15,000 trees will be planted by September 2024. Furthermore, 21,420 more plants will be planted as part of the greenbelt plan over the next two years, with 11,420 in the first year and 10,000 in the second year. This will result in a total of 60,700 plants, maintaining a density of 2,500 plants per hectare in the 24.28 hectares of greenbelt area, in compliance with CPCB norms. Each year, any plants that do not survive will be replaced with fresh plants of 10 feet height, ensuring the maintenance of 60,700 plants at all times. A budget of Rs 1.31 crores has been allocated for greenbelt development. The EAC deliberated on the greenbelt layout plan along with action plan and the budget earmarked and is of the opinion that greenbelt shall be developed as committed.
16. The EAC noted that there are court case pertaining to compensation for ex-employees as detailed in the relevant para above. The EAC opined that PP shall abide by the judgement of the Hon'ble court in the said matter.
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 deliberated on the certified compliance report along with ATR and closure report of IRO and is of the opinion that PP shall strictly comply with the observations reported by IRO.
19. The EAC also deliberated on the written submission of the project proponent and found it satisfactory.
20. The EAC deliberated on the proposal with due diligence in the process as notified under the provisions of the EIA Notification, 2006, as amended from time to time and accordingly



made the recommendations to the proposal. The Experts Members of the EAC found the proposal in order and recommended for grant of environmental clearance.

21. The environmental clearance recommended to the project/activity is strictly under the provisions of the EIA Notification 2006 and its subsequent amendments. It does not tantamount/construe to approvals/consent/permissions etc. required to be obtained or standards/conditions to be followed under any other Acts/ Rules/ Subordinate legislations, etc., as may be applicable to the project. The project proponent shall obtain necessary permission as mandated under the Water (Prevention and Control of Pollution) Act, 1974 and the Air (Prevention and Control of Pollution) Act, 1981, as applicable from time to time, from the State Pollution Control Board, prior to construction & operation of the project.
22. The EAC also reviewed the EC conditions (specific and general) pertaining to Industry-I projects and observed that some of the specific conditions stipulated so far in the previously recommended EC projects are common and applicable to most of the projects in general. In view of the same, the General Conditions (in case of EC projects) have been revised through reallocation of these common conditions from specific to General Conditions (in case of EC projects). Accordingly, the instant project is also being stipulated with the modified General conditions.

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

- 62.8.21 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 portal** under the provisions of EIA Notification, 2006 subject to the stipulation of following specific conditions and general conditions based on project specific requirements:

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

- i. **This Environmental clearance is granted subject to final outcome of Hon'ble Supreme Court of India, Hon'ble High Court, Hon'ble NGT and any other Court of Law, if any, as may be applicable to this project.**
- ii. The project proponent shall comply with all the environmental protection measures and safeguards proposed in the documents submitted to the Ministry. All the recommendations made in the EIA/EMP in respect of environmental management, and risk mitigation measures relating to the project shall be implemented.
- iii. The project proponent shall utilize modern technologies for capturing of carbon emitted and shall also develop carbon sink/carbon sequestration resources capable of capturing more than emitted. The implementation report shall be submitted to the IRO, MoEF&CC in this regard.
- iv. The PP shall complete the conversion of land for industrial purpose prior to commencement of proposed expansion project.
- v. Khuntuni village adjacent to the plant site in West Direction along with other sensitive areas within the study area of the project site. Proponent shall take appropriate environmental safeguard measures to minimise the impact on the habitation of the locals. The project proponent needs to strengthen green belt all around the plant area to reduce

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

- vi. As reported, Barha Jhor Stream is at a distance of 0.8 km in NW of the project site along with other water bodies within the study area of the project site. A robust and full proof Drainage Conservation scheme to protect the natural drainage and its flow parameters; along with Soil conservation scheme and multiple Erosion control measures shall be implemented.
- vii. Kapilash Wildlife Sanctuary is at a distance of 5.7 km in North of project site and its ESZ at a distance of 2.4 km. PP shall obtain the NBWL approval, if applicable, and also prepare and implement the protective measures to minimise the impact of project activities on the Wildlife Sanctuary
- viii. Total water requirement of 4,190 KLD (~ 1.7 Cusecs) shall be sourced from Mahanadi River. PP shall obtain necessary permission from the Competent Authority in this regard.
- ix. Three tier Green Belt shall be developed in atleast 33% of the project area, as committed, 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 sensitive areas nearby project site. Additionally, three row green belt of thickness 10-15 m consisting of tall trees shall be provided at the boundary of School. Compliance status in this regard, shall be submitted to concerned Regional Office of the MoEF&CC.
- x. The PP is advised to implement the 'Ek Ped Maa Ke Naam' Campaign which was launched on 5<sup>th</sup> June 2024 on the occasion of the World Environment Day to increase the forest cover across the Country.
- xi. All the commitments made towards socio-economic development of the nearby villages shall be satisfactorily implemented. The action plan based on the social impact assessment study of the project as per the EMP in accordance to the Ministry's OM dated 30.09.2020 amounting to Rs. 11.25 Crores shall be strictly implemented and progress shall be submitted to the Regional Office of MoEF&CC.
- xii. The project proponent shall undertake village adoption programme and prepare and implement the action plan to develop them into a model village. The PP shall also ensure that the concern of the earlier employoe shall be protected.
- xiii. PP shall strictly comply with the non-complied conditions reported by IRO.
- xiv. PP shall carry out testing of soil in nearby areas on a periodic basis.
- xv. CO sensors with alarm shall be installed by the industry at strategic locations inside the Plant.

## **B. General Conditions**

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

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

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

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

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

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

- xiii. Pollution control system in the plant shall be provided as per the CREP Guidelines of CPCB.
- xiv. The project proponent shall adopt the Clean Air practices like mechanical collectors, wet scrubbers, fabric filters (bag houses), electrostatic precipitators, combustion systems (thermal oxidizers), condensers, absorbers, adsorbers, and biological degradation. Controlling emissions related to transportation shall include emission controls on vehicles as well as use of cleaner fuels. Sufficient numbers of additional truck mounted Fog/Mist water cannons shall be procured and operated regularly inside the project premises and also in the surrounding villages to arrest suspended dust in the atmosphere.
- xv. Bag filters shall be cleaned regularly and efficiency of bag filter system shall be monitored at regular intervals.
- xvi. Water Sprinklers/Water mist system shall be installed near raw material yards, operational units and other strategic locations to control fugitive emissions from the plant.
- xvii. The particulate matter emissions from the process stacks shall be less than 30 mg/Nm<sup>3</sup> and measures shall be undertaken as per the submitted action plan. Efficient Air monitoring equipment shall be installed.
- xviii. Following additional arrangements to control fugitive dust shall be provided:
  - a. Fog / Mist Sprinklers at all on bulk raw material storage area (at the transfer points) like Iron Ore, Coal and for Fly Ash and similar solid waste storage areas.
  - b. Proper covered vehicle shall be used while transport of materials.
  - c. Wheel washing mechanism shall be provided in entry and exit gates with complete recirculation system.
- xix. Briquetting and Jigging plant shall be installed in Ferro Alloys Plant.
- xx. The PP shall minimize the evaporation losses in jigging operation to less than 10% using suitable advanced process.
- xxi. The 4<sup>th</sup> hole extraction system shall be provided in the Sub Merged Arc Furnaces and EAF.
- xxii. Industry is going to use silica quartz in large quantities and going to produce Silico Manganese and Ferro Silicon alloy steel. Therefore, it is necessary to control silica/quartz exposures at production Departments, not only emission norms as per Indian Factories Act. The permissible limit for silica/quartz should be within 10 mg/m<sup>3</sup> for total dust as per Indian Factories Act. Therefore, it is recommended to monitor personal and area exposures for silica quartz dust in the process plants.
- xxiii. Hoppers of the coal crushing unit and other washery units shall be fitted with high efficiency bag filters/mist spray water sprinkling system shall be installed and operated effectively at all times of operation to check fugitive emissions from crushing operations, transfer points of closed belt conveyor systems and from transportation roads.
- xxiv. The raw coal, washed coal and coal wastes (rejects) shall be stacked properly at earmarked site (s) within stockyards fitted with wind breakers/shields. Adequate measures shall be taken to ensure that the stored mineral does not catch fire.
- xxv. The temporary reject sites should appropriate planned and designed to avoid air and water pollution from such sites.
- xxvi. During operational phase at Captive Power Plant, Action Plan to monitor coke/coal dust exposures in different process plants using personal and area air samplers and to compare with permissible limits as per Indian Factories Act, 1948 shall be implemented.

- xxvii. The coal dust should be monitored at coal unloading, crushing, furnace areas and should be within 2 mg/m<sup>3</sup>, respirable dust fraction containing less than 5% quartz as per Indian Factories Act, 1948.
- xxviii. Basic Oxygen Furnace (BOF) gas shall be cleaned dry.
  
- xxix. Online stack monitoring system for IF and RHF shall be installed and monitoring report shall be submitted to the concerned Regional Office of the MoEF&CC along with the six monthly compliance report.
- xxx. Low NO<sub>x</sub> Burners will be installed at Reheating Furnace for control of Gaseous emissions generated while using PNG.

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

- i. The project proponent shall install 24x7 continuous effluent monitoring system with respect to standards prescribed in Environment (Protection) Rules 1986 as amended from time to time and connected to SPCB and CPCB online servers and calibrate these system from time to time according to equipment supplier specification through labs recognized under Environment (Protection) Act, 1986 or NABL accredited laboratories.
- ii. The project proponent shall monitor regularly ground water quality at least twice a year (pre- and post-monsoon) at sufficient numbers of piezometers/sampling wells in the plant and adjacent areas through labs recognized under Environment (Protection) Act, 1986 and NABL accredited laboratories.
- iii. Garland drains and collection pits shall be provided for each stock pile to arrest the run-off in the event of heavy rains and to check the water pollution due to surface run off.
- iv. Water meters shall be provided at the inlet to all unit processes in the plants.
- v. The project proponent shall make efforts to minimise water consumption in the plant complex by segregation of used water, practicing cascade use and by recycling treated water.
- vi. The proposed project shall be designed as "Zero Liquid Discharge" Plant. ETP shall be installed and there shall be no discharge of effluent from the plant. Domestic effluent shall be treated in Sewage Treatment Plant. Suitable measures shall be adopted for sewage water handling to ensure no contamination of any kind of water body.
- vii. All stockyards shall have impervious flooring and shall be equipped with water spray system for dust suppression. Stock yards shall also have garland drains and catch pits to trap the run off material and shall be implemented as per the action plan submitted in EIA/EMP report.
- viii. Rain water harvesting shall be implemented to recharge/harvest water as per the action plan submitted in the EIA/EMP report.
- ix. The project proponent shall provide the ETP for effluents of rolling mills to meet the standards prescribed in G.S.R 277 (E) 31st March 2012 (applicable to IF/EAF) as amended from time to time.
- x. The effluent discharge (mine waste water, workshop effluent) shall be monitored in terms of the parameters notified under the Water Act, 1974 Coal Industry Standards vide GSR

742 (E) dated 25.9.2000 and as amended from time to time by the Central Pollution Control Board.

- xi. Heavy metal content in raw coal and washed coal shall be analysed once in a year and records maintained thereof.
- xii. The rejects should preferably be utilized in FBC power plant or disposed off through sale for its gainful utilization. If the coal washery rejects are to be disposed off, it should be done in a safe and sustainable manner with adequate compaction and post closure arrangement to avoid water pollution due to leachate from rejects and surface run off from reject dumping sites.
- xiii. An Integrated Surface Water Management Plan for the washery area up to its buffer zone considering the presence of any river/rivulet/pond/lake etc. with impact of coal washing activities on it, shall be prepared, submitted to MoEFCC and implemented.
- xiv. Waste Water shall be effectively treated and recycled completely either for washery operations or maintenance of green belt around the plant.
- xv. Rainwater harvesting in the washery premises shall be implemented for conservation and augmentation of ground water resources in consultation with Central Ground Water Board.
- xvi. No ground water shall be used for coal washing unless otherwise permitted in writing by competent authority (CGWA) or MoEFCC. The make-up water requirement of washery should not exceed 1.5 m<sup>3</sup>/tonne of raw coal.
- xvii. Regular monitoring of ground water level and quality shall be carried out in and around the mine lease area by establishing a network of existing wells and constructing new piezometers during the mining operations. The monitoring of ground water levels shall be carried out four times a year i.e. pre-monsoon, monsoon, post-monsoon and winter. The ground water quality shall be monitored once a year, and the data thus collected shall be sent regularly to MOEFCC/RO.
- xviii. The project proponent shall take all precautionary measures to ensure riverine/ riparian ecosystem in and around the coal mine up to a distance of 5 km. A riverine/riparian ecosystem conservation and management plan should be prepared and implemented in consultation with the irrigation / water resource department in the state government
- xix. Air Cooled condensers shall be used in the captive power plant.

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

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

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

- i. Use torpedo ladle for hot metal transfer as far as possible. If ladles not used, provide covers for open top ladles.

- ii. Restrict Gas flaring to < 1%.
- iii. Provide solar power generation on roof tops of buildings, for solar light system for all common areas, street lights, parking around project area and maintain the same regularly;
- iv. Provide LED lights in their offices and residential areas.
- v. The project proponent shall provide waste heat recovery system (pre-heating of combustion air) at the flue gases of reheating furnaces.
- vi. Practice hot charging of slabs and billets/blooms as far as possible.
- vii. Ensure installation of regenerative type burners on all reheating furnaces.
- viii. Blast Furnaces shall be equipped with Top Recovery Turbine, dry gas cleaning plant, stove waste heat recovery, cast house and stock house ventilation system and slag granulation facility.
- ix. The project proponent shall provide waste heat recovery system on the DRI Kilns.
- x. The dolochar generated shall be used for power generation.
- xi. Tar shall be recovered from producer gas and shall be sold to registered processors and phenolic water shall be incinerated in After Burn Chamber (ABC) of DRI kilns.
- xii. The PP shall implement the guidelines on sponge iron plants issued by the CPCB/SPCB in this regard.

## **VI. Waste management**

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

- vii. SMS slag after metal recovery in waste recycling facility shall be conditioned and used for road making, railway track ballast and other applications. The project proponent shall install a waste recycling facility to recover metallic and flux for recycle to sinter plant. The project proponent shall establish linkage for 100% reuse of rejects from Waste Recycling Plant.
- viii. Carbon recovery plant to recover the elemental carbon present in GCP slurries for use in Sinter plant shall be installed.
- ix. Waste recycling Plant shall be installed to recover scrap, metallic and flux for recycling to sinter plant and SMS.
- x. Rejects from coal washery shall only be used either in the captive power plant (or) in the Thermal Power Plants meeting emission standards.

## **VII. Green Belt**

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

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

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

## **IX. Environment Management**

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



- ii. The company shall have a well laid down environmental policy duly approved by the Board of Directors. The environmental policy should prescribe for standard operating procedures to have proper checks and balances and to bring into focus any infringements/deviation/violation of the environmental / forest / wildlife norms / conditions. The company shall have defined system of reporting infringements / deviation / violation of the environmental / forest / wildlife norms / conditions and / or shareholders / stake holders. The copy of the board resolution in this regard shall be submitted to the MoEF&CC as a part of six-monthly report.
- iii. A separate Environmental Cell both at the project and company head quarter level, with qualified personnel shall be set up under the control of senior Executive, who will directly to the head of the organization.
- iv. Performance test shall be conducted on all pollution control systems every year and report shall be submitted to Integrated Regional Office of the MoEF&CC.

## **X. Miscellaneous**

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

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

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## **Agenda No. 62.9**

### **62.9 Expansion Project for Manufacturing of Paper from Waste Paper Based Mills by M/s Shah Paper Mills Ltd., located at Plot No: 97, Notified Industrial Area, GIDC Vapi, Tal: Pardi, Dist.: Valsad, Gujarat - Consideration of Environmental Clearance**

**[Proposal No.: IA/GJ/IND1/455735/2023; File No. IA-J-11011/444/2023-IA-II(IND-I)]**  
**[Consultant: Eco Chem Sales & Services; Valid upto: 03/03/2027]**

62.9.1 M/s. Shah Paper Mills Ltd. has made an online application vide proposal no. IA/GJ/IND1/455735/2023 dated 18.06.2024 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 schedule no. S. No. 5(i) Pulp & paper industry under Category “B” of the schedule of the EIA Notification, 2006 and attracts general condition due to Project location is in Critically Polluted area (GIDC Vapi) and therefore appraised at Central Level.

- 62.9.2 Name of the EIA consultant: M/s. Eco Chem Sales & Services [List of ACOs with their Certificate/Extension Letter vide letter no. NABET/EIA/2326/RA 0292; valid up to 15.03.2026; as on June 26, 2024].

**Details submitted by Project proponent**

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

Date of application	Consideration	Details	Date of accord	ToR Validity
09.09.2021	Standard Terms of Reference	Terms of Reference	15.09.2021	14.09.2025

- 62.9.4 The project of M/s Shah Paper Mills Ltd., located at Plot No: 97, Notified Industrial Area, GIDC Vapi, Tal: Pardi, Dist.: Valsad, Gujarat is for expansion of paper manufacturing from Waste Paper Based Mills through enhancement of production from 5500 to 9000 TPM.

- 62.9.5 Details of EDS:

**1. On perusal of the kml file, it is observed that greenbelt is not developed properly along the project boundary. PP shall submit the justification and complete details of the greenbelt developed so far along with the photographs and action plan for completing the balance greenbelt.**

**Reply:** Justification and complete details of the greenbelt developed so far:

Unit has developed 500 m<sup>2</sup> (1.05 %) (Planted trees 130 Nos.) area as greenbelt within premises. Moreover, Unit has developed Green Belt Area in GIDC Industrial Estate, Vapi, at a distance of 1.26 km from unit. Latitude and longitude is 20.36504°N 72.93570° E plot detail as below:

S.No.	Plot No.	Area m <sup>2</sup>	Area %
1.	312	1950	4.09

Unit has also developed Green Belt area in the Notified Area Authority Green Space at a distance of 0.92 km from unit. Latitude and longitude is 20.36229°N 72.93324° E (Sardar Chowk) and 20.35932°N 72.99267° E (Chanod Tanki).

S.No.	Plot No.	Area m <sup>2</sup>	Area %
1.	Outside area of industrial Plot No.308, near sardar chowk water tank and near Chanod water tank	7300	15.33

Photographs of the existing plantation is submitted.

**Action Plan for Balance Plantation:**

Additionally, Shah Paper Mills Ltd. will develop 8000 m<sup>2</sup> (16.80 %) Green Belt Development & Maintenance at Vapi Industrial Estate jointly with Green Society of Vapi Industries Association (VIA) at a distance of 0.28 km from unit. Latitude and longitude is 20°21'47.58"N 72°55'22.14"E to 20°21'10.85"N 72°55'2.62"E. For this, PP has paid the onetime Development Cost Rs.36 Lakhs and will pay Rs.30,72,000/- towards the maintenance charges for next 5 years. copy of the Allotment Letter submitted.

Considering 80% survival rate approx. 2850 Nos. of trees will be planted within the next two years.

**Year wise Tree Plantation**

Year	No. of Trees/Plants to Be Planted In Plant Area
1 <sup>st</sup> Year	2000
2 <sup>nd</sup> Year	850

Total green belt area development outside the plant premises will be 17250 m<sup>2</sup> (36.22 %).

Therefore, total green belt development considering inside and outside the premises will be 19250 m<sup>2</sup> (40.42%).

- 2. It is observed that some part of the facilities are falling outside the boundary as depicted in the uploaded kml file. PP shall submit the justification along with revised kml file of the project boundary as per the geographical coordinates.**

**Reply:** Revised kml is uploaded online Parivesh portal.

- 3. It is reported that the project falls under CPA. PP shall submit the compliance to the CEPI guidelines as per Ministry's OM dated 2019.**

**Reply:** Compliance to the CEPI guidelines as per Ministry's OM dated 2019 is submitted.

- 4. In Part A, section for details of the earlier EC/CTE/CTO of existing projects, the details of the CTE obtained for establishment of the existing project has not been provided. PP is required to submit all the details as desired in the form.**

**Reply:** Noted and CTE obtained for establishment of the existing project is submitted.

- 5. As reported, there are sensitive areas such as Health centres, rivers etc. within the study area of the project site. PP shall submit the mitigation measures undertaken to minimise the impact of project activities on these sensitive areas.**

**Reply:** Mitigation measures undertaken to minimise the impact of project activities on these sensitive areas are as follows:

- The unit has installed 40 TPH coal fired boiler with 4.9 MW Co-generation power plant having four field highly efficient (99%+) ESP along with Sulphur capture system with 70 meters height of chimney.
- There is/will not be process emission from existing and proposed project.
- The source of water supply is GIDC Vapi and hence no ground water abstraction shall be required.
- No direct disposal of wastewater outside the plant premises. The industry has provided adequately designed ETP. After primary and secondary treatment approximately 375 KLD of wastewater will be sent to CETP for further treatment and disposal.
- Acoustic enclosure has been provided where noise levels exceed the permissible limit.

- Periodical Monitoring and maintenance is/ will be done of equipments, machineries, pumps, blowers etc.

**6. Under Part C, section for select nature of ToR, PP has mentioned that “ToR prescribed by EAC and Ministry”. However, it is noticed that Standard ToR has been granted by the Ministry. PP shall rectify the same by selecting the right option in the form.**

**Reply:** We had selected the correct tab available on Online portal.

**7. Under section 3 of the Part C, in the uploaded copy of entire PH proceedings there is no SPCB cover letter. PP shall also include the same as the whole process is online on portal.**

**Reply:** SPCB Cover letter is submitted.

**8. PP shall also provide the Action plan to address the issues based on socio-economic survey as per OM dated 30.09.2020 along-with physical targets and year-wise timelines.**

**Reply:** Major issues raised during the public hearing was employment related, skill development training program related and support to schools/Aanganwadi.

Action plan to address the issues based on socio-economic survey as per OM dated 30.09.2020 along-with physical targets and year-wise timelines is as below:

The proponent has allocated a budget of Rs. 153.28 Lakhs *i.e.* 2 % of the expansion cost of Rs. 76.64 Crore to be spent within a period of 5 years.

S. No.	Description	Years					Total (Lakhs)
		1	2	3	4	5	
1.	Necessary equipment's and Kits distribution in schools/ aanganwadi.	4.00	4.00	4.00	4.00	4.00	20.00
2.	Skill Development program	0.00	0.00	20.00	20.00	20.00	60.00
3.	Provision of tree guard for planted trees	6.656	6.656	6.656	6.656	6.656	33.28
4.	Deepening of ponds and lakes for rain water collection.	0.00	0.00	0.00	20.00	20.00	40.00
	<b>Total (Rs. in Lakhs)</b>	<b>10.656</b>	<b>10.656</b>	<b>30.656</b>	<b>50.656</b>	<b>50.656</b>	<b>153.28</b>

**9. The baseline data for PM<sub>10</sub> and PM<sub>2.5</sub> during baseline collection in the core zone is recorded too high. PP shall submit the reasons for the same along with the list of industries within the study area and mitigation measures to minimise the same.**

**Reply:** With respect to submitted online application and submitted EIA the maximum value of PM<sub>10</sub> 84.9 µg/m<sup>3</sup> and PM<sub>2.5</sub> is 43.5 µg/m<sup>3</sup> at project site, whereas limit of PM<sub>10</sub> is 100 µg/m<sup>3</sup> and PM<sub>2.5</sub> is 60 µg/m<sup>3</sup>. All the results are well within the limit as per NAAQS standards. Summary of ambient air quality results are given in Page No: 50 Section 3.4.4. of chapter -3.

Company is/will adopt the following mitigation measures to reduce the impact on air environment:

- Regular water sprinkling is/will be done on roads and stock yards (if any) to avoid dust generation from handling.
- Highly efficient four field ESP is/will be provided to reduce the flue gas emissions from the CPP.
- Online monitoring station for Regular ambient air quality monitoring is/will be provided within the premises for PM, SO<sub>x</sub> and NO<sub>x</sub>.
- Regular ambient air quality monitoring through third party is/will be carried out within premises and in the nearby area for PM, SO<sub>x</sub> and NO<sub>x</sub>.
- Good house-keeping is/will be maintained in the premises.
- Coal is/will be transferred to boiler through closed conveyor belt to reduce the chance of fugitive emission.
- No ash pond is/will be constructed for storage of fly ash. Fly ash is/will be stored in closed silo.

**List of industries near unit are as follows:**

- Best Paper Mills Private Limited at 0.30 km in SW
- Inject Care Parenterals Pvt. Ltd at 0.03 km in NE
- Kan Power Rubber Industries at 0.19 km in NWW
- Exemed Pharmaceuticals at 0.19 km in NNW

**10. It is reported that Schedule-I species are present within the study area and has also submitted the Wildlife Conservation Plan. Please check whether the conservation plan has been prepared based on amendments in Act or not. PP shall submit the status of the approval of Conservation Plan.**

**Reply:** Checked and revised the Conservation plan for schedule – I species as per the amendments act and submitted to the DFO. Revised conservation plan is submitted.

**11. Details of Raw material and its linkage and its mitigation measure during transportation needs to be submitted under section for requirement of minerals involved in the project.**

**Reply:** Details of Raw materials and its linkage are as follows:

Sr. No.	Name of Raw material	Existing (TPM)	Proposed (TPM)	Total (TPM)	Source	Mode of Transportation
1.	Waste paper	6787	3439	10226	Neh Traders Ronvel, Valsad	Bags in Trucks
2.	Deinking Chemicals	21.393	10.841	32.234	Local Market	Bags in Trucks
3.	Bleaching chemicals	49.627	99.923	149.550	Local Market	Drums in Trucks
4.	Caustic Soda	55	45	90	Local Market	By Trucks
5.	Hydrogen	110	70	180	Local Market	By Trucks

	Peroxide					
6.	Starch	22	428	450	Local Market	By Trucks (bags)
7.	Soapstone powder	800	550	1350	Local Market	By Trucks (bags)
8.	Sodium Silicate	83	52	135	Local Market	By Trucks

**Material Required for Boiler Operation:**

S. No.	Particulars	Quantity			Source	Mode of Transportation
		Existing	Proposed	Total		
1.	Coal/Lignite	324 TPD	0	324 TPD	M/s. Maheswari Logistics, Vapi, Valsad.	Road Transport by trucks

Linkage of raw material is attached as **Annexure 7**.

**12. The PP needs to submit the details of activities/ECs/CTEs/CTOs in tabular form showing its details of ECs/CTEs/CTO vis-à-vis production capacity since grant of CTE/CTO to check the violation, if any. All old CTEs/CTOs/ HW Authorization to be uploaded to verify the violation, if any.**

**Reply:** The details of activities CTOs in tabular form showing its details of CTOs vis-à-vis production capacity since grant of CTO are as follows:

S.No.	CTE/ CTO No. & year	Product	Production capacity
1.	Consent Order No: 24228 PC/VSD/1126/16281 Dated 11.05.2001 valid upto 17.10.2001	• Printing/ Writing/ News/ Print paper	1500.00 TPM
2.	Consent Order No: 17986 PC/AIR/VSD/803/ 44378 Dated 13.12.2001 valid upto 15.10.2002	• Printing/ Writing/ News/ Print paper	1500.00 TPM
3.	<b>CTE</b> PC/NOC/VSD/ 2139 (VSD- 1126)/ 8517 dated 20.03.2003	• Printing/ Writing/ News/ Print paper	450.00 TPM
4.	Consent Order No: 29623 PC/VSD/1126/ 8519 Dated 20.03.2003 valid upto 16.10.2003	• Printing/ Writing/ News/ Print paper	1950.00 TPM
5.	<b>CTE</b> GPCB/ NOC/ VSD-2916 (CCA-VSD-275)/ 13675 dated 26.05.2006.	• Printing/ Writing/ News/ Print paper	2750 TPM (1950 TPM + 800 TPM)

6.	CTO No. PC/CCA-VSD/275/ 32813 Dated 18.11.2006 valid upto 24.10.2007	<ul style="list-style-type: none"> <li>• Printing/ Writing/ News/ Print paper</li> <li>• Co. generation Power Plant</li> <li>• Steam</li> <li>• Power</li> <li>• Captive Power Plant</li> </ul>	1950.00 TPM  10 MT/hr 0.5 MW 1.6 MW
7.	<b>CTE</b> GPCB/ CE/ NOC/ VSD-3131 32076 dated 29.10.2007.	<ul style="list-style-type: none"> <li>• Natural gas Power plant</li> <li>• Steam</li> <li>• Dismantle existing 1.6 MW CPP</li> </ul>	2660 KW (2 * 1330 kVA) 1.84 MT/hr
8.	Consent Order No. 10387 dated 31.03.2008  valid upto 18.10.2012  PC/ VSD/ CCA-275/9812 dt.3.04.2008	<ul style="list-style-type: none"> <li>• Printing/ Writing/ News/ Print paper</li> <li>• Co-generation Power Plant <ul style="list-style-type: none"> <li>- Steam</li> <li>- Power</li> </ul> </li> <li>• Captive power Plant <ul style="list-style-type: none"> <li>- Power</li> </ul> </li> </ul>	2750 TPM  10 MT/hr 0.5 MW  1.60MW
9.	Consent Order No. AWH-50741 dated 20.11.2012 Valid upto 14.09.2017 GPCB/ CCA-VSD-275/ ID 24366/ 131511 dt. 03.12.12	<ul style="list-style-type: none"> <li>• Printing/ Writing/ News/ Print paper</li> <li>• Co-generation Power Plant <ul style="list-style-type: none"> <li>- Power</li> </ul> </li> </ul>	2750 TPM  0.5 MW
10.	<b>CTE - 54385</b> GPCB/ CCA-VSD-275/ ID: 24366/ 149839 dated 11.06.2013  Valid upto 09.01.2017	<ul style="list-style-type: none"> <li>• Printing/ Writing/ News/ Print paper</li> <li>• Co-generation Power Plant <ul style="list-style-type: none"> <li>- Steam</li> <li>- Power</li> </ul> </li> </ul>	5500 TPM (2750 TPM + 2750 TPM)  10 MT/hr 0.5 MW
11.	<b>CTE - 79856</b> GPCB/ CCA-VSD-275(3)/ ID: 24366/ Valid upto 21.06.2023  Outward No. 361084 dated 29.06.2016	<ul style="list-style-type: none"> <li>• Col fired Boiler</li> <li>• Co-generation Power Plant <ul style="list-style-type: none"> <li>- Power</li> </ul> </li> </ul> <p>Unit shall remove 0.5 MW co-generation power plant and use 13 TPH boiler as a stand by.</p>	30 TPH  4.9 MW
12.	<b>CTE Amendment - 101117</b> GPCB/ CCA-VSD-275(4)/ ID: 24366/ Valid upto 29.04.2024  Outward No. 530977, Dated 19.12.2019	<ul style="list-style-type: none"> <li>• Col fired Boiler</li> <li>• Co-generation Power Plant <ul style="list-style-type: none"> <li>- Power</li> </ul> </li> </ul>	40 TPH  4.9 MW
13.	CTO AWH-89472 dated 15.11.2017	<ul style="list-style-type: none"> <li>• Printing/ Writing/ News/ Print paper</li> </ul>	5500 TPM



	Valid upto 30.06.2022 GPCB/ CCA-VSD-275(3)/ ID: 24366	<ul style="list-style-type: none"> <li>• Co-generation Power Plant</li> <li>1. Steam</li> <li>2. Power</li> </ul>	10 MT/hr 0.5 MW
14.	Amendment CTO Outward No. 455474 dated 17.05.2018	Removal of Deinking Sludge (8600 TPA) from hazardous waste category	-
15.	Amendment CTO Outward No. 598998 dated 26.08.2021	Addition of deinking sludge (8600 TPA) in other waste	-
16.	Amendment CTO Outward No. 625776 dated 17.03.2022	<ul style="list-style-type: none"> <li>• Coal/ lignite</li> <li>• Boiler</li> </ul>	324 MT/Day  (40 TPH) with 4.9 MW Co-generation Power Plant
17.	CTE-55309 File No: GPCB/ (PCB ID. - 24366) Validity of Seven years Outward No. 16971, Dated 27.06.2022	CTE After TOR	--
18.	CTO AWH- 120703 dated 05.08.2022 Valid upto 30.06.2027 GPCB/ CCA-VSD-275(5)/ ID: 24366	<ul style="list-style-type: none"> <li>• Printing/ Writing/ News/ Print paper</li> <li>• Captive Power Plant</li> </ul>	5500 TPM  4.9 MW
19.	CTE-133549  Validity upto 13.02.2031  Outward No. 798441, Dated 09.04.2024	<ul style="list-style-type: none"> <li>• Addition of Plot</li> </ul>	S. No. 4899

All CTE/ CTO/ HW Authorization is submitted.

**13. 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 and uploaded the data accordingly. English translation of land documents authenticated from notary shall be submitted.**

**Reply:** Details of land involved in the project is submitted.

**14. Details of court case, directions issued by SPCB, if any, pending needs to be submitted.**

**Reply:** There is no court case, directions issued by SPCB to the existing unit.

**15. It is noted that in the uploaded CCR is inaccessible. PP shall upload proper copy along with ATR and closure report from IRO for any non-compliances.**

**Reply:** Certified Compliance of CCA is received from GPCB having letter no. GPCB/CCA-VSD-275(6)/ID24366/760228 dated 05.12.2023. All the CCA Conditions are compiled by the Shah Paper Mills Limited. Certified Compliance of CCA is submitted.

**16. PP has not uploaded the essential documents such as water permission, contour map, rainwater harvesting plan etc. which are requisite for consideration of the proposal.**

**Reply:** Essential documents such as water permission, contour map, rainwater harvesting plan etc. is attached as Annexure 11, 12 and 13.

**17. PP shall revise the complete application in conformity to Ministry's requirement and resubmit the application.**

**Reply:** Noted and implemented

**18. It is noted that the desired information and documents are not updated in the relevant section in the application form. PP shall update the application form also with the desired information/documents as the whole process is online on Portal.**

**Reply:** Noted. PP has updated the documents in the relevant section.

**19. Some of the documents are not in readable condition. PP shall submit the legible copy of the same.**

**Reply:** Noted. We had submitted the all non-readable documents in legible conditions separately in any other information tab on parivesh portal.

**20. Some of the documents as EDS Annexures are in regional language. PP shall submit the English translation of the same authorised from notary.**

**Reply:** All regional language documents submitted in EDS annexures are translated, authorised and notarised and submitted in respective tab on online portal.

**21. The applicability of EC under EIA Notification, 1994 & 2006 needs to be ascertain as it seems that PP has obtained enhanced CTO after EIA Notification, 2006. Please justify with your reply along with documentary proof.**

**Reply:** For the applicability of EC under EIA Notification, 1994 & 2006 adequate justification along with documentary proof is submitted.

S. No.	Notification	Compliance
<b>1.0</b>	<b>EIA notification 27/01/1994</b>	
1.1	S. No. 25 (Pulp, Paper & News Prints having investment >100 Cr for new project & > 50 Cr for expansion	PP has obtained CTE of GPCB for the manufacture of writing/printing paper with capacity of 1800 TPM on 21/04/1997. PP has started our unit on 22/01/1998 for which PP has

		<p>obtained CTO for the manufacture of writing/printing paper with capacity of 1500 TPM. Copy of CTE &amp; CTO is enclosed herewith as <b>Annexure:1</b></p> <p>At the time of CTE/CTO application, our total project cost was Rs. 41.27 Crore. Copy of Chartered Account certificate is submitted, which was less than 100 Crore, hence EIA notification 27/01/1994</p>				
<b>2.0</b>	<b>EIA notification 14/09/2006</b>					
2.1	<p>5(i) Pulp &amp; paper industry (excluding manufacturing of paper from waste paper and manufacture of paper from ready pulp without bleaching)</p> <table border="1"> <tr> <td></td> <td>Pulp manufacturing and Pulp &amp; Paper manufacturing industry -</td> <td>Paper manufacturing industry without pulp manufacturing</td> <td>General Condition shall apply</td> </tr> </table>		Pulp manufacturing and Pulp & Paper manufacturing industry -	Paper manufacturing industry without pulp manufacturing	General Condition shall apply	<p>PP has obtained CTE of GPCB for the manufacture of writing/printing news paper with additional capacity of 450 TPM on 20/03/2003 and also obtained CTO on 20/03/2003. Copy of CTE &amp; CTO is submitted. After that; PP has obtained CTE of the GPCB for expansion project on 26/05/2006 for manufacture of printing/writing news paper with capacity of 800 TPM (existing 1950 TPM + additional 800 TPM= total 2750 TPM).</p> <p>After obtaining CTE, PP has obtained CTO for total 2750 TPM on 18/11/2006. Copy of CTO is submitted.</p> <p>Meanwhile <b>EIA notification 14/09/2006</b> was published by MoEF, New Delhi i.e. <b>5(i) Pulp &amp; paper industry (excluding manufacturing of paper from waste paper and manufacture of paper from ready pulp without bleaching)</b></p> <p>As per said EIA notification, our expansion project i.e. for additional production capacity 800 TPM was covered as PP has obtained CTO for additional production capacity on 18/11/2006 i.e. after EIA notification dated 14/09/2006.</p>
	Pulp manufacturing and Pulp & Paper manufacturing industry -	Paper manufacturing industry without pulp manufacturing	General Condition shall apply			

		<p>Meanwhile, MoEF (IA division) has published circular on 21/11/2006 i.e. Such projects for which NOCs issued before 14th September, 2006 will not be required to take Environmental Clearance under the EIA Notification, 2006. Copy of Circular is submitted.</p> <p>As per said circular, we were exempted from the EIA notification dated 14/09/2006, as PP has obtained CTE for total 2750 TPM production capacity before 14/09/2006.</p> <p>Thus EIA notification 14/09/2006 was not applicable to us.</p>
3.0	Notarized undertaking regarding no violation of EIA notification and its amendment dated <b>27/01/1994 &amp; 14/09/2006</b>	PP has submitted Notarized undertaking regarding no violation of EIA notification dated <b>27/01/1994 &amp; 14/09/2006</b> .

It is also mentioned that the processing of EC proposal, in the Ministry, is through Parivesh Portal only, therefore providing the requisite information/documents shall be in compliance as per Form and accordingly the PP are kindly requested to revise the application in the Form and resubmit the same as after accepting the form cannot be revised.

**Reply:** Revised information/documents are revised in the application form and submitted.

#### 62.9.6 Environmental Site Settings:

S. No.	Particular	Details			Remarks
1.	Total land	<b>4.7625 Ha</b> [Private: 0.8512 ha; Govt.: 3.9113 ha]			Land use: Notified Industrial Area, GIDC Vapi and Non GIDC land.
2.	Land acquisition details as per MoEF&CC O.M. dated 7/10/2014	The land is already in possession of Shah Paper Mills Ltd.			--
3.	Existence of habitation & involvement of R&R, if any.	Chanod – 1.03 km. (S) R&R is not applicable as expansion is in within existing land.			-
4.	Latitude and Longitude of all	Corner	Latitude	Longitude	-
		A	20°21'40.21"N	72°55'27.43"E	

S. No.	Particular	Details			Remarks															
	corners of the project site.	B	20°21'38.60"N	72°55'28.51"E																
		C	20°21'35.13"N	72°55'23.45"E																
		D	20°21'30.84"N	72°55'28.36"E																
		E	20°21'29.30"N	72°55'26.41"E																
		F	20°21'29.91"N	72°55'25.76"E																
		G	20°21'29.46"N	72°55'25.38"E																
		H	20°21'29.80"N	72°55'24.28"E																
		I	20°21'30.16"N	72°55'24.29"E																
		J	20°21'30.12"N	72°55'22.74"E																
		K	20°21'29.98"N	72°55'22.41"E																
		L	20°21'30.07"N	72°55'20.49"E																
		M	20°21'31.85"N	72°55'20.89"E																
		N	20°21'33.93"N	72°55'20.32"E																
		O	20°21'33.95"N	72°55'18.21"E																
		P	20°21'35.51"N	72°55'18.40"E																
		Q	20°21'37.12"N	72°55'18.32"E																
		R	20°21'36.73"N	72°55'19.92"E																
		S	20°21'35.99"N	72°55'20.56"E																
		Centre	20°21'34.76"N	72°55'21.86"E																
5.	Elevation of the project site	27 - 30 M above mean sea level																		
6.	Involvement of Forest land if any.	No involvement of Forest Land.			-															
7.	Water body (Rivers, Lakes, Pond, Nala, Natural Drainage, Canal etc.) exists within the project site as well as study area.	<b>Project Site: None</b> Name: -  <b>Study area</b> <table border="1"> <thead> <tr> <th>Water body</th> <th>Distance</th> <th>Direction</th> </tr> </thead> <tbody> <tr> <td>River Damanganga</td> <td>2.28 km</td> <td>S</td> </tr> <tr> <td>River Kolak River</td> <td>4.65 km</td> <td>NNE</td> </tr> <tr> <td>Darotha</td> <td>5.39 km</td> <td>SW</td> </tr> <tr> <td>Arabian Sea</td> <td>10.95 km</td> <td>W</td> </tr> </tbody> </table>			Water body	Distance	Direction	River Damanganga	2.28 km	S	River Kolak River	4.65 km	NNE	Darotha	5.39 km	SW	Arabian Sea	10.95 km	W	-
Water body	Distance	Direction																		
River Damanganga	2.28 km	S																		
River Kolak River	4.65 km	NNE																		
Darotha	5.39 km	SW																		
Arabian Sea	10.95 km	W																		
8.	Existence of ESZ/ ESA/ national park/ wildlife sanctuary/ biosphere reserve/ tiger reserve/ elephant reserve etc. if any within the study area.	Nil			-															

62.9.7 The existing project was initially operational based on CTE dated 21.04.1997 obtained from GPCB for the manufacture of writing/printing paper with capacity of 1800 TPM. EC was not applicable to existing unit as it was investment cost was Rs. 41.27 Crore which was less than Rs.

100 Crore. Further, PP had obtained CTE expansion from 2750 TPM to 5500 TPM in 11.06.2013. As bleaching was not involved in manufacturing process. Hence, EIA Notification 2006 was not applicable. The latest Consent to Operate for the existing unit was accorded by Gujarat Pollution Control Board vide Ir. no. AWH- 120703 dated 05.08.2022. The validity of CTO is up to 30.06.2027.

S. No.	Particulars	Details	Date	Remarks
1	Site clearance from GPCB	writing/printing paper: 1800 TPM	04/11/1995	EIA notification 1994 is not applicable as investment is Rs. 41.27 Crore
2	No objection certificate	writing/printing paper: 1800 TPM	21/04/1997	
3	Consent to operate	News print / writing/printing paper: 1500 TPM	22/01/1998	
4	No objection certificate	writing/printing News paper: 450 TPM	20/03/2003	
5	Consent to operate	writing/printing News paper: 1950 TPM	20/03/2003	
6	No objection certificate	writing/printing News paper: 800 TPM	26/05/2006	
7	Consent to operate	writing/printing News print paper: 2750 TPM	18/11/2006	EIA notification 2006 is not applicable as per circular 21/11/2006

62.9.8 Implementation status of the existing CTE/CTO:

S. No.	Facilities	Implementation Status as on date	Production as per CTO
1.	Printing/ Writing/ News/ Print Paper	5500 TPM	5500 TPM
2.	Captive Power Plant	4.9 MW	4.9 MW

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

Sl. No.	Facility	Existing	Proposed	Total	Remarks
1	Printing/ Writing/ News/ Print Paper	5500 TPM	3500 TPM	9000 TPM	Expansion using recycled paper
2	Captive power Plant	4.9 MW	-	4.9 MW	-

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

S. No.	Raw Material	Quantity required per annum			Source	Distance from site (Kms)	Mode of Transportation
		Existing	Expansion	Total			
1.	Waste paper	6787	3439	10226	M/s Neh Traders, Stockist/ Dealer of Waste paper, Dist Valsad, Gujarat.	30 km	Bales in Trucks
2.	Drinking Chemicals	21.393	10.841	32.234	Local Market	10 km	Bags in Bags Trucks
3.	Bleaching chemicals	49.627	99.923	149.550	Local Market	10 km	Drums in Trucks
4.	Caustic Soda	55	45	90	Local Market	10 km	By Trucks
5.	Hydrogen Peroxide	110	70	180	Local Market	10 km	By Trucks
6.	Starch	22	428	450	Local Market	10 km	By Trucks (bags)
7.	Soapstone powder	800	550	1350	Local Market	10 km	By Trucks (bags)
8.	Sodium Silicate	83	52	135	Local Market	10 km	By Trucks

62.9.11 Existing fresh Water requirement is 1110 m<sup>3</sup>/day, water requirement is obtained from GIDC Pipeline and permission for the same has been obtained from GIDC water supply department vide letter no DEE/WS/NA/VPI/1480 dated 30.12.2023. The water requirement for the proposed expansion project is estimated as 12712.00 m<sup>3</sup>/day, out of which 2219.00 m<sup>3</sup>/day of fresh water requirement will be obtained from the GIDC water supply department and the remaining requirement of 10493.00 m<sup>3</sup>/day will be met from the Recycled water (from Processing and Boiler).

62.9.12 Existing power requirement of 4500 kVA is obtained from 4.9 MW Captive Power Plant and 2800 from. No additional Power will be required.

62.9.13 Baseline Environmental Studies:

Period	1st October 2021 to 31st December 2021
AAQ parameters at 8 Locations (min and max)	<ul style="list-style-type: none"> <li>• PM<sub>2.5</sub> = 27.0 to 43.5 µg/m<sup>3</sup>,</li> <li>• PM<sub>10</sub> = 61.1 to 84.9 µg/m<sup>3</sup>,</li> <li>• SO<sub>2</sub> = 8.1 to 21.9 µg/m<sup>3</sup>,</li> <li>• NO<sub>x</sub> = 13.0 to 29.1 µg/m<sup>3</sup></li> <li>• CO = BDL</li> </ul>
Incremental GLC level	<ul style="list-style-type: none"> <li>• PM<sub>10</sub> = 0.21 µg/m<sup>3</sup></li> <li>• SO<sub>2</sub> = 0.03 µg/m<sup>3</sup></li> </ul>

	<ul style="list-style-type: none"> <li>• <math>\text{NO}_x = 0.19 \mu\text{g}/\text{m}^3</math></li> </ul>																														
Ground water quality at 8 locations	<ul style="list-style-type: none"> <li>• pH: 6.9 – 7.42,</li> <li>• Total hardness: 276 – 675 mg/L,</li> <li>• Chlorides: 40 – 536 mg/L,</li> <li>• Fluoride: 0.5 – 0.7 mg/L,</li> <li>• Iron: 0.04 – 0.72 mg/L,</li> <li>• TDS: 361-1285 mg/L,</li> </ul>																														
Surface water quality at 7 locations (3 River water and 4 Lakes)	<p><b>River &amp; Lake Water</b></p> <ul style="list-style-type: none"> <li>• pH: 5.38 – 7.82,</li> <li>• DO: 4.4 – 6.1 mg/L,</li> <li>• BOD: 3 – 9 mg/L,</li> <li>• COD: 12 – 18 mg/L,</li> <li>• Chloride: 13 – 256 mg/L,</li> <li>• Total hardness: 96 – 416 mg/L</li> </ul>																														
Noise levels Leq (Day and Night) 8 Locations (3 Industrial zone, 4 Residential Area & 1 Road (Noise Generating Source))	<p>Day Time: 62.2 to 66.4 dB (A) and Night Time: 57.4 to 61.3 dB (A) for Industrial zone</p> <p>Day Time: 49.8 to 53.6 dB(A) and Night Time: 43.2 to 44.9 dB(A) for Residential Area</p> <p>Day Time : 75.2 dB(A) and Night Time: 73.2 dB(A) for NH-48</p>																														
Traffic assessment study findings	<ul style="list-style-type: none"> <li>• Traffic study has been conducted at NH 8 (0.33 km in NW) &amp; SH-185 which is abutting to the plant site in NE.</li> <li>• Transportation of raw material, fuel &amp; finished product will be done <b>100 %</b> by road.</li> <li>• Existing PCU is <b>1621</b> PCU/hr on <b>NH 8 &amp; 698</b> on <b>SH 185</b> (NH/SH/MDR) and existing level of service (LOS) is:</li> </ul> <table border="1"> <thead> <tr> <th>Road</th> <th>V (Volume in PCU/hr.)</th> <th>C (Capacity in PCU/hr.)</th> <th>Existing V/C Ratio</th> <th>LOS</th> </tr> </thead> <tbody> <tr> <td>NH-8</td> <td>1621</td> <td>3000</td> <td>0.54</td> <td>C</td> </tr> <tr> <td>SH-185</td> <td>698</td> <td>1250</td> <td>0.55</td> <td>C</td> </tr> </tbody> </table> <ul style="list-style-type: none"> <li>• PCU load after proposed project will be <b>1621</b> (Existing) + <b>5</b> (Additional) PCU/hr on NH 8 and <b>698</b> (Existing) + <b>1</b> (Additional) on SH 185 and level of service (LOS) will be:</li> </ul> <table border="1"> <thead> <tr> <th>Road</th> <th>V (Volume in PCU/hr.)</th> <th>C (Capacity in PCU/hr.)</th> <th>Existing V/C Ratio</th> <th>LOS</th> </tr> </thead> <tbody> <tr> <td>NH-8</td> <td>1626</td> <td>3000</td> <td>0.54</td> <td>C</td> </tr> <tr> <td>SH-185</td> <td>699</td> <td>1250</td> <td>0.55</td> <td>C</td> </tr> </tbody> </table> <p>Note: Capacity as per IRC- IRC 106-1990 Guide line for capacity for roads.</p>	Road	V (Volume in PCU/hr.)	C (Capacity in PCU/hr.)	Existing V/C Ratio	LOS	NH-8	1621	3000	0.54	C	SH-185	698	1250	0.55	C	Road	V (Volume in PCU/hr.)	C (Capacity in PCU/hr.)	Existing V/C Ratio	LOS	NH-8	1626	3000	0.54	C	SH-185	699	1250	0.55	C
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	<b>Conclusion:</b> The level of service will <b>Good</b> After including additional traffic due to proposed project.
Flora and fauna	Study area shows the presence of Schedule-I species – Indian Peafowl (Pavocristatus). PP has reported that Conservation Plan has been prepared and submitted to the forest department on 16.02.2022 for approval.

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

#### Hazardous Waste:

S. No.	Type of Waste	Source	Quantity generated (TPA)	Mode of Treatment	Disposal
1.	ETP waste	ETP	50.0	-	Collection, storage, transportation, disposal at TSDF-VGEL.
2.	Plastic waste (Non-recyclable waste)	Process	3930	-	Sent to sister Unit of Shah Paper Mills Ltd. for utilization as fuel in energy boiler or Selling to cement industry for co processing.
3.	Used oil	Plant & Machinery	0.30	-	Collection, storage, Transportation, sold to registered re-refiners.
4.	Discarded containers/bags	Storage	4	-	Collection, storage, transportation sold to authorized recyclers.
5.	Used Resin	DM Plant	As and when required	-	Collection, storage, transportation and disposal by sending to approved and authorized TSDF sites by use of GPS munted vehicles and XGN Manifest

#### Non-Hazardous Waste:

S. No.	Type of Waste	Source	Quantity generated (TPA)	Mode of Treatment	Disposal
1.	Fly Ash	Coal Fired Boiler	5940 (Coal)	-	Will be sent to Brick making Industry
2.	De-Inking sludge	Process	14070	-	Used in boiler as a fuel
3.	STP Sludge	STP	12	-	Used as a manure in plant premises
4.	Domestic Waste	-	10 kg/day	-	It will be segregated as dry waste and wet waste. Dry waste is disposed in the bin of GIDC/ Nagarpalika and wet waste will

S. No.	Type of Waste	Source	Quantity generated (TPA)	Mode of Treatment	Disposal
					be allowed to OWC to convert it bio-degradable waste in to manure
5.	E-Waste	-	0.50	-	Collected and disposed to Authorized E-waste management Site

62.9.15 Public Consultation:

Details of advertisement given	26/03/2022
Date of public consultation	28/04/2022
Venue	VIA Auditorium Hall, Plot No. 135, Near Vapi Char Rasta, GIDC Vapi, Dist. Valsad.
Presiding Officer	Resident Additional Collector & Additional District Magistrate, Valsad
Major issues raised	Employment related, School development, Skill development.

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

S. No.	Description	Villages	Years					Total (Lakhs)
			1 <sup>st</sup>	2 <sup>nd</sup>	3 <sup>rd</sup>	4 <sup>th</sup>	5 <sup>th</sup>	
1.	Necessary equipments and Kits distribution in schools/Anganwad i	Bhilad, Chhiri	4.00	4.00	4.00	4.00	4.00	20.00
2.	Skill Development program like ITI course	Angam, Punat	0.00	0.00	20.00	20.00	20.00	60.00
3.	Provision of tree guard for planted trees	Chanod, Chharwada	6.656	6.656	6.656	6.656	6.656	33.28
4.	Deepening of ponds and lakes for rain water collection & donation in Sports activity	Borlai, Rata, Paria	0.00	0.00	0.00	20.00	20.00	40.00
	<b>Total (Rs. in Lakhs)</b>		<b>10.656</b>	<b>10.656</b>	<b>30.656</b>	<b>50.656</b>	<b>50.656</b>	<b>153.28</b>

62.9.16 Existing capital cost of project was 180.15 Crores. The capital cost of the proposed expansion project is Rs 76.64 Crores and the capital cost for environmental protection measures is proposed

as Rs. 5.14 Crores. The annual recurring cost towards the environmental protection measures is proposed as Rs. 34.43 Crores. The employment generation from the proposed expansion is 105 Nos. The details of cost for environmental protection measures is as follows:

S. No.	Description of Item	Existing (Rs. In Crores/ lakhs)		Proposed (Rs. In Crores/ lakhs)	
		Capital Cost	Recurring Cost	Capital Cost	Recurring Cost/month
i.	Air Pollution Control/ Noise Management	1600.00	-	0.00	3.15
ii.	Water Pollution Control			235.00	24.28
iii.	Environmental Monitoring and Management			250	2.20
iv.	Green Belt Development			4.00	0.2
v.	Addressable of Public Consultation concerns			153.28	2.0
vi.	OHS			25.00	0.6
vii.	Hazardous waste			0.00	4.00
	Details of adoption of villages, if any				

62.9.17 Existing green belt has been developed in 0.05 ha area which is about 1.05 % of the total project area of 4.7625 ha with total sapling of 130 Nos. Trees. Proposed greenbelt will be developed in 0.15 ha which is about 3.15 % of the total project area within premises. 0.925 Ha which is about 19.42 % of the total project area has been developed outside plant premise and 0.80 Ha will be developed outside premise which is about 16.80% of the total project area. Thus total of 1.925 ha area (40.42 % of total project area) will be developed as greenbelt. A 4 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 2850 saplings will be planted and nurtured in 0.95 hectares in 2 years.

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

#### **Certified compliance report from Regional Office**

62.9.19 The Status of compliance of earlier CTO is obtained vide letter No. GPCB/CCA-VSD-275(6) ID 24366/ 760228 dated 03.12.2023. As per the report, the unit has complied all the conditions.

62.9.20 **CPA Action Plan as per CEPI Guidelines:**

Environment	Mitigation Measures	Compliance	
		Compliance at Existing Scenario	Compliance after Proposed EC Expansion Related Mfg. Activities
Air	Stipulation of conditions such as:	Complied.	Same will be continued as per existing CTO and no

Environment	Mitigation Measures	Compliance	
		Compliance at Existing Scenario	Compliance after Proposed EC Expansion Related Mfg. Activities
	i. Stack emission levels should be stringent than the existing standards in terms of the identified critical pollutants.	<p>From the unit, PM, SO<sub>2</sub>, NO<sub>x</sub> and Mercury (Hg) are generated as flue gas-critical pollutants due to the 40 TPH Boiler operation.</p> <p>To control flue gas emissions, adequate stack height (70 m) is provided to the Boiler. Provided Electrostatic Precipitator (ESP) and Auto lime dosing system/ wet alkali scrubber as an APCS. Existing standards with respect to each pollutant, standards for the unit that are located within the CPA, and standards that are achieved by the unit are given as per the submitted table.</p>	<p><b>additional stack will be added due to proposed expansion.</b></p> <p>From the unit, PM, SO<sub>2</sub>, NO<sub>x</sub> and Mercury (Hg) are generated as flue gas-critical pollutants due to the 40 TPH Boiler operation.</p> <p>To control flue gas emissions, adequate stack height (70 m) is provided to the Boiler. Provided Electrostatic Precipitator (ESP) and Auto lime dosing system/ wet alkali scrubber as an APCS. Existing standards with respect to each pollutant, standards for the unit that are located within the CPA, and standards that are achieved by the unit are given as per the submitted table.</p>
	ii. CEMS may be installed in all large/medium red category industries (air polluting) and connected to SPCB and CPCB server.	<p><b>Complied</b></p> <p>The unit falls under the large-scale red category of industries. CEMS is already installed and connected with GPCB and CPCB server.</p>	<p><b>Will be Complied</b></p> <p>After the proposed EC expansion in project activities, the project will remain under the large-scale (project cost &gt; Rs. 50.00 cr) red category of industries. CEMS is already installed and same will be continued. During proposed expansion no new stack will be added.</p>
	iii. Effective fugitive emission control measures should be imposed in the process,	<p><b>Complied.</b></p> <p>The unit has already installed dust curtains; coal is transferred via a closed-loop system and stored in covered shed. All transportation trucks are covered with tarpaulin sheets during</p>	<p><b>Will be Complied.</b></p> <p>After the proposed EC expansion in project activities, all the existing practices mentioned herewith are being followed by the</p>

Environment	Mitigation Measures	Compliance	
		Compliance at Existing Scenario	Compliance after Proposed EC Expansion Related Mfg. Activities
	transportation, packing etc.	<p>transportation for effective fugitive emission control.</p> <p>Vehicle speed is maintained, and a pucca road is provided within the premises.</p>	<p>unit to control the fugitive emissions.</p> <p>Coal is/will be stored in the covered shed, and water sprinkling will be carried out at the internal road as well as in the coal and fly ash storage areas.</p>
	iv. Transportation of materials by rail / conveyor belt, wherever feasible.	<p><b>Complied.</b></p> <p>All the materials are transported in the truck or tempo, and the covered truck is used for the transportation of powdered or liquid materials.</p> <p>Valid PUC vehicles are used for transportation activities.</p> <p>For transportation, loading &amp; unloading of coal, closed conveyor belt system is provided.</p>	<p><b>Will be Complied.</b></p> <p>After the proposed EC expansion in project activities, the unit will continue to maintain the same as below;</p> <p>After the proposed EC expansion in project activities, the unit will continue to maintain the same as below:</p> <ul style="list-style-type: none"> <li>• Transportation of materials will be carried out by truck, and the loaded vehicles will be covered with a tarpaulin sheet.</li> <li>• Valid PUC vehicles will be used for the transportation activities.</li> <li>• For transportation, loading &amp; unloading of coal, closed conveyor belt system and same will be continued.</li> </ul>
	v. Encourage use of cleaner fuels (Pet Coke / Furnace Oil / LSHS may be avoided).	<p><b>Complied.</b></p> <p>At present, Imported Coal/ Lignite is used as a fuel in the Boiler. Unit is not using Pet Coke / Furnace Oil / LSHS.</p>	<p><b>Will be Complied.</b></p> <p>After the proposed expansion-related activities, the unit will use imported coal/ lignite in the Boiler.</p> <p>Pet coke, furnace oil, or LSHS will not be used as fuel in any case.</p>

Environment	Mitigation Measures	Compliance	
		Compliance at Existing Scenario	Compliance after Proposed EC Expansion Related Mfg. Activities
	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.	<p><b>Complied.</b></p> <p>Raw materials and products are handled through a closed-loop system.</p> <p>For the effluent treatment plant, Primary and secondary treatment has been provided.</p> <p>Energy-efficient devices are used at the pumps and motors to avoid high voltage frequencies and save electricity.</p>	<p><b>Will be Complied.</b></p> <p>After the proposed expansion-related activities, raw materials and products will be handled through a closed-loop system.</p> <p>PP has planned to modify the existing manufacturing process by installing the new pre-treatment facility <i>i.e.</i> Dissolved Air Floatation (DAF) system. This system is efficient and part of effluent generated from process before any treatment in ETP will be reused back to process through this facility.</p> <p>Energy-efficient devices will be provided with all pumps and motors to avoid high voltage frequencies and save electricity.</p>
	vii. Increase of green belt cover by 40% of the total land area beyond the permissible requirement of 33%, wherever feasible.	<p>At present, the unit has developed a 500.00 m<sup>2</sup> greenbelt area within the premises.</p> <p>Shah Paper Mills have already developed 1950 m<sup>2</sup> the Green Belt in GIDC Industrial Estate. Shah Paper Mills Ltd has developed Green Belt area 7300 m<sup>2</sup> in the Notified Area Authority Green Space.</p>	<p><b>Will be Complied.</b></p> <p>After the proposed EC expansion-related activities, the unit will develop 8000 m<sup>2</sup> Green Belt Development &amp; Maintenance at Vapi Industrial Estate jointly with Green Society of Vapi Industries Association (VIA) outside plant premise and will develop 1500 m<sup>2</sup> within plant premise.</p> <p>Total green belt area development outside the plant premises will be 17250</p>

Environment	Mitigation Measures	Compliance	
		Compliance at Existing Scenario	Compliance after Proposed EC Expansion Related Mfg. Activities
			<p>m<sup>2</sup> (36.22 %) including existing and proposed.</p> <p>Total green belt development considering inside and outside the premises will be 19250 m<sup>2</sup> (40.42%).</p>
	viii. Stipulation of greenbelt outside the project premises such as avenue plantation, plantation in vacant areas, social forestry, etc.	<p>The unit is developed within the premises.</p> <p>Unit will develop additional greenbelt outside the plant premises (at the roadside adjacent to the plot), such as avenue plantations, plantations in vacant space, social forestry, roadside, etc., and maintain the same.</p>	<p><b>Will be Complied.</b></p> <p>The unit will develop additional greenbelt outside the plant premises (at the roadside adjacent to the plot), such as avenue plantations, plantations in vacant space, social forestry, roadside, etc., and maintain the same.</p> <p>The PP will participate with other local social forestry organizations for greenbelt development and maintenance activities.</p>
	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.	<p><b>Complied.</b></p> <p>At present, a 6.0 to 7.50 meter-wide in-house road is provided at the periphery and surrounds the production plant and material storage area inside the industrial premises.</p> <p>An adequate width of road exists within the premises.</p>	<p><b>Will be Complied.</b></p> <p>After the EC expansion-related activities, the 6.0 to 7.50 meter-wide in-house road shall be kept as it is. There will be no reduction in the width of the existing road within the premises.</p>
Water	<p>Stipulation of conditions such as:</p> <p>i. Reuse/recycle of treated wastewater, wherever feasible.</p>	<p><b>Complied.</b></p> <p>At present the total Industrial wastewater generation from Process, Cooling Tower &amp; Boiler Blow Down is 7495 KLD. 7370 KLD waste water</p>	<p><b>Will be Complied.</b></p> <p>After the EC expansion-related activities, total Industrial waste water generation from Process, Cooling Tower &amp; Boiler Blow</p>

Environment	Mitigation Measures	Compliance	
		Compliance at Existing Scenario	Compliance after Proposed EC Expansion Related Mfg. Activities
		<p>is recycled in process. 125 KLD is being sent to CETP Vapi after treatment in Primary secondary effluent treatment plant.</p> <p>At present, Domestic waste water (8 KLD) is passed through Septic Tank/Soak Pit System.</p>	<p>Down will be 10894 KLD, out of which 10519 KLD will be recycled back in process, coal wetting/ash quenching. 375 KLD of wastewater will be sent to CETP Vapi after treatment for further treatment and disposal.</p> <p>Domestic sewage (28 KLD) will be treated in Sewage treatment plant and treated water will be reused in the gardening.</p>
	ii. Continuous monitoring of effluent quality/quantity in large and medium Red Category Industries (water polluting).	<p><b>Complied</b></p> <p>The unit has installed magnetic flow meter at line going to CETP for further treatment and disposal.</p>	<p><b>Will be Complied</b></p> <p>Magnetic flow meter is already installed and same will be continued after proposed expansion.</p>
	iii. A detailed water harvesting plan may be submitted by the project proponent.	<p><b>Will be Complied.</b></p> <p>An in-house rainwater harvesting structure will be provided (tank capacity: 100 KL) covering around 733 m<sup>2</sup> of roof top area, and collected rainwater will be reused for ancillary purposes within the premises.</p> <p>Recharging of ground water is not applicable as it is not permissible in a notified industrial area.</p>	<p><b>Will be Complied.</b></p> <p>An in-house rainwater harvesting structure will be provided (tank capacity: 100 KL) covering around 733 m<sup>2</sup> of roof top area, and collected rainwater will be reused for ancillary purposes within the premises.</p>
	iv. Zero liquid discharge wherever techno-	<p>The existing unit has a valid membership and GPCB consent for the discharge of</p>	<p><b>Will be Complied.</b></p> <p>After the proposed EC expansion-related activities,</p>



Environment	Mitigation Measures	Compliance	
		Compliance at Existing Scenario	Compliance after Proposed EC Expansion Related Mfg. Activities
	economically feasible.	<p>125 KLD of treated effluent into CETP Vapi.</p> <p>Domestic sewage (8.00 KLD) is disposed of in a septic tank or soak pit system.</p> <p>A valid CC&amp;A letter is attached as per Annexure.</p>	<p>due to the availability of additional discharge acceptance from CETP, Vapi, the unit will discharge 375 KLD of effluent to CETP, Vapi, for better management of wastewater and for further treatment and final disposal.</p> <p>Domestic wastewater (28.00 KLD) will be treated in Sewage treatment plant and treated water will be reused in the gardening.</p> <p>The CETP membership letter is attached as per Annexure.</p>
	v. In case, domestic waste water generation is more than 10 KLD, the industry may install STP.	Domestic waste water generation is 8.00 KLD only (<10 KLD). Hence, STP is not installed.	<p><b>Will be Complied.</b></p> <p>After the proposed EC expansion the domestic waste water generation will be 28 KLD will be treated in Sewage treatment plant and treated water will be reused in the gardening.</p>
Land	<p>Stipulation of conditions such as:</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>At present, the unit has developed a 500.00 m<sup>2</sup> greenbelt area within the premises.</p> <p>Shah Paper Mills have already developed 1950 m<sup>2</sup> the Green Belt in GIDC Industrial Estate. Shah Paper Mills Ltd has developed Green Belt area 7300 m<sup>2</sup> in the Notified Area Authority Green Space.</p>	<p><b>Will be Complied.</b></p> <p>After the proposed EC expansion-related activities, the unit will develop 8000 m<sup>2</sup> Green Belt Development &amp; Maintenance at Vapi Industrial Estate jointly with Green Society of Vapi Industries Association (VIA) outside plant premise and will develop 1500 m<sup>2</sup> within plant premise.</p> <p>Total green belt area development outside the plant premises will be 17250 m<sup>2</sup></p>

Environment	Mitigation Measures	Compliance	
		Compliance at Existing Scenario	Compliance after Proposed EC Expansion Related Mfg. Activities
			(36.22 %) including existing and proposed.  Total green belt development considering inside and outside the premises will be 19250 m <sup>2</sup> (40.42%).
	ii. Stipulation of greenbelt outside the project premises such as avenue plantation, plantation in vacant areas, social forestry, etc.	The unit will develop additional greenbelt outside the plant premises (at the roadside adjacent to the plot), such as avenue plantations, plantations in vacant space, social forestry, roadside, etc., and maintain the same.	<b>Will be Complied.</b>  The unit will develop additional greenbelt outside the plant premises (at the roadside adjacent to the plot), such as avenue plantations, plantations in vacant space, social forestry, roadside, etc., and maintain the same.  The PP will participate with other local social forestry organizations for greenbelt development and maintenance activities.
	iii. Dumping of waste (fly ash, slag, red mud, etc.) may be permitted only at designated locations approved by SPCBs / PCCs.	<b>Complied.</b>  At present, fly ash is generated and it is sent to Brick manufacturing industry.	<b>Will be Complied.</b>  As per the existing scenario after expansion also unit will continue to send the generated fly ash to brick manufacturing industry.
	iv. More stringent norms for management of hazardous waste. The waste generated should be preferably utilized in co-processing.	<b>Complied</b>  ETP waste, Plastic waste, Used oil and Discarded containers are generated by the unit, and they are managed and disposed of as per the HWM Rules 2016.	<b>Will be Complied.</b>  After the proposed EC Expansion, no additional categories of waste will be generated from the unit. ETP waste, Plastic waste, Used oil and Discarded containers are generated by the unit, and they are managed and disposed of as per the HWM Rules 2016.

Environment	Mitigation Measures	Compliance	
		Compliance at Existing Scenario	Compliance after Proposed EC Expansion Related Mfg. Activities
		<p>Deinking sludge is generated from the unit, which will be used as fuel in boiler.</p> <p>Category wise quantity and management of each waste are as below:</p>	
Other Condition (Additional)	i. Monitoring of compliance of EC conditions may be submitted with third party audit every year.	At present, the unit has not started expansion-related activities like those mentioned in the EC. The unit is complying with all applicable conditions mentioned in the CC&A.	<b>Will be Complied.</b> After the proposed EC expansion-related activities, monitoring compliance with the EC conditions will be carried out through a GPCB-approved Schedule II auditor or NABL-accredited laboratory, and compliance reports will be submitted regularly to the respective authorities.
	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.	<b>Complied.</b> At present, no CER is applicable to this unit. However, unit is engaged in social and welfare activities in nearby villages and spent about Rs. 38 Lakhs in last three years.	<b>Will be Complied.</b> As per the EIA, the expansion project cost will be Rs. 76.64 crore, and to comply with the mentioned Oms and in view of the expansion project, 2% (1% as per the mentioned OM + 1% additional as the project location is in CPA), <i>i.e.</i> , a total of Rs. 153.28 lacs, will be spent under the CER activities.  The following activities will be carried out under CER: <ul style="list-style-type: none"> <li>• 20.00 Lacs shall be spent on Necessary equipments and Kits distribution in schools/anganwadi.</li> <li>• 60.00 Lacs shall be spent on Skill Development program.</li> </ul>

Environment	Mitigation Measures	Compliance	
		Compliance at Existing Scenario	Compliance after Proposed EC Expansion Related Mfg. Activities
			<ul style="list-style-type: none"> <li>• 33.28 Lacs shall be spent on Provision of tree guard for planted trees.</li> <li>• 40.00 Lacs shall be spent on Deepening of ponds and lakes for rain water collection.</li> </ul> <p>The mentioned activities will be carried out in villages located within a 10-kilometer radius of the project site.</p>

**Written submission by the PP:**

62.9.21 During the meeting, based on the deliberations made by the EAC, the project proponent vide letter dated 05.07.2024 through email dated 05.07.2024 submitted the following information:

**1. Justification regarding Non applicability of EC under EIA Notification, 1994 & 2006.**

**Reply of PP:**

S. No.	Notification	Compliance
1.0	<b>EIA notification 27/01/1994</b> S. No. 25 (Pulp, Paper & News Prints having investment >100 Cr for new project & > 50 Cr for expansion	PP has obtained CTE of GPCB for the manufacture of writing/printing paper with capacity of 1800 TPM on 21/04/1997. PP has started unit on 22/01/1998 for which PP has obtained CTO for the manufacture of writing/printing paper with capacity of 1500 TPM. At the time of CTE/CTO application, total project cost was less than Rs. 50 Crore. Hence, EIA notification 1994 is not applicable to the unit which was less than 100 Crore, hence EIA notification 27/01/1994 .
2.0	<b>EIA notification 14/09/2006</b> 5(i) Pulp & paper industry (excluding manufacturing of paper from waste paper and manufacture of paper from ready pulp without bleaching)	PP has obtained CTE of GPCB for the manufacture of writing/printing news paper with additional capacity of 450 TPM on 20/03/2003 and also obtained CTO for the same. After that; PP hs obtained CTE of the GPCB for expansion project on 26/05/2006 for manufacture of printing/writing news paper with capacity of 800 TPM (existing 1950 TPM + additional 800 TPM= total 2750 TPM).  After obtaining CTE, PP has obtained CTO for total 2750 TPM on 18/11/2006.

S. No.	Notification	Compliance
		<p>Meanwhile EIA notification 14/09/2006 was published by MoEF, New Delhi i.e. 5(i) Pulp &amp; paper industry (excluding manufacturing of paper from waste paper and manufacture of paper from ready pulp without bleaching)</p> <p>As per said EIA notification, the expansion project i.e. for additional production capacity 800 TPM was covered as PP has obtained CTO for additional production capacity on 18/11/2006 i.e. after EIA notification dated 14/09/2006.</p> <p>Meanwhile, MoEF (IA division) has published circular on 21/11/2006 i.e. Such projects for which NOCs issued before 14<sup>th</sup> September, 2006 will not be required to take Environmental Clearance under the EIA Notification, 2006.</p> <p>As per said circular, PP were exempted from the EIA notification dated 14/09/2006, as they have obtained CTE for total 2750 TPM production capacity before 14/09/2006.</p> <p>Moreover, the project cost in the year of 2006 is less than Rs. 50 Crore. Hence, EIA Notification 1994 and 2006 are not applicable.</p>
3.0	EIA notification 14/09/2006 and S.O.1599 (E) dated 25th June, 2014	Unit had obtained CTE expansion from 2750 TPM to 5500 TPM in 11.06.2013 and based on the same, PP also obtained CTO for the same from the GPCB. As bleaching was not involved in manufacturing process. Hence, EIA Notification 2006 and 2014 was not applicable.

To justify above fact, PP has submitted all the copies of CTE/CTO and CA Certificates. Moreover, PP has also submitted regarding non violating of EIA notification 1994, 2006 and its amendment thereafter.

**2. MoU/ Membership for CETP and TSDF Site for disposal of treated waste water and ETP sludge.**

**Reply:** MoU/ Membership for CETP and TSDF Site for disposal of treated waste water and ETP Sludge is submitted.

**3. Sludge Handling Process.**

**Reply:** We have well developed sludge handling system from generation, storage to end use. Generated deinking sludge will be dry up to 30% moisture content and after that same

is mix with coal and use as fuel in Boiler. After receipt of OM for removal of deinking sludge from hazardous waste category through MoEF, dated 8.8.2027, we have obtained permission for using deinking sludge as fuel in boiler from Gujarat state pollution control board (GPCB) via AWH-120703 dated: 05/08/2022.

➤ **Storage area and capacity:**

PP has provided designated storage area for our generated de-inking sludge with having storage capacity of 900 Sq. meter. That is adequate size to store 1500 MT deinking sludge.

➤ **Appropriate mechanized system for mixing of coal and de-inking sludge:**

PP has provided mechanical conveyor system/auto-feeding system to feed premix fuel and sludge into Boiler. Ash generated from boiler is stored in silo and disposed to Brick Manufacturer. We have MOU with brick manufacturer M/s. R M Suppliers, Vapi.

**4. Details of green belt as per CPA condition, area bifurcation and Nos of trees to be planted along with MoUs as form affidavit.**

**Reply:** To full fill the requirement of 40% greenbelt of total plant area to meet CEPI guideline, we have allocated 2000 Sq.meter (i.e 4.20%) of greenbelt within the plant premises. Moreover, Unit has already developed 9250 Sq.meter (i.e. 19.42%) area as greenbelt within GIDC area. Additionally, unit will develop 8000 m<sup>2</sup> (16.80 %) Green Belt and maintain the same at Vapi Industrial Estate jointly with Green Society of Vapi Industries Association (VIA) and sign MOU vide letter no VIA/2023-24/0295 dated 17.10.2023 and already paid Rs. 36,00,000/- as development cost and will pay Rs. 30,72,000/- as maintenance cost for 4 years. Area Bifurcation along with numbers of trees is given as under:

**Greenbelt Development to meet the CEPI guideline.**

Plot Details	Nos. of trees	Area (m <sup>2</sup> )	Area (Ha)	Percentage (%)
In premise	Existing - 130 Proposed - 380	2000	0.2	4.20
In GIDC – Plot no. 312 (Shah Paper owned Plot) and Outside area of industrial Plot No.308, near sardar chowk water tank and near Chanod water tank	Existing - 2315	9250	0.925	19.42
In Association with Vapi Industrial Estate (VIA)	Proposed - 2000	8000	0.8	16.80
<b>Total</b>	<b>4825</b>	<b>19250</b>	<b>1.925</b>	<b>40.42</b>

\* Supporting document stating the above fact is submitted and affidavit for the same is also submitted.

**5. Raw Data for Air Modelling to identify incremental pollution load.**

**Reply:** Raw data for Air Modelling to identify incremental pollution load due to proposed expansion is submitted.

**6. Detail Action plan for public hearing including PH activities.**

**Reply:** Unit has proposed detailed PH Action Plan along with year wise budget based on discussion held during Public hearing. Under this plan, the proponent has allocated a budget of Rs. 153.28 Lakhs i.e. 2 % of the expansion cost of Rs. 76.64 crore to be spent within a period of 5 years.

S. No	Description	Villages	Years					Total (Lakhs)
			1 <sup>st</sup>	2 <sup>nd</sup>	3 <sup>rd</sup>	4 <sup>th</sup>	5 <sup>th</sup>	
1.	Necessary equipments and Kits distribution in schools/Anganwadi	Bhilad, Chhiri	4.00	4.00	4.00	4.00	4.00	<b>20.00</b>
2.	Skill Development program like ITI course	Angam, Punat	0.00	0.00	20.00	20.00	20.00	<b>60.00</b>
3.	Provision of tree guard for planted trees	Chanod, Chharwada	6.656	6.656	6.656	6.656	6.656	<b>33.28</b>
4.	Deepening of ponds and lakes for rain water collection & donation in Sports activity	Borlai, Rata, Paria	0.00	0.00	0.00	20.00	20.00	<b>40.00</b>
	<b>Total (Rs. in Lakhs)</b>		<b>10.656</b>	<b>10.656</b>	<b>30.656</b>	<b>50.656</b>	<b>50.656</b>	<b>153.28</b>

More over unit is actively undertaking many CSR activities and allocating financial budget towards CSR activities every year. The CSR Budget along with activity for the financial year 22-23 and 23-24 is given in the following table.

S. No.	CSR Activity	Activity in Detail	Budget (Rs.)
1.	Education	Training to promote nationally recognised sports,	5,00,000
2.	Charitable trust for poor & needy people	Gnyan Dham Vapi Charitable Trust - School	5,00,000
3.	Public Welfare	IIT RoorKee Development Foundation	10,00,000
4.	Public Welfare	Surat Manav Seva Sangh	2,55,000
5.	Charitable trust	Muskan Trust	1,08,000
6.	Education	Z. H. Shah Sarvajanik High School	5,81,729
		<b>F.Y. 2022-23 Total</b>	<b>29,44,729</b>

S. No.	CSR Activity	Activity in Detail	Budget (Rs.)
1.	Charitable trust	Rotary Charitable Trust Vapi	7,500
2.	Education	Z.H. Shah Sarvajanic High School	4,18,338
3.	Charitable trust	Oswal Charities	11,00,000
4.	Public Welfare	Pujyapad Sant Shri Asharam Gaushala Samiti Niwai	22,00,000
5.	Charitable trust	Raginiben Bipinchandra Seva Karya Trust	22,00,000
		<b>F.Y. 2023-24 Total</b>	<b>59,25,838</b>
	<b>Total</b>		<b>8870567</b>

**7. Details about the no of trees to be planted with reference to employee in EK Ped Maa Ke Naam campaign.**

**Reply:** PP gives commitment towards the development of trees as per campaign” EK Ped Maa Ke Naam”. PP will plant 150 nos of trees within premises under this campaign and submit the same with geo tagging photographs along with name plate within 1 month.

**Deliberations by the Committee**

62.9.22 The Committee noted the following:

1. The instant proposal is for expansion of paper manufacturing from Waste Paper Based Mills through enhancement of production from 5500 to 9000 TPM.
2. The existing project was initially operational based on CTE dated 21.04.1997 obtained from GPCB for the manufacture of writing/printing paper with capacity of 1800 TPM. EC was not applicable to existing unit as it was investment cost was Rs. 41.27 Crore which was less than Rs. 100 Crore. Further, PP had obtained CTE expansion from 2750 TPM to 5500 TPM in 11.06.2013. As bleaching was not involved in manufacturing process. Hence, EIA Notification 2006 was not applicable to the instant project. The latest Consent to Operate for the existing unit was accorded by Gujarat Pollution Control Board vide Ir. no. AWH-120703 dated 05.08.2022. The validity of CTO is up to 30.06.2027.
3. The EAC, constituted under the provision of the EIA Notification, 2006 comprising Expert Members/domain experts in various fields, examined the proposal submitted by the Project Proponent in desired format along with EIA/EMP reports prepared and submitted by the Consultant accredited by the QCI/ NABET on behalf of the Project Proponent.
4. The EAC noted that the Project Proponent has given an undertaking that the data and information given in the application and enclosures are true to the best of his knowledge and belief and no information has been suppressed in the EIA/EMP reports. If any part of data/information submitted is found to be false/ misleading at any stage, the project will be rejected and Environmental Clearance given, if any, will be revoked at the risk and cost of the project proponent.



5. The Committee noted that the EIA reports are in compliance of the ToR issued for the project, reflecting the present environmental status and the projected scenario for all the environmental components. The Committee deliberated on the proposed mitigation measure towards Air, Water, Noise and Soil pollutions. The Committee suggested that the storage of toxic/explosive raw materials/products shall be undertaken with utmost precautions and following the safety norms and best practices.
6. The EAC also took into consideration the drone survey of the project site and kml file on the Google Earth presented by the project proponent along with DSS of the project site on PARIVESH and made following deliberations accordingly.
7. Total project area is 4.7625 Ha [Private: 0.8512 ha; Govt.: 3.9113 ha]. The total plant area is already under the possession of the company and has been converted for industrial purpose. No additional land is involved for expansion.
8. The proposed falls in CPA of GIDC Vapi. The EAC deliberated on the action plan in compliance to CEPI guidelines submitted by the project proponent as detailed in relevant para above and is of the opinion that action plan shall be strictly implemented.
9. As reported, Chanod is at a distance of 1.03 km in South of project site along other sensitive areas such as Health centres etc. within the study area of the project site. The EAC opined that proponent shall take appropriate environmental safeguard measures to minimise the impact on the habitation of the locals. The project proponent needs to strengthen green belt all around the plant area to reduce the dust pollution. The PP shall also include some of these locations in its environmental monitoring programme.
10. As reported, there are water bodies within the study area of the project site. The EAC opined 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 implemented.
11. The water requirement for the proposed expansion project is estimated as 12712.00 m<sup>3</sup>/day, out of which 2219.00 m<sup>3</sup>/day of fresh water requirement will be obtained from the GIDC water supply department and the remaining requirement of 10493.00 m<sup>3</sup>/day will be met from the Recycled water (from Processing and Boiler). The EAC deliberated on the water requirement is of the opinion that PP shall obtain necessary permission from the Competent Authority in this regard.
12. The Committee has deliberated on the baseline data and incremental GLC due to the proposed project and observed that PM<sub>2.5</sub> and PM<sub>10</sub> values are recorded on a higher side. The EAC opined that PP shall undertake stringent measures to minimise the levels of PM<sub>2.5</sub> and PM<sub>10</sub>.
13. It is reported that 1 Schedule-I species - Indian Peafowl (Pavocristatus) was found within 10 km radius of the study area of the plant site. PP has reported that Conservation Plan has been prepared and submitted to the forest department on 16.02.2022 for approval. The EAC opined that PP shall strictly comply with the recommendations made in the Wildlife Conservation Plan as per the approval.

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 PP has submitted that existing green belt has been developed in 0.05 ha area which is about 1.05 % of the total project area of 4.7625 ha with total sapling of 130 Nos. Trees. Proposed greenbelt will be developed in 0.15 ha which is about 3.15 % of the total project area within premises. 0.925 Ha which is about 19.42 % of the total project area has been developed outside plant premise and 0.80 Ha will be developed outside premise which is about 16.80% of the total project area. Thus total of 1.925 ha area (40.42 % of total project area) will be developed as greenbelt. Total no. of 2850 saplings will be planted and nurtured in 0.95 hectares in 2 years. The EAC deliberated on the greenbelt layout plan and is of the opinion that greenbelt shall be completed within a period of 1 year.
16. The committee deliberated details of carbon foot prints and carbon sequestration study w.r.t. proposed project and found them to be satisfactory.
17. The Committee deliberated on the certified compliance report and found it satisfactory.
18. The EAC also deliberated on the written submission of the project proponent 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.
21. The EAC also reviewed the EC conditions (specific and general) pertaining to Industry-I projects and observed that some of the specific conditions stipulated so far in the previously recommended EC projects are common and applicable to most of the projects in general. In view of the same, the General Conditions (in case of EC projects) have been revised through reallocation of these common conditions from specific to General Conditions (in case of EC projects). Accordingly, the instant project is also being stipulated with the modified General conditions.

**Recommendations of the Committee:**

- 62.9.23 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 portal** under the provisions of EIA Notification, 2006 subject to the stipulation of following specific conditions and general conditions based on project specific requirements:

**A. Specific Condition:**

- i. **This Environmental clearance is granted subject to final outcome of Hon'ble Supreme Court of India, Hon'ble High Court, Hon'ble NGT and any other Court of Law, if any, as may be applicable to this project.**
- ii. The project proponent shall comply with all the environmental protection measures and safeguards proposed in the documents submitted to the Ministry. All the recommendations made in the EIA/EMP in respect of environmental management, and risk mitigation measures relating to the project shall be implemented.
- iii. The project proponent shall utilize modern technologies for capturing of carbon emitted and shall also develop carbon sink/carbon sequestration resources capable of capturing more than emitted. The implementation report shall be submitted to the IRO, MoEF&CC in this regard.
- iv. 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.
- v. As reported, Chanod is at a distance of 1.03 km in South of project site along other sensitive areas such as Health centres etc. within the study area of the project site. Proponent shall take appropriate environmental safeguard measures to minimise the impact on the habitation of the locals. The project proponent needs to strengthen green belt all around the plant area to reduce the dust pollution. The PP shall also include some of these locations in its environmental monitoring programme.
- vi. As reported, there are water bodies within the study area of the project site. A robust and full proof Drainage Conservation scheme to protect the natural drainage and its flow parameters; along with Soil conservation scheme and multiple Erosion control measures shall be implemented.
- vii. Total water requirement of 12712.00 m<sup>3</sup>/day, shall be obtained from GIDC water supply (2219.00 m<sup>3</sup>/day) and the remaining from the Recycled water (from Processing and Boiler) (10493.00 m<sup>3</sup>/day). PP shall obtain necessary permission from the Competent Authority in this regard.
- viii. PP shall undertake stringent measures to minimise the levels of PM<sub>2.5</sub> and PM<sub>10</sub>.
- ix. Three tier Green Belt shall be developed in atleast 40% of the project area, as committed, 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 sensitive areas nearby project site. Compliance status in this regard, shall be submitted to concerned Regional Office of the MoEF&CC.

- x. The PP is advised to implement the 'Ek Ped Maa Ke Naam' Campaign which was launched on 5<sup>th</sup> June 2024 on the occasion of the World Environment Day to increase the forest cover across the Country.
- xi. All the commitments made towards socio-economic development of the nearby villages shall be satisfactorily implemented. The action plan based on the social impact assessment study of the project as per the EMP in accordance to the Ministry's OM dated 30.09.2020 amounting to Rs. 1.54 Crores shall be strictly implemented and progress shall be submitted to the Regional Office of MoEF&CC.
- xii. The project proponent shall undertake village adoption programme and prepare and implement the action plan to develop them into a model village.
- xiii. 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.
- xiv. CO sensors with alarm shall be installed at strategic locations inside the Plant.

## **B. General Conditions**

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

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

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

- i. The project proponent shall install 24x7 continuous emission monitoring system at process stacks to monitor stack emission as well as Continuous Ambient Air Quality Station (CAAQMS) for monitoring AAQ parameters with respect to standards prescribed in Environment (Protection) Rules 1986 as amended from time to time. The CEMS and CAAQMS shall be connected to SPCB and CPCB online servers and calibrate these systems from time to time according to equipment supplier specification through labs recognized under Environment (Protection) Act, 1986 or NABL accredited laboratories.
- ii. The project proponent shall carryout Continuous Ambient Air Quality monitoring for common/criterion parameters relevant to the main pollutants released (e.g. PM<sub>10</sub> and PM<sub>2.5</sub> in reference to PM emission, and SO<sub>2</sub> and NO<sub>x</sub> in reference to SO<sub>2</sub> and NO<sub>x</sub> emissions) within and outside the plant area covering upwind and downwind directions.
- iii. The project proponent shall monitor fugitive emissions in the plant premises at least once in every quarter through laboratories recognized under Environment (Protection) Act, 1986 or NABL accredited laboratories.
- iv. Sampling facility at process stacks shall be provided as per CPCB guidelines for manual monitoring of emissions.
- v. Appropriate Air Pollution Control (APC) system shall be provided for all the dust generating points including fugitive dust from all vulnerable sources, so as to comply prescribed stack emission and fugitive emission standards.

- vi. The project proponent shall provide leakage detection and mechanized bag cleaning facilities for better maintenance of bags.
- vii. Sufficient number of mobile or stationery vacuum cleaners shall be provided to clean plant roads, shop floors, roofs, regularly.
- viii. Ensure covered transportation and conveying of raw material to prevent spillage and dust generation. The project proponent use leak proof trucks/dumpers carrying coal and other raw materials and cover them with tarpaulin.
- ix. The project proponent shall provide primary and secondary fume extraction system at all heat treatment furnaces.
- x. Wind shelter fence and chemical spraying shall be provided on the raw material stock piles.
- xi. Design the ventilation system for adequate air changes as per prevailing norms for all tunnels, motor houses, Oil Cellars.
- xii. 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.
- xiii. Bag filters shall be cleaned regularly and efficiency of bag filter system shall be monitored at regular intervals.
- xiv. Water Sprinklers/Water mist system shall be installed near raw material yards, operational units and other strategic locations to control fugitive emissions from the plant.
- xv. The particulate matter emissions from the process stacks shall be less than 30 mg/Nm<sup>3</sup> and measures shall be undertaken as per the submitted action plan. Efficient Air monitoring equipment shall be installed.
- xvi. The project proponent shall install high volume, low concentration NCG collection & destruction system to mitigate all malodorous gases emitted.
- xvii. Emissions shall be controlled from chemical recovery section through primary and secondary venturi scrubbers.
- xviii. Pollution control system in the pulp and paper plant shall be provided as per the CREP Guidelines of CPCB.
- xix. The company shall install Oxygen Delignification (ODL) Plant and shall maintain AOX below 1 kg/tonne of paper production
- xx. Elemental Chlorine Free (ECF) technology shall be used and lime kiln shall be installed to manage lime sludge.
- xxi. During operational phase at Captive Power Plant, Action Plan to monitor coke/coal dust exposures in different process plants using personal and area air samplers and to compare with permissible limits as per Indian Factories Act, 1948 shall be implemented.
- xxii. The coal dust should be monitored at coal unloading, crushing, furnace areas and should be within 2 mg/m<sup>3</sup>, respirable dust fraction containing less than 5% quartz as per Indian Factories Act, 1948.

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

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

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

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

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

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

## **VI. Waste management**

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

## **VII. Green Belt**

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

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

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

- iii. Provision shall be made for the housing of construction labour within the site with all necessary infrastructure and facilities such as fuel for cooking, mobile toilets, mobile STP. Safe drinking water, medical health care, creche etc. The housing may be in the form of temporary structures to be removed after the completion of the project.
- iv. Occupational health surveillance of the workers shall be done on a regular basis and records maintained.

## **IX. Environment Management**

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

## **X. Miscellaneous**

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



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

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**Agenda No. 62.10**

**62.10 Establishment of 1.0 MTPA Beneficiation Plant, 0.6 MTPA Pellet Plant and Sponge Iron plant of 4x100 TPD along with the installation of Induction Furnace 90,000 TPA & Rolling Mill of 90,000 TPA and Captive Power Plant of 10 MW” by M/s Shashi Alloys Pvt. Ltd., located at Sy. No's 1/2, 1/3, 11/1, 11/2, 11/3, 11/4, 11/5, 11/6, 11/7, 11/8 & 14/2 of Bhairanayakanahatti Village, Nayakanahatti Hobli, Challakere Taluk, Chitradurga District, Karnataka- Consideration of Environmental Clearance.**

**[Proposal No.: IA/KA/IND1/462863/2024; File No. IA-J-11011/267/2022-IA-II(IND-I)]  
[Consultant: Environmental Health and Safety Consultants Private Limited; Valid upto: 22/08/2024]**

62.10.1 M/s. Shashi Alloys Pvt. Ltd., has made an online application vide proposal No IA/KA/IND1/462863/2024 dated 10.06.2024 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 schedule no. S. No. 3(a) Metallurgical Industries (ferrous & non-ferrous), 2(b) Beneficiation Plants and 1(d) Thermal Power Plants under Category “A” of the schedule of the EIA Notification, 2006 and appraised at Central Level.

62.10.2 Name of the EIA consultant: M/s. Environmental Health and Safety Consultants Private Limited [List of ACOs with their Certificate/Extension Letter vide letter no. NABET/EIA/2124/RA 0241; valid up to 22.08.2024; as on June 26, 2024].

**Details submitted by Project proponent**

62.10.3 The details of the ToR are furnished as below:

<b>Date of application</b>	<b>Consideration</b>	<b>Details</b>	<b>Date of accord</b>	<b>ToR Validity</b>
07.07.2022	Standard Terms of Reference	Terms of Reference	22.07.2022	21.07.2026

62.10.4 The Project of M/s. Shashi Alloys Pvt. Ltd., located in Sy. No's 1/2, 1/3, 11/1, 11/2, 11/3, 11/4, 11/5, 11/6, 11/7, 11/8, 14/2 of Bheemgondanahalli Village, Challakere Tehsil, Chitradurga District, Karnataka State is for setting up of the new Beneficiation plant of 1.0 MTPA, Pellet plant for production of 0.6 MTPA & Sponge Iron plant for production of 0.132 MTPA along with installation of Induction Furnace 0.09 MTPA, Rolling mill of 0.09 MTPA & Captive power plant for production of 10 MW captive power.

62.10.5 Details of EDS:

<b>Details of EDS sought</b>	<b>Reply of PP</b>
It is reported that there are sensitive areas within the	Details of nearest Environmental sensitive areas in the study area as follows

Details of EDS sought	Reply of PP				
study area of the project site. PP shall submit the mitigation measures undertaken to minimize the impact of project activities on these sensitive areas.	<b>Sl. No</b>	<b>Particulars</b>	<b>Distance in Km</b>		
	1	Nearest village /Habitation	• Name of the village	• Distance from main plant area	• Distance from Project Boundary
			• Bheemagondanahalli	• 1.04 Km NE	• 420 m NE
			• Bhairanayakanahatt	• 1.12 m, NE	• 360 m, NE
	•				
	2	Nearest water body	<ul style="list-style-type: none"> <li>• One Nala passing inside the project site</li> <li>• Lake near Hosajoghatty – 1.36 Km, NE</li> </ul>		
	3	Nearest Reserve Forest	<ul style="list-style-type: none"> <li>• Open Scrub Forest (Unclassified) – 340 m, S</li> </ul>		
4	Nearest School	<ul style="list-style-type: none"> <li>• Govt. High School, Bheemgondanahalli - 485 m, NE</li> </ul>			
5	Nearest Hospital	<ul style="list-style-type: none"> <li>• Government Hospital Mustur -3.67 Km, W</li> </ul>			
<p><b>Mitigation measure to control air pollution</b></p> <ul style="list-style-type: none"> <li>• APCEs such as 5 No's of 4 field ESPs (Electro Static Precipitator) with efficiency an efficiency of 99.8 % will be provided to Pellet plant Kiln, Rotary Kilns &amp; AFBC boiler to capture the fly ash and emissions and connected with an stack heights of 2*60 m &amp; 50 m respectively.</li> <li>• 8 No's of Bag Filters will be provided to control fugitive dust emissions in Iron ore screening and handling area, Coal screening and handling area, Stock House, intermediate bin, cooler discharge, Induction furnace,</li> </ul>					

Details of EDS sought	Reply of PP
	<p>production separation building and near raw material handling area.</p> <ul style="list-style-type: none"> <li>• Unloading of Raw materials will be done at low level to reduce dust emissions.</li> <li>• Coal, ash and other raw materials will be stored in closed sheds to avoid dust emissions.</li> <li>• All the internal roads will be asphalted and water sprinklers will be provided along the internal roads and in the plant area.</li> <li>• Fume extraction system will be provided to induction furnace and dry fogging system will be provided.</li> </ul> <p><b>Mitigation measure to control Water pollution</b></p> <ul style="list-style-type: none"> <li>• There is no waste water generation from process, the water is subjected to recirculation and evaporation.</li> <li>• The generated waste water from domestic activities will be treated in 20 KLD STP and treated water will be completely used for greenbelt development. The plant is designed with Zero Liquid discharge concept and no waste water/ treated water will be discharged outside of the plant.</li> </ul> <p><b>Mitigation measure to control Noise pollution</b></p> <ul style="list-style-type: none"> <li>• Acoustic Enclosures will be provided to turbine and DG sets.</li> <li>• Silencers will be provided for major noise generated equipment/ machinery.</li> <li>• Greasing will be done regularly to the rotating parts of the equipment's / machineries to reduce noise and vibrations.</li> <li>• PPEs such as ear mufflers/ plugs will be provided to workers</li> <li>• Less noise generating equipment's will be chosen</li> </ul> <p><b>Mitigation measure to control Solid waste pollution</b></p> <ul style="list-style-type: none"> <li>• Dewatered tailing will be sold to cement industry.</li> <li>• Ash will be collected in silos and stored in closed areas.</li> <li>• Water sprinklers will be provided around the ash handling area.</li> <li>• The municipal and other solid wastes will collected separately and handling will be done in an impervious layer.</li> <li>• Segregated into organic and inorganic solid waste, Organic waste will be composted by using Vermi-composting method &amp; used as fertilizer for greenbelt within the industry and Inorganic waste will be handed over to Gowdagere Gram Panchayat.</li> </ul> <p>Detailed mitigations measures for Environmental sensitive areas are uploaded in Parivesh portal.</p>

Details of EDS sought	Reply of PP			
Under section for brief summary on the proposed baseline collection, PP shall submit the summarized baseline data collected for each parameter	The baseline data collection for proposed project is from October 2022 – December 2022. The detailed baseline data collection for each parameter is as follows			
	Season of Baseline data Collected	Post-monsoon season		
	AAQM Parameters at 10 locations	Parameters	Project Site (Max)	Study Area (Max)
	AAQ Modelling (Incremental GLCs) AERMOD CLOUD CALINE PRO	<p><b>For Rotary Kilns (4 x 100 TPD) – With Mitigation Measures</b>            PM<sub>10</sub>: 1.17 µg/m<sup>3</sup> at a distance of 488 m towards WSW            SO<sub>2</sub>: 0.16 µg/m<sup>3</sup> at a distance of 499 m towards WSW.            NO<sub>2</sub> : 0.17 µg/m<sup>3</sup> at a distance of 499 m towards WSW</p> <p><b>For Induction Furnace (90,000 TPA) - With Mitigation Measures</b>            PM<sub>10</sub>: 0.68 µg/m<sup>3</sup> at a distance of 600 m towards E.</p>		
Ground Water Quality monitored at 8 Locations	pH : 6.81 to 8.02, Total Hardness: 160 to 436 mg/L, Chlorides : 23.48 to 254.38 mg/L, TSS: 4 to 5 mg/L			

Details of EDS sought	Reply of PP	
		Fluoride : 0.52 to 1.22 mg/L, <b>Heavy metals:</b> Zn: 0.006 to 0.174 mg/L, Fe : 0.032 to 0.985 mg/L.
	<b>Surface Water Quality monitored at 6 locations (Out of 6 location, 4 locations are dry during the sample collection time &amp; sample is collected for remaining 2 location)</b>	pH : 7.12 to 8.08, BOD : 7.66 to 9.5 mg/L, COD : 24 to 40 mg/L, DO : 4.4 to 4.7 mg/L, TDS: 520 to 768 mg/L, E – Coli : 58 to 70 MPN / 100 ml, Fecal Coliform : 170 to 210 MPN/100ml, Total coliform : 2400 to 2800 MPN / 100 ml
	<b>Noise Levels at 8 locations</b>	46.42 dB(A) to 52.46 dB(A)-day time & 35.42 to 42.57 dB(A)-night time
PP shall submit the copy of entire PH proceedings including advertisements given for PH, SPCB cover letter, actual proceedings, attendance sheet, written representations & the response submitted by PP, Authenticated English translation of the PH proceedings if any.	The PH Proceedings including advertisements given for PH, SPCB cover letter, actual proceedings, attendance sheet, written representations and Authenticated/Notarized English translation of the written Kannada PH proceedings & PH photographs are uploaded in Parivesh portal.	
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 and uploaded the data accordingly. English translation of land documents authenticated from notary shall be submitted.	Total area of the project site is 21.17 Ha, out of which area of 17.14 Ha was already registered in the name of company & registration of remaining 3.78 Ha with respect to Sy. No 11/1 & 11/2 is under process and for the same an agreement has been made for land transformation. The copy of the Translated and notarized land documents & land transformation agreement are uploaded in Parivesh portal.  The industry has obtained permission from Department of Commerce & Industries, Govt. of Karnataka on 26.09.2023 for setting up of the industry for a total area of 21.17 Ha which is equivalent to industrial conversion. Copy of the Government order are uploaded in Parivesh portal.	
It is mentioned that the processing of proposal, in the Ministry, is through Parivesh Portal only. PP shall revise the complete application in	Noted and the application is revised and resubmitted.	

Details of EDS sought	Reply of PP
conformity to Ministry's requirement and resubmit the application.	

62.10.6 Environmental Site Settings:

Sl. No.	Particulars	Details	Remarks												
1	Total Land	21.17 Ha (52.32 Acres - Private land)	<b>Land use:</b> The industry has obtained permission from Department of Commerce & Industries, Govt. of Karnataka on 26.09.2023 for setting up of the industry for an area of 52.32 acres which is equivalent to industrial conversion												
2	Land acquisition details as per MoEF&CC O.M. dated 7/10/2014	There is no land acquisition involved in this project, the entire land is in the name of M/s. Shashi Alloys Pvt. Ltd.,	<b>Land conversation status</b> The industry has obtained permission from Department of Commerce & Industries, Govt. of Karnataka on 26.09.2023 for setting up of the industry												
3	Existence of habitation & involvement of R&R, if any.	Project site: No habitation exists in the project site <b>Study area</b> <table border="1"> <thead> <tr> <th>Habitation</th> <th>Distance</th> <th>Direction</th> </tr> </thead> <tbody> <tr> <td>Bhairanayakan ahatti</td> <td>360 mt</td> <td>NE</td> </tr> <tr> <td>Bheemgondan halli</td> <td>420 mt</td> <td>NE</td> </tr> <tr> <td>Hosajogihatty</td> <td>1.10 Km</td> <td>NE</td> </tr> </tbody> </table>	Habitation	Distance	Direction	Bhairanayakan ahatti	360 mt	NE	Bheemgondan halli	420 mt	NE	Hosajogihatty	1.10 Km	NE	<b>Status of R&amp;R.</b> There is no R & R involved in this Project
Habitation	Distance	Direction													
Bhairanayakan ahatti	360 mt	NE													
Bheemgondan halli	420 mt	NE													
Hosajogihatty	1.10 Km	NE													

Sl. No.	Particulars	Details			Remarks
		Point	Latitude	Longitude	
4	Latitude and Longitude of all corners of the project site.	A	14°28'9.45"N	76°28'8.63"E	
		B	14°28'9.06"N	76°28'21.47"E	
		C	14°28'14.27"N	76°28'23.40"E	
		D	14°28'12.89"N	76°28'29.69"E	
		E	14°28'27.66"N	76°28'33.54"E	
		F	14°28'28.13"N	76°28'29.34"E	
		G	14°28'23.04"N	76°28'28.68"E	
		H	14°28'23.22"N	76°28'26.19"E	
		I	14°28'19.86"N	76°28'25.75"E	
		J	14°28'18.72"N	76°28'24.27"E	
		K	14°28'20.01"N	76°28'9.36"E	
5	Elevation of the project site	660 m above mean sea level			
6	Involvement of Forest land if any	No forest land involved			
7	Water body (Rivers, Lakes, Pond, Nala, Natural Drainage, Canal etc.) exists within the project site as well as study area	<b>Project site:</b> One Nala is Passing inside the project site for that 25 mt buffer is maintained on the both side.			
		<b>Study area:</b>			
		<b>Water body</b>	<b>Distance</b>	<b>Direction</b>	
		Lake near Hosajogihatty	1.36 Km,	NE	
		Lake near Kadabankatte	5.10 Km	SW	
		Hirekere Kaval Lake	5.44 Km	SE	
		Lake near Nayakanahatti	5.75 Km	E	
Lake near Gollahalli	5.75 Km	SE			



Sl. No.	Particulars	Details	Remarks
8	Existence of ESZ/ESA/ national park/wild life sanctuary/bio sphere reserve/tiger reserve/elephant reserve etc. if any within the study area	<p><b>Study area</b> Nil</p> <p><b>List of Reserved and protected forests:</b></p> <ul style="list-style-type: none"> <li>• Open Scrub (Un-classified forest ) – 340 m, S</li> <li>• Anaburu Reserved Forest – 9 Km, NW</li> <li>• Jagaluru Reserved Forest – 12.25 Km, SW</li> </ul>	

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

Sl. No.	Plant Equipment/ Facility	Capacity
1	Beneficiation Plant for manufacturing of beneficiated iron ore	1.0 MTPA
2	Pellet Plant for manufacturing of pellets	0.6 MTPA
3	Sponge Iron plant for manufacturing of Sponge iron	400 TPD
4	Induction Furnace for manufacturing of MS billets	90,000 TPA
5	Rolling Mill for manufacturing of TMT bars	90,000 TPA
6	Captive Power plant for generation of power	10 MW

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

Sl. No.	Raw materials	Quantity (TPA)	Source	Distance	Mode of Transportation
<b>I</b>	<b>For Iron ore beneficiation Plant (10,00,000 TPA – Throughput capacity)</b>				
1	Low grade iron ore fines (0 to 5 mm & 0 to 10 mm)	10,00,000	Through E – Auction (MNDC Sandur, Chitradurga Ballari)	84 Km	By road in covered trucks
<b>II</b>	<b>For Pellet Plant – 0.6 MTPA (6,00,000 TPA)</b>				
a	Beneficiated Iron ore	6,60,000	Own plant	-	By belt conveyer
b	Bentonite	6,000	Adjacent district through supplier's i.e Sri. Venkateshwara Industries, Sri Haritha Trader	182Km	By road in covered trucks

Sl. No.	Raw materials	Quantity (TPA)	Source	Distance	Mode of Transportation
c	Coal	15,000	Imported from Mangalore Port through Suppliers i.e., Shri Laxmi Sponge Pvt. Ltd., & Shree Mahabala Ganapathi Steel Pvt. Ltd., & etc.	450 Km	By road in covered trucks
d	Limestone	7,500	Adjacent district through supplier's i.e., Sri. Venkateshwara Industries, Sri Haritha Trader	182 Km	By road in covered trucks
<b>III</b>	<b>DRI Kilns (Sponge Iron) - 1,32,000 TPA (400 TPD)</b>				
a	Iron ore pellet	1,80,000	Own plant	-	By road in covered trucks
b	Coal	1,32,000	Imported from Mangalore Port through Suppliers i.e., Shri Laxmi Sponge Pvt. Ltd., & Shree Mahabala Ganapathi Steel Pvt. Ltd., & etc	450 Km	By road in covered trucks
c	Dolomite	6,600	Adjacent district through supplier's i.e., Sri. Venkateshwara Industries, Sri Haritha Trader	184 Km	By road in covered trucks
<b>IV</b>	<b>For Steel Melting Shop with IF (Billets/ Ingots/Hot Billets) – 90,000 TPA</b>				
a	Sponge Iron	90,090	Own plant	-	By belt conveyer
b	MS Scrap/Pig Iron	29,700	Local Parties & JSW & other parties	350 Km	By road in covered trucks
c	Ferro-Alloys	3,500	From Hyderabad / Goa	385 Km	By road in covered trucks
d	Fluxes	4,400	From JSW & Other parties	300 Km	By road in covered trucks
e	Coke	720	Imported from Mangalore Port through Suppliers i.e., Shri Laxmi Sponge Pvt. Ltd., & Shree Mahabala Ganapathi Steel Pvt. Ltd., & etc.	300 Km	By road in covered trucks
<b>V</b>	<b>For Rolling Mill (TMT Bars) - 90,000 TPA</b>				

Sl. No.	Raw materials	Quantity (TPA)	Source	Distance	Mode of Transportation
a	M.S Billets	98,900	Induction Furnace	-	By belt conveyer
<b>VI</b>	<b>For Power Generation - 10 MW</b>				
a	Dolo-char	37,000	In plant generation	-	By belt conveyer
b	Coal	40,798	Imported from Mangalore Port through Suppliers i.e., Shri Laxmi Sponge Pvt. Ltd., & Shree Mahabala Ganapathi Steel Pvt. Ltd., & etc.	450 Km	By road in covered trucks

62.10.9 The water requirement for proposed project is estimated as 2020 m<sup>3</sup>/day, out of which 2000 m<sup>3</sup>/day for industrial operation will be sourced from Sewage Treatment Plant (Treated water), Chitradurga City Municipal Council and permission has been obtained vide letter No: NSC/Technical/S.K.A/CR/03/2022-23 Dtd: 13.04.2023 and 20 m<sup>3</sup>/day fresh water for the domestic activities will be sourced from Bore well and permission has been obtained from Karnataka Ground Water Authority Vide Letter No. KGWAN1593643464 Dtd: 08.12.2023.

62.10.10 The power requirement for the proposed project is 15 MW, out of which 10 MW will be sourced from own internal 10 MW Captive Power Plant & remaining 5 MW will be sourced from BESCOM.

62.10.11 Baseline Environmental Studies:

Period	October 2022 to December 2022 (Post Monsoon Season)
AAQ parameters at 10 Locations (min and max) for both in study area and project site	<ul style="list-style-type: none"> <li>• PM<sub>10</sub> = 57.9 to 67.1 µg/m<sup>3</sup></li> <li>• PM<sub>2.5</sub> = 23 to 25.6 µg/m<sup>3</sup></li> <li>• SO<sub>2</sub> = 7.28 to 8.62 µg/m<sup>3</sup></li> <li>• Nox = 13.15 to 17.65 µg/m<sup>3</sup></li> <li>• CO = 0.63 to 0.79 mg/m<sup>3</sup></li> </ul>
Incremental GLC level	<p><b>For Rotary Kilns (4 x 100 TPD) – With Mitigation Measures</b></p> <ul style="list-style-type: none"> <li>• PM<sub>10</sub> = 1.17µg/m<sup>3</sup> at a distance of 488 m towards WSW</li> <li>• SO<sub>2</sub> = 0.16 µg/m<sup>3</sup> at a distance of 499 m towards WSW,</li> <li>• Nox = 0.17 µg/m<sup>3</sup> at a distance of 499 m towards WSW</li> </ul> <p><b>For Induction Furnace (90,000 TPA) - With Mitigation Measures</b></p> <ul style="list-style-type: none"> <li>• PM<sub>10</sub>: 0.68 µg/m<sup>3</sup> at a distance of 600 m towards E.</li> </ul>
Ground water quality at 8 locations	<ul style="list-style-type: none"> <li>• pH: 6.81(GW7) to 8.02 (GW3),</li> <li>• Total Hardness: 160 mg/L (GW4) to 436 mg/L (GW2),</li> <li>• Chlorides: 23.48 mg/L (GW1) to 254.38 mg/L (GW3),</li> <li>• Fluoride: 0.52 mg/L (GW2) to 1.22 mg/L (GW4)</li> </ul> <p><b>Heavy metals:</b></p> <ul style="list-style-type: none"> <li>• Zn: 0.006 mg/L(GW4) to 0.174 mg/L (GW1),</li> </ul>

	Fe: 0.032 mg/L(GW1) to 0.985 mg/L (GW3).																									
Surface water quality at 6 locations	<ul style="list-style-type: none"> <li>pH: 8.08 (SW5) to 7.12 (SW6)</li> <li>DO: 4.4 mg/l (SW6) to 4.7 mg/l (SW5)</li> <li>BOD: 7.66 mg/l (SW5) to 9.5 mg/l (SW6)</li> <li>COD: 24 mg/l (SW5) to 40 mg/l (SW6)</li> </ul>																									
Noise levels Leq (Day and Night)	46.42 dB(A) to 52.46 dB(A)-day time & 35.42 to 42.57 dB(A)-night time																									
Traffic assessment studyfindings	<ul style="list-style-type: none"> <li>Traffic study has been conducted at study area, the project site is accessed through SH-65 is passing at a distance of 750 m in south direction followed by Bhairanayakanhatti Road (2 Lane road) which is adjacent to the project site (0 Km) &amp; NH-50 (Chitradurga - Hospet Road) is passing at a distance of 6.18 Km.</li> <li>Transportation of raw material, fuel &amp; finished product will be done 100 % by road.</li> <li>Existing PCU is 1654 PCU/hr on SH - 65 (2 Lane road) and existing level of service (LOS) is: A.</li> </ul>																									
		<b>Road</b>	<b>V</b>	<b>C</b>	<b>Existing V/C</b>	<b>Los</b>																				
		SH-65 (2- Lane undivided)	1654	15000	0.11	A																				
		<ul style="list-style-type: none"> <li>PCU load after proposed project will be 2414 (Existing + Additional) PCU/hr. and level of service (LOS) will be: A.</li> </ul>																								
		<b>Road</b>	<b>Modified V/C and LoS after adding the generated traffic</b>																							
			<b>V</b>	<b>C</b>	<b>V/C</b>	<b>LoS</b>																				
	SH - 65 (2 lanes Undivided)	2414	15,000	0.16	A																					
	<p>* <i>Note: Capacity as per IRC 64-1990 Guide line recommended design service is 15,000 PCU/day for 2 lane roads.</i></p> <p><b>Conclusion:</b> The level of service will be <b>A</b> including additional traffic due to proposed project.</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 &amp; Above</td> <td>F</td> <td>Very Poor</td> </tr> </tbody> </table>					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
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1.0 & Above	F	Very Poor																								
Flora and fauna	There is no Schedule 1 species is recorded in the study area.																									

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

Sl. No	Type of Waste	Source	Quantity generated (TPA)	Mode of Treatment/ Disposal	Remark
<b>Solid Waste</b>					
1	Tailing waste from Benefication plant	From Manufacturing process	339900	The tailings will be stacked in tailing stock pile & sold to cement factory daily basis.	
2	Ash from Pellet Plant		19800	Send to in-house Brick Manufacturing Unit for manufacturing of bricks	
3	Ash from DRI		24420	Send to in-house Brick Manufacturing Unit for manufacturing of bricks	
4	Kiln accretion slag		80	Will be given to road contractor for road constructions	
5	Slag from induction furnace		8580	Reused back to melting process	
6	ESP/ Bag filter Dust		3960	Send to in-house Brick Manufacturing Unit for manufacturing of bricks	
7	Ash from Power Plant		28380	Send to in-house Brick Manufacturing Unit for manufacturing of bricks	
8	Domestic Solid waste	From Workers	198	Segregated into organic and inorganic solid waste, Organic waste will be composted by using Vermi-composting method & used as fertilizer for greenbelt within the industry and Inorganic waste will be handed over to Gowdagere Gram Panchayat.	
<b>Hazardous Waste</b>					
1	Used Oil	DG sets	50 L/A	Will be given to M/s. SMI Industries, Tumkur	-
2	Oil Soaked Cotton Waste		0.025	Will be given to M/s. SMI Industries, Tumkur	
<b>E- Waste</b>					
1	E-Waste	From industry	0.015	Will be given to Greens Recology, Tumkur	-
<b>Plastic waste</b>					
1	Plastic waste	From industry	0.02 TPA	Will be given to M/s. Green Recycloplast Solutions Tumkur	-
<b>Bio-medical waste</b>					

Sl. No	Type of Waste	Source	Quantity generated (TPA)	Mode of Treatment/ Disposal	Remark
1	Biomedical waste	From labours	0.017 TPA	Will be given to M/s. VV Incin Solutions Pvt. Ltd., Chitradurga.	-
<b>Batteries Waste</b>					
1	Batteries	From industry	0.017 TPA	Will be given to Greens Recology, Tumkur	-

#### 62.10.13 Public Consultation:

Details of advertisement given	Local newspaper (Kannada) "Prajavani" National newspaper (English) "Indian Express" Date of paper advertisement : 11.08.2023
Date of public consultation	12.09.2023
Venue	Project site premises, M/s. Shashi Alloys Pvt. Ltd., Bhairanyakanhatti Village, Challakere Taluk, Chitradurga District
Presiding Officer	Assistant Commissioner of Chitradurga Karnataka.
Major issues raised	<ul style="list-style-type: none"> <li>▪ Air pollution, Water pollution, Noise pollution, Health problems, Loss of crops, Effect on ground water &amp; also will cause for migration.</li> <li>▪ Job opportunities, medical health check-ups, education to children's, drinking water facility, CER activities, etc.</li> </ul>

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

Sl. No.	Physical activity & action plan		Year of implementation (budget in lakhs)			Total expenditure in lakh	
			1 <sup>st</sup> year	2 <sup>nd</sup> year	3 <sup>rd</sup> year		
1	Health	Construction / Support / Refurbishment of Govt. Medical Centres/ Primary Health Center in co-ordination with Government of Karnataka Health Department	2 Units		1 Unit at Mustur	1 Unit at Hosajogihatti	70.00
					35.00	35.00	
2	Education	Renovation Government School with toilets, compound wall and playground in Hosajogihatti village	1 Units		1 Unit at Hosajogihatti		90.00
					50.00	40.00	
		Providing teaching aids/books, Furniture, Computers, library, Sports materials to schools	1Units		1 Unit at Hosajogihatti village		40.00
		Construction of 2 Model Anganwari Centre in the village. (construction of Two	2 Units		1 Unit i.e., Hosajogihatti	1 Unit i.e., Mustur	60.00

Sl. No.	Physical activity & action plan		Year of implementation (budget in lakhs)			Total expenditure in lakh	
	Name of the activity	Physical Target	1 <sup>st</sup> year	2 <sup>nd</sup> year	3 <sup>rd</sup> year		
		rooms, installation of cooler, fans & lights, furniture and other necessary furniture)		30.00	30.0		
3	Support for formers	Construction of Farm Ponds and distribution of agricultural equipment in Mustur, Hosajogihatti, Siddahalli to support formers	3 Units	1 unit at Mustur 6.00	1 unit at Hosajogihatti 6.00	1 unit at Siddahalli 6.00	18.00
4	Provision for Drinking water supply	Provision of RO drinking water facilities to Mustur & Hosajogihatti	2 Units	1 unit at Mustur 6.00	1 Unit at Hosajogihatti 6.00	-	12.00
5	Plantation in the nearby village	Planation of varies native species in surrounding village i.e Mustur, Hosajogihatti, Siddahalli	1,00,000 number	33,333 No. of sapling at mustur 33.33	33,333 No. of sapling at Hosajogihatti 33.33	33,334 No. of sapling at Siddahalli 33.34	100.0
6	Skill Development & Empowerment of Women	Distributing Sewing machines to women's in the Mustur, Hosajogihatti, Siddahalli	60 Number	20 No's at Mustur 20.00	20 No's at Hosajogihatti 20.00	20 unit at Siddahalli 20.00	60.00
7	Road facility	Modification of internal roads in Mustur, Hosajogihatti, Siddahalli villages	3 Units	1 unit at Mustur 30.00	1 unit at Hosajogihatti 30.00	1 unit at Siddahalli 30.00	90.00
8	Public bus stand with shelter	Construction of bus stand with shelter	2 Units	1 unit at Hosajogihatti 6.00	-	1 unit at Mustur 6.00	12.00
9	Solar lighting system	Provision of Solar lights and Solar Panel	40 number	-	20 No's at Mustur 9.00	20 No's at Siddahalli 9.00	18.00
<b>Total cost in Lakhs</b>				<b>76</b>	<b>250</b>	<b>244</b>	<b>570</b>
<b>Total cost in Crores</b>				<b>0.76</b>	<b>0.25</b>	<b>0.244</b>	<b>5.70</b>
<b>Revised Action plan for Public hearing issues</b>							
1	Employment	Industry will provide 400 No's of employment opportunities and Conducting training programme on self-employment such as making	3 villages	Jogihatti 3.00	Gowdagere 3.5	Hirekere kaval 3.5	10.0

Sl. No.	Physical activity & action plan		Year of implementation (budget in lakhs)			Total expenditure in lakh	
	Name of the activity	Physical Target	1 <sup>st</sup> year	2 <sup>nd</sup> year	3 <sup>rd</sup> year		
		Agarbatti by using fly ash & organic forming with modern techniques, Diary forming, Pickle making, Making cloth bags etc to Jogihatti, Gowdagere, Hirekere Kaval					
2	Health	Conducting medical camps & Health check-ups to the surrounding villagers at Hosajogihatti, Gowdagere, Mustur, Siddahalli, Jogihatti, Hirekere Kaval village	6 units	2 units@ Hosajogihatti Gowdagere 6.0	2 units @ Mustur, Siddahalli 7.0	2 Units @ Jogihatti Hirekere kaval 7.0	20.0
3	Education	Distribution of Prize money/ scholarship for the 10 <sup>th</sup> and PUC students for their higher studies	20 Students	6 No's@ Gowdagere 6.00	7 No's@ at Jogihatti 7.00	7 No's@ Hirekere kaval. 7.00	20.0
4	Road facility	Provision of RO drinking facilities to nearby villages i.e Gowdagere, Jogihatti, Hirekere Kaval & Mustur	4 units	1 unit at Gowdagere 5.0	1 unit at at Jogihatti 5.0	2 unit at Hirekere kaval & Mustur 10.0	20.0
<b>Total cost in Lakhs</b>				<b>20.0</b>	<b>22.5</b>	<b>27.5</b>	<b>70.0</b>
<b>Total cost in Crores</b>				<b>0.2</b>	<b>0.225</b>	<b>0.275</b>	<b>0.7</b>

#### Revised Village adoption & development action plan

1	Education	Development of Govt. School building & compound wall in Bheemgondanhalli	1 unit	-	-	1 unit @ Bheemgon danhalli 30.0	30.0
		Development of School playground & planation in and around schools Bheemgondanhalli & Bhiranayakanhatti	2 units	1 unit @ Bheemgon danhalli 15.0	-	1 unit @ Bhiranayak anhatti 15.0	30.0
		Construction of toilets in schools and Anganwadi in Bheemgondanhalli & Bhiranayakanhatti	8 units	4 units @ Bheemgon danhalli 10.0	-	4 units @ Bhiranayak anhatti 10.0	20.0
		Provision of water purifiers at Bheemgondanhalli & Bhiranayakanhatti Schools	2 units	-	Bheemgon danhalli 2.5	Bhiranayak anhatti 2.5	5.0
		Construction of model anganwadi in	2 units	-	Bheemgon danhalli	Bhiranayak anhatti	60.0



Sl. No.	Physical activity & action plan		Year of implementation (budget in lakhs)			Total expenditure in lakh	
	Name of the activity	Physical Target	1 <sup>st</sup> year	2 <sup>nd</sup> year	3 <sup>rd</sup> year		
		Bharianyakanhatti and modification existing in Anganwadi in Bheemgondanhalli		20.0	40.0		
2	Health	Construction of Primary Health Center with association of Govt. of Karnataka Health department in Bheemgondahalli Village	1 unit	-	Bheemgon danhalli 60.0	-	60.0
3	Infrastructure	Provision of solar lights in Bheemgondanhalli & Bhiranayakanhatti	40 No's	20 No's @ Bheemgon danhalli 10.0	-	20 No's @ Bheemgon danhalli 10.0	20.0
		Construction of Bus Stop & sitting chairs in both village	2 units	1 unit @ Bheemgon danhalli 10.0	-	1 unit @ Bhiranayakanhatti 10.0	20.0
		Development of temples with water supply & compound wall facility	2 units	1 unit @ Bheemgon danhalli 15.0	-	1 unit @ Bhiranayakanhatti 15.0	30.0
4	Water Conservation	Construction of rain water recharge structure around the village water supply bore wells & in schools	8 No's	-	4 No's @ Bheemgon danhalli 10.0	4 No's Bhiranayakanhatti 10.0	20.0
5	Sanitation	Construction of toilets to individual households	30 No's	-	15 No's @ Bheemgon danhalli 30.0	15 No's Bhiranayakanhatti 30.0	60.0
6	Women Empowerment	Provision of 50 No's of cows to womens in the village for self employment	50 No's	25 No's @ Bheemgon danhalli 70.0	25 No's Bhiranayakanhatti 70.0	-	140.0
7	Awareness program	Conducting Awareness programmes in village on recharging ground water table, Single use plastics, Hygiene, self-employment, reduction of carbon emissions by planting native species, etc	2 units	1 unit @ Bheemgon danhalli 5.0		1 unit @ Bhiranayakanhatti 5.0	10.0
<b>Total cost in Lakhs</b>				<b>135</b>	<b>192.5</b>	<b>177.5</b>	<b>505</b>
<b>Total cost in Crores</b>				<b>1.35</b>	<b>1.925</b>	<b>1.775</b>	<b>5.05</b>

62.10.14 The cost of the proposed project is Rs. 380 Crores and the capital cost for environmental protection measures is proposed as Rs. 36.75 Crores. The annual recurring cost towards the environmental protection measures is proposed as Rs. 1.80 Crores. The employment generation from the proposed project is 400 Nos Skilled, Semi-skilled and Un-skilled workers of will be taken for 3 shifts in a day from surrounding villages. The details of cost for environmental protection measures is as follows:

Sl. No	Description of Item	Capital Cost	Recurring Cost
	<b>Air Pollution Control / Noise Management</b>		
	Air Pollution Control Equipment such as Fume extraction system, dry fog system, Heat exchanger, bag filters & ESP with stack arrangements & purchasing of Vacuum cleaner	600.00	30.00
	Metallic slip seal to kiln inlet & outlets, closed wood system for collected of ESP dust, chutes for bag filters	60.00	10.00
	Provision of sheds for storage of raw materials / finished products	80.00	-
	Provision of Closed conveyor belts for carrying raw materials to kiln	100.00	4.00
i.	Tarpaulin /Geo blanket sheet coverage on raw materials and byproducts to control air pollution	20.00	5.00
	Provision of wet scrubbers	30.00	-
	Provision of water sprinklers in the industry	50.00	10.00
	Water sprinkling during construction phase to control air pollution	10.00	-
	Continuous Online Monitoring for stack emissions	45.00	5.00
	Stack arrangements for DG set & other sources of emissions	80.00	4.00
	Noise pollution control by Provision of PPEs for workers, enclosures and barriers for attenuation of noise	70.00	10.00
	Water Sprinkling with truck mounted mist system	180.00	-
	<b>Water pollution control</b>		
	Provision of mobile STP for labours during construction phase	15.00	-
	Provision of sanitation facilities such as bathrooms, toilets & provision of drinking water facilities during construction phase	30.00	-
	Installation of STP	50.00	6.00
ii.	Construction of temporary garland drains and catch pits around construction area	10.00	3.00
	Construction of recharge pits and provision of rainwater harvesting system	50.00	5.00
	Provision of Garland Drains around the tailing area	40.00	5.00
	Provision of Retaining wall around Nala & tailing stock yard	50.00	5.00
	Construction of water settling ponds	30.00	2.00
	Construction of Sediment ponds	5.00	2.00
iii.	<b>Environmental Monitoring &amp; Management</b>	2.00	13.00
iv.	<b>Provision of labour camps and raw material storage sheds during construction phase</b>	20.00	-
v.	<b>Greenbelt development within the plant</b>	18.00	25.00

Sl. No	Description of Item	Capital Cost	Recurring Cost
vi.	<b>Solid &amp; Hazardous waste management</b>	200.00	20.0
vii.	<b>Traffic management and asphaltting of internal roads</b>	70.00	7.00
viii.	<b>Provision of Solar Lighting as part of Energy Conservation measures</b>	40.00	2.00
ix.	<b>Occupational Health and Safety</b>	60.00	10.00
x.	<b>Provision of First Aid facilities &amp; safety facilities during construction phase for labors</b>	10.00	-
xi.	<b>Excavated earth storage for greenbelt development</b>	5.00	-
xii.	<b>Other required EMP activities such construction of laboratory and control room for DG sets, Transformers, STP, recruiting of security for traffic maintenance, installation of tall barricades around the construction area during construction phase, pipeline arrangement for supply of treated water from STP to greenbelt area, Provision of ash pond, installation of safety boards, caution boards, etc</b>	500	12.00
xiii.	<b>Action Plan for implementation of PH issues after Public hearing</b>	70.00	-
xiv.	<b>Village adoption &amp; development</b>	505.00	-
	<b>PH Action Plan</b>	575.00	-
	<b>Total</b>	<b>3680</b>	<b>180</b>

62.10.15 Proposed greenbelt will be developed in 7.05 ha (18.04 Acres) which is about 33 % of the total project area (21.17 Ha). A 10 m widegreenbelt, 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 beplanted with a density of 2500 trees per hectare. Total no. of 17,500 saplings will be planted and nurtured in 7.05 hectares in 3 years.

62.10.16 It is reported that there is no violation under EIA notification 2006 /no court cases pending against to the project/ no show cause / no directions issued to the project.

**Written submission by the PP:**

62.10.17 During the meeting, based on the deliberations made by the EAC, the project proponent vide letter dated 05.07.2024 through email dated 05.07.2024 submitted the following information:

Sl. No	Additional Details	Compliance
1	Undertaking for plantation of 9000 trees within the September, 2024	<ul style="list-style-type: none"> <li>PP submitted the undertaking for completion of 9,000 No of plantation in the project site within September 2024 to the Ministry.</li> </ul>
2	Photo affidavit copy for the Sy. No. 11/1 & 11/2 for the area of 9.36 Acres.	<ul style="list-style-type: none"> <li>PP submitted that, an agreement has been made on 06.07.2022 by Ms. Shashi Alloys Pvt Ltd with Shri. H J Ravindra, a farmer of the land for the transfer of land pertaining to Sy. 11/1 &amp; 11/2 with an extent of 8 Acre 17 G in Sy. No 11/1 and 1 Acre 19 G in Sy. No 11/2 totalling</li> </ul>

Sl. No	Additional Details	Compliance
		to 9 Acre 36 Guntas. The land registration has to be done after conducting survey and preparation of Sketch by Department of Survey Settlement and Land Records, Govt. of Karnataka. But conducting survey is pending from Department of Survey Settlement and Land Records, Govt. of Karnataka. Photo Affidavit for the Sy. No's 11/1 & 11/2 was submitted to the Ministry.
3	Revised PH action Plan	PP submitted the Revised PH action for the cost of Rs. 70 Lakh has been worked out and submitted.
4	Revised Village development action plan	PP submitted the Revised Village development plan with specific activities for the cost of 505 Lakh.
5	Revised water balance for revised water for greenbelt development	PP submitted the revised water balance stating that Total water requirement is 2020 KLD, out of which revised water for greenbelt development i.e, 410 KLD.
6	Implementation of 'Ek ped Maa ke Naam' campaign	As per the suggestions of MOEFCC, PP started the plantation drive under the campaign in the sister concern company on 05.07.2024 namely Ms. Supra Steel and Power Pvt Ltd, Ballari. Geo-tagged Photographs of the plantation was submitted.
7	Availability of Schedule - I species in the study area	<ul style="list-style-type: none"> <li>PP submitted that there are no Schedule - I species has been recorded during the Ecology and Biodiversity studies. However, as per Working Plan of Chitradurga Forest Division, Karnataka Forest Department (2012-2013 to 2022- 2023) and discussion with the local villagers wild boar, Indian hare, common langur are occasionally found in the study area which belongs to schedule – II of Wildlife (Protection) Act, 1972 as amended on 20.12.2022.</li> </ul>

### **Deliberations by the Committee**

62.10.18 The Committee noted the following:

1. The instant proposal is for setting up of the new Beneficiation plant of 1.0 MTPA, Pellet plant for production of 0.6 MTPA & Sponge Iron plant for production of 0.132 MTPA along with installation of Induction Furnace 0.09 MTPA, Rolling mill of 0.09 MTPA & Captive power plant for production of 10 MW captive power.
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 EAC also took into consideration the drone survey of the project site and kml file on the Google Earth presented by the project proponent along with DSS of the project site on PARIVESH and made following deliberations accordingly.
6. Total area of the project site is 21.17 Ha, out of which area of 17.14 Ha was already registered in the name of company & registration of remaining 3.78 Ha with respect to Sy. No 11/1 & 11/2 is under process and for the same an agreement has been made for land transformation. PP submitted that, an agreement has been made on 06.07.2022 by Ms. Shashi Alloys Pvt Ltd with the owner of the land for the transfer of land pertaining to Sy. 11/1 & 11/2 with an extent of 8 Acre 17 G in Sy. No 11/1 and 1 Acre 19 G in Sy. No 11/2 totalling to 9 Acre 36 Guntas. The land registration has to be done after conducting survey and preparation of Sketch by Department of Survey Settlement and Land Records, Govt. of Karnataka. But conducting survey is pending from Department of Survey Settlement and Land Records, Govt. of Karnataka. Photo Affidavit for the Sy. No's 11/1 & 11/2 was submitted to the Ministry.
7. Bhairanayakanahatti (0.36 km, NE), Bheemgondanhalli (0.42 km, NE) and Hosajogihatty (1.10 km, NE) along with other sensitive areas within the study area of the project site. The EAC opined that proponent shall take appropriate environmental safeguard measures to minimise the impact on the habitation of the locals. The project proponent needs to strengthen green belt all around the plant area to reduce the dust pollution. The PP shall also include some of these locations in its environmental monitoring programme.
8. As reported, One Nala is passing through the project site. Also there are water bodies within the study area of the project site. The EAC opined 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 implemented.
9. The water requirement for proposed project is estimated as 2020 m<sup>3</sup>/day, out of which 2000 m<sup>3</sup>/day for industrial operation will be sourced from Sewage Treatment Plant (Treated water), Chitradurga City Municipal Council and 20 m<sup>3</sup>/day fresh water for the domestic activities will be sourced from Bore well. The EAC deliberated on the water requirement is of the opinion that PP shall obtain necessary permission from the Competent Authority in this regard.
10. The Committee has deliberated on the baseline data and incremental GLC due to the proposed project and found it 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 PP has submitted that greenbelt will be developed in 7.05 ha (18.04 Acres) which is about 33 % of the total project area (21.17 Ha). Total no. of 17,500 saplings will be planted and nurtured in 7.05 hectares in 3 years. The EAC deliberated on the greenbelt layout plan along with action plan and the budget earmarked and is of the opinion that greenbelt shall be developed within a period of 1 year.
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 EAC also deliberated on the written submission of the project proponent and found it satisfactory.
15. The EAC deliberated on the proposal with due diligence in the process as notified under the provisions of the EIA Notification, 2006, as amended from time to time and accordingly made the recommendations to the proposal. The Experts Members of the EAC found the proposal in order and recommended for grant of environmental clearance.
16. The environmental clearance recommended to the project/activity is strictly under the provisions of the EIA Notification 2006 and its subsequent amendments. It does not tantamount/construe to approvals/consent/permissions etc. required to be obtained or standards/conditions to be followed under any other Acts/ Rules/ Subordinate legislations, etc., as may be applicable to the project. The project proponent shall obtain necessary permission as mandated under the Water (Prevention and Control of Pollution) Act, 1974 and the Air (Prevention and Control of Pollution) Act, 1981, as applicable from time to time, from the State Pollution Control Board, prior to construction & operation of the project.
17. The EAC also reviewed the EC conditions (specific and general) pertaining to Industry-I projects and observed that some of the specific conditions stipulated so far in the previously recommended EC projects are common and applicable to most of the projects in general. In view of the same, the General Conditions (in case of EC projects) have been revised through reallocation of these common conditions from specific to General Conditions (in case of EC projects). Accordingly, the instant project is also being stipulated with the modified General conditions.

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

62.10.19 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 portal** under the provisions of EIA Notification, 2006 subject to the stipulation of following specific conditions and general conditions based on project specific requirements:

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

- i. **This Environmental clearance is granted subject to final outcome of Hon'ble Supreme Court of India, Hon'ble High Court, Hon'ble NGT and any other Court of Law, if any, as may be applicable to this project.**
- ii. The project proponent shall comply with all the environmental protection measures and safeguards proposed in the documents submitted to the Ministry. All the recommendations made in the EIA/EMP in respect of environmental management, and risk mitigation measures relating to the project shall be implemented.
- iii. The project proponent shall utilize modern technologies for capturing of carbon emitted and shall also develop carbon sink/carbon sequestration resources capable of capturing more than emitted. The implementation report shall be submitted to the IRO, MoEF&CC in this regard.
- iv. PP shall complete the conversion of land for industrial purpose prior to commencement of proposed project.
- v. Bhairanayakanahatti (0.36 km, NE), Bheemgondanhalli (0.42 km, NE) and Hosajogihatty (1.10 km, NE) along with other sensitive areas within the study area of the project site. Proponent shall take appropriate environmental safeguard measures to minimise the impact on the habitation of the locals. The project proponent needs to strengthen green belt all around the plant area to reduce the dust pollution. The PP shall also include some of these locations in its environmental monitoring programme.
- vi. As reported, One Nala is passing through the project site. Also there are water bodies within the study area of the project site. A robust and full proof Drainage Conservation scheme to protect the natural drainage and its flow parameters; along with Soil conservation scheme and multiple Erosion control measures shall be implemented.
- vii. Total water requirement of 2020 m<sup>3</sup>/day shall be sourced from Sewage Treatment Plant (Treated water), Chitradurga City Municipal Council (2000 m<sup>3</sup>/day) and for the domestic activities will be sourced from Bore well (20 m<sup>3</sup>/day). PP shall obtain necessary permission from the Competent Authority in this regard.
- viii. Three tier Green Belt shall be developed in atleast 33% of the project area, as committed, 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 sensitive areas nearby project site. Additionally, three row green belt of thickness 10-15 m consisting of tall trees shall be provided at the boundary of School. Compliance status in this regard, shall be submitted to concerned Regional Office of the MoEF&CC.
- ix. The PP is advised to implement the 'Ek Ped Maa Ke Naam' Campaign which was launched on 5<sup>th</sup> June 2024 on the occasion of the World Environment Day to increase the forest cover across the Country.
- x. All the commitments made towards socio-economic development of the nearby villages shall be satisfactorily implemented. The action plan based on the social impact assessment study of the project as per the EMP in accordance to the Ministry's OM dated 30.09.2020

amounting to Rs. 5.75 Crores shall be strictly implemented and progress shall be submitted to the Regional Office of MoEF&CC.

- xii. The project proponent shall undertake village adoption programme and prepare and implement the action plan to develop them into a model village.
- xiii. A comprehensive ground survey must be conducted to assess the socio-economic development of the region. This survey should include detailed data collection on demographics, livelihood practices, cultural heritage, infrastructure, and public services. The findings will help to formulate targeted development strategies that respect and enhance the region's unique civilizational context, ensuring sustainable growth that benefits all local communities.
- xiv. CO sensors with alarm shall be installed at strategic locations inside the Plant.
- xv. The health of the soil in the vicinity of the industry (5 K.M. radius) shall be monitored periodically (once a year) and reported to the IRO.

## **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 02 Nos. Continuous Ambient Air Quality Station (CAAQMS) for monitoring AAQ parameters with respect to standards prescribed in Environment (Protection) Rules 1986 as amended from time to time. The CEMS and CAAQMS shall be connected to SPCB and CPCB online servers and calibrate these systems from time to time according to equipment supplier specification through labs recognized under Environment (Protection) Act, 1986 or NABL accredited laboratories.
- ii. The project proponent shall carryout Continuous Ambient Air Quality monitoring for common/criterion parameters relevant to the main pollutants released (e.g. PM<sub>10</sub> and PM<sub>2.5</sub> in reference to PM emission, and SO<sub>2</sub> and NO<sub>x</sub> in reference to SO<sub>2</sub> and NO<sub>x</sub> emissions) within and outside the plant area covering upwind and downwind directions.
- iii. The project proponent shall monitor fugitive emissions in the plant premises at least once in every quarter through laboratories recognized under Environment (Protection) Act, 1986 or NABL accredited laboratories.
- iv. Sampling facility at process stacks shall be provided as per CPCB guidelines for manual monitoring of emissions.
- v. Appropriate Air Pollution Control (APC) system shall be provided for all the dust generating points including fugitive dust from all vulnerable sources, so as to comply prescribed stack emission and fugitive emission standards.
- vi. The project proponent shall provide leakage detection and mechanized bag cleaning facilities for better maintenance of bags.



- vii. Sufficient number of mobile or stationery vacuum cleaners shall be provided to clean plant roads, shop floors, roofs, regularly.
- viii. Ensure covered transportation and conveying of raw material to prevent spillage and dust generation. The project proponent use leak proof trucks/dumpers carrying coal and other raw materials and cover them with tarpaulin.
- ix. Recycle and reuse iron ore fines, coal and coke fines, lime fines and such other fines collected in the pollution control devices and vacuum cleaning devices in the process after briquetting/ agglomeration.
- x. The project proponent shall provide primary and secondary fume extraction system at all heat treatment furnaces.
- xi. Wind shelter fence and chemical spraying shall be provided on the raw material stock piles.
- xii. Design the ventilation system for adequate air changes as per prevailing norms for all tunnels, motor houses, Oil Cellars.
- xiii. Pollution control system in the plant shall be provided as per the CREP Guidelines of CPCB.
- xiv. The project proponent shall adopt the Clean Air practices like mechanical collectors, wet scrubbers, fabric filters (bag houses), electrostatic precipitators, combustion systems (thermal oxidizers), condensers, absorbers, adsorbers, and biological degradation. Controlling emissions related to transportation shall include emission controls on vehicles as well as use of cleaner fuels. Sufficient numbers of additional truck mounted Fog/Mist water cannons shall be procured and operated regularly inside the project premises and also in the surrounding villages to arrest suspended dust in the atmosphere.
- xv. Bag filters shall be cleaned regularly and efficiency of bag filter system shall be monitored at regular intervals.
- xvi. Water Sprinklers/Water mist system shall be installed near raw material yards, operational units and other strategic locations to control fugitive emissions from the plant.
- xvii. The particulate matter emissions from the process stacks shall be less than 30 mg/Nm<sup>3</sup> and measures shall be undertaken as per the submitted action plan. Efficient Air monitoring equipment shall be installed.
- xviii. Following additional arrangements to control fugitive dust shall be provided:
  - a. Fog / Mist Sprinklers at all on bulk raw material storage area (at the transfer points) like Iron Ore, Coal and for Fly Ash and similar solid waste storage areas.
  - b. Proper covered vehicle shall be used while transport of materials.
  - c. Wheel washing mechanism shall be provided in entry and exit gates with complete recirculation system.
- xix. During operational phase at Captive Power Plant, Action Plan to monitor coke/coal dust exposures in different process plants using personal and area air samplers and to compare with permissible limits as per Indian Factories Act, 1948 shall be implemented.
- xx. The coal dust should be monitored at coal unloading, crushing, furnace areas and should be within 2 mg/m<sup>3</sup>, respirable dust fraction containing less than 5% quartz as per Indian Factories Act, 1948.

- xxi. Online stack monitoring system for IF and RHF shall be installed and monitoring report shall be submitted to the concerned Regional Office of the MoEF&CC along with the six monthly compliance report.
- xxii. Low NO<sub>x</sub> Burners will be installed at Reheating Furnace for control of Gaseous emissions generated while using PNG.

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

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

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

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

- ii. The ambient noise levels should conform to the standards prescribed under E(P)A Rules, 1986 viz. 75 dB(A) during day time and 70 dB(A) during night time.
- iii. PP shall identify extreme hot areas through heat stress survey as well as noise monitoring within process plants to ensure that workers not exposed above 90 dBA levels as per Factories Act, 1948.

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

- i. Use torpedo ladle for hot metal transfer as far as possible. If ladles not used, provide covers for open top ladles.
- ii. Restrict Gas flaring to < 1%.
- iii. Provide solar power generation on roof tops of buildings, for solar light system for all common areas, street lights, parking around project area and maintain the same regularly;
- iv. Provide LED lights in their offices and residential areas.
- v. The project proponent shall provide waste heat recovery system (pre-heating of combustion air) at the flue gases of reheating furnaces.
- vi. Practice hot charging of slabs and billets/blooms as far as possible.
- vii. Ensure installation of regenerative type burners on all reheating furnaces.
- viii. The project proponent shall provide waste heat recovery system on the DRI Kilns.
- ix. The dolochar generated shall be used for power generation.
- x. Tar shall be recovered from producer gas and shall be sold to registered processors and phenolic water shall be incinerated in After Burn Chamber (ABC) of DRI kilns.
- xi. The PP shall implement the guidelines on sponge iron plants issued by the CPCB/SPCB in this regard.

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

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

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

## **VII. Green Belt**

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

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

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

## **IX. Environment Management**

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

stake holders. The copy of the board resolution in this regard shall be submitted to the MoEF&CC as a part of six-monthly report.

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

## **X. Miscellaneous**

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

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

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### **Re-Consideration of Environmental Clearance Proposals**

#### **Agenda No. 62.11**

**62.11 Greenfield Steel Plant Project to produce Pellets 1.0 Million TPA; DRI 0.4 Million TPA, MS Billets 0.42 Million TPA and 0.4 Million TPA TMT Rebars with Iron ore beneficiation plant of capacity 2.65 Million TPA & Captive Power generation of 28 MW through WHRB and 15 MW through AFBC by M/s Pacific Metasteel Private Limited, located at Village (s) Sakera Bhata, Sunrai Bhata & Papawani Khas, Tehsil Prithvipur, District Niwari, Madhya Pradesh– Re-Consideration of Environmental Clearance.**

**[Proposal No.: IA/MP/IND1/458594/2024; File No. IA-J-11011/535/2022-IA-II(IND-I)]**  
**[Consultant: Gaurang Environmental Solutions Pvt. Ltd.; Valid upto: 2024-08-30]**

62.11.1 M/s Pacific Metasteel Private Limited has made an online application *vide* proposal no. IA/MP/IND1/458594/2024 dated 30.03.2024 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. 2(b)

Mineral Beneficiation, 3(a) Metallurgical Industries (Ferrous and Non/ferrous), 2(b) Beneficiation Plant and 1(d) Thermal Power Plant under Category “A” of the schedule of the EIA Notification, 2006 and appraised at Central Level.

62.11.2 Name of the EIA consultant: M/s. Gaurang Environmental Solutions Pvt. Ltd. [List of ACOs with their Certificate / Extension Letter no. QCI/NABET/ENV/ACO/24/3149; valid upto 30.08.2024, as on June 26, 2024].

62.11.3 The detail of the ToR is furnished as below:

Date of application	Consideration	Details	Date of accord	ToR Validity
17.01.2023	22 <sup>nd</sup> meeting of the EAC (Industry-I) held on – 31 <sup>st</sup> January, 2023.	Terms of Reference	01.03.2023	28.02.2027

**Details submitted by the project proponent**

62.11.4 The project of M/s. Pacific Metasteel Privet Limited located in village Sakera Bhata, Sunrai Bhata, Papawani Khas, Tehsil Prithvipur, District Niwari, Madhya Pradesh is for a Greenfield Steel Plant Project to produce Pellets 1.0 Million TPA; DRI 0.4 Million TPA, MS Billets 0.42 Million TPA and 0.4 Million TPA TMT Rebars with Iron ore beneficiation plant of capacity 2.65 Million TPA & Captive Power generation of 28 MW through WHRB and 15 MW through AFBC.

62.11.5 Details of EDS:

Details of EDS sought by Ministry	Reply of PP
On perusal of kml file, it is observed that multiple land patches have been shown for the proposed project. PP shall clarify whether the proposal is interlinked.	<p>The project site is divided into three plots, Plot A, Plot B &amp; Plot C by nallah flowing adjacent to project site. All the three plots together form the project site for the proposed steel plant. Site planning has been done to avoid any disturbance to the flow and path of the nallah.</p> <p>Site use planning is as below:</p> <ul style="list-style-type: none"> <li>• Raw material yard, beneficiation plant, Pellet plant, DRI Plant &amp; captive power plant is kept in plot A.</li> <li>• Steel melt shop and rolling mill with final product storage yard is kept in plot B.</li> <li>• Complete plant components have been located in plot-A &amp; B leaving the plot C for storage of Tailings &amp; ash.</li> <li>• Movement of material is proposed in a linear flow from plot A to plot B to plot C and it is proposed to construct minor bridge / culverts to connect plot A to plot B and plot B to plot C. Minor bridge design by Madhya Pradesh WRD is enclosed as <b>Annexure I</b> of the EIA/EMP report.</li> </ul> <p>Proposed protection measures for Nallah include zero effluent discharge from plant premises, 6 row (2 x 2 m) greenbelt of minimum 30 m width on plant periphery with native trees and Rain water harvesting measures including garland drains sediment traps for drainage conservation and to prevent soil erosion.</p>

<b>Details of EDS sought by Ministry</b>	<b>Reply of PP</b>
<p>Under section for brief summary on the proposed baseline collection, PP shall submit the summarized baseline data collected for each parameter.</p>	<p>The data has been generated during Winter season from 1st December 2022 to 28th February 2023 by SCS Enviro Services Private Limited {NABL accredited (certificate no. TC-6960 dated 29.01.2022 valid upto 28.01.2024) and MoEF&amp;CC recognized (F.No.15018/29/2015-CPW dated 05.04.2018). The monitoring and testing has been done as per the guidelines of MoEF&amp;CC and the IS standards. Monitoring was conducted for the following parameters:</p> <p><b>1.0 AIR</b> Ambient air monitoring (24 hourly samples) was done twice a week for 3 months for one season for the parameters PM10, PM 2.5, SO2, NOx &amp; CO. One station was in core zone and 11 stations in buffer zone. Out of 11 Stations, 3 stations were in downwind, 3 in upwind, 2 in cross-wind direction and 3 stations represent habitations and sensitive receptors. Total 312 samples were taken from 12 no. of locations during the study period. All the parameters have been found to be within NAAQS at all the monitoring locations.</p> <p><b>1.1 Meteorological</b> Meteorological parameters measured at hourly duration simultaneously at one air monitoring station for 3 months. Parameters: Wind speed, wind direction, Relative humidity, Temperature, Precipitation</p> <p><b>2.0 WATER</b></p> <p><b>2.1 Surface water</b> 7 locations were identified for collection of surface water in study area (10 km radius). Parameters tested for physical and chemical as well as biological parameters according to applicable standards. surface water samples collected from 6 locations since nallah flowing adjacent to project site was found to be dry. The presence of Coliform bacteria in the surface water bodies indicate sewage &amp; / or animal waste contamination from sewage discharge and cattle faecal contamination which may be due to open drain nature.</p> <p><b>2.2 Ground water</b> Ground water samples have been collected from 12 stations. All the analysed parameters in ground water except for total hardness, total dissolved solids, fluoride &amp; Nitrates indicate the increased concentration beyond the maximum desired limit but below the permissible limit as per IS 10500:2012. This increased concentration is expected due to the presence of salts from different rocks, ions and solids in the geological formation of the area and also agricultural activity and entailing use of fertilizers, insecticides and pesticides in the fields.</p> <p><b>3.0 SOIL QUALITY</b> Soil samples have been collected from 12 no. of stations (1 in core zone &amp; 11 in buffer zone). Soil quality is found to be fertile in the study area. Based on organic carbon content, pH, soil texture and NPK content, it is concluded that soil in the study area is generally fertile and conducive to agriculture.</p> <p><b>4.0 NOISE LEVEL</b></p>



Details of EDS sought by Ministry	Reply of PP
	<p>Hourly readings were taken for 24 hours (Leq) and Noise monitoring was done at 12 no. of stations (one in core zone, 11 in buffer zone). The noise level at all the monitored locations is within prescribed limit given in Noise Pollution (Regulation &amp; Control) Rules, 2000, except for locations in silence zone i.e. N-8 Tapariyan Kararan &amp; N-10 Dhillia.</p> <p><b>5.0 TRAFFIC DENSITY</b> Traffic data has been collected from State highway -37 (upside and downside) as per IRC guidelines (IRC: 60-1990).</p> <p><b>6.0 LAND USE-LAND COVER</b> Interpretation of Satellite Imagery of study period, Land use land cover analysis of 10 km study area (beyond core zone) based on LISS IV data has been done. The total area cover was calculated 375.87 sq. km. The analysis reveals that agricultural classes including irrigated crop land and fallow land cover the largest area of 131.797 sq. km and 34.895 sq. km respectively which together contribute to 44 % of the total study area followed by Forest and tree cover (19.64%), Scrub land (13.96%), barren land (11.78%), rural and urban built-up area (6.5%) and waterbodies (3.75%). the land cover of the project site predominantly comes under agricultural, fallow and barren land. Some portion is covered under the open scrub category, ponds. A few settlements under sparse built up category are also observed inside the project boundary. In the north, fourth order stream passes by the project site and no forest area was observed within the core zone</p> <p><b>7.0 BIOLOGICAL ENVIRONMENT</b> Flora: Core zone- 40 species of tree, 14 species of shrubs, 21 species of herbs, 7 species of Flora: Core zone- 40 species of tree, 14 species of shrubs, 21 species of herbs, 7 species of Creeper, 8 species of grasses. Buffer Zone- 84 species of trees, 24 species of shrubs, 44 species of herbs, 21 species of Creeper, 20 species of climbers &amp; lianas and 21 species of grasses. 13 of Aquatic plant species recorded/compiled in the Study Area, total 28 species of Phytoplankton, 8 species of Macro invertebrates, 9species of Zooplankton and 15 species of Fish have been recorded in the Buffer Zone Fauna: 206 number of faunal terrestrial species comprising mammals, reptiles, Birds and Amphibians were recorded from the study area. Least Concern (LC) are major in the study area Near Threatened (NT) Vulnerable (VU) Endangered (EN) also IUCN species is found in the study area. However, 7 Schedule I species as per W(P)AA, 2022 is present in the study area that are Mammals: Schedule I: 3; Schedule II: 10, Avifauna (Schedule I: 2; Schedule II: 145; Schedule IV: 1), Reptiles and Amphibians (Schedule I: 2).</p> <p><b>8.0 SOCIO-ECONOMIC PARAMETER</b> A. Various amenities, demography, employment pattern of 10 km study area B. socio-economic survey of Nearby villages</p>
As mentioned in the application form [ S No. 19 at part A ], validity of consultant	Accreditation validity extension till 07.03.2024 has bene obtained from NABET-QCI vide letter no. QCI/NABET/ENV/ACO/23/3058 dated 08.12.2023. However, the ToR application form (Form 1 PART A) on

Details of EDS sought by Ministry	Reply of PP																																																																																																																													
has expired on 12.07.2023, kindly update the same in from at part A S No.19 and submit the validity extension certificate, if extension has been obtained.	PARIVESH was automatically showing old validity details. The same has been resolved and is reflecting in the PARIVESH Portal as well. NABET Accreditation certificate along with letter for validity extension are submitted.																																																																																																																													
Uploaded PH proceedings are in regional language. PP shall upload the English translation of the same authenticated from notary.	English translation of public hearing proceedings duly authenticated from public notary, Tikamgarh (M.P.) on 06.02.2024 are submitted.																																																																																																																													
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Details of EDS sought by Ministry	Reply of PP				
	(Pellet plant)		Chhindwada, Bilaspur (Chhattisgarh), Ambikapur (Chhattisgarh), Imports from South Africa, Australia, Russia	Surat port (HPPL)	(through covered trucks)
14	Non-Coking coal (DRI Plant)	366,175 TPA			
15	Steam Coal (CPP)	66,270 TPA			
16	CBM (Rolling mill)	66,00,000 Nm <sup>3</sup> / annum	CIL, CBM Blocks at Jharia, Raniganj, and Sohagpur within Coal Mining Lease areas.	~350 km	Pipeline / tanker
17	LDO (Pellet plant)	5000 KLA	Retail vendors in Domestic market like IOCL, HPCL and others	~50 Km	by road (through tanker)
18	LPG (Pellet plant)	200 m <sup>3</sup>	Retail vendors in Domestic market	~50 Km	by road (through tanker)
19	Dolo-Char (CPP)	80,000 TPA	In house generation	--	
20	HSD (DG Set)	300-400 Ltr/Hour	Nearby diesel pump	~10 km	by road (through tanker)
	<ul style="list-style-type: none"> <li>• Major raw materials will be transported through railway rakes up to the nearest railway station (i.e. Railway siding at Teharka at a distance of 44 km– By Road). Also, the site is not far from the Main Railway Line, passing through the ‘Jhansi’ junction.) and then to the site through road by covered trucks / tanker.</li> <li>• Mitigation measures proposed during transportation and storage of raw material: <ul style="list-style-type: none"> <li>✓ All the trucks used for the transport of raw materials, products and wastes will be completely covered with tarpaulin to ensure no spillage during transportation.</li> <li>✓ Internal roads in the proposed project will be designed as per IRC based on MSA.</li> <li>✓ All the raw material yards will be equipped with water sprinkling system, so as to avoid fugitive emission during the material handling.</li> <li>✓ All the raw material required for the proposed steel plant will be stored on concrete platform above ground level.</li> <li>✓ Wheel washing arrangement will be made at the entry and exit gates.</li> </ul> </li> </ul>				
Details of court case, directions issued by SPCB, if any, pending needs to be submitted.	There is no litigation against the project &/or project site in any court of law including NGT. No directions have been received from SPCB against the project till date. Undertaking by the authorized signatory of PMPL in this regard are submitted.				
PP shall clarify whether the project falls under CPA/SPA? If yes, then compliance to the CEPI guidelines shall be submitted	The project site is located in Tehsil-Prithvipur, Niwari District of Madhya Pradesh. There is no CPA/SPA declared by CPCB within its 10 km radius area. The nearest severely polluted area to the project site in Madhya Pradesh is in Singrauli ~431 km from project site. Nearest polluted river stretch to the project site is Rover Betwa (Mandideep to Vidisha) ~ 203 km from project site (upstream).				
PP has not uploaded the proposal presentation, authorisation letter, which are	Power point presentation for obtaining Environmental Clearance has been prepared and submitted.				

Details of EDS sought by Ministry	Reply of PP																																																																															
essential for consideration of the proposal.	Authorization letter in favour of Shri Vinod Choudhary (authorized signatory) for proposed steel plant project in Niwari, Madhya Pradesh by Pacific Metasteel Private Limited are submitted.																																																																															
<p>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 and uploaded the data accordingly. English translation of land documents authenticated from notary shall be submitted.</p>	<p>The land proposed for project site is government land and allotment of 137.699 Hectares (340.261 acres) land for industrial purpose has been done by MPIDCL, Madhya Pradesh vide allotment order no. क्रमांक/एमपीआईडीसी/क्षे.का.ग्वा./ नवीनपरियोजना/146/निवाड़ी/2023/1691 ग्वालियर dated 03.07.2023. Copy of allotment order along with its English translation authenticated by public notary, Tikamgarh (M.P.) dated 06.02.2024 are incorporated. Survey number wise details of land are as below:</p> <table border="1"> <thead> <tr> <th>S. No.</th> <th>Village name</th> <th>Survey no</th> <th>Area</th> <th>Type of land</th> </tr> </thead> <tbody> <tr> <td>1</td> <td rowspan="4">Sunrai Bhata</td> <td>20/3</td> <td>3.367</td> <td rowspan="18">Government land allocated for industrial purpose</td> </tr> <tr> <td>2</td> <td>21</td> <td>11.582</td> </tr> <tr> <td>3</td> <td>22 (part)</td> <td>35.450</td> </tr> <tr> <td>4</td> <td>57</td> <td>4.411</td> </tr> <tr> <td colspan="2">Total</td> <td>04</td> <td>54.810</td> </tr> <tr> <td>5</td> <td rowspan="9">Papawni Khas</td> <td>52</td> <td>0.433</td> </tr> <tr> <td>6</td> <td>53</td> <td>3.824</td> </tr> <tr> <td>7</td> <td>54</td> <td>1.554</td> </tr> <tr> <td>8</td> <td>55</td> <td>0.210</td> </tr> <tr> <td>9</td> <td>121</td> <td>9.748</td> </tr> <tr> <td>10</td> <td>123</td> <td>24.888</td> </tr> <tr> <td>11</td> <td>124</td> <td>0.036</td> </tr> <tr> <td>12</td> <td>125</td> <td>0.231</td> </tr> <tr> <td>13</td> <td>126/3/2</td> <td>14.022</td> </tr> <tr> <td colspan="2">Total</td> <td>09</td> <td>54.946</td> </tr> <tr> <td>14</td> <td rowspan="5">Sakera Bhata</td> <td>76/1</td> <td></td> </tr> <tr> <td>15</td> <td>75</td> <td></td> </tr> <tr> <td>16</td> <td>77</td> <td></td> </tr> <tr> <td>17</td> <td>58/1</td> <td></td> </tr> <tr> <td>18</td> <td>56/4</td> <td></td> </tr> <tr> <td colspan="2">Total</td> <td>05</td> <td>27.943</td> </tr> <tr> <td colspan="2"><b>Grand total</b></td> <td><b>18</b></td> <td><b>137.699</b></td> </tr> </tbody> </table>	S. No.	Village name	Survey no	Area	Type of land	1	Sunrai Bhata	20/3	3.367	Government land allocated for industrial purpose	2	21	11.582	3	22 (part)	35.450	4	57	4.411	Total		04	54.810	5	Papawni Khas	52	0.433	6	53	3.824	7	54	1.554	8	55	0.210	9	121	9.748	10	123	24.888	11	124	0.036	12	125	0.231	13	126/3/2	14.022	Total		09	54.946	14	Sakera Bhata	76/1		15	75		16	77		17	58/1		18	56/4		Total		05	27.943	<b>Grand total</b>		<b>18</b>	<b>137.699</b>
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PP shall revise the complete application in conformity to Ministry's requirement and resubmit the application.	Contents of para 10 are duly noted and have been complied with. Application has been revised as per EDS and in conformity to requirement of MoEF&CC.																																																																															

#### 62.11.6 Environmental site settings

S. No	Particulars	Details	Remarks
1	Total land	137.699 Hectare (Govt. land allotted for industrial purpose)	Land use: Govt. land allotted for industrial purpose

S. No	Particulars	Details	Remarks
2	Land acquisition details as per MoEF&CC O.M. dated 7/10/2014	The land proposed for project site is government land and allotment of 137.699 Hectares (340.261 acres) for industrial purpose has been done by MPIDCL, Madhya Pradesh vide allotment order no. क्रमांक / एमपीआईडीसी / क्षे.का.ग्वा./ नवीनपरियोजना/146/निवाडी/2023/1691 ग्वालियर dated 03.07.2023 in favour of PMPL and lease deed registered on 28.07.2023 between MPIDCL & PMPL.	
3	Existence of habitation & involvement of R&R, if any.	Project site: 13 houses (encroachment) in core zone covering village Sakera Bhata, Sunarai Bhata & Papwani Khas	<p>Status of R&amp;R</p> <ul style="list-style-type: none"> <li>• The land proposed for project site is government land and allotment for industrial purpose has been done by MPIDCL, Madhya Pradesh vide allotment order dated 03.07.2023 in favour of PMPL and lease deed registered on 28.07.2023 between MPIDCL &amp; PMPL.</li> <li>• R&amp;R is being undertaken by Govt. of Madhya Pradesh. However, PMPL has undertaken survey at its end to arrive at suitable amount as per provisions under the <i>The Right to Fair Compensation and Transparency in Land Acquisition, Rehabilitation and Resettlement Act, 2013</i> for R&amp;R of the PAFs &amp; an amount of Rs. 1.80 Crore has been allocated for this purpose.</li> <li>• This amount will be used to compensate the Project Affected Families by suitable means in agreement with PAF including allocation of land outside of project site boundary in coordination with District administration 7b MPIDCL.</li> <li>• PMPL will give preference for employment based on eligibility &amp; qualification to</li> </ul>

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			<p>eligible individuals from PAFs.</p> <ul style="list-style-type: none"> <li>The company will also, under Social-EMP (as per MoEF&amp;CC O.M. dated 30.09.2020) &amp; CSR plan (under Company's Act) undertake social welfare &amp; upliftment activities with emphasis on project affected families.</li> </ul>																																																																																										
4	Latitude and Longitude of all corners of the project site.	<p>Coordinates are:</p> <table border="1"> <thead> <tr> <th>S. 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S. No	Particulars	Details				Remarks								
		27	25°14'0.90"N	78°39'1.95"E										
28	25°14'6.37"N	78°39'2.51"E												
29	25°14'14.23"N	78°39'9.69"E												
30	25°14'20.56"N	78°39'14.79"E												
31	25°14'18.08"N	78°39'21.97"E												
32	25°14'5.86"N	78°39'22.82"E												
33	25°13'58.43"N	78°39'21.41"E												
34	25°13'55.78"N	78°39'21.03"E												
35	25°13'57.91"N	78°39'18.48"E												
36	25°13'58.96"N	78°39'19.18"E												
5	Elevation of the project site	253 m AMSL to 282 m AMSL												
6	Involvement of Forest land if any.	No Forest land is involved												
7	Water body (Rivers, Lakes, Pond, Nala, Natural Drainage, Canal etc.) exists within the project site as well as study area	S. No.	Particulars	Distance (km)	Direction	The project site is safe from 50 years calculated HFL. of Jamni & Betwa River as per the HFL study report authenticated by WRD Niwari. NOC for site suitability with respect to Nallah adjacent to the project site has been obtained from Office of the Executive Engineer, WRD, Niwari vide letter no. 287/W/2024-25 dated 23.04.2024.								
1.	Bardai Nallah	Adjacent to the Boundary	North											
2.	Jamni River	5.3	WNW											
3.	Magra Nala	5.4	NNE											
4.	Birsagar Taal	5.8	SE											
5.	Betwa River	6.6	NW											
6.	Sanera Tall	9.5	SSE											
7.	Radha Sagar	9	ESE											
8	Existence of ESZ/ ESA/ national park/ wildlife sanctuary/ biosphere reserve/ tiger reserve/ elephant reserve etc. if any within the study area	<ul style="list-style-type: none"> <li>• <b>Name &amp; distance of ESZ:</b> Orchha Wildlife sanctuary ESZ – 2.0 km, WNW</li> <li>• <b>Name &amp; distance of WLS:</b> Orchha Wildlife sanctuary – 4.0 km, WNW</li> <li>• <b>Authenticated map of ESZ projecting distance of ESZ from project site:</b> As per certificate no. क्रमांक मा.चि./2023/977 dated 20.02.2023 from D.F.O, Tikamgarh, along with authenticated 10 km radius topomap showing project site coordinates, distance from Orchha WLS and its ESZ, Orchha Wildlife sanctuary ESZ is at 2.0 km, WNW &amp; Orchha Wildlife sanctuary is at 4.0 km, WNW.</li> </ul> <p>List of Forest in the study areas are:</p> <table border="1"> <thead> <tr> <th>S. No</th> <th>Particulars</th> <th>Distance</th> <th>Direction</th> </tr> </thead> <tbody> <tr> <td></td> <td></td> <td></td> <td></td> </tr> </tbody> </table>				S. No	Particulars	Distance	Direction					
S. No	Particulars	Distance	Direction											

S. No	Particulars	Details				Remarks
		1	Tapariyan Hararan	1.3	W	
		2	Neguwan P.F.	2.8	NNE	
		3	Ladwari P.F.	5	ENE	
		4	Kachhana P.F.	5.2	ESE	
		5	Seguwan P.F.	5.5	NNE	
		6	Kanvariya P.F.	6	SSW	
		7	Smara P.F.	6.8	SW	
		8	Kuryau R.F.	7.6	WSW	
		9	Kandhari Kanan R.F.	7.9	WSW	
		10	Lahar North R.F.	8.9	W	
		11	Lahar South R.F.	9.2	W	
		12	R.F (Pura Khurd)	9.8	SW	
		13	Sukwan R.F.	9.8	WSW	
		14	Dumduma P.F.	10	E	

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

S. No	Plant		Capacity (million TPA)	Product (million TPA)	Remarks
1	Iron Ore Beneficiation Plant		2.65	Iron Ore concentrate:1.06	Captive use
2	Pellet Plant		1.0	Pellet: 1.0	Pellet: 0.39 Million TPA for sale
3	DRI Plant		0.4	DRI: 0.4	Captive use
4	Steel Melt Shop		0.42517	Liquid Steel: 0.43	Captive use
5	Caster Shop		0.416667	MS Billets: 0.42	Captive use
6	Rolling Mill		0.4	TMT Rebars: 0.4	Product for sale
7	CPP	WHRB	28 MW	Power: 43 MW	Captive use
		AFBC	15 MW		

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

S. No.	Raw Material	Quantity (TPA)	Source	Distance	Mode of transportation
<b>BENEFICIATION PLANT</b>					
1	Iron Ore	2,665,090	Nearby iron ore block, Anand mines & Jain Mines near Jabalpur	10 km to ~300 km	By rail & road (through covered trucks)
<b>PELLET PLANT</b>					
2	Iron Concentrate	1,060,000	In house generation	--	--



S. No.	Raw Material	Quantity (TPA)	Source	Distance	Mode of transportation
3	Limestone	32,000	Jaisalmer, Jodhpur, Karnataka and AP Mines, Imports from Vietnam, Malaysia and Dubai.	~800 km	Through sea route, rail route & by road (through covered trucks)
4	Bentonite	9,000	Private Mines in Kutch district of Gujarat.	~900 km	By rail & road (through covered trucks)
<b>DRI PLANT</b>					
5	Pellets	610,290	In house generation	--	--
6	Dolomite	20,345	Karnataka and AP Mines, Imports from Vietnam, Malaysia and Dubai.	~800 km from Surat port (HPPL)	Through sea route, rail route & by road (through covered trucks)
<b>STEEL MELT SHOP</b>					
7	DRI	406,860	In house generation	--	--
8	Pig Iron	76,285	Merchant Blast Furnace installations in Raipur-Raigarh belt.	~550 km	By rail & road (through covered trucks)
9	Revert Scrap	25,430	In house generation	--	--
10	Calcined Lime	4,250	Jaisalmer, Jodhpur, Domestic market	~800 km	By rail & road (through covered trucks)
11	Ferro Alloys	5,100	Merchant Ferro Alloy Plants in Raipur-Raigarh belt.	~550 km	By rail & road (through covered trucks)
<b>ROLLING MILL</b>					
12	MS Billets	416,667	In house generation	--	--
<b>FUEL</b>					
13	Anthracite Coal (Pellet plant)	45,000 TPA	CIL, Private Coal Mines in Anuppur, Shadol, Singroli, Chhindwada, Bilaspur (Chhattisgarh), Ambikapur (Chhattisgarh), Imports from South Africa, Australia, Russia	800 km from Surat port (HPPL)	Through sea route, rail route & by road (through covered trucks)
14	Non-Coking coal (DRI Plant)	366,175 TPA			
15	Steam Coal (CPP)	66,270 TPA			
16	CBM (Rolling mill)	66,00,000 Nm3 / annum	CIL, CBM Blocks at Jharia, Raniganj, and Sohagpur within Coal Mining Lease areas.	~350 km	Pipeline / tanker
17	LDO (Pellet plant)	5000 KLA	Retail vendors in Domestic market like IOCL, HPCL and others	~50 Km	by road (through tanker)
18	LPG (Pellet plant)	200 m3	Retail vendors in Domestic market	~50 Km	by road (through tanker)
19	Dolo-Char (CPP)	80,000 TPA	In house generation	--	--

S. No.	Raw Material	Quantity (TPA)	Source	Distance	Mode of transportation
20	HSD (DG Set)	300-400 Ltr/Hour	Nearby diesel pump	~10 km	by road (through tanker)

62.11.9 The water requirement for the proposed project is estimated as 7500 m<sup>3</sup>/day, out of which 1100 m<sup>3</sup>/day of fresh water requirement will be obtained from the ground water and another 6400 m<sup>3</sup>/day of fresh water requirement will be obtained from the Jamni River. Application submitted dated 12.12.2023 to CGWA for ground water abstraction. Application submitted dated 09.10.2023 for obtaining permission from WRD for surface water withdrawal and MoA signed between PMPL & WRD, Bhopal, Madhya Pradesh dated 14.06.2024. It proposed to collect & use rain water to reduce fresh water demand. Proposed rain water harvesting to the tune of 6,12,883 m<sup>3</sup>/annum and use of this rain water after primary treatment for plant operations will reduce the fresh water demand during rainy days. It is estimated that water demand to the tune of ~ 1679 m<sup>3</sup>/day can be met from rain water harvesting, reducing daily fresh water demand by ~22% i.e. 5829 KLD. PP has undertaken that Ground water abstraction will be phased out completely after commencement of project and pipeline operations and Daily makeup water demand for project operations will be met from surface water and stored rain water.

62.11.10 The power requirement for the proposed project is estimated as 83 MW, out of which 40 MW will be obtained from the state grid and another 40 MW sourced from the WHRB & AFBC based power plant.

#### 62.11.11 Baseline Environmental Studies

Period	December 2022 - February 2023
AAQ parameters at 12 locations	<ul style="list-style-type: none"> <li>PM<sub>10</sub> = 43.68 µg/m<sup>3</sup> to 68.3 µg/m<sup>3</sup></li> <li>PM<sub>2.5</sub> = 25.0 µg/m<sup>3</sup> to 48.4 µg/m<sup>3</sup></li> <li>SO<sub>2</sub> = 6.0 µg/m<sup>3</sup> to 15.2 µg/m<sup>3</sup></li> <li>NO<sub>2</sub> = 6.1 µg/m<sup>3</sup> to 24.9 µg/m<sup>3</sup></li> <li>CO = 344 µg/m<sup>3</sup> to 802 µg/m<sup>3</sup></li> </ul>
Incremental GLC level	<ul style="list-style-type: none"> <li>PM<sub>10</sub> = 2.43 µg/m<sup>3</sup> (Level 0 Km at Project site)</li> <li>PM<sub>2.5</sub> = 0.57 µg/m<sup>3</sup> (Level 0 Km at Project site)</li> <li>SO<sub>2</sub> = 9.59 µg/m<sup>3</sup> (Level 0 Km at Project site)</li> <li>NO<sub>x</sub> = 1.98 µg/m<sup>3</sup> (Level 0 Km at Project site)</li> <li>CO = 3.62 µg/m<sup>3</sup> (Level 0 Km at Project site)</li> </ul>
Ground water samples at 12 locations	<ul style="list-style-type: none"> <li>pH: 6.43 to 7.45.</li> <li>Total Hardness: 176 mg/l to 452 mg/l</li> <li>Chloride: 15.99 mg/l to 143.96 mg/l</li> <li>Fluoride: 0.37 mg/l to 1.14 mg/l</li> <li>Heavy Metals: BDL</li> <li>Nitrates: 4 mg/l to 87.26 mg/l</li> <li>TDS: 274 mg/l to 914 mg/l</li> </ul>

Surface water samplings at 6 locations	<ul style="list-style-type: none"> <li>• pH: 7.38 to 8.22.</li> <li>• DO: 3.3 mg/l to 4.6 mg/l</li> <li>• BOD: &lt; 2 mg/l</li> <li>• COD: &lt; 5 mg/l</li> <li>• Total Hardness: 88 mg/l to 188 mg/l.</li> <li>• TDS: 172 mg/l to 480 mg/l</li> </ul>																				
Noise levels at 12 locations	<p>Day time: 51.6 to 53.9 dB(A) Night time: 42.8 to 44.9 dB(A)</p>																				
Traffic assessment study findings	<p>Traffic study has been conducted at SH-37. Which approximately 1.8 km from the project site. Transportation of raw material, fuel 7 finished product will be done 15.999% of road. Existing PCU is 75 PCU/hr on SH-37 and existing level of service (LOS) is:</p> <table border="1"> <thead> <tr> <th>Road</th> <th>V (Volume in PCU/hr.)</th> <th>C (Capacity in PCU/hr.)</th> <th>Existing V/C Ratio</th> <th>LOS</th> </tr> </thead> <tbody> <tr> <td>SH-37</td> <td>75</td> <td>250</td> <td>0.3</td> <td>Very Good</td> </tr> </tbody> </table> <p>PCU load after proposed project will be 75 + 96 (171) PCU/hr and level of service (LOS) will be:</p> <table border="1"> <thead> <tr> <th>Road</th> <th>V (Volume in PCU/hr.)</th> <th>C (Capacity in PCU/hr.)</th> <th>Existing V/C Ratio</th> <th>LOS</th> </tr> </thead> <tbody> <tr> <td>SH-37</td> <td>75+ 96 = 171</td> <td>250</td> <td>0.684</td> <td>'D' Poor</td> </tr> </tbody> </table> <p><b>Conclusion:</b> The level of service will poor after including additional traffic due to proposed project. Road strength augmentation in consultation with district administration is proposed. Modified LOS is based on existing capacity of road, however, LOS will improve as road strengthening is proposed.</p>	Road	V (Volume in PCU/hr.)	C (Capacity in PCU/hr.)	Existing V/C Ratio	LOS	SH-37	75	250	0.3	Very Good	Road	V (Volume in PCU/hr.)	C (Capacity in PCU/hr.)	Existing V/C Ratio	LOS	SH-37	75+ 96 = 171	250	0.684	'D' Poor
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Road	V (Volume in PCU/hr.)	C (Capacity in PCU/hr.)	Existing V/C Ratio	LOS																	
SH-37	75+ 96 = 171	250	0.684	'D' Poor																	

Flora and Fauna	<p><b>Flora:</b> Core zone- 40 species of tree, 14 species of shrubs, 21 species of herbs, 7 species of Creeper, 8 species of grasses. Buffer Zone- 84 species of trees, 24 species of shrubs, 44 species of herbs, 21 species of Creeper, 20 species of climbers &amp; lianas and 21 species of grasses.</p> <p>13 of Aquatic plant species recorded/compiled in the Study Area, total 28 species of Phytoplankton, 8 species of Macro invertebrates, 9 species of Zooplankton and 15 species of Fish have been recorded in the Buffer Zone</p> <p><b>Fauna:</b> 206 number of faunal terrestrial species comprising mammals, reptiles, Birds and Amphibians were recorded from the study area. Least Concern (LC) are major in the study area Near Threatened (NT) Vulnerable (VU) Endangered (EN) also IUCN species is found in the study area.</p> <p><b>Presence of schedule I fauna and endangered Fauna:</b> 7 Schedule I species as per W(P)AA, 2022 is present in the study area that are Mammals: Schedule I: 3; Schedule II: 10, Avifauna (Schedule I: 2; Schedule II: 145; Schedule IV: 1), Reptiles and Amphibians (Schedule I: 2).</p> <p><b>Status of site specific wildlife conservation plan</b></p> <ul style="list-style-type: none"> <li>Wildlife conservation plan has been prepared for 7 nos. of schedule I species recorded in study area (as per DFO authenticated list) viz. India Peafowl, Indian vulture, Monitor Lizard, Indian Fox, Indian Jackal, Indian Cobra, Grey mongoose with a budgetary allocation of Rs. 0.35 Crore.</li> <li>Submission receipt dated 18.09.2023 of conservation plan to the Principle Chief Conservator of Forest &amp; Chief wildlife warden, Department of Forests, Bhopal for authentication along with wildlife conservation plan</li> </ul>
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62.11.12 The details of solid and hazardous waste generation along with its mode of treatment/disposal is furnished as below:

**A. Industrial solid waste**

S. No.	Production Area	Solid waste type	Quantity (TPD)	Disposal
1	Iron ore beneficiation plant & Pellet plant	Tailings (solid)	~4461	Temporary storage in Plot C & disposal in low lying area (mine voids)
2		Fine Iron ore & dust	34.6	Recycled to Pellet Plant
		Coal dust	5.456	
3	DRI Plant	Coal & Iron Ore Dust from RMHS Dedusting	163.62	Recycled to Pellet Plant
		Flyash from DSC & ESP	54.54	Sent to brick making plants
		Kiln Accretion	7.3	Sent to road contractors (Can be used as blending material with aggregates and used for rural road making)
4		Dolochar	242.4	Used in CPP boiler
5	SMS	Slag from IF	180.32	Sent to road contractors

S. No.	Production Area	Solid waste type	Quantity (TPD)	Disposal
				(Can be used as blending material with aggregates and used for rural road making)
		Mill Scale	6.3	
6	Reheating furnace Rolling mill	Mill scale	6.8	Sent to pellet making
7	Captive power plant (AFBC)	Fly ash from ESP	167.5	Sent to brick making plants & / or Cement plant <i>It is also recommended to set-up a fly ash brick plant within project premises for effective handling of fly ash quantity.</i>
8	Metal Scrap (redundant plant equipment etc.	All production units	0.02 TPA	Sold to authorized recyclers

#### B. Hazardous waste

Waste name	Category as per HOW Rules 2016	Quantity	Disposal/Management
Used oil / spent oil	5.1	<7.2 TPA	Hand over to authorized recycler as per provisions of HoW Rules 2016 amended till date
Wastes or residues containing oil	5.2		
Empty barrels/containers/liners contaminated with hazardous chemicals/wastes	33.1		
Contaminated cotton rags or other cleaning materials	33.2		

#### 62.11.13 Public Consultation:

Details of advertisement given	1. Dainik Bhaskar, Sagar (Hindi) dated 27.08.2023 2. Sagar Deshbandhu, Sagar (Hindi) dated 27.08.2023 3. Patrika, Tikamgarh(Hindi) dated 27.08.2023
Date of public consultation	29.09.2023
Venue	Govt. Sec. School Complex, Papawani Khas, Tehsil Prithvipur, District Niwari, Madhya Pradesh.
Presiding Officer	Upper Collector, District Niwari (nominated as presiding officer by Collector, Niwari).
Major issues raised	Major issues raised included land and compensation, employment for locals, construction of cow-shelter, improvement in educational infrastructure in the area, control of pollution (emissions and effluent) from proposed project.

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

##### I. Proposed Activities (under social-EMP as per MoEF&CC O.M. dated 30.09.2020):

Budgetary allocation for issues raised during public hearing

S. No.	Particulars	Activity	Time bound (year wise) expenditure (in Rs. Lakh)			Total
			1	2	3	
1.	Skill development	Construction of Skill development centre (handicraft, textile etc) for women in village Sunrai Khas & provision of sewing machines (50 nos.) to women for tailoring classes.	100	0	0	100
		Construction of Skill development centre (common) including computer training in village Papawani Khas. Focus on utilizing internet and making use of online platforms for livelihood opportunities and income generation.	100	0	0	100
		Vocational training programs in the field of Automobile Repair, Welding, Electrical, Computer Hardware, etc.	50	0	50	100
		Training centre on scientific & modern agricultural practices to farmers, self-help groups for processing and sale of cow dung, urine from cow shelter proposed in village Papawani Khas by PMPL.	50	0	50	100
		Construction of ITI college in Papawani Khas village for skill development as mechanic, Fruits and vegetable processing, welding, electrician, plumbing, Carpenter, Draughtsman civil, Computer operator etc.	100	50	50	200
		Construction of ITI college in Neguwan Khas village for skill development as mechanic, Fruits and vegetable processing, welding, electrician, plumbing, Carpenter, Draughtsman civil, Computer operator etc.	100	50	50	200
<b>A.</b>	<b>Total</b>		<b>500</b>	<b>100</b>	<b>200</b>	<b>800</b>
2.	Education	<p>Infrastructure development in <b>Govt. primary school, Neguwan khas village</b> including</p> <ul style="list-style-type: none"> <li>• separate toilets for male and female students (3 each),</li> <li>• borewell construction,</li> <li>• water tank and filtration system for drinking water,</li> <li>• science and computer labs in school and</li> </ul>	100	0	0	100

S. No.	Particulars	Activity	Time bound (year wise) expenditure (in Rs. Lakh)			Total
			1	2	3	
		<ul style="list-style-type: none"> <li>• distribution of laptops to 10 meritorious students</li> </ul>				
		Infrastructure development in Govt. primary school, Sunrai Khas village including <ul style="list-style-type: none"> <li>• separate toilets for male and female students (3 each),</li> <li>• borewell construction,</li> <li>• water tank and filtration system for drinking water,</li> <li>• science and computer labs and</li> <li>• distribution of laptops to 10 meritorious students</li> </ul>	100	0	0	100
		Infrastructure development in <b>Govt. secondary school, Papawani Khas village</b> including <ul style="list-style-type: none"> <li>• separate toilets for male and female students (3 each),</li> <li>• filtration system for drinking water, science and computer labs in school and</li> <li>• distribution of laptops to 10 meritorious students</li> </ul>	50	50	0	100
<b>B.</b>	<b>Total</b>		<b>250</b>	<b>50</b>	<b>0</b>	<b>300</b>
<b>3.</b>	Community infrastructure	Construction of a model <b>Cow Shelter</b> in <b>Village Papawani Khas</b> wherein cattle are looked after and provided locally available feed and services such as such as routine check-ups, treatment, vaccination etc.	80	0	0	80
		<b>Solar lights</b> in in 9 villages <ul style="list-style-type: none"> <li>• Sunrai Khas,</li> <li>• Papawani Khas,</li> <li>• Sakera Khurd,</li> <li>• Tapariya Hararan,</li> <li>• Banyani,</li> <li>• Neguwan Khas,</li> <li>• Dhaurra,</li> <li>• Niwaura,</li> <li>• Beer Sagar Khas</li> </ul>	50	30	20	100
		Construction of ground level reservoir in village <ul style="list-style-type: none"> <li>• Neguwan Khas,</li> <li>• Dhaurra,</li> <li>• Niwaura</li> </ul>	150	100	100	350

S. No.	Particulars	Activity	Time bound (year wise) expenditure (in Rs. Lakh)			Total
			1	2	3	
		Construction of ground level reservoir in village • Papawani Khas, • Sunrai Khas	100	100	30	230
<b>C</b>	<b>Total</b>		<b>380</b>	<b>230</b>	<b>150</b>	<b>760</b>
<b>4</b>	Health & sanitation	Repair works and provision of medical equipment in PHC in Village Papawani Khas	50	0	0	50
		Repair works and provision of medical equipment in PHC in Village Neguwan Khas	50	0	0	50
		Provision of 1 Mobile Intensive Care Unit (MICU) Ambulance to Government health care centre in Papawani Khas	0	100	0	100
		Construction of 10 bedded health care facility in village Neguwan Khas & provision of medical equipment with Radio Diagnostic facility and Pathological Lab	100	100	100	300
		Construction of 10 bedded health care facility in village Papawani Khas & provision of medical equipment with Radio Diagnostic facility and Pathological Lab	100	100	100	300
<b>D</b>	<b>Total</b>		<b>300</b>	<b>300</b>	<b>200</b>	<b>800</b>
<b>TOTAL (A-D)</b>			<b>1430</b>	<b>680</b>	<b>550</b>	<b>2660</b>
<b>5</b>	Social welfare activities including education, skill development, employment (1 person from each family) for project affected families		180	0	0	180
<b>GRAND TOTAL</b>			<b>1610</b>	<b>680</b>	<b>550</b>	<b>2840</b>

## II. PROPOSED ACTIVITIES (TO BE CONTINUED THROUGHOUT THE LIFE OF THE PROJECT):

### 1. Village adoption

PMPL proposes to adopt 2 villages in its vicinity to be developed as model villages in consultation with the village Panchayat and the district administration in a timeframe of 10 years.

S. No.	Village to be adopted	Distance (aerial) & direction (in km)	Activities proposed
1.	Sunrai Khas	~0.4 km South direction	<ul style="list-style-type: none"> <li>• Power supply infrastructure augmentation</li> <li>• Water supply &amp; distribution infrastructure augmentation</li> </ul>



S. No.	Village to be adopted	Distance (aerial) & direction (in km)	Activities proposed
			<ul style="list-style-type: none"> <li>• Road infrastructure improvement,</li> <li>• construction of public bus stands,</li> <li>• construction of rain water harvesting structures and rain water storage structures,</li> <li>• construction of community hall,</li> <li>• infrastructure development in Govt. Primary School including science and computer labs</li> <li>• development of football ground.</li> <li>• operation &amp; maintenance of Health care facility (constructed under CER programme)</li> </ul>
2.	Papawani Khas	~0.6 km towards ESE direction	<ul style="list-style-type: none"> <li>• Power supply infrastructure augmentation</li> <li>• Water supply &amp; distribution infrastructure augmentation</li> <li>• Road infrastructure improvement,</li> <li>• construction of public bus stands,</li> <li>• construction of rain water harvesting structures and rain water storage structures,</li> <li>• construction of community hall,</li> <li>• infrastructure development in Govt. Primary School including science and computer labs and development of cricket ground</li> <li>• Upgradation of the school into a smart school.</li> <li>• Establishment of Model Anganwari and nutrition center (1) for pregnant and lactating women having basic medical equipment.</li> <li>• Skill development centre for Women in village (Maintenance &amp; salaries of vocational teachers)</li> <li>• Skill Development Centre (common) in the village (Maintenance &amp; salaries of vocational teachers)</li> </ul>

2. PMPL will ensure fodder availability for locals engaged in animal husbandry along with maintenance of cow shelter in village Papawani Khas proposed to be constructed under Social EMP by PMPL.

62.11.14 The capital cost of the project is Rs. 1772.08 Crores and the capital cost for environmental protection Rs. 74.20 Crore. The annual recurring cost towards the environmental protection measures is proposed as Rs. 4.03 Crores. The employment generation from the proposed project is 1264 persons. The details of cost for environmental protection measures is as follows:

S. No.	Environment Control Measure	Capital cost (In Rs. Lakhs)	Recurring cost (in Rs. Lakh per annum)
1	Air Pollution Control	1850	185
2	Water Pollution Control	270	27
3	Noise Pollution Control	50	1
4	Solid & Hazardous Waste Management	50	5
5	Environmental laboratory monitoring	40	10

6	OCEMS and CAAQMS	200	20
7	1.0 MW Solar PV Plant	475	5
8	Greenbelt Development & plantation	1400	130
9	Firefighting Measures	110	10
10	Occupational Health & Safety measures	100	10
A	<b>Total</b>	<b>4545</b>	<b>403</b>
B	Wildlife Conservation plan	35.0	0
C	Addressal of Public Consultation concerns (Social EMP plan budget)	2840	0
<b>Grand Total (A+B+C)</b>		<b>7420</b>	<b>403</b>
Details of adoption of villages, if any		PMPL proposes to adopt 2 villages in its vicinity to be developed as model villages in consultation with the village Panchayat and the district administration in a timeframe of 10 years. Details are as below:	
	<b>S. No.</b>	<b>Village to be adopted</b>	<b>Distance (aerial) &amp; direction</b>
	1.	Sunrai Khas	~0.4 km South direction
	2.	Papawani Khas	~0.6 km towards ESE direction

62.11.15 Proposed greenbelt will be developed in 46.61 ha which is about 34 % of the total project area. Thus total of 137.699 ha area (34% of total project area) will be developed as greenbelt. A min. 30 m wide greenbelt 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 139862 saplings will be planted within 1 year and nurtured.

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

62.11.17 The proposal was initially considered during the 57<sup>th</sup> meeting of the EAC for Industry-I sector held on 24<sup>th</sup> – 25<sup>th</sup> April 2024 wherein EAC deferred the proposal seeking additional information. The deliberations and recommendations of EAC are as follows:

#### **Deliberations by the Committee (EAC during 24<sup>th</sup> -25<sup>th</sup> April 2024)**

The Committee noted the following:

1. The EAC also took into consideration the drone survey of the project site and kml file on the Google Earth presented by the project proponent along with DSS of the project site on PARIVESH and observed that Bardai Nala is adjacent to project boundary in the North direction and appears to be a perennial stream. The EAC is of the opinion that PP needs to obtain NOC from the Irrigation Department /concerned authority and submit the same. Also detailed mitigation measures along with Draining network plan needs to be submitted in this regard.

2. The EAC observed that the proposed project area consists of three blocks. During discussions, the EAC reviewed the layouts provided by the project proponent and noted that the right of way (ROW) for each block is unclear from the layouts. The project proponent needs to obtain permission for point-to-point ROW from the Competent Authority. The permission letter should also include geographical coordinates. Additionally, the project proponent is required to submit the revised layouts.
3. The PP needs to redone the Drone survey as it has not properly captured the details of the site.
4. The PP needs to rework on the proposed water requirement for the project specifically assigned for greenbelt and shall submit the revised water balance diagram.
5. The PP/Consultant is advised to reverify the R&R of the proposed project land and submit the detailed report in this regard.
6. The EAC discussed on the implementation of the project and is of the opinion that PP shall submit activity wise schedule of the project implementation with timelines and shall also present the same in the form of the GANTT chart.
7. The Committee deliberated on the public hearing issues along with action plan submitted by the proponent to address the issues raised during the public hearing and is of the view that the submitted action is not sufficient to address all the issues. The EAC advised PP to revise the action plan as per Ministry's O.M. dated 30.09.2020.
8. The EAC reviewed the baseline data and is of the opinion that BOD and COD in the surface water need to be reverified.
9. The PP reported that there are 7 Schedule-I species as per W(P)AA, 2022 recorded within 10 km radius of the study area of the plant site. The EAC noted that PP has not given the details of the conservation plan and its approval in the brief summary submitted along with the other documents for appraisal. The PP shall submit the complete details in the brief summary also.
10. Project proponent needs to submit a study report on Decarbonisation program, which would essentially consist of company's carbon emissions, carbon budgeting/ balancing, carbon sequestration activities and carbon capture, use and storage and offsetting strategies. Further, the report shall also contain time bound action plan to reduce its carbon intensity of its operations and supply chains, energy transition pathway from fossil fuels to Renewable energy etc. All these activities/ assessments should be measurable and monitorable with defined time frames.
11. The EAC advised PP/Consultant to represent the case again with revised proposal presentation. In view of the same, the EAC opined that PP needs to update the Proposal presentation with all the desired details and shall submit for consideration of the proposal.
12. The EAC agreed to the request of PP/Consultant and allowed them to reappear after the revision of the application incorporating the desired information.

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**Recommendations of the Committee (EAC during 24<sup>th</sup> -25<sup>th</sup> April 2024)**

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

62.11.18 The proponent submitted the ADS reply vide letter dated 17.06.2024 uploaded on PARIVESH on 18.06.2024. Point-wise reply of ADS is given as below:

S. No.	Additional information sought	Reply
1	<p>The EAC also took into consideration the drone survey of the project site and kml file on the Google Earth presented by the project proponent along with DSS of the project site on PARIVESH and observed that Bardai Nala is adjacent to project boundary in the North direction and appears to be a perennial stream. The EAC is of the opinion that PP needs to obtain NOC from the Irrigation Department / concerned authority and submit the same.</p> <p>Also detailed mitigation measures along with Draining network plan needs to be submitted in this regard.</p>	<p>The project site is divided into three plots, Plot A, Plot B &amp; Plot C by Bardai nallah adjacent to project site. All the three plots together form the project site for the proposed steel plant &amp; will be connected to each other by 2 no of culverts.</p> <p>NOC from Office of the Executive Engineer, water resources Division, Niwari vide letter no. 287/W/2024-25 dated 23.04.2024 has been obtained for the Nallah adjacent to the proposed project site. Copy of the NOC from WRD is submitted.</p> <p>Site planning has been done to avoid any disturbance to the flow and path of the nallah. Proposed protection measures for Nallah include:</p> <ul style="list-style-type: none"> <li>• Stone pitching</li> <li>• Slope stabilization</li> <li>• Greenbelt &amp; plantation of min. 30 m all along plant periphery</li> <li>• No plant components within 50 m of Nallah</li> <li>• Zero effluent discharge from plant premises,</li> <li>• Rain water harvesting measures proposed including garland drains with sediment traps to channel run-off from site to rain water collection tank.</li> </ul> <p>The site development works to commence after obtaining all the statutory clearance will include stone pitching &amp; slope stabilization for nallah conservation, storm water drainage network for plant site &amp; development of greenbelt &amp; plantation.</p> <p>Draining network plan is submitted along with detailed mitigation measures.</p>
2	<p>The EAC observed that the proposed project area consists of three blocks. During discussions, the EAC reviewed the layouts provided by the project proponent and noted that the right of way (ROW) for each block is unclear from the layouts. The project proponent needs to obtain permission for point-to-point ROW from the Competent Authority. The permission letter should also include geographical coordinates.</p>	<ul style="list-style-type: none"> <li>• The project site is divided into three plots, Plot A, Plot B &amp; Plot C by nallah flowing adjacent to project site. All the three plots together form the project site for the proposed steel plant.</li> <li>• Movement of main raw material is proposed in a linear flow from plot A to plot B to plot C and it is proposed to construct minor bridge / culverts to connect the 3 plots.</li> <li>• NOC from Office of the Executive Engineer, water resources Division, Niwari vide Memo no. 379/W/2024-25 dated 25.05.2-24 has been obtained for construction of 2 no. of culverts for connecting</li> </ul>

S. No.	Additional information sought	Reply
	Additionally, the project proponent is required to submit the revised layouts.	<p>Plot A to Plot B and Plot B to Plot C including the geographical coordinates of the proposed culverts.</p> <ul style="list-style-type: none"> <li>• Copy of the NOC from WRD along with authenticated layout map showing location of the culverts is submitted.</li> </ul>
3	The PP needs to redo the Drone survey as it has not properly captured the details of the site.	As directed by the Hon'ble EAC (Industry 1 projects), the drone survey has been redone capturing the project details as per the requirements of the EAC. The same shall be presented before the EAC during re-appraisal of the proposal.
4	The PP needs to rework on the proposed water requirement for the project specifically assigned for greenbelt and shall submit the revised water balance diagram.	<p>Water balance diagram has been revised w.r.t quantity assigned to greenbelt. The water demand for greenbelt &amp; plantation has been calculated as below:</p> <ul style="list-style-type: none"> <li>• Total trees proposed as per greenbelt &amp; plantation programme: 1,39,862</li> <li>• Water demand @8.0 litre per tree: 1,39,862 * 8 = 11,18,896 litre.</li> <li>• Total water demand for greenbelt &amp; plantation in KLD: 1,118.896 say <b>1119 KLD.</b></li> </ul> <p>Out of this 1119 KLD, 50 KLD will be fresh water, 45.5 KLD will be STP treated water &amp; remaining 1023.50 KLD will be ETP treated water with parameters conforming to norms prescribed for irrigation under Schedule VI, Rule 3A, Environment (Protection) Rules, 1986.</p> <p>Revised water balance diagram is submitted.</p>
5	The PP/Consultant is advised to reverify the R&R of the proposed project land and submit the detailed report in this regard.	<ul style="list-style-type: none"> <li>• The land proposed for project site is Government Land and allotment of 137.699 Hectares (340.261 acres) for industrial purpose has been done by MPIDCL, Madhya Pradesh vide allotment order no. क्रमांक / एमपीआईडीसी / क्षे.का.ग्वा./ नवीनपरियोजना/146/निवाडी/2023/1691 ग्वालियर dated 03.07.2023 in favour of PMPL and lease deed registered on 28.07.2023 between MPIDCL &amp; PMPL.</li> <li>• R&amp;R is being undertaken by Govt. of Madhya Pradesh. However, PMPL has undertaken survey at its end to arrive at suitable amount as per provisions under the The Right to Fair Compensation and Transparency in Land Acquisition, Rehabilitation and Resettlement Act, 2013 for R&amp;R of the PAFs &amp; an amount of Rs. 1.80 Crore has been allocated for this purpose.</li> <li>• This amount will be used to compensate the Project Affected Families by suitable means in agreement with PAF including allocation of land outside of project site boundary by District administration &amp; MPIDCL.</li> </ul>

S. No.	Additional information sought	Reply
		<ul style="list-style-type: none"> <li>• Also, an amount of Rs. 54,52,000/- has been disbursed by PMPL for addressing land related issues put up during public hearing for person's whose Khatedari land is falling inside land allocated to PMPL by MPIDCL. Copy of agreements done by PMPL with khatedari land owners is submitted.</li> <li>• PMPL will give preference for employment based on eligibility &amp; qualification to eligible individuals from PAFs.</li> <li>• The company shall also, under Social-EMP (as per MoEF&amp;CC O.M. dated 30.09.2020) &amp; CSR plan (under Company's Act) will undertake social welfare &amp; upliftment activities with emphasis on project affected families.</li> </ul>
6	The EAC discussed on the implementation of the project and is of the opinion that PP shall submit activity wise schedule of the project implementation with timelines and shall also present the same in the form of the GANTT chart.	Major activities involved in implementing the project are defined and estimated completion time given in the Implementation Schedule is submitted in the shape of a GANTT Chart. The Chart shows tentative construction schedule indicating the commencement, duration and completion of various activities. The Chart shows a Project Construction Schedule of 24 months from the date, go-ahead is given. Go-ahead date is assumed from the date of achieving financial closure.
7	The Committee deliberated on the public hearing issues along with action plan submitted by the proponent to address the issues raised during the public hearing and is of the view that the submitted action is not sufficient to address all the issues. The EAC advised PP to revise the action plan as per Ministry's O.M. dated 30.09.2020.	<p>Revised action plan with budgetary allocation of Rs. 26.6 Crore (1.5 % of total project cost) to address public hearing issues as per MoEF&amp;CC O.M. dated 30.09.2020 is submitted.</p> <p>The areas to be covered under Social-EMP plan by PMPL include</p> <ol style="list-style-type: none"> <li>1. Skill development: 800 Lakh</li> <li>2. Education: 300 Lakh</li> <li>3. Community infrastructure development: 760 Lakh</li> <li>4. Health &amp; sanitation: 800 Lakh</li> </ol>
8	The EAC reviewed the baseline data and is of the opinion that BOD and COD in the surface water need to be reverified.	<ul style="list-style-type: none"> <li>• The Surface water sampling has been redone through NABL certified &amp; MoEF&amp;CC recognized environmental laboratory to reverify the baseline surface water monitoring results.</li> <li>• The BOD in the surface water samples is ranging from 6.0 mg/l to 12.0 mg/l</li> <li>• The COD in the surface water samples is ranging from 24.0 mg/l to 54.0 mg/l</li> <li>• The surface water monitoring results along with NABL certificate of Environmental laboratory are submitted.</li> </ul>
9	The PP reported that there are 7 Schedule-I species as per W(P)AA, 2022 recorded within 10 km radius of the study area of the plant site. The EAC noted that PP has not given the	Wildlife conservation plan prepared for 7 no of Schedule I species as per W(P)AA, 2022 with a budgetary allocation of Rs. 35 Lakh has been submitted to Principle Chief Conservator of Forest & Chief wildlife warden, Department of Forests, Bhopal for

S. No.	Additional information sought	Reply
	details of the conservation plan and its approval in the brief summary submitted along with the other documents for appraisal. The PP shall submit the complete details in the brief summary also.	approval on dated 18.09.2023. The same has been submitted along with Final EIA/EMP report. Copy of the submission receipt is submitted. Revised Brief summary with details of wildlife conservation plan and its approval status is submitted.
10	Project proponent needs to submit a study report on Decarbonisation program, which would essentially consist of company's carbon emissions, carbon budgeting/ balancing, carbon sequestration activities and carbon capture, use and storage and offsetting strategies. Further, the report shall also contain time bound action plan to reduce its carbon intensity of its operations and supply chains, energy transition pathway from fossil fuels to Renewable energy etc. All these activities/ assessments should be measurable and monitorable with defined time frames.	Assessment of Carbon footprint from process has been carried out and it is estimated that total Carbon footprint of the proposed project (IOBP, Pellet plant, DRI plant, SMS, Rolling mill, CPP) will be 14,31,505 tonne of CO <sub>2</sub> / annum. The decarbonisation programme has been planned on a long term basis and will span 30- 35 years to achieve Net-Zero. The decarbonisation programme is based on carbon emission reduction mainly through <ul style="list-style-type: none"> <li>• Process technology: Carbon capturing units, green hydrogen based process.</li> <li>• Through use of renewable energy: Solar PV plant of 1.0 MW in plant premises.</li> <li>• Transitioning to Electric vehicles / Bio fuel / green hydrogen powered vehicles.</li> <li>• Through plantation &amp; greenbelt development.</li> </ul> Detailed carbon footprint & sequestration report is submitted.
11	The EAC advised PP/Consultant to represent the case again with revised proposal presentation. In view of the same, the EAC opined that PP needs to update the Proposal presentation with all the desired details and shall submit for consideration of the proposal.	The contents of para 11 are duly noted & agreed upon.
12	The EAC agreed to the request of PP/Consultant and allowed them to reappear after the revision of the application incorporating the desired information.	The contents of para 11 are duly noted & agreed upon.

62.11.19 Based on the above submission of PP, the proposal was re-considered during the 62<sup>nd</sup> meeting of the EAC for Industry-I sector held on 3<sup>rd</sup> – 5<sup>th</sup> July 2024. The deliberations and recommendations of EAC are as follows:

**Written submission by the PP:**

62.11.20 During the meeting, based on the deliberations made by the EAC, the project proponent vide letter dated 04.07.2024 sent through email dated 05.07.2024 submitted following information:

<b>S. No.</b>	<b>Additional details sought</b>	<b>Response by Project Proponent</b>
1.	Submit plan for connecting project site to State highway	Approach road from project site to existing village road will be constructed by PMPL and land for the same will be purchased from state govt. The village road further connecting to the state highway will be strengthened by PMPL in coordination with state govt. It will be ensured that the point of connection of approach road to the village road will be further away from habitation.
2.	Submit plan for entirely phasing out use of ground water for project operations.	Ground water abstraction will be phased out completely after commencement of project and pipeline operations and Daily makeup water demand for project operations will be met from surface water and stored rain water.
3.	Submit status of R&R	The project site land is govt land allotted to PMPL by MPIDCL and lease deed for the same has been registered dated 28.07.2023. R&R for the encroachers on Govt land has been carried out by MPIDCL. PMPL has allocated a budget of Rs 1.80 crore for the social welfare of the Project affected families and is in consultation with the MPIDCL for disbursement of the same. PMPL will deposit the amount to the MPIDCL and this amount will be spent for the welfare of the PAFs by the MPIDCL.
4.	Provide the details of plantation in the project site.	Plantation in the core zone will be completed within 3 years after EC is granted. Most of the trees with dense canopy will be provided. List of proposed plantation along with no and type of species is submitted.
5.	Additional Plantation within the plant premises under 'Ek Ped Maa ke Naam Campaign' should be done	Additional plantation within the plant premises under 'Ek Ped Maa ke Naam Campaign' will be provided. The geotagged photographs of the plantation will be uploaded on the LIFE website. Affidavit stating the same is submitted.

### **Deliberations by the Committee**

62.11.21 The Committee noted the following:

1. The instant proposal is for a Greenfield Steel Plant Project to produce Pellets 1.0 Million TPA; DRI 0.4 Million TPA, MS Billets 0.42 Million TPA and 0.4 Million TPA TMT Rebars with Iron ore beneficiation plant of capacity 2.65 Million TPA & Captive Power generation of 28 MW through WHRB and 15 MW through AFBC.
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 EAC also took into consideration the drone survey of the project site and kml file on the Google Earth presented by the project proponent along with DSS of the project site on PARIVESH and made following deliberations accordingly.
6. Total project area is 137.699 Hectare. The land proposed for project site is government land and allotment of 137.699 Hectares (340.261 acres) for industrial purpose has been done by MPIDCL, Madhya Pradesh vide allotment order dated 03.07.2023 in favour of PMPL and lease deed registered on 28.07.2023 between MPIDCL & PMPL.
7. PP reported that there are 13 houses (encroachment) in core zone covering village Sakera Bhata, Sunarai Bhata & Papwani Khas. The status of R&R is as follows:
  - R&R is being undertaken by Govt. of Madhya Pradesh. However, PMPL has undertaken survey at its end to arrive at suitable amount as per provisions under the The Right to Fair Compensation and Transparency in Land Acquisition, Rehabilitation and Resettlement Act, 2013 for R&R of the PAFs & an amount of Rs. 1.80 Crore has been allocated for this purpose.
  - This amount will be used to compensate the Project Affected Families by suitable means in agreement with PAF including allocation of land outside of project site boundary in coordination with District administration 7b MPIDCL.
  - PMPL will give preference for employment based on eligibility & qualification to eligible individuals from PAFs.
  - The company will also, under Social-EMP (as per MoEF&CC O.M. dated 30.09.2020) & CSR plan (under Company's Act) undertake social welfare & upliftment activities with emphasis on project affected families.

The EAC deliberated on the same and is of the view that R&R shall be completed in consultation with the State Government prior to commencement of project activities.

8. There are sensitive areas within the study area of the project site. Proponent shall take appropriate environmental safeguard measures to minimise the impact on the habitation of the locals. The project proponent needs to strengthen green belt all around the plant area to reduce the dust pollution. The PP shall also include some of these locations in its environmental monitoring programme.
9. As reported, Bardai Nallah is Adjacent to the Boundary of the project in North direction. PP has reported that NOC for site suitability with respect to Nallah adjacent to the project site has been obtained from Office of the Executive Engineer, WRD, Niwari vide letter no.

287/W/2024-25 dated 23.04.2024. Also there are several water bodies within the study area of the project site. The EAC opined that water bodies shall be conserved. 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.

10. Orchha Wildlife sanctuary is reported at 4.0 km in WNW and its ESZ at a distance of 2 km. The same is certified as per certificate dated 20.02.2023 from D.F.O, Tikamgarh, along with authenticated 10 km radius topomap showing project site coordinates. The EAC opined that PP shall obtain the NBWL approval if applicable and also prepare and implement the protective measures to minimise the impact of project activities on the Wildlife Sanctuary.
11. The PP reported that water requirement is 7500 m<sup>3</sup>/day, out of which 1100 m<sup>3</sup>/day of fresh water requirement will be obtained from the ground water and another 6400 m<sup>3</sup>/day of fresh water requirement will be obtained from the Jamni River. The EAC deliberated on the water requirement is of the opinion that PP shall obtain necessary permission from the Competent Authority in this regard. Further, PP proposed to collect & use rain water to reduce fresh water demand. Proposed rain water harvesting to the tune of 6,12,883 m<sup>3</sup>/annum and use of this rain water after primary treatment for plant operations will reduce the fresh water demand during rainy days. It is estimated that water demand to the tune of ~ 1679 m<sup>3</sup>/day can be met from rain water harvesting, reducing daily fresh water demand by ~22% i.e. 5829 KLD. PP has undertaken that Ground water abstraction will be phased out completely after commencement of project and pipeline operations and Daily makeup water demand for project operations will be met from surface water and stored rain water.
12. The Committee has deliberated on the baseline data and incremental GLC due to the proposed project and found it satisfactory.
13. 7 Schedule I species as per W(P)AA, 2022 is present in the study area viz. India Peafowl, Indian vulture, Monitor Lizard, Indian Fox, Indian Jackal, Indian Cobra, Grey mongoose. Wildlife conservation plan has been prepared with a budgetary allocation of Rs. 0.35 Crore. PP has submitted conservation plan to the Principle Chief Conservator of Forest & Chief wildlife warden, Department of Forests, Bhopal for authentication along with wildlife conservation on 18.09.2023. The EAC opined that PP shall strictly comply with the recommendations made in the Wildlife Conservation Plan as per the approval.
14. The PP has submitted that greenbelt will be developed in 46.61 ha which is about 34 % of the total project area. Thus total of 137.699 ha area (34% of total project area) will be developed as greenbelt. Total no of 139862 saplings will be planted within 1 year and nurtured. The EAC deliberated on the greenbelt layout plan along with action plan and the budget earmarked and is of the opinion that greenbelt shall be completed within a period of 1 year.
15. 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.

16. The committee deliberated details of carbon foot prints and carbon sequestration study w.r.t. proposed project and found them to be satisfactory.
17. The EAC also deliberated on the ADS reply of the project proponent and found it satisfactory.
18. The EAC also deliberated on the written submission of the project proponent 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.
21. The EAC also reviewed the EC conditions (specific and general) pertaining to Industry-I projects and observed that some of the specific conditions stipulated so far in the previously recommended EC projects are common and applicable to most of the projects in general. In view of the same, the General Conditions (in case of EC projects) have been revised through reallocation of these common conditions from specific to General Conditions (in case of EC projects). Accordingly, the instant project is also being stipulated with the modified General conditions.

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

62.11.22 In view of the foregoing and after detailed deliberations, the committee **recommended** the instant proposal **subject to uploading of written submission on PARIVESH portal** for grant of Environment Clearance under the provisions of EIA Notification, 2006 subject to the stipulation of following specific conditions and general conditions based on project specific requirements:

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

- i. **This Environmental clearance is granted subject to final outcome of Hon'ble Supreme Court of India, Hon'ble High Court, Hon'ble NGT and any other Court of Law, if any, as may be applicable to this project.**
- ii. The project proponent shall comply with all the environmental protection measures and safeguards proposed in the documents submitted to the Ministry. All the recommendations made in the EIA/EMP in respect of environmental management, and risk mitigation measures relating to the project shall be implemented.

- iii. The project proponent shall utilize modern technologies for capturing of carbon emitted and shall also develop carbon sink/carbon sequestration resources capable of capturing more than emitted. The implementation report shall be submitted to the IRO, MoEF&CC in this regard.
- iv. PP shall complete the R&R in consultation with the State Government prior to commencement of project activities. The PP may also take care of the Livelihood options of the displaced families in consultation with the State Govt.
- v. There are sensitive areas within the study area of the project site. Proponent shall take appropriate environmental safeguard measures to minimise the impact on the habitation of the locals. The project proponent needs to strengthen green belt all around the plant area to reduce the dust pollution. The PP shall also include some of these locations in its environmental monitoring programme.
- vi. As reported, Bardai Nallah is Adjacent to the Boundary of the project in North direction. Also there are several water bodies within the study area of the project site. A robust and full proof Drainage Conservation scheme to protect the natural drainage and its flow parameters; along with Soil conservation scheme and multiple Erosion control measures shall be implemented.
- vii. Orchha Wildlife sanctuary is reported at 4.0 km in WNW and its ESZ at a distance of 2 km. PP shall obtain the NBWL approval (if applicable) and also prepare and implement the protective measures to minimise the impact of project activities on the Wildlife Sanctuary.
- viii. Total water requirement is 7500 m<sup>3</sup> /day, out of which 1100 m<sup>3</sup>/day of fresh water requirement is proposed to be obtained from the ground water and another 6400 m<sup>3</sup>/day of fresh water requirement from the Jamni River. PP shall obtain necessary permission from the Competent Authority in this regard. Further, as undertaken Ground water abstraction shall be phased out completely after commencement of project and pipeline operations and Daily makeup water demand for project operations shall be met from surface water and stored rain water.
- ix. Three tier Green Belt shall be maintained in atleast 33% of the project area 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 sensitive areas nearby project site. Compliance status in this regard, shall be submitted to concerned Regional Office of the MoEF&CC.
- x. The PP is advised to implement the 'Ek Ped Maa Ke Naam' Campaign which was launched on 5<sup>th</sup> June 2024 on the occasion of the World Environment Day to increase the forest cover across the Country.
- xi. All the commitments made towards socio-economic development of the nearby villages shall be satisfactorily implemented. The action plan based on the social impact assessment study of the project as per the EMP in accordance to the Ministry's OM dated 30.09.2020 amounting to Rs. 28.40 Crores shall be strictly implemented and progress shall be submitted to the Regional Office of MoEF&CC.

- xii. The project proponent shall undertake village adoption programme and prepare and implement the action plan to develop them into a model village.
- xiii. 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.
- xiv. As committed, approach road from project site to existing village road shall be constructed by PMPL and land for the same shall be purchased from state govt. The village road further connecting to the state highway shall be strengthened by PMPL in coordination with state govt. It shall be ensured that the point of connection of approach road to the village road will be further away from habitation.

## **B. General Conditions**

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

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

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

- i. The project proponent shall install 24x7 continuous emission monitoring system at process stacks to monitor stack emission as well as 04 Nos. Continuous Ambient Air Quality Station (CAAQMS) for monitoring AAQ parameters with respect to standards prescribed in Environment (Protection) Rules 1986 as amended from time to time. The CEMS and CAAQMS shall be connected to SPCB and CPCB online servers and calibrate these systems from time to time according to equipment supplier specification through labs recognized under Environment (Protection) Act, 1986 or NABL accredited laboratories.
- ii. The project proponent shall carryout Continuous Ambient Air Quality monitoring for common/criterion parameters relevant to the main pollutants released (e.g. PM<sub>10</sub> and PM<sub>2.5</sub> in reference to PM emission, and SO<sub>2</sub> and NO<sub>x</sub> in reference to SO<sub>2</sub> and NO<sub>x</sub> emissions) within and outside the plant area (at least at four locations one within and three outside the plant area at an angle of 120° each), covering upwind and downwind directions.
- iii. The project proponent shall monitor fugitive emissions in the plant premises at least once in every quarter through laboratories recognized under Environment (Protection) Act, 1986 or NABL accredited laboratories.
- iv. Sampling facility at process stacks shall be provided as per CPCB guidelines for manual monitoring of emissions.
- v. Appropriate Air Pollution Control (APC) system shall be provided for all the dust generating points including fugitive dust from all vulnerable sources, so as to comply prescribed stack emission and fugitive emission standards.
- vi. The project proponent shall provide leakage detection and mechanized bag cleaning facilities for better maintenance of bags.

- vii. Sufficient number of mobile or stationery vacuum cleaners shall be provided to clean plant roads, shop floors, roofs, regularly.
- viii. Ensure covered transportation and conveying of raw material to prevent spillage and dust generation. The project proponent use leak proof trucks/dumpers carrying coal and other raw materials and cover them with tarpaulin.
- ix. Recycle and reuse iron ore fines, coal and coke fines, lime fines and such other fines collected in the pollution control devices and vacuum cleaning devices in the process after briquetting/ agglomeration.
- x. The project proponent shall provide primary and secondary fume extraction system at all heat treatment furnaces.
- xi. Wind shelter fence and chemical spraying shall be provided on the raw material stock piles.
- xii. Design the ventilation system for adequate air changes as per prevailing norms for all tunnels, motor houses, Oil Cellars.
- xiii. Pollution control system in the plant shall be provided as per the CREP Guidelines of CPCB.
- xiv. The project proponent shall adopt the Clean Air practices like mechanical collectors, wet scrubbers, fabric filters (bag houses), electrostatic precipitators, combustion systems (thermal oxidizers), condensers, absorbers, adsorbers, and biological degradation. Controlling emissions related to transportation shall include emission controls on vehicles as well as use of cleaner fuels. Sufficient numbers of additional truck mounted Fog/Mist water cannons shall be procured and operated regularly inside the project premises and also in the surrounding villages to arrest suspended dust in the atmosphere.
- xv. Bag filters shall be cleaned regularly and efficiency of bag filter system shall be monitored at regular intervals.
- xvi. Water Sprinklers/Water mist system shall be installed near raw material yards, operational units and other strategic locations to control fugitive emissions from the plant.
- xvii. The particulate matter emissions from the process stacks shall be less than  $30 \text{ mg/Nm}^3$  and measures shall be undertaken as per the submitted action plan. Efficient Air monitoring equipment shall be installed.
- xviii. Following additional arrangements to control fugitive dust shall be provided:
  - a. Fog / Mist Sprinklers at all on bulk raw material storage area (at the transfer points) like Iron Ore, Coal and for Fly Ash and similar solid waste storage areas.
  - b. Proper covered vehicle shall be used while transport of materials.
  - c. Wheel washing mechanism shall be provided in entry and exit gates with complete recirculation system.
- xix. During operational phase at Captive Power Plant, Action Plan to monitor coke/coal dust exposures in different process plants using personal and area air samplers and to compare with permissible limits as per Indian Factories Act, 1948 shall be implemented.
- xx. The coal dust should be monitored at coal unloading, crushing, furnace areas and should be within  $2 \text{ mg/m}^3$ , respirable dust fraction containing less than 5% quartz as per Indian Factories Act, 1948.

- xxi. Online stack monitoring system for IF and RHF shall be installed and monitoring report shall be submitted to the concerned Regional Office of the MoEF&CC along with the six monthly compliance report.
- xxii. Low NO<sub>x</sub> Burners will be installed at Reheating Furnace for control of Gaseous emissions generated while using PNG.

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

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

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

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

- ii. The ambient noise levels should conform to the standards prescribed under E(P)A Rules, 1986 viz. 75 dB(A) during day time and 70 dB(A) during night time.
- iii. PP shall identify extreme hot areas through heat stress survey as well as noise monitoring within process plants to ensure that workers not exposed above 90 dBA levels as per Factories Act, 1948.

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

- i. Use torpedo ladle for hot metal transfer as far as possible. If ladles not used, provide covers for open top ladles.
- ii. Restrict Gas flaring to < 1%.
- iii. Provide solar power generation on roof tops of buildings, for solar light system for all common areas, street lights, parking around project area and maintain the same regularly;
- iv. Provide LED lights in their offices and residential areas.
- v. The project proponent shall provide waste heat recovery system (pre-heating of combustion air) at the flue gases of reheating furnaces.
- vi. Practice hot charging of slabs and billets/blooms as far as possible.
- vii. Ensure installation of regenerative type burners on all reheating furnaces.
- viii. The project proponent shall provide waste heat recovery system on the DRI Kilns.
- ix. The dolochar generated shall be used for power generation.
- x. Tar shall be recovered from producer gas and shall be sold to registered processors and phenolic water shall be incinerated in After Burn Chamber (ABC) of DRI kilns.
- xi. The PP shall implement the guidelines on sponge iron plants issued by the CPCB/SPCB in this regard.

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

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



- a. PP shall install a slag crusher to convert steel slag into aggregate for use in construction industry, fine sand for use as flux in steel plant, sand in brick making and as lime in cement making.
- b. PP shall recycle/reuse solid waste generated in the plant as far as possible.
- c. Used refractories shall be recycled as far as possible.
- vii. SMS slag after metal recovery in waste recycling facility shall be conditioned and used for road making, railway track ballast and other applications. The project proponent shall install a waste recycling facility to recover metallic and flux for recycle to sinter plant. The project proponent shall establish linkage for 100% reuse of rejects from Waste Recycling Plant.
- viii. Carbon recovery plant to recover the elemental carbon present in GCP slurries for use in Sinter plant shall be installed.
- ix. Waste recycling Plant shall be installed to recover scrap, metallic and flux for recycling to sinter plant and SMS.

## **VII. Green Belt**

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

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

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

## **IX. Environment Management**

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

Responsibility (CER) activity, company shall adopt nearby villages based on the socio-economic survey and undertake community developmental activities in consultation with the village Panchayat and the District Administration as committed.

- ii. The company shall have a well laid down environmental policy duly approved by the Board of Directors. The environmental policy should prescribe for standard operating procedures to have proper checks and balances and to bring into focus any infringements/deviation/violation of the environmental / forest / wildlife norms / conditions. The company shall have defined system of reporting infringements / deviation / violation of the environmental / forest / wildlife norms / conditions and / or shareholders / stake holders. The copy of the board resolution in this regard shall be submitted to the MoEF&CC as a part of six-monthly report.
- iii. A separate Environmental Cell both at the project and company head quarter level, with qualified personnel shall be set up under the control of senior Executive, who will directly to the head of the organization.
- iv. Performance test shall be conducted on all pollution control systems every year and report shall be submitted to Integrated Regional Office of the MoEF&CC.

#### **X. Miscellaneous**

- i. The project proponent shall make public the environmental clearance granted for their project along with the environmental conditions and safeguards at their cost by prominently advertising it at least in two local newspapers of the District or State, of which one shall be in the vernacular language within seven days and in addition this shall also be displayed in the project proponent's website permanently.
- ii. The copies of the environmental clearance shall be submitted by the project proponents to the Heads of local bodies, Panchayats and Municipal Bodies in addition to the relevant offices of the Government who in turn has to display the same for 30 days from the date of receipt.
- iii. The project proponent shall upload the status of compliance of the stipulated environment clearance conditions, including results of monitored data on their website and update the same on half-yearly basis.
- iv. The project proponent shall monitor the criteria pollutants level namely; PM10, SO2, NOx (ambient levels as well as stack emissions) or critical sectoral parameters, indicated for the projects and display the same at a convenient location for disclosure to the public and put on the website of the company.
- v. Action plan for developing connecting and internal road in terms of MSA as per IRC guidelines shall be implemented
- vi. The project proponent shall submit six-monthly reports on the status of the compliance of the stipulated environmental conditions on the website of the ministry of Environment, Forest and Climate Change at environment clearance portal.
- vii. The project proponent shall submit the environmental statement for each financial year in Form-V to the concerned State Pollution Control Board as prescribed under the Environment (Protection) Rules, 1986, as amended subsequently and put on the website of the company.

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

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### **Consideration of TOR Proposal**

#### **Agenda No. 62.12**

- 62.12 Expansion of Ore Processing Unit for production of Raw Manganese Powder (18000 TPA), Roasted Manganese Powder (11000 TPA), Manganese Mono Oxide (3600 TPA), Aluminium Notch bar and Aluminium Allied Products (3600 TPA), Chrome Refractory Motors (6000 TPA), Chrome Refractory Monolithics (6000 TPA), Chrome Refractory Mortar bricks (6000 TPA), Manganese Briquettes (12000 TPA) and Iron Powder (7200**

**TPA) with the existing unit for production of Stone Chips (1,20,000 TPA), Stone dust (30,000), Sized Iron Ore (1,20,000 TPA) and Iron Ore Fines (1,20,000 TPA) along with installation of Ferro Alloy Plant for Production of Medium Carbon Ferro Manganese (6000 TPA), Low Carbon Ferro Manganese (3600 TPA), Low Carbon Ferro Chrome (3600 TPA), Ferro Molybdenum (3600 TPA), Ferro Vanadium (3600 TPA) and Ferro Titanium (3600 TPA)” by M/s Maruti Ores and Minerals, located at Village – Purkapali, PO – Kutra, District – Sundergarh, Odisha – Consideration of TOR.**

**[Proposal No. IA/OR/IND1/472408/2024; File No. IA-J-11011/210/2024-IA-II(IND-I)]**

**[Consultant: Grass Roots Research and Creation India (P) Ltd.; Valid upto: 15.08.2024]**

62.12.1 M/s Maruti Ores and Minerals has made an online application vide proposal No-IA/OR/IND1/472408/2024, dated 21.06.2024 along with the application in prescribed format (CAF, Form – I Part A & B), copy of pre-feasibility report and proposed ToRs for undertaking detailed EIA study as per the EIA Notification, 2006 for the project mentioned above. The proposed project activity is listed at schedule no. 3(a) “Metallurgical industries (ferrous & non-ferrous)”, under Category “A” of the schedule of the EIA Notification, 2006 and appraised at Central Level.

62.12.2 Name of the EIA consultant: M/s. Grass Roots Research and Creation India (P) Ltd. [List of ACOs with their Certificate / Extension Letter No: NABET/EIA/21-24/SA 0211; valid till 15.08.2024, as on June 26, 2024].

**Details submitted by Project proponent**

62.12.3 The project of M/s Maruti Ores and Minerals located at Village – Purkapali, PO – Kutra, District – Sundergarh, Odisha is for expansion of existing Ore Processing plant producing Stone Chips (1,20,000 TPA), Stone dust (30,000), Sized Iron Ore (1,20,000 TPA) and Iron Ore Fines (1,20,000 TPA) for Production of Raw Manganese Powder (18000 TPA), Roasted Manganese Powder (11000 TPA), Manganese Mono Oxide (3600 TPA), Aluminium Notch bar and Aluminium Allied Products (3600 TPA), Chrome Refractory Mortar (6000 TPA), Chrome Refractory Monolithic (6000 TPA), Chrome Refractory Mortar bricks (6000 TPA), Manganese Briquettes (12000 TPA) and Iron Powder (7200 TPA) along with installation of Ferro Alloy Plant for production of Medium Carbon Ferro Manganese (6000 TPA), Low Carbon Ferro Manganese (3600 TPA), Low Carbon Ferro Chrome (3600 TPA), Ferro Molybdenum (3600 TPA), Ferro Vanadium (3600 TPA) and Ferro Titanium (3600 TPA).

62.12.4 Environmental site settings:

S.No	Particulars	Details	Remarks
1	Total Land	1.25 ha [Private land]	No additional land is required.
2	Land acquisition details as per MoEF&CC O.M dated 7/10/2014	Total land i.e. 1.25 ha land is under possession of proponent.	

S.No	Particulars	Details	Remarks																											
3	Existence of habitation & involvement of R&R, if any.	No involvement of R&R <b>Nearest habitation:</b> Purkapali Village :- 0.6 km towards SW																												
4	Latitude and Longitude of the project site	<table border="1"> <thead> <tr> <th>Pillar No.</th> <th>Latitude</th> <th>Longitude</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>22°10'47.95"N</td> <td>84°22'50.66"E</td> </tr> <tr> <td>2</td> <td>22°10'48.55"N</td> <td>84°22'53.32"E</td> </tr> <tr> <td>3</td> <td>22°10'48.23"N</td> <td>84°22'55.05"E</td> </tr> <tr> <td>4</td> <td>22°10'46.45"N</td> <td>84°22'55.91"E</td> </tr> <tr> <td>5</td> <td>22°10'44.69"N</td> <td>84°22'51.83"E</td> </tr> <tr> <td>6</td> <td>22°10'45.33"N</td> <td>84°22'51.15"E</td> </tr> <tr> <td>7</td> <td>22°10'45.89"N</td> <td>84°22'50.80"E</td> </tr> <tr> <td>8</td> <td>22°10'46.43"N</td> <td>84°22'50.67"E</td> </tr> </tbody> </table>	Pillar No.	Latitude	Longitude	1	22°10'47.95"N	84°22'50.66"E	2	22°10'48.55"N	84°22'53.32"E	3	22°10'48.23"N	84°22'55.05"E	4	22°10'46.45"N	84°22'55.91"E	5	22°10'44.69"N	84°22'51.83"E	6	22°10'45.33"N	84°22'51.15"E	7	22°10'45.89"N	84°22'50.80"E	8	22°10'46.43"N	84°22'50.67"E	
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7	22°10'45.89"N	84°22'50.80"E																												
8	22°10'46.43"N	84°22'50.67"E																												
5	Elevation of the project site	285 Meter above the sea level																												
6	Involvement of Forest land if any.	Nil																												
7	Water body exists within the project site as well as study area	<b>Project Site – Nil</b> <b>Study Area</b> <ul style="list-style-type: none"> <li>➤ Daku Nadi :- 1.6 km, NW</li> <li>➤ Sapai Nadi :- 4.40 km, W</li> <li>➤ Lohranga Nadi :- 5.20 km, S</li> <li>➤ Nakti Jor :- 6.00 km, ENE</li> <li>➤ Matwali Jor :- 6.50 km, N</li> <li>➤ Brahmani Nala :- 7.00 km, S</li> <li>➤ Sihajor Nala :- 8.80 km, WNW</li> </ul>																												
8	Existence of ESZ / ESA/national park /wildlife sanctuary /biosphere reserve /tiger reserve /elephant reserve etc. if any within the study area	Nil  <b>List of RF/PF:</b> <ul style="list-style-type: none"> <li>➤ RajabasaRF:-1.80km,E</li> <li>➤ MahabirRF:-2.60km,SE</li> <li>➤ TudalagaPF:-4.60km,WNW</li> <li>➤ JurajamRF:-7.30km,E</li> <li>➤ UdaramaRF:-7.3km,NW</li> <li>➤ LuhuraberniPF:-8.00km,E</li> <li>➤ AndiabiraRF:-8.00 km,WNW</li> <li>➤ Kalliapathar RF:- 8.20 km, N</li> <li>➤ MundalasaKhamgarhaPF:-8.80km,ESE</li> <li>➤ DahijiraRF:-9.50km,NW</li> </ul>																												

62.12.5 The existing project was accorded Consent to Establish from State Pollution Control Board, Odisha vide letter No. 3001 dated 31.08.2019 for Stone Chips (120000 TPA), Stone Dust (30000 TPA), Iron Ore Fines (120000 TPA) and Iron Powder (120000 TPA). EC was not required for

the existing project as per EIA notification 2006. Consent to Operate was obtained for the plant vide Letter No. 3786 dated 18.11.2019. Latest CTO was obtained vide letter no. 1416 dated 27.03.2024 and is valid upto 31.03.2029.

62.12.6 Implementation status of existing CTE/CTO:

Sl. No.	Products	Capacity As per CTE dated 31.08.2019	Implementation Status as on date	Production as per CTO
1.	Stone Chips	1,20,000 TPA	All units are operational.	1,20,000 TPA
2.	Stone Dust	30,000 TPA		30,000 TPA
3.	Iron Ore Fines	1,20,000 TPA		1,20,000 TPA
4.	Iron Powder	1,20,000 TPA		1,20,000 TPA

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

S. No.	Plant Equipment/ Facilities	Existing facilities as per CTE dated 31.08.2019				Proposed Capacity	Final Capacity
		Total Capacity	Implemented Capacity	Unimplemented Capacity	As Per CTO		
<b>A.</b>	<b>Ore Processing Unit</b>						
1.	Stone Chips	1,20,000 TPA	1,20,000 TPA	Nil	1,20,000 TPA	Nil	1,20,000 TPA
2.	Stone Dust	30,000 TPA	30,000 TPA	Nil	30,000 TPA	Nil	30,000 TPA
3.	Sized Iron Ore	1,20,000 TPA	1,20,000 TPA	Nil	1,20,000 TPA	Nil	1,20,000 TPA
4.	Iron Ore Fines	1,20,000 TPA	1,20,000 TPA	Nil	1,20,000 TPA	Nil	1,20,000 TPA
5.	Raw Manganese Powder	Non Existing				18,000 TPA	18,000 TPA
6.	Roasted Mn-Powder	Non Existing				11,000 TPA	11,000 TPA
7.	Manganese Mono Oxide	Non Existing				3,600 TPA	3,600 TPA
8.	Aluminum Notch Bar and Aluminum Allied Products	Non Existing				3,600 TPA	3,600 TPA
9.	Chrome Refractory Mortars	Non Existing				6,000 TPA	6,000 TPA
10.	Chrome Refractory Monolithic	Non Existing				6,000 TPA	6,000 TPA
11.	Chrome Refractory	Non Existing				6,000 TPA	6,000 TPA

S. No.	Plant Equipment/ Facilities	Existing facilities as per CTE dated 31.08.2019				Proposed Capacity	Final Capacity
		Total Capacity	Implemented Capacity	Unimplemented Capacity	As Per CTO		
	Mortar Bricks						
12.	Manganese Briquette			Non Existing	12,000 TPA	12,000 TPA	
13.	Iron Powder			Non Existing	7,200 TPA	7,200 TPA	
<b>B.</b>	<b>Proposed Ferro Alloy Plant</b>						
1.	Medium Carbon Ferro Manganese			Non Existing	6,000 TPA	6,000 TPA	
2.	Low Carbon Ferro Manganese			Non Existing	3,600 TPA	3,600 TPA	
3.	Low Carbon Ferro Chrome			Non Existing	3,600 TPA	3,600 TPA	
4.	Ferro Molybdenum			Non Existing	3,600 TPA	3,600 TPA	
5.	Ferro Vanadium			Non Existing	3,600 TPA	3,600 TPA	
6.	Ferro Titanium			Non Existing	3,600 TPA	3,600 TPA	

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

S. No.	Raw Material	Consumption in TPA			Source	Distance in km
		Existing	Expansion	Total after expansion		
<b>A.</b>	<b>Stone Chips Crushing (producing Stone chips (1,20,000 TPA) and stone dust(30,000 TPA))</b>					
1.	Stones	1,50,000	--	1,50,000	Purchase from mines	100- 150
<b>B.</b>	<b>Iron Ore Sizing (producing Sized Iron Ore (1,20,000 TPA), Iron Ore Fines (1,20,000 TPA) and Iron Powder (7,200 TPA))</b>					
1.	Iron Ore lumps	2,47,200	--	2,47,200	Purchase from mines	100- 150
<b>C.</b>	<b>Raw Manganese Powder (18,000 TPA)</b>					
1.	Manganese Ore	--	18,000	18,000	MOIL/Odisha/ Imported	100-150
<b>D.</b>	<b>Roasted Manganese Powder (11,000 TPA)</b>					
1.	Manganese Ore	--	11,000	11,000	MOIL/Odisha/ Imported	100-150
<b>E.</b>	<b>Manganese Mono Oxide (4,500)</b>					
1.	Roasted Manganese Powder	--	4,500	4,500	In house / Local Market	--

	/ Raw Manganese Powder					
<b>F. Aluminium Notch Bar &amp; Aluminium Allied Products (3,600 TPA)</b>						
1.	Aluminium Scrap	--	3,372	3,372	Local/Imported/Odisha	100-150
2.	Coal/Coal Fines	--	800	800	Odisha MCL Mines	100-150
<b>G. Chrome Refractory Mortars (6,000)</b>						
1.	Roasted/ Raw Chromite ore	--	4,400	4,400	In house /Local Market	100-150
2.	Slag Chromite Powder	--	1,800	1,800	Local Market	100-150
<b>H. Chrome Refractory Monolithic (6,000 TPA)</b>						
1.	Roasted/ Concentrate-Chromite ore	--	4,400	4,400	Roasted/Concentrate-Chromite ore	100-150
2.	Slag Chromite Powder	--	1,800	1,800	Local Market	100-150
<b>I. Chrome Refractory Mortar Bricks (6,000 TPA)</b>						
1.	Chrome Refractory Mortars.	--	6,000	6,000	In house	--
<b>J. Manganese Briquette (12,000 TPA)</b>						
1.	Mn-Ore Powder	--	12,000	12,000	In house	--
<b>K. Medium Carbon Ferro Manganese (6,000 TPA)</b>						
1.	Roasted Mn – Powder / Raw Manganese Powder	--	5,700	5,700	In house /Local Market	--
2.	Aluminium Scrap	--	1,025	1,025	Open Market	20-30 km
3.	Lime Powder/ Fluorspar	--	1,370	1,370	Local Market	20-30 km
4.	Silico Manganese	--	3,540	3,540	Open Market	20-30 km
<b>L. Low Carbon Ferro Manganese (3,600 TPA)</b>						
1.	Roasted Mn – Powder/ Raw Manganese Powder	--	3,420	3,420	In house /Local Market	--
2.	Aluminium Scrap	--	615	615	Open Market	20-30 km
3.	Lime Powder/ Fluorspar	--	820	820	Local Market	20-30 km
4.	Silico Manganese	--	2,120	2,120	Open Market	20-30 km
<b>M. Low Carbon Ferro Chrome</b>						
1	Roasted Chromite Ore/ Concentrates	--	5,760	5,760	Chrome Mines of Odisha	100-150 km
2	Aluminium Powder	--	2,245	2,245	Local	20-30 km
3	Mill Scale	--	576	576	Local	20-30 km
4	Nail Cutting	--	230	230	Raipur, Local	20-30 km



5	Sodium Nitrate	--	630	630	Mumbai	20-30 km
<b>N Ferro Molybdenum</b>						
1	Molybdenum Concentrate	--	3,629	3,629	Local Market	20-30 km
2	Aluminium Powder	--	432	432	Local Market	20-30 km
3	Lime Powder	--	360	360	Local Market	20-30 km
4	Iron scrap	--	2,060	2,060	Local Market	20-30 km
5	Fluorspar	--	1,368	1,368	Local Market	20-30 km
<b>O Ferro Vanadium</b>						
1	Vanadium Pentoxide (flakes)	--	3,456	3,456	Local Market	20-30 km
2	Aluminium Shots	--	1,800	1,800	Local Market	20-30 km
3	Limestone Powder	--	115	115	Local Market	20-30 km
4	Al Powder	--	115	115	Local Market	20-30 km
5	Iron Scrap	--	1,872	1,872	Local Market	20-30 km
<b>P Ferro Titanium</b>						
1	Roasted Ilmenite/Concentrates	--	4,110	4,110	Mines in Odisha	100-150 km
2	Aluminium Powder	--	2,100	2,100	Local Market	20-30 km
3	Lime Powder	--	48	48	Local Market	20-30 km
4	Titanium Scrap	--	240	240	Local Market	20-30 km
5	Titanium Dioxide	--	695	695	Local Market	20-30 km
6	Rutile/Zirconium	--	300	300	Local Market	20-30 km
7	Fluorspar	--	30	30	Local Market	20-30 km

62.12.9 The total water requirement after expansion will be 9 m<sup>3</sup>/day which will be sourced from ground water and permission for the same has been obtained from Department of Water Resources vide application no. 21-4/5122/OR/IND/2023 dated 03.07.2023.

62.12.10 The total power requirement after expansion is estimated as 93 kW which will be sourced from TPWODL.

62.12.11 The total capital cost (existing + proposed) of the project is Rs 2 Cr and the capital cost for environmental protection measures is proposed as INR 17 lakhs. The employment generation from the project is 40.

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

62.12.13 Proposed Terms of Reference: [Baseline data collection period: March, 2024 to May, 2024]

S. No.	Attributes	Parameters	Sampling		Remarks
			No. of stations	Frequency	
<b>A. Air</b>					
a.	Meteorological Parameters	Temperature, Relative Humidity, Wind Speed, Wind Direction, Rainfall	01 (Plant Site)	Twice a week (24 hourly)	
b.	AAQ Parameters	PM <sub>10</sub> , PM <sub>2.5</sub> , SO <sub>2</sub> , NO <sub>2</sub> , CO and other applicable parameters as per proposed ToR	08	24 Hourly once in a season.	
<b>B.</b>	<b>Noise</b>	Equivalent noise levels in Leq in dB(A)	08	Once in a season (Day & Night)	
<b>C. Water</b>					
a.	Surface Water	Parameters as per IS 10500 - 2012	08	Once in a season	
b.	Ground Water	08	08	Once in a season	
<b>D. Land</b>					
a.	Soil Quality	Parameters as per IS 2720/USDA	05	Once in a season	
b.	Land Use	Agriculture, Habitation, Industry, Stony waste/ Quarries, Forest area, Plantation/ Vegetation, Open scrub, Water bodies etc.	10 km radius, Buffer from Project site (Core zone)	Once in a Season	
<b>E. Biological</b>					
a.	Aquatic	Flora and fauna	Study area	Once in a year.	
b.	Terrestrial	Flora and fauna	Study area	Once in a year.	
<b>F.</b>	<b>Socio-economic parameters</b>	Economic Demography	Study area	Once in a year.	

**Written submission by the PP:**

62.12.14 During the meeting, based on the deliberations made by the EAC, the project proponent through email dated 05.07.2024 submitted the revised proposal presentation.

**Deliberation by the Committee**

62.12.15 The Committee noted the following:

- i. The instant proposal is for expansion of existing Ore Processing plant producing Stone Chips (1,20,000 TPA), Stone dust (30,000), Sized Iron Ore (1,20,000 TPA) and Iron Ore Fines (1,20,000 TPA) for Production of Raw Manganese Powder (18000 TPA), Roasted Manganese Powder (11000 TPA), Manganese Mono Oxide (3600 TPA), Aluminium Notch bar and Aluminium Allied Products (3600 TPA), Chrome Refractory Mortar (6000 TPA), Chrome Refractory Monolithic (6000 TPA), Chrome Refractory Mortar bricks (6000 TPA), Manganese Briquettes (12000 TPA) and Iron Powder (7200 TPA) along with installation of Ferro Alloy Plant for production of Medium Carbon Ferro Manganese (6000 TPA), Low Carbon Ferro Manganese (3600 TPA), Low Carbon Ferro Chrome (3600 TPA), Ferro Molybdenum (3600 TPA), Ferro Vanadium (3600 TPA) and Ferro Titanium (3600 TPA).
- ii. The existing project was accorded Consent to Establish from State Pollution Control Board, Odisha vide letter No. 3001 dated 31.08.2019 for Stone Chips (120000 TPA), Stone Dust (30000 TPA), Iron Ore Fines (120000 TPA) and Iron Powder (120000 TPA). EC was not required for the existing project as per EIA notification 2006. Consent to Operate was obtained for the plant vide Letter No. 3786 dated 18.11.2019. Latest CTO was obtained vide letter no. 1416 dated 27.03.2024 and is valid upto 31.03.2029.
- iii. The EAC took into consideration the drone survey of the project site and kml file on the Google Earth presented by the project proponent along with DSS of the project site on PARIVESH and made following deliberations accordingly.
- iv. The PP submitted that total land is 1.25 ha [Private land] and the same is under possession of proponent.
- v. Purkapali Village is at a distance of 0.6 km towards SW from the project site along with other sensitive areas within the study area of the project site. The EAC is of the opinion that PP shall prepare and include in the EIA/EMP Report the environmental safeguard measures to minimise the impact of the project activities on these sensitive areas.
- vi. There are several water bodies within the study area of the project site. The EAC is of the opinion that water bodies shall not be disturbed. Mitigation measures w.r.t. safeguarding the water bodies shall be prepared and submitted.
- vii. The total water requirement after expansion will be 9 m<sup>3</sup>/day which will be sourced from ground water. The EAC is of the opinion that PP shall obtain necessary permission in this regard. PP shall also explore the possibility to draw water from the surface water/RWH to minimise the dependency on ground water.
- viii. The EAC deliberated on the written submission of project proponent and found it satisfactory.

### **Recommendations of the Committee**

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

- (i) Purkapali Village is at a distance of 0.6 km towards SW from the project site along with other sensitive areas within the study area of the project site. Proponent shall prepare appropriate environmental safeguard measures to minimise the impact of the project activities on these sensitive areas.
- (ii) There are several water bodies within the study area of the project site. The PP shall include in the EIA/EMP report suitable steps /conservation plan along with contouring (close intervals), Run -off calculations, disposal etc. A robust and full proof Drainage Conservation scheme to protect the natural drainage and its flow parameters; along with Soil conservation scheme and multiple Erosion control measures shall be prepared and included in EIA/EMP Report.
- (iii) Water requirement of 9 m<sup>3</sup>/day is proposed to be met from Ground water. PP shall obtain necessary water permission from the Competent Authority. PP shall also explore the possibility to draw water from the surface water/RWH to minimise the dependency on ground water.
- (iv) The EAC also suggested the TOR conditions such as, (a) The “input” parameters used in the AAQ modelling must be reported in the E.I.A. Influence of the combinations of various parameters on the AAQ must be reported. (b) Wind Rose diagrams for all seasons of the year must be included in the E.I.A. Data from secondary sources such as IMD may be used for this purpose, this is apart for the mandatory study of meteorological factors for one season. (c) GLC modelling for CO emission from reactors must be included in the E.I.A. report. (d) The total PM expected to be emitted from the stacks must be modelled and reported. (e) Specific water consumption and specific CO<sub>2</sub> emission from the Plant must be predicted and documented. (f) Inversion level and Mixing height must be reported in the AAQ model.
- (v) The PP is advised to implement the 'Ek Ped Maa Ke Naam' Campaign which was launched on 5<sup>th</sup> June 2024 on the occasion of the World Environment Day to increase the forest cover across the Country.

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### **Agenda No. 62.13**

**62.13 Establishment of Greenfield steel plant comprising of DRI Kilns 2x350 TPD&2x200 TPD -3,63,000 TPA),Induction Furnaces with matching LRF&CCM(Hot Billets/Billets/Ingots 2x40 T- 2,64,000 TPA),Rolling Mills(TMT bars/Structural Steel)(85% Hot charging with Hot Billets and remaining 15% through RHF with LDO as fuel – 2,31,000 TPA),Galvanizing Plant Pipe unit 2x1 LTPA-2,00,000 TPA, Coal Washery Unit 2x2 MTPA – 40,00,000 TPA,Ferro Alloy Unit 2x9 MVA(FeSi-14,000TPA/FeMn-40,000 TPA/SiMn-28,000 TPA/FeCr-30,000 TPA/ Pig Iron48,000 TPA), Briquetting Plant (200 Kg/Hr), WHRB based Power Plant – 2 x 10 MW & 2 x 6 MW, FBC based Power Plant – 1 x 30 MW & Brick Manufacturing unit (40,000 Bricks / Day)] by M/s Prismo Steels Pvt. Ltd. located at Tumidih & Punjipathra Villages, Ghargoda Tehsil, Raigarh District, Chhattisgarh- Consideration of TOR.**

**[Proposal No. IA/CG/IND1/468927/2024; File No. IA-J-11011/210/2024-IA-II(IND-I)]**  
**[Consultant: Pioneer Enviro Consultants Pvt. Ltd.; Valid upto: 21-09-2025]**

62.13.1 M/s. Prismo Steels Private Limited has made an application online vide proposal no. IA/CG/IND1/468927/2024 dated 13.06.2024 along with the application in prescribed format (CAF, Form – I Part A & B), copy of pre-feasibility report and proposed ToRs for undertaking detailed EIA study as per the EIA Notification, 2006 for the project mentioned above. The proposed project activity is listed at schedule no. 3(a) Metallurgical industries (ferrous & non-ferrous), 2(a) Coal Washeries and 1(d) Thermal Power Plants under Category “A” of the schedule of the EIA Notification, 2006 and appraised at Central Level.

62.13.2 Name of the EIA consultant: M/s. Pioneer Enviro Consultants Private Limited [List of ACOs with their Certificate/Extension Letter vide letter no. NABET/EIA/2225/RA 0282; valid up to 21.09.2025; as on June 26, 2024].

**Details submitted by Project proponent**

62.13.3 The project of M/s. Prismo Steels Private Limited located at Tumidih & Punjipathra Villages, Ghargoda Tehsil, Raigarh District, Chhattisgarh is for establishment of a Greenfield Steel Plant by setting up a of DRI Kilns 2 x 350 TPD & 2 x 200 TPD -3,63,000 TPA), Induction Furnaces LRF & CCM (Hot Billets / Billets / Ingots 2 x 40 T- 2,64,000 TPA), Rolling Mills (TMT bars / Structural Steel) (85% Hot charging with Hot Billets and remaining 15% through RHF with LDO as fuel – 2,31,000 TPA),Galvanizing Plant Pipe unit 2 x 1 LTPA-2,00,000 TPA, Coal Washery Unit 2 x 2 MTPA – 40,00,000 TPA, Ferro Alloy Unit 2 x 9 MVA (FeSi-14,000TPA / FeMn-40,000 TPA / SiMn-28,000 TPA / FeCr-30,000 TPA/ Pig Iron-48,000 TPA), Briquetting Plant (200 Kg/Hr), WHRB based Power Plant – 2 x 10 MW & 2 x 6 MW, FBC based Power Plant – 1 x 30 MW & Brick Manufacturing unit (40,000 Bricks / Day)].

62.13.4 Environmental site settings:

S.No.	Particulars	Details	Remarks						
i.	Total Land	<b>20.187 Ha</b>	---						
ii.	Land acquisition details as per MoEF&CC O.M. dated 7/10/2014	Total Land: <b>20.187 Ha. (49.76 Acres)</b>  Total land envisaged for the proposed project is <b>20.187 Ha. (49.76 acres)</b> and entire land of 20.187 Ha. is taken on lease from Pvt. Land owners.	Land diversion Application Submitted and it is under process						
iii.	Existence of habitation & involvement of R & R, if any	<u>Plant site:</u> No habitation exists in plant site; Hence no R & R is involved.  <u>Study area:</u> Nearest habitation: <table border="1" style="margin-left: 20px;"> <thead> <tr> <th>Name</th> <th>Distance</th> </tr> </thead> <tbody> <tr> <td>Thumidih Village</td> <td>0.65 Kms.</td> </tr> </tbody> </table>	Name	Distance	Thumidih Village	0.65 Kms.	---		
Name	Distance								
Thumidih Village	0.65 Kms.								
iv.	Latitude and Longitude of the project site	Latitude and Longitude of the project site: <table border="1" style="margin-left: 20px;"> <thead> <tr> <th>S No</th> <th>Longitude</th> <th>Latitude</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>22°04'39.83855"N</td> <td>83°19'43.65326"E</td> </tr> </tbody> </table>	S No	Longitude	Latitude	1	22°04'39.83855"N	83°19'43.65326"E	---
S No	Longitude	Latitude							
1	22°04'39.83855"N	83°19'43.65326"E							

S.No.	Particulars	Details		Remarks
		2	22°04'39.27526"N 83°19'37.26823"E	
		3	22°04'37.92959"N 83°19'37.14290"E	
		4	22°04'38.26037"N 83°19'30.36711"E	
		5	22°04'37.28299"N 83°19'30.73429"E	
		6	22°04'37.23319"N 83°19'28.65946"E	
		7	22°04'37.46693"N 83°19'27.20578"E	
		8	22°04'38.70404"N 83°19'27.11818"E	
		9	22°04'38.41354"N 83°19'29.25332"E	
		10	22°04'38.99530"N 83°19'29.34542"E	
		11	22°04'38.95203"N 83°19'31.58981"E	
		12	22°04'40.97594"N 83°19'31.61080"E	
		13	22°04'40.69299"N 83°19'34.96599"E	
		14	22°04'43.39164"N 83°19'35.12114"E	
		15	22°04'43.47007"N 83°19'33.31915"E	
		16	22°04'42.72299"N 83°19'29.61269"E	
		17	22°04'41.02762"N 83°19'30.00454"E	
		18	22°04'41.09675"N 83°19'27.80168"E	
		19	22°04'43.38736"N 83°19'28.15826"E	
		20	22°04'43.42197"N 83°19'27.25814"E	
		21	22°04'44.29469"N 83°19'26.98665"E	
		22	22°04'41.18422"N 83°19'26.40960"E	
		23	22°04'41.21246"N 83°19'25.70579"E	
		24	22°04'44.24659"N 83°19'26.29994"E	
		25	22°04'44.94005"N 83°19'28.31139"E	
		26	22°04'45.71779"N 83°19'28.03513"E	
		27	22°04'45.47322"N 83°19'26.20213"E	
		28	22°04'45.65013"N 83°19'26.22582"E	
		29	22°04'45.78545"N 83°19'25.06224"E	
		30	22°04'46.94584"N 83°19'25.74335"E	
		31	22°04'47.22360"N 83°19'25.13242"E	
		32	22°04'48.53539"N 83°19'25.42349"E	
		33	22°04'47.62735"N 83°19'27.40920"E	
		34	22°04'49.92947"N 83°19'30.71817"E	
		35	22°04'51.50028"N 83°19'26.31946"E	
		36	22°04'54.15521"N 83°19'27.95600"E	
		37	22°04'52.88361"N 83°19'32.00802"E	
		38	22°04'53.70481"N 83°19'32.48587"E	
		39	22°04'55.55867"N 83°19'28.83597"E	
		40	22°04'57.23327"N 83°19'29.94493"E	
		41	22°04'59.32594"N 83°19'29.72238"E	
		42	22°04'58.12537"N 83°19'28.71276"E	
		43	22°04'57.72862"N 83°19'29.53338"E	
		44	22°04'51.41232"N 83°19'25.70724"E	
		45	22°04'51.53427"N 83°19'24.60145"E	
		46	22°04'53.64976"N 83°19'24.27346"E	
		47	22°04'52.54654"N 83°19'22.50413"E	
		48	22°04'53.05932"N 83°19'21.16256"E	

S.No.	Particulars	Details			Remarks																								
		49	22°04'55.46608"N	83°19'20.28390"E																									
		50	22°04'57.60566"N	83°19'25.68201"E																									
		51	22°04'59.32078"N	83°19'27.97859"E																									
		52	22°04'59.33060"N	83°19'28.52466"E																									
		53	22°05'01.70853"N	83°19'28.14407"E																									
		54	22°05'01.73979"N	83°19'30.06246"E																									
		55	22°05'01.27218"N	83°19'31.96981"E																									
		56	22°05'00.34311"N	83°19'33.47399"E																									
		57	22°04'59.05693"N	83°19'33.84832"E																									
		58	22°04'57.96907"N	83°19'35.16954"E																									
		59	22°04'55.29790"N	83°19'32.14092"E																									
		60	22°04'53.52931"N	83°19'34.27718"E																									
		61	22°04'56.95023"N	83°19'37.59777"E																									
		62	22°04'55.53151"N	83°19'39.53200"E																									
		63	22°04'53.22215"N	83°19'38.34025"E																									
		64	22°04'53.26780"N	83°19'37.41064"E																									
		65	22°04'52.40125"N	83°19'36.35161"E																									
		66	22°04'53.45511"N	83°19'34.40174"E																									
		67	22°04'50.88702"N	83°19'33.44612"E																									
		68	22°04'50.05407"N	83°19'36.11455"E																									
		69	22°04'48.41119"N	83°19'36.67850"E																									
		70	22°04'46.29502"N	83°19'34.94845"E																									
		71	22°04'46.39730"N	83°19'36.90125"E																									
		72	22°04'45.81190"N	83°19'36.89153"E																									
		73	22°04'45.81407"N	83°19'37.32375"E																									
		74	22°04'42.15452"N	83°19'37.14330"E																									
		75	22°04'43.32014"N	83°19'39.12517"E																									
		76	22°04'45.25201"N	83°19'40.15348"E																									
		77	22°04'46.24635"N	83°19'40.75931"E																									
		78	22°04'47.21630"N	83°19'40.69026"E																									
		79	22°04'46.95748"N	83°19'43.82415"E																									
v.	Elevation of the project site	MSL of the Project area – 295.5 m to 306.5 m			---																								
vi.	Involvement of Forest land, if any	No Forest land is involved in the project site.			---																								
vii.	Water body (Rivers, Lakes, Pond, Nala, Natural Drainage, Canal etc.) exists within the project site as well as study area	<p><u>Project site:</u> <i>Nil</i></p> <p><u>Study area:</u></p> <table border="1"> <thead> <tr> <th>Water Body</th> <th>Distance (Kms.)</th> <th>Direction</th> </tr> </thead> <tbody> <tr> <td>Unnamed Canal</td> <td>Adjacent</td> <td>W</td> </tr> <tr> <td>Tumidih Band</td> <td>0.26</td> <td>SE</td> </tr> <tr> <td>Bodojuri Nala</td> <td>3.0</td> <td>E</td> </tr> <tr> <td>Kurket River</td> <td>4.7</td> <td>W</td> </tr> <tr> <td>Dewanmunda Nala</td> <td>4.8</td> <td>S</td> </tr> <tr> <td>Karanara Nala</td> <td>5.2</td> <td>S</td> </tr> <tr> <td>Banjari Nala</td> <td>6.5</td> <td>SE</td> </tr> </tbody> </table>			Water Body	Distance (Kms.)	Direction	Unnamed Canal	Adjacent	W	Tumidih Band	0.26	SE	Bodojuri Nala	3.0	E	Kurket River	4.7	W	Dewanmunda Nala	4.8	S	Karanara Nala	5.2	S	Banjari Nala	6.5	SE	<p>---</p> <p><b>NOC obtained from Water Resources Department</b></p>
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S.No.	Particulars	Details			Remarks																																										
		Rabo Dam	6.7	SW																																											
		Barade Nala	6.7	NW																																											
		Gerwani Nala	7.3	SE																																											
		Kelo River	8.6	SE																																											
		PajharNadi	8.7	E																																											
viii.	Existence of ESZ / ESA / National Park / Wildlife Sanctuary / Biosphere Reserve / Tiger Reserve etc. if any within the study area	Study Area: <b>Nil</b>  <b>List of Reserved forests:</b> <table border="1"> <thead> <tr> <th>Name</th> <th>Distance (Kms.)</th> <th>Direction</th> </tr> </thead> <tbody> <tr> <td>Samaruma RF</td> <td>adjacent</td> <td>N</td> </tr> <tr> <td>Suhai RF</td> <td>2.3</td> <td>NW</td> </tr> <tr> <td>Taraimal RF</td> <td>1.7</td> <td>N</td> </tr> <tr> <td>Rabo RF</td> <td>6.4</td> <td>W</td> </tr> <tr> <td>Urdana RF</td> <td>8.2</td> <td>S</td> </tr> </tbody> </table> <b>List of protected forests:</b> <table border="1"> <thead> <tr> <th>Name</th> <th>Distance (Kms.)</th> <th>Direction</th> </tr> </thead> <tbody> <tr> <td>Punjipathra PF</td> <td>3.0</td> <td>SE</td> </tr> <tr> <td>Pajhar PF</td> <td>6.4</td> <td>SE</td> </tr> <tr> <td>Chhirwani PF</td> <td>6.6</td> <td>NW</td> </tr> <tr> <td>Barlia PF</td> <td>8.4</td> <td>SE</td> </tr> <tr> <td>Amaghat PF</td> <td>4.6</td> <td>E</td> </tr> <tr> <td>Gohari PF</td> <td>8.9</td> <td>N</td> </tr> <tr> <td>Unnamed PF</td> <td>5.2</td> <td>W</td> </tr> </tbody> </table>			Name	Distance (Kms.)	Direction	Samaruma RF	adjacent	N	Suhai RF	2.3	NW	Taraimal RF	1.7	N	Rabo RF	6.4	W	Urdana RF	8.2	S	Name	Distance (Kms.)	Direction	Punjipathra PF	3.0	SE	Pajhar PF	6.4	SE	Chhirwani PF	6.6	NW	Barlia PF	8.4	SE	Amaghat PF	4.6	E	Gohari PF	8.9	N	Unnamed PF	5.2	W	<ul style="list-style-type: none"> <li>• There are no notified National Park /Wildlife sanctuary/ Biosphere reserve/ Tiger Reserve /migratory routes for Birds within 10Km. Radius of the plant.</li> <li>• Movement of Elephants is observed within 15 Kms. radius of the plant, as per the secondary source.</li> <li>• Conservation plan will be prepared</li> <li>• NOC issued by Forest dept. obtained</li> </ul>
Name	Distance (Kms.)	Direction																																													
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62.13.5 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)	2 x 350 TPD & 2 x 200 TPD	3,63,000 TPA
2.	Induction Furnaces with LRF & CCM (Hot Billets / Billets / Ingots)	4 x 20 T	2,64,000 TPA
3.	Rolling Mill (TMT bars / Structural Steel) (85% Hot charging with Hot Billets and remaining 15% through RHF with LDO as fuel)	2 x 350 TPD	2,31,000 TPA
4.	Galvanizing unit (Galvanize Pipes)	2 x 1.0 LTPA	2,00,000 TPA



5.	Coal washery (washed Coal)	2 x 2.0 MTPA	40,00,000 TPA (throughput)
6.	Ferro Alloys Unit (FeSi / FeMn / SiMn / FeCr / Pig Iron)	2 x 9 MVA	2 x 9 MVA FeSi-14,000TPA / FeMn-40,000 TPA / SiMn- 28,000 TPA / FeCr-30,000 TPA/ Pig Iron-48,000 TPA
7.	Brick Manufacturing Unit	40,000 Bricks/day	40,000 Bricks/day
8.	Briquetting Plant	200 Kg/Hr	200 Kg/Hr
9.	Power Plant (62-MW)	WHRB Power Plant	2 x 10 MW & 2 x 6 MW
		FBC Power Plant	1 x 30 MW
			32 MW
			30 MW

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

S. No.	Raw Material	Quantity (TPA)	Sources	Distance w.r.t site (in Kms.)	Mode of Transport
1	Pellets	5,26,350	Odisha & Chhattisgarh	~ 500	By rail & road (covered trucks)
	(or)				
2	Iron Ore	6,33,360	Odisha & Chhattisgarh	~ 500	By rail & road (covered trucks)
3	Coal	Indian	SECL Chhattisgarh / MCL Odisha	~ 500	By rail & road (covered trucks)
		Imported	Imported	~ 600	Through vessel, rail & by road (Covered trucks)
4	Raw Coal	40,00,000	SECL Chhattisgarh / MCL Odisha	~ 500	By rail & road (covered trucks)
5	Coal washery Rejects for CPP	2,40,000	In-house	---	---
6	Dolomite	26,550	Chhattisgarh	~ 150	By road (covered trucks)
7	Sponge Iron	2,67,000	Own generation	---	Through covered conveyers
8	MS Scrap / Pig Iron	40,000	Own generation & Purchased from outside	~ 100	By road (covered trucks)
9	Ferro alloys	13,000	Own generation	---	By road (covered trucks)
10	Hot Billets / Billets	2,03,320	Own generation	---	----
11	Billets (for RHF)	37,950	Chhattisgarh	~ 100	By road (covered trucks)
12	LDO / LSHS	1,117 Kl/annum	Nearby IOCL Depot	~ 100	By road (through Tankers)

S. No.	Raw Material	Quantity (TPA)	Sources	Distance w.r.t site (in Kms.)	Mode of Transport
13	Manganese Ore	96,000	MOIL / OMC	~ 500	By Rail & Road (covered trucks)
14	Chrome Ore	72,000	Sukinda, Odisha Imported	~ 500 ~ 600 (from Vizag Port)	By road (covered trucks) From Port By Road (covered Trucks)
15	Lime stone	7,200	Chhattisgarh	~ 100	By road (covered trucks)
16	Quartz	30,800	Chhattisgarh / Andhra Pradesh	~ 500	By road (covered trucks)
17	Coke	30,144	Andhra Pradesh	~ 500	By road (covered trucks)
18	Mill scales & MS Scrap	31,200	Inhouse Generation /Chhattisgarh	---- ~ 100	By road (covered trucks)
19	Electrode paste	1,400	Maharashtra / West Bengal	~ 300	By road (covered trucks)
20	Fluorspar	1,200	Maharashtra / West Bengal	~ 300	By road (covered trucks)
21	Briquetted Bagfilter dust	980	Own generation	---	---

- 62.13.7 The water required for the proposed project will be 3200 KLD, which will be sourced from Kurket river (at a distance of 4.7 Kms. from the project site). Water drawl Permission will be obtained from Water Resources Department, Government of Chhattisgarh.
- 62.13.8 Power required for the proposed project will be 68.0 MW. Out of which 62.0 MW will be sourced from Captive Power Plant and the remaining 6.0 MW Power will be sourced from the State Grid.
- 62.13.9 The capital cost of the project is Rs. 970 Crores. Employment generation from proposed project will be 350 nos. through direct employment and 700 nos. through indirect employment.
- 62.13.10 It is reported that there is no violation under EIA, 2006/court case/show cause/direction related to the project under consideration.
- 62.13.11 Proposed Terms of Reference: [Baseline data collection period: 1<sup>st</sup> March, 2024 to 31<sup>st</sup> May, 2024]

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

### Deliberation by the Committee

62.13.12 The Committee noted the following:

- i. The instant proposal is for establishment of a Greenfield Steel Plant by setting up a of DRI Kilns 2 x 350 TPD & 2 x 200 TPD -3,63,000 TPA), Induction Furnaces LRF & CCM (Hot Billets / Billets / Ingots 2 x 40 T- 2,64,000 TPA), Rolling Mills (TMT bars / Structural Steel) (85% Hot charging with Hot Billets and remaining 15% through RHF with LDO as fuel – 2,31,000 TPA),Galvanizing Plant Pipe unit 2 x 1 LTPA-2,00,000 TPA, Coal Washery Unit 2 x 2 MTPA – 40,00,000 TPA, Ferro Alloy Unit 2 x 9 MVA (FeSi-14,000TPA / FeMn-40,000 TPA / SiMn-28,000 TPA / FeCr-30,000 TPA/ Pig Iron-48,000

TPA), Briquetting Plant (200 Kg/Hr), WHRB based Power Plant – 2 x 10 MW & 2 x 6 MW, FBC based Power Plant – 1 x 30 MW & Brick Manufacturing unit (40,000 Bricks / Day)].

- ii. The EAC took into consideration the drone survey of the project site and kml file on the Google Earth presented by the project proponent along with DSS of the project site on PARIVESH and made following deliberations accordingly. The EAC opined that PP shall widen the existing approach road from State Highway to Plant site prior to commencement of project operations.
- iii. The PP submitted that total land envisaged for the proposed project is 20.187 Ha. (49.76 acres) and entire land of 20.187 Ha. is taken on lease from Pvt. Land owners. The PP further reported that land diversion application is submitted and it is under process. The EAC is of the opinion that PP shall complete the conversion of land for industrial purpose prior to commencement of proposed project.
- iv. Thumidih Village is at a distance of 0.65 km from the project site along with other sensitive areas within the study area of the project site. The EAC is of the opinion that PP shall prepare and include in the EIA/EMP Report the environmental safeguard measures to minimise the impact of the project activities on these sensitive areas.
- v. Unnamed Canal is adjacent to project site in West direction along with several water bodies within the study area of the project site. The EAC is of the opinion that water bodies shall not be disturbed. Mitigation measures w.r.t. safeguarding the water bodies shall be prepared and submitted.
- vi. Samaruma RF is adjacent to project site in North direction for which NOC has been issued by the Forest Department. Also PP has reported that Movement of Elephants is observed within 15 Kms. radius of the plant, as per the secondary source and Conservation plan will be prepared. The EAC opined that conservation plan shall be prepared in consultation with the State Forest Department and the approved plan shall be submitted with the EIA/EMP Report.
- vii. The water required for the proposed project will be 3200 KLD, which will be sourced from Kurket river (at a distance of 4.7 Kms. from the project site). The EAC is of the opinion that PP shall obtain necessary permission in this regard.

### **Recommendations of the Committee**

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

- (i) PP shall complete the conversion of land for industrial purpose prior to commencement of proposed project.
- (ii) PP shall widen the existing approach road from State Highway to Plant site prior to commencement of project operations.
- (iii) Thumidih Village is at a distance of 0.65 km from the project site along with other sensitive areas within the study area of the project site. Proponent shall prepare appropriate

environmental safeguard measures to minimise the impact of the project activities on these sensitive areas.

- (iv) Unnamed Canal is adjacent to project site in West direction along with several water bodies within the study area of the project site. The PP shall include in the EIA/EMP report suitable steps /conservation plan along with contouring (close intervals), Run -off calculations, disposal etc. A robust and full proof Drainage Conservation scheme to protect the natural drainage and its flow parameters; along with Soil conservation scheme and multiple Erosion control measures shall be prepared and included in EIA/EMP Report.
- (v) Water requirement of 3200 KLD shall be sourced from Kurket river. PP shall obtain necessary water permission from the Competent Authority.
- (vi) PP shall prepare a plan for solar / other renewable source of energy to meet the energy demand of the proposed project.
- (vii) The EAC also suggested the TOR conditions such as, (a) The “input” parameters used in the AAQ modelling must be reported in the E.I.A. Influence of the combinations of various parameters on the AAQ must be reported. (b) Wind Rose diagrams for all seasons of the year must be included in the E.I.A. Data from secondary sources such as IMD may be used for this purpose, this is apart for the mandatory study of meteorological factors for one season. (c) GLC modelling for CO emission from reactors must be included in the E.I.A. report. (d) The total PM expected to be emitted from the stacks must be modelled and reported. (e) Specific water consumption and specific CO<sub>2</sub> emission from the Plant must be predicted and documented. (f) Inversion level and Mixing height must be reported in the AAQ model.
- (viii) The PP is advised to implement the 'Ek Ped Maa Ke Naam' Campaign which was launched on 5<sup>th</sup> June 2024 on the occasion of the World Environment Day to increase the forest cover across the Country.

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#### **Agenda No. 62.14**

**62.14 Establishment of DRI Kilns (Sponge Iron 1,32,000 TPA), Induction Furnace with LRF & CCM (MS Billets / Ingots) (1,18,800 TPA), Submerged Electric Arc Furnace (Si-Mn) – 15840 TPA or (Fe-Mn) – 20130 TPA, WHRB based Power Plant – 2 x 5 MW, AFBC based Power Plant – 1 x 5 MW, Brick Manufacturing unit (8,000 Bricks/day) by M/s Baidyanath STEEL & power private limited located at Village-Chhapora, Tehsil-Tilda, District-Raipur, Chhattisgarh-- Consideration of TOR.**

**[Proposal No. IA/CG/IND1/472704/2024; File No. IA-J-11011/226/2024-IA-II(IND-I)]**

**[Consultant: Parivesh Environmental Engineering Services; Valid upto 11/11/2024]**

62.14.1 M/s. Baidyanath Steel & Power Pvt. Ltd has made an application online vide proposal no.IA/CG/IND1/472704/2024 dated 08.06.2024 along with the application in prescribed format (CAF, Form – I Part A & B), copy of pre-feasibility report and proposed ToRs for undertaking

detailed EIA study as per the EIA Notification, 2006 for the project mentioned above. The proposed project activity is listed at schedule no. 3(a) Metallurgical industries (ferrous & non-ferrous) and 1(d) Thermal Power Plants under Category “A” of the schedule of the EIA Notification, 2006 and appraised at Central Level.

62.14.2 Name of the EIA consultant: M/s. Parivesh Environmental Engineering Services [List of ACOs with their Certificate / Extension Letter No: NABET/EIA/2124/IA 0092 (Rev.02); valid till 11.11.2024, as on June 26, 2024].

**Details submitted by Project proponent**

62.14.3 The project of M/s Baidyanath Steel & Power Pvt. Ltd located in Khasra No 9,18,19/1,19/2,19/3,20/1,20/2,21/1,21/2,22/1,22/2,22/3,23,24,25/1,25/2,26/1,28/4,28/13,28/14, Village Chhapora, Tehsil -Tilda District Raipur, Chhattisgarh is for setting up of a Proposed DRI Kilns (Sponge Iron 1,32,000 TPA), Induction Furnace with LRF & CCM (MS Billets / Ingots) (1,18,800 TPA), Submerged Electric Arc Furnace Silicon Manganese (SiMn) – 15,840 TPA or Ferro Manganese (Fe-Mn) – 15840 TPA, WHRB based Power Plant – 2 x 5 MW, AFBC based Power Plant – 1 x 5 MW, Brick Manufacturing unit (8,000 Bricks/day).

62.14.4 Environmental site settings:

S.No.	Particulars	Details	Remarks			
i.	Total land	12.45 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 & involvement of R&R, if any.	<b>Project site:</b> Nil	No R & R involved			
		<b>Study Area:</b> The nearest human settlement from the project site is:				
		<table border="1"> <thead> <tr> <th>Habitati on</th> <th>Distance (km)</th> <th>Direction</th> </tr> </thead> <tbody> <tr> <td>Champa</td> <td>1.4</td> <td>N</td> </tr> </tbody> </table>		Habitati on	Distance (km)	Direction
Habitati on	Distance (km)	Direction				
Champa	1.4	N				
iv.	Latitude and Longitude of all corners of the project site.	<b>Pillar Co-ordinate</b>				
			<b>Latitude</b>	<b>Longitude</b>		
		1	21°33' 2.619" N	81°52' 5.064" E		
		2	21°33' 8.058" N	81°52' 26.645"E		
		3	21°33' 5.443" N	81°52' 32.712"E		
		4	21°33' 4.257" N	81°52' 31.813"E		
		5	21°33' 4.690" N	81°52' 28.162"E		
		6	21°33' 3.330" N	81°52' 28.331"E		
		7	21°33' 2.771" N	81°52' 25.463"E		
		8	21°33' 1.090" N	81°52' 26.017"E		
		9	21°33' 1.119" N	81°52' 25.099"E		
		10	21°33' 1.698" N	81°52' 24.724"E		
		11	21°33' 1.114" N	81°52' 23.214"E		
		12	21°33' 0.340" N	81°52' 23.348"E		
13	21°33' 0.159" N	81°52' 20.922"E				

S.No.	Particulars	Details			Remarks																					
		14	21°33' 0.503" N	81°52' 16.603"E																						
		15	21°32' 53.593" N	81° 52'14.162"E																						
		16	21°32' 53.294" N	81°52' 12.353"E																						
		17	21°32' 53.884" N	81°52' 10.892"E																						
		18	21°32' 55.217" N	81°52' 9.862"E																						
		19	21°32' 56.326" N	81°52' 10.871"E																						
		20	21°32' 57.029" N	81°52' 8.898"E																						
		21	21°32' 57.308" N	81°52' 5.778"E																						
v.	Elevation of the project site	MSL of Project Site -308.54 to 304.27 m above mean sea level																								
vi.	Involvement of Forest land if any.	No involvement of Forest land			-																					
vii.	Water body (Rivers, Lakes, Pond, Nala, Natural Drainage, Canal etc.) exists within the project site as well as study area	<p><b>Project site:</b> None</p> <p><b>Study area</b></p> <table border="1"> <thead> <tr> <th>Water body</th> <th>Distance (in KM)</th> <th>Direction</th> </tr> </thead> <tbody> <tr> <td>Manpur Reservoir</td> <td>0.15</td> <td>S</td> </tr> <tr> <td>Kumhari Tank</td> <td>6.8</td> <td>SE</td> </tr> <tr> <td>Mahanadi Canal</td> <td>7.55</td> <td>W</td> </tr> <tr> <td>Jamuniya Nadi</td> <td>4.8</td> <td>NW</td> </tr> <tr> <td>Banjari Nala</td> <td>4.6</td> <td>ESE</td> </tr> <tr> <td>Kirra Tank</td> <td>12.4</td> <td>SW</td> </tr> </tbody> </table>			Water body	Distance (in KM)	Direction	Manpur Reservoir	0.15	S	Kumhari Tank	6.8	SE	Mahanadi Canal	7.55	W	Jamuniya Nadi	4.8	NW	Banjari Nala	4.6	ESE	Kirra Tank	12.4	SW	-
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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	<p><b>Study area</b> Nil</p> <p><b>List of Reserved and protected forests:</b></p> <ol style="list-style-type: none"> <li>1. Bilari Ghughua RF – 9.4 km, NW,</li> <li>2. Mohrenga PF – 10.1 km, S</li> </ol>																								

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

Sr. No	Units (Products)		Plant configuration	Production capacity
1	DRI Kilns (Sponge Iron)		2x200 TPD	1,32,000 TPA
2	Induction Furnace with matching capacity of LRF, CCM (MS Billets/Ingots)		3x12 MT	1,18,800 TPA
3	Ferro Alloys (FeMn / SiMn)		1x9 MVA	Silicon Manganese (SiMn) – 15,840 TPA or Ferro Manganese (Fe-Mn) – 20,130TPA
4	Power plant (15 MW)	WHRB Based Power Plant	2x5 MW	10MW

		AFBC Based Power Plant	1x5 MW	5 MW
5	Brick manufacturing Unit		8,000 Bricks /Day	26,40,000 Bricks /Annum

62.14.6 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
<b>1.</b>	<b>Raw Material for Sponge Iron Production (DRI Plant) (1,32,000 TPA)</b>				
a)	Iron Ore (100%)	2,11,200	Barbil, Orissa NMDC, Chhattisgarh	~ 500 Kms	By Rail/ Road Through Covered Trucks
	OR				
	Pellets (100%)	1,88,760	Purchased from out side	-	Through covered conveyers
b)	Coal Indian	1,71,600	SECL Chhattisgarh/MCL Odisha	~ 500 Kms	By rail & road (Through covered trucks)
	OR				
	Coal Imported	1,18,800	Indonesia / South Africa / Australia	~ 600 Kms (from vizag Port)	Through sea route, rail route & by road
c)	Dolomite	6,600	Chhattisgarh	~ 100 Kms	By road (Through covered trucks)
<b>2.</b>	<b>Raw Material for Power Plant (AFBC) 5 MW</b>				
a)	Dolochar	26,400	In house generation	-	through covered conveyors
	Indian Coal	19,879	SECL Chhattisgarh / MCL Odisha	~ 500 Kms	By rail & road (Through covered trucks)
<b>3.</b>	<b>Raw Material for Steel Melting Shop (M.S Billets / Ingots) – 1,18,800 TPA</b>				
a)	Sponge Iron	1,18,800	Own generation	-	Through covered conveyers
b)	Pig Iron	8,910	Chhattisgarh	~ 100 Kms	By road (through covered trucks)
c)	Scrap	20,790	Chhattisgarh	~ 100 Kms	By road (through covered trucks)
d)	Ferro Alloys	2,376	Inhouse generation	-	-
<b>4</b>	<b>For Ferro Alloys (1 x 9 MVA)</b>				
<b>4(i)</b>	<b>For Ferro Manganese (20,130 TPA)</b>				
a)	Manganese Ore	42,273	Balaghat (M.P.) Imported from South Africa	~ 500 Kms. ~ 480 Kms. (from Vizag Port)	By Road (Covered Trucks) From Vizag Port by Road (Covered Trucks)
b)	Coke	14,091	Andhra Pradesh	~ 500 Kms.	By Road (Through Covered Trucks)



Sr. No.	Raw material	Quantity (TPA)	Source	Distance from site (km)	Mode of Transportation
c)	Limestone	5,032	Chhattisgarh	~ 100 Kms	By Road (Covered trucks)
d)	Dolomite	10,065	Chhattisgarh / Andhra Pradesh	~ 500 Kms.	By road (Through covered trucks)
e)	Electrode Paste	442	Maharashtra / West Bengal	~ 300 Kms	By road (through covered trucks)
4(ii)	<b>For Silico Manganese (15,840 TPA)</b>				
a)	Manganese Ore	33264	Balaghat (M.P.) Imported from South Africa	~ 500 Kms. ~ 480 Kms. (from Vizag Port)	By Road (Covered Trucks) From Vizag Port by Road (Covered Trucks)
b)	Mn Slag	9000	In house generation	-	By Road (Covered trucks)
c)	Quartz	6336	Chhattisgarh / Andhra Pradesh	500 Kms	By Road (Covered trucks)
d)	Coke	11088	Andhra Pradesh	~ 500 Kms.	By Road (Through Covered Trucks)
e)	Dolomite	7920	Chhattisgarh / Andhra Pradesh	~ 500 Kms.	By road (Through covered trucks)
f)	Electrode paste	316	Maharashtra / West Bengal	~ 300 Kms	By road (through covered trucks)
<b>5</b>	<b>Fly Ash Brick Manufacturing Unit</b>				
a)	Fly Ash	5280	Internally available	~0.5 Kms.	-
b)	Lime	1320	Local market & through road by covered vehicles	~50 Kms.	By road
c)	Sand	660	Local market & through road by covered vehicles	~ 50 Kms.	(Through covered
d)	Gypsum	740	Local market & through road by covered vehicles.	~ 50Kms.	trucks)

62.14.7 The water requirement for the proposed project is estimated as 1030 KLD, out of which 920 KLD of fresh water requirement will be obtained from the ground water/surface water and the remaining requirement of 110 KLD will be met from the recycled water. The application has been submitted to CG WRD for Sanction of surface water vide application no. WA00512 dated 07.06.2024.

62.14.8 The power requirement for the proposed project is estimated as 22.43 MW, out which 13.50 MW will be sourced from CPP& WHRB. 8.93 MW power will be sourced from State Grid. In addition to this total 2 Nos of 1000 kVA DG sets are proposed for emergency backup.

62.14.9 The capital cost of the project is Rs 253.56 Crores and the capital cost for environmental protection measures is proposed as Rs 16.23 Crores. The employment generation from the proposed project is 720 (Direct -300 Nos., Indirect -420 Nos.).

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

62.14.11 Proposed Terms of Reference: [Baseline data collection period: March, 2024 to May, 2024]

Attributes	Sampling		Remarks
	No. of stations	Frequency	
<b>A. Air</b>			
a. Meteorological parameters	1 Location at project site	One hourly continuous for one season	Automatic Weather stations with sensor and microprocessor Max/ Min Thermometer Hygrometer Anemometer Rain gauge As per IMD specifications
b. AAQ parameters	8	As per NAAQS, For Study Period Twice a week	Particulate Matter (PM10, PM2.5), Sulphur Dioxide (SO2), Oxides of Nitrogen (NOx) and Carbon Monoxide (CO) etc.
B. Noise	8	Once during baseline study period	Parameters Monitored: • Day equivalent • Night equivalent
<b>C. Water</b>			
Surface water/Ground water quality parameters	Ground water-8 Surface water-5	Once during baseline study period	(a)physical parameters (b)chemical parameters (c) Biological parameters As per IS: 10500
<b>D. Land</b>			
a. Soil quality b. Land use	8	Once during baseline study period	
<b>E. Biological</b> a. Aquatic b. Terrestrial	8	Once during baseline study period	
F. Socio-economic parameters	Study area	In two phases of the project	

**Written submission by the PP:**

62.14.12 During the meeting, based on the deliberations made by the EAC, the project proponent vide letter dated 04.07.2024 through email dated 05.07.2024 submitted the following information:

S. No	Query	Response
1	Submit the details of application made for	The water requirement for project is estimated as 1030 KLD, out of which 920 KLD of fresh water requirement will be

	Sanction of surface water.	obtained from the surface water. Remaining 110 KLD from Recycled water. The application to CG WRD for Sanction of surface water vide application no. WA00512 on dated 07-06-2024 has been submitted. Copy submitted.
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### **Deliberation by the Committee**

62.14.13 The Committee noted the following:

- i. The instant proposal is for setting up of a Proposed DRI Kilns (Sponge Iron 1,32,000 TPA), Induction Furnace with LRF & CCM (MS Billets / Ingots) (1,18,800 TPA), Submerged Electric Arc Furnace Silicon Manganese (SiMn) – 15,840 TPA or Ferro Manganese (Fe-Mn) – 15840 TPA, WHRB based Power Plant – 2 x 5 MW, AFBC based Power Plant – 1 x 5 MW, Brick Manufacturing unit (8,000 Bricks/day).
- ii. The EAC took into consideration the drone survey of the project site and kml file on the Google Earth presented by the project proponent along with DSS of the project site on PARIVESH and made following deliberations accordingly.
- iii. The PP submitted that total land is 12.45 ha [Private land] and the same is under possession of proponent.
- iv. Champa Village is at a distance of 1.4 km towards North of the project site along with other sensitive areas within the study area of the project site. The EAC is of the opinion that PP shall prepare and include in the EIA/EMP Report the environmental safeguard measures to minimise the impact of the project activities on these sensitive areas.
- v. Manpur Reservoir is at a distance of 0.15 km in South direction along with other water bodies within the study area of the project site. The EAC is of the opinion that water bodies shall not be disturbed. PP shall submit the NOC from the irrigation department. Mitigation measures w.r.t. safeguarding the water bodies shall be prepared and submitted. The PP shall come with an option of constructing a Retention wall between the project and the reservoir water body so that the area doesnot get flodded in future due to severe weather events in clamate change scenario. The proposal of the Retention wall shall be submitted in the EIA-EMP with all engineering aspects and cost estimates.
- vi. The total water requirement after expansion will be 1030 KLD, out of which 920 KLD of fresh water requirement will be obtained from the ground water/surface water and the remaining requirement of 110 KLD will be met from the recycled water. The EAC is of the opinion that PP shall obtain necessary permission in this regard. PP shall also explore the possibility to draw water from the surface water/RWH to minimise the dependency on ground water.
- vii. The EAC deliberated on the written submission of project proponent and found it satisfactory.

### **Recommendations of the Committee**

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

- (i) Champa Village is at a distance of 1.4 km towards North of the project site along with other sensitive areas within the study area of the project site. Proponent shall prepare appropriate environmental safeguard measures to minimise the impact of the project activities on these sensitive areas.
- (ii) Manpur Reservoir is at a distance of 0.15 km in South direction along with other water bodies within the study area of the project site. PP shall submit the NOC from the irrigation department.. The PP shall include in the EIA/EMP report suitable steps /conservation plan along with contouring (close intervals), Run -off calculations, disposal etc. A robust and full proof Drainage Conservation scheme to protect the natural drainage and its flow parameters; along with Soil conservation scheme and multiple Erosion control measures shall be prepared and included in EIA/EMP Report.
- (iii) Water requirement 1030 KLD is proposed to be obtained from the ground water/surface water (920 KLD) and the recycled water (110 KLD). PP shall obtain necessary water permission from the Competent Authority. PP shall also explore the possibility to draw water from the surface water/RWH to minimise the dependency on ground water.
- (vii) The EAC also suggested the TOR conditions such as, (a) The “*input*” parameters used in the AAQ modelling must be reported in the E.I.A. Influence of the combinations of various parameters on the AAQ must be reported. (b) Wind Rose diagrams for all seasons of the year must be included in the E.I.A. Data from secondary sources such as IMD may be used for this purpose, this is apart for the mandatory study of meteorological factors for one season. (c) GLC modelling for CO emission from reactors must be included in the E.I.A. report. (d) The total PM expected to be emitted from the stacks must be modelled and reported. (e) Specific water consumption and specific CO<sub>2</sub> emission from the Plant must be predicted and documented. (f) Inversion level and Mixing height must be reported in the AAQ model.
- (viii) The PP is advised to implement the 'Ek Ped Maa Ke Naam' Campaign which was launched on 5<sup>th</sup> June 2024 on the occasion of the World Environment Day to increase the forest cover across the Country.

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## DAY-3: JULY 5, 2024 [FRIDAY]

### Consideration of ToR Proposal

#### Agenda No. 62.15

**62.15 Modernisation-cum-expansion of existing Production of Pig Iron / Hot Metal from 0.25 to 0.45 MTPA, DI Pipe from 0.19 to 0.45 MTPA, DI Pipe Fitting 30,000 TPA, Sinter from 0.2988 to 0.55 MTPA & CPP from 26.43 to 60 MW by installation of a new CPP of 30MW capacity, by M/s Jindal Saw Limited, located at Village - Haresamudram, Mandal - Bommanahal, District Ananthapur, Andhra Pradesh- Consideration of TOR.**

**[Proposal No.: IA/AP/IND1/466674/2024; File No. IA-J-11011/125/2010-IA-II(IND-I)]  
[Consultant: Ecomen Mining Pvt. Ltd.; Valid upto 22.03.2025]**

62.15.1 M/s. Jindal Saw Limited has made an application online vide proposal no. IA/AP/IND1/466674/2024 dated 21.06.2024 along with the application in prescribed format (CAF, Form – I Part A & B), copy of pre-feasibility report and proposed ToRs for undertaking detailed EIA study as per the EIA Notification, 2006 for the project mentioned above. The proposed project activity is listed at schedule no. 3(a) Metallurgical industries (ferrous & non-ferrous) and 1(d) Thermal Power Plants, under Category “A” of the schedule of the EIA Notification, 2006 and attracts general conditions due to the project site being within 1.4 km of Karnataka State Boundary and therefore being appraised at Central Level.

62.15.2 Name of the EIA consultant: M/s. Ecomen Mining Pvt. Ltd. [List of ACOs with their Certificate / Extension Letter No: NABET/EIA/2023/RA 0203 (Rev.02); valid till 22.03.2025, as on June 26, 2024].

#### Details submitted by Project proponent

62.15.3 The project of Jindal Saw Limited, located at Village Haresamudram, Mandal-Bommanahal, District Anantapur, Andhra Pradesh is for Modernisation-cum-expansion of existing Pig Iron / Hot Metal Plant (Blast Furnace) production from 2,50,000 TPA to 4,50,000 TPA, Ductile Iron Pipe Plant production from 1,90,000 TPA to 4,50,000 TPA, Sinter Plant production from 2,98,800 TPA to 5,50,000TPA, New Sand Reclamation Plant production of 24,000 TPA and Captive Power Plant from 30 MW to 60 MW by installation of New CPP of 30 MW Capacity.

62.15.4 Environmental site settings:

SN.	Particulars	Details	Remarks
i)	Total Land	The site of the proposed Modernisation-cum-expansion project covers an area of <b>81.836 ha</b> (142.94 acres), which is in two parts: A. <b>Area Under Acquisition of M/s JSAW: 57.847 ha.</b> (142.94 acres) covering Survey plot no. 41, 42-A, 42-	A.Land use: An operating Pig Iron / Hot Metal & Ductile Iron (DI) Pipe manufacturing plant

SN.	Particulars	Details	Remarks																					
		<p>C, 43, 44, 45-A, 45-B, 46, 47, 48-B, 48-C, 48-D, 49-A, 49-B, 49-C at Village – Haresamudram, Mandal Bommanahal, District Ananthpur, Andhra Pradesh.</p> <p><b>B. Adjoining Additional Area Proposed to be Acquired:</b> An area of <b>23.989 ha. (59.276 acres)</b> (Private: 23.989ha; Govt: Nil ha; Agriculture: 21.49ha; Grazing land: Nil; &amp; Housing Facility: 2.499ha.) covering Cadastral Survey Number Survey Plot No. 37, 38, 40, 42, 42-D, 48-A, 51-A, 51-B, 51-C, 51/2, 52-B, 52-C, 53-B, 53-C, 53-D, 54-B at Village – Haresamudram, Mandal Bommanahal, District Ananthpur, Andhra Pradesh.</p>	<p>and under the possession of JSAW vide NCLT Case No. / Order No. IA (IBC) 1198 &amp; 1475/2022 in CP(IB) No. 17/9/HDB/2020 (U/S 9 of IBC, 2016) dated 31.03.2023.</p> <p><b>B.Land use:</b> Land proposed to be acquired. Agricultural / Fallow Land / Housing Facility.</p>																					
ii)	Land Acquisition Details	<ul style="list-style-type: none"> <li>• About 70% land acquired vide NCLT Case No. / Order No. IA (IBC) 1198 &amp; 1475/2022 in CP(IB) No. 17/9/HDB/2020 (U/S 9 of IBC, 2016) dated 31.03.2023.</li> <li>• About 30% of land under advanced stage of acquisition through outright purchase.</li> </ul>	The land patch proposed to be acquired on the NW corner of the project area there is a Village Road crossing the land. This is the existing housing area, which will be extended for the project. The public road crossing the area will be maintained and kept as such for public and project people.																					
iii)	Existence of habitation & involvement of R&R, if any.	<p><b>Project Site:</b> No habitation at project site.</p> <p><b>Study Area:</b></p> <table border="1"> <thead> <tr> <th>Habitation</th> <th>Distance (km)</th> <th>Direction</th> </tr> </thead> <tbody> <tr> <td>Kuruvalli village</td> <td>1.5</td> <td>ENE</td> </tr> <tr> <td>Bommanahallu Village</td> <td>2.0</td> <td>WSW</td> </tr> <tr> <td>Haresamudram</td> <td>3.7</td> <td>SE</td> </tr> <tr> <td>Untakallu Village</td> <td>4.2</td> <td>SW</td> </tr> <tr> <td>Devagiri Village</td> <td>4.2</td> <td>S</td> </tr> <tr> <td>Ettinabadihalli</td> <td>4.4</td> <td>NNW</td> </tr> </tbody> </table>	Habitation	Distance (km)	Direction	Kuruvalli village	1.5	ENE	Bommanahallu Village	2.0	WSW	Haresamudram	3.7	SE	Untakallu Village	4.2	SW	Devagiri Village	4.2	S	Ettinabadihalli	4.4	NNW	The housing facility of 2.499 ha in the NW direction of existing project, proposed to be acquired was for the project man-power built by erstwhile project proponent but the same was not transferred to JSAW through NCLT process. The same is now being envisaged to be acquired for project people. The built-up houses will not be dismantled but will be used by the project employees.
Habitation	Distance (km)	Direction																						
Kuruvalli village	1.5	ENE																						
Bommanahallu Village	2.0	WSW																						
Haresamudram	3.7	SE																						
Untakallu Village	4.2	SW																						
Devagiri Village	4.2	S																						
Ettinabadihalli	4.4	NNW																						

SN.	Particulars	Details			Remarks
		Village			
		R & R : Not involved.			
iv)	Latitude & Longitude of all corners of the project site.	<b>Pillars</b>	<b>Degrees, Minutes &amp; Seconds</b>		
			<b>Latitude</b>	<b>Longitude</b>	
		A.	15 <sup>0</sup> 0' 10.78"N	77 <sup>0</sup> 0' 1.76"E	
		B.	15 <sup>0</sup> 0' 10.44"N	76 <sup>0</sup> 59' 53.99"E	
		C.	15 <sup>0</sup> 0' 14.44"N	76 <sup>0</sup> 59' 49.40"E	
		D.	15 <sup>0</sup> 0' 20.53"N	76 <sup>0</sup> 59' 49.84"E	
		E.	15 <sup>0</sup> 0' 22.60"N	76 <sup>0</sup> 59' 49.00"E	
		F.	15 <sup>0</sup> 0' 19.34"N	76 <sup>0</sup> 59' 49.13"E	
		G.	15 <sup>0</sup> 0' 19.38"N	76 <sup>0</sup> 59' 45.78"E	
		H.	15 <sup>0</sup> 0' 12.51"N	76 <sup>0</sup> 59' 45.62"E	
		I.	15 <sup>0</sup> 0' 12.89"N	76 <sup>0</sup> 59' 41.73"E	
		J.	15 <sup>0</sup> 0' 20.25"N	76 <sup>0</sup> 59' 41.34"E	
		K.	15 <sup>0</sup> 0' 27.42"N	76 <sup>0</sup> 59' 41.03"E	
		L.	15 <sup>0</sup> 0' 33.88"N	76 <sup>0</sup> 59' 40.14"E	
		M.	15 <sup>0</sup> 0' 33.44"N	76 <sup>0</sup> 59' 43.06"E	
		N.	15 <sup>0</sup> 0' 33.38"N	76 <sup>0</sup> 59' 46.73"E	
		O.	15 <sup>0</sup> 0' 31.26"N	77 <sup>0</sup> 00' 3.49"E	
		P.	15 <sup>0</sup> 0' 30.32"N	77 <sup>0</sup> 00' 12.51"E	
		Q.	15 <sup>0</sup> 0' 29.587"N	77 <sup>0</sup> 00' 22.47"E	
		R.	15 <sup>0</sup> 0' 29.46"N	77 <sup>0</sup> 0' 24.15"E	
S.	15 <sup>0</sup> 0' 7.58"N	77 <sup>0</sup> 0' 24.04"E			
T.	15 <sup>0</sup> 0' 8.06"N	77 <sup>0</sup> 00' 11.54"E			
U.	15 <sup>0</sup> 0' 7.55"N	77 <sup>0</sup> 00' 5.77"E			
V.	15 <sup>0</sup> 0' 11.14"N	77 <sup>0</sup> 00' 5.54"E			
v)	Elevation of the project site	Site elevation in general ranges from 434.5m to 444.5m AMSL (Above Mean Sea Level) with small mounds up to peak height of 448m AMSL			
vi)	Involvement of forest Land, if any	No forest land involved within the project site.			The project land is not a forest land.
vii)	Water body (Rivers, Lakes, Pond, Nala, Natural Drainage, Canal etc.) exists within the project site as well as study area	<b>Project Site:</b> a) Only a second order (ephemeral) drainage channel enters from outside in the project area, and after running parallel to plant boundary leaves the project site. b) Another 1 <sup>st</sup> order drainage channel from within the project area leaves the SE corner of the proposed project boundary.			a) The proposed project area through which the drainage channel passes through the proposed greenbelt area. The drainage channel will be made smooth and paved for smooth flow with greenbelt on both the edges. b) The natural drainage starting from within the project area

SN.	Particulars	Details			Remarks						
		<b>Study area:</b>			will be merged with the plant drainage network.  The project site do not falls under flood affected area of Hagari River. NOC from Irrigation Department, Water Resources Department is requested and the NOC under finalisation.						
		<b>Water body</b>	<b>Distance (km)</b>	<b>Direction</b>							
		Hagari River	3.3	E							
		Boyala Venka	5.5	S							
		Chinna Hagari River	6.9	S							
		Benja Halla	8.1	N							
		Pedda Vanka	8.1	E							
		Tungbhadra High Level Canal	2.6	WSW							
viii)	Existence of ESZ / ESA / National Park / Wildlife Sanctuary / Biosphere Reserve / Tiger Reserve / Elephant Reserve etc. if any within the study area	<ul style="list-style-type: none"> <li>No ESZ / ESA / National Park / Wildlife Sanctuary / Biosphere Reserve / Tiger Reserve / Elephant Reserve etc exist within study area.</li> <li>Reserved Forest as follows:</li> </ul> <table border="1"> <thead> <tr> <th>Name of Forest</th> <th>Distance</th> <th>Direction</th> </tr> </thead> <tbody> <tr> <td>Mincheri RF</td> <td>4.5 km</td> <td>WNW</td> </tr> </tbody> </table>			Name of Forest	Distance	Direction	Mincheri RF	4.5 km	WNW	-
Name of Forest	Distance	Direction									
Mincheri RF	4.5 km	WNW									

62.15.5 The erstwhile Project Proponent, M/s Sathavahana Ispat Ltd. (SIL) project, was accorded Consent for Establishment vide letter no. 13026 / PCB / NOC / AEE-VI / 91-5070; dated 21.12.1991 for Blast Furnace for 375 TPD Pig Iron production, which was prior to EIA Notification 1994. SIL project underwent expansion CTE letters dated 28.04.2003, 28.06.2003, and 18.02.2005. The project was accorded Environmental Clearance (EC) vide F. No. J-II011/125/2010-IA-II (I) dated 02.06.2011 for Pig Iron Plant (Blast Furnace) : 2,50,000 TPA (Existing); existing CPP (3 MW + 8.43 MW) on imported coal & BF Gas; CPP : 15 MW; Ductile Iron Plant : 1,90,000 TPA (New) & Sinter Plant : 2,98,000 TPA (New) and amendment in EC vide F. No. J-II011/125/2010-IA-II (I) dated 13.03.2014 for Pig Iron Plant (Blast Furnace): 2,50,000 TPA; CPP 30 MW\* (Imported Coal Based & BF Gas); Ductile Iron Plant : 1,90,000 TPA; Sinter Plant: 2,98,000 TPA; DI Pipe Fitting Plant : 30,000 TPA (Not Implemented). The project was under shut down from April 2017 to October 2022 due to statutory orders and financial crisis, and was referred to the National Company Law Tribunal (NCLT), Hyderabad Bench. NCLT awarded the project ownership to M/s Jindal Saw Limited (JSAW) vide NCLT Case No. / Order No. IA (IBC) 1198 & 1475/2022 in CP(IBC) No. 17/9/HDB/2020 (U/S 9 of IBC, 2016) dated 31.03.2023. JSAW got the CTO (CFO) for the existing unit, renewed from APPCB vide Consent Order No: 1857856/APPCB/KNL/ATP/HO/CFO&HWA/2022 dated on 17.10.2022 valid up to 30.09.2026 for Pig Iron Plant: 2,50,000 TPA; CPP 8.43 MW (Standby); CPP 30 MW (Power generation not to exceed 26.43 MW & on imported coal); Sinter Plant: 2,98,800 TPA; Captive Power Plant: 30 MW\* (Imported Coal based) & DI Pipes: 1,90,000 TPA. JSAW started the project operation from 01.11.2022 with existing facilities as per EC dated



02.06.2011 and EC amendment dated 13.03.2014. Meanwhile, JSAW got the project EC 2011 (amendment 2014) transferred from MoEFCC in the name of Jindal Saw Limited (JSAW), vide MoEFCC File No. F. No. J-II/Oil/125/2010-IA-II (I) dated 27.09.2023. Subsequently, JSAW got the Consent to Operate transferred in the name of JSAW, vide APPCB Amendment Order No. 1857856/APPCB/KNL/ATP/HO/CTO&HWA/2023 - 20/12/2023 dtd. 20.12.2023.

62.15.6 Implementation status of existing EC:

S. No.	Facilities	Units	As per EC Dated	Implementation Status as on date	Production as per CTO Dated 17.10.2022
1	Pig Iron Plant	2,50,000 TPA	02.06.2011	Implemented	2,50,000 TPA
2	Captive Power Plant	30 MW** (Imported Coal)	13.03.2014	Implemented	30 MW (Imported Coal based) <sup>§</sup>
3	Ductile Iron Pipe Plant	1,90,000 TPA	02.06.2011	Implemented	1,90,000 TPA
4	Sinter Plant	2,98,800 TPA	02.06.2011	Implemented	2,98,800 TPA
5.	DI Pipe Fitting	30,000 TPA	13.03.2014	Not Implemented	Not Implemented

\*\* / <sup>§</sup> At any time, the power generation will not exceed 26.43 MW

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

S. No.	Plant Equipment / Facility	Existing Facility as per EC Dated 02.06.2011 & Subsequent Amendment Dated 13.03.2014				Proposed Unit	Final (Existing + Proposed)	Remarks
		Total (A+B)	Impleme nted (B)	Un- implem ented	As per CTO			
		Configuration / Capacity	Configuration / Capacity	Configuration / Capacity	Configuration / Capacity			
1.	Pig Iron Plant / Blast Furnace (Pig Iron / Hot Metal)	2,50,000 TPA	2,50,000 TPA	-	2,50,000 TPA	2,00,000 TPA	4,50,000 TPA	Capacity enhancement of existing Unit by Modernisation / Technologic al Up-gradation
2.	Captive Power Plant	30 MW (Imported Coal) Operating	30 MW (Imported Coal) Operating	-	30 MW (Imported Coal) Operating	Operating at 30 MW (Imported Coal)	30 MW (Imported Coal)	Running Existing CPP at Full Capacity

S. No.	Plant Equipment / Facility	Existing Facility as per EC Dated 02.06.2011 & Subsequent Amendment Dated 13.03.2014				Proposed Unit	Final (Existing + Proposed)	Remarks
		Total (A+B)	Implemented (B)	Un-implemented	As per CTO			
		Configuration / Capacity	Configuration / Capacity	Configuration / Capacity	Configuration / Capacity			
		at 26.43 MW	at 26.43 MW		at 26.43 MW			with Imported Coal
3.	New Captive Power Plant	-	-	-	-	30 MW (Imported Coal)	30 MW (Imported Coal)	New Unit based on Imported Coal
	<b>Total CPP Power Generation</b>	<b>1x30 MW</b>	<b>30MW (26.43 MW)</b>	<b>-</b>	<b>30MW (26.43 MW)</b>	<b>2X30MW</b>	<b>60MW</b>	<b>-</b>
4.	Ductile Iron (DI) Pipe Plant	1,90,000 TPA	1,90,000 TPA	-	1,90,000 TPA	1,10,000 TPA	3,00,000 TPA	Capacity enhancement of existing Unit by Modernisation / Technological Up-gradation
5.	New Small Ductile Iron Pipe (SDP) Plant	-	-	-	-	1,50,000 TPA	1,50,000 TPA	New Unit
	<b>Total DI Plant Production</b>	<b>1,90,000 TPA</b>	<b>1,90,000 TPA</b>	<b>-</b>	<b>1,90,000 TPA</b>	<b>2,60,000 TPA</b>	<b>4,50,000 TPA</b>	<b>-</b>
6.	Sinter Plant	2,98,800 TPA	2,98,800 TPA	-	2,98,800 TPA	2,51,2000 TPA	5,50,000 TPA	Capacity enhancement of existing Unit by Modernisation / Technological Up-gradation

S. No.	Plant Equipment / Facility	Existing Facility as per EC Dated 02.06.2011 & Subsequent Amendment Dated 13.03.2014				Proposed Unit	Final (Existing + Proposed)	Remarks
		Total (A+B)	Implemented (B)	Un-implemented	As per CTO			
		Configuration / Capacity	Configuration / Capacity	Configuration / Capacity	Configuration / Capacity			
7.	New Sand Reclamation Plant	-	-	-	-	24,000 TPA	24,000 TPA	New Unit to recycle the used core sand

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

S	Raw Material	Quantity Required Per Annum (TPA)			Source	Distance (km)	Transportation Mode
		Existing	Expansion	Total			
1.	Iron Ore (Lumps / Fines)	4,16,540	2,83,456	6,99,996	Hospet belt	90	By Road
2.	Lime Stone (Lump / Fines)	21,227	17,779	39,006	Hospet belt	100	By Road
3.	Quick Lime (Burnt Lime)	14,940	12,606	27,546	Dhone	100	By Road
4.	Dolomite (Lump / Fines)	34,374	28,873	63,247	Hospet belt	90	By Road
5.	Coke (Sized & Fines)	1,96,876	91,399	2,88,275	Captive	60	By road
6.	Bituminous Coal	0	73,000	73,000	Hospet Belt	90	By road
7.	Quartzite	17,500	14,007	31,507	Hospet Belt	90	By road
8.	Manganese Ore	3,750	3,002	6,752	Hospet Belt	90	By Road
9.	Imported Coal	1,55,500	2,22,500	3,78,000	Australia / Indonesia / SA	450	Ship / Road
10.	Washed Silica Sand	9,275	7,420	16,695	Local Quarry	20	By Road
11.	Sieved River Sand	42,400	33,920	76,320	Local Quarry	7	By Road
12.	Additives <sup>\$</sup>	48,896	34,973	83,869	Various	50 - 450	Ship / Rail / Road
<b>Grand Total</b>		<b>9,61,278</b>	<b>8,22,935</b>	<b>17,84,214</b>	-	-	-

<sup>\$</sup> Pure Magnesium, Ferro Silicon, Steel Scrap, Calcined Petroleum, HC Ferro Manganese, De-slagger, Inoculants, Mould Power, Trough Powder, Paint Core metakote, Resin, Catalyst, Parting & Cleaning Agent, Paint water based, Zinc wire, Cement, & Bitumen

- 62.15.9 Existing makeup water requirement is 2435 m<sup>3</sup>/day, which is obtained from Hagari River and permission for the same has been obtained from Water Resources Department, Govt. of Andhra Pradesh vide Memo No. 1422/Irrgn.III(2)91-1 dated 11.02.1991. The water requirement for the total project (including existing plus proposed project) is estimated as 7000 m<sup>3</sup>/day, which will be sourced from Hagari River. The permission for drawl of surface water is obtained from Water Resources Department, Govt. of Andhra Pradesh vide Memo No. 1422/Irrgn.III(2)91-1 dated 11.02.1991. The existing permission meets the expansion requirement.
- 62.15.10 Existing power requirement of 20.6 MW is obtained from the existing 30 MW CPP. The additional power requirement for the proposed project is estimated as 22.7 MW, total of which will be obtained from the proposed 30 MW CPP. The total post modernisation-cum-expansion project power requirement will be 43.3 MW, which will be sourced from existing 30 MW and proposed 30 MW CPP.
- 62.15.11 The capital cost of the project is Rs. 1,21,491 lakhs and the capital cost for environmental protection measures is proposed as Rs. 3,000 lakhs. The additional employment generation from the project / expansion is 1541 number of persons.
- 62.15.12 It is reported that there is no violation under EIA, 2006/court case/show cause/direction related to the project under consideration.
- 62.15.13 Proposed Terms of Reference: [Baseline data collection period: October to December 2023]

Environmental Attributes	Parameters	Sampling		Remarks
		No.	Frequency	
<b>Study Area : 10km from Project Site Boundary</b>				
<b>Study Period : Continuous 3 months covering 1 season (except monsoon) : Oct. 2023 – Dec. 2023.</b>				
<b>Air</b>				
Meteorological parameters	Wind speed & direction, temperature, Relative humidity, rainfall (Automatic Met. Stn)	1	Hourly recording 24hrly	
AAQ parameters	PM <sub>10</sub> , PM <sub>2.5</sub> , SO <sub>2</sub> , NO <sub>2</sub> Other parameters such as O <sub>3</sub> , CO, NH <sub>3</sub> , C <sub>6</sub> H <sub>6</sub> , As, Ni, BaP & Pb	11	24 hourly, twice a week, 4 weeks / month for 3 months. Locations: Considering predominant winds, sensitive receptors. Other Parameters: Once / month, for 3 months.	
<b>B. Noise</b>	Noise levels in dBA Leq day & Night time	8	Once during study period	
<b>C. Water :</b> Surface water (SW) Ground Water (GW)	Physico-Chemical & Bacteriological parameters GW : IS: 10500 standards & SW: CPCB Surface Water Quality Parameters	8-SW & 4-GW	Once in study period. SW: Nearby river / stream (U/S) & (D/S) & GW : U/G & D/G of project site (hydro-geological	

Environmental Attributes	Parameters	Sampling		Remarks
		No.	Frequency	
			features)	
<b>D. Land :</b> a. Soil Quality	pH, conductivity, texture, NPK, organic matter, moisture content, grain size distribution.	6	Once in study period	
<b>D. Land :</b> b. Land Use	Land use / land cover using IRS satellite data (LISS-IV) and ArcGIS / Erdas imagine software.	Study Area	Once in study period	
<b>E. Biological</b> a. Aquatic  b. Terrestrial	a. Planktons and Benthos density, Biodiversity Index. b. Phyto-sociological studies of Forests in study area, Bio-diversity Index and fauna / flora inventorisation.	Study Area	Once in study period  Once in study period	Hageri River
<b>E. Socio-Economic</b>	Socio-economic Characteristics	Study Area	Census 2011 & Primary Survey	

#### **Written submission by the PP:**

- 62.15.14 During the meeting, based on the deliberations made by the EAC, the project proponent vide letter dated 10.07.2024 through email dated 10.07.2024 submitted the following information:
- i. Submission of copy of Land Agreement/ Consent letter from the owner of the land area of 23.9ha to be acquired by JSAW for the proposed expansion.
  - ii. PP to submit an undertaking for the following:
    - a) PP will develop greenbelt of 67000 nos. of plants in the existing plant area /boundary by August 15/08/2024.
    - b) PP to do the feasibility study to install a STP in a nearby village /area
    - c) PP will use Renewable/ Waste Heat Recovery energy in the proposed expansion

These information were also forwarded to EAC.

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

- 62.15.15 The Committee noted the following:
- i. The instant proposal is for Modernisation-cum-expansion of existing Pig Iron / Hot Metal Plant (Blast Furnace) production from 2,50,000 TPA to 4,50,000 TPA, Ductile Iron Pipe Plant production from 1,90,000 TPA to 4,50,000 TPA, Sinter Plant production from 2,98,800 TPA to 5,50,000TPA, New Sand Reclamation Plant production of 24,000 TPA and Captive Power Plant from 30 MW to 60 MW by installation of New CPP of 30 MW Capacity.

- ii. The erstwhile Project Proponent, M/s Sathavahana Ispat Ltd. (SIL) project, was accorded Consent for Establishment vide letter no. 13026 / PCB / NOC / AEE-VI / 91-5070; dated 21.12.1991 for Blast Furnace for 375 TPD Pig Iron production, which was prior to EIA Notification 1994. SIL project underwent expansion CTE letters dated 28.04.2003, 28.06.2003, and 18.02.2005. The project was accorded Environmental Clearance (EC) vide F. No. J-II/OII/125/2010-IA-II (I) dated 02.06.2011 for Pig Iron Plant (Blast Furnace) : 2,50,000 TPA (Existing); existing CPP (3 MW + 8.43 MW) on imported coal & BF Gas; CPP : 15 MW; Ductile Iron Plant : 1,90,000 TPA (New) & Sinter Plant : 2,98,000 TPA (New) and amendment in EC vide F. No. J-II/OII/125/2010-IA-II (I) dated 13.03.2014 for Pig Iron Plant (Blast Furnace): 2,50,000 TPA; CPP 30 MW\* (Imported Coal Based & BF Gas); Ductile Iron Plant : 1,90,000 TPA; Sinter Plant: 2,98,000 TPA; DI Pipe Fitting Plant : 30,000 TPA (Not Implemented). The project was under shut down from April 2017 to October 2022 due to statutory orders and financial crisis, and was referred to the National Company Law Tribunal (NCLT), Hyderabad Bench. NCLT awarded the project ownership to M/s Jindal Saw Limited (JSAW) vide NCLT Case No. / Order No. IA (IBC) 1198 & 1475/2022 in CP(IB) No. 17/9/HDB/2020 (U/S 9 of IBC, 2016) dated 31.03.2023. JSAW got the CTO (CFO) for the existing unit, renewed from APPCB vide Consent Order No: 1857856/APPCB/KNL/ATP/HO/CFO&HWA/2022 dated on 17.10.2022 valid up to 30.09.2026 for Pig Iron Plant: 2,50,000 TPA; CPP 8.43 MW (Standby); CPP 30 MW (Power generation not to exceed 26.43 MW & on imported coal); Sinter Plant: 2,98,800 TPA; Captive Power Plant: 30 MW\* (Imported Coal based) & DI Pipes: 1,90,000 TPA. JSAW started the project operation from 01.11.2022 with existing facilities as per EC dated 02.06.2011 and EC amendment dated 13.03.2014. Meanwhile, JSAW got the project EC 2011 (amendment 2014) transferred from MoEFCC in the name of Jindal Saw Limited (JSAW), vide MoEFCC File No. F. No. J-II/OII/125/2010-IA-II (I) dated 27.09.2023. Subsequently, JSAW got the Consent to Operate transferred in the name of JSAW, vide APPCB Amendment Order No. dtd. 20.12.2023.
- iii. The EAC took into consideration the drone survey of the project site and kml file on the Google Earth presented by the project proponent along with DSS of the project site on PARIVESH and made following deliberations accordingly.
- iv. The PP submitted that the site of the proposed Modernisation-cum-expansion project covers an area of 81.836 ha (142.94 acres), which is in two parts: Area Under Acquisition of M/s JSAW: 57.847 ha (142.94 acres) covering Survey plot numbers 41, 42-A, 42-C, 43, 44, 45-A, 45-B, 46, 47, 48-B, 48-C, 48-D, 49-A, 49-B, 49-C at Village Haresamudram, Mandal Bommanahal, District Ananthpur, Andhra Pradesh; and Adjoining Additional Area Proposed to be Acquired: An area of 23.989 ha (59.276 acres) (Private: 23.989 ha; Govt: Nil ha; Agriculture: 21.49 ha; Grazing land: Nil; & Housing Facility: 2.499 ha) covering Cadastral Survey Number Survey Plot Numbers 37, 38, 40, 42, 42-D, 48-A, 51-A, 51-B, 51-C, 51/2, 52-B, 52-C, 53-B, 53-C, 53-D, 54-B at Village Haresamudram, Mandal Bommanahal, District Ananthpur, Andhra Pradesh. The land patch proposed to be acquired on the NW corner of the project area there is a Village Road crossing the land. This is the existing housing area, which will be extended for the project. The public road crossing the area will be maintained and kept as such for public and project people. The

EAC opined that PP shall complete the acquisition of proposed additional land and conversion for industrial purpose and submit the credible documents with the EIA/EMP Report.

- v. Kuruvalli village is at a distance of 1.5 km towards ENE from the project site along with other sensitive areas within the study area of the project site. The EAC is of the opinion that PP shall prepare and include in the EIA/EMP Report the environmental safeguard measures to minimise the impact of the project activities on these sensitive areas.
- vi. A second order (ephemeral) drainage channel enters from outside in the project area, and after running parallel to plant boundary leaves the project site. PP shall submit the NOC from the irrigation department. There are several other water bodies within the study area of the project site. The EAC is of the opinion that water bodies shall not be disturbed. Mitigation measures w.r.t. safeguarding the water bodies shall be prepared and submitted.
- vii. The water requirement for the total project (including existing plus proposed project) is estimated as 7000 m<sup>3</sup>/day, which will be sourced from Hagari River. The EAC is of the opinion that PP shall obtain necessary permission in this regard.
- viii. While finalization of the minutes of the EAC meeting, it was observed that PP has submitted the written submission on 10.07.2024 and while circulating the Minutes of the meeting, the information found to be satisfactory.

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

62.15.16 After deliberations, the Committee **recommended** the project proposal **subject to uploading of written submission** (credible documents pertaining to additional land acquisition, clarification on project land pertaining to establishment of township project, affidavit for completing greenbelt) **on PARIVESH portal** for prescribing following specific ToRs for undertaking detailed EIA and EMP study alongwith Public Hearing in addition to the generic ToRs enclosed at **Annexure-1** read with additional ToRs at **Annexure-2**:

- (i) The PP shall complete the acquisition of proposed additional land and conversion for industrial purpose and submit the credible documents with the EIA/EMP Report.
- (ii) Kuruvalli village is at a distance of 1.5 km towards ENE from the project site along with other sensitive areas within the study area of the project site. Proponent shall prepare appropriate environmental safeguard measures to minimise the impact of the project activities on these sensitive areas.
- (iii) A second order (ephemeral) drainage channel enters from outside in the project area, and after running parallel to plant boundary leaves the project site. PP shall submit the NOC from the irrigation department. There are several other water bodies within the study area of the project site. The PP shall include in the EIA/EMP report suitable steps /conservation plan along with contouring (close intervals), Run -off calculations, disposal etc. A robust and full proof Drainage Conservation scheme to protect the natural drainage and its flow parameters; along with Soil conservation scheme and multiple Erosion control measures shall be prepared and included in EIA/EMP Report.

- (iv) Water requirement of 7000 m<sup>3</sup>/day, shall be sourced from Hagari River. PP shall obtain necessary water permission from the Competent Authority.
- (v) PP shall explore the possibility to establish a Sewage Treatment plan in the nearby villages.
- (vi) PP shall prepare a plan for solar / other renewable source of energy to meet the energy demand of the proposed project with the EIA/EMP Report.
- (vii) 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.
- (viii) The EAC also suggested the TOR conditions such as, (a) The “*input*” parameters used in the AAQ modelling must be reported in the E.I.A. Influence of the combinations of various parameters on the AAQ must be reported. (b) Wind Rose diagrams for all seasons of the year must be included in the E.I.A. Data from secondary sources such as IMD may be used for this purpose, this is apart for the mandatory study of meteorological factors for one season. (c) GLC modelling for CO emission from reactors must be included in the E.I.A. report. (d) The total PM expected to be emitted from the stacks must be modelled and reported. (e) Specific water consumption and specific CO<sub>2</sub> emission from the Plant must be predicted and documented. (f) Inversion level and Mixing height must be reported in the AAQ model.
- (ix) The PP is advised to implement the 'Ek Ped Maa Ke Naam' Campaign which was launched on 5<sup>th</sup> June 2024 on the occasion of the World Environment Day to increase the forest cover across the Country.

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### **Agenda No. 62.16**

**62.16 Proposing for Expansion of Integrated Cement Plant (Clinker – 6.45 to 18.51 Million TPA, Cement – 6.705 to 16.705 Million TPA and WHR - 24 MW to 96 MW) by Installation of new Line – 3, 4 & 5 by M/s. ACC Limited (Unit: Wadi Cement Works), located at Wadi Plant, Village+Post - Wadi, Tehsil- Chittapur, District - Kalaburagi, State-Karnataka - Consideration of TOR.**

**[Proposal No. IA/KA/IND1/441966/2023; File No. IA-J-11011/126/2007-IA-II(IND-I)]  
[Consultant: Ecomen Mining Pvt. Ltd.; Valid upto 03/10/2026]**

62.16.1 M/s. ACC Limited has made an application online vide proposal no. IA/KA/IND1/441966/2023 dated 18.06.2024 along with the application in prescribed format (CAF, Form – I Part A & B),



copy of pre-feasibility report and proposed ToRs for undertaking detailed EIA study as per the EIA Notification, 2006 for the project mentioned above. The proposed project activity is listed at schedule no. 3(b) Cement Plants, under Category “A” of the schedule of the EIA Notification, 2006 and appraised at Central Level.

62.16.2 Name of the EIA consultant: M/s. Ecomen Mining Pvt. Ltd. [List of ACOs with their Certificate / Extension Letter No: NABET/EIA/2023/RA 0203 (Rev.02); valid till 22.03.2025, as on June 26, 2024].

**Details submitted by Project proponent**

62.16.3 The project of M/s ACC Limited located in Wadi Town, Tehsil- Chittapur, District: Kalaburagi, Karnataka is for enhancement of production of Integrated Cement Plant (Clinker: 6.45 to 18.51 Million TPA, Cement 6.705 to 16.705 Million TPA and WHRB: 24 MW to 96 MW) by Installation of new Line – 3, 4 & 5.

62.16.4 Environmental site settings:

S. No.	Particulars	Details			Remarks
i.	Total land	229.05 Ha is private land			Land is for Industry use.
ii.	Land acquisition details as per MoEF&CC O.M. dated 7/10/2014	Khasra Details of Plant Area : 201 202 203 204 205 644 629 630/1 631 644 641 637 643 206 209 208 207 638 639 642 661 622 623 624 660 618 617 630A 633 634 645 636 640 635 632			
iii.	Existence of Habitation & Involvement of R&R, if any.	<b>Project site:</b> Wadi Village			R&R not applicable
		<b>Study Area:</b>			
		<b>Habitation</b>	<b>Distance</b>	<b>Direction</b>	
		Wadi	adjacent to Plant	E	
iv.	Latitude and Longitude of all corners of the project site.	<b>SL</b>	<b>Latitude</b>	<b>Longitude</b>	
		1	76° 58' 29.3894" E	17° 03' 30.9095" N	
		2	76° 58' 26.5870" E	17° 03' 30.8312" N	
		3	76° 58' 22.6745" E	17° 03' 29.3349" N	
		4	76° 58' 24.1047" E	17° 03' 25.7975" N	
		5	76° 58' 24.2188" E	17° 03' 25.3647" N	
		6	76° 58' 26.0551" E	17° 03' 24.0500" N	
		7	76° 58' 27.3367" E	17° 03' 23.8985" N	
		8	76° 58' 27.8552" E	17° 03' 22.8510" N	
		9	76° 58' 30.6151" E	17° 03' 21.2697" N	
		10	76° 58' 32.9768" E	17° 03' 13.4388" N	
		11	76° 58' 32.1411" E	17° 03' 13.1762" N	
		12	76° 58' 21.3983" E	17° 03' 15.8268" N	
		13	76° 58' 20.4120" E	17° 03' 12.0606" N	
		14	76° 58' 24.3776" E	17° 03' 12.3032" N	
15	76° 58' 24.2685" E	17° 03' 11.0391" N			

S. No.	Particulars	Details		Remarks
		16	76° 58' 27.1204" E 17° 03' 10.6328" N	
		17	76° 58' 26.6197" E 17° 03' 07.5956" N	
		18	76° 58' 26.6852" E 17° 03' 07.0539" N	
		19	76° 58' 23.7894" E 17° 02' 59.7494" N	
		20	76° 58' 26.6295" E 17° 02' 59.5863" N	
		21	76° 58' 30.7313" E 17° 02' 59.4200" N	
		22	76° 58' 38.9657" E 17° 02' 59.6524" N	
		23	76° 58' 39.0232" E 17° 02' 55.1083" N	
		24	76° 58' 44.4698" E 17° 02' 55.6149" N	
		25	76° 58' 46.4102" E 17° 02' 56.0463" N	
		26	76° 58' 49.8611" E 17° 02' 56.3592" N	
		27	76° 58' 53.9845" E 17° 02' 56.5061" N	
		28	76° 58' 54.6241" E 17° 02' 56.6557" N	
		29	76° 58' 57.2943" E 17° 02' 56.7010" N	
		30	76° 58' 57.7837" E 17° 02' 56.8737" N	
		31	76° 59' 03.6532" E 17° 02' 57.1081" N	
		32	76° 59' 04.0051" E 17° 02' 59.5585" N	
		33	76° 59' 04.1452" E 17° 02' 59.9335" N	
		34	76° 59' 06.5473" E 17° 02' 59.6431" N	
		35	76° 59' 07.1756" E 17° 03' 06.6165" N	
		36	76° 59' 07.9663" E 17° 03' 06.7138" N	
		37	76° 59' 08.4757" E 17° 03' 06.7174" N	
		38	76° 59' 10.1408" E 17° 03' 06.9785" N	
		39	76° 59' 11.2496" E 17° 03' 07.1278" N	
		40	76° 59' 13.8287" E 17° 03' 07.1793" N	
		41	76° 59' 15.0185" E 17° 03' 07.2230" N	
		42	76° 59' 17.2767" E 17° 03' 07.4271" N	
		43	76° 59' 20.7709" E 17° 03' 07.6062" N	
		44	76° 59' 20.9342" E 17° 03' 27.7617" N	
		45	76° 59' 20.8657" E 17° 03' 28.5703" N	
		46	76° 59' 31.3091" E 17° 03' 28.4021" N	
		47	76° 59' 31.9259" E 17° 03' 28.3626" N	
		48	76° 59' 32.4609" E 17° 03' 28.8543" N	
		49	76° 59' 32.6602" E 17° 03' 31.9377" N	
		50	76° 59' 24.7072" E 17° 03' 32.1956" N	
		51	76° 59' 22.4901" E 17° 03' 32.1182" N	
		52	76° 59' 22.3561" E 17° 03' 32.3960" N	
		53	76° 59' 21.0521" E 17° 03' 32.4669" N	
		54	76° 59' 21.3877" E 17° 03' 33.6083" N	
		55	76° 59' 28.5159" E 17° 03' 33.8328" N	
		56	76° 59' 28.0138" E 17° 03' 35.8231" N	
		57	76° 59' 33.1643" E 17° 03' 35.8208" N	
		58	76° 59' 33.7932" E 17° 03' 35.4864" N	
		59	76° 59' 37.3794" E 17° 03' 59.6456" N	

S. No.	Particulars	Details			Remarks
		60	76° 59' 37.4897" E	17° 04' 01.0501" N	
		61	76° 59' 37.9391" E	17° 04' 06.6022" N	
		62	76° 59' 37.7810" E	17° 04' 07.7500" N	
		63	76° 59' 36.8875" E	17° 04' 16.5906" N	
		64	76° 59' 36.3732" E	17° 04' 18.3187" N	
		65	76° 59' 35.9525" E	17° 04' 18.2899" N	
		66	76° 59' 36.0178" E	17° 04' 17.9513" N	
		67	76° 59' 32.6695" E	17° 04' 17.1776" N	
		68	76° 59' 32.7423" E	17° 04' 15.9864" N	
		69	76° 59' 31.5617" E	17° 04' 15.9565" N	
		70	76° 59' 31.4039" E	17° 04' 17.2919" N	
		71	76° 59' 27.8772" E	17° 04' 03.0370" N	
		72	76° 59' 26.3749" E	17° 03' 53.1008" N	
		73	76° 59' 26.5715" E	17° 03' 52.5863" N	
		74	76° 59' 27.5963" E	17° 03' 52.3429" N	
		75	76° 59' 27.8256" E	17° 03' 52.3065" N	
		76	76° 59' 26.9322" E	17° 03' 46.1524" N	
		77	76° 59' 28.1789" E	17° 03' 35.9672" N	
		78	76° 59' 27.8611" E	17° 03' 35.8856" N	
		79	76° 59' 28.1847" E	17° 03' 34.0189" N	
		80	76° 59' 21.3004" E	17° 03' 33.7656" N	
		81	76° 59' 20.0966" E	17° 03' 33.3523" N	
		82	76° 59' 19.5538" E	17° 03' 32.1839" N	
		83	76° 59' 16.5066" E	17° 03' 32.3348" N	
		84	76° 59' 20.5390" E	17° 03' 40.2703" N	
		85	76° 59' 19.8881" E	17° 03' 42.9005" N	
		86	76° 58' 54.9834" E	17° 03' 40.5142" N	
		87	76° 58' 29.3894" E	17° 03' 30.9095" N	
v.	Elevation of the project site	447 m above mean sea level			
vi.	Involvement of Forest land if any.	No			
vii.	Water body (Rivers, Lakes, Pond, Nala, Natural Drainage, Canal etc.) exists within the project site as well as study area	<b><u>Project site:</u></b> No water body exist within the project site.			
		<b><u>Study area:</u></b>			
		<b>Water body</b>	<b>Distance</b>	<b>Direction</b>	
		Kagina river	3.4Kms	W	
Bhima river	5.3 km	SW			
viii.	Existence of ESZ/ ESA/	Nil			

S. No.	Particulars	Details	Remarks													
	national park/ wildlife sanctuary/ biosphere reserve/ Tiger reserve/ elephant reserve etc. if any within the study area															
ix	Details of interlinked/ interdependent project	<p>ACC is having an Integrated Cement plants at Wadi , with two kilns (Lines-1 &amp; 2, in operation with Clinker production capacity 6.45 MTPA (1.85 MTPA at Line-1 as per CTO dated 02/12/2021 &amp; 4.60 MTPA at Line-2 as per EC dated 20th Feb 2008 ), Cement : 6.705 MTPA (2.705 MTPA at Line-1, 4.0 MTPA at Line-2), Captive Power Plant 125 MW (installed 100 MW, 4 x 25 MW) as per EC File No. J-11011/126/2007-IA II (I) dated 20<sup>th</sup> Feb 2008 &amp; Waste Heat Recovery Boiler 24 MW (Line-2- as per Combined Consent Order No. AW-327971 PCB ID: 10423 Dated 12/11/2021 valid up to 30/06/2026) &amp; 15000 TPM AFR co-processing system (As per CFO File No- PCB/004/HPI/ACC-2/2022-23/2667 dated 16 July 2022)</p> <p>Existing Limestone Mines of capacity 7.72 MTPA of Wadi Cement Works vide File no 11015/76/2021-IA.IIM has been obtained (Copy submitted).</p> <p>For proposed expansion project, PP is proposing 12 MTPA from the New Kannur Limestone mine for which ToR has been obtained vide ToR No. IA-J-11015/76/2021-IA-II (NCM), Public hearing completed 27.06.2023 &amp; now proposal for final EC is under preparation (Copy of ToR and PH submitted)</p>														
	<table border="1"> <thead> <tr> <th>Available Limestone Source</th> <th>Mine Status (Environmental Clearance /TOR)</th> <th>Date of Issue</th> <th>Limestone Production (MTPA)</th> </tr> </thead> <tbody> <tr> <td>Wadi Limestone Mine</td> <td>           EC vide no. F. No: J-11015/7/2000-IA - II(M)             Revalidation of EC : File no. J11015/153/2018-IA.II (M)         </td> <td>           07.09.2000 (EC), Copy submitted             29.01.2021(TOR) Copy submitted         </td> <td>7.72</td> </tr> <tr> <td>Ingalgi Limestone Mines</td> <td>F. No: J- 1015/75/2007-IA.II (M)</td> <td>29.12.2008 (EC) Copy submitted</td> <td>8.13</td> </tr> </tbody> </table>	Available Limestone Source	Mine Status (Environmental Clearance /TOR)	Date of Issue	Limestone Production (MTPA)	Wadi Limestone Mine	EC vide no. F. No: J-11015/7/2000-IA - II(M)  Revalidation of EC : File no. J11015/153/2018-IA.II (M)	07.09.2000 (EC), Copy submitted  29.01.2021(TOR) Copy submitted	7.72	Ingalgi Limestone Mines	F. No: J- 1015/75/2007-IA.II (M)	29.12.2008 (EC) Copy submitted	8.13			
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Ingalgi Limestone Mines	F. No: J- 1015/75/2007-IA.II (M)	29.12.2008 (EC) Copy submitted	8.13													

S. No.	Particulars	Details		Remarks
	Kannur Limestone Mines	TOR ref. F. No: AI- J- 11015/76/2021-IA-II (NCM), MoEFCC, New Delhi PH done on 27.06.2023 EC application submitted vide proposal no. IA/KA/MIN/457622/2024	16.12.2021 (TOR) Copy submitted	12.00
<b>Total Capacity</b>				<b>27.85</b>

62.16.5 The existing project was accorded Consent to Establish for Cement production of 1.95 MTPA, followed by EC dated 31.08.2000 for 4 MTPA Cement Production. The project was accorded expansion as per Environmental Clearance Letter. No. J-11011/132/2007-IA II (I) dated 20.02.2008 for Cement: 4.0 MTPA, Clinker 3.0 to 4.6 MTPA, CPP: 75 MW to 125 MW. The present Consent to Operate for the existing unit was accorded by Karnataka State Pollution Control Board vide letter. no. AW-32845 dated: 01/07/2021 valid up to 30.06.2026 & AW-328357 dated 02.12.2021 valid up to 30.06.2026.

SI No.	Details	EC/CFO /CFE	Capacity (MTPA)	Issued Date
1	Wadi (Line-I)	CFE	Cement: 1.95 MTPA	NA
		CFO	Cement: 1.95 MTPA	26.08.1998
2	Wadi (Line -I) Expansion	CFE	Cemnet: 1.95 MTPA to 2.7 MTPA	12.07.2006
		CFO	Cement: 1.95 MPA to 2.7 MTPA, Clinker: 1.85 MTPA	28.07.2000
3	Wadi (Line II)	EC	Cement: 4.0 MTPA	31.08.2000
		CFE	Cement: 4.0 MTPA, Clinker: 3.0 MTPA	14.10.1999
		CFO	Cement: 4.0 MTPA, Clinker: 3.0 MTPA	31.03.2001
4	Wadi (Line II) Expansion	EC	Cement: 4.0 MTPA, Clinker 3.0 to 4.6 MTPA, CPP: 75 MW to 125 MW	20.02.2008
		CFE	Cement: 4.0 MTPA, Clinker 3.0 to 4.6 MTPA & CPP: 75 MW to 125 MW	23.10.2008
		CFO	Cement; 4.0 MTPA, Clinker : 3.0 to 4.6 MTPA & CPP: 75 MW to 125 MW	07.08.2010

62.16.6 Implementation status of existing EC:

Sl. No.	Facilities	Units	As per EC 20.02.2008	Implementation Status as on	Production as per CTO
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1	Cement	4.0 MTPA	J- 11011/126/2007- IA II (I)	Implemented	4.0 MTPA
2	Clinker	4.6 MTPA			4.6 MTPA
3	CPP	125 MW			125 MW

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

Sl. No.	Plant Equipment/ Facility	Existing facilities as per EC dated 07.08.2007								Proposed Units		Final (Existing + Proposed)	
		Total (A+B)		Implemented (A)		Un-implemented (B)		As per CTO		Configuration	Capacity	Configuration	Capacity
		Configuration	Capacity	Configuration	Capacity	Configuration	Capacity	Configuration	Capacity				
1	Clinker (Million TPA)	4	6.45 MTPA	4	6.45 MTPA	Nil	Nil	4	6.45 MTPA	3	4.02 MTPA	7	18.51 MMTPA
2	Cement Mill	2	6.70 MTPA	2	6.70 MTPA	Nil	Nil	2	6.70 MTPA	4	10 MTPA	6	16.70 MTPA
3	Coal Mill	5	181 TPH	5	181 TPH	Nil	Nil	5	181 TPH	3	100 TPH	8	481 TPH
4	Raw Mill	5	1220 TPH	5	1220 TPH	Nil	Nil	5	1220 TPH	3	2580 TPH	8	3800 TPH
5	Lime stone Crusher	3	3000 TPH	3	3000 TPH	Nil	Nil	3	3000 TPH	3	6000 TPH	6	9000 TPH
6	WHRS	1	24MW	1	24MW	Nil	Nil	1	24MW	3	24MW	4	96MW
7	Wagon Tippler	1	25 TPH	1	25 TPH	Nil	Nil	1	25 TPH	2	50 TPH	2	75 TPH
8	Packing Machines	8	1120 TPH	8	1120 TPH	Nil	Nil	8	1120 TPH	6	1440 TPH	14	2560 TPH
9	Truck Loading Machines	8	1280 TPH	8	1280 TPH	Nil	Nil	8	1280 TPH	18	2160 TPH	26	3440 TPH
10	Bulk loading of cement	1	100 TPH	1	100 TPH	Nil	Nil	1	100 TPH	6	900 TPH	7	1000 TPH
11	AFR Feeding System	1	0.18 MTPA	1	0.18 MTPA	Nil	Nil	1	0.18 MTPA	1	.90 MTPA	2	1.08 MTPA

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

Raw Material	Requirement (Million TPA) Dry Basis			Source	Mode of Transportation/
	Existing	Expansion	Total		

Limestone	7.72	5.92x 3=17.76	25.48	Existing Captive Limestone Mines and other nearby local market	By conveying system from mine and road
Laterite	0.40	0.249 x 3	1.147	Nearby source	Rail/Road
Bauxite	0.10	0.062 x 3	0.286	Nearby source	Rail/Road

62.16.9 Existing Water requirement is 12440 KLD, which is obtained from Kagina river and permission from the same has been obtained from Karnataka State water authority Govt order No ERD/97MMG/2017/Bengaluru/dated 14.02.2017. The water requirement for the proposed project is estimated as 18520 KLD. This additional requirement will also be met from Kagina river.

62.16.10 Existing power requirement of 86 MW is obtained from CPP and State Grid. The power requirement for the proposed project will be 111 MW will be obtained from CPP, Grid, WHRS and Renewable energy.

62.16.11 The capital cost of the project is Rs. 8400 Crores and the capital cost for environmental protection measures is proposed as Rs 420. Crores & Recurring cost / annum is Rs. 21 Crore.

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

62.16.13 Proposed Terms of Reference: [Baseline data collection period: March, 2023 to May, 2023]

Attributes	Sampling	
A. Air	No.of Stations	Frequency
i. Meteorological parameters	1	Hourly
ii. AAQ Parameters	10	One season study
B. Noise	9	Once in the study period
C. i. Surface Water quality parameters	2	Once in the study period
ii. Ground water quality parameters	8	Once in the study period
D. Land		
i. Soil quality	6	Once in the study period
ii. Land use	10 Km radius study area	
E. Biological	10 Km radius study area	Once in the study period
i. Aquatic		
ii. Terrestrial		
F. Socio-economic parameters	10 Km radius study area	Once in the study period

**Written submission by the PP:**

62.16.14 During the meeting, based on the deliberations made by the EAC, the project proponent vide letter dated 05.07.2024 through email dated 05.07.2024 submitted the following information:

<b>S. No</b>	<b>Documents asked by EAC</b>	<b>Reply</b>																							
1	Plant Layout of the existing and proposed plant including greenbelt	Layout Map for existing and proposed plant area including greenbelt is submitted.																							
2	To furnish the source wise details of Limestone along with clearance status and capacity	<p>Details source of Limestone mines alongwith Environmental Clearance (EC) / TOR status and capacity is tabulated below:</p> <table border="1"> <thead> <tr> <th><b>Available Limestone Source</b></th> <th><b>Mine Status (Environmental Clearance /TOR)</b></th> <th><b>Date of Issue</b></th> <th><b>Limestone Production (MTPA)</b></th> </tr> </thead> <tbody> <tr> <td>Wadi Limestone Mine</td> <td>EC vide no. F. No: J-11015/7/2000-IA - II(M)  Revalidation of EC : File no. J11015/153/2018-IA.II (M)</td> <td>07.09.2000 (EC), Copy submitted  29.01.2021(TOR) Copy submitted</td> <td>7.72</td> </tr> <tr> <td>Ingalgi Limestone Mines</td> <td>F. No: J- 1015/75/2007-IA.II (M)</td> <td>29.12.2008 (EC) Copy submitted</td> <td>8.13</td> </tr> <tr> <td>Kannur Limestone Mines</td> <td>TOR ref. F. No: AI- J-11015/76/2021-IA-II (NCM), MoEFCC, New Delhi PH done on 27.06.2023 EC application submitted vide proposal no. IA/KA/MIN/457622/2024</td> <td>16.12.2021 (TOR) Copy submitted</td> <td>12.00</td> </tr> <tr> <td colspan="3"><b>Total Capacity</b></td> <td><b>27.85</b></td> </tr> </tbody> </table>				<b>Available Limestone Source</b>	<b>Mine Status (Environmental Clearance /TOR)</b>	<b>Date of Issue</b>	<b>Limestone Production (MTPA)</b>	Wadi Limestone Mine	EC vide no. F. No: J-11015/7/2000-IA - II(M)  Revalidation of EC : File no. J11015/153/2018-IA.II (M)	07.09.2000 (EC), Copy submitted  29.01.2021(TOR) Copy submitted	7.72	Ingalgi Limestone Mines	F. No: J- 1015/75/2007-IA.II (M)	29.12.2008 (EC) Copy submitted	8.13	Kannur Limestone Mines	TOR ref. F. No: AI- J-11015/76/2021-IA-II (NCM), MoEFCC, New Delhi PH done on 27.06.2023 EC application submitted vide proposal no. IA/KA/MIN/457622/2024	16.12.2021 (TOR) Copy submitted	12.00	<b>Total Capacity</b>			<b>27.85</b>
<b>Available Limestone Source</b>	<b>Mine Status (Environmental Clearance /TOR)</b>	<b>Date of Issue</b>	<b>Limestone Production (MTPA)</b>																						
Wadi Limestone Mine	EC vide no. F. No: J-11015/7/2000-IA - II(M)  Revalidation of EC : File no. J11015/153/2018-IA.II (M)	07.09.2000 (EC), Copy submitted  29.01.2021(TOR) Copy submitted	7.72																						
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<b>Total Capacity</b>			<b>27.85</b>																						



S. No	Documents asked by EAC	Reply			
3.	Name of Villages falls under 5 Km radius of the project	Name of villages falls under 5 Km radius of the project is given below:			
		<b>Sl No.</b>	<b>Village Name</b>	<b>Distance</b>	<b>Direction</b>
		1	Wadi	Adjacent	E
		2	Lakshiminipur	0.9	NE
		3	Ravur	1.9	NE
		4	Dhangarwadi	0.9	E
		5	Kamarawadi Tanda	3.8	E
		6	Kamarawadi	4.9	ESE
		7	Vasavankani	2.5	SE
		8	Sewalalnagar	1.5	SE
		9	Halkatta	4.3	SE
		10	Kannur	4.9	SW
		11	Ingalgi	2.9	W

### **Deliberation by the Committee**

62.16.15 The Committee noted the following:

- i. The instant proposal is for enhancement of production of Integrated Cement Plant (Clinker: 6.45 to 18.51 Million TPA, Cement 6.705 to 16.705 Million TPA and WHRB: 24 MW to 96 MW) by Installation of new Line – 3, 4 & 5.
- ii. The existing project was accorded Consent to Establish for Cement production of 1.95 MTPA, followed by EC dated 31.08.2000 for 4 MTPA Cement Production. The project was accorded expansion as per Environmental clearance Letter. No. J-11011/132/2007-IA II (I) dated 20.02.2008 for Cement: 4.0 MTPA, Clinker 3.0 to 4.6 MTPA, CPP: 75 MW to 125 MW. The present Consent to Operate for the existing unit was accorded by Karnataka State Pollution Control Board vide letter. no. AW-32845 dated: 01/07/2021 valid up to 30.06.2026 & AW-328357 dated 02.12.2021 valid up to 30.06.2026.
- iii. The EAC took into consideration the drone survey of the project site and kml file on the Google Earth presented by the project proponent along with DSS of the project site on PARIVESH and made following deliberations accordingly.
- iv. The PP submitted that total land is 229.05 ha [Private land] and the same is under possession of proponent.
- v. Wadi is adjacent in East of the project site along with other sensitive areas within the study area of the project site. The EAC is of the opinion that PP shall prepare and include in the EIA/EMP Report the environmental safeguard measures to minimise the impact of the project activities on these sensitive areas.
- vi. There are water bodies within the study area of the project site. The EAC is of the opinion that water bodies shall not be disturbed. Mitigation measures w.r.t. safeguarding the water bodies shall be prepared and submitted.
- vii. The instant project is a part of interlinked/integrated project. PP has reported that ACC is having an Integrated Cement plants at Wadi , with two kilns (Lines-1 & 2, in operation

- with Clinker production capacity 6.45 MTPA (1.85 MTPA at Line-1 as per CTO dated 02/12/2021 & 4.60 MTPA at Line-2 as per EC dated 20th Feb 2008 ), Cement : 6.705 MTPA (2.705 MTPA at Line-1, 4.0 MTPA at Line-2), Captive Power Plant 125 MW (installed 100 MW, 4 x 25 MW) as per EC File No. J-11011/126/2007-IA II (I) dated 20th Feb 2008 & Waste Heat Recovery Boiler 24 MW (Line-2- as per Combined Consent Order No. AW-327971 PCB ID: 10423 Dated 12/11/2021 valid up to 30/06/2026) & 15000 TPM AFR co-processing system (As per CFO File No- PCB/004/HPI/ACC-2/2022-23/2667 dated 16 July 2022). Existing Limestone Mines of capacity 7.72 MTPA of Wadi Cement Works vide File no 11015/76/2021-IA.IIM has been obtained. For proposed expansion project, PP is proposing 12 MTPA from the New Kannur Limestone mine for which ToR has been obtained vide ToR No. IA-J-11015/76/2021-IA-II (NCM), Public hearing completed 27.06.2023 & now proposal for final EC is under preparation.
- viii. The total water requirement after expansion will be 18520 KLD, which will be obtained from Kagina river. The EAC is of the opinion that PP shall obtain necessary permission in this regard.
- ix. The EAC deliberated on the written submission of project proponent and found it satisfactory.

### **Recommendations of the Committee**

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

- (i) Wadi is adjacent in East of the project site along with other sensitive areas within the study area of the project site. It was also observed that the PM10 values are at little higher side and near to the threshold limit, PP shall come up with a dedicated and project specific Air Quality Management Plan (AQMP). Proponent shall prepare appropriate environmental safeguard measures to minimise the impact of the project activities on these sensitive areas.
- (ii) There are water bodies within the study area of the project site. The PP shall include in the EIA/EMP report suitable steps /conservation plan along with contouring (close intervals), Run -off calculations, disposal etc. A robust and full proof Drainage Conservation scheme to protect the natural drainage and its flow parameters; along with Soil conservation scheme and multiple Erosion control measures shall be prepared and included in EIA/EMP Report.
- (iii) PP shall obtain requisite permissions linked with the integrated projects to ensure the raw material security of the instant project.
- (iv) Water requirement of 18520 KLD, which will be obtained from Kagina river. PP shall obtain necessary water permission from the Competent Authority.
- (v) The EAC also suggested the TOR conditions such as, (a) The “*input*” parameters used in the AAQ modelling must be reported in the E.I.A. Influence of the combinations of various parameters on the AAQ must be reported. (b) Wind Rose diagrams for all seasons of the year must be included in the E.I.A. Data from secondary sources such as IMD may be used

for this purpose, this is apart for the mandatory study of meteorological factors for one season. (c) GLC modelling for CO emission from reactors must be included in the E.I.A. report. (d) The total PM expected to be emitted from the stacks must be modelled and reported. (e) Specific water consumption and specific CO<sub>2</sub> emission from the Plant must be predicted and documented. (f) Inversion level and Mixing height must be reported in the AAQ model.

- (vi) The PP is advised to implement the 'Ek Ped Maa Ke Naam' Campaign which was launched on 5<sup>th</sup> June 2024 on the occasion of the World Environment Day to increase the forest cover across the Country.

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## **Proposals from Parivesh 1.0**

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

#### **Agenda No. 62.17**

#### **62.17 Installation of 2 X 7 MTPA Greenfield Iron Ore Pellet Plant by M/s Essar Minmet Limited, located at Paradip, Jagatsinghpur District, Odisha - Re-Consideration of Environmental Clearance [From Parivesh 1.0]**

**[Proposal No. IA/OR/IND/198977/2021, File No. J-11011/38/2021-IA.II(I)]**

**[Consultant: M. N. Dastur and Company (Pvt.) Ltd.; Valid upto Till: 17.11.2025.]**

- 62.17.1 The proposal was initially considered during the 13<sup>th</sup> meeting of the EAC for Industry-I sector held on 14-15<sup>th</sup> September, 2022 wherein, the EAC, based on information & clarifications provided by the project proponent and after detailed deliberations recommended the proposal for grant of Environment Clearance subject to stipulation of certain specific conditions and general conditions.
- 62.17.2 The proposal was processed in the Ministry wherein it was noted that PP has reported that this is an interlinked project, Iron Ore Beneficiation plant of 14.3 MTPA at Tikarpada - Keonjhar district for which TOR was obtained on 12/04/2021. Further, the matter was examined in the Ministry as per the Ministry's OM dated 24/12/2010 for consideration of Integrated and Inter-linked projects.
- 62.17.3 In view of the above, the Ministry vide letter dated 09.11.2022, advised PP to expedite the process of EC application for the integrated Iron Ore Beneficiation plant of 14.3 MTPA at Tikarpada Keonjhar District for further action on the instant project in the Ministry.
- 62.17.4 The PP vide letter dated 17.10.2023, further submitted that they want to propose an alternate plan with external iron ore concentrate through pipe Conveyor from Paradip port, till Beneficiation plant and slurry pipeline become operational.
- 62.17.5 Based on the request of PP, the Ministry on 02.11.2023 informed PP that in order to consider this revised proposal, such changes may also be included be in EIA/EMP report and PP needs to revise the report. In this regard, the PP was submitted the revised/updated EIA/EMP report to include the alternative plan for further appraisal before the EAC for further deliberations/consideration.
- 62.17.6 The PP submitted the revised EIA/EMP report on 20.11.2023 and accordingly, the proposal was placed before the EAC during the 50<sup>th</sup> meeting held on 13<sup>th</sup>-15<sup>th</sup> December, 2023 and further re-considered during the 52<sup>nd</sup> meeting of the EAC for Industry-I sector held on 23<sup>rd</sup>-25<sup>th</sup> January, 2024 wherein after detailed deliberations, the committee recommended the instant revised

proposal for grant of Environment Clearance under the provisions of EIA Notification, 2006 subject to the stipulation of specific conditions and general conditions as recommended in the 13<sup>th</sup> meeting of the EAC for Industry-I sector held on 14-15<sup>th</sup> September, 2022.

62.17.7 The file was processed in the Ministry matter and it was examined that the Public Consultation has been held for 2x7 MTPA pellet plant, the location of which is different from that of beneficiation plant. It is further mentioned that the interim arrangement for supply of beneficiated ore through pipeline is only for two years and that beneficiation plant is going to be set up within the given time frame. In this context, ADS was raised on 09.04.2024 wherein the PP was requested to submit the following clarification/justification:

- (i) Since Public Consultation has not yet been held for the iron ore beneficiation plant, what is the rationale behind assuming that the beneficiation plant would be set up within two years.
- (ii) Has the Public Consultation been held factoring in the layout of the slurry pipeline to be used for transporting the beneficiated ore to the pellet plant?
- (iii) What is the reason for this inordinate delay in conducting Public Consultation?
- (iv) As an alternate plan, it is proposed to utilize imported iron concentrate. Was this part of the EIA/EMP report regarding which Public Consultation has been held and if this is a new component introduced as part of alternate plan then would it not require public hearing afresh [as per provision of EIA Notification 2006] the conveyor belt for transporting iron ore concentrate may be passing through a different alignment/habitation.

62.17.8 The PP submitted the ADS reply vide letter dated 30.04.2024 uploaded on PARIVESH portal on 30.04.2024. Based on the submission of PP, the proposal was re-considered during the 62<sup>nd</sup> meeting of the EAC for Industry-I sector held on 3<sup>rd</sup> – 5<sup>th</sup> July, 2024 wherein after detailed deliberation, EAC asked PP to revise their submission. The revised information has been by PP vide letter dated 05.07.2024 through email dated 05.07.2025 as follows:

**(i) Since Public Consultation has not yet been held for the iron ore beneficiation plant, what is the rationale behind assuming that the beneficiation plant would be set up within two years.**

**Response:**

Since the public hearing for the beneficiation plant could not be carried out, the project development plan has been modified based on import of iron ore concentrate from Paradeep Port to pellet plant through the same pipe conveyor to be used for despatching product pellet to Paradeep Port in return direction for the interim period till July 2027. Moreover, there is no requirement of operating the beneficiation plant during this interim period till July 2027.

However, all the formalities as required for setting up the projects (Beneficiation plant, slurry pipeline and pellet plant) have been completed and the clearances/approvals such as land allocation, water allocation, power supply, wildlife conservation plan (by PCCF, Odisha) have been obtained. In order to ensure the availability of the beneficiation plant within the stipulated time period, the pre project activities like basic engineering order has been placed and with the

expertise available with the Essar group, we are confident that the Beneficiation plant will be ready by July 2027.

Thus, once the beneficiation plant is operational, both the Pellet modules (2X7 MTPA) of Pellet plant, will be operated along with beneficiation plant and connecting slurry pipeline in an integrated way.

**(ii) Has the Public Consultation been held factoring in the layout of the slurry pipeline to be used for transporting the beneficiated ore to the pellet plant?**

**Response:**

Yes, while conducting the Public Hearing of Pellet Plant, the slurry pipeline from beneficiation plant has been included in the EIA report.

As the project development plan has been modified due to delay in Public Hearing of the beneficiation plant, the project proponent has adopted import of iron ore concentrate from Paradeep Port to pellet plant through the same pipe conveyor to be used for despatching product pellet to Paradeep Port in return direction for the interim period till July 2027. Moreover, there is no requirement of operating the slurry pipeline during this interim period till July 2027.

The pipe conveyor mentioned under the alternate arrangement is not a new conveyor and therefore fresh public hearing is not required.

**(iii) What is the reason for this inordinate delay in conducting Public Consultation?**

**Response:**

The procedures and formalities as required for conducting public hearing as per the provisions under EIA Notification 2006 had been completed and date for public hearing was obtained on 10th January 2022. Due to COVID followed by declaration of Panchayat and municipal elections in the state, the Public Hearing was suspended. After the elections, the Project proponent approached the state authorities for getting a fresh date for Public Hearing. Efforts were also made by MoEFCC, Ministry of Steel, OSPCCB for getting a suitable date for Public Hearing for which records are available and date for Public Hearing could not be received.

**(iv) As an alternate plan, it is proposed to utilize imported iron concentrate. Was this part of the EIA/EMP report regarding which Public Consultation has been held and if this is a new component introduced as part of alternate plan then would it not require public hearing afresh [as per provision of EIA Notification 2006] the conveyor belt for transporting iron ore concentrate may be passing through a different alignment/habitation.**

**Response:**

The pipe conveyor was part of the original EIA report for transporting product pellet to Paradeep Port. The alternative plan for transport of iron ore concentrate from source (Paradeep Port) to plant will be carried out through the same pipe conveyor in return direction. This pipe conveyor was also part of the public hearing conducted for the pellet plant. No new conveyor will be constructed and there is no further change in alignment of the pipe conveyor. Therefore, there

will be no hindrance to the public. Moreover, since the pipe conveyor is completely closed type, there would not be any air, water or soil pollution. Therefore, no further Public Consultation is required.

**Recommendations of the Committee:**

62.17.9 In view of the foregoing and after detailed deliberations, the EAC recommended that the details provided in the ADS, as outlined in the relevant paragraph above, may be updated or supplemented with information from the minutes of the 13<sup>th</sup> meeting of the EAC for Industry-I sector held on 14-15<sup>th</sup> September, 2022 and 52<sup>nd</sup> meeting of the EAC for Industry-I sector held on 23<sup>rd</sup>-25<sup>th</sup> January, 2024 **subject to uploading of revised ADS submission on Parivesh portal**, and based on the information/clarification furnished by the project proponent, the EAC **recommended** the instant proposal for grant of Environment Clearance under the provisions of EIA Notification, 2006 subject to the stipulation of specific conditions and general conditions as recommended in the 13<sup>th</sup> meeting of the EAC for Industry-I sector held on 14-15<sup>th</sup> September, 2022.

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**Agenda No. 62.18**

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

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

62.18.1 The instant proposal was considered during the 39<sup>th</sup> meeting of the EAC for Industry-I sector held on 6-7<sup>th</sup> July, 2023 wherein, the EAC, based on information & clarifications provided by the project proponent and after detailed deliberations recommended the proposal for grant of Environment Clearance subject to stipulation of certain specific conditions and general conditions and also subject to submission of Forest Clearance under the provisions of the FC Act, 1980 for the 29.29 acre (11.853 ha) involved in the proposed expansion project.

62.18.2 Accordingly, the Ministry requested PP to submit the copy of the Stage 1 FC for the forest diversion of 29.29 acre (11.853 ha) under FC Act for further consideration of the matter.

62.18.3 The proponent submitted the ADS reply vide letter dated 10<sup>th</sup> January, 2024 uploaded on PARIVESH on 10th January, 2024 as below:

Sl. No.	Details of ADS sought by Ministry	Reply of PP
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Point No. (i)	<p>The matter has been examined in the Ministry in accordance with the Environment Impact Assessment (EIA) Notification, 2006 &amp; further amendments thereto. The undersigned is directed to say that the Ministry has accepted the recommendations of the Expert Appraisal Committee (Industry-1 Sector) for grant of Environment Clearance under the provisions of EIA Notification, 2006 subject to <b>submission of Stage I FC</b>.</p> <p>In view of the above, it is requested to submit the copy of the Stage 1 FC for the forest diversion of 29.29 acre (11.853 ha) under FC Act for further consideration of the matter.</p>	<ul style="list-style-type: none"> <li>• Stage I FC approval has been obtained for 5.483 ha out of 11.853 ha forest land applied for establishment of industries i.e. expansion of the existing industry of GM Iron &amp; Steel Company Ltd. Vide letter No. 5-ORC581/2023-BHU dated 29th December, 2023. The same has been uploaded.</li> <li>• The forest land measuring (6.37 ha) which could not be acquired had been allotted for development of greenbelt only, as per the proposal. No units were falling within that forest land area.</li> <li>• The proponent has now decided to drop the proposed pellet plant and accommodate the rest of the units within the available land measuring 36.73 ha (90.76 Acre).</li> <li>• The total greenbelt area i.e. 40% of the total plant area shall be maintained.</li> <li>• There has also been some reorientation of the units.</li> </ul>
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62.18.4 **Based on the above, the PP has submitted the revised proposal (after reduction of land) which as as follows:**

62.18.5 M/s GM Iron & Steel Company Ltd. has made an online EC application vide proposal no. IA/OR/IND1/417729/2023 dated 23<sup>rd</sup> June, 2023 along with copy of EIA report and Forms (Part A, B and C) and certified compliance report seeking Environment Clearance (EC) under the provisions of the EIA Notification, 2006 for the project mentioned above. The proposed project activity is listed at S. No. 3(a) Metallurgical Industries (Ferrous & Nonferrous), 3(b) Cement Plants and 1(d) Thermal Power Plants under Category “A” of the schedule of the EIA Notification, 2006 being appraised at Central Level.

62.18.6 Name of the EIA consultant: M/s. Envirotech East Pvt. Ltd. [List of ACOs with their Certificate / Extension Letter no. NABET/EIA/2225/RA 0279; valid upto 12.09.2025, as on June 26, 2024].

**Details submitted by Project proponent**

62.18.7 The details of the ToR are furnished as below:

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

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



## 62.18.9 Environmental Site Settings:

S. N.	Particulars	Details submitted by the PP																													
i.	Total land	Total land - 36.728 ha (90.76 Acre).																													
ii.	Land acquisition details as per MoEF&CC O.M. dated 7/10/2014	<p>Total land involved in the project was 43.098 ha (106.50 Acre). Now, after excluding the forest land for which Stage-1 Forest Clearance was not received, the total land comes to 36.728 ha (90.76 Acre).</p> <p>Govt. Land – 17.35 Acre (7.02 Ha) - Acquired  1. Forest land- 13.55 Acre (5.483 Ha)  2. Non-forest land- 3.80 Acre (1.537 Ha)</p> <p>Govt. land of 33.09 Acre (13.391 Ha) has been allotted in favour of the project by IPICOL, Odisha vide letter No. CGM/SLNA/GM Iron &amp; Steel-239/20 dtd. 10.11.2020 and 239/20 dtd. 09.01.2023 but Stage-1 Forest Clearance was received for 13.55 Acre (5.483 Ha) out of the total 29.29 Acre (11.85 Ha) Forest land.</p> <p>Private land- 73.41 Acre (29.708 Ha)  1. Tenanted land- 25.75 Acre (10.421 Ha) – Acquired  2. Existing land- 47.66 Acre (19.287 Ha) - Acquired</p> <p>Existing land of 47.66 Acre (19.29 Ha) has been purchased through SARFAESI Act from Bank for industrial purpose.</p>																													
iii.	Existence of habitation & involvement of R&R, if any	There is no habitation and no involvement of R&R.																													
iv.	Latitude and Longitude of all corners of the project site.	<table border="1"> <thead> <tr> <th>POINT</th> <th>LATITUDE</th> <th>LONGITUDE</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>20°59'12.15"N</td> <td>85°16'12.58"E</td> </tr> <tr> <td>2</td> <td>20°59'07.98"N</td> <td>85°16'42.20"E</td> </tr> <tr> <td>3</td> <td>20°59'01.23"N</td> <td>85°16'40.20"E</td> </tr> <tr> <td>4</td> <td>20°58'52.43"N</td> <td>85°16'44.76"E</td> </tr> <tr> <td>5</td> <td>20°58'51.54"N</td> <td>85°16'34.31"E</td> </tr> <tr> <td>6</td> <td>20°58'57.50"N</td> <td>85°16'32.60"E</td> </tr> <tr> <td>7</td> <td>20°58'58.03"N</td> <td>85°16'25.24"E</td> </tr> <tr> <td>8</td> <td>20°59'05.71"N</td> <td>85°16'15.37"E</td> </tr> </tbody> </table>	POINT	LATITUDE	LONGITUDE	1	20°59'12.15"N	85°16'12.58"E	2	20°59'07.98"N	85°16'42.20"E	3	20°59'01.23"N	85°16'40.20"E	4	20°58'52.43"N	85°16'44.76"E	5	20°58'51.54"N	85°16'34.31"E	6	20°58'57.50"N	85°16'32.60"E	7	20°58'58.03"N	85°16'25.24"E	8	20°59'05.71"N	85°16'15.37"E		
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8	20°59'05.71"N	85°16'15.37"E																													
v.	Elevation of the project site	64 m - 70 m above mean sea level.																													
vi.	Involvement of Forest land if any.	Stage I FC approval has been obtained for 5.483 ha out of 11.853 ha forest land applied for establishment of industries i.e. expansion of the existing industry of GM Iron & Steel Company Ltd. Vide letter No. 5-ORC581/2023-BHU dated 29 <sup>th</sup> December, 2023																													
vii.	Water body (Rivers, Lakes, Pond, Nala, Natural Drainage, Canal etc.) exists within the project	<p><b>Project Site:</b> No water body in the project site.</p> <p><b>Study area:</b></p>																													

S. N.	Particulars	Details submitted by the PP
	site as well as study area.	River Brahmani - 0.9 km from the project site boundary on the western side.
viii.	Existence of ESZ / ESA / national park / wildlife Sanctuary / biosphere Reserve / tiger reserve / elephant reserve etc. if any within the study area	Nil
ix.	CPA/SPA	The Odisha SPCB, vide letter no. 8339/Ind1-Con-4699 (Vol.III), dated 25.05.2023 has confirmed that the instant Unit is located outside of critically polluted area of Angul-Talchar Industrial cluster.

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

62.18.11 Implementation status of the existing clearances

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

				<ul style="list-style-type: none"> <li>• 12 MW CPP (8 MW WHRB + 4 MW AFBC)</li> <li>• CCM - 75,000 TPA</li> <li>• Rolling Mill - 30,000 TPA</li> </ul>		
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62.18.12 The unit configuration and capacity of existing and proposed project is given as below:

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

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

Sl. No	Raw Material	Annual Requirement (in TPA)			Source	Distance (in km)	Quantities and Transportation type		
		Existing	Proposed	Total			Internal	Rail	Road
<b>SPONGE IRON PLANT (3,72,900 TPA)</b>									
1	Pellet	217000	380000	597000	In-House	-	597000	-	-
2	Coal	176200	308600	484800	Mahanadi Coalfields, Talcher	25	-	484800	-
3	Dolomite	6800	12000	18800	Raipur CG	450	-	-	18800
					Katni MP	770			
<b>STEEL MELTING SHOP (2,77,200 TPA)</b>									
1	Sponge Iron	60000	192000	252000	In-house Conveyor	-	252000	-	-
2	Pig Iron	10000	32000	42000	Rourkela	190	-	-	42000

Sl. No	Raw Material	Annual Requirement (in TPA)			Source	Distance (in km)	Quantities and Transportation type		
		Existing	Proposed	Total			Internal	Rail	Road
3	Scraps	14000	44800	58800	Local market	100	-	-	58800
4	Ferro Alloys	520	1650	2170	Rourkela	190	-	-	2170
<b>CAPTIVE POWER PLANT (40 MW AFBC)</b>									
1	Coal	45900	183500	229400	Mahanadi Coalfields, Talcher	25	-	2,29,400	-
2	Coal Fines	3800	14800	18600	Mahanadi Coalfields, Talcher	25	-	18600	-
3	Dolochar	8475	76275	84750	In-House	-	84,750	-	-
<b>TOTAL</b>		<b>542695</b>	<b>2113625</b>	<b>2656320</b>			<b>336750</b>	<b>1329800</b>	<b>121770</b>
<b>Percentage (%)</b>							18.8%	74.4%	6.8%
<b>No. of Rakes / Trucks per Year</b>								<b>332.5</b>	<b>6088.5</b>
								<b>(28 Rakes / Month)</b>	<b>(17 Trucks / Day i.e. 1 Truck/Hr.)</b>

62.18.14 The PP reported that as per an initial estimate make up water to the tune of 2558 KLD will be needed for the entire project (for Existing units - 842 KLD + for Proposed units - 1716 KLD). The raw water will be sourced from Brahmani River. No ground water shall be abstracted.

62.18.15 Total Power Requirement for the entire Project : 61.5 MW (for Existing Units : 17.7 MW + Proposed Units : 43.8 MW). Power will be sourced from Proposed 58 MW capacity Captive Power Plant and GRIDCO.

62.18.16 Baseline Environmental Studies:

Period	December, 2021-Februray 2021 & December 2022
AAQ parameters at 8 locations	<ul style="list-style-type: none"> <li>• PM<sub>2.5</sub> = 22 - 50 µg/m<sup>3</sup></li> <li>• PM<sub>10</sub> = 42 - 88 µg/m<sup>3</sup></li> <li>• SO<sub>2</sub> = 5 - 15 µg/m<sup>3</sup></li> <li>• NO<sub>2</sub> = 10 - 33 µg/m<sup>3</sup></li> <li>• CO = 0.104 - 0.783 mg/m<sup>3</sup></li> </ul>
AAQ Modelling (Incremental GLCs) Model Used : ISCST3	<ul style="list-style-type: none"> <li>• PM = 3.03 µg/m<sup>3</sup> (0.8 km in SE)</li> <li>• SO<sub>2</sub> = 1.56 µg/m<sup>3</sup> (1.2 km in SE)</li> <li>• NO<sub>x</sub> = 1.56 µg/m<sup>3</sup> (1.2 km in SE)</li> </ul>
Ground water quality at 8 locations	<ul style="list-style-type: none"> <li>• pH: 5.84 – 7.45,</li> <li>• Total Hardness: 92 – 502 mg/l,</li> <li>• Chlorides: 25 – 116 mg/l,</li> <li>• Fluoride: 0.42 - 1.2 mg/l,</li> <li>• Iron: 0.12 – 2.1 mg/l,</li> <li>• TDS: 138 – 763 mg/l</li> </ul>
Surface water quality at 10 locations (2 different locations from the River)	<b>River Water</b> pH: 7.59 and 7.53, DO: 7.3 & 6.9 mg/l,

Brahmani, 1 canal water, 1 reservoir water, 1 jor water and 3 different nala water)	<p>BOD: 2 &amp; 2 mg/l, COD: 20 &amp; 26 mg/l, Fe: 0.18 &amp; 0.18 mg/l, Coliform: 630 - 790 MPN/100ml, TDS: 196 &amp; 210 mg/l, Chloride: 15 &amp; 14 mg/l</p> <p><b>Nala Water</b>  pH: 7.49 - 8.17, DO: 5.9 - 6.8 mg/l, BOD: 2 - 3 mg/l, COD: 9 - 24 mg/l, Fe: 0.12 - 0.39 mg/l, Coliform: 1010 - 2400 MPN/100ml, TDS: 220 - 455 mg/l, Chloride: 13 - 22 mg/l</p>																																													
Noise Levels at 10 Locations	48.5 – 70.1 dBA for day time and 39.7 – 63.1 dBA for night time.																																													
Traffic assessment study findings	<p>A Traffic density was monitored at 2 different locations respectively:</p> <ul style="list-style-type: none"> <li>NH-200 near Pitri Square</li> <li>Banarpal - Pallahara Road</li> </ul> <p>Existing PCU and existing level of service (LOS) for the 2 Locations are presented below:</p> <table border="1"> <thead> <tr> <th>Road (Location)</th> <th>Volume PCU/day</th> <th>Capacity PCU/day</th> <th>Existing V/C</th> <th>LoS</th> </tr> </thead> <tbody> <tr> <td>NH-200 near Pitri Square</td> <td>9222</td> <td>86,400</td> <td>0.106</td> <td>A</td> </tr> <tr> <td>Banarpal - Pallahara Road</td> <td>4036</td> <td>15,000</td> <td>0.27</td> <td>B</td> </tr> </tbody> </table> <p>Incremental PCU Load per day for the proposed project is 477. PCU load per day after proposed expansion project and level of service (LOS) at the 2 Locations are presented below:</p> <table border="1"> <thead> <tr> <th>Road (Location)</th> <th>Volume PCU/day</th> <th>Capacity</th> <th>V/C</th> <th>LoS</th> </tr> </thead> <tbody> <tr> <td>NH-200 near Pitri Square</td> <td>9699</td> <td>86,400</td> <td>0.11</td> <td>A</td> </tr> <tr> <td>Banarpal - Pallahara Road</td> <td>4513</td> <td>15000</td> <td>0.30</td> <td>B</td> </tr> </tbody> </table> <p>* Note: Capacity as per IRC 64-1990 Guide line recommended design service is 86,400 PCU/day for 4 lane divided two way roads and 15,000 PCU/day for 2 lane roads respectively.</p> <p>Conclusion: The level of service will be “A” in Location T1 and B in Location T2 including additional traffic due to proposed expansion cum modification project.</p> <table border="1"> <thead> <tr> <th>V/C ratio</th> <th>LOS</th> <th>Performance</th> </tr> </thead> <tbody> <tr> <td>0.0-0.2</td> <td>A</td> <td>Excellent</td> </tr> <tr> <td>0.2-0.4</td> <td>B</td> <td>Very Good</td> </tr> <tr> <td>0.4-0.6</td> <td>C</td> <td>Good</td> </tr> <tr> <td>0.6-0.8</td> <td>D</td> <td>Fair/Average</td> </tr> </tbody> </table>	Road (Location)	Volume PCU/day	Capacity PCU/day	Existing V/C	LoS	NH-200 near Pitri Square	9222	86,400	0.106	A	Banarpal - Pallahara Road	4036	15,000	0.27	B	Road (Location)	Volume PCU/day	Capacity	V/C	LoS	NH-200 near Pitri Square	9699	86,400	0.11	A	Banarpal - Pallahara Road	4513	15000	0.30	B	V/C ratio	LOS	Performance	0.0-0.2	A	Excellent	0.2-0.4	B	Very Good	0.4-0.6	C	Good	0.6-0.8	D	Fair/Average
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	0.8-1.0	E	Poor
	>1.0	F	Very Poor
Flora and fauna	Presence of schedule I fauna if any. If yes, status of site-specific wildlife conservation plan - Not Applicable.		

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

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

62.18.18 Public Consultation:

Details of advertisement given	27 <sup>th</sup> September, 2021
Date of Public Consultation	3 <sup>rd</sup> November, 2021
Venue	Rajiv Gandhi Seva Kendra, Under Gengutia GP, Parjang Tehsil, District - Dhenkanal, Odisha
Presiding Officer	Sri Sashank Sekhar Dash, Additional District Magistrate, Dhenkanal District

Major issues raised	<ul style="list-style-type: none"> <li>• Air, Noise and Water Pollution Control</li> <li>• Afforestation programme</li> <li>• Local employment opportunity based on Educational Qualification</li> <li>• Employment Opportunity to Land Affected Family Members</li> <li>• Provision of Health checkup camp at different villages on yearly basis</li> <li>• Provision for repair and maintenance of village roads with street light facility</li> <li>• No discharge of wastewater to perennial nallah adjacent to factory premises</li> <li>• Peripheral development in nearby areas / villages</li> <li>• Demand for equal salary for equal work</li> <li>• Provision of drinking water supply during summer time</li> </ul>
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**Action plan as per MoEF&CC O.M. dated 30/09/2020:**

Concerns raised during Public Hearing	Physical Activity and Action Plan	Particulars	YEAR OF IMPLEMENTATION			Total Expenditure (Rs. in Lakhs)
			1 <sup>st</sup> Year	2 <sup>nd</sup> Year	3 <sup>rd</sup> Year	
Air, Noise and Water Pollution Control	<ul style="list-style-type: none"> <li>• Adequate control measures like installation of ESP, Bag filters, dust suppression system &amp; stacks of adequate height at relevant places.</li> <li>• Air borne dust shall be controlled by mobile water tanker inside the plant premises.</li> <li>• Maintenance of air pollution control equipment shall be done regularly.</li> <li>• All roads shall be paved on which movement of raw materials or products will take place inside the plant premises.</li> <li>• No waste water will be discharged outside the plant area. The plant is designed as a zero discharge plant. The entire wastewater will be recirculated and recycled.</li> <li>• The equipment shall comply with the Statutory limit of 85 dB(A) (at 1 m. from the source). Noise Reduction Systems will be arranged.</li> </ul>	Physical Target	The physical Target for the entire activities shall be achieved in 3 years.			-
		Budget in Lakhs	Included in the EMP Cost. (Total EMP Cost Capital - Rs. 48.03 Crores Recurring - Rs. 4.45 Crores / annum)			
Afforestation programme	Proper plantation of trees will be done inside the plant premises. 40% of the total project area shall be covered under Breen Belt.	Physical Target	The physical Target for the entire activities shall be achieved in 3 years.			-
		Budget in Lakhs	Green Belt cost is included in the EMP cost (Total EMP Cost Capital - Rs. 48.03 Crores Recurring - Rs. 4.45 Crores / annum)			
	In the proposed project, top most priority will be given to the local	Physical Target	Construction of 4- room training building (3000 sq.ft area) and installation of 8 sewing machines,			92

Concerns raised during Public Hearing	Physical Activity and Action Plan	Particulars	YEAR OF IMPLEMENTATION			Total Expenditure (Rs. in Lakhs)
			1 <sup>st</sup> Year	2 <sup>nd</sup> Year	3 <sup>rd</sup> Year	
Employment of local people	people based on their academic qualification. Skill development for unemployed local youths through National Skill Development Corporation, Govt. of India Scheme. Construction of a building along with the necessary infrastructure for this purpose.		8 computer systems & 4 machines for making hand craft items along with necessary raw materials, based on the need of the local people			
		Budget in Lakhs	40	40	12	
Organizing Health Checkup Camps at different villages on yearly basis	Health camps shall be organized in the surrounding villages for health check-up of the local villagers.	Physical Target	It will be done on regular basis.			-
		Budget in Lakhs	Adequate fund will be allocated under CSR budget			
Maintenance & Repairing of roads in the surrounding areas (*)	Repairing of the local connecting road to NH and repairment of road with land (12 km) at Kulej village (@Rs. 18,00,000/- per Km) in the nearby villages	Physical Target	Repairing of the 4 km local connecting road to NH	4 km road at Kulei village	4 km road at Kulei village	216
		Budget in Lakhs	72	72	72	
Street lighting facility for the roads	Street Lighting (Solar) provision at suitable public places in and around the nearby villages (90 numbers, @ Rs. 20,000/- per Solar Light)	Physical Target	Providing 90 nos. Solar light at village Kulei			18
		Budget in Lakhs	18	-	-	
No discharge of wastewater to perennial nallah adjacent to factory premises	The plant is designed as a zero discharge plant. The water will be recirculated through cooling and treatment. The entire waste water will be recycled for various purposes inside the plant. Domestic wastewater will be treated in Sewage Treatment Plant (STP). Nallah protection plan has also been formulated.	Physical Target	The physical Target for the entire activities shall be achieved in 3 years.			
		Budget in Lakhs	Included in the EMP Cost. (Total EMP Cost Capital - Rs. 48.03 Crores Recurring - Rs. 4.45 Crores / annum)			
Peripheral development in nearby areas / villages	Maintenance of local schools building, playground, class rooms, library facilities, green belt development and providing computers in the Local Schools.	Physical Target	Repairing of school building and constructing 4 extra class rooms and green belt development in Kualo ASVN (High School), Nodal Primary school Kualo and Taleswar Vidyapith, Kulei	Supplying desks, benches, chairs, blackboards in Paramhanspur Primary School and UP School Kulei.	Development of library and providing books and Providing 10 nos. of computers to Paramhanspur UP School and UP School Gengutia.	35
		Budget in Lakhs	20	10	5	
Peripheral development	Development and maintenance of existing ponds in the local villages	Physical Target:	Dev. & maintenance of	Dev. & maintenance of 1	Dev. & maintenance	18



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

Need based Activities	Particulars	Year of Implementation		
		1 <sup>st</sup> Year	2 <sup>nd</sup> Year	3 <sup>rd</sup> Year
Construction of W/C/Toilet (2) each - 9 numbers (@ Rs. 3.00 Lakhs per set of 2 Toilets).	Physical Target:	Construction of 6 nos. Toilets 02 each at Gengutia, Kulei& Kualo	Construction of 3 nos. Toilets 01 each at Gengutia, Kulei& Kualo	-
	Budget: Rs. 27.0 Lakhs	Rs. 18 Lakhs	Rs. 9 Lakhs	-
Creation of irrigation and other agricultural infrastructures in the peripheral villages and conservation of nearby forest. (*)	Physical Target:	Supplying crop harvesting machines	Supplying pest control machines	Supplying tractors to farmers
	Budget: Rs. 55 Lakhs	Rs. 15 Lakhs	Rs. 10 Lakhs	Rs. 30 Lakhs
Drainage Development & maintenance -	Physical Target:	Development & maintenance of drains & Culvert on drainage in adjacent villages	Development & maintenance of drains &	Development & maintenance of drains &

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

62.18.19 The capital cost of the proposed expansion project is Rs. 457.5 Crores and the capital cost for environmental protection measures is proposed as Rs. 48.03 Crores. The annual recurring cost towards the environmental protection measures is proposed as Rs. 4.45 Crores. The employment generation from the proposed expansion project is 522 persons. The details of cost for environmental protection measures is as follows:

SL. NO.	ENVIRONMENT / SOCIAL CONTROL MEASURE	PROPOSED	
		CAPITAL (in Crores)	RECURRING (PER ANNUM) (in Crores)
1	Cost of Air Pollution Control Systems	17.0	1.80
2	Cost of Water conservation & Pollution Control	6.5	0.68
3	Cost of Solid Waste Management System	4.7	0.40
4	Green belt development	0.36	0.05
5	Noise Reduction Systems	3.5	0.35
6	Occupational Health Management	2.2	0.22
7	Risk Mitigation & Safety Plan	4.2	0.42
8	Environmental Management Department	5.3	0.53
9	Total Budget - Public Hearing related	4.27	-
	<b>GRAND TOTAL</b>	<b>48.03</b>	<b>4.45</b>

62.18.20 Existing green belt covering 12.2 ha area which is about 33.2% of the total project area of 36.728 ha with total sapling of 30,500 Trees. Total of 14.692 Ha (36.3 acres) area (40% of total project area) will be developed as greenbelt. A 15 m wide greenbelt, consisting of at least 3 tiers around plant boundary will be developed as greenbelt and green cover as per CPCB / MoEF&CC, New Delhi guidelines. Local and native species will be planted with a density of 2500 trees per hectare. Total no. of 36,730 saplings will be planted and nurtured in 14.692 hectares in 1 year.

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

#### **Details of Show cause Notice issued by SPCB, Odisha**

A show cause notice was issued under section 33A of the Water (PCP) Act, 1974 and 31A of the Air (PCP) Act, 1981 by the State Pollution Control Board, Odisha vide letter No. 8501/IND-

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

### **Details of Court Case**

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

### **Certified compliance report from IRO, SPCB**

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

### **Written representations:**

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

<b>Sl. No.</b>	<b>Queries raised by EAC</b>	<b>Reply of PP</b>
1.	The Committee asked for a justification for not obtaining Environmental Clearance(EC) for the existing project.	The existing steel plant at Village Kulei, Parjang in Dhenkanal District, Odisha, was implemented by M/s. Rana Sponge Ltd. after getting NOC from State Pollution Control Board, Orissa vide Letter No. 29790/Ind-II-NOC dated 04.10.2004 and Letter No. 14933/IND-II-NOC-3435 dated 09.05.2005 as per the prevailing notification of MoEF&CC, as per which Environmental Clearance (EC) was not applicable for the project as the project cost was less than Rs. 100 Crores. (The project cost was 48.52 Crores). Copy of CTEs are submitted.
2.	The maximum value of PM during baseline data is recorded too high. Submit justification for the same.	<ul style="list-style-type: none"> <li>• The values of PM<sub>10</sub> are within the prescribed limits but quite on the higher side.</li> <li>• The maximum value of PM<sub>10</sub> i.e. 98.1 µg/m<sup>3</sup> was observed at Talcher during baseline data generation, only once during the monitoring period from December, 2020 to February, 2021.</li> </ul>

Sl. No.	Queries raised by EAC	Reply of PP
		<ul style="list-style-type: none"> <li>• This can be attributed to the presence of Lingaraj Opencast Mines close to the monitoring location and regular plying of vehicles carrying raw materials &amp; products on the SH-149 which is about 110 m from the monitoring location.</li> <li>• Baseline data was again collected in the month of December, 2022. The maximum value of PM<sub>10</sub> was observed to be 88 µg/m<sup>3</sup> which was much lower.</li> <li>• Upon enquiry it was found out that the Lingaraj Opencast Mines were not in operation at that point of time and the mines have been almost saturated.</li> </ul> <p><b>Mitigation Measures</b></p> <ul style="list-style-type: none"> <li>• Compliance to the CEPI guidelines shall be done.</li> <li>• Sufficient APC measures like Bag Filters, ESPs, stack of adequate height will be installed to control the emission levels.</li> <li>• CEMS has already been installed for the existing units and connected to SPCB and CPCB servers. Same practice shall be followed for the proposed units.</li> <li>• The company has earmarked 17.24 ha (42.6 acres) of land i.e. 40% of the total project area for Green Belt Development within its plant site.</li> </ul>
3.	The committee asked the proponent and the consultant to explore options to reduce the LOS values.	The revised traffic load calculations have been submitted and updated at para 39.9.12 above. After the final calculations, the level of service will be “A” on NH-200 near Pitri Square and “B” on Banarpal -Pallahara Road including additional traffic due to proposed expansion cum modification project.
4.	Public Hearing action plan including more details regarding the CER and CSR activities to be carried out.	It has been decided to develop three nearby villages namely Kulei, Gengutia and Kualo by addressing the socio-economic needs of the villagers and issues raised during the Public Hearing. Adequate fund will be allocated for village road maintenance, medical facilities for villagers, educational support, drinking water supply etc. under CSR of the company. Adequate fund will be allocated for conservation of nearby forests under CSR of the company. Details of CER activities / Point-wise Compliance to the issues raised during Public Hearing along with action plan as per MoEF&CC O.M. dated 30/09/2020 has been submitted and updated at para 39.9.14 above.
5.	Details of the ongoing NGT case were asked to be provided.	Summary of the case proceedings along with the case order, inspection report by SPCB, Odisha and last hearing notice has been submitted and updated at para 39.9.17 above.

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

### **Deliberations by the Committee**

62.18.24 The Committee noted the following:

1. The instant proposal is for expansion cum modification of existing steel plant to final capacity of Sponge Iron – 3,72,900 TPA, Rolled Products – 2,70,000 TPA, Captive Power – 58 MW and Slag Cement – 4,16,000 TPA.
2. The EAC, constituted under the provision of the EIA Notification, 2006 comprising Expert Members/domain experts in various fields, examined the proposal submitted by the Project Proponent in desired format along with EIA/EMP reports prepared and submitted by the Consultant accredited by the QCI/ NABET on behalf of the Project Proponent.
3. The EAC noted that the Project Proponent has given an undertaking that the data and information given in the application and enclosures are true to the best of his knowledge and belief and no information has been suppressed in the EIA/EMP reports. If any part of data/information submitted is found to be false/ misleading at any stage, the project will be rejected and Environmental Clearance given, if any, will be revoked at the risk and cost of the project proponent.
4. The Committee noted that the EIA reports are in compliance of the ToR issued for the project, reflecting the present environmental status and the projected scenario for all the environmental components. The Committee deliberated on the proposed mitigation measure towards Air, Water, Noise and Soil pollutions. The Committee suggested that the storage of toxic/explosive raw materials/products shall be undertaken with utmost precautions and following the safety norms and best practices.
5. The existing steel plant was implemented by M/s. Rana Sponge Ltd. after getting NOC from State Pollution Control Board, Orissa vide Letter No. 29790/Ind-II-NOC dated 04.10.2004 and Letter No. 14933/IND-II-NOC-3435 dated 09.05.2005 as per the prevailing notification of MoEF&CC, as per which Environmental Clearance (EC) was not applicable for the project as the project cost was less than Rs. 50 Crores. (The project cost was 48.52 Crores). The plant was shut down from 2016 and went bankrupt. The unit was put to auction by the bank and it was purchased by M/s GM Iron and Steel Company

Limited (GMISCL) from State bank of India under section 5 of the SARFAESI Act, 2002 on 17.03.2019. M/s GMISL was granted Consent to Operate on the basis of Consent to Establish issued to M/s. Rana Sponge Ltd. without enhancement. Subsequently, CTO in the name of M/s. GMISCL was obtained for the above mentioned units vide Memo. No. 5331/IND-I-CON-4699 dated 31.03.2023 and valid upto 31.03.2024.

6. Total land involved in the project is 36.728 ha (90.76 Acre) [*Govt. Land – 17.35 Acre (7.02 Ha) : Forest land- 13.55 Acre (5.483 Ha), Non-forest land- 3.80 Acre (1.537 Ha)*] and { *Private land - 73.41 Acre (29.708 Ha) : Tenanted land- 25.75 Acre (10.421 Ha), Existing land- 47.66 Acre (19.287 Ha)*}. Existing land of 47.66 Acre (19.29 Ha) has been purchased through SARFAESI Act from Bank for industrial purpose.
7. Stage I FC approval has been obtained for 5.483 ha out of 11.853 ha forest land applied for establishment of industries i.e. expansion of the existing industry of GM Iron & Steel Company Ltd. Vide letter No. 5-ORC581/2023-BHU dated 29<sup>th</sup> December, 2023.
8. The EAC noted that the Odisha SPCB, vide letter no. 8339/Ind1-Con-4699 (Vol.III), dated 25.05.2023 has confirmed that the instant Unit is located outside of critically polluted area of Angul-Talchar Industrial cluster.
9. As per an initial estimate make up water to the tune of 2558 KLD will be needed for the entire project (for Existing units - 842 KLD + for Proposed units - 1716 KLD). The raw water will be sourced from Brahmani River. No ground water shall be abstracted.
10. The PP submitted that existing green belt covering 12.2 ha area which is about 33.2% of the total project area of 36.728 ha with total sapling of 30,500 Trees. Total of 14.692 Ha (36.3 acres) area (40% of total project area) will be developed as greenbelt. Total no. of 36,730 saplings will be planted and nurtured in 14.692 hectares in 1 year. The EAC deliberated on the greenbelt action plan and opined that greenbelt remaining greenbelt shall be completed in the period of 1 year.
11. The Committee has found that the baseline data and revised incremental GLC due to the proposed project and observed that PM<sub>10</sub> and PM<sub>2.5</sub> values are recorded high. The EAC opined that PP shall strictly implement the mitigation measures submitted to minimise the same.
12. The committee deliberated details of carbon foot prints and carbon sequestration study w.r.t. proposed project and found them to be satisfactory.
13. The Committee also deliberated on the public hearing issues along with revised action plan submitted by the proponent to address the issues raised during the public hearing along with the village adoption plan and found it satisfactory.
14. PP also reported a show cause notice issued under section 33A of the Water (PCP) Act, 1974 and 31A of the Air (PCP) Act, 1981 by the State Pollution Control Board, Odisha vide letter No. 8501/IND-I-CON-4699 dated 18.05.2022. Further, a complaint has been filed by one villager of Santhapada under Angul district in the National Green Tribunal, Kolkata vide OA No 45 of 2022.
15. The EAC deliberated on the certified compliance report and its Action Plan on CTO and found it satisfactory.
16. The EAC deliberated on the written submission of project proponent and found it satisfactory.

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

### **Recommendations of the Committee**

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

#### **A. Specific conditions:**

- (i) **This Environmental clearance is granted subject to final outcome of Hon'ble Supreme Court of India, Hon'ble High Court, Hon'ble NGT and any other Court of Law, if any, as may be applicable to this project.**
- (ii) **This Environmental clearance is subject to grant of Forest Clearance under the provisions of the FC Act, 1980 for the 5.483 ha involved in the proposed expansion project.**
- (iii) The PP shall comply with all the environmental protection measures and safeguards proposed in the documents submitted to the Ministry. All the recommendations made in the EIA/EMP in respect of environmental management, and risk mitigation measures relating to the project shall be implemented.
- (iv) The project proponent shall utilize modern technologies for capturing of carbon emitted and shall also develop carbon sink/carbon sequestration resources capable of capturing

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

- (v) The PP shall strictly implement the Action Plan/Mitigation measures as prescribed in the EIA/EMP Report to address the emissions due to high AAQ values.
- (vi) The PP shall complete the acquisition of the proposed project land prior to commencement of proposed expansion project.
- (vii) The water requirement of 2558 KLD for the entire project (for Existing units - 842 KLD + for Proposed units - 1716 KLD), shall be met from Brahmani River. Necessary permission shall be obtained from the Competent Authority. No ground water abstraction is permitted.
- (viii) Three tier Green Belt shall be developed in atleast 40% of project area in a period of 1 year with native species all along the periphery of the project site of adequate width and tree density shall not be less than 2500 per ha. Survival rate of green belt developed shall be monitored on periodic basis to ensure that damaged plants are replaced with new plants in the subsequent years. PP shall develop greenbelt in the form of shelter belt comprising of total of 6 rows of 2x2 m plantation with tall trees & broad leaves with thick canopy along with windshield inside the plant premises to act as green barrier for air pollution & noise levels towards nearby ESA's. Compliance status in this regard, shall be submitted to concerned Regional Office of the MoEF&CC.
- (ix) All the commitments made towards socio-economic development of the nearby villages shall be satisfactorily implemented. The action plan based on the social impact assessment study of the project as per the EMP in accordance to the Ministry's OM dated 30.09.2020 amounting to Rs. 6.14 Crores shall be strictly implemented and progress shall be submitted to the Regional Office of MoEF&CC.
- (x) As committed, the PP shall adopt three nearby villages namely Kulei, Gengutia and Kualo and implement the Village Adoption program consisting of need-based community development activities, to develop them into model villages.

## **B. General Conditions**

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

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

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

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



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

- xvii. The particulate matter emissions from the process stacks shall be less than 30 mg/Nm<sup>3</sup> and measures shall be undertaken as per the submitted action plan. Efficient Air monitoring equipment shall be installed.
- xviii. Following additional arrangements to control fugitive dust shall be provided:
  - a. Fog / Mist Sprinklers at all on bulk raw material storage area (at the transfer points) like Iron Ore, Coal and for Fly Ash and similar solid waste storage areas.
  - b. Proper covered vehicle shall be used while transport of materials.
  - c. Wheel washing mechanism shall be provided in entry and exit gates with complete recirculation system.
- xix. Provide Low NO<sub>x</sub> burners as primary measures and SCR /NSCR technologies as secondary measure to control NO<sub>x</sub> emissions.
- xx. The emission norms applicable for the cement plant shall be adhered to.
- xxi. Dioxin and Furan monitoring shall be carried out once in six months at cement kiln stack.
- xxii. DeSO<sub>x</sub> system shall be provided dry type. NO<sub>x</sub> level shall be maintained below 600 mg/Nm<sup>3</sup> by using best available technology.
- xxiii. Petcoke dosing shall be controlled automatically to control SO<sub>2</sub> emission from chimney within the prescribed limits.
- xxiv. PP shall identify the Source of fluoride emissions and action plan to mitigate the same shall be implemented.
- xxv. Pollution control system in the cement plant shall be provided as per the CREP Guidelines of CPCB.
- xxvi. During operational phase at Captive Power Plant, Action Plan to monitor coke/coal dust exposures in different process plants using personal and area air samplers and to compare with permissible limits as per Indian Factories Act, 1948 shall be implemented.
- xxvii. The coal dust should be monitored at coal unloading, crushing, furnace areas and should be within 2 mg/m<sup>3</sup>, respirable dust fraction containing less than 5% quartz as per Indian Factories Act, 1948.
- xxviii. Online stack monitoring system for IF and RHF shall be installed and monitoring report shall be submitted to the concerned Regional Office of the MoEF&CC along with the six monthly compliance report.
- xxix. Low NO<sub>x</sub> Burners will be installed at Reheating Furnace for control of Gaseous emissions generated while using PNG.

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

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

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

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

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

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

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

- x. Tar shall be recovered from producer gas and shall be sold to registered processors and phenolic water shall be incinerated in After Burn Chamber (ABC) of DRI kilns.
- xi. The PP shall implement the guidelines on sponge iron plants issued by the CPCB/SPCB in this regard.
- xii. The project proponent make efforts to achieve power consumption less than 65 units/tonne for Portland Pozzolona Cement (PPC) and 85 units/tonne for Ordinary Portland Cement (OPC) production and thermal energy consumption of 670 Kcal/Kg of clinker.
- xiii. Maximize utilization of fly ash, slag and sweetener in cement blend as per BIS standards.
- xiv. Maximize utilization of alternate fuels and Co-processing to achieve best practice norms.
- xv. Waste heat recovery system shall be provided for kiln and cooler.

## **VI. Waste management**

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

## **VII. Green Belt**

- i. The project proponent shall prepare GHG emissions inventory for the plant and shall submit the programme for reduction of the same including carbon sequestration by trees.
- ii. Project proponent shall submit a study report on Decarbonisation program, which would essentially consist of company's carbon emissions, carbon budgeting/ balancing, carbon sequestration activities and carbon capture, use and storage and offsetting strategies. Further, the report shall also contain time bound action plan to reduce its carbon intensity

of its operations and supply chains, energy transition pathway from fossil fuels to Renewable energy etc. All these activities/ assessments should be measurable and monitor able with defined time frames.

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

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

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

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

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

#### **X. Miscellaneous**

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

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

- ii. The copies of the environmental clearance shall be submitted by the project proponents to the Heads of local bodies, Panchayats and Municipal Bodies in addition to the relevant offices of the Government who in turn has to display the same for 30 days from the date of receipt.
- iii. The project proponent shall upload the status of compliance of the stipulated environment clearance conditions, including results of monitored data on their website and update the same on half-yearly basis.
- iv. The project proponent shall monitor the criteria pollutants level namely; PM10, SO2, NOx (ambient levels as well as stack emissions) or critical sectoral parameters, indicated for the projects and display the same at a convenient location for disclosure to the public and put on the website of the company.
- v. Action plan for developing connecting and internal road in terms of MSA as per IRC guidelines shall be implemented
- vi. The project proponent shall submit six-monthly reports on the status of the compliance of the stipulated environmental conditions on the website of the ministry of Environment, Forest and Climate Change at environment clearance portal.
- vii. The project proponent shall submit the environmental statement for each financial year in Form-V to the concerned State Pollution Control Board as prescribed under the Environment (Protection) Rules, 1986, as amended subsequently and put on the website of the company.
- viii. The project proponent shall inform the Regional Office as well as the Ministry, the date of financial closure and final approval of the project by the concerned authorities, commencing the land development work and start of production operation by the project.
- ix. The project proponent shall abide by all the commitments and recommendations made in the EIA/EMP report, commitment made during Public Hearing and also that during their presentation to the Expert Appraisal Committee.
- x. The recommendations of the approved Site-Specific Wildlife Management Plan (in case of involvement of Schedule-I species) shall be implemented in consultation with the State Forest Department. The implementation report shall be furnished along with the six-monthly compliance report to the concerned Regional Office of the MoEF&CC.
- xi. The PP shall put all the environment related expenditure, expenditure related to Action Plan on the PH issues, and other commitments made in the EIA/EMP Report etc. in the company web site for the information to public/public domain. The PP shall also put the information on the left over funds allocated to EMP and PH as committed in the earlier ECs and shall be carried out and spent in next three years, in the company web site for the information to public/public domain.
- xii. No further expansion or modifications in the plant shall be carried out without prior approval of the Ministry of Environment, Forests and Climate Change (MoEF&CC).
- xiii. Concealing factual data or submission of false/fabricated data may result in revocation of this environmental clearance and attract action under the provisions of Environment (Protection) Act, 1986.

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

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

#### **Agenda No. 62.19**

#### **62.19 Amendment in EC of Integrated Steel Plant 6 MTPA and Captive Power Plant 810 MW by M/s Jindal Steel and Power Ltd. at Angul, State Odisha- Re-Consideration of Environmental Clearance [From Parivesh 1.0]**

**[Proposal No. IA/OR/IND/298472/2023; File No. J-11011/365/2006-IA.II(I)]**

- 62.19.1 The proposal was initially considered during the 26<sup>th</sup> meeting of Re-constituted EAC (Industry-1) held during 12<sup>th</sup>-13<sup>th</sup> April, 2023 wherein, after deliberations, the Committee recommended the proposal for amendment in EC granted vide letter no. J-11011/365/2006 dated 22/02/2007 and subsequent amendments dated 14/11/2008, 08/02/2017, 26/06/2018, 22/01/2019, 18/01/2021 and 14.03.2022 w.r.t. change in land requirement from 2213 acres to 2010.27 acres for existing 6 MTPA Integrated Steel plant of JSPL located at Angul, Odisha.
- 62.19.2 Subsequently, the MoEF&CC has sought the status of compliance to the recommendations suggested by the Sub-Committee of EAC during site visit to JSPL.
- 62.19.3 The PP submitted the compliance to the recommendations of the Sub-committee of EAC by JSPL and based on the same the proposal was again placed before the EAC in its 62<sup>nd</sup> meeting held on 3<sup>rd</sup> – 5<sup>th</sup> July, 2024. The deliberations and recommendations of EAC are as follows:
- 62.19.4 It was informed that a complaint was also received through email dated 04.07.204 requesting to initiate necessary action against conditions & purpose of forest diversion by user agency (JSPL, Angul) for usage of diverted forest land/area in Kaliakata RF & Durgapur RF of Angul Range.

### **Deliberations and Recommendations of EAC**

- 62.19.5 The EAC examined the reply submitted by JSPL and also shared the complaint received against the project with them. After a pointwise deliberation, it was decided that JSPL shall prepare a detailed reply on the compliance of the sub-committee report and a para-wise reply to the complaint. The case shall be presented before the EAC in the forthcoming meeting.

The meeting ended with thanks to the Chair.

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

**Preliminary requirements:**

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

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

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

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

## **EIA/EMP Report**

### **1. Introduction**

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

### **2. Project description**

#### **A. Site Details**

- i. Location of the project site covering village, Taluka/Tehsil, District and State.
- ii. Site accessibility

- iii. A digital toposheet in pdf or shape file compatible to google earth of the study area of radius of 10km and site location preferably on 1:50,000 scale. (including all eco-sensitive areas and environmentally sensitive places).
- iv. Latest High-resolution satellite image data having 1 m - 5 m spatial resolution like quickbird, Ikonos, IRS P-6 pan sharpened etc., along with delineation of plant boundary co-ordinates. Area must include at least 100 m all around the project location.
- v. Environment settings of the site and its surrounding along with map.
- vi. A list of major industries with name, products and distance from plant site within study area (10km radius) and the location of the industries shall be depicted in the study area map.
- vii. In case if the project site is in vicinity of the water body, 50 meters from the edge of the water body towards the site shall be treated as no development/construction zone. If it's near the wetland, Guidelines for implementing Wetlands (Conservation and Management) Rules, 2017 may be followed.
- viii. In case if the project site is in vicinity of the river, the industry shall not be located within the river flood plain corresponding to one in 25 years flood, as certified by concerned District Magistrate/Executive Engineer from State Water Resources Department (or) any other officer authorized by the State Government for this purpose as per the provisions contained in the MoEF&CC Office Memorandum dated 14/02/2022.
- ix. In case of canal/ nala/ seasonal drain and any other water body passing through project site, the PP shall submit the suitable steps /conservation plan/mitigation measures along with contouring, Run -off calculations, disposal etc. A robust and full proof Drainage Conservation scheme to protect the natural drainage/water bodies and its flow parameters; along with Soil conservation scheme and multiple Erosion control measures shall be provided in the report.
- x. Type of land, land use of the project site needs to be submitted.
- xi. Status of acquisition of land. If acquisition is not complete, stage of the acquisition process as per the MoEF&CC O.M. dated 7/10/2014 shall be furnished.
- xii. Project proponent shall prepare Engineering layout plan showing all internal roads minimum 6 m width and 9 m turning radius for smooth traffic flow inside including fire tender as per NBC. Road network shall connect all service areas in layout. This drawing shall include area statement showing plot area, area under roads, parking, green belt with calculations and % with respect to plot area of project site and proper indexing. If located within an Industrial area/Estate/Complex, layout of Industrial Area indicating location of unit within the Industrial area/Estate.
- xiii. Project proponent shall submit contour map of project site along with drainage disposal system with calculations and drawings supported with proper indexing including Rain Water Harvesting details with calculations mentioning about GW recharge along with relevant drawing.
- xiv. A detailed report covering all aspects of Fire Safety Management and Fire Emergency Plan shall be submitted.

- xv. Details of drone survey for the site, needs to be included in report and presented before the EAC during appraisal of the project.

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

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

**C. Salient features of the project**

- i. Products with capacities in **Tons per Annum** for the proposed project.
- ii. If expansion project, status of implementation of existing project, details of existing/proposed products with production capacities in Tons per Annum.
- iii. Site preparatory activities.
- iv. List of raw materials required and their source along with mode of transportation.
- v. Other than raw materials, other chemicals and materials required with quantities and storage capacities.
- vi. Manufacturing process details along with process flow diagram of proposed units.
- vii. Consolidated materials and energy balance for the project.
- viii. Total requirement of surface/ ground water and power with their respective sources, status of approval.
- ix. Water balance diagram
- x. Details of Emission, effluents, hazardous waste generation and mode of disposal during construction as well as operation phase.
- xi. Man-power requirement.
- xii. Cost of project and scheduled time of completion.
- xiii. In case of expansion projects, project proponent shall submit structural stability certificate showing whether existing structure withstand for proposed expansion activity.
- xiv. Brief on present status of compliance (Expansion/modernization proposals)
  - a. Cumulative Environment Impact Assessment for the existing as well as the proposed expansion/modernization shall be carried out.
  - b. In case of ground water drawl for the existing unit, action plan for phasing out of ground water abstraction in next two years except for domestic purposes and shall switch over to 100 % use of surface water from nearby source.

- c. Copy of all the Environment Clearance(s) including Amendments/validity of extension/transfer of EC, there to obtained for the project from MoEF&CC/SEIAA shall be attached as Annexures. A Certified Compliance Report (CCR) of the Integrated Regional Office of the Ministry of Environment, Forest and Climate Change/ or concerned authority as per OM No. IA3-22/10/2022-IA.III [E 1772581], dated 8<sup>th</sup> June, 2022 on the status of compliance of conditions stipulated in all the existing environment clearances including amendments shall be provided. A Certified Compliance Report (CCR) issued by the concerned Authority shall be valid for a period of one year from the date of inspection.
- d. In case the existing project has not obtained Environment Clearance, reasons for not taking EC under the provisions of the EIA Notification 1994 and/or EIA Notification 2006 shall be provided. A proper justification needs to be submitted along with documentary proof. Copies of Consent to Establish/No Objection Certificate and Consent to Operate (in case of units operating prior to EIA Notification 1994 or 2006, CTE and CTO of FY 2005-2006) obtained from the SPCB shall be submitted. Further, compliance report to the conditions of CTO from the Regional Office of the SPCB shall be submitted, as per OM No. IA3-22/10/2022-IA.III [E 1772581], dated 8<sup>th</sup> June, 2022. CCR on CTO conditions issued by the concerned SPCBs/PCCs shall be valid for a period of one year from the date of inspection of the project.

### 3. Description of the Environment

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

Attributes	Sampling		Remarks
	Network	Frequency	
<b>A. Air Environment</b>			
<b>Micro-Meteorological</b> <ul style="list-style-type: none"> <li>• Wind speed (Hourly)</li> <li>• Wind direction</li> <li>• Dry bulb temperature</li> <li>• Wet bulb temperature</li> <li>• Relative humidity</li> <li>• Rainfall</li> <li>• Solar radiation</li> <li>• Cloud cover</li> <li>• Environmental Lapse Rate</li> </ul>	Minimum 1 site in the project impact area	1 hourly continuous	<ul style="list-style-type: none"> <li>• IS 5182 Part 1-20</li> <li>• Site specific primary data is essential</li> <li>• Secondary data from IMD, New Delhi</li> <li>• CPCB guidelines to be considered.</li> </ul>
<b>Pollutants</b> <ul style="list-style-type: none"> <li>• PM<sub>2.5</sub></li> <li>• PM<sub>10</sub></li> </ul>	At least 8-12 locations	As per	<ul style="list-style-type: none"> <li>• Sampling as per CPCB guidelines</li> </ul>

Attributes	Sampling		Remarks
	Network	Frequency	
<ul style="list-style-type: none"> <li>• SO<sub>2</sub></li> <li>• NO<sub>x</sub></li> <li>• CO</li> <li>• HC</li> <li>• Other parameters relevant to the project and topography of the area</li> </ul>		National Ambient Air Quality Standards, CPCB Notification.	<ul style="list-style-type: none"> <li>• Collection of AAQ data (except in monsoon season)</li> <li>• Locations of various stations for different parameters should be related to the characteristic properties of the parameters.</li> <li>• The monitoring stations shall be based on the NAAQM standards as per GSR 826(E) dated 16/11/2009 and take into account the predominant wind direction, population zone and sensitive receptors including reserved forests,</li> <li>• Raw data of all AAQ measurement for 12 weeks of all stations as per frequency given in the NAAQM Notification of 16/11/2009 along with min., max., average and 98% values for each of the AAQ parameters from data of all AAQ stations should be provided as an</li> </ul>

Attributes	Sampling		Remarks
	Network	Frequency	
			annexure to the EIA Report.
<b>B. Noise</b>			
<ul style="list-style-type: none"> <li>Hourly equivalent noise levels</li> </ul>	At least 8-12 locations	As per CPCB norms	-
<b>C. Water</b>			
<b>Parameters for water quality</b> <ul style="list-style-type: none"> <li>pH, temp, turbidity, magnesium hardness, total alkalinity, chloride, sulphate, nitrate, fluoride, sodium, potassium, salinity</li> <li>Total nitrogen, total phosphorus, DO, BOD, COD, Phenol</li> <li>Heavy metals</li> <li>Total coliforms, faecal coliforms</li> <li>Phyto-plankton</li> <li>Zoo-plankton</li> <li>Microalgae/microalgal bloom</li> </ul>	Samples for water quality should be collected and analyzed as per: <ul style="list-style-type: none"> <li>IS: 2488 (Part 1-5) methods for sampling and testing of Industrial effluents</li> <li>Standard methods for examination of water and wastewater analysis published by American Public Health Association.</li> </ul>		
<b>For River Bodies</b> <ul style="list-style-type: none"> <li>Total Carbon</li> <li>pH</li> <li>Dissolved Oxygen</li> <li>Biological Oxygen Demand</li> <li>Free NH4</li> <li>Boron</li> <li>Sodium Absorption Ratio</li> <li>Electrical Conductivity</li> <li>TDS</li> </ul>	<ul style="list-style-type: none"> <li>Surface water quality of the nearest River (60m upstream and downstream) and other surface water bodies</li> </ul>	<ul style="list-style-type: none"> <li>Yield of water sources to be measured during critical season</li> <li>Standard methodology for collection of surface water (BIS standards)</li> </ul>	

Attributes	Sampling		Remarks
	Network	Frequency	
<b>For Ground Water</b>	<ul style="list-style-type: none"> <li>Ground water monitoring data should be collected at minimum of 8 locations (from existing wells /tube wells/existing current records) from the study area and shall be included.</li> </ul>		
<b>D. Traffic Study</b>			
<ul style="list-style-type: none"> <li>Type of vehicles</li> <li>Frequency of vehicles for transportation of materials</li> <li>Additional traffic due to proposed project</li> <li>Parking arrangement</li> </ul>	-		
<b>E. Land Environment</b>			
<b>Soil</b> <ul style="list-style-type: none"> <li>Particle size distribution</li> <li>Texture</li> <li>pH</li> <li>Electrical conductivity</li> <li>Cation exchange capacity</li> <li>Alkali metals</li> <li>Sodium Absorption Ratio (SAR)</li> <li>Permeability</li> <li>Water holding capacity</li> <li>Porosity</li> </ul>	Soil samples be collected as per BIS specifications		
<b>Land use/Landscape</b> <ul style="list-style-type: none"> <li>Location code</li> <li>Total project area</li> <li>Topography</li> <li>Drainage (natural)</li> <li>Cultivated, forest, plantations, water bodies, roads and settlements</li> </ul>	-		
<b>E. Biological Environment</b>			
<b>Aquatic</b> <ul style="list-style-type: none"> <li>Primary productivity</li> <li>Aquatic weeds</li> </ul>	<ul style="list-style-type: none"> <li>Detailed description of flora and fauna (terrestrial and aquatic) existing in the study area shall be given with special reference to rare, endemic and endangered</li> </ul>		



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

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

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

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

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

Activity	Environment	Ecological	Socio-economic
Construction phase			
Operation phase			

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

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

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

- a. Construction phase
- b. Operation phase

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

- a. Construction phase
- b. Operation phase

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

- a. Construction phase

- b. Operation phase
- vi. Impact on land use (Sources; Embedded control measures; Assessment; Mitigation measures; Residual impact)
  - a. Construction phase
  - b. Operation phase
- vii. Impact on surface water resource and quality (Sources; Embedded control measures; Assessment; Mitigation measures; Residual impact)
  - a. Construction phase
  - b. Operation phase
- viii. Impact on ground water resource and quality (Sources; Embedded control measures; Assessment; Mitigation measures; Residual impact)
  - a. Construction phase
  - b. Operation phase
- ix. Impact on terrestrial and aquatic habitat (Sources; Embedded control measures; Assessment; Mitigation measures; Residual impact)
  - a. Construction phase
  - b. Operation phase
- x. Impact on socio-economic environment (Sources; Embedded control measures; Assessment; Mitigation measures; Residual impact)
  - a. Construction phase
  - b. Operation phase
- xi. Impact on occupational health and safety (Sources; Embedded control measures; Assessment; Mitigation measures; Residual impact)
  - a. Construction phase
  - b. Operation phase

## **5. Analysis of Alternatives (Technology & Site)**

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

## **6. Environmental Monitoring Program**

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

d. Does the company have system of reporting of non compliances / violations of environment norms to the Board of Directors of the company and / or shareholders or stakeholders at large? This reporting mechanism shall be detailed in the EIA report

iv. Action plan for **post-project environment monitoring matrix:**

Activity	Aspect	Monitoring Parameter	Location	Frequency	Responsibility
Construction phase					
Operation phase					

## 7. Additional Studies

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

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

viii. Risk assessment

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

ix. Emergency response and preparedness plan

## 8. Project Benefits

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

## 9. Environment Cost Benefit Analysis

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

## 10. Environment Management Plan (Construction and Operation phase)

- i. Air quality management plan
- ii. Noise quality management plan
- iii. Action plan for hazardous waste management
- iv. Action plan for solid waste management
- v. Action plan for e-waste management.
- vi. Action plan for plastic waste management.
- vii. Action plan for construction and demolition waste management.
- viii. Effluent management plan
- ix. Storm water management plan
- x. Rain water harvesting plan
- xi. Plan for maximum usage of waste water/treated water in the Unit
- xii. Occupational health and safety management plan
- xiii. Green belt development plan: An action plan for Green Belt development consisting of 3 tiers of plantations of native species all along the periphery of the project of adequate width shall be raised in 33% of total area with a tree density shall not less than 2500 per

- ha within a time frame of one year shall be submitted. Survival rate of green belt shall be monitored on periodic basis to ensure that survival rate not be less than 80 %.
- xiv. Socio-economic management plan
  - xv. Wildlife conservation plan (In case of presence of schedule I species)
  - xvi. Total capital cost and recurring cost/annum for environment pollution control measures shall be included.

### **11. Conclusion of the EIA study**

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

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**Standard ToRs FOR CEMENT INDUSTRY [3(b)]**

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

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

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

5. PM (PM<sub>10</sub> and PM<sub>2.5</sub>) present in the ambient air must be analysed for source analysis – natural dust/RSPM generated from plant operations (trace elements) of PM<sub>10</sub> to be carried over.
6. All stock piles will have to be on top of a stable liner to avoid leaching of materials to ground water.
7. Plan for the implementation of the recommendations made for the steel plants in the CREP guidelines.
8. Plan for slag utilization
9. Plan for utilization of energy in off gases (coke oven, blast furnace)
10. System of coke quenching adopted with justification.
11. Trace metals Mercury, arsenic and fluoride emissions in the raw material.
12. Trace metals in waste material specially in slag.
13. Trace metals in water
14. Details of proposed layout clearly demarcating various units within the plant.
15. Complete process flow diagram describing each unit, its processes and operations, along with material and energy inputs and outputs (material and energy balance).
16. Details on design and manufacturing process for all the units.
17. Details on environmentally sound technologies for recycling of hazardous materials, as per CPCB Guidelines, may be mentioned in case of handling scrap and other recycled materials.
18. Details on requirement of energy and water along with its source and authorization from the concerned department. Location of water intake and outfall points (with coordinates).
19. Details on toxic metal content in the waste material and its composition and end use (particularly of slag).
20. Details on toxic content (TCLP), composition and end use of slag.
21. Fourth Hole fume extraction system shall be provided for submerged Arc Furnace (SAF). Waste heat recovery (WHR) system shall be installed to recover the sensible heat from flue gases of electric arc furnace (EAF).
22. Emission/effluent norms as per G.S.R 894 (E) dated 4/12/2019 [EPA Rules 1986].
23. Action plan for the stock piles with impervious floor, provision of garland drains and catch pits to trap run off material shall be submitted.
24. Action plan to limit the particulate matter emission from all the stacks below 30 mg/Nm<sup>3</sup> shall be furnished.
25. Action plan for 100 % solid waste utilization shall be submitted.
26. PP shall explore the possibility of plastic waste utilization in the Plant/Unit process.

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

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



4. Plan for utilization of energy in off gases (coke oven, blast furnace)
5. System of coke quenching adopted with full justification.
6. Details on environmentally sound technologies for recycling of hazardous materials, as per CPCB Guidelines, may be mentioned in case of handling scrap and other recycled materials.
7. Details on toxic metal content in the waste material and its composition and end use (particularly of slag).
8. Details on toxic content using Toxicity Characteristic Leaching Procedure (TCLP), composition and end use of slag.
9. 100 % dolo char generated in the plant shall be used to generate power.
10. Fourth Hole fume extraction system shall be provided for SAF.WHR system shall be installed to recover sensible heat from flue gases of EAF. Provision for installation of jigging and briquetting plant to utilise the fines generated in the process.
11. No tailing pond is permitted for Iron ore slimes. Dewatering and filtration system shall be provided.
12. Emission/effluent norms as per G.S.R 894 (E) dated 4/12/2019 [EPA Rules 1986].
13. Action plan for the stock piles with impervious floor, provision of garland drains and catch pits to trap run off material shall be submitted.
14. Action plan for developing connecting and internal road in terms of MSA as per IRC guidelines shall be submitted.
15. Action plan to limit the particulate matter emission from all the stacks below 30 mg/Nm<sup>3</sup> shall be furnished.
16. Action plan for 100 % solid waste utilization shall be submitted.
17. PM (PM<sub>10</sub> and P<sub>2.5</sub>) present in the ambient air must be analysed for source analysis – natural dust/RSPM generated from plant operations (trace elements) of PM<sub>10</sub> to be carried over.

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

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

5. A commitment that no extra chlorine base bleaching chemicals (more than being used now) will be employed and AOx will remain within limits as per CREP for used based mills. Plan for reduction of water consumption.
6. Undertaking to comply with the norms stipulated in the S.O. 3187 (E) dated 7/10/2016 for the projects located in Ganga basin.
7. Action plan for the stock piles with impervious floor, provision of garland drains and catch pits to trap run off material shall be submitted.
8. Action plan to limit the particulate matter emission from all the stacks below 30 mg/Nm<sup>3</sup> shall be furnished.
9. Action plan for 100 % waste utilization shall be submitted.

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

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

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

1. Justification for selecting recovery/non-recovery (beehive) type batteries with the proposed unit size.
2. Details of proposed layout clearly demarcating various facilities such as coal storages, coke making, by-product recovery area, etc within the plant.
3. Details of coke oven plant (recovery/non-recovery type) including coal handling, coke oven battery operations, coke handling and preparation.
4. Scheme for coal changing, charging emission centre, Coke quenching technology, pushing emission control.
5. Scheme for coke oven effluent treatment plant details including scheme for meeting cyanide standard.

6. Emission/effluent norms as per G.S.R 894 (E) dated 4/12/2019. Provision of CDQ in case of coke oven plant of 0.8 MTPA and above.
7. Action plan to limit the particulate matter emission from all the stacks below 30 mg/Nm<sup>3</sup> shall be furnished.
8. Action plan for 100 % solid waste utilization shall be submitted.
9. Action plan for the stock piles with impervious floor, provision of garland drains and catch pits to trap run off material shall be submitted.

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

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

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

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

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

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

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

<b>S. No.</b>	<b>Name</b>	<b>Position</b>	<b>03.07.2024</b>	<b>04.07.2024</b>	<b>05.07.2024</b>
1.	Shri Rajive Kumar	Chairman	<i>Present</i>	<i>Present</i>	<i>Present</i>
2.	Dr. Dipankar Shome	Vice Chairman	<i>Present</i>	<i>Present</i>	<i>Present</i>
3.	Dr. S. Ranganathan	Member	<i>Present</i>	<i>Present</i>	<i>Present</i>
4.	Dr. Ranjit Prasad	Member	<i>Present</i>	<i>Present</i>	<i>Present</i>
5.	Dr. S. K. Singh	Member	<i>Present</i>	<i>Present</i>	<i>Present</i>
6.	Dr. Tejaswini Ananthkumar	Member	<i>Present</i>	<i>Present</i>	<i>Present</i>
7.	Dr. Hemant Sahasrabuddhe	Member	<i>Present</i>	<i>Present</i>	<i>Present</i>
8.	Dr. Jai Krishna Pandey	Member	<i>Present</i>	<i>Present</i>	<i>Present</i>
9.	Dr. E V R Raju	Member	<i>Present</i>	<i>Present</i>	<i>Present</i>
10.	Dr. S K Chaturvedi, (Representatives of NCCBM)	Member	<i>Present</i>	<i>Present</i>	<i>Present</i>
11.	Shri Nazimuddin, Scientist 'F'(Representative of CPCB)	Member	<i>Present</i>	<i>Present</i>	<i>Present</i>
12.	Dr. S. Raghavan, Scientist 'D' (Representative of National Institute of Occupational Health (NIOH))	Member	<i>Present</i>	<i>Present</i>	<i>Present</i>
13.	Dr. Sanjay Bist, Scientist 'E' (Representative of Indian Meteorological Department)	Member	<i>Present</i>	<i>Present</i>	<i>Present</i>
14.	Dr. R.B. Lal, Scientist F / Director, MoEFCC	Member Secretary	<i>Present</i>	<i>Present</i>	<i>Present</i>
<b>MoEFCC</b>					
15.	Dr R P Rastogi	Scientist C	<i>Present</i>	<i>Present</i>	<i>Present</i>
16.	Dr Sandeepan BS	Scientist B	<i>Present</i>	<i>Present</i>	<i>Present</i>

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**Approval of EAC Chairman**

**Re: Draft minutes of the 62nd EAC Meeting held on 3-5 July, 2024**

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

Wed, Jul 17, 2024 05:04  
PM

**Subject :** Re: Draft minutes of the 62nd EAC  
Meeting held on 3-5 July, 2024

**To :** Dr R. B. Lal <rb.lal@nic.in>

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

Dear Dr Lal,  
The draft minutes are approved. Kindly do the needful.  
Best wishes  
Rajive Kumar  
Chairman- EAC-Industry-1

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