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

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Date of Zero Draft MoM sent to EAC: 20/06/2022
Approval by Chairman: 23/06/2022
Uploading on PARIVESH: 23/06/2022

MINUTES OF THE 7th EXPERT APPRAISAL COMMITTEE (INDUSTRY-1 SECTOR) MEETING HELD ON JUNE 13-14, 2022

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

Time: 10:30 AM onwards

DAY-1: JUNE 13, 2022 [MONDAY]

(i) Opening Remarks by the Chairman, EAC

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

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

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

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

(iii) Confirmation of the Minutes of the 6th Meeting of the EAC (Industry-1 Sector) held during May 30-31, 2022 at MoEF&CC through VC.

The EAC, having taken note that final minutes were issued after incorporating comments offered by the EAC (Industry-1 Sector) members on the minutes of its **6th Meeting of the EAC (Industry-1 Sector) held during May 30-31, 2022** conducted through Video Conferencing (VC), and noted that no request has been received for modifications/factual correction, in the minutes of the 6th EAC meeting for the project/activities, and confirmed the same.

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

Consideration of Environmental Clearance Proposals

Agenda No. 7.1

7.1 **Increase in production capacity of Asbestos Corrugated & plain Sheets from 1,44,000 TPA to 2,50,000 TPA and installation of pre-coloured galvanized MS profile sheet plant (non-asbestos) of 25000 TPA and Captive Cotton Rag Pulp Plant of capacity 2000 TPA of M/s UP Asbestos Ltd., located at Village-Mau, Taluka- Mohanlalganj, District-Lucknow, Uttar Pradesh– Consideration of Environmental Clearance.**

[Proposal no. IA/UP/IND/5671/2011; File No. J-11011/567/2011-IA.II(I)]

[Name of Consultant: M/s. Ecomen Laboratories Pvt. Ltd.; valid up to 21.09.2023]

7.1.1 M/s U. P. ASBESTOS Ltd. has made an online application vide proposal no IA/UP/IND/5671/2011 dated 23.05.2022 along with copy of EIA/EMP report, Form – 2 and Certified EC compliance report seeking Environment Clearance (EC) under the provisions of the EIA Notification, 2006 for the project mentioned above. The proposed project activity is listed at schedule no. 4(c) Asbestos milling and asbestos based products under Category "A" of the schedule of the EIA Notification, 2006 and appraised at Central Level.

7.1.2 Name of the EIA consultant: M/s. Ecomen Laboratories Pvt. Ltd. [Sl. No. 155, List of ACOs with their Certificate / Extension Letter no. NABET/EIA/2023/RA 0203; valid upto 21.09.2023, Rev. 23, May 09, 2022].

Details submitted by Project proponent

7.1.3 The details of the ToR are furnished as below:

Date of application	Consideration	Details	Date of accord	Validity of ToR
20/12/2018	3rd meeting of EAC held on 9-11th January, 2018	Terms of Reference	11/02/2019	10.02.2023
03/04/2021	34th meeting of EAC held on 15-16th April, 2021	Amendment in ToR	03/05/2021	

7.1.4 The project of M/s. U. P. Asbestos Ltd. located in Village- Mau, Tehsil- Mohanlalganj, District- Lucknow, Uttar Pradesh is for increase in production capacity of Asbestos Corrugated & plain Sheets from 1,44,000 MTPA to 2,50,000 MTPA and installation of pre-coloured galvanized MS profile sheet plant (non-asbestos) of 25000 MTPA and Captive Cotton Rag Pulp Plant of capacity 2000 MTPA.

7.1.5 Environmental Site Settings:

S.No.	Particulars	Details	Remarks
i.	Total land	10.533 ha (26.03 Acre) [Private land]	Land use:

<table>
<tr><td></td><td></td><td></td><td>Plant:- 2.148
Road:- 2.541
Greenbelt/ plantation/ stockyard:- 5.844</td></tr>
<tr><td>ii.</td><td>Land acquisition details as per MoEF&CC O.M. dated 7/10/2014</td><td colspan="2">It is a Private Land under the possession of UPAL. The expansion will take place in the existing land. No extra land is required for the proposed expansion.</td></tr>
<tr><td>iii.</td><td>Existence of habitation & involvement of R&R, if any.</td><td colspan="2">R&R is not applicable.</td></tr>
<tr><td>iv.</td><td>Latitude and Longitude of the project site</td><td colspan="2"><table>
<tr><th>Sl No.</th><th>Co-ordinates</th><th>Sl No.</th><th>Co-ordinates</th><th>Sl No.</th><th>Co-ordinates</th></tr>
<tr><td rowspan="2">1</td><td>26°41'38.78"N</td><td rowspan="2">5</td><td>26°41'24.17"N</td><td rowspan="2">9</td><td>26°41'32.42"N</td></tr>
<tr><td>80°58'42.95"E</td><td>80°58'59.46"E</td><td>80°58'52.39"E</td></tr>
<tr><td rowspan="2">2</td><td>26°41'40.88"N</td><td rowspan="2">6</td><td>26°41'24.42"N</td><td rowspan="2">10</td><td>26°41'33.64"N</td></tr>
<tr><td>80°58'59.07"E</td><td>80°58'58.01"E</td><td>80°58'50.31"E</td></tr>
<tr><td rowspan="2">3</td><td>26°41'22.40"N</td><td rowspan="2">7</td><td>26°41'26.85"N</td><td rowspan="2">11</td><td>26°41'34.41"N</td></tr>
<tr><td>80°59'1.37"E</td><td>80°58'59.17"E</td><td>80°58'46.59"E</td></tr>
<tr><td rowspan="2">4</td><td>26°41'22.22"N</td><td rowspan="2">8</td><td>26°41'32.56"N</td><td rowspan="2">12</td><td>26°41'34.64"N</td></tr>
<tr><td>80°58'59.80"E</td><td>80°58'57.56"E</td><td>80°58'44.51"E</td></tr>
</table></td></tr>
<tr><td>v.</td><td>Elevation of the project site</td><td colspan="2">125 m AMSL</td></tr>
<tr><td>vi.</td><td>Involvement of Forest land if any.</td><td colspan="2">No forest land is involved</td></tr>
<tr><td>vii.</td><td>Water body exists within the project site as well as study area</td><td colspan="2">Project Site: Nil

Study Area:
Water body exists within the Buffer Zone Are: -
Sarda Canal, 0.75 KM, N
Loni Nala, 6.4 KM, E
Bhujiniya Nala, 8.5 KM, N
Bakh Nala, 1.2 KM, W</td></tr>
<tr><td>viii.</td><td>Existence of ESZ/ESA/national park/wildlife sanctuary / biosphere reserve/tiger reserve /elephant reserve etc. if any within the study</td><td colspan="2">Nil</td></tr>
</table>

	area		

7.1.6 The PP informed that the existing project was initially accorded environmental clearance vide file no. 11011/31/1998-IA.II(I) dated 24.03.1999 and J-11011/43/2000-IA.II(I0 daetd 20.11.2010. The project was granted expansion in production capacity from 1,08,000 TPA to 144,000 TPA vide letter no. J- 11011/567/2011-IA II (I) dated 12.06.2015 with amendment dated 14.07.2020 and corrigendum to EC amendment on 12.03.2021. The latest consent to operate for the existing unit was accorded by Uttar Pradesh State Pollution Control Board vide lr. no. 111833/UPPCB/Lucknow(LAB)/CTO/air/LUCKNOW/2020 & 111842/UPPCB/ Lucknow(LAB) /CTO/water/LUCKNOW/2020 both dated 4/1/2021 and both valid up to 31/12/22.

7.1.7 Implementation status of the existing EC:

S.no	Facilities	Units	As Per EC dated 12/06/2015	Implementation status	Production as per CTO
1	Asbestos Sheets	1	1,44,000 TPA	Implemented and operational	1,44,000 TPA Asbestos sheets (12000 MT/month)

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

S. No.	Name	Existing Units	Proposed Units	Total (Existing +Proposed)
		Production TPA	Production TPA	Production TPA
1.	Asbestos Corrugated & plain sheets	1,44,000	1,06,000	**250000**
2.	Pre coloured galvanized MS Profile Sheet (Non Asbestos)	-	**25000**	**25000**
3.	Captive Cotton Rag Pulp plant	-	**2000**	**2000**

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

S. No.	Raw Material	Quantity required per annum			Source	Distance from site (Kms)	Mode of Transportation
		Existing	Expansion	Total			
1	O.P.C. Cement	58830	51170	110000	A.C.C. & J.P. Associates J. K. Laxmi, Ultra Tech Cement	400-500	Train/Road
2	Chrysotile Asbestos Fibre	11100	**8400**	19500	Asbestos fibre is imported and received at Mumb	1400	Sea and Road

					ai / Calcutta		
3	Fly Ash	38850	**11100**	49950	NTPC's Thermal Plants atUnchahar, Shaktinagar & Rihand	530	Road
4	Cotton Rag Pulp	2220	**2880**	5100	Unnao/from our own captive plant at our premises	60	Road
5	Slag	--	**10000**	10000	Yamunanagar, Haryana, Ramgarh, Jharkhand	700	Road/ Train

FOR PROFILE SHEET PLANT, PULP PROCESSING UNIT:-

S. No.	**Raw Material**	**Quantity required per annum**			**Source**	**Distance from site (Kms)**	**Mode of Transportation**
		Existing	**Expansion**	**Total**			
1	Pre painted, Galvanised M.S. coil	-	**25000**	**25000**	1. Pre painted M.S coils are Imported from China and received at Mumbai Port. 2. Local purchase from market as per requirement a. Essar Steel, Pune b. Asian Coils Mumbai c. Bhushan Steel, Mumbai	1400	Sea / Road/ Train
2	Cotton rag	-	**2000**	**2000**	Ludhiana, Delhi, Kanpur	600-700	Road/Train

7.1.10 Existing water requirement is 570 KLD drawn from underground for process, drinking, domestic, plantation etc. out of which 342 KLD is the makeup water. The proposed water requirement for the project is estimated as 390 KLD, out of which 342 KLD of fresh water requirement will be obtained from the ground water source and the remaining requirement of 48 m^3 /day will be met from the recycled water. Ground Water Department (Namami Gange & Rural Supply Department), Ministry of Jal Shakti, Government of Uttar Pradesh issued NOC with Authorization/ No-Objection Certificate No: NOC042035 & NOC013277 is valid upto 20/02/2027. No extra water is required for the proposed expansion.

7.1.11 The power requirement for the project is estimated as 1350 KVA, which will be obtained from the Lucknow Electricity Supply Administration. Solar power plant of 1.1 MW has been commissioned. Power required for proposed profile sheet plant and pulp processing plant would be 22.4 KW and 111.86 KW respectively which is included in the above

7.1.12 Baseline Environmental Studies:

<table>
<tr><td>Period</td><td>Dec, 2019 to Feb, 2020</td></tr>
<tr><td>AAQ PARAMETERS AT EIGHT LOCATIONS</td><td>PM_{10} - 51.30 to 115.0 µg/m^3
$PM_{2.5}$ - 25.50 to 63.0 µg/m^3
SO_2 - 12.40 to 20.30 µg/m^3
NO_2 - 14.80 to 29.85 µg/m^3</td></tr>
<tr><td>AAQ parameters µg/m^3 (Incremental GLC)</td><td>PM_{10} - 3.5 µg/m^3 0.5 km SW
$PM_{2.5}$ - 1.6 µg/m^3 0.5 km SW
SO_2 - 0.4 µg/m^3 0.80 km SE
NO_2 - 0.8 µg/m^3 0.70 km SE</td></tr>
<tr><td>Ground water quality at 8 locations</td><td>pH - 7.20 to 7.73
Chloride- 22.0 to 36.0 (mg/l)
Fluoride- 0.18 to 0.29 (mg/l)
Iron- 0.100 to 0.210 (mg/l)
Hardness- 164.0 to 232.0 (mg/l)</td></tr>
<tr><td>Surface water quality at 2 locations</td><td>pH - 7.60 to 7.70</td></tr>
<tr><td>Noise levels</td><td>49.6 to 66.9 dB(A) for the day time and 42.8 to 55.6 dB(A) for the Night time.</td></tr>
<tr><td>Traffic assessment study findings</td><td>
<table>
<tr><th>Particulars</th><th>Details</th><th>Remarks</th></tr>
<tr><td>Traffic Load Study Period</td><td>Feb.’2020 (One Day)</td><td></td></tr>
<tr><td>Traffic Load (Baseline) (Pcu/ Day)</td><td>13250 Pcu/Day Appro x</td><td>Two Way</td></tr>
<tr><td>Additional Traffic Load Duri ng Operation Of The Expansi on Project (Pcu/Day)</td><td>52 Trucks/Day(3*52= 156 PCU /Day)</td><td>Two Way</td></tr>
<tr><td>Total Traffic Load During Op eration Of Existing And Prop osed Expansion (Pcu/Day)</td><td>13406 Pcu/Day</td><td>Two Way</td></tr>
<tr><td>Traffic Capacity As Per The Irc 73: 1980 For Highways (Pcu/Day)</td><td>As Per Irc: 64 1990 Recommended Design Service Volum es For 2 Lane Rural R oads Of Plain Terrain Is 15000 Pcu /Day.</td><td>Two Way</td></tr>
</table>
</td></tr>
<tr><td>Flora and fauna</td><td>No threatened, rare, endangered or endemic species were observed during the survey in core zone.</td></tr>
</table>

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

S. No	Type of Waste	Source	Quantity generated (TPA)		Mode of Treatment / Disposal
			EXISTING	PROPOSED	
1.	Empty Fiber Bag	From Bag Opening Device	NIL	NIL	100% Recycled in process, Shredded in the Shredder unit attached to the Bag Opening Device and reused along with the opened fibre
2.	Fiber Dust	From Fiber Dust Collector at ER Mill & BOD	0.03	0.05	100% reused in the process
3.	Process Sludge	From Week-End Tank	25	28	100% reused in the process
4.	Hard Broken Pieces	From Salvaging/ Damages/ Rejects	77.33	90	100% reused in the process after converting into powder form after pulverizing.
5.	Cement Dust	From Cement Dust Collector	1.62	2.25	100% reused in the process
6.	Fly ash Dust	From Fly ash Dust Collector	0.72	1.05	100% reused in the process

7.1.14 Public Consultation:

Details of advertisement given	The advertisement of the PH was given by UPPCB in local daily Newspapers The Times of India (English) & Amar Ujala (Hindi) on 08/09/2021
Date of public consultation	08/10/2021
Venue	Village- Mau, Tehsil- Mohanlalganj, District- Lucknow (U.P)
Presiding Officer	Additional District Magistrate (Land Acquisition-1)
Major issues raised	i. Employment ii. Establishment of new industries iii.Dust suppression iv.Safety equipment v. Maintenance of gaushalas and primary schools

7.1.15 The capital cost of the project is Rs 5.54 Crores and the capital cost for environmental protection measures is proposed as Rs 7,85,000. The annual recurring cost towards the environmental protection measures is proposed as Rs 8,40,000. The employment generation from the proposed project / expansion is 425. The capital cost already spent will be Rs 7,01,63,472. The details of cost for environmental protection measures is as follows:

S.	Description of Item	Existing (Rs. In Crores/ lakhs)

No		Capital Cost	Recurring Cost
i.	Air Pollution Control/Noise	4,00,000	1,80,000
ii.	Water Pollution Control		
iii.	Environmental Monitoring and Management	1,85,000	2,50,000
iv.	Occupational Health	2,00,000	2,50,000
V	Green Belt Development	Nil	1,20,000
vii.	Addressal of Public Consultation concerns	7,85,000	8,40,000

7.1.16 Greenbelt will be developed in 4.21278 ha which is about 40 % of the total project area. A 10-34 m wide greenbelt 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.

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

Certified compliance report from Regional Office

7.1.18 The Status of compliance of earlier EC was obtained from Regional Office, Lucknow *vide* letter no. IV/ENV/UP/IND-140/393/2015/1244, dated 22/02/2021 and IV/ENV/UP/IND-140/393/2015/331, dated 27/10/2021 in the name of M/s. U.P. Asbestos Ltd. The Action taken report regarding the partially/non-complied condition was submitted to Regional officer MoEF&CC, Lucknow vide letter no. UPAL/MoEF-IRO LKO/2021-22/720 dated 01/11/2021. MoEF&CC (RO), evaluated the same and has issued letter with file No. IV/ENV/UP/IND-140/393/2015/335 dated 25/01/2022. The details of the observations made by RO in the report dated 25/01/2022 along with its re-assessment / present status as furnished by the PP is given as below.

Sl.	Non- compliances details	Observation of RO (abridged)	Condition no.			Re-assessment by IRO / Response by PP
			EC date	Specific	General	
1	The renewal of communication regarding the merely use of chryosotile white asbestos fibre should be submitted to this office (MOEF&CC)	The renewal of commitment regarding the merely use of the chrysotile white asbestos fibre has been submitted by PAs to this office.	**12/06/2015**	**Yes (ii)**		Project Proponent has submitted written commitment regarding merely use of chrysotile fibre (white fibre) in the manufacturing process carried out at manufacturing facility. **Being complied.**
2	During the site visit, the housekeeping was not found up to the mark. The housekeeping within the plan and premises needs improvement and better housekeeping must be adopted like dust extraction system at a	As per information submitted by PAs and also observed during site visit, it has been found that PAs have	**12/06/2015**	**Yes (vii)**		Project Proponent has improved house keeping . The floors are being cleaned regularly as before with the aid of vacuum cleaners but with increased frequency for improved results The floors have also been repaired wherever required.

Sl.	Non- compliances details	Observation of RO (abridged)	Condition no.			Re-assessment by IRO / Response by PP
			EC date	Specific	General	
	ll transfer point, pluggi ng of leakages from ma chines and dust and flo ors should be clean reg ularly	installed plugging of leakages from machines, installation of Fly ash and Cement Silos. They have taken certain steps to improve the housekeeping like betterment of dust extraction system mainly at transfer point of Flyash and Cement feeding point/Silos, Salvage point /pulverizer, carbo cutter and Asbestos cement roofing sheet plant. Cemented roads are found re-laid within the plant premises. As stated by PAs, they have discontinued the use of turbines to produce the electricity and taken the connection from LESA. PAs have assured to provide the cemented roads throughout the plant premises in the coming financial year.				Water sprinkling is done at regular intervals to control dust inside the premises.Ce mented roads are being rela yed in the premises for bett er environment. Dust extrac tion system is operational a s before and all the machine points from where leakage can take place are being rec hecked from time to time. P roject Proponent have take n certain steps which not on ly helped in keeping premis es more clean but helped in protecting environment like installation of fly ash and c ement Silos. Project Propon ent have taken power conne ction fro m LESA and have discontinued the use of turb ine. All the process waste is being reused. For that purp ose ball mill has been instal led to grind sludge to make it reusable and have also ins talled pulveriser to grind ha rd ground waste to convert i t into powder form. Bottom templates have been bought to reduce breakages and wa ste. Most of the high power electrical motors have been replaced by low power mot ors. In addition to above, in order to conserve energy us ed for building, convention al lighting system has been replaced by LED, Roof top solar power plant of 1.1 M W has been installed. **Being complied.**
3	The copy of the certific ate from the supplier of chryosotile fibre that it does notcontain any to	The copy of the certificate from the supplier of chrysotile fibre	**12/06/2015**	**Yes (xii)**		Copy of the certificate sub mitted. **Complied.**

Sl.	Non- compliances details	Observation of RO (abridged)	Condition no.			Re-assessment by IRO / Response by PP
			EC date	Specific	General	
	xic ortrace metals shoul dbe submitted to thisoff ice	that it does not contain any toxic or trace metals should be submitted to this office. Complied				
4	The action plan for RW H measures should be s ubmitted byPAs to this office	As found during site visit, total 04 nos. of RWI-I Pits are provided within project premises and details of the RWH measures has been submitted by PM to this office. Complied	**12/06/2015**	**Yes (xvi)**		The rain water harvesting s ystem is alreadythere inside the premises. Water is coll ected from roof top through drain pipes and collected in concrete tanks. The water c ollected thus is pumped to o verhead tank and from there it is used in process, wet m opping and dust suppressio n. The ground water collect ed through drains is recharg ed into recharge well. **Complied.**
5	The information abo ut the allocation of sepa rate budget for the impl ementation on the com mitments made to the public during publichea ring should be submitt ed to this office	As per submitted information by PAs and also observed during site visit. the commitment made during public hearing related to providing Job employment, storage of hazardous waste and its use in ball mill, better housekeeping, installation of solar plant of 1.1 MW and power connection from LESA has been complied with proper handling of Asbestos, fly ash and cement. Complied.	**12/06/2015**	**Yes (xvi)**		No commitments were mad e during the Public Hearing which took place on 23.08. 2015 and presided over by ADM (Admin) Shri Davend ra Kumar Pandey. During t he proceedings regular natu re of jobs were advised to b e done by project proponent related to the expansion, he nce no seperate budget was allocated for that purpose. I n this regard:- 1. No change was done in t he machinery except chang e in diameter of the sheet fo rming drum. 2. A separate shed was mad e for keeping the hazardous waste and was stored there only. 3. The hazardous waste/slu dge was being given to desi gnated authorised facility fo r disposal and for reuse in t he circuit. 4. The effluent which consti tutes water and a mix of ra w material is being reused i n the process for preparatio n of Slurry.

Sl.	Non- compliances details	Observation of RO (abridged)	Condition no.			Re-assessment by IRO / Response by PP
			EC date	Specific	General	
						5. The water is being sprinkeld on regular basisinside the premises to suppress fly ash and Cement dust. 6. Till the boiler(turbine) was operational only rice husk was being used as a fuel. Since project proponent have taken power connection from LESA and have also installed roof top solar plant of 1.1 MW, the use of boiler has been discontinued and the plant is now being run by either of these two sources 1. For opening of fibre bags, automatic bag opening device with bag shredder was already there and was of appropriate capacity hence no changes were done 2. Till the boiler (turbine) was in use no change was done in it's construction plan and no alternate fuel was being used (now discontinued because project proponent have taken power connection and installed solar power plants). 3. Water is sprinkled in the premises on regular basis to suppress the dust due to movement of trucks for loading and unloading of raw materials & finished goods 4. Asbestos, fly ash and cement are being handled as per the guidelines. 5. Dust masks are being provided to the workers and staff. 6. The green belt was being maintained in the area prescribed by MoEF

Sl.	Non- compliances details	Observation of RO (abridged)	Condition no.			Re-assessment by IRO / Response by PP
			EC date	Specific	General	
						but now consequent to Reduction in factory area project proponent would maintain the green belt as per the amended TOR. **Complied.**
6	As stated by PAs green belt area is more than 3 3% of the total plot are a. However, the details about the species plante d, their no. and year of plantation with survival status with covered are a should be submitted t o this office	As per submitted information by PAs, the development of the green belt has been done around 10.41 acre, which is about 40% of the available total plot area (26.03 acre) for Asbestos Industry as per the EC amendment vide letter no. - 11011/567/201 l-IA.II(I) dated 14.07.2020. The details of plant species planted with their no. have been submitted by the PAs. Complied.	**12/06/2015**	**Yes (xvii)**		As per the amended TOR we have to maintain 40% of the plot area of 26.03 acres which comes to 10.41 acres a green belt with a tree density of 2500 trees per hectare i.e project proponent need to have around 10500 trees. During the rainy season 4000 more trees have been planted in addition to existing trees. Out of these 4000 trees, 2500 trees were provided by Forest Department free of cost and rest were purchased by project proponent from different nurseries. Species planted with their nos mentioned against them: Gulmohar 550 nos Bargad 20 nos Shaghan 120 nos Neem 275 nos Imli 60 nos Pakad 50 nos Kadam 55 nos Gulachin champa 300 nos pipal 40 nos Savni 105 nos Amrud 100 nos Karanji 800 nos Kasia 100 nos Babul 200 nos Shisham 430 nos Manokami 110 nos Ashok 70 nos Teak 200 nos Singri 600 nos **Complied.**
7	The item wise details a	As per	**12/06/2015**	**Yes**		Item wise expenses

Sl.	Non- compliances details	Observation of RO (abridged)	Condition no.			Re-assessment by IRO / Response by PP
			EC date	Specific	General	
	long with time bound a ction plan regarding the 5% of the total cost of the project earmarked t owards enterprise socia l commitments based o n public hearing issues should be submitted to t his office	submitted information by PAs, Enterprises social commitment based on public hearing are being implemented. Item wise detail has been given as stated above by PAs. Being complied		**(xviii)**		amounting to Rs. 8.50 lac incurred towards Enterprises Social Commitment from 01.01.2016 to 31.03.2021 is as follows :- Health care & Drinking water Rs 2.00 lac Education & Communication Rs 2.00 lac Alternative livelihood & environmental protection Rs 1.50 lac Infrastructure develpment Rs 1.50 lac Sports & culture Rs 1.00 lac **Being complied.**
8	The details of the fund earmarked for soci o - economic development and action plan is to be submitted to regional office	The detail of the expenditure done for socio-economic development of year has been submitted for year 2020-21 with relevant supporting enclosures.	**12/06/2015**		**Yes (vii)**	During the year 2020-21 around Rs 9.50 lac were spent towards CSR under different heads. **Complied.**
9	However, the detailed r eport should be submitt ed on implementation a nd expenditure for envi ronmental safeguards t o this regional offic e	As per submitted document by PAs, total Rs. 7,01,62,972 already incurred for environmental safeguards as stated above for various purposes. Being complied.	**12/06/2015**		**Yes (ix)**	Total cost already incurred on implemantion for environmental safeguard is Rs 7,01,62,972/- haeadwise expenditure is given below: wet fibre opener Rs 75,782 Reclaimation machine Rs 1,16,824 Bag Opening Machine Rs 17,61,770 Bag Opening Machine Rs 12,98,520 25” pulveriser machine Rs 1,75,500 Pollution control equipment Rs 8,08,000 Pollution control Rs 3,90,658

Sl.	Non- compliances details	Observation of RO (abridged)	Condition no.			Re-assessment by IRO / Response by PP
			EC date	Specific	General	
						Occupational health Rs 1,89,845 Environmental monitoring Rs 1,26,091 Solar Power Plant Rs 6,01,69,982 Cement Silos Rs 50,50,500 **Being complied.**
10	The copy of the consent should be submitted to this office.Further, the r enewal of the consent s hould be also obtained f rom the concerned auth ority	As per document submitted by PAs, PAs have obtained consent to operate (CTO) for Air and Water from UPPCB vide letter no. 111833/UPPC B/Lucknow (LAB)/CTO/air /LUCKNOW/2 020 and letter no. I 11833/UPPCB/ Lucknow(LAB)/CTO/air/LUC KNOW/2020 respectively both dated 04.01.2021 valid till 31.12.2022. Complied.	**12/06/2015**		**Yes** **(i)**	Copies of consent both air and water for the period from 01.01.2021 to 31.12.2022 are submitted **Complied.**

Deliberations by the Committee

7.1.19 The Committee noted the following:

1. The Committee noted that EIA/EMP report needs to be improved. Proper photographs should be submitted.
2. The Committee noted that the baseline data and incremental GLC due to the proposed project are above the NAAQ standards at many locations and detailed mitigation measures are not provided in EIA/EMP report. PP shall revise the mitigation measures on this high particulate matter.
3. The Committee suggested to carry out mineralogical study of Particulate Matter as the instant project involves the production of asbestos.

4. The Committee noted that action plan proposed to address the public hearing issued is not in accordance to Ministry's O.M dated 30/09/2020.PP shall revise the action plan in accordance with the said OM.
5. At plant boundary adjacent to the sensitive receptors sufficient dense green belt shall be developed for minimising the impact of the project on the habitation. EAC noted that the green belt has not adequately developed by the PP though they had obtained EC in 1999, 2010 and later in 2015.
6. Action plan for monitoring the sensitive receptors for adverse impact shall be submitted.
7. The housekeeping of the Unit does not appear satisfactory.
8. The Committee noted that this is existing Industry is going to use 19500 tons/MTPA Chrysolite Asbestos Fibers. As Asbestos fibres are crushed, ground mixed with OPC cement and Asbestos Corrugated & Plan sheets 250000 TPA will be produced. There are chances of fugitive emissions that might occur in the unloading of Chrysotile Asbestos area, crushing, grinding and mixing areas as well at all other production sites. Total dust should be characterized and asbestos concentrations should be evaluated and compared with Amorphous silicates permissible limit of 10 mg/m3 as per Indian Factories Act, 1948. Similarly, the concentration of Chrysolite fibres should be within 1.0 fiber/cc of air. Similarly, the Portland cement dust (total dust) should be within 10 mg/m3, Total dust containing less than 1% quartz as per Indian Factories Act, 1948. If concentrations found higher than these values in the process plant areas then suitable fibre control-engineering controls applicable to asbestos products manufacturing should be installed at unloading, charging, grinding and mixing areas. The workers should be subjects for medical examination to diagnose asbestosis disease by qualified public health specialist or pulmonologist.
9. The total weight of suspended particulate matter generated in the process and the percentage by the pollution control systems, must be reported by the PP in the revised application.

Recommendations of the Committee:

7.1.20 In view of the foregoing and after detailed deliberations, the Committee recommended that proposal to be **deferred** and the proposal may be re-considered based on the submission of above-mentioned information enumerated at para no. 7.1.19. The case should be placed before the committee after getting this requisite information.

Agenda No. 7.2

7.2 **Expansion for HSD Steel Bar/ Angle/ Channel/Ms Round/Ms Flat/Ms Section Manufacturing Unit with Project Capacity of Existing: 39,000 TPA; Proposed: 1,26,000 TPA; Total: 1,65,000 TPA; by M/s Mangala Ispat (Jaipur) Limited, located at Plot No. B-234, E-221 (A), E-221(A open area), Road No. 9, VKI Area, Jaipur, Rajasthan (Area: - 10,137.24 sq.m) – Consideration of Environmental Clearance.**

[Proposal No. IA/RJ/IND/273602/2021; File No. IA-J-11011/278/2021-IA-II(I)]

[Name of Consultant: M/s. Gaurang Environmental Solutions Pvt. Ltd., valid upto 19 Jan 2023]

7.2.1 M/s. Mangala Ispat (Jaipur) Limited has made an online application vide proposal no. IA/RJ/IND/273602/2021dated 20.05.2022 along with copy of EIA/EMP Report, Form - 2 and Certified Compliance Report seeking Environment Clearance (EC) under the provisions of the EIA Notification, 2006 for the project mentioned above. The proposed project activity is listed at schedule 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 presence of the Nahargarh Wildlife Sanctuary at a distance of 0.5Km and Eco Sensitive Zone boundary at a distance of 0.48 km. Hence, the project is appraised at Central Level as Category 'A'. The Unit is located outside of the ESZ notified by the Ministry.

7.2.2 Name of the EIA consultant: M/s. Gaurang Environmental Solutions Pvt. Ltd [Sl. No. 114, List of ACOs with their Certificate / Extension Letter No: NABET/EIA/2023/RA 0192 valid till 19/01/2023; Rev. 23, May 09, 2022].

Details submitted by Project proponent

7.2.3 The details of the ToR are furnished as below:

Date of application	Consideration	Details	Date of accord	Validity of ToR
11/02/2021 & EDS reply on 10/07/2021	Issued Standard Terms of Reference	Standard Terms of Reference	15/07/2021	14/07/2025

7.2.4 The project of M/s. Mangala Ispat (Jaipur) Limited is located in Plot No. B-234, E-221 (A), E-221(A open area), Road No.9, VKI Area, Jaipur, Rajasthan is for Expansion of HSD Steel Bar/ Angle/ Channel from 39,000 TPA to 1,65,000 TPA and dismantling the existing Reheating Furnace (15 TPHx1 No.) & installing new Reheating Furnace (25 TPHx1 No).

7.2.5 Environmental Site Settings:

S. No	Particulars	Details	Remarks
i.	Total land	1.01ha [Govt. 1.01 ha;]	Land use: Industrial Land
Ii	Land acquisition details as per	The proposed expansion will be executed	

<table>
<tr><td></td><td>MoEF&CC O.M. Dated 7/10/2014</td><td>on the existing 1.01 ha land only. Complete land of 1.01 ha is in possession of company. No additional land is required for proposed expansion.</td><td></td></tr>
<tr><td>iii.</td><td>Existence of Habitation & Involvement of R&R, if any.</td><td><u>Project site</u>: Nil
Study Area:<table><tr><th>Habitation</th><th>Distance</th><th>Direction</th></tr><tr><td>Mahapura</td><td>2.0</td><td>SSW</td></tr><tr><td>Harmada</td><td>2.2</td><td>NNW</td></tr></table></td><td>No R&R issue involved.</td></tr>
<tr><td>iv.</td><td>Latitude and Longitude of all corners of the project site.</td><td><table><tr><th>Point</th><th>Latitude (N)</th><th>Longitude (E)</th></tr><tr><td>1</td><td>26°59'10.43"</td><td>75°46'52.06"</td></tr><tr><td>2</td><td>26°59'8.34"</td><td>75°46'53.81"</td></tr><tr><td>3</td><td>26°59'8.09"</td><td>75°46'53.78"</td></tr><tr><td>4</td><td>26°59'8.09"</td><td>75°46'51.60"</td></tr><tr><td>5</td><td>26°59'8.45"</td><td>75°46'47.63"</td></tr><tr><td>6</td><td>26°59'10.50"</td><td>75°46'47.64"</td></tr></table></td><td></td></tr>
<tr><td>v.</td><td>Elevation of the project site</td><td>469 m above mean sea level</td><td></td></tr>
<tr><td>vi.</td><td>Involvement of Forest land if any.</td><td>No Forest Land is involved within the plant site.</td><td></td></tr>
<tr><td>vii.</td><td>Water body (Rivers, Lakes, Pond, Nala, Natural Drainage, Canal etc.) exists within the project site as well as study area</td><td><u>Project site</u>: Nil

<u>Study area</u>:<table><tr><th>Water body</th><th>Distance</th><th>Direction</th></tr><tr><td>Amanishah Nala</td><td>5.6 km</td><td>South</td></tr><tr><td>Tal Katora Lake</td><td>7.12 km</td><td>SE</td></tr><tr><td>Man Sagar Lake</td><td>7.0 km</td><td>SE</td></tr><tr><td>Maotha Lake</td><td>6.94 km</td><td>East</td></tr><tr><td>Hanuman Sagar Lake</td><td>6.43km</td><td>East</td></tr></table></td><td></td></tr>
<tr><td>viii.</td><td>Existence of ESZ/ ESA/national park/ Wildlife sanctuary/bio sphere reserve/tiger reserve/ Elephant reserve Etc. If any within the study area</td><td><u>Study area:</u>Nil
Name of the ESZ/ESA: Eco Sensitive Zone of Nahargarh Wildlife Sanctuary boundary located at 0.48 km and boundary of Nahargarh Wildlife Sanctuary at 0.5Km.
Status of Notification: Gazette Notification from MoEF&CC dated 08/03/2019.
Distance of project from ESZ/ESA: Zone of Nahargarh Wildlife Sanctuary boundary - 0.48 km
Authenticated map of ESZ projecting distance of ESZ from project site:</td><td></td></tr>
</table>

		Authentication of distances of the Wildlife Sanctuary and National Parkhas been obtained from the Office of Deputy Conservator of Forest (Wildlife), Chidiyaghar, Jaipur vide letter no **क्रमांकएफ** ()**सर्वे/ज़ू**/2020-21/3121-22 dated 06/05/2021. **Status of NBWL approval:** NBWL is not applicable. **List of Reserved and protected forests:** **SNo** **Particulars** **Distance** **Direction** 1. Papad ka RF 2.9Km ESE 2. Nindhar PF 3.3 Km NW 3. Amer RF 3.9 Km E 4. Nahargarh RF 4.2 Km SE	
ix.	Archaeological Sites (State Protected Monuments)	**Particulars** **Distance** **Direction** Sun Temple Amer 6.9 East Shri Jagat Shiromanni Temple 7.0 East Jama Masjid Amer 7.5 East Laxmi Narayan Temple 7.5 East	

7.2.6 The existing project was accorded Consent to Establish from Rajasthan State Pollution Control Board (RPCB) vide letter dated 31/05/1996. PP reported that the existing project does not come under the purview of Environmental Clearance as existing project is for Rolling mill. EC application submitted in pursuance to the Order dated 12/02/2020 of Hon'ble NGT in Appeal No. 55 of 2019. Consent to Operate for the existing unit was accorded RPCB vide letter dated 19/05/2017. The validity of CTO is up to 30/11/2021. Application for CTO renewal under Air and Water Acts for HSD Steel Bar/Angle/Channels to the tune of 39,000 TPA has been applied vide Application ID 294897 on dated 27/11/2021. The same is in under process. Brief of CTE and CTO obtained so far is as follows:

S. No.	Particulars	Production Capacity	Letter No and Date	Validity
Consent To Establish-HSD Steel Bar/Angle/Channel				
1.	Angle/ Sections/ Square Rods	40,800 TPA (136 MTD)	सं/No RPCB/ROJP/विश्वकर्मा/66/898 dated 31.05.1996	31.05.1996 to 30.05.1999
2.	HSD Steel bar/Angle/ Channels etc.	39,000 TPA (130 MTD)	F(Tech)/Jaipur(Jaipur (VKIA))/319(1)/2011-2012/2507-2508 dated 25.01.2012	01.12.2011 to 30.11.2014
3.	HSD Steel bar/Angle/	39,000 T/Annum	F(Tech)/Jaipur(jaipur(VKIA))/319(1)/2011-2012/502-503 dated 19.05.2017	18/04/2017 to

	Channels etc			30/03/2022#
#This Consent to Establish is being issued for additional capital investment of Rs. 921.68 lac.				

7.2.7 Implementation status of the existing CTO:

Facilities	Unit	As per CTO	Implementation Status as on date	Production As per CTO
HSD Steel Bar/ Angle/ Channel	TPA	The existing project does not come under the purview of Environmental Clearance as existing project is for Rolling mill. As per NGT order of I.A. No. 04/2020 in O.A. No. 55/2019(WZ) dated 16/01/2020 on the regulation of project requires Environment Clearance	39,000 TPA	39,000 TPA

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

Plant Equipment/Facility	Existing facilities (A)		Proposed Units (B)		Final(Existing +Proposed) (A+ B)		Remarks
HSD Steel Bar/ Angle/ Channel	Reheating Furnace: 1x15 TPH	39000 TPA	Dismantle existing Reheating Furnace and install new RHF: 1x25 TPH	1,26,000 TPA	RHF: 1x25 TPH	1,65,000 TPA	--

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

S No	Raw Material	Quantity (TPA)			Source	Distance from site(Kms)	Mode of Transportation
		Existing	Expansion	Total			
1	Ingots/ Billets	40,170	1,29,780	1,69,950	Local Market	50	Road
2.	Coal for Reheating furnace	4,800	12,000	16,800	Local Market	50	Road

7.2.10 Existing Water requirement is 155 m^3/day out of which fresh water is 9 m^3/day and Recycled water is 146 m^3/day. Fresh water demand is less than 10 m^3/day. Thus, CGWA permission is not required. Total water requirement after expansion will be 607m^3/day, out of which 27 m^3/day of fresh water requirement will be obtained from the Ground water and the remaining requirement of 580 m^3/day will be met through recycled water (one-time water demand for industrial purpose will be met through tanker supply). NOC from CGWA for 27 KLD water

extraction has been obtained vide application no 21-4/16728/RJ/IND/2022 dated 21.02.2022 and its valid up to 01.03.2024.

7.2.11 Existing power requirement of 1.4 MW is obtained from Jaipur Vidyut Vitran Nigam Limited (JVVNL). The power requirement for the project after expansion will be estimated as 3.5 MW, the same will be obtained from the JVVNL.

7.2.12 Baseline Environmental Studies:

<table>
<tr><td>Period</td><td>March, April and May'2021 (Pre-Monsoon Season)</td></tr>
<tr><td>AAQ parameters at 7 Locations (min and max)</td><td>$PM_{2.5}$ = 45.73 to 31.72 µg/m^3
PM_{10} = 84.69 to 61.21µg/m^3
SO_2 = 12.47 to 7.12 µg/m^3
NOx = 24.13 to 16.76 µg/m^3
CO = 670 to 390 µg/m^3</td></tr>
<tr><td>Incremental GLC level</td><td>PM_{10} = 0.38575 µg/m^3(Level at 0.3 km in SE)
$PM_{2.5}$ =0.25882 µg/m^3 (Level at 0.3 km in SE)
SO_2 = 3.6695 µg/m^3 (Level at 0.3 km in SE)
NOx = 20.9932 µg/m^3 (Level at 0.3 km in SE)
CO = 0.049 µg/m^3 (within site)</td></tr>
<tr><td>Ground water Quality at 7 locations</td><td>pH: 6.82 to 8.15,
Total Hardness: 145.78-553.96 Mg/l,
Chlorides: 77.47-358.34 mg/l,
Fluoride: 0.11-0.22 mg/l.
Heavy metals (Lead):0.01-0.01 mg/l</td></tr>
<tr><td>Surface water quality at 2 locations</td><td>pH: 7.49 to 7.66;
DO: 3.0 to 5.10 mg/l;
BOD: 15.40 to 19.80 mg/l.
COD- Nil</td></tr>
<tr><td>Noise levels Leq
(Day and Night)</td><td>52.8 to 65.4 for the day time and
40.0 to 50.7 for the Night time.</td></tr>
<tr><td>Traffic assessment study findings</td><td>• Traffic study has been conducted at Road No-9 which is 90 m from the plant site.
• Transportation of raw material, fuel & finished product will be done 100% by road.
• Existing PCU is 165PCU/hr on (Road No. 9) and existing level of service (LOS) is:
<table>
<tr><th>Road</th><th>V (Volume in PCU/hr.)</th><th>C (Capacity in PCU/hr.)</th><th>Existing V/C Ratio</th><th>LOS</th></tr>
<tr><td>Road No-9
2 lane (Two way)</td><td>165</td><td>1200</td><td>0.13</td><td>A</td></tr>
</table>
</td></tr>
</table>

NH-11 (Jaipur-Sikar)	1145	3600	0.32	B	

- PCU load after proposed expansion project will be 175 PCU/hr (165 Existing + 10 Additional) and level of service (LOS) will be:

Road	V (Volume in PCU/hr.)	C (Capacity in PCU/hr.)	Proposed V/C Ratio	LOS
Road No-9 2 lane (Two way)	165+10=175	1200	0.14	A
NH-11 (Jaipur-Sikar)	1145+10=1155	3600	0.32	B

*Note: Capacity as per IRC-106:1990 Guideline for capacity for roads.

Conclusion: the level of service will "A" i.e., excellent after including additional traffic due to proposed expansion project.

Flora and fauna	Schedule-I Species i.e. Common Indian Monitor, Indian peafowl, Panther/ Leopard, Striped hyena Conservation plan for Schedule-I Species i.e. Common Indian Monitor, Indian peafowl, Panther/ Leopard, Striped hyena have been submitted to the Office of Deputy Conservator of Forest, Jaipur on 18/02/2022. The approval is in under process.

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

Solid Waste

S. No.	Particulars	Quantity			Mode of Disposal
		Existing	Proposed	Total	
1.	Domestic solid waste	10.5 Kg/day	18.0 Kg/day	28.5 Kg/day	Will be handled by Municipal Corporation, Jaipur
2.	Fly ash	1.6 kg/day	4.0 kg/day	5.6 says 6 kg/day	Sent to brick manufacturing unis
3.	Mill scale/iron dust	2.6 T/day	8.4 T/day	11 T/day	It is primarily iron waste and having market value, which is being/will be sold to steel casting unit.

Hazardous Waste

Particulars	Category	Quantity			Management
		Existing	Proposed	Total	
Used/Spent oil	5.1	--	0.01KL/year	0.01KL/year	Authorized Recyclers
Recycle water tank sludge	--	0.15 TPA	0.35 TPA	0.5 TPA	Six monthly cleaning frequency and sold to cement unit

7.2.14 Public Consultation:

Details of advertisement given	30/09/2021: Dainik Bhaskar and Samachar Jagat
Date of public consultation	01/11/2021
Venue	Industrial Association Office, Vishwakarma Industrial Area, Rajasthan
Presiding Officer	Additional District Collector, City (North), District- Jaipur
Major issues raised	Environment Protection measures, Social-EMP Employment Green belt in plant premises. Provision for occupational health & Safety Rain Water Harvesting

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

S No	Major Activity Heads		Capital Cost				Recurring Cost (Rs. in Lakhs)
			Year of Implementation			Total Expenditure (Rs. In Lacs)	
			1st Year (Rs. In Lakhs)	2st Year (Rs. In Lakhs)	3st Year (Rs. In Lakhs)		
A	**Based on Need Based Study**						
1.	Community & Infrastructure Development						
	Construction of public toilets	Physical Activities	2 no. in Murlipura area	2 no. in Murlipura area	2 no. in VKI area		
		Budget	2.00	2.00	2.00	6.00	0.50
2.	Education						
	Construction of toilets in surrounding schools & its maintenance	Physical Activities	2 nos. (boys and girls) at RajkiyaUcch Madhyamik Vidyalaya, Murlipura, Jaipur.	2 nos. (boys and girls) at RajkiyaUcch Madhyamik Vidyalaya, Charannadi, Murlipura Jaipur.	-		
		Budget	2.00	2.00	-	4.00	0.50

S No	Major Activity Heads		Capital Cost				Recurring Cost (Rs. in Lakhs)
			Year of Implementation			Total Expenditure (Rs. In Lacs)	
			1st Year (Rs. In Lakhs)	2st Year (Rs. In Lakhs)	3st Year (Rs. In Lakhs)		
	Sports kits for schools	Physical Activities	Sports items Badminton, carom board, cricket set volley ball, foot boll, ring ball, skip rope, chess etc. in RajkiyaUcch Madhyamik Vidyalaya, Murlipura, Jaipur.	Sports items Badminton, carom board, cricket set volley ball, foot boll, ring ball, skip rope, chess etc. in RajkiyaUcch Madhyamik Vidyalaya, Charannadi, Murlipura Jaipur.	-	2.00	-
		Budget	1.00	1.00	-		
					Total A	**12.00**	**1.00**
B	**Based on Public Consultation**						
1	Chair, table and computer set for students and teachers.	Physical Activities	100 no. of Chair & table at RajkiyaUcch Madhyamik Vidyalaya, Murlipura, Jaipur.	100 no. of Chair & table at RajkiyaUcch Madhyamik Vidyalaya, Charannadi, Murlipura Jaipur.	10 no. of Computer at RajkiyaUcch Madhyamik Vidyalaya, Murlipura, Jaipur.		
		Budget	2.00	2.00	1.00	5.00	-
2	Plantation in VKI area, Murlipura and surrounding area	Physical Activities	500 nos. in VKI area.	500 nos. in Murlipura.	500 nos. in Vidhyadharnagar.		
		Budget	1.00	1.00	1.00	3.00	0.60
					Total B	**8.00**	0.60
	Total (A+B)					**20.00**	**1.60**

7.2.15 Existing capital cost of project was 18 crores. The capital cost of the proposed expansion project is Rs 38.0 Crores and the capital cost for environmental protection measures is proposed as Rs 1.43 Crores. The annual recurring cost towards the environmental protection measures is proposed as Rs 0.20 Crores. The employment generation from the proposed

expansion is 190 persons. The detail of cost for environmental protection measures is as follows:

S. No.	Description of Item	COST OF EMP					
		Existing		Proposed		Total	
		Capital Cost	Recurring Cost	Capital Cost	Recurring Cost	Capital Cost	Recurring Cost
1	Air Pollution Control (Bag house, Multi cyclone and wet scrubber, DG Set stack)	20.0	2.5	32.0	2.2	52.0	4.7
2.	Water Environment (Existing: Septic tank followed by soak pit, proposed: Installation of Automatic Control Airlift Crossflow MBR followed by Ozonator STP)	0.5	0.1	8.0	2.0	8.5	2.1
3	Rain water Harvesting (1-Existing)	3.5	0.5	--	1.0	3.5	1.5
4	Environmental Monitoring (Air, Water, Noise and Soil)	--	2.0	--	4.0	--	6.0
5	Green Belt	1.0	0.25	7.50	2.0	8.50	2.25
6	Occupational Health and Safety (PPE) (Training, Medical Checkup & Awareness programme)	2.5	0.5	10.0	2.0	12.5	2.5
7.	EMP-Social	--	--	20.0	1.60	20.0	1.60
8.	Conservation Plan (Schedule-I species)	--	--	38.0	--	38.0	--
Total		**27.5**	**5.85**	**115.5**	**14.8**	**143.0**	**20.65**

7.2.16 Total green belt will be developed in 0.33 ha area which is about 33% of the total project area. 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, guidelines. Local and native species will be planted with a density of 2500 trees per hectare. Total no. of 850 saplings (100 existing and 750 proposed) will be planted and nurtured in 0.33 hectares in 1 years.

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

Certified compliance report from Rajasthan Pollution Control Board

7.2.18 The Status of compliance of CTO was obtained from Regional Office (North), Rajasthan Pollution Control Board, Jaipur vide letter dated 18.05.2022. As per compliance report, the industry was found non-operational at the time of inspection as the unit has removed major part of plant & machinery in order to upgrade the plant. Further, RO has submitted the compliance of the conditions stated in the CTO issued by SPCB on 19/05/2017.

7.2.19 The project proponent had earlier applied for EC vide proposal no. IA/RJ/IND/253058/2021 dated 08/03/2022 and the proposal was considered in the 2nd EAC meeting held on 22-23rd March, 2022 wherein the Committee returned the proposal in its present form due to technical shortcomings. The observations and recommendations of the EAC are as follows:

Observations of the Committee (EAC during 22-23rd March 2022)

7.2.20 The Committee noted the following:

i. PP shall provide the contour lines in project layout map and according to the contours of project site run off drainage, waste water drainage system and all other facility. PP shall submit the revised layout map.
ii. PP has been using coal as fuel in reheating furnace. Additional mitigation measures shall be provided to meet the PM emission level 30 mg/ Nm^3.
iii. Wet scrubber has been proposed with reheating furnace. Instead, PP shall install Bag filter instead of wet scrubber.
iv. Traffic load assessment shall be carried out for proposed project. PP shall provide the capacity of the internal and connecting road in terms of Million Standard Axle (MSA).
v. Action plan proposed to address the public hearing issues is not in accordance to Ministry's O.M. dated 30/09/2020. PP shall revise the action plan with monitorable physical targets.
vi. ToR point #9 is not addressed properly, same shall be revisited.
vii. Solid waste management plan shall be provided.
viii. Air Modelling has been done on the basis of PM emission limit of 150 mg/ Nm^3. PP shall revise the Air Modelling according to PM emission level of 30 mg/ Nm^3.
ix. Maximum GLC level for PM, SO_2 and NOx is at same location, clarification shall be provided for same.
x. SO_2 value is high as per baseline data submitted; additional mitigation measures shall be provided to reduce the SO_2 level.
xi. PP has not provided the action taken report for noncompliance of CTO conditions, same shall be provided.
xii. PP shall clarify whether project site comes under severely polluted area or not.
xiii. PP shall provide approved conservation plan (or) application status for schedule 1 species located in study area of the project.

Recommendations of the Committee (EAC during 22-23rd March, 2022)

7.2.21 In view of the foregoing and after deliberations, the Committee recommended the proposal to be returned in its present form to address the shortcomings enumerated above in para 7.2.20 above and submit revised application as per the provisions of EIA Notification, 2006.

7.2.22 The project proponent has submitted the revised application for EC vide proposal no. IA/RJ/IND/273602/2021 dated 20.05.2022 addressing the issues in compliance to the EAC recommendation during 22-23rd March, 2022 as follows:

S. No.	Recommendation of EAC during 2nd EAC held on 22-23rd March, 2022	Reply/Response by PP
1.	PP shall provide the contour lines in project layout map and according to the contours of project site run off drainage, waste water drainage system and all other facility. PP shall submit the revised layout map.	Revised layout plan showing contour lines in project layout map and according to the contours of project site run off drainage, waste water drainage system and all other facility has been mentioned. The same is uploaded as Appendix-X on Parivesh portal S.No.39 (a) as copy of EIA EMP (Annexures).
2.	PP has been using coal as fuel in reheating furnace. Additional mitigation measures shall be provided to meet the PM emission level 30 mg/ Nm^3.	1. Coal is being/will be used as fuel for re-heating furnace. 2. Bag house will be provided at coal pulverize area. 3. To minimize & control the emission from Re-Heating Furnace, exhaust gas after suction through side flue duct will be passed through Gravity chamber (2 parallel), multi cyclone and baghouse before its discharge to atmosphere through stack (45 m) after expansion. 4. Coal is being/will be stored in covered designated storage area. 5. 33% of plant area will be under green cover. Green belt development along with plant periphery and within the plant premises. 6. All adequate measures is/will be strictly followed to keep the pollution level well within the limits.
3.	Wet scrubber has been proposed with reheating furnace. Instead, PP shall install Bag filter instead of wet scrubber.	In the existing unit, cyclone along with scrubber has been installed. After expansion, to minimize & control the emission from Re-Heating Furnace, exhaust gas after suction through side flue duct will be passed through Gravity chamber (2 parallel), multi cyclone and baghouse before its discharge to atmosphere through stack (45 m) after expansion.
4.	Traffic load assessment shall be carried out for proposed project. PP shall provide the capacity of the internal and connecting road in terms of Million Standard Axle (MSA).	Traffic load assessment has been carried out and mentioned in Chapter – VII, Sub-section-7.11 in EIA/EMP Report. Revised EIA/EMP report has been uploaded on Parivesh portal S.No. 39 (a) as copy of EIA/EMP. Load of one vehicle during operation time is 25 tons hence there will be no damage due to proposed expansion on Road No. 9 by unit as load of 3Ax Tandem is 27.5 Tons and unit per vehicle load is 25 Tons.
5.	Action plan proposed to address the public hearing issues is not in accordance to Ministry's O.M. dated 30/09/2020. PP shall revise the action plan with	Public Hearing Action plan is mentioned in Chapter-VII sub-section 7.2 of EIA/EMP Report and updated at para 7.2.13 above. Revised EIA/EMP report has been uploaded on Parivesh portal S. No. 39 (a) as copy of EIA/EMP.

<table>
<tr><th>S. No.</th><th>Recommendation of EAC during 2nd EAC held on 22-23rd March, 2022</th><th>Reply/Response by PP</th></tr>
<tr><td></td><td>monitorable physical targets.</td><td></td></tr>
<tr><td>6.</td><td>ToR point #9 is not addressed properly, same shall be revisited.</td><td>ToR point #9 in Chapter-I of EIA Report has been revised. Copy of Environmental Policy has been uploaded as Appendix-XXIII as copy of EIA/EMP (Annexures) S.No. 39 (a) on Parivesh portal.</td></tr>
<tr><td>7.</td><td>Solid waste management plan shall be provided.</td><td>Solid waste management plan is as under:-</td></tr>
<tr><td colspan="3">
Solid Waste Generation
<table>
<tr><th rowspan="2">S. No.</th><th rowspan="2">Particulars</th><th colspan="3">Quantity</th><th rowspan="2">Mode of Disposal</th></tr>
<tr><th>Existing</th><th>Proposed</th><th>Total</th></tr>
<tr><td>1.</td><td>Domestic solid waste</td><td>10.5 Kg/day</td><td>18.0 Kg/day</td><td>28.5 Kg/day</td><td>Will be handled by Municipal Corporation, Jaipur</td></tr>
<tr><td>2.</td><td>Fly ash</td><td>1.6 kg/day</td><td>4.0 kg/day</td><td>5.6 says 6 kg/day</td><td>Sent to brick manufacturing unis</td></tr>
<tr><td>3.</td><td>Mill scale/iron dust</td><td>2.6 T/day</td><td>8.4 T/day</td><td>11 T/day</td><td>It is primarily iron waste and having market value, which is being/will be sold to steel casting unit.</td></tr>
</table>
Hazardous Waste
<table>
<tr><th rowspan="2">Particulars</th><th rowspan="2">Category</th><th colspan="3">Quantity</th><th rowspan="2">Management</th></tr>
<tr><th>Existing</th><th>Proposed</th><th>Total</th></tr>
<tr><td>Used/Spent oil</td><td>5.1</td><td>--</td><td>0.01KL/year</td><td>0.01KL/ year</td><td>Authorized Recyclers</td></tr>
<tr><td>Recycle water tank sludge</td><td>--</td><td>0.15 TPA</td><td>0.35 TPA</td><td>0.5 TPA</td><td>Six monthly cleaning frequency and sold to cement unit</td></tr>
</table>
</td></tr>
<tr><td>8.</td><td>Air Modelling has been done on the basis of PM emission limit of 150 mg/ Nm3 . PP shall revise the Air Modelling according to PM emission level of 30 mg/ Nm3 .</td><td>Revised Air modelling according to PM emission level of 30 mg/Nm^3 has been carried out. Details about the same is mentioned in chapter-IV, subsection 4.3.2.1 of EIA/EMP Report. Revised EIA/EMP report has been uploaded on Parivesh portal S.No. 39 (a) as copy of EIA/EMP.</td></tr>
<tr><td>9.</td><td>Maximum GLC level for PM, SO_2 and NOx is at same location, clarification</td><td>GLC of PM_{10}, SO_2, NOx at the same distance due to occurrence of Neutral stability conditions for a major part of the monitoring period (March, April and May’2022 covering summer season).</td></tr>
</table>

S. No.	Recommendation of EAC during 2nd EAC held on 22-23rd March, 2022	Reply/Response by PP
	shall be provided for same.	Due to this the Maximum GLCs of all the Parameters are observed at same distance and direction/
10.	SO_2 value is high as per baseline data submitted; additional mitigation measures shall be provided to reduce the SO_2 level.	The maximum value for SO_2 as per baseline date is observed at Project Site is 12.47 µg/m^3. To reduce the SO_2 level following mitigation measures will be adopted: - From Re-Heating Furnace, exhaust gas after suction through side flue duct will be passed through Gravity chamber (2 parallel), multi cyclone and baghouse before its discharge to atmosphere through stack (45 m) after expansion.
11.	PP has not provided the action taken report for noncompliance of CTO conditions, same shall be provided.	Certified compliance report of consent conditions of M/s Mangla Ispat Jaipur has been obtained from member secretary, RSPCB Vide letter no F.Tech(M-294)/RPCB/OGM/(UID-31283)/251 dated 18.05.2022 has been uploaded as Appendix-VI on parivesh portal S.No.39 (a) as copy of EIA EMP (Annexures).
12.	PP shall clarify whether project site comes under severely polluted area or not.	No, the project does not come under severely polluted area.
13.	PP shall provide approved conservation plan (or) application status for schedule 1 species located in study area of the project	Conservation plan for Schedule-I Species i.e., Common Indian Monitor, Indian peafowl, Panther/ Leopard, Striped hyena have been submitted to the Office of Deputy Conservator of Forest, Jaipur on dated 18.02.2022. The same is in under process. Details about conservation plan has been uploaded on Parivesh portal on S.No.28 (i).

7.2.23 The proposal with revised EIA/EMP Report was considered in the 7th EAC meeting held on 13-14th June, 2022. The deliberations and recommendations of the EAC are as follows:

Deliberations by the Committee

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

i. 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.

ii. 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.

iii. 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.

iv. Instant proposal is for expansion of HSD Steel Bar/ Angle/ Channel from 39,000 TPA to 1,65,000 TPA and dismantling the existing Reheating Furnace (15 TPHx1 No.) & installing new Reheating Furnace (25 TPHx1 No).

v. The existing project was accorded Consent to Establish from Rajasthan State Pollution Control Board (RPCB) vide letter dated 31/05/1996. The existing project does not come under the purview of Environmental Clearance as existing project is for Rolling mill. Instant EC application is submitted in pursuance to the Order dated 12/02/2020 of Hon'ble NGT in Appeal No. 55 of 2019.

vi. Eco Sensitive Zone of Nahargarh Wildlife Sanctuary boundary is located at 0.48 km and boundary of Nahargarh Wildlife Sanctuary at 0.5 Km. Detailed mitigation measures to prevent any impacts on the Nahargarh Wildlife Sanctuary has been deliberated by the EAC and found in order. EAC is of the view that though the said Unit is located outside of the ESZ, but very near to the sanctuary and in this regard the comments from ESZ Division of the Ministry may also be obtained.

vii. There are 4 nos. of Schedule - I species reported in study area, namely Common Indian Monitor, Indian peafowl, Panther/ Leopard, Striped hyena. Conservation plan has been prepared and submitted to Office of Deputy Conservator of Forest, Jaipur on 18/02/2022 for its approval.

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

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

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

xi. 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.

xii. 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.

xiii. 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

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

A. Specific conditions

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

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

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

iv. The Eco Sensitive Zone of Nahargarh Wildlife Sanctuary boundary is located at 0.48 km and boundary of Nahargarh Wildlife Sanctuary at 0.5 Km. The PP shall implement the detailed mitigation measures to prevent any impacts on the Nahargarh Wildlife Sanctuary and implement the same in consultation with the State Forest/Wildlife Department. PP shall also take necessary permission from the State Government and other concerned authority in this regard.

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

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

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

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

ix. The total weight of suspended particulate matter generated in the process and the percentage by the pollution control systems, must be reported by the PP in the annual report.

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

xi. 100 % solid waste generated in the facility shall be utilized.

xii. All stockyards shall be having impervious flooring and shall be equipped with water

spray system for dust suppression. Stock yards shall also have garland drains to trap the run off material.

xiii. At least 85% of hot charging of billets shall be done and balance can be processed through RHF using LDO. No coal firing of RHF will be permitted.

xiv. No pickling shall be carried out without obtaining prior approval from appropriate authority.

xv. PP shall install adequate scrubber to arrest the pollutant to comply the Standards as notified under the provisions of the E(P) Rules, 1986.

xvi. PP shall analyse the Sulphur content in coal. Low sulphur coal shall be used so that SO_2 concentrations may come down.

xvii. Following additional arrangements to control fugitive dust shall be provided:

a. Fog /Mist Sprinklers at all on bulk raw material storage area (at the transfer points) like Iron Ore, Coal and for Fly Ash and similar solid waste storage areas.

b. Proper covered vehicle shall be used while transport of materials.

c. Wheel washing mechanism shall be provided in entry and exit gates with complete recirculation system.

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

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

B. <u>General conditions</u>:

I. Statutory compliance:

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

II. Air quality monitoring and preservation

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

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

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

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

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

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

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

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

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

III. Water quality monitoring and preservation

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

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

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

IV. Noise monitoring and prevention

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

V. Energy Conservation measures

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

VI. Waste management

i. Used refractories shall be recycled.

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

iii. Oily scum and metallic sludge recovered from rolling mills ETP shall be mixed, dried, and briquetted and reused melting Furnaces.

VII. Green Belt

i. Green belt shall be developed in an area equal to 33% of the plant area with native tree species in accordance with CPCB guidelines. The greenbelt shall inter alia cover the entire periphery of the plant

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

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

VIII. Public hearing and Human health issues

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

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

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

IX. Environment Management

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

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

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

X. Miscellaneous

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

ii. The copies of the environmental clearance shall be submitted by the project proponents to the Heads of local bodies, Panchayats and Municipal Bodies in addition to the

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

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

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

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

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

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

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

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

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

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

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

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

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

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

Agenda No. 7.3

7.3 Proposed Installation of Ferro Alloy Plant through Setting Up of 4x16.5 MVA Submerged Arc Furnaces along with Sinter & Briquette Plant at Village: Hat-Asuriaand Basudebpur (North) and Hat-Asuria, P.O. Hat-Asuria, P.S. Barjora, District Bankura, West Bengal by M/s Maithan Ferrous Private Limited – Consideration of Environmental Clearance.

[Proposal No. IA/WB/IND/80421/2018; File No. IA-J-11011/306/2018-IA-II(I)]

[Name of Consultant: M/s. Envirotech East Pvt. Ltd.; valid upto 12.09.2022]

7.3.1 M/s Maithan Ferrous Private Limited has made an online application vide proposal no. IA/WB/IND/80421/2018 dated 23.05.2022 along with copy of EIA/EMP Report, Form - 2 seeking Environment Clearance (EC) under the provisions of the EIA Notification, 2006 for the project mentioned above. The proposed project activity is listed at schedule no. 3(a) Metallurgical industries (ferrous & non-ferrous) under Category "A" of the schedule of the EIA Notification, 2006 and appraised at Central Level.

7.3.2 Name of the EIA consultant: M/s. Envirotech East Pvt. Ltd. [S. No. 177, List of ACOs with their Certificate / Extension Letter No: NABET/EIA/2124/SA 0145 valid till 12.09.2022; Rev. 23, May 09, 2022].

Details submitted by Project proponent

7.3.3 The details of the ToR are furnished as below:

Date of application	Consideration	Details	Date of accord	Validity of ToR
27th September, 2018	1st meeting of REAC (Industry-1), held on 26th - 28th November, 2018	Terms of Reference in the name of M/s. Maithan Alloys Limited	10.12.2018	09.12.2022
22nd December 2020	-	Transfer of ToR from M/s. Maithan Alloys Limited to M/s. Maithan Ferrous Private Limited	14.01.2021	

7.3.4 The project of M/s Maithan Ferrous Private Limited is located at Village: Hat-Asuria and Basudebpur (North) and Hat-Asuria, P.O. Hat-Asuria, P.S. Barjora, District Bankura, West Bengal State for Proposed installation of following:

- Ferro Alloys Plant (4x16.5 MVA Submerged Arc Furnaces) for production of 1,20,000 TPA Ferro Alloys (Ferro Chrome, Silico Manganese, Ferro Silicon & Ferro Manganese)
- Sinter Plant (2 x 100 TPD) for production of 70,000 TPA Manganese Ore Sinter

- Chrome Ore Briquette Plant (2 x 30 TPH) for production of 3,00,000 TPA Chrome Ore Briquette

7.3.5 Environmental Site Settings:

<table>
<tr><th>S. N.</th><th>Particulars</th><th>Details</th><th>Remarks</th></tr>
<tr><td>i.</td><td>Total land</td><td>16.19 ha
[Private: 16.19 ha]</td><td>Land use: PP has not still applied for conversion of agricultural land to Industrial purpose
– 16.19 ha</td></tr>
<tr><td>ii.</td><td>Land acquisition details as per MoEF&CC O.M. dated 7/10/2014</td><td>16.19 ha</td><td>The land for the proposed project is already under the possession of the Company.</td></tr>
<tr><td>iii.</td><td>Existence of habitation & involvement of R&R, if any</td><td>There is no habitation and no involvement of R&R.</td><td>Total land under the possession of the company.</td></tr>
<tr><td>iv.</td><td>Latitude and Longitude of the project site</td><td><table><tr><th>POINTS</th><th>LATITUDE</th><th>LONGITUDE</th></tr><tr><td>A</td><td>23°24'18.26" N</td><td>87°17'49.13"E</td></tr><tr><td>B</td><td>23°24'16.78" N</td><td>87°17'52.52"E</td></tr><tr><td>C</td><td>23°24'22.09" N</td><td>87°17'58.94"E</td></tr><tr><td>D</td><td>23°24'18.73" N</td><td>87°18'04.23"E</td></tr><tr><td>E</td><td>23°24'15.51" N</td><td>87°17'59.99"E</td></tr><tr><td>F</td><td>23°24'08.96" N</td><td>87°17'56.20"E</td></tr><tr><td>G</td><td>23°24'03.62" N</td><td>87°17'52.85"E</td></tr><tr><td>H</td><td>23°24'03.98" N</td><td>87°17'47.95"E</td></tr><tr><td>I</td><td>23°24'11.74" N</td><td>87°17'36.94"E</td></tr><tr><td>J</td><td>23°24'10.17" N</td><td>87°17'44.67"E</td></tr></table></td><td>-</td></tr>
<tr><td>v.</td><td>Elevation of the project site</td><td>78.3 m (257 feet)</td><td>-</td></tr>
<tr><td>vi.</td><td>Involvement of Forest land if any.</td><td>No involvement of Forest Land.</td><td>-</td></tr>
<tr><td>vii.</td><td>Water body</td><td><u>Project Site:</u></td><td>-</td></tr>
</table>

S. N.	Particulars	Details	Remarks
	exists within the project site as well as study area	No water body in the project site. **<u>Study area:</u>** Damodar River - 6.0 km in NE direction	
viii.	Existence of ESZ / ESA / national park / wildlife Sanctuary / biosphere Reserve / tiger reserve / elephant reserve etc. if any within the study area	Nil	-

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

Name of the Unit	Proposed Capacity	Proposed Production	Products
Ferro Alloys Plant	4 x 16.5 MVA Submerged Arc Furnaces	1,20,000 TPA	Ferro Alloys (Ferro Chrome, Silico Manganese, Ferro Silicon & Ferro Manganese)
Sinter Plant	2 x 100 TPD	70,000 TPA	Manganese Ore Sinter
Briquette Plant	2 x 30 TPH	3,00,000 TPA	Chrome Ore Briquette

7.3.7 The capital cost of the project is Rs. 271 Crores and the capital cost for environmental protection measures is proposed as Rs. 16.5 Crores. The annual recurring cost towards the environmental protection measures is proposed as Rs. 1.53 Crores. The employment generation from the proposed project is 570 persons. The details of cost for environmental protection measures is as follows:

S. No.	Description of Item	Proposed (Rs. in Crores)	
		Capital Cost	Recurring Cost
i.	Cost of Air Pollution Control Systems	12.0	1.20
ii.	Cost of Water conservation & Pollution Control	1.12	0.11
iii.	Cost of Solid Waste Management System	0.4	0.04
iv.	Green belt development	0.16	0.02
v.	Noise Reduction Systems	0.2	0.02
vi.	Occupational Health Management	0.3	0.03
vii.	Risk Mitigation & Safety Plan	0.5	0.05

S. No.	Description of Item	Proposed (Rs. in Crores)	
		Capital Cost	Recurring Cost
viii.	Environmental Management Department	0.6	0.06
ix.	Total Budget - Public Hearing related	1.22	-
TOTAL		**16.5**	**1.53**

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

Deliberations by the Committee

7.3.9 The Committee noted the following:

1. The EAC noted that the Project Proponent has not even submitted the application for land conversion from the agricultural land to industrial purpose. The Committee is of the view that how PP will start the implementation of the project without land conversion to Industrial purpose and advised the Consultant to guide the PP properly so that the project can be implemented in time bound manner.
2. The River Damodar flowing at a distance of 6.0 km from the Project site in north-eastern side High Flood Level data has to be provided in EIA/EMP report for deliberation of the EAC.
3. EAC also noted that the TOR compliances in the EIA/EMP is ambiguous and only references are provided in the report. EAC advised the Consultant that they should submit the complete TOR compliances as per TOR granted by the Ministry.
4. PP has not submitted the PPT as per the Template provide by the EAC in the agenda. EAC asked the Consultant about this. Consultant mentioned that he has not read the complete guidelines of the Agenda and requested the EAC to provide some time for submission of the revised application along with PPT.
5. The industry is going to use silica quartz in large quantities and going to produce Silico Manganese and Ferro Silicon alloy steel. Therefore, it is necessary to control silica/quartz exposures at production departments, not only emission norms as per Indian Factories Act. The permissible limit for silica/quartz should be within 10 mg/m3 for total dust as per Indian Factories Act. Therefore, it is recommended to monitor personal and area exposures for silica quartz dust in the process plants.
6. Every tonne of (ferro-chrome) slag will contain about 270 kg SiO2. However, only 20 kg of quartz is added per tonne of metal, equivalent to 1 tonne slag. This error must be corrected. (slide 14).
7. The coke rate budgeted is much higher than the industry norms (400 kg coke+400 kg coal is budgeted as against 300 kg coke/tonne FeMn being the industry norm). (slide 14).
8. Why there is evaporation loss of 390 KLD in S.A.F. This water used only for cooling. All the water supplied to S.A.F. is lost as proposed here. Recycling of water and the proper calculations must be presented.
9. Explain why there is 30 KLD of evaporation loss in sinter plant?
10. Prepare and implement an action plan for the disposal of electronic waste.
11. What is the estimated total weight of suspended particulate matter (SPM) generated per annum. What is the percentage of this captured by pollution control units?

12. Document a plan of action to control emissions when these cross the critical limits. Give specific steps.
13. What is the quantum of solar energy planned to be generated in the Plant?
14. In view of the deficiencies in the project report, the PP/Consultant is requested to revise the EIA/EMP Report. The EAC accepted the request of Consultant/PP for revision of EIA/EMP Report. Since whole process is online on Parivesh Portal the PP/Consultant shall revise the application on Portal.

Recommendations of the Committee

7.3.10 In view of the foregoing and after detailed deliberations, the committee the Committee recommended that proposal to be **returned in its present form** and submit the revised EIA/EMP Report and other details as per Appendix III of the EIA Notification, 2006.

Consideration in ToR Proposals

Agenda No. 7.4

7.4 Regularization of the existing project of Rolling Mill having capacity of MS Ingots/Billets of 27,000 TPA (90TPD), MS CTD/TMT Bars & MS Round of 1,50,000 TPA (500TPD), Heating Furnace - 21Ton/Hr, Induction Furnace - -9 Ton/Heat" by M/s Rathi Special Steels Limited, located at Plot no.# SP-29, F-20- 24, RIICO Industrial Area, Khushkhera, District. Alwar, Rajasthan – Consideration of TOR.

[Proposal No. IA/RJ/IND/272130/2022; File No. IA-J-11013/8/2019-IA-II(I)]

[M/s. Enkay Enviro Services Pvt. Ltd.; valid upto 12/12/2023]

7.4.1 M/s. Rathi Special Steels Limited has made an application online vide proposal no. IA/RJ/IND/272130/2022 dated 10.05.2022 in prescribed format (Form-I), copy of pre-feasibility report along-with proposed ToR for undertaking detailed EIA study as per the EIA Notification, 2006 for the project mentioned above. The proposed project activity is listed at S. No. 3(a) Metallurgical Industries and attracts general condition due to Inter-state boundary of Rajasthan & Haryana lies at a distance 3.77 Km, NNW and being appraised at central level.

7.4.2 Name of the EIA consultant: M/s. Enkay Enviro Services Pvt. Ltd. [S No 112, List of ACOs with their Certificate / Extension Letter No: NABET/EIA/2023/RA 0183 valid till 12/12/2023; Rev. 23, May 09, 2022].

Details submitted by Project proponent

7.4.3 The project of M/s Rathi Special Steels Limited located in RIICO Industrial Area Khushkhera, Tehsil - Tijara, District- Alwar, Rajasthan is for regularization of the existing project of Rolling Mill having capacity of MS Ingots/Billets of 27,000 TPA (90TPD), MS CTD/TMT

Bars & MS Round of 1,50,000 TPA (500TPD), Heating Furnace - 21Ton/Hr, Induction Furnace - -9 Ton/Heat.

7.4.4 Environmental site settings:

<table>
<tr><th>S. No.</th><th>Particulars</th><th>Details</th><th>Remarks</th></tr>
<tr><td>i.</td><td>Total land</td><td>Total plot Area is 35,200Sq.m.(3.52Ha)
There is no change is land use w.r.t. land allotted by RIICO.
<table>
<tr><th rowspan="2">S. No.</th><th rowspan="2">Land Use</th><th colspan="2">Area (Sq.m)</th><th rowspan="2">Total area</th><th rowspan="2">Percentage (%)</th></tr>
<tr><th>Existing Area</th><th>Proposed Area</th></tr>
<tr><td>1.</td><td>Plant Area</td><td>11150.71</td><td>0.0</td><td>11150.71</td><td>31.68</td></tr>
<tr><td>2.</td><td>Paved Area (Road, Corridor,)</td><td>15317.07</td><td>0.0</td><td>15317.07</td><td>43.51</td></tr>
<tr><td>3.</td><td>Green Belt Area</td><td>8732.22</td><td>5347.78 (outside the plant premises)</td><td>8732.22</td><td>24.81</td></tr>
<tr><td>4.</td><td>Open area</td><td>0.0</td><td>None</td><td>0.0</td><td>0.0</td></tr>
<tr><td colspan="2">Total</td><td>35,200</td><td>--</td><td>35,200</td><td>100</td></tr>
<tr><td colspan="6">Note*: The available Green area within the plant premises is 24.81%. About 15.19% green area will be developed by the proponent in consent with RIICO Office.</td></tr>
</table></td><td></td></tr>
<tr><td>ii.</td><td>Land acquisition details as per MoEF&CC O.M. dated 7/10/2014</td><td>Existing project is already situated in Khushkhera RIICO Industrial Area which is under the possession of the company.</td><td>-</td></tr>
<tr><td>iii.</td><td>Existence of habitation & involvement of R&R, if any.</td><td>Land is already converted for industrial use. (RIICO Industrial Area) there is no habitation in the existing area, therefore rehabilitation & resettlement plan is not required/ applicable.</td><td>-</td></tr>
<tr><td>iv.</td><td>Latitude and Longitude of all corners of the project site.</td><td>
<table>
<tr><th>Point</th><th>Latitude</th><th>Longitude</th></tr>
<tr><td>(1)</td><td>28° 6'43.78"N</td><td>76°47'40.24"E</td></tr>
<tr><td>(2)</td><td>28° 6'43.20"N</td><td>76°47'40.00"E</td></tr>
<tr><td>(3)</td><td>28° 6'42.73"N</td><td>76°47'39.81"E</td></tr>
<tr><td>(4)</td><td>28° 6'40.69"N</td><td>76°47'39.05"E</td></tr>
<tr><td>(5)</td><td>28° 6'41.05"N</td><td>76°47'37.01"E</td></tr>
<tr><td>(6)</td><td>28° 6'38.61"N</td><td>76°47'35.96"E</td></tr>
<tr><td>(7)</td><td>28° 6'40.74"N</td><td>76°47'29.63"E</td></tr>
<tr><td>(8)</td><td>28° 6'46.35"N</td><td>76°47'31.90"E</td></tr>
<tr><td>(9)</td><td>28° 6'45.29"N</td><td>76°47'35.15"E</td></tr>
<tr><td>(10)</td><td>28° 6'44.08"N</td><td>76°47'34.68"E</td></tr>
</table></td><td>--</td></tr>
</table>

<table>
<tr><th>S. No.</th><th>Particulars</th><th>Details</th><th>Remarks</th></tr>
<tr><td></td><td></td><td>
<table>
<tr><td>(11)</td><td>28° 6'43.14"N</td><td>76°47'37.76"E</td></tr>
<tr><td>(12)</td><td>28° 6'43.31"N</td><td>76°47'37.95"E</td></tr>
<tr><td>(13)</td><td>28° 6'43.79"N</td><td>76°47'38.14"E</td></tr>
<tr><td>(14)</td><td>28° 6'44.36"N</td><td>76°47'38.37"E</td></tr>
</table>
</td><td></td></tr>
<tr><td>v.</td><td>Elevation of the project site</td><td>The highest and lowest elevation of the project site is 264 AMSL and 260 AMSL</td><td>--</td></tr>
<tr><td>vi.</td><td>Involvement of Forest land if any.</td><td>No forest land is involved.</td><td>-</td></tr>
<tr><td>vii.</td><td>Water body (Rivers,Lakes, Pond,Nala,Natural Drainage,Canal etc.) exists within the project site as well as study area</td><td>Project site: Nil.
Study Area:
<table>
<tr><th>Water Bodies</th><th>Distance</th><th>Direction</th></tr>
<tr><td>Sahibi River (non-Perennial)</td><td>4.21</td><td>WSW</td></tr>
<tr><td>Rattanpur Distributary</td><td>9.20</td><td>WNW</td></tr>
<tr><td>Raliawas Distributary</td><td>9.42</td><td>NW</td></tr>
<tr><td>Garhi Bolni Distributary</td><td>9.73</td><td>W</td></tr>
<tr><td>Sare Khurd Canal</td><td>10.80</td><td>ENE</td></tr>
<tr><td>Nikhari Distributary</td><td>11.23</td><td>NW</td></tr>
<tr><td>Kheri Motla Distributary</td><td>12.16</td><td>WSW</td></tr>
<tr><td>Water Pond N/V Sare Khurd</td><td>13.61</td><td>ENE</td></tr>
<tr><td>Jitpur Distributary</td><td>14.19</td><td>NW</td></tr>
</table>
</td><td>--</td></tr>
<tr><td>viii.</td><td>Existence of ESZ/ ESA/ national park/wildlife sanctuary/biosphere reserve/tiger reserve/ elephant reserve etc. if any within the study area</td><td>Nil

List of Reserved and protected forests: Are given in the following table.
<table>
<tr><th>Forests</th><th>Distance(km)</th><th>Direction</th></tr>
<tr><td>Banvan P.F.</td><td>5.39</td><td>ENE</td></tr>
<tr><td>Khori Kalan P.F.</td><td>6.19</td><td>E</td></tr>
<tr><td>P.F. Near Village Banvan</td><td>6.65</td><td>NE</td></tr>
<tr><td>Guwalda P.F.</td><td>7.79</td><td>E</td></tr>
<tr><td>Banvan P.F. Near Village Joriah</td><td>8.61</td><td>NE</td></tr>
<tr><td>Gondhan P.F.</td><td>8.62</td><td>NE</td></tr>
<tr><td>Chaupanki P.F.</td><td>10.18</td><td>ENE</td></tr>
<tr><td>Indaur R.F.</td><td>11.12</td><td>E</td></tr>
<tr><td>Khidarpur P.F.</td><td>11.18</td><td>SE</td></tr>
<tr><td>Sare Kalan P.F.</td><td>11.83</td><td>ENE</td></tr>
<tr><td>Bhalki P.F.</td><td>12.36</td><td>SSE</td></tr>
<tr><td>Milakpur Turk P.F.</td><td>13.07</td><td>ESE</td></tr>
</table>
</td><td></td></tr>
</table>

S. No.	Particulars	Details			Remarks
		Rangala R.F.	14.27	NNE	
		Gotoli P.F.	14.52	SE	

7.4.5 The existing project was accorded Consent to Establish vide letter no. RPCB/RO/BWD/OR-755/493 dated 30.06.2006. The proposal for obtaining Environmental Clearance has been applied first time as previously the project of Rolling Mill was not covered under the purview of Environmental Clearance under EIA Notification 2006. (Secondary metallurgical processing industries with Production ≤60,000 TPA). Latest Consent to Operate for the existing unit was accorded by Rajasthan State Pollution Control Board vide letter no. F(CPM)/Alwar(Tijara)/3978(1)/2018-2019/1771-1773 dated 21.06.2018. The validity of CTO was up to 31.07.2021. Renewal of CTO is applied and pending for want of Environmental Clearance. The details of CTO are as follows:

7.4.6 Implementation status of the existing CTE/CTO:

Details	Document no.	Date	Validity	Implementation status
Details of Earlier EC	The proposal is applied first time for obtaining Environmental Clearance as previously the project of Rolling Mill was not covered under the purview of Environmental Clearance (<60,000TPA, Secondary metallurgical processing industry)			
DETAILS OF CTE	RPCB/RO/BWD/OR-755/493	30.06.2006	Valid For 3 Years Or Upto The Actual Date Of Production	Granted for CTD BARS,TMT BARS (1,50,000MT/Annum)
	F(CPM)/Alwar(Tijara)/8(1)/2011-2012/ 4737-4739	07.09.2012	05.04.2012 TO 31.03.2015	Granted for M.S. INGOTS -80TPD (24,000MTPA)
	F(CPM)/Alwar(Tijara)/8(1)/2011-2012/ 4411-413	29.04.2015	03.10.2013 TO 30.09.2016	Granted for COAL GASIFIER - 1.50TPH
	F(CPM)/Alwar(Tijara)/8(1)/2011-2012/ 3259-3261	02.11.2015	02.11.2015 TO 31.10.2018	Granted for M.S.INGOTS/ BILLETS - 90TPD (27,000MTPA)
	F(CPM)/Alwar(Tijara)/8(1)/2018-2019/ 1768-1770	21.06.2018	12.12.2015 TO 30.11.2018	Granted for COAL PULVERIZER- 1 no.
	F(CPM)/Alwar(Tijara)/8(1)/201	21.06.2018	12.10.2016 TO	Granted for DG

Details	Document no.	Date	Validity	Implementation status
	8-2019/ 1765-1767		30.09.2021	SET 1(125kVA) - ,DG SET 1- (380kVA)
DETAILS OF CTO	**RPCB/RO/BWD/OR-527/858**	27.07. 2007	31.07.2008	Granted for CTD BARS (1,50,000MT/ Annum)
	RPCB/RO/BWD/OR-755/1465	18.08.2009	31.07.2010	Granted Extension Of CTO For CTD BARS (1,50,00MT/ Annum
	F(CPM)/Alwar(Tijara)/8(1)/2011-2012/ 7462-7464	16.01.2012	01.08.2010 TO 31.07.2013	Granted for MS CTD/TMT BARS & MS ROUND (1,50,000MT/ Annum)
	F(CPM)/Alwar(Tijara)/8(1)/2011-2012/ 67-69	04.05.2015	01.08.2013 TO 31.07.2016	Granted for MS CTD/TMT BARS & MS ROUND (1,50,000MT/ Annum)
	F(CPM)/Alwar(Tijara)/8(1)/2018-20199/ 17671-1773	21.06.2018	01.08.2016 TO 31.07.2021	Granted for MS CTD/TMT BARS & MS ROUND (1,50,000mt/ Annum) & M.S. INGOTS/ BILLETS (90TPD)
	--	---	Applied for renewal of CTO and	Pending for want of Environmental Clearance.

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

S. No.	Product	Existing Capacity (MTPA)	Total Capacity (MTPA)
1.	MS Ingots/Billets	27,000 TPA (90TPD)	27,000 TPA (90TPD)

S. No.	Product	Existing Capacity (MTPA)	Total Capacity (MTPA)
2.	MS CTD/TMT Bars & MS Round	1,50,000 TPA (500TPD)	1,50,000 TPA (500TPD)
3.	Induction Furnace	9Ton/Heat	9Ton/Heat
4.	Heating Furnace	21Ton/Hr	21Ton/Hr

7.4.8 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	Existing	Total	Source	Mode of transport
		Quantity			
1	MS Billets	94.940MT/Day	94.940MT/Day	Local	Transported by Trucks
2	Scrap	530.170MT/Day	530.170MT/Day		
3	Coal	20kg/Ton/day	20kg/Ton/day	Local	
4	Gas (PNG)	1000m^3/day	1000m^3/day	Local	

7.4.9 Existing one time Water requirement is 88m^3/day, out of which 32 m^3/day of fresh water requirement is being obtained from the ground water and permission for the same has been obtained from CGWA vides letter no. CGWA/NOC/IND/ORIG/2021/10436 dated 09.01.2021 valid up to 08.01.2023 and the remaining 56 m^3 /day is being met from the Recycling.

7.4.10 Existing power requirement of 4500 kVA (15095.5KW Sanctioned capacity) is obtained from JVVNL, Alwar from nearest GSS of 220KV.

7.4.11 The capital cost of the project is Rs 82.01 Crores and the capital cost for environmental protection measures is proposed as Rs 0.41 Crores and recurring cost of Rs. 0.05 Crores. The employment generation from the existing project is 175.

7.4.12 PP has reported the following related to the project under consideration:

Particular	Details
Direction	A letter issued from RSPCB vide letter no. RPCB/RO/BWD/1747 dated 25.01.2022 for Direction under section 12(2) (xi) of the Commission for Air Quality Management in National Region and Adjoining areas Act'2021 for closure of Industrial Operations/Process. Thus, the industry is closed till further order.
Court Case	IA No. 150/2022 in Appeal No.-29/2022 at NGT.

7.4.13 Proposed Terms of Reference: **[Baseline data collection period: March - April - May 2022]**

Attributes& Parameters	Sampling		Measurement Method	Protocol
	No. of stations	Frequency		
A. Air Environment				

Attributes& Parameters	Sampling		Measurement Method	Protocol
	No. of stations	Frequency		
Meteorological Wind Speed Wind Direction Max. Temperature Min. Temperature Relative Humidity Rain fall Solar radiation Cloud cover	1–site area in the project impact area- site area	One hourly continuous	Mechanical/ Automatic Weather stations Max/ Min Thermometer Hygrometer Rain gauge As per IMD specifications	IS 5182 Part1-20 Site specific primary data is essential Secondary data from IMD
Pollutants Pollutants $PM_{(10)}$ $PM_{(2.5)}$	8 locations Including Site	24 hourly twice a week	As per CPCB Guidelines Gravimetric (High-Volume with Cyclone)	IS 11255(Part 1):1985
SO_2			Improved West & Gaeke	IS 5182(Part 2):2001
NO_X			Modified Jacob Hochheiser	IS 5182(Part 6):1975
CO		8 hourly twice a week	NDIR Method	IS 5182(Part 10):1999
B. Noise				
Hourly equivalent noise levels	8 locations including Project site.	Frequency Once in season	Integrated Sound Level Measurement Instrument, DT - 805 issued by Mextech	IS: 4954-1968 as adopted by CPCB. CPCB/ OSHA CPCB/ IS:5954-1968
Hourly equivalent noise levels	--	Once		
Hourly equivalent noise levels	Site	Once in season		
C. Water				
Parameters for water quality	8 locations Including Site	Once in season		
Colour (in hazen units)			Visual Method	IS : 3025 (P-4) 1983
Odour			Manual	IS : 3025 (P-5) 1983
Temperature ^oC			Thermameter	IS 3025(Part 9):1984
pH			pH meter	IS : 3025 (P-11)1983
Turbidity (NTU)			Nephelometer	IS 3025(Part 10):1984
Total Dissolved Solids (mg/l)			Gravimetric	IS : 3025 (P-16) 1984
Biochemical Oxygen Demand (mg/l)			DO consumption in 3 days at 27°C	IS : 3025 (P-44) 1993
Carbonate as $CaCO_3$			Titrimetric	IS 3025(Part

Attributes& Parameters	Sampling		Measurement Method	Protocol
	No. of stations	Frequency		
(mg $CaCO_3$/l)				51):2001
Coliform (No./100 ml)			MPN	IS : 5401
Fecal Coliform			MPN	IS : 5401
Sodium as Na(mg/l)			Flame photometry	IS 3025(Part 45):1993
Potassium as K (mg/l)			Flame photometry	IS 3025(Part 45):1993
Chloride as Cl (mg/l)			Argentometriv titration	IS 15210(Part 0/Sec 0):2002/ ISO 8762
Nitrite (mg N/L)			Colorometry	
Chemical Oxygen Demand (mg/l)			Potassium dichromate method	
Magnesium (mg $CaCO_3$/l)			EDTA Titrimetric	IS 3025(Part 46):1994
Sulphate (mg/l)			Turbidimetry	IS 3025(Part 24):1986
D. Land Environment				
Soil Texture pH Electrical Conductivity Bulk density Porosity Total organic carbon N, P, K, Zinc, Cd Chloride, Alkali metal, permeability, Water holding capacity, Cu, Iron as Fe, Moisture content, Boron as B	8 sample from project sit as well as nearby agriculture land.(soil samples has been collected as per BIS specifications)	Season wise	Collected and analyzed as per soil analysis reference book, M.I. Jackson and soil analysis reference book by C.A. Black	Once in a year.
Land use/ Landscape Location code Total project area Topography Drainage (Natural) Cultivated, forest, plantations, water bodies, roads and settlements		--	Global Positioning System Toposheet (1:50,000) Satellite Imagery* (1:50,000)	
E. Biological Environment				

Attributes& Parameters	Sampling		Measurement Method	Protocol
	No. of stations	Frequency		
Plants Butterflies Amphibians Reptiles Birds Mammals	--	Three- five days in each months	Quadrate sampling/ enumeration/ survey methods Transect method/ Visual encounter survey Visual encounter survey/ Opportunistic survey Visual encounter survey/ Opportunistic survey Point count/ Opportunistic survey Tracks / signs and visual encounter survey	Preliminary assessment point quarter plot-less method for terrestrial vegetation survey
Fauna, Avian fauna, Rare and endangered species Sanctuaries/ National park/ Biosphere reserve/ Migratory routes.	--	--	--	Secondary data to be collected from Government offices, NGO's published literature.
F. Socio-Economic Environment				
Demographic structure infrastructure resource baseEconomic resource base health status: Occupation pattern cultural and aesthetic attributes education	Socio- Economic observation will be based on random sampling method with access to the nearest habitation to the extent possible.	One site visit and prior to the final submission of the project.	Primary data collection through questionnaire and interviews	Secondary data from census records, statistical hand-books, toposheets, health records and relevant official records available in public domain.

Deliberation by the Committee

7.4.14 The Committee noted the following:

i. The instant proposal is for regularization of the existing project of Rolling Mill having capacity of MS Ingots/Billets of 27,000 TPA (90TPD), MS CTD/TMT Bars & MS

Round of 1,50,000 TPA (500TPD), Heating Furnace - 21Ton/Hr, Induction Furnace - -9 Ton/Heat.

ii. The proposal is for regularization of existing unit in compliance of MoEF&CC letter no. F. No. - IA-J-11013/24/2022-IA-II(I) dated 13.04.2022 to Rajasthan State Pollution Control Board and order of Hon'ble National Green Tribunal in O.A. no. 55/2019(WZ) in matter of Gajubha Jesar Jadeja vs Union of India & Ors. dated 12.02.2020 & Letter no. F. No. - IA-J-11013/24/2022-IA-II(I) dated 13.04.2022.

iii. The EAC deliberated on the proposal. Based on the KML file presented by the PP, the proposed Unit is brown field project and the project was operational based on the CTE/CTO obtained from the State Pollution Control Board.

iv. As reported by PP, a letter has been issued from RSPCB vide letter no. RPCB/RO/BWD/1747 dated 25.01.2022 for Direction under section 12(2) (xi) of the Commission for Air Quality Management in National Region and Adjoining areas Act, 2021 for closure of Industrial Operations/Process. Thus, the industry is closed till further order. Also, there is a court case in Hon'ble NGT vide IA No. 150/2022 in Appeal No.-29/2022.

v. The EAC noted that the instant project comes under Critically Polluted Area (CPA). PP has committed the proposed mitigation measures and detailed action plan to be submitted in the EIA/EMP Report.

vi. The EAC also noted that the instant project is located at 3.77 km interstate boundary of Rajasthan and Haryana, hence PP has applied at the Central level as a Category 'A' project for obtaining EC under the provisions of the EIA Notification, 2006.

vii. The EAC also noted that the RSPCB vide letter no. RPCB/RO/BWD/1747 dated 25.01.2022 has issued the Direction under section 12(2) (xi) of the Commission for Air Quality Management in National Region and Adjoining Areas Act' 2021 to the said Unit for its closure of Industrial Operations/Process. Thus, the industry is closed till further order. EAC observed that proposal is technically found satisfactory for prescribing TOR. However, the Ministry to further examined this aspect.

Recommendations of the Committee

7.4.15 After deliberations, the Committee **recommended** the project proposal for prescribing following specific ToRs for undertaking detailed EIA and EMP study **subject to further examination/decision on CPA & Directions issued by the CAQM in National Region and Adjoining Areas**, in addition to the generic ToRs enclosed at Annexure-1 read with additional ToRs at Annexure-2:

(i) The implementation on the Direction issued by the Commission for Air Quality Management in National Region and Adjoining Areas.

(ii) The implementation of the Action Plan/Mitigation measures as prescribed for the CPA, as the Unit is located in CPA.

(iii) The industry shall use CETP treated waste water for industrial processes to reduce the stress on Ground water resource as and when made available, accordingly the PP will incorporate the water balance in the EIA/EMP Report.

(iv) Ground water shall be abstracted only for the domestic water demand (drinking purpose only).

(v) The industry shall use PNG gas as per direction no. 64 of the Commission for Air Quality Management in National Region and Adjoining Areas.

(vi) The Sahibi River exists nearby of the project site. The PP shall submit the suitable steps /conservation plan along with contouring, Run -off calculations, disposal etc. As a river exist nearby of the project area, so 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 provided.

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

(viii) Explore possibilities for recycling and reusing of treated water in the unit to reduce the fresh water demand and waste disposal. PP shall submit an action plan for gradual phasing out of ground water consumption and switching to alternative source of water.

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

(x) PP should submit action plan for rainwater harvesting.

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

(xii) Project proponent shall prepare layout plan showing all internal roads minimum 6m width and 9m turning radius with proper looping for smooth traffic flow, including fire tender as per NBC. Road network shall connect all service areas in layout. This drawing shall include area statement showing plot area, area under roads, parking, green belt with calculations and % with respect to plot area of project site and proper indexing.

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

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

(xv) 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.

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

(xvii) Action plan for fugitive emission control in the plant premises shall be provided.

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

(xix) 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 of not less than 2500 per ha within a time frame of one year shall be submitted. Survival rate of green belt developed shall be monitored on periodic

basis to ensure that damaged plants are replaced with new plants in the subsequent years.

(xx) An action plan for the disposal of electronic waste must be drawn up and implemented.

Agenda No. 7.5

7.5 Expansion of Steel Plant and Regularization of partly constructed Iron Ore Pellet Plant of M/s Crest Steel & Power Private Limited, located in Village Joratarai, Post Mangatta, Tehsil & District Rajnandgaon, Chhattisgarh – Consideration of TOR as per SOP 07.07.2021 (Violation Case).

[Proposal No. IA/CG/IND/272981/2022; File No. J-11011/753/2008-IA.II(I)]

[Name of Consultant: M/s Pollution and Ecology Control Services; QCI NABET Accreditation: valid upto 16/10/2022]

7.5.1 M/s. Crest Steel and Power Private Limited has made an application online vide proposal no. IA/CG/IND/261985/2022 dated 03/06/2022 in prescribed format (Form-I), copy of pre-feasibility report along-with proposed ToR for undertaking detailed EIA study as per the EIA Notification, 2006 for the project mentioned above. The proposed project activity is listed at S. No. 2(b) Mineral Beneficiation, 3(a) Metallurgical Industries, 4(b) Coke oven plants and 1(d) Thermal Power Plants under Category "A" of the schedule of the EIA Notification and appraised at central level.

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

Details submitted by Project proponent

7.5.3 The project of M/s. Crest Steel and Power Private Limited located in Survey No. 1260/2, 1260/1, 1263,1257/6, 1258/1, 1259/ 1,2,3,4,5,6 and other at Joratarai Village, Mangatta (PO), Tehsil & District Rajnandgaon, Chhattisgarh State is to expand the manufacturing capacity of existing units and installation of Iron Ore Beneficiation Plant, Blast Furnace, Sinter Plant, Coke Oven Plant, Electric Arc Furnace, LRF, VOD with slab, bloom billet caster, Rolling Mill for TMT/wire rod with further deep drawing into wire for radial tyre/ wire rope etc and Hot Strip Mill for making HR coil further processing into ERW pipe/ square/ rectangle/ sections and Regularization of Partly Constructed (More than 60%) Iron Ore Pellet Plant.

7.5.4 Environmental site settings:

S. No.	Particulars	Details	Remarks
1.	Total land	Total land requirement for the proposed unit is about 168.01 ha which is already in possession.	The present land use is industrial use.
2.	Land acquisition details as per MoEF&CC O.M. dated 7/10/2014	The land is in possession of the Crest Steel and Power Private Limited	-

<table>
<tr><th>S. No.</th><th>Particulars</th><th>Details</th><th>Remarks</th></tr>
<tr><td>3.</td><td>Existence of habitation & involvement of R&R, if any.</td><td>No R&R is involved.

Study Area:
No. of Village: 39

<table><tr><th>Habitation</th><th>Distance</th><th>Direction</th></tr><tr><td>Joratarai
(Total population:2120)</td><td>700m</td><td>NW</td></tr></table></td><td>-</td></tr>
<tr><td>4.</td><td>Latitude and Longitude of all corners of the project site.</td><td><table><tr><th>S.N.</th><th>LATITUDE</th><th>LONGITUDE</th></tr><tr><td>1.</td><td>21°11'30.55"N</td><td>81°11'44.25"E</td></tr><tr><td>2.</td><td>21°11'39.44"N</td><td>81°11'58.84"E</td></tr><tr><td>3.</td><td>21°11'26.32"N</td><td>81°12'20.52"E</td></tr><tr><td>4.</td><td>21°11'11.16"N</td><td>81°12'27.26"E</td></tr><tr><td>5.</td><td>21°10'53.76"N</td><td>81°12'24.12"E</td></tr><tr><td>6.</td><td>21°10'43.88"N</td><td>81°12'16.93"E</td></tr><tr><td>7.</td><td>21°10'36.08"N</td><td>81°12'17.90"E</td></tr><tr><td>8.</td><td>21°10'49.04"N</td><td>81°11'59.98"E</td></tr><tr><td>9.</td><td>21°11'4.63"N</td><td>81°11'58.29"E</td></tr><tr><td>10.</td><td>21°11'24.79"N</td><td>81°11'46.29"E</td></tr></table></td><td></td></tr>
<tr><td>5.</td><td>Elevation of the project site</td><td>307m above mean sea level</td><td></td></tr>
<tr><td>6.</td><td>Involvement of Forest land if any.</td><td>No involvement of Forest Land.</td><td>-</td></tr>
<tr><td>7.</td><td>Water body (Rivers, Lakes, Pond, Nala, Natural Drainage, Canal etc.) exists within the project site as well as study area</td><td>Study area
<table><tr><th>Water Body</th><th>Distance</th><th>Direction</th></tr><tr><td>Shivnath River :</td><td>3.0 Km</td><td>E</td></tr><tr><td>Chitawar Nala</td><td>3.6 Km</td><td>NNE</td></tr><tr><td>Bharda Nala</td><td>3.5 Km</td><td>N</td></tr><tr><td>Ghatewa Nala</td><td>8.5 Km</td><td>NW</td></tr></table>
Project site: 3 abandoned canals are passing through the project site. It will not be disturbed and 6 metre of landscape will be developed on both side of the canals.</td><td></td></tr>
<tr><td>8.</td><td>Existence of ESZ/ ESA/ national park/ wildlife</td><td>Nil</td><td>-</td></tr>
</table>

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

7.5.5 The existing project was accorded environmental clearance vide lr.no. J-11011/753/2008-IA II (I) dated 27th August 2010. Consent to Operate for the existing unit was accorded by Chhattisgarh Environment Conservation Board vide lr. no. 7690/TS/CECB/2022 dated 28th January 2022. The validity of CTO is up to 31st January 2025.

7.5.6 Implementation status of the existing EC

S. No.	Facilities	Units	As per EC dated 27th August 2010	Implementation Status in April 2022	Production as per CTO
1.	Iron Ore Crushing Plant	TPA	17,95,200	-	-
2.	DRI (Sponge Iron)	TPA	9,24,000 (8x350 TPD)	1) 2 x 350 TPD :- 2,31,000 TPA (in operation) 2) 2 x 350 TPD :– 2,31,000 TPA (underway) Total : 4 x 350 TPD(Sponge Iron after completion of project): 4,62,000 TPA	2,31,000 TPA (2X350 TPD)
3.	Induction Furnace with LRF (Billets)	TPA	5,78,100	2 x 15 TPH – 96,000 TPA	2 x 15 TPH – 96,000 TPA
4.	Electric Arc Furnace (Billets)	TPA	3,30,000	-	-
5.	Rolling Mill (TMT Bars)	TPA	5,61,000	-	-
6.	Wire Rod Mill	TPA	2,06,250	-	-
7.	Captive Power Plant	MW	106 MW 64 MW	a) WHRB – 16 MW b) FBBB – 43 MW	a) WHRB – 16 MW

S. No.	Facilities	Units	As per EC dated 27th August 2010	Implementation Status in April 2022	Production as per CTO
	WHRB FBC		42 MW	Total – 59 MW after Completion of the project.	b) FBBB – 43 MW
8.	Ferro Manganese Ferro Silicon Silico Manganese	TPA	92,250 TPA	-	-
9.	Coal Washery	TPA	3.2 MTPA	95% of the work completed of 1 MTPA coal washery	-

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

S. No.	Details	Existing in operation with Valid CTO	Under Way	Proposed	Total
1.	DRI(Sponge Iron)	2,31,000 TPA(2X350TPD)	2,80,000 TPA(2X350 TPD)	To enhance the production of operational 2x350 TPD Kiln by change in raw material. After this change the production will be 2,80,000TPA.	5,60,000TPA (4X350TPD)
2.	Iron Ore Beneficiation Plant	---	----	1.8MTPA	1.8MTPA
3.	Iron Ore Pellet Plant (for Regularization)	--	1.4MTPA	--	1.4MTPA
4.	Blast Furnace of 650Cum	--	--	7,28,000TPA	7,28,000TPA
5.	Sinter Plant	--	--	6,00,000TPA	6,00,000TPA
6.	Coke Oven Plant (non recovery vertical shaft with WHRB type)	--	---	3,60,000TPA (2x0.18 MTPA)	3,60,000TPA (2x0.18 MTPA)
7.	Steel Melting	96,000 TPA		96,000 TPA	1,92,000 TPA.

S. No.	Details	Existing in operation with Valid CTO	Under Way	Proposed	Total
	Shop	(2X15TPH)	--	(2x15 TPH)	
	4a) Induction Furnace				
	4b) Electric Arc Furnace	--	---	2 x 60 T Electric Arc Furnace with LRF,VOD,CCM	9,50,400 TPA
8.	Rolling Mill (TMT Bars/wire rod radial tyre wire)	---	---	4,00,000 TPA	4,00,000 TPA
9.	Hot Strip Mill (HR coil) , ERW pipe /rectangle / square sections	---	---	4,00,000 TPA	4,00,000 TPA
10.	Oxygen Plant	---	---	620 TPD	620 TPD
11.	CPP (WHRB)	1 x 16 MW	---	1X16 MW	1 x 16 MW 1 x 16 MW Total 32 MW
	WHRB from Coke Oven	--	--	2 X 15 MW	2X15MW Total 30 MW
12.	CPP (FBB)	1 x 8 MW	1 x 35 MW	1x35 MW	1X8 MW 2x35 MW Total 78 MW
13.	Coal Washery	---	1.0 MTPA. EC is for 3.2 MTPA	---	1.0 MTPA
14.	Railway Sliding	---	---	3.0 MTPA	3.0 MTPA

7.5.8 Crest Steel & Power Private Limited has been taken over by New Management through NCLT. At the time of takeover of the unit some facilities are in operation and some facilities are underway initiated by old management. The new management after take over of Crest Steel & Power Private Limited through NCLT proposed to expand the manufacturing capacity of existing units and installation of Iron Ore Beneficiation Plant, Blast Furnace, Sinter plant, Coke oven plant, Steel melting shop (Induction Furnace and Electric Arc Furnace), Rolling Mill, Hot strip Mill and Regularization of Partly Constructed (More than 60%) Iron Ore Pellet Plant.

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

S.N.	Raw Material	Quantity (TPA)	Sources	Distance from site (in Kms.)	Mode of Transport

S.N.	Raw Material	Quantity (TPA)	Sources	Distance from site (in Kms.)	Mode of Transport
Beneficiation Plant 1.8 MTPA					
1.	Low Grade Iron Ore	18,00,000	NMDC, Bacheli	400-500 Km	Rail /Road
Pellet Plant 1.4 MTPA					
1.	Iron Ore Concentrate	14,56,000	Inhouse	-	Rail /Road
2.	Bentonite/Binder	14,000	Vishakapatnam	500 Km	Road
3.	Limestone/Dolomite	22,400	Katni	300 Km	Road
4.	Green Ball Moisture (10%)	1,54,000	Open Market	150 Km	Road
Coal Gasifier (Fludized Bed Type)					
1.	Coal	95,000	SECL Mines	300-400 Km	Rail/Road
Sponge Iron Plant 5,60,000 TPA					
1.	Pellet	7,95,200	Inhouse	-	Conveyer Belt
2.	Coal	5,54,400	SECL Mines	300-400 Km	Road/Rail
3.	Dolomite	16,800	Open Market		Road
Blast Furnace 7,28,000 TPA					
1.	Iron Ore /Pellet	6,55,200	Inhouse	-	Conveyer Belt
2.	Sinter	6,26,080	Inhouse	-	Conveyer Belt
3.	Coke	2,91,200	Inhouse	-	Conveyer Belt
4.	Pulverized Coal	1,16,480	SECL Mines	300-400 Km	Road/Rail
5.	Air Blast	10,19,200	-	-	-
Sinter Plant 6,00,000 TPA					
1.	Iron Ore Fines	5,10,000	Inhouse	-	Conveyer Belt
2.	Return Sinter Fines	90,000	Inhouse	-	Conveyer Belt
3.	Fluxes	1,20,000	Local Market	100-150 Km	Road
4.	Non Coking Coal	36,000	SECL Mines	300-400 Km	Road/Rail
Coke Oven Plant 3,50,000 TPA					
1.	Hard Coking Coal	2,83,500	SECL Mines	300-400 Km	Road/Rail
2.	Soft Coking Coal	94,500	SECL Mines	300-400 Km	Road/Rail
3.	Semi Soft Coal	94,500	SECL Mines	300-400 Km	Road/Rail
Induction Furnace 1,92,000 TPA					

S.N.	Raw Material	Quantity (TPA)	Sources	Distance from site (in Kms.)	Mode of Transport
1.	Sponge Iron	1,51,600	Inhouse	-	Conveyer Belt
2.	Scrap	55,680	Open Market	-	Road
3.	Ferro Alloys	1,920	Open Market	-	Road
EAF 9,50,400TPA					
1.	Hot Metal	712800	Inhouse	-	Ladle
2.	Pig Iron/ Scrap	37066	-	-	Road
3.	DRI	468547	-	-	Road
4.	Calcined lime (including LF)	82685			
5.	Calcined dolo	21859	-	-	Road
6.	Ferro-alloys (including LF)	14256	-	-	Road
7.	Fluorspar	1426	-	-	
Rolling Mill 4,00,000 TPA					
1.	Billets	4,16,000	Inhouse	-	Direct hot charging / Reheating Furnace
2	Coal for Reheating furnace	28,000	SECL Mines	300-400 Km	Road/Rail
Hot Strip Mill 4,00,000 TPA					
1.	Billets	4,88,400	Inhouse	-	Direct hot charging
Power Plant 2x35 MW					
1.	Coal	3,12,000	SECL Mines	-	Rail/Road
2.	Char	55,440	Inhouse	-	-
Coal Washery 1.0 MTPA					
1.	Raw Coal	10,00,000	SECL Mines	300 Km	Rail/ Road

7.5.10 The total requirement of water for the operation of plant is 12575 KLD and is being and will be supplied by CSIDC.

7.5.11 The total power required for proposed expansion and existing project is 150 MW. Electric power will be supplied from own captive power plant.

7.5.12 The total cost of the project including existing + underway + proposed project will be Rs.2500 crores and the capital cost for environmental protection measures is proposed as Rs.250 Crores. The employment after expansion total employment generation will be about 2500-3000.

Violation Details

7.5.13 It is a case of violation. The PP has reported that the previous management has initiated the work of Installation of 1.4 MTPA Iron Ore Pellet Plant without obtaining Environment Clearance from Ministry of Environment, Forest & Climate Change, New Delhi. They have completed almost 60% construction of the 1.4 MTPA Iron Ore Pellet Plant. The construction work of 1.4 MTPA Iron Ore Pellet Plant was closed since January 2014. PP is ready to comply all the points of TOR for Violation Project and follow SOP dated 07.07.2021 for identification & handling of Violation cases under EIA notification 2006 will comply all points of TOR for Violation project and follow all SOP given in OM dated 07.07.2021 published by Ministry of Environment, Forest & Climate Change, New Delhi. PP has completed almost Structural Fabrication 63%, Techno Fabrication 31.8% , Equipment 10.8% and RCC 79.6% of total work of 1.4 MTPA Iron Ore Pellet Plant with investment of Rs. 91 Crore Cr. PP is ready to pay penalty of 1% of the project cost incurred toward 1.4 MTPA Iron Ore Pellet Plant. The construction work of 1.4 MTPA Iron Ore Pellet Plant was closed since January 2014.

7.5.14 Proposed Terms of Reference: **[Baseline data collection period: March to May 2022)]**

Attributes	**Sampling**	
	No. of stations	Frequency
A. Air		
a. Meteorological parameters	1 location	Continuously 24 hrs once for 13 weeks during study period.
b. AAQ parameters	8 locations	Continuously 24 hrs once for 13 weeks during study period.
A. Noise	8 locations	Continuously 24 hrs once during study period.
B. Water		
Surface water/Ground water quality parameters	Surface Water : 8 locations Ground Water: 8 locations	Once during study period.
C. Land		
a. Soil quality b. Land use	8 locations in 10 km Study Area	Once during study period.
D. Biological a. Aquatic b. Terrestrial	Random sampling/Quadrate Method	Once during study period.
E. Socio-economic parameters	Field survey through questionnaire, group discussion and random Sampling in the study area.	Once during study period.

Deliberation by the Committee

7.5.15 The Committee noted the following:

i. Instant proposal is for expansion of manufacturing capacity of existing units and installation of Iron Ore Beneficiation Plant, Blast Furnace, Sinter Plant, Coke Oven Plant, Electric Arc Furnace, LRF, VOD with slab, bloom billet caster, Rolling Mill for TMT/wire rod with further deep drawing into wire for radial tyre/ wire rope etc. and Hot Strip Mill for making HR coil further processing into ERW pipe/ square/ rectangle/ sections and Regularization of Partly Constructed (More than 60%) Iron Ore Pellet Plant.

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

iii. Crest Steel & Power Private Limited has been taken over by New Management through NCLT. At the time of takeover of the unit some facilities are in operation and some facilities are underway initiated by old management. The new management after take over of Crest Steel & Power Private Limited through NCLT proposed to expand the manufacturing capacity of existing units and installation of Iron Ore Beneficiation Plant, Blast Furnace, Sinter plant, Coke oven plant, Steel melting shop (Induction Furnace and Electric Arc Furnace), Rolling Mill, Hot strip Mill and Regularization of Partly Constructed (More than 60%) Iron Ore Pellet Plant.

iv. PP has reported that the previous management had initiated the work of Installation of 1.4 MTPA Iron Ore Pellet Plant without obtaining Environment Clearance from Ministry of Environment, Forest & Climate Change. They have completed almost 60% construction of the 1.4 MTPA Iron Ore Pellet Plant. The construction work of 1.4 MTPA Iron Ore Pellet Plant was closed since January 2014. PP is ready to comply all the points of TOR for Violation Project and follow SOP dated 07.07.2021 issued by Ministry of Environment, Forest & Climate Change for identification & handling of Violation cases under EIA notification 2006. PP has completed almost Structural Fabrication 63%, Techno Fabrication 31.8% , Equipment 10.8% and RCC 79.6% of total work of 1.4 MTPA Iron Ore Pellet Plant with investment of Rs. 91 Crore Cr. PP is ready to pay penalty of 1% of the project cost incurred toward 1.4 MTPA Iron Ore Pellet Plant. The construction work of 1.4 MTPA Iron Ore Pellet Plant was closed since January 2014.

v. The EAC noted that this is a case of violation and PP shall to comply SOP dated 07.07.2021 issued by Ministry of Environment, Forest & Climate Change, for identification & handling of Violation cases under EIA notification, 2006. The PP has committed to abide the SOP dated 07.07.2021

Recommendations of the Committee

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

(i) PP needs to comply all the points of TOR for Violation Project and follow SOP dated 07.07.2021 issued by the Ministry of Environment, Forest & Climate Change, for identification & handling of Violation cases under EIA notification 2006.

(ii) The State Government/SPCB to take action against the project proponent under the provisions of the Environment (Protection) Act, 1986, and further no consent to operate

to be issued till the project is granted EC for the Unit which violated under the provision of the EIA Notification 2006 i.e. 1.4 MTPA Iron Ore Pellet Plant.

(iii) Assessment of ecological damage with respect to air, water, land and other environmental attributes. The collection and analysis of data shall be done by an environmental laboratory duly notified under the Environment (Protection) Act, 1986, or an environmental laboratory accredited by NABL, or a laboratory of a Council of Scientific and Industrial Research (CSIR).

(iv) Preparation of EMP comprising remediation plan and natural and community resource augmentation plan corresponding to the ecological damage assessed and economic benefits derived due to violation.

(v) The remediation plan and the natural and community resource augmentation plan to be prepared as an independent chapter (13) in the EIA report by the accredited consultants.

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

(vii) The project proponent shall require to submit a bank guarantee equivalent to the amount of remediation plan and natural and community resource augmentation plan with the SPCB prior to the grant of EC. The quantum shall be recommended by the EAC and finalized by the regulatory authority. The bank guarantee shall be released after successful implementation of the EMP, followed by recommendations of the EAC and approval of the regulatory authority.

(viii) Three abandoned canals are passing through the project site. The PP shall submit the suitable steps /conservation plan along with contouring, Run -off calculations, disposal etc. As a canal exist nearby of the project area, so 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 provided.

(ix) Tailing management plan shall be included in EIA.

(x) Coal washery tailings shall be dewatered in filters and no tailing pond is permitted.

(xi) Air cooled condensors shall be used in the power plant.

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

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

(xiv) PP should conduct Public Hearing and all issues should be addressed in the EIA/EMP.

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

(xvi) PP should submit action plan rainwater harvesting.

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

(xviii) Project proponent shall prepare layout plan showing all internal roads minimum 6m width and 9m turning radius with proper looping for smooth traffic flow, including fire tender as per NBC. Road network shall connect all service areas in layout. This drawing shall include area statement showing plot area, area under roads, parking, green belt with calculations and % with respect to plot area of project site and proper indexing.

(xix) 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.

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

(xxi) 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.

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

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

(xxiv) Industry is going to use silica quartz in large quantities and going to produce Silico Manganese and Ferro Silicon alloy steel. Therefore, it is necessary to control silica/quartz exposures at production Departments, not only emission norms as per Indian Factories Act. The permissible limit for silica/quartz should be within 10 mg/m3 for total dust as per Indian Factories Act. Therefore, it is recommended to monitor personal and area exposures for silica quartz dust in the process plants.

(xxv) The coal dust should be monitored at coal unloading, crushing, furnace areas and should be within 2 mg/m3, respirable dust fraction containing less than 5% quartz as per Indian Factories Act, 1948.

(xxvi) 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 of not less than 2500 per ha within a time frame of one year shall be submitted. Survival rate of green belt developed shall be monitored on periodic basis to ensure that damaged plants are replaced with new plants in the subsequent years.

(xxvii) An action plan for the disposal of electronic waste must be drawn up and implemented.

(xxviii) A plan of action for controlling emissions when these cross the critical limit must be documented and communicated to EAC.

***

DAY-2: JUNE 14, 2022 [TUESDAY]

Consideration of Environmental Clearance Proposals

Agenda No. 7.6

7.6 **Expansion of Integrated Cement Plant - Clinker (6.5 to 10 MTPA), Cement (9.0 to 14.0 MTPA) and WHRS (20 to 36 MW) by M/s. UltraTech Cement Ltd., located at Village: Bhogasamudhra, Mandal: Tadipatri, District: Anantapur and Village: Tummalapenta, Mandal: Kolimigondla, District: Kurnool, Andhra Pradesh-Consideration of Environmental Clearance.**

[Proposal no. IA/AP/IND/125643/2008; File No. J-11011/303/2008-IA-II(I)]
[Consultant: M/s. J.M. EnviroNet Pvt. Ltd.; Valid upto 07.02.2023]

7.6.1 M/s. UltraTech Cement Limited (Unit: Andhra Pradesh Cement Works) has made an online application *vide* proposal no. IA/AP/IND/125643/2008 dated 31/05/2022 along with copy of EIA/EMP Report, Form - 2 and certified EC compliance report seeking Environment Clearance (EC) under the provisions of the EIA Notification, 2006 for the project mentioned above. The proposed project activity is listed at schedule no. 3(b) Cement Plants under Category "A" of the schedule of the EIA Notification, 2006 and appraised at Central Level.

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

Details submitted by Project proponent

7.6.3 The details of the ToR are furnished as below:

Date of application	Consideration	Details	Date of accord	Validity of ToR
16.11.2019	13th meeting of the REAC (Industry-I) held during 27-29th November, 2019	Terms of References	03.02.2020	02.02.2024

7.6.4 The project of M/s. UltraTech Cement Limited (Unit: Andhra Pradesh Cement Works) is located in Village: Bhogasamudhram, Mandal: Tadipatri, District: Anantapur and Village: Tummalapenta, Mandal: Kolimigondla, District: Kurnool (Andhra Pradesh) is for Expansion of Integrated Cement Plant - Clinker (6.5 to 10.0 MTPA), Cement (9.0 to 14.0 MTPA) and WHRS (20 to 36 MW).

7.6.5 Environmental Site Settings:

S. No.	Particulars	Details	Remarks
i.	Total land	320.68 ha (Plant + Colony); Proposed expansion will be done within	Land use of the existing land area is already industrial.

<table>
<tr><th>S. No.</th><th>Particulars</th><th>Details</th><th>Remarks</th></tr>
<tr><td></td><td></td><td>the existing plant premises.</td><td></td></tr>
<tr><td>ii.</td><td>Land acquisition details as per MoEF&CC O.M. dated 7/10/2014</td><td>Total land is under the possession of the company.</td><td>-</td></tr>
<tr><td>iii.</td><td>Existence of habitation & involvement of R&R, if any.</td><td>Plant Site: No habitation exists within the plant site and R&R is not applicable.
Study Area:
<table>
<tr><th>Habitation</th><th>Distance (km)</th><th>Direction</th></tr>
<tr><td>Tummalapenta</td><td>~0.13 km</td><td>NE</td></tr>
<tr><td>Ankireddipalle</td><td>~2.5 km</td><td>ENE</td></tr>
<tr><td>Ayyavaripalle</td><td>~0.28 km</td><td>WNW</td></tr>
<tr><td>Bhogasamudram</td><td>~0.50 km</td><td>WSW</td></tr>
<tr><td>Venkatampalle</td><td>~3.5 km</td><td>East</td></tr>
<tr><td>Bandarlapalle</td><td>~3.0 km</td><td>ESE</td></tr>
</table>
There are approx. 18 villages in 10 km radius study area.</td><td>-</td></tr>
<tr><td>iv.</td><td>Latitude and Longitude of all corners of the project site</td><td>
<table>
<tr><th>Point</th><th>Latitude</th><th>Longitude</th></tr>
<tr><td>1.</td><td>15° 1'0.68"N</td><td>78° 1'38.96"E</td></tr>
<tr><td>2.</td><td>15° 1'0.90"N</td><td>78° 1'29.00"E</td></tr>
<tr><td>3.</td><td>15° 0'45.91"N</td><td>78° 1'21.56"E</td></tr>
<tr><td>4.</td><td>15° 0'42.34"N</td><td>78° 1'21.39"E</td></tr>
<tr><td>5.</td><td>15° 0'42.27"N</td><td>78° 1'18.34"E</td></tr>
<tr><td>6.</td><td>15° 0'40.90"N</td><td>78° 1'17.25"E</td></tr>
<tr><td>7.</td><td>15° 0'39.16"N</td><td>78° 1'17.52"E</td></tr>
<tr><td>8.</td><td>15° 0'39.10"N</td><td>78° 1'18.50"E</td></tr>
<tr><td>9.</td><td>15° 0'38.53"N</td><td>78° 1'19.22"E</td></tr>
<tr><td>10</td><td>15° 0'38.61"N</td><td>78° 1'16.15"E</td></tr>
<tr><td>11</td><td>15° 0'38.83"N</td><td>78° 1'15.73"E</td></tr>
<tr><td>12</td><td>15° 0'38.30"N</td><td>78° 1'12.72"E</td></tr>
<tr><td>13</td><td>15° 0'37.79"N</td><td>78° 1'11.83"E</td></tr>
<tr><td>14</td><td>15° 0'36.45"N</td><td>78° 1'10.62"E</td></tr>
<tr><td>15</td><td>15° 0'36.24"N</td><td>78° 1'8.91"E</td></tr>
<tr><td>16</td><td>15° 0'36.42"N</td><td>78° 1'8.55"E</td></tr>
<tr><td>17</td><td>15° 0'38.32"N</td><td>78° 1'8.55"E</td></tr>
<tr><td>18</td><td>15° 0'39.26"N</td><td>78° 1'3.56"E</td></tr>
<tr><td>19</td><td>15° 0'38.05"N</td><td>78° 1'2.18"E</td></tr>
<tr><td>20</td><td>15° 0'35.46"N</td><td>78° 1'0.99"E</td></tr>
<tr><td>21</td><td>15° 0'38.43"N</td><td>78° 0'55.18"E</td></tr>
<tr><td>22</td><td>15° 0'45.25"N</td><td>78° 0'51.89"E</td></tr>
<tr><td>23</td><td>15° 0'49.10"N</td><td>78° 0'50.49"E</td></tr>
</table>
</td><td>-</td></tr>
</table>

S. No.	Particulars	Details			Remarks
		24	15° 0'51.85"N	78° 0'48.30"E	
		25	15° 1'0.48"N	78° 0'37.69"E	
		26	15° 1'1.01"N	78° 0'35.84"E	
		27	15° 1'1.89"N	78° 0'33.40"E	
		28	15° 1'4.40"N	78° 0'32.17"E	
		29	15° 1'8.12"N	78° 0'31.22"E	
		30	15° 1'10.77"N	78° 0'30.73"E	
		31	15° 1'12.63"N	78° 0'30.07"E	
		32	15° 1'17.00"N	78° 0'30.08"E	
		33	15° 1'20.26"N	78° 0'30.76"E	
		34	15° 1'25.26"N	78° 0'28.83"E	
		35	15° 1'28.44"N	78° 0'28.98"E	
		36	15° 1'28.91"N	78° 0'30.51"E	
		37	15° 1'31.81"N	78° 0'31.36"E	
		38	15° 1'34.82"N	78° 0'30.57"E	
		39	15° 1'42.78"N	78° 0'30.02"E	
		40	15° 1'44.05"N	78° 0'29.86"E	
		41	15° 1'56.21"N	78° 0'29.60"E	
		42	15° 1'59.17"N	78° 0'30.69"E	
		43	15° 1'58.04"N	78° 0'38.57"E	
		44	15° 1'58.04"N	78° 0'42.91"E	
		45	15° 1'59.11"N	78° 0'49.26"E	
		46	15° 1'56.54"N	78° 0'49.90"E	
		47	15° 1'55.87"N	78° 0'50.53"E	
		48	15° 1'55.57"N	78° 0'51.51"E	
		49	15° 1'53.02"N	78° 0'52.37"E	
		50	15° 1'53.88"N	78° 0'54.73"E	
		51	15° 1'55.34"N	78° 0'54.34"E	
		52	15° 1'57.45"N	78° 0'55.52"E	
		53	15° 1'54.12"N	78° 0'57.96"E	
		54	15° 1'52.94"N	78° 0'58.20"E	
		55	15° 1'39.31"N	78° 1'6.86"E	
		56	15° 1'36.66"N	78° 1'10.58"E	
		57	15° 1'28.77"N	78° 1'18.71"E	
		58	15° 1'26.53"N	78° 1'23.02"E	
		59	15° 1'22.79"N	78° 1'24.62"E	
		60	15° 1'6.27"N	78° 1'37.08"E	
		61	15° 1'5.01"N	78° 1'37.10"E	
		62	15° 1'4.50"N	78° 1'36.78"E	

<table>
<tr><th>S. No.</th><th>Particulars</th><th>Details</th><th>Remarks</th></tr>
<tr><td></td><td></td><td><table><tr><td>63</td><td>15° 1'3.44"N</td><td>78° 1'36.95"E</td></tr><tr><td>64</td><td>15° 1'2.40"N</td><td>78° 1'38.12"E</td></tr></table></td><td></td></tr>
<tr><td>v.</td><td>Elevation of the project site</td><td>260 m to 345 m above mean sea level.</td><td>-</td></tr>
<tr><td>vi.</td><td>Involvement of Forest land if any.</td><td>No Forest Land is involved in the plant site.</td><td>-</td></tr>
<tr><td>vii.</td><td>Water body exists within the project site as well as study area</td><td>Project site: No water body exists within the plant site.
Study area: Following water bodies falls within 10 km radius:<table><tr><th>Water body</th><th>Distance (km)</th><th>Direction</th></tr><tr><td>Pedda Vanka</td><td>~6.0 km</td><td>SW</td></tr><tr><td>Pedda Vanka</td><td>~8.5 km</td><td>NNE</td></tr><tr><td>Saddala Venganna Cheruvu</td><td>~9.0 km</td><td>NE</td></tr><tr><td>Penneru River</td><td>~9.5 km</td><td>SW</td></tr></table></td><td>-</td></tr>
<tr><td>viii.</td><td>Existence of ESZ/ESA/national park/wildlife sanctuary/biosphere reserve/tiger reserve/elephant reserve etc. if any within the study area.</td><td>Nil.</td><td>-</td></tr>
</table>

7.6.6 The existing project was accorded Environmental Clearance from MoEFCC, New Delhi for Expansion of Clinker production (5.4 MTPA to 6.5 MTPA) and cement production (7.6 MTPA to 9.0 MTPA) *vide* their letter no. J-11011/303/2008-IA (II) dated 08th October, 2008. Environmental Clearance for CPP (100 MW) was obtained from SEIAA, Andhra Pradesh *vide* their letter no. SEIAA/AP/ANT-26/2010-1113 dated 16th July, 2011. Consent to Operate for the existing unit was accorded by APPCB v*ide* their order no. APPCB/KNL/TPT/184/ HO/CFO/2021 dated 27th Sept., 2021 for Clinker (6.5 MTPA), Cement (9.0 MTPA), CPP (100 MW) & WHRS (20 MW); which is valid up to 30th Sept., 2026.

7.6.7 Implementation status of the existing EC

S. No.	Facilities	Units	As per EC dated 08th October, 2008	Implementation Status as on date	Production as per CTO
1.	Clinker	Million TPA	6.5 (Line I: 2.7 & Line II: 3.8)	Implemented	6.5

S. No.	Facilities	Units	As per EC dated 08th October, 2008	Implementation Status as on date	Production as per CTO
2.	Cement	Million TPA	9.0 (Line I: 3.2 & Line II: 5.8)	Implemented	9.0
3.	CPP	MW	100	Implemented	100
4.	WHRS	MW	20*	Implemented	20
** As per CTO obtained from APPCB.*					

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

S. No.	Plant Equipment / Facility	Existing Facilities as per EC dated 08th October, 2008.		Proposed Unit*		Final (Existing + Proposed)	
		Configuration	Capacity	Configuration	Capacity	Configuration	Capacity
1.	Clinker	Kiln: 1 x 6500, 1 x 8000 TPD	6.5 MTPA	Kiln: 1 x 11000 TPD	3.5 MTPA	Kiln: 1 x 6500, 1 x 8000, 1 x 11000 TPD	10.0 MTPA*
2.	Cement	Mill: 2 x 250 3 x 250 TPH	9.0 MTPA	Mill: 2 x 330 TPH	5.0 MTPA	Mill: 2 x 250, 3 x 250, 3 x 330 TPH	14.0 MTPA
3.	CPP	Boiler capacity 4 x 115 TPH	100 MW	Nil	Nil	Boiler capacity 4 x 115 TPH	100 MW
4.	WHRS	20 MW Turbine	20 MW	16 MW Turbine	16 MW	20 MW + 16 MW Turbine	36 MW
**Note: Part of Clinker will be dispatched to split Grinding Units of UltraTech.*							

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

S. No.	Name of Raw Material	Quantity (MTPA)			Source	Distance & Mode of Transportation
		Existing	Additional	Total		
1.	Limestone	9.2	4.935	14.135	Five Captive Limestone and Petnikota Mines	Covered Conveyors belt / 12 km by Road
2.	Laterite/ Bauxite	0.6	0.245	0.845	Andru Minerals & Sri Mennekshi Minerals-AP/Belgaum Minerals-Karnataka	560 km - 600 km / Road
3.	Iron ore	0.035	0.1225	0.1575	Sai Sindhu industries-AP/KEJ Minerals Pvt. Ltd.& Janaki Corporation Ltd Karnataka	130 km - 500 km / Road

S. No.	Name of Raw Material	Quantity (MTPA)			Source	Distance & Mode of Transportation
		Existing	Additional	Total		
4.	Gypsum	0.133	0.125	0.258	CFL, Spic, Sterlite, Fact	380 km - 860 km / Road
5.	Fly Ash	0.714	0.4875	1.2015	CPP and nearby Rayalaseema TPP - Muddanur, Bellary Thermal Power station (BTPS) & Power plant at Nellore	100 km - 250 km/ Road
6.	Slag	0.08	0.63	0.71	JSW/Arja Steels	150 / 25 km / Road / Rail

7.6.10 The existing water requirement for Integrated Cement Plant is 3645 KLD; which is being sourced from Ground water, existing rainwater sump at mine site and treated water from STP for plantation purpose. Permission for withdrawal of 4000 KLD of water (2900 KLD rainwater collected in mine pit water and 1100 KLD of ground water from existing bore wells) has been obtained vide order number CORD-11028/6/2018-SNLA-GIS-CORD dated on 18th Dec., 2018. The Renewed NOC has been obtained from AP-WALTA vide letter No: CORD-11028/6/2018-SLNA-GIS-CORD, date: 11th Dec., 2021. Additional 1300 KLD water will be required for proposed expansion project; which will be sourced from Ground water (1100 KLD), existing rainwater sump at mine site (3435 KLD), and treated water from STP (430 KLD). Also, permission for remaining water (945 KLD) which will be sourced from mine sump has been obtained *vide* letter. No. 1947/GP/2022 dated 30th May, 2022.

7.6.11 Existing power requirement is 85 MW. Additional requirement for proposed expansion project is 44 MW. Thus, the total power requirement after proposed expansion will be 129 MW which is being / will be sourced from CPP, Andhra Pradesh Electricity Board Grid and WHRS.

7.6.12 Baseline Environmental Studies:

Period	Post - Monsoon Season (October, 2020 to December, 2020)
AAQ parameters at 08 locations	PM_{10} - 58.6 to 88.1 μg/m^3 $PM_{2.5}$ - 23.9 to 46.2 μg/m^3 SO_2 - 5.7 to 15.8 μg/m^3 NO_2 - 14.0 to 29.6 μg/m^3 CO - BDL (DL- 0.50) to 0.93 mg/m^3
Incremental GLC level	PM_{10} - 2.36 μg/m^3 (at 0.767 km in West) SO_2 - 3.24 μg/m^3 (at 1.0 km in West) NO_x - 4.12 μg/m^3 (at 1.2 km in West)
Ground Water Quality at 08 locations	pH - 7.45 to 7.95 Total Hardness - 277.2 to 489.65 mg/l Chloride - 72.96 to 137.98 mg/l Fluoride - 0.66 to 0.89 mg/l TDS - 487.0 to 726.0 mg/l

<table>
<tr><th>Period</th><th>Post - Monsoon Season (October, 2020 to December, 2020)</th></tr>
<tr><td>Surface Water Quality at 01 location</td><td>pH - 7.35
DO - 6.8 mg/l
BOD - 6.3 mg/l
COD - 25.8 mg/l</td></tr>
<tr><td>Noise Levels Leq
(Day and Night)</td><td>During Day Time - 51.4 to 68.9 Leq dB (A)
During Night Time - 41.3 to 61.2 Leq dB (A)</td></tr>
<tr><td>Traffic assessment study findings</td><td>

Traffic study has been conducted at SH- 57 (adjacent in South East direction) from the Plant site.
Transportation of raw material, fuel and finished product is being/will be done by road and rail. Limestone is being / will be transported by covered conveyor belt / road from captive limestone mine.
Existing PCU is 206.7 PCU/hr. on SH - 57 and existing Level of Service (LOS) is:

<table>
<tr><th>Road</th><th>V (Volume in PCU/hr.)</th><th>C (Capacity in PCU/hr.)</th><th>Existing V/C Ratio</th><th>LOS</th></tr>
<tr><td>SH – 57</td><td>206.7</td><td>625</td><td>0.33</td><td>B</td></tr>
</table>

PCU load after proposed expansion project will be 206.7 (Existing) + 26.375 (Additional) PCU/hr. on SH - 57 and existing Level of Service (LOS) is:

<table>
<tr><th>S. No.</th><th>Road</th><th>V (Volume in PCU/hr.)</th><th>C (Capacity in PCU/hr.)</th><th>Existing V/C Ratio</th><th>LOS</th></tr>
<tr><td>1.</td><td>SH-57</td><td>206.7 + 26.375 = 233.075</td><td>625</td><td>0.37</td><td>B</td></tr>
</table>
*Note: Capacity as per IRC - 64- 1990 Guideline for capacity for roads
Conclusion: The level of service will remain “B” i.e. Very Good after including additional traffic due to proposed expansion project.
</td></tr>
<tr><td>Flora & Fauna</td><td>No schedule - I species were recorded in the study area.</td></tr>
</table>

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

S. No.	Type of Waste	Waste	Source		Quantity			Treatment / Disposal
			Plant Unit	Section	Existing	Additional	Total	
1.	SW	Dust	Cement Plant	APCE	1018 TPD	732 TPD	1750 TPD	Dust collected from various APCE is being / will be totally recycled into the process.
2.	SW	STP Sludge	STP	-	8 kg/day	2 kg/day	10 kg/day	Sludge is being /

S. No.	Type of Waste	Waste	Source		Quantity			Treatment / Disposal
			Plant Unit	Section	Existing	Additional	Total	
								will be utilized as manure for greenbelt development/ plantation.
3.	HW	Used or Spent Oil (Cat 5.1)	Plant Maintenance	Different Sections	105 KL / annum	45 KL / annum	150 KL / annum	Will be sold to CPCB authorized recycler / used in Kiln as co-processing as per Hazardous Waste Management Rules, 2016.
		Contaminated cotton rags (Cat 33.2)			6-8 kg/day	2-4 kg/day	5 - 10 kg/day	
		Empty barrels (Cat 33.1)			4 Tonnes/ Annum	1 Tonnes/ Annum	5 Tonnes/ Annum	
4.	E waste	Used electrical equipment, Cables, CFL/ LED Lights	Plant Maintenance	Different Sections	4 Tonnes/ Annum	1 Tonnes/ Annum	5 Tonnes/ Annum	Sold to registered vendors as per e-Waste Management Rules, 2016
5.	Other Waste	Used Lead acid batteries			150 Nos. / Annum)	100 Nos. / Annum)	250 Nos. / Annum)	Sold to registered vendors as per Battery waste Management Rules, 2020.
6.	MSW - Dry	Bottles, paper, cans, textile, etc.	Plant and Colony	-	150 kg / day	50 kg / day	200 kg / day	Will be sold to registered recycler.
7.	MSW - Wet	Kitchen and canteen/ Green waste			250 kg / day	50 kg / day	300 kg / day	Organic waste is being / will be utilized as manure for greenbelt development/ plantation.

7.6.14 Public Consultation:

Details of Advertisement Given	▪ Public Hearing Notice published in Newspapers the "Indian Express" & "Sakshi Telugu Daily" on 11th Jan., 2022 for District Anantapur ▪ Public Hearing Notice published in Newspapers the "Hans India" & "Sakshi Telugu Daily" on 11th Jan., 2022 for District Kurnool
Date of Public Consultation	11th Feb., 2022
Venue	▪ Near Existing Cement Plant Premises at Village: Bhogasamudhram, Mandal: Tadipatri, District: Anantapur (Andhra Pradesh) ▪ Near Existing Cement Plant Premises at Survey No. 277/2 Near Existing Cement Plant Premises at Village - Tummalapenta, Mandal - Kolimigondla, District- Kurnool (Andhra Pradesh).
Presiding Officer	▪ Sri Ketan Garg (Joint Collector & Additional District Magistrate, District: Anantapur) and Sri M B S Shankara Rao (Regional Officer, Andhra Pradesh Pollution Control Board, Anantapur)

	▪ Sri B Pullaiah (District Revenue Officer, Kurnool) Nominated by District Collector and Sri B Y Muni Prasad (Environmental Engineer, Andhra Pradesh Pollution Control Board, Regional Office, Kurnool)
Major Issues Raised	Employment, Environment, Education, Health facilities, Plantation, Socio-economic Development, etc.

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

S. No.	Concerns raised during the Public Hearing	Physical activity to be done	Unit of Measurement			Tentative Budget (Rs. in lacs)
			1st Year	2nd Year	3rd Year	
1.	**Employment**	Development of skill development training centre	1 Nos. each (Bhogasamudram & Bugga)	1 Nos. each (Bhogasamudram & Bugga)	1 Nos. each (Bhogasamudram & Bugga)	15
2.	***Socio-economic Development***					
2 (a).	Infrastructure Development	Construction of CC Road	100 Meter (Village Bugga)	-	-	30
		Repairing of Internal roads in Villages	Village Bhogasamudram (1 Nos), Village Bugga (1 Nos), Village Venktampalli (1 Nos)	-	-	5
		Construction of Toilets for Girls	5 Nos. (Village-Bhogasamudram), 3 Nos (Village Kotapadu), 2 Nos. (Village Gadaraguttapalli)	-	-	8 * Rs. 0.90 Maintenance Cost
		Repair & Renovation of Govt. school building	1 Nos. (Village Gadaraguttapalli)	-	-	5
		Repair & Renovation of class room of Govt. School	1 Nos. (Village Venktampalli), 1 Nos. (Village Ayyavaripalli)	-	-	3
		Establish one Farmer Training cum demonstration Centre	-	1 Nos. (Village Petnikota)	-	2
		Construction of Drainage system	150 meter length (Village Bhogasamudra)	150-meter length (Village Venktampalli)	-	10
		Construction of Community centre	-	1 Nos. (Village Petnikota)	-	10

S. No.	Concerns raised during the Public Hearing	Physical activity to be done	Unit of Measurement			Tentative Budget (Rs. in lacs)
			1st Year	2nd Year	3rd Year	
		Constriction of sport park for children in Govt. schools	Bhogasamudram (1 Nos)	Bugga (1 Nos)	Venktampalli (1 Nos)	6
		Installation of solar lights	Bhogasamudram (50 Nos), Bugga (50 Nos), Gadaraguttapalli (20 Nos)	-	-	6
		Construction of Aanganbadi Building	-	1 Nos. (Village - Gadaraguttapalli)	-	5
2(b).	*Ground Water Conservation*	Desilting of Check dam	Bugga (I Nos)	1 Nos. Ayyavaripalli	1 Nos. Venkatampalle	2
		Development of Percolation Tank	2 Nos (Ayyavaripalli village)	2 Nos (Ayyavaripalli village)	-	2
		Construction of Roof water harvesting structures and Injection wells	2 Nos. (Colony area)	1 Nos. (Govt. school-Venktampalli)	-	9
2(c).	*For providing Water Facility*	Setting up of water kiosk	1 Nos. (Bugga Circle)	-	-	1
		Development of pipeline works	-	1 Nos. (Gadaraguttapalli)	-	5
3.	***Plantation***	Plantation	3000 Nos. saplings (Bugga, Bhogasamudram, Ayyavararipalli, Venkatampalli, Gadaraguttapalli)	-	-	8 * Rs. 6.0 Maintenance Cost
			Total			**132**
			Total Recurring Cost			**6.9**

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

S. No.	Concerns raised during the Public Hearing	Physical activity to be done	Unit of Measurement			Tentative Budget (Rs. in lacs)
			1st Year	2nd Year	3rd Year	
1.	***Employment***	Development of skill development training centre @ Kolimigundla Mandal	Villages: Tummalapenta & Gorvimanipalli	Villages: Ankireddiaplli and Bandarlapalli	Village: Petnikota	25
2.	***Socio-economic Development***					
2 (a).	*Infrastructure Development*	Construction of CC Road	1. Length of 215 meters and width of 3.7 meters 1 Nos. (Tummalapenta village) 2. Length of 200 meters and width of 3.5 meters 1 nos. (Ankireddipalle village)	Length of 400 meters and width of 3.5 meters . 1 nos. (Petnikota village)	Length of 500 meters and width of 3.5 meters . 1 nos. (Gorvimanipalle village)	125
		Repair and renovation of community hall	1 Nos. (Tummalapenta village)	-	-	2
		Construction of Aanganbadi building	1 Nos. (Village Bandarlapali)	-	1 Nos. (Tummalapenta village)	10
		Constructing 60 Individual house hold latrines (60 Nos)	60 Nos. (Villages of GorvimanipallI & Tummalapenta)	-	-	9 * Rs. 5.4 Maintenance Cost
		LED street lights	100 Nos. each (Villages of Gorvimanipalle, Bandarlapally & Tummalapenta)	-	100 Nos. each (Villages of Ankireddipalle, & Petnikota)	6
		Construction of sport park for children	1 No each (Villages of Gorvimanipalle, Bandarlapally & Tummalapenta)	1 No each (Villages of Ankireddipalle, Petnikota & Gourmanupally)	-	25
		UTCL & ICRISAT Watershed project	Petnikota (2 Nos)	Petnikota (2 Nos)	-	5
2 (b).	*For providing Water Facility*	Laying of water pipeline- with GI Pipes	1500 Meters 1 No. (Ankireddipalle Village)	1000 meters (Village Bandarlapally)	-	6
		Development of pipeline works	1 Nos (Gourmanupalli Village)	-	-	2

S. No.	Concerns raised during the Public Hearing	Physical activity to be done	Unit of Measurement			Tentative Budget (Rs. in lacs)
			1st Year	2nd Year	3rd Year	
		Development of Water tank	1 No each (Villages of Gorvimanipalle, Bandarlapally & Tummalapenta.)	1 No each (Villages of Ankireddipalle, Petnikota & Gourmanupally)	-	3
		Proposed to construct 04 Percolation Tanks in 2 villages as part of watershed project for wildlife	Petnikota (2 Nos)	Petnikota (2 Nos)	-	5
2(c).	*Education*	Construction of dining hall for school children at Higher school	1 Nos (Ankireddipalle Village)	-	-	3
		Renovation & provision of Basic infrastructure support to Primary school (@SC Colony)	1 Nos (Gorvimanipalle Village)	-	-	2
		Increasing height of school compound wall	1 Nos (Bandarlapally Village)	-	-	2
2(d)	*Health*	Eye camps with the support of Rotary club	5 Target Villages	5 Target Villages	5 Target Villages	1
		Conduction of Regular health camps in surrounding 5 villages on monthly basis	(Tummalapenta, Gorvimanipalle, Ankireddipalle, Petnikota and Bandarlapally)	(Tummalapenta, Gorvimanipalle, Ankireddipalle, Petnikota and Bandarlapally)	(Tummalapenta, Gorvimanipalle, Ankireddipalle, Petnikota and Bandarlapally)	5
3.	*Plantation*	Sapling in 1500 Numbers in 2 villages for Greenery development in next 3 years	Gorvimanipalli (500 Nos)	Petnikota (500 Nos)	Ankireddipalli (500 Nos)	5
4.	*Others*	Maintenance the Garland drains. (Tummalapenta & Bandarlapalli)	200 Mtrs.	200 mtrs.	-	0.5
			Total			**241.5**
			Total Recurring Cost			**5.4**
Grand Total of Capital Cost						**373.5**
Grand Total of Recurring Cost						**12.3**

7.6.15 Existing capital cost of the project was Rs. 3135 Crores. The capital cost for the proposed expansion project is Rs. 1250 Crores & the capital cost for environmental protection measures is proposed as Rs. 125 Crores. The annual recurring cost towards the environmental protection

measures for proposed expansion is Rs. 6.4 Crores/ annum. The employment generation from the proposed expansion project is 750 people (regular & contractual). The details of cost for environment protection measures are as follows:

S. No.	Description of Item	Existing (Rs. In Crores)		Proposed (Rs. In Crores)	
		Capital Cost	Recurring Cost	Capital Cost	Recurring Cost
i.	Air Pollution Control & House Keeping measures	281	3.0	95	2.5
ii.	Water Pollution Control and Rain Water Harvesting Measures	2.03	0.60	13	1.0
iii.	Noise Pollution Control	0.25	0.10	1.0	0.5
iv.	Environment monitoring and management	0.50	0.20	14.0	2.0
v.	Greenbelt Development	2.57	1.0	2.0	0.4
	Total	**286.53**	**4.9**	**125**	**6.4**
vi.	Addressal of Public Consultation concerns	-	-	2.985*	-
vii	Details of Adoption of Villages, if any	*5.15 Crore* **	-	*6.0* (Village - Bhogasamudram, Bugga, Ayyavaripalli, Tummalapenta, Venktampalli, Gadaraguttapalli, Gorvimanipalli, Ankireddipalli and Bandarlapalli and Petnikota	-
	Grand Total	**291.68**	**4.9**	**133.985**	**6.4**
Rs. 1.32 Crores in District Anantapur and Rs. 1.665 Crores in District Kurnool ****CSR Expenditure done in last 5 years***					

7.6.16 Existing greenbelt has been developed in 119.25 ha which is about 37% of the total project area of 320.68 ha with total sapling of 274071 trees planted @2298 plants/ha. Further, the greenbelt/plantation will be enhanced by gap filling considering 2500 plants/ ha. Total no. of 24000 saplings will be planted.

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

7.6.18 The Status of compliance of earlier EC was obtained from Integrated Regional Office, Buckinghampeta, Vijayawada, Andhra Pradesh, *vide* File No. IRO/VIJ/EPA/MISC/111-01/2021-88 dated 28th Feb, 2022 in the name of M/s. UltraTech Cement Ltd. As reported, the PAs have complied or are in process of complying the conditions stipulated by the Ministry.

PP has further reported that the action taken report for the observation received has been submitted to RO, MoEFCC, Vijayawada Office on 28th March, 2022.

Deliberations by the Committee

7.6.19 The Committee noted the following:

1. The EAC, constituted under the provision of the EIA Notification, 2006 comprising Expert Members/domain experts in various fields, examined the proposal submitted by the Project Proponent in desired format along with EIA/EMP reports prepared and submitted by the Consultant accredited by the QCI/ NABET on behalf of the Project Proponent.
2. The EAC noted that the Project Proponent has given an undertaking that the data and information given in the application and enclosures are true to the best of his knowledge and belief and no information has been suppressed in the EIA/EMP reports. If any part of data/information submitted is found to be false/ misleading at any stage, the project will be rejected and Environmental Clearance given, if any, will be revoked at the risk and cost of the project proponent.
3. The Committee noted that the EIA reports are in compliance of the ToR issued for the project, reflecting the present environmental status and the projected scenario for all the environmental components. The Committee deliberated on the proposed mitigation measure towards Air, Water, Noise and Soil pollutions. The Committee suggested that the storage of toxic/explosive raw materials/products shall be undertaken with utmost precautions and following the safety norms and best practices.
4. The Committee has found that the baseline data and incremental GLC due to the proposed project within NAAQ standards.
5. The Committee deliberated on the action plan and budget allocation for green belt development and noted that as committed by the PP the green belt development shall be completed in coming monsoon season.
6. 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.
7. The EAC also deliberated on the written submissions submitted by the proponent and found it satisfactory.
8. PM_{10} value was observed at near to the standard, the PP shall minimize the particulate concentration by adopting suitable mitigation measures in this regard.
9. The Committee deliberated upon the certified compliance report of IRO, MoEFCC as well as action taken report submitted by PP with respect to the observations reported by IRO, MoEFCC and found it satisfactory.
10. 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.
11. 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

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

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

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

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

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

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

(v) Three tier Green Belt shall be developed in a time frame of one year covering 33% of the total land area with native species all along the periphery of the project site of adequate width and tree density shall not be less than 2500 per ha. Survival rate of green belt developed shall be monitored on periodic basis to ensure that damaged plants are replaced with new plants in the subsequent years.

(vi) Additional 1300 KLD water will be required for proposed expansion project; which is proposed to be sourced from Ground water, existing rainwater sump at mine site and treated water from STP. Necessary permission shall be obtained from the Competent Authority in this regard. Ground water extraction are allowed only for drinking purpose.

(vii) Project proponent should ensure that ground water assessment is carried out once in two years by a reputed institute and the report of same shall be submitted to IRO, MoEFCC.

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

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

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

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

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

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

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

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

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

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

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

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

(xx) Sufficient numbers of additional truck mounted Fog/Mist water cannons shall be procured and operated regularly inside the project premises and also in the surrounding villages to arrest suspended dust in the atmosphere. The implementation report shall be submitted to IRO, MoEFCC.

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

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

(xxiii) PP shall monitor the coal dust at coal unloading, crushing, furnace areas and should be within 2 mg/m3, respirable dust fraction containing less than 5% quartz as per Indian Factories Act, 1948.

(xxiv) The estimated total annual generated of suspended particulate matter must be documented with details of estimation. The industry should report what is the percentage of the SPM captured by the pollution control systems.

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

B. <u>General conditions</u>

I. Statutory compliance:

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

II. Air quality monitoring and preservation

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

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

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

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

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

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

III. Water quality monitoring and preservation

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

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

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

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

v. Water meters shall be provided at the inlet to all unit processes in the cement plant.

vi. The project proponent shall make efforts to minimize water consumption in the cement plant complex by segregation of used water, practicing cascade use and by recycling treated water.

IV. Noise monitoring and prevention

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

V. Energy Conservation measures

i. Waste heat recovery system shall be provided for kiln and cooler.

ii. The project proponent makes efforts to achieve power consumption less than 65 units/ton for Portland Pozzolona Cement (PPC) and 85 units/ton for Ordinary Portland Cement (OPC) production and thermal energy consumption of 670 Kcal/Kg of clinker.

iii. Provide solar power generation on roof tops of buildings, for solar light system for all common areas, street lights, parking around project area and maintain the same regularly.

iv. Provide the project proponent for LED lights in their offices and residential areas.

VI. Waste management

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

VII. Green Belt

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

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

VIII. Public hearing and Human health issues

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

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

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

IX. Environment Management

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

ii. The company shall have a well laid down environmental policy duly approve by the Board of Directors. The environmental policy should prescribe for standard operating procedures to have proper checks and balances and to bring into focus any

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

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

X. Miscellaneous

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

Agenda No. 7.7

7.7 **Proposed expansion of steel manufacturing unit by replacing existing induction furnace with production capacity of Steel Ingots/Billets- 28,800 TPA to 75,240 TPA by M/s Trishala Alloys Pvt. Ltd., located at Village-Jandiali, Budhewal road, Near Kohara, District- Ludhiana, Punjab- Consideration of Environmental Clearance.**

[Proposal No. IA/PB/IND/255814/2019; File No. J-11011/356/2019-IA.II(I)]

[Consultant: M/s. CPTL-EIA Division; Valid upto 19.07.2022]

7.7.1 M/s Trishala Alloys Pvt. Ltd. has made an online application vide proposal no. IA/PB/IND/255814/2019 dated 28/05/2022 along with copy of EIA/EMP report, Form – 2 and certified EC compliance report seeking Environment Clearance (EC) under the provisions of EIA Notification, 2006 for the project mentioned above. Although, the project site does not fall in the "Critically Polluted Areas (CPA)" of Ludhiana but the unit is located within a radius of 5 km from the boundary of CPA. Therefore, due to applicability of general condition, the project is listed under schedule 3(a) Metallurgical industries (ferrous & non-ferrous) and categorized as Category 'A' being appraised at Central level.

7.7.2 Name of the EIA consultant: M/s. Chandigarh Pollution Testing Laboratory – EIA Division [Sl. No. 102, List of ACOs with their Certificate / Extension Letter no. QCI/NABET/ENV/ACO/22/2323; valid upto 19.07.2022, Rev. 23, May 09, 2022].

Details submitted by Project proponent

7.7.3 The details of the ToR are furnished as below:

Date of application	Consideration	Details	Date of accord	Validity of ToR
15.11.2019	13th Meeting of REAC held during 27th-29th November, 2019	Terms of Reference	06.02.2020	05.02.2024

7.7.4 The project of M/s Trishala Alloys Pvt. Ltd. located in revenue estate of Village- Jandiali, Budhewal Road, Near Kohara, District- Ludhiana, Punjab is for expansion of steel manufacturing unit by replacing existing induction furnace with production capacity of Steel Ingots/Billets- 28,800 TPA to 75,240 TPA. It is proposed to enhance the capacity of their unit by replacing the existing furnaces of capacity 4 TPH & 3.5 TPH with 2 no's of Induction furnaces of capacity 12 TPH & 7 TPH.

7.7.5 Environmental Site Settings:

S. No.	Particulars	Details		Remarks
i.	Total land	The total land of 3.0 Acres or 1.21 ha or 12141 sqm is available for the existing project and its expansion. An additional land of 13759.4 sqm is taken for development of green belt and Transport parking area. (Industrial Land)		Acquired
ii.	Land acquisition details as per MoEF&CC O.M. dated 7/10/2014	Land acquisition is completed. Expansion will take place in the existing land, no additional land is required for proposed expansion.		
iii.	Existence of habitation & involvement of R&R, if any.	The project doesn't involve any displacement of population and subsequent Rehabilitation & Resettlement.		
iv.	Latitude and Longitude of the project site	**Latitude**	30°52'56.83"N, 30°52'56.84"N, 30°52'51.02"N, 30°52'50.97"N 30°52'55.28"N	
		Longitude	75°59'33.74"E, 75°59'33.00"E, 75°59'24.78"E, 75°59'25.34"E 75°59'27.92"E	
v.	Elevation of the project site	254 m AMSL		
vi.	Involvement of Forest land if any.	No forest land is involved.		
vii.	Water body exists within the project site as well as study area	Project site: Nil **Study area:** Sirhind Canal – 9.1 km, Buddha Nallah – 4.3 km,		
viii.	Existence of ESZ/ESA/national park/wildlife sanctuary/biosphere reserve/tiger	Nil		

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

7.7.6 The existing project is not covered under the EIA Notification 1994 & 2006 and its subsequent amendments don't qualify for EC as the project is in operation before advent of EIA Notification 2006. The industry has valid CTO's from Punjab Pollution Control Board. CTO under water act vide no. CTOW/RENEWAL/LDH1/2018/7863420 dated 07.07.2018 valid up to 30.06.2023. CTO under Air act vide no. CTOA/RENEWAL/LDH1/2018/7863486 dated 07.07.2018 valid up to 30.06.2023.

7.7.7 This proposal was applied by the PP at Central level as the Unit is located within 5 km boundary of CPA. The project site does not fall in the "Critically Polluted Areas (CPA)" of Ludhiana but the unit is located at a distance of about 3.85km outside the limits of Critically Polluted area of Ludhiana. Therefore, the project attracts the general condition, as it is located within 5km from CPA Ludhiana. Thus, the project is categorized as Category 'A' and the environmental clearance is to be accorded by the Central Govt. in the MoEF&CC. Letter regarding location of project site "Outside the Critical Polluted area of Ludhiana" has been obtained from Punjab Pollution Control Board vide letter no.- R.O./LDH-I/3995 dated 19.12.2018 and Letter no.- 2336 dated 13/06/2022.

7.7.8 Implementation status of the existing CTO:

S. No	As per CTO dated 07/07/2018	CAPACITY/IMPLEMENTED
1	Products - Steel Ingots & CI Casting @ 60 MTD	Operational – Producing Steel Ingots/Billets- 28,800 TPA (Induction Furnace (IF) – 4 TPH & 3.5 TPH)

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

S. No.	Name	Existing Units		Proposed Units		After Expansion	
		Configuration	Production TPA	Configuration	Production TPA	Configuration	Production TPA
1.	Steel Ingots/ Billets	• Induction Furnace- 1x4 TPH and 1x3.5 (to be replaced)	28,800	• Induction Furnace- 1x12 TPH and 1x7 TPH	46,440	• Induction Furnace- 1x12 TPH and 1x7 TPH	75,240

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

S. No.	Raw material	Quantity required per annum in TPA			Source	Distance from Site	Mode of transportation
		Existing	Expansion	Total			

S. No.	Raw material	Quantity required per annum in TPA			Source	Distance from Site	Mode of transportation
		Existing	Expansion	Total			
1.	MS Scrap	31,329	50,567	81,896	Local and International markets	100 Km	By Road
2.	Ferro Alloys	639	1,031	1,670			

7.7.11 Existing water requirement is 15 KLD. The total water requirement after the proposed expansion is estimated at 45.0 KLD. Domestic water requirement is 12.0 KLD and for cooling purposes is 33.0 KLD. The daily requirement of water will be met through the Ground Water, for which application to PWRDA has already been filled on dated 24th February, 2022.

7.7.12 Existing power requirement is 4800 kVA. The total power requirement for the proposed project is estimated as 9600 kVA. The demand of electricity will be sourced from Punjab State Power Corporation Limited (P.S.P.C.L.) Two D.G. Sets (100 and 250 kVA) is there as power failure back-up.

7.7.13 Baseline Environmental Studies:

Period	January to March, 2020
AAQ parameters at 8 locations	PM_{10} = 75.1 to 95.4 µg/m^3 $PM_{2.5}$ = 34.9 to 52.4 µg/m^3 SO_2 = 8.2 to 12.5 µg/m^3 NO_2 = 25.1 to 32.5 µg/m^3 CO = 0.41 to 0.60 mg/m^3
AAQ modelling (Incremental GLC)	**For PM** The maximum predicted GLC for 24 hourly average concentrations after the proposed expansion at site shall be 3.44 ug/m^3. The maximum predicted concentration of PM_{10} after unit operation will be **90.61 ug/m^3** which is below the prescribed standard of 100 ug/m^3.
Ground water quality at 8 locations	**pH**- 7.21-7.42 **Total Hardness:** 210-246 mg/l **Fluorides:** 1.00-1.20 mg/l **Chlorides:** 12.0 to 18.0 mg/l **Total Dissolved Solids:** 310-341 mg/l Heavy metals arewithin the limits.
Surface water quality at 2 locations	**Sirhind Canal** ➢ pH of the surface water collected ranged from 7.84 – 7.88 ➢ TDS was found to be 298- 320 mg/l. The tolerance limit is 1,500 mg/l as per IS:2296 ➢ Total hardness was found to be 136-142 mg/l. ➢ Total Coliform in water was 550-889 MPN/100ml. The likely source of bacteriological contamination may be due to the proximity to residential area ➢ All the heavy metals were not detectable.

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- pH of the surface water collected ranged from 7.62-7.82.
- TDS was found to be 984-1120 mg/l. The tolerance limit is 1,500 mg/l as per IS:2296
- Total hardness was found to be 520-580 mg/l.
- Total Coliform in water was 14000-20000 MPN/100ml. The likely source of bacteriological contamination may be due to discharge of untreated/partially treated /treated sewage being only the source for discharge of sewage for Ludhiana city.
- All the heavy metals were not detectable.

Noise levels at 8 locations

Noise levels in the study area vary from 50.4 to 72.1 dB (A) during day time and 42.5 to 65.8 dB (A) at night time. The highest levels were observed at Project Site.

Traffic assessment study findings

Existing Traffic Scenario & LOS

Road	**V (Volume in PCU/hr)**	**C* (Capacity in PCU/hr)**	**Existing V/C ratio**	**LOS**
At junction of Sahibana - Jiandali link road and Budhewal road.	1460.5	570	0.26	B
On Budhewal Road	631.5	1800	0.35	B

Traffic Scenario & LOS after expansion

Road	**V (Volume in PCU/hr)**	**C* (Capacity in PCU/hr)**	**Existing V/C ratio**	**LOS**
At junction of Sahibana - Jiandali link road and Budhewal road.	1460.5+3*19 =1517.5	5700	0.26	B
On Budhewal Road	631.5+19*3 =688.5	1800	0.38	B

From the traffic study, it is inferred with the proposed expansion coming into being an average 12 trucks/day each @20 ton will be added to the existing traffic. The traffic study on both sides was conducted by physical count of the

	vehicles for 24 hrs. From the traffic study it is observed that, there will be insignificant impact on the link road due to proposed expansion, and the existing road network is sufficient to cater the load.
Flora and fauna	None of reported species in study area belongs to Rare, Endangered or Threatened category, and as per Indian Wild Life (Protection) Act, 1972, no Schedule-I species were found during study period.

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

S. No.	Waste	Source	Quantity	Disposal
1.	APCD Dust	Induction Furnace	0.54PD	Shall be given to authorized M/s Bhawani Chemicals for metal recovery.
2.	Furnace Slag	Induction Furnace	12.90TPD	Will be disposed of to manufacturers of tiles named M/s Ultracrete Blocks and Pavers under proper agreement, for using the same for manufacturing of tiles and pavers.
3.	Used Oil	DG sets	0.030 Kl/Annum	Will be used as lubricants

7.7.15 Public Consultation:

Details of advertisement given	Public hearing notice was published on 18th September 2021 in a prominent newspapers namely 'The Tribune' and 'Rozana spokesman'.
Date of public consultation	21st October, 2021.
Venue	Village- Jandiali, Budhewal Road, Near Kohara, District- Ludhiana, Punjab
Presiding Officer	Additional Deputy Commissioner (General), Ludhiana
Major issues raised	The people present in public hearing were majority supporting the steel manufacturing unit. They had no objection for proposed unit and were very much encouraging the company's effort in developing area. They were aware of the fact that establishment of industry will prove to be asset in creating employment for the localities. No one from present public raised any query, seek clarifications or gave suggestion on proposed expansion. Majority of the people present, raised hand in the favor of the expansion. At last, they wished the company their best for future endeavors.

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

No environmental issue was raised during public hearing but the industry is committed to spent funds Rs 7.0 lakhs, which will be utilized for rejuvenation of village pond to improve upon the health of the pond.

Sl. No.	Activity	Amount (Rs. Lakhs)	Timeline
1	Village Pond Rejuvenation	7.0	Within 6 months of grant of EC

	Total	**7.0**	

7.7.16 The capital cost of the project is Rs. 8.20 Crores including the cost of expansion (Rs 7.0 Crore) and the capital cost for environmental protection measures is proposed as Rs 250.14 Lakhs. The annual recurring cost towards the environmental protection measures is proposed as Rs 124.14 Lakhs. The proposed project will provide employment to total 250 number of people. The details of cost for environmental protection measures is as follows:

S. No	Title	Capital Cost Rs. Lakh	Recurring Cost Rs. Lakh
1	Pollution Control during construction stage	5.0	---
2	Air Pollution Control (Installation of APCD)	125.0	50.0
3	Water Pollution Control/ STP up-gradation	30.0	30.0
4	Noise Pollution Control	2.5	2.5
5.	Green belt development	23.64	23.64
5	Solid Waste Management	5.0	4.0
6	Environment Monitoring and Management	5.0	4.0
7	Occupational Safety & Health	2.0	5.0
8	RWH	30.0	5.0
9	Miscellaneous	15.0	---
10	**CER Activities**	7.0	
	TOTAL	**250.14 Lakhs**	**124.14**

7.7.17 Green belt cover of 33% (4007 sqm) of the total land has been proposed inside the project premises. About 300 trees have already been planted. In addition, greenbelt will be developed in 11759 sqm at a distance of 440 m from the project site. Tree species like Pilkhan *(Ficus virens)*, Silver oak *(Grevillea robusta)*, Kachnar *(Bauhinia variegate)*, Derek *(Melia azedarach)*, Baheda *(Terminalia bellirica*) will be planted with a density of 2500 trees per hectare. A total of 2364 trees will be planted and nurtured.

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

Certified compliance report from SPCB

7.7.19 Certified Compliance Report under Air (Prevention & Control of Pollution) Act, 1981 from Punjab Pollution Control Board vide letter no. 784 dated on 03.03.2022. Certified Compliance Report under Water (Prevention & Control of Pollution) Act, 1974 Punjab Pollution Control Board vide letter no. 833 dated on 10.03.2022. As per the reports, the conditions of the CTO have been complied with or agreed by the project proponent.

Deliberations by the Committee

7.7.20 The Committee noted the following:

1. The EAC, constituted under the provision of the EIA Notification, 2006 comprising Expert Members/domain experts in various fields, examined the proposal submitted by the Project Proponent in desired format along with EIA/EMP reports prepared and submitted by the Consultant accredited by the QCI/ NABET on behalf of the Project Proponent.
2. The EAC noted that the Project Proponent has given an undertaking that the data and information given in the application and enclosures are true to the best of his knowledge and belief and no information has been suppressed in the EIA/EMP reports. If any part of data/information submitted is found to be false/ misleading at any stage, the project will be rejected and Environmental Clearance given, if any, will be revoked at the risk and cost of the project proponent.
3. The Committee noted that the EIA reports are in compliance of the ToR issued for the project, reflecting the present environmental status and the projected scenario for all the environmental components. The Committee deliberated on the proposed mitigation measure towards Air, Water, Noise and Soil pollutions. The Committee suggested that the storage of toxic/explosive raw materials/products shall be undertaken with utmost precautions and following the safety norms and best practices.
4. The Committee has also found that the baseline data and incremental GLC due to the proposed project within NAAQ standards.
5. The Committee deliberated on the action plan and budget allocation for green belt development and noted that as committed by the PP the green belt development shall be completed within one year.
6. 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.
7. The Committee deliberated upon the certified CTO compliance report submitted by SPCB and found it satisfactory.
8. 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.
9. 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:

7.7.21 In view of the foregoing and after detailed deliberations, the committee **recommended** the instant proposal for grant of Environment Clearance under the provisions of EIA Notification, 2006 subject to the stipulation of following specific conditions and general conditions as per

the Ministry's Office Memorandum No. 22-34/2018-III dated 9/8/2018 based on project specific requirements:

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

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

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

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

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

(v) The industry should analyse the composition of the slag produced under different operation conditions (eg. Addition of different ferro alloys in I.F., such as FeCr,FeMn etc.) and report on the plan of disposal of different slags.

(vi) The industry should report on the total quantity of suspended particulate matter(SPM) generated per annum and the percentage of this dust captured by the pollution control equipment.

(vii) Three tier Green Belt shall be developed in a time frame of one year covering 33% of the total land area with native species all along the periphery of the project site of adequate width and tree density shall not be less than 2500 per ha. Survival rate of green belt developed shall be monitored on periodic basis to ensure that damaged plants are replaced with new plants in the subsequent years.

(viii) 45 KLD of water requirement after the proposed expansion shall be met from ground water after obtaining requisite permission from the Competent Authority. PP shall prepare an action plan for gradual phasing of ground water usage and shifting to alternative source of water.

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

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

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

(xii) 100 % solid waste generated in the facility shall be utilized.

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

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

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

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

B. General conditions

I. Statutory compliance:

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

II. Air quality monitoring and preservation

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

ii. The project proponent shall carryout Continuous Ambient Air Quality monitoring for common/criterion parameters relevant to the main pollutants released (e.g. PM_{10} and $PM_{2.5}$ in reference to PM emission, and SO_2 and NOx in reference to SO_2 and NOx emissions) within and outside the plant area (at least at four locations one within and three outside the plant area at an angle of 120° each), covering upwind and downwind directions.

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

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

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

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

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

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

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

III. Water quality monitoring and preservation

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

Act, 1986 and NABL accredited laboratories.

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

IV. Noise monitoring and prevention

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

V. Energy Conservation measures

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

VI. Waste management

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

ii. Oily scum and metallic sludge recovered from rolling mills ETP shall be mixed, dried, and briquetted and reused melting Furnaces

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

VII. Green Belt

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

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

VIII. Public hearing and Human health issues

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

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

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

IX. Environment Management

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

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

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

X. Miscellaneous

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

Consideration of Extension of Validity in EC Proposal

Agenda No. 7.8

7.8 Amendment of EC for extension of validity time for establishment of CDQ (Coke Dry Quenching) as per 5.6 MTPA Integrated Steel Plant by M/s Tata Steel Limited, located at Meramandali, District- Dhenkanal, Odisha – Amendment in Environmental Clearance specific condition no. (xviii) seeking extension of time for Installation-Regarding.

[Proposal No. IA/OR/IND/265198/2022; File no. J-11011/829/2008-IA II(I)]

7.8.1 M/s Tata Steel Limited has made an online application vide proposal no IA/OR/IND/265198/2022 dated 29/02/2022 along with Form-4 and sought for amendment w.r.t. time extension for establishment of CDQ1 envisaged in Environment Clearance (EC) accorded by Ministry vide letter no. J-11011/829/2008-IA-II(I) dated 20/07/2012 and subsequent amendments/extension/transfer dated 11/03/2013,10/09/2015, 11/05/2017, 17/09/2019 and 25/10/2019.

Details submitted by Project proponent

7.8.2 Environmental Clearance for expansion of Integrated Steel Plant capacity from 3.1 MTPA to 5.6 MTPA was granted by the MoEF&CC, vide letter No. J-11011/829/2008- IA II (I), dated 20th July, 2012 in the name of M/s. Bhushan Steel Limited. It was reported that the facilities envisaged in the EC has been implemented by the project proponent. Subsequently, M/s. Tata Steel limited has acquired the erstwhile Bhushan Steel Limited on 18/05/2018 under the Corporate Insolvency Resolution Process of Insolvency and Bankruptcy Code 2016. In view of this, Company name has been changed from M/s. Bhushan Steel Limited to M/s. Tata Steel BSL Limited. Further, EC granted in favour of erstwhile M/s Bhushan Steel Ltd. was transferred in the name of Tata Steel BSL Ltd. on 17th September 2019. Thereafter, EC amendment was granted vide letter No. J-11011/829/2008-IA II (I), dated 25th Oct 2019 for extension of time period to establish CDQ#1 till 19th July 2022.

Chronology of the EC events:

- Environmental Clearance for expansion of Integrated Steel Plant capacity from 3.1 MTPA to 5.6 MTPA was granted by the MoEF&CC, vide letter No. J-11011/829/2008-IA II (I), dated. 20th July, 2012.

- Amendment in EC No. J-11011/829/2008-IA II (I), dated. 20th July, 2012.by adding Cold Roll Mill 2.6 MTPA without increasing overall production capacity vide letter dated 11/03/2013.
- One of the conditions of said EC (specific condition No- xviii) was to transfer Coke Oven plants from wet to dry quenching of coke by Sept 2014. However, on request of the Company, the dates for completion of dry quenching were revised.
- 1st extension was granted vide letter No. No. J-11011/829/2008-IA II (I), dated. 10th Sept 2015 to establish CDQ#2 by May 2017 and CDQ#1 by August, 2017
- 2nd extension was granted vide letter No. J-11011/829/2008-IA II (I), dated. 11th May 2017 to establish CDQ#2 by November 2017 and CDQ#1 by August, 2019.
- Tata Steel Limited through its wholly owned subsidiary namely Bamnipal Steel Ltd, took over the management and business of erstwhile M/s Bhushan Steel Ltd. w.e.f 18th May 2018 in accordance and compliance with the provisions of the Insolvency and Bankruptcy Code, 2016.
- The name of the company has changed from Bhushan Steel Ltd. to Tata Steel BSL Ltd. w.e.f 27th November 2018. Further, EC granted in favour of erstwhile M/s Bhushan Steel Ltd. was transferred in the name of Tata Steel BSL Ltd. on 17th September 2019.
- 3rd extension was granted vide letter No. J-11011/829/2008-IA II (I), dated. 25th Oct 2019 to 19th July 2022 to establish CDQ#1. However, due to COVID'19 the construction of the project was delayed.
- During the time, though CDQ#2 has been established and operational, but CDQ -1 installation is in progress.
- Amalgamation of Bamnipal Steel Limited and Tata Steel BSL Limited (formerly Bhushan Steel Ltd.) into and with Tata Steel Limited, under the provisions of sections 230 to 232 and other applicable provisions of Companies Act.2013 read with the Rules framed there under.
- Incorporation of name changes in 5.6 MTPA EC (File No. J-11011/829/2008-IA II (I)) from Tata Steel BSL Ltd. to Tata Steel Ltd. vide proposal No. IA/OR/IND/261495/2022 dtd.15th March 2022 is under process.

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

S. No.	**Plant Facilities**	**Proposed under 5.6 MTPA EC**	**EC capacity MTPA**	**Implementation Status**	**Installed Capacity** (MTPA)
1	Coal Washery	425 TPH 660 TPH (Capacity @ clean coal)*	3.2	Operating @1.5 MTPA (cleancoal) based on requirement	2.4
2	Coke Oven	2 x 64 ovens (0.85 MTPA) 1 x 74 ovens (1.25 MTPA)Conversion of Wet to Dry Quenching, CDQ - 1 & 2	2.10	Implemented Implemented CDQ - 2 Implemented **CDQ - 1 Under Implementation (64.5 TPH)**	2.10 (CDQ#2: 94.5 TPH Steam)
3	Sinter Plant	1 x 177 m2 2 x 204 m2	6.35	Implemented	6.35
4	Hot Metal/Blast Furnace's	1 x 1681 cum (1.294 MTPA) 1 x 3814 cum (2.625 MTPA)	3.919	Implemented	3.919

S. No.	Plant Facilities	Proposed under 5.6 MTPA EC	EC capacity MTPA	Implementation Status	Installed Capacity (MTPA)
	BF - 1 & BF - 2				
5	DRI Plant (Coal base)	14 x 500 TPD Rotary Kilns *	2.38	10 x 500 TPD Installed	1.7
6	Liquid Steel		5.88		5.88
a.	BOF	2 x 180 ton	2.62	Implemented	2.62
b.	EAF Conarc	2 x 60 ton* 1 x 180 ton	3.26	1x60 Implemented **1x180 Implemented**	3.26
c.	IF	12 x 15 ton*		6x15 Implemented	
7	Slab	Slab Casterv(MTPA)	5.12	Implemented	5.12
8	Billet	Billet caster (MTPA)	0.585	Implemented	0.585
9	HR coil	Hot Strip Mill (MTPA)	4.992	Implemented	4.992
10	Bar Mill	0.20 MTPA*	0.2	Not implemented	-
11	Oxygen Plant	1 x 150 TPD, 1 x 340TPD, 1 x 405 TPD,1 x 1118 TPD 1 x 1200 TPD)	3350 TPD	Implemented	3215 TPD
12	Lime & Dolo Plant	1X100 TPD 4 x 300 TPD 4 x 600 TPD*	0.74	Implemented 1 x 600 TPD Implemented	0.425
13	Captive Power Plant(WHRB & AFBC)	155 MW	155MW	Implemented	142MW
14	CRM complex*	CRM I & II	2.6	1MTPA Implemented 1.6 MTPA Dropped	I MTPA
* EC amendment letter no-J-11011/289/2008-IA(II) dated 11/03/2013					

7.8.4 The instant proposal is for amendment in Environmental Clearance specific condition no. xviii and subsequent amendment seeking extension of time for commissioning of CDQ # 1 by additional one year i.e. from 19th July 2022 to 19th July 2023.

7.8.5 **Reasons for delay:** After acquisition of erstwhile Bhushan Steel Limited and change of name of the Company to Tata Steel Limited, the new management wanted to transfer the wet quenching process of CDQ#1 to dry quenching in a shortest time. Subsequently, based on PP request, MoEF&CC extended the date of commissioning of CDQ #1 to 19th July 2022 vide letter no. J-11011/829/2008-IA. II(I), dtd. 25/10/2019. Following to said approval, order was placed with M/s. Nippon Steel Engineering Co. Ltd, Tokyo for supply of equipment and civil construction at site before COVID pandemic. During COVID, CDQ#1 jobs were stopped and import of materials were badly affected. Due to continuous COVID situation site work and other activities have been badly impacted and it is not possible to complete the job within the target date.

7.8.6 An online application vide proposal no. IA/OR/IND/261495/2022 dated 29/05/2022 by M/s. Tata Steel Limited, requesting the Ministry to transfer the Environment Clearance accorded by MoEF&CC vide letter no. J-11011/829/2008- IA II (I) dated 20/07/2012 and subsequent amendments/ extension/ transfer dated 11/03/2013 10/09/2015, 11/05/2017, 17/09/2019 and

25/10/2019 from M/s. Tata Steel BSL Limited to M/s. Tata Steel Limited is also under consideration in Ministry.

7.8.7 On examination of the application, following points are noted:

- Environment clearance (EC) to the project cited above was initially accorded by the Ministry vide letter no. J-11011/829/2008- IA II (I) dated 20.07.2012 in the name of M/s. Bhushan Steel Limited under the provisions of the EIA Notification, 2006 for expansion of Integrated Steel Plant (3.1 MTPA to 5.6 MTPA) with amendments / extensions dated 11/03/2013 10/09/2015, 11/05/2017, 17/09/2019. The EC was transferred in the name of M/s. Tata Steel BSL Limited vide letter dated 17.09.2019.

- As reported by proponent, following is Consent to Establishment/ Consent to Operate:

Type of Order	Date	Details
CTE	14/12/2012	Consent to Establish pursuant to EC was obtained from OSPCB vide Order no. 24444/Ind-II-NOC-5245 dated 14/12/2012 issued in the name of M/s. Bhushan Steel Limited for Expansion of Integrated Steel Plant (3.1 to 5.6 MTPA).
CTO	17/03/2021	Latest Consent to Operate was obtained from OSPCB vide Consent Order no. 4048/IND-I-CON-5440 dated 17/03/2021 valid from 01/04/2021 to 31/03/2023 issued in the name of M/s. Tata Steel BSL Limited.

- Reasons for transfer of EC:

  Pursuant to the NCLT order dated 15th May 2018, Tata Steel Limited through its wholly owned subsidiary namely Bamipal Steel Ltd, took over the management and business of erstwhile M/s Bhushan Steel Ltd. w.e.f 18th May 2018 in accordance and compliance with the provisions of the Insolvency and Bankruptcy Code,2016. The name of the company has changed from Bhushan Steel Ltd. to Tata Steel BSL Ltd. with effect from 27th November 2018. Further, to state that the EC granted in favour of erstwhile M/s Bhushan Steel Ltd. was transferred in the name of Tata Steel BSL Ltd.

  That amalgamation of Bamnipal Steel Limited and Tata Steel BSL Limited (formerly Bhushan Steel Ltd.) into and with Tata Steel Limited, under the provisions of sections 230 to 232 and other applicable provisions of Companies Act.2013 read with the Rules framed there under. The Composite scheme of Amalgamation was approved and sanctioned by the Hon'ble National Company Law Tribunal; Mumbai bench vide Order dated October 29, 2021 ('NCLT Order'). The said amalgamation scheme was effective from dated 11th November 2021. That subsequent to the approval of scheme of Amalgamation Tata Steel BSL Ltd. has now merged with Tata Steel Ltd. (herein after referred to as TSL). The legal entity of Tata Steel BSL Ltd. has now ceased and all its respective business and operation has become part of Tata Steel Ltd.

Sl. No.	Name of Company	CIN No.	Status w.r.t. Change of ownership
A.	M/s. Tata Steel	L74899DL1983PLC014942	As per Sl. No. 1 (f) of Form-7,

Sl. No.	Name of Company	CIN No.	Status w.r.t. Change of ownership
	BSL Ltd.		the project proponent has submitted that the proposal involves no change of ownership. However, the CIN No. of both the companies are found to be different. In view of the same, the proposal involves transfer of Environment Clearance from M/s. Tata Steel BSL Ltd.to M/s. Tata Steel Ltd with change of ownership.
B.	M/s. Tata Steel Ltd	L27100MH1907PLC000260	

7.8.8 Documents submitted for EC transfer:

Form No.7 for transfer of Environmental Clearance.

- Copy of Authority Letter dated 13/04/2022 authorizing Mr. Santosh Kumar Pattajoshi, (Senior Manager –Environment), M/s. Tata Steel Ltd. to correspond and execute documents with MoEF&CC.
- Declaration in company letter head by M/s. Tata Steel Limited that the instant case involves amalgamation of Bamnipal Steel Limited ('BNPL') and Tata Steel BSL Limited ('TSBSL') into and with Tata Steel Limited ('Scheme of Amalgamation') was approved and sanctioned by the Hon'ble National Company Law Tribunal, Mumbai bench vide Order dated October 29, 2021 ('NCLT Order'). The said amalgamation scheme was effective from dated 11th November 2021. Therefore, NOC from the transferor is not applicable.
- Undertaking by way of Affidavit in a non-judicial stamp dated 21.04.2022 by M/s. Tata Steel Ltd. that they will abide by and comply with all the conditions/environmental safeguards stipulated in the Environment Clearance vide letter no. J-11011/829/2008- IA II (I) dated 20.07.2012, subsequent amendment and subsequent amendments/ extension/ transfer dated 10/09/2015, 11/05/2017, 17/09/2019 and 25/10/2019.
- Scheme of amalgamation sanctioned by the National Company Law Tribunal (NCLT), Mumbai bench vide Order CP (CAA) No. 70/MB/2021 Connected with CA (CAA) No. 3083 of 2019 CA(CAA) No 129 of 2019 dated October 29, 2021
- Certificate of Incorporation pursuant to change of name of company dated 27/11/2018 from M/s. Bhushan Steel Limited to M/s. Tata Steel BSL Ltd. bearing CIN Number L74899DL1983PLC014942.
- Company LLP Master Data of M/s. Tata Steel Limited bearing CIN Number L27100MH1907PLC000260.

Deliberations by the Committee

7.8.9 The Committee noted the following:

i. Environmental Clearance for expansion of Integrated Steel Plant capacity from 3.1 MTPA to 5.6 MTPA was granted by the MoEF&CC, vide letter No. J-11011/829/2008-IA II (I), dated 20th July, 2012 in the name of M/s. Bhushan Steel Limited. It was reported that the facilities envisaged in the EC has been implemented by the project proponent. Subsequently, M/s. Tata Steel limited has acquired the erstwhile Bhushan Steel Limited on 18/05/2018 under the Corporate Insolvency Resolution Process of Insolvency and Bankruptcy Code 2016. In view of this, Company name has been

changed from M/s. Bhushan Steel Limited to M/s. Tata Steel BSL Limited. Further, EC granted in favour of erstwhile M/s Bhushan Steel Ltd. was transferred in the name of Tata Steel BSL Ltd. on 17th September 2019.

ii. EC amendment was granted vide letter No. J-11011/829/2008-IA II (I), dated 25th October 2019 for extension of time period to establish CDQ#1 till 19th July 2022.

iii. PP in the instant proposal has again requested for amendment in Environmental Clearance specific condition no. xviii and subsequent amendment seeking extension of time for commissioning of CDQ # 1 by additional one year i.e. from 19th July 2022 to 19th July 2023

iv. Validity of EC dated 20/07/2012 and amendment/extension dated 25/10/2019 is up to 19/07/2023 as per the provisions of Ministry Notification no. S.O. 221(E) dated 18/01/2021 and Ministry's Gazette Notification vide S.O.1807 (E) dated 12th April 2022.

v. The Committee also noted that M/s. Tata Steel Limited has also applied for EC transfer at ministry and as per the para 11 of EIA notification 2006, a prior environmental clearance granted for a specific project or activity to an applicant may be transferred during its validity to another legal person entitled to undertake the project or activity on application by the transferor, or by the transferee with a written "no objection" by the transferor to and by the regulatory authority concerned, on the same terms and conditions under which the prior environmental clearance was initially granted, and for the same validity period. No reference to the Expert Appraisal Committee or State Level Expert Appraisal Committee concerned is necessary in such cases. The Ministry may examine the proposal accordingly as per provisions of para 11 of the EIA Notification, 2006.

Recommendations of the Committee

7.8.10 In view of the foregoing and after deliberations, the Committee **recommended** to extend the validity of EC w.r.t. commissioning of CDQ-1 by additional one year i.e. from 19th July 2022 to 19th July 2023 subject to stipulation of environmental safeguards prescribed in the EC letter no. J-11011/829/2008-IA-II(I) dated 20/07/2012 and subsequent amendment/ extension/ transfer dated 11/03/2013, 10/09/2015, 11/05/2017, 17/09/2019 and 25/10/2019.

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

Re-Consideration of Environmental Clearance Proposal

Agenda No. 7.9

7.9 Revised Configuration of Modernisation-cum-expansion (3.5 MTPA to 2.7 MTPA Gross Hot Metal) by M/s Steel Authority of India Limited (SAIL), Durgapur Steel Plant (DSP) located at Durgapur, Faridpur Block, District Paschim Bardhaman, West Bengal - Consideration of Environmental Clearance.

[Proposal no. IA/WB/IND/267283/2020; File no. J-11011/492/2007-IA-II(I)]

[Consultant: M/s. MECON Limited; QCI NABET Accreditation: valid upto 09/02/2023]

7.9.1 M/s Durgapur Steel Plant -Steel Authority of India has made an online application vide proposal no. IA/WB/IND/267283/2020 dated 13.04.2022 along with copy of EIA/EMP Report, Form - 2 and Certified EC Compliance Report seeking Environment Clearance (EC) under the provisions of the EIA Notification, 2006 for the project mentioned above. The proposed project activity is listed at schedule no. 3(a) Metallurgical Industries (ferrous & non-ferrous), 2(b) Mineral Beneficiation, 4(b) Coke oven plants and 1(d) Thermal Power Plantsunder Category "A" of the schedule of the EIA Notification, 2006 and appraised at Central Level.

7.9.2 Name of the EIA consultant: M/s. MECON Limited [Sl. No. 51, List of ACOs with their Certificate / Extension Letter no. NABET/EIA/2023/RA 0195; valid upto 09.02.2023, Rev. 23, May 09, 2022].

Details submitted by Project proponent

7.9.3 The details of the ToR are furnished as below:

Date of application	Consideration	Details	Date of accord	Validity of ToR
11/08/2020	22nd meeting REAC held on 26th– 29th August, 2022.	Terms of Reference	23/09/2020	22/09/2024
15/01/2021	29thmeeting of REAC held on 27th January, 2021.	Amendment in Terms of Reference	08/02/2021	

7.9.4 The project of M/s Durgapur Steel Plant located in Durgapur Town, Faridpur-Durgapur Tehsil, Paschim Bardhaman District, West Bengal State is proposing revised configuration of its existing plant from 3.5 MTPA to 2.7 MTPA Gross Hot Metal (GHM).

7.9.5 Environmental Site Settings:

S. No.	Particulars	Details	Remarks
i.	Total land	600 ha [Private: 0 ha; Govt.: 600 ha; Other: 0]	Land use: Industrial
ii.	Land acquisition details	Entire 600 ha is already in procession of DSP	The plant is in operation

<table>
<tr><th>S. No.</th><th>Particulars</th><th>Details</th><th>Remarks</th></tr>
<tr><td></td><td>as per MoEF&CC O.M. dated 7/10/2014</td><td></td><td>from 1960’s.Proposed project will be carried out within the existing plant boundary.</td></tr>
<tr><td>iii.</td><td>Existence of habitation & involvement of R&R, if any.</td><td>Project Site: Nil
Study Area:
<table><tr><td>Habitation</td><td>Distance</td><td>Direction</td></tr><tr><td>DSP Township</td><td>~3 km</td><td>NE</td></tr><tr><td>DTPS Township</td><td>~2 km</td><td>SE</td></tr></table></td><td>No R&R required.</td></tr>
<tr><td>iv.</td><td>Latitude and Longitude of all corners of the project site.</td><td><table><tr><th>Point</th><th>Latitude (N)</th><th>Longitude (E)</th></tr><tr><td>1</td><td>23°31'53"</td><td>87°15'55"</td></tr><tr><td>2</td><td>23°32'07"</td><td>87°15'50"</td></tr><tr><td>3</td><td>23°32'13"</td><td>87°15'48"</td></tr><tr><td>4</td><td>23°32'35"</td><td>87°15'41"</td></tr><tr><td>5</td><td>23°32'39"</td><td>87°15'50"</td></tr><tr><td>6</td><td>23°32'46"</td><td>87°15'46"</td></tr><tr><td>7</td><td>23°32'47"</td><td>87°15'46"</td></tr><tr><td>8</td><td>23°32'46"</td><td>87°15'45"</td></tr><tr><td>9</td><td>23°32'46"</td><td>87°15'44"</td></tr><tr><td>10</td><td>23°32'47"</td><td>87°15'43"</td></tr><tr><td>11</td><td>23°32'47"</td><td>87°15'43"</td></tr><tr><td>12</td><td>23°32'46"</td><td>87°15'42"</td></tr><tr><td>13</td><td>23°32'48"</td><td>87°15'41"</td></tr><tr><td>14</td><td>23°32'50"</td><td>87°15'35"</td></tr><tr><td>15</td><td>23°33'25"</td><td>87°15'17"</td></tr><tr><td>16</td><td>23°33'26"</td><td>87°15'16"</td></tr><tr><td>17</td><td>23°33'28"</td><td>87°15'07"</td></tr><tr><td>18</td><td>23°33'29"</td><td>87°15'03"</td></tr><tr><td>19</td><td>23°33'30"</td><td>87°15'03"</td></tr><tr><td>20</td><td>23°33'31"</td><td>87°15'04"</td></tr><tr><td>21</td><td>23°33'34"</td><td>87°15'05"</td></tr><tr><td>22</td><td>23°33'35"</td><td>87°14'60"</td></tr><tr><td>23</td><td>23°33'35"</td><td>87°14'57"</td></tr><tr><td>24</td><td>23°33'38"</td><td>87°14'59"</td></tr><tr><td>25</td><td>23°33'40"</td><td>87°14'54"</td></tr><tr><td>26</td><td>23°33'37"</td><td>87°14'51"</td></tr><tr><td>27</td><td>23°33'43"</td><td>87°14'19"</td></tr></table></td><td>-</td></tr>
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<table>
<tr><th>S. No.</th><th>Particulars</th><th>Details</th><th>Remarks</th></tr>
<tr><td></td><td></td><td>
<table>
<tr><td>28</td><td>23°33'42"</td><td>87°14'18"</td></tr>
<tr><td>29</td><td>23°33'42"</td><td>87°14'17"</td></tr>
<tr><td>30</td><td>23°33'41"</td><td>87°14'17"</td></tr>
<tr><td>31</td><td>23°33'33"</td><td>87°14'18"</td></tr>
<tr><td>32</td><td>23°33'32"</td><td>87°14'16"</td></tr>
<tr><td>33</td><td>23°33'22"</td><td>87°14'16"</td></tr>
<tr><td>34</td><td>23°33'07"</td><td>87°14'23"</td></tr>
<tr><td>35</td><td>23°33'01"</td><td>87°14'10"</td></tr>
<tr><td>36</td><td>23°32'48"</td><td>87°14'17"</td></tr>
<tr><td>37</td><td>23°32'27"</td><td>87°14'41"</td></tr>
<tr><td>38</td><td>23°32'01"</td><td>87°15'12"</td></tr>
<tr><td>39</td><td>23°31'40"</td><td>87°15'39"</td></tr>
<tr><td>40</td><td>23°31'38"</td><td>87°15'48"</td></tr>
<tr><td>41</td><td>23°31'41"</td><td>87°15'52"</td></tr>
<tr><td>42</td><td>23°31'44"</td><td>87°15'54"</td></tr>
</table>
</td><td></td></tr>
<tr><td>v.</td><td>Elevation of the project site</td><td>Altitude: 74 m to 87 m above MSL</td><td>-</td></tr>
<tr><td>vi.</td><td>Involvement of Forest land if any.</td><td>No Forest Land Involved</td><td>-</td></tr>
<tr><td>vii.</td><td>Water body (Rivers, Lakes, Pond, Nala, Natural Drainage, Canal etc.) exists within the project site as well as study area</td><td>Project site: Nil
Study area:
<table>
<tr><th>Water body</th><th>Distance</th><th>Direction</th></tr>
<tr><td>Damodar River</td><td>~1.15 km</td><td>S</td></tr>
<tr><td>Durgapur Barrage</td><td>~7.0 km</td><td>SE</td></tr>
<tr><td>Tamla Nala</td><td>~0.3km</td><td>E</td></tr>
<tr><td>Singaran Nala</td><td>~1.5 km</td><td>W</td></tr>
<tr><td>Barjora Nala</td><td>~6 km</td><td>S</td></tr>
</table>
</td><td>-</td></tr>
<tr><td>viii.</td><td>Existence of ESZ/ESA/national park/wildlife sanctuary/biosphere reserve/tiger reserve/elephant reserve etc. if any within the study area</td><td>Study area: Nil</td><td>-</td></tr>
</table>

7.9.6 The existing project was accorded environmental clearance vide lr.no. J-11011/492/2007-IA II(I) dated 10.09.2007 and subsequent amendments in 23.12.2008, 01.04.2011, 20.11.2014 and 19.02.2016. Consent to Operate for the existing plant was accorded by West Bengal State

Pollution Control Board project vide consent letter no. dated 31.07.2018 & subsequent amendment vide memo dated 02.07.2020. The validity of CTO is up to 31.07.2023.

7.9.7 Implementation status of the existing EC

S. No.	Facilities/ Plant Unit /Particulars	As per EC 2007 and its amendments	Implementation Status as on 31.03.2020	
		Capacity/ Configuration	Capacity/ Configuration	Remarks
1.	**Coke Oven Complex**			
a)	**Composition / Availability :**			
	Coke Oven Battery (COB) No. # I	78 Ovens; 4.5 m tall; Top Charge; Wet Quenching Facility	78 Ovens; 4.5 m tall; Top Charge; Wet Quenching Facility	No Change
	COBs # II, # III, # IV, #V, # VI	Each 78 Ovens, height 4.45m; Top Charge; Wet Quenching.	Each 78 Ovens, height 4.45m; Top Charge; Wet Quenching.	No Change
	Gross Coke Production	**1.7 MTPA**	**1.7 MTPA**	No Change
2.	**Byproducts Plant**			
a)	Benzol Plant : Crude Benzol Production	16800 TPA	16800 TPA	No Change
b)	Ammonium Sulphate Plant	19200 TPA	19200 TPA	No Change
c)	Tar Plant : Crude Tar Production	72000 TPA	72000 TPA	No Change
3.	**Sinter Plant Complex :**			
a)	Sinter Plant SP # I (2X143.2 m^2)	1.299 MTPA (To be phased out after installation of SP#III)	1.299 MTPA	Not Phased out, as SP #III is not installed.
b)	Sinter plant SP # II (1X180 m^2)	1.71 MTPA	1.71 MTPA	No Change
c)	Sinter plant SP # III New: (1X296 m^2)	3.029 MTPA	Not Installed	Not Installed
d)	**Total Gross Sinter Production :**	**4.739 MTPA**	**3.009 MTPA**	**Reduction**
4.	**Blast Furnace :**			
a)	BF# 1 : 1x1400 m^3; GHM Production	0.945 MTPA	Not Re-constructed	Dismantled
b)	BF# 2 & BF# 3 : 2x1400 m^3, GHM Production	1.61 MTPA	1.61 MTPA	No Change
c)	BF# 4 : 1 x 1800 m^3; GHM Production	0.945 MTPA	0.945 MTPA	No Change
d)	**Total GHM Production**	**3.5 MTPA**	**2.555 MTPA**	**Reduction**
e)	BF Gas Cleaning Plant (GCP): BF #2, #3 & BF #4	GCP: BF #2, #3 & BF #4	GCP: BF #2, #3 & BF #4	No Change
f)	Slag Granulation Plant (SGP):	0.89 MTPA	0.89 MTPA	No Change
g)	Pig Casting Machine	214000 TPA	214000 TPA	No Change

S. No.	Facilities/ Plant Unit /Particulars	As per EC 2007 and its amendments	Implementation Status as on 31.03.2020	
		Capacity/ Configuration	**Capacity/ Configuration**	**Remarks**
5.	**Steel Melting Shop & Associated Facilities**			
a)	Hot Metal Mixer	2 x 1300t	2 x 1300t	No Change
b)	Hot Metal De-sulphurisation Unit : 1.4 MTPA	1.4 MTPA	-	Not installed
c)	Charging Ladles 140t for Hot Metal supply from Mixers to BOFs.	140t	140t	No Change
d)	Basic Oxygen Furnaces (BOFs)	3x120t (3x110 m^3): 3/3 Convertor Operation	3x120t (3x110 m^3): 3/3 Convertor Operation	No Change
e)	Laddle Furnace (LF)	2x130t (Existing) + 1x130t (New)	3x130t	No Change
f)	RH de-gassing unit (new envisaged)	1X130t	-	Not installed
g)	Secondary Refining : Vacuum Arc Degassing (VAD)	1X130t	1X130t	No Change
h)	Gas Cleaning Plant (GCP)	83000 Nm^3/hr	83000 Nm^3/hr	No Change
6.	**Casting Facilities**			
a)	Billet Caster	2X6 strand	2X6 strand	No Change
b)	Bloom Caster	1X4 strand	1X4 strand	No Change
c)	Bloom-cum-Round Caster	1X4 Strand	1X4 Strand	No Change
d)	Ingot Casting	100% Continuous casting replacing Ingot casting – blooming mill route.	Bottom Pouring Ingot Casting for 2.5% liquid steel (for high grade steel for wheels) & rest through continuous casting.	Both Continuous casting and Ingot casting
	Total Crude Steel Production : 3.0 MTPA	**3.0 MTPA**	**2.20 MTPA**	**Reduction**
7.	**Rolling Mills**			
a)	Existing Merchant Mill	0.33 MTPA	0.33 MTPA	No Change
b)	New Bar & Rod Mill:	Wire Rod Mill: 0.5 MTPA. New Merchant Mill: 0.8 MTPA	-	Not installed
c)	Wheel & Axle Plant	0.16 MTPA	0.16 MTPA	No Change
d)	Skelp Mill	0.22 MTPA	-	Not in Operation
e)	Section Mill	0.207 MTPA	0.207 MTPA	No Change

S. No.	Facilities/ Plant Unit /Particulars	As per EC 2007 and its amendments	Implementation Status as on 31.03.2020	
		Capacity/ Configuration	Capacity/ Configuration	Remarks
		(Kept Out of Operation)	(Kept Out of Operation)	
f)	New Medium Structural Mill (MSM)	1.0 MTPA	1.0 MTPA	No Change
g)	20 Nos. Soaking Pits Ingot-Stripping Facilities & Blooming Mills	Phased Out	Phased Out	No Change
h)	Billet Mill; Producing 0.23 MTPA. Phased out	Phased Out	Phased Out	No Change
	Total Finished Steel / Saleable Steel Production :	**2.832 MTPA**	**2.29 MTPA**	**Reduction**
8.	**Old Power Plant (OPP)**			
	Dual Fired (Coal & Coke oven & BF Gas) Boiler	Boiler No. 1, 2, 5 & 6: Dual Fired- Gas & Coal (68 TPH each) proposed to be replaced with Dual Fired (Coal & Gas) Boiler 3X125 TPH.	Boiler No. 1, 2, 5 & 6: Dual Fired Gas & Coal (68 TPH each)	Boiler replacement not undertaken
	Coke Oven/ BF Gas Fired Boiler	Three Gas Fired Boiler Nos. 3, 4 & 7 (68 TPH each).	Three Gas Fired Boiler Nos. 3, 4 & 7 (68 TPH each).	No Change
	Turbo-Alternators	Four Steam driven Turbo-Alternators 4X5 MW. Max. Power Generation 4x5 MW of Category –I Load; To be replaced with 3X20MW (2W+1S) Turbo-Alternator to produce 2x20MW Category –I Power		Replacement not undertaken
9.	**Associated Facilities**			
a)	Calcined Lime Plant (3X300 t/d)	0.2485 MTPA	0.2485 MTPA	No Change
b)	Calcined Dolomite Plant (1X300t/d)	0.0694 MTPA	0.0694 MTPA	No Change
c)	Oxygen Plant: Captive	2x350 TPD	2x350 TPD	No Change
d)	Oxygen Plant : BOO basis	1x700 TPD 1x350 TPD(new)	1x700	1x350 TPD-Not Installed
e)	Foundry shop with EAF	Furnace 6t	Furnace 6t	No Change
f)	**Raw material Handling Complex**	**9.1138 MTPA**	**7.5321 MTPA**	**Reduction**

S. No.	Facilities/ Plant Unit /Particulars	As per EC 2007 and its amendments	Implementation Status as on 31.03.2020	
		Capacity/ Configuration	Capacity/ Configuration	Remarks
g)	Coke Oven Gas Holder	56,000 m^3	56,000 m^3	No Change
h)	BF Gas Holder	1,00,000m^3	1,00,000m^3	No Change
i)	Existing BOF Gas Holder	40,000m^3	40,000m^3	No Change
j)	Liquid Oxygen Holder	2000t	2000t	No Change
k)	Propane Unit (2x200t)	2x200t = 400t	2x200t = 400t	No Change
l)	LPG Storage Facility	4X500t	-	Not Installed

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

S. No.	Plant Unit /Particulars	Plant Unit Configuration/Capacity			
		EC 2007 (with amendments)	Existing / Implemented	Present Proposal	Final (Existing+ Proposed)
1.	**EC Capacity**				
a)	Gross Hot Metal (GHM) Production	3.5 MTPA	2.555 MTPA	2.7 MTPA	2.7 MTPA
b)	Crude Steel Production	3.0 MTPA	2.20 MTPA	2.5 MTPA	2.5 MTPA
c)	Finished / Saleable Steel Production	2.8325 MTPA	2.29 MTPA	2.4104 MTPA	2.4104 MTPA
d)	Cold Pigs Production:	214000 TPA	214000 MTPA	No Change	214000 TPA
2.	**Coke Oven Complex**				
b)	**Composition / Availability :**				
	Coke Oven Battery (COB) No. # I	78 Ovens; 4.5 m tall; Top Charge; Wet Quenching Facility	78 Ovens; 4.5 m tall; Top Charge; Wet Quenching Facility	Existing COB # I to be replaced with New COB#I (2x44 Ovens, height 5.5m, Stamp Charge; CDCP).	COB # I (2x44 Ovens, height 5.5m; Stamp Charge; CDCP)
	COBs # II, # III, # IV, #V, # VI	Each 78 Ovens, height 4.45m; Top Charge; Wet Quenching.	Each 78 Ovens, height 4.45m; Top Charge; Wet Quenching.	No Change	Each 78 Ovens, height 4.45m; Top Charge; Wet Quenching)
	Gross Coke Production	**1.7 MTPA**	**1.7 MTPA**	**No Change**	**1.7 MTPA**
c)	CDQ Green Power : 10	-	-	New CDQ	CDQ Extraction

S. No.	Plant Unit /Particulars	Plant Unit Configuration/Capacity			
		EC 2007 (with amendments)	**Existing / Implemented**	**Present Proposal**	**Final (Existing+ Proposed)**
	MW			Extraction Turbine 12MW; Power Generation 10MW	Turbine 12MW; Power Generation 10MW
3.	**Byproducts Plant**				
d)	Benzol Plant : Crude Benzol Production	16800 TPA	16800 TPA	No Change	16800 TPA
e)	Ammonium Sulphate Plant	19200 TPA	19200 TPA	No Change	19200 TPA
f)	Tar Plant : Crude Tar Production	72000 TPA	72000 TPA	No Change	72000 TPA
4.	**Sinter Plant Complex :**				
e)	Sinter Plant SP # I (2X143.2 m^2)	1.299 MTPA (To be phased out after installation of SP#III)	1.299 MTPA	Increase in Gross Sinter Production from 1.299 to 1.5 MTPA	1.5 MTPA
f)	Sinter plant SP # II (1X180 m^2)	1.71 MTPA	1.71 MTPA	Increase in Gross Sinter Production from 1.71 to 1.9 MTPA	1.9 MTPA
g)	Sinter plant SP # III New: (1X296 m^2)	3.029 MTPA	Not Installed	No Change	-
h)	**Total Gross Sinter Production :**	**4.739 MTPA**	**3.009 MTPA**	**3.4 MTPA**	**3.4 MTPA**
5.	**Blast Furnace :**				
h)	BF# 1 : 1x1400 m^3; GHM Production	0.945 MTPA	Not Re-constructed	No Change	-
i)	BF# 2 & BF# 3 : 2x1400 m^3, GHM Production	1.61 MTPA	1.61 MTPA	Increase in GHM Production from 1.61 MTPA to 1.755 MTPA	1.755 MTPA
j)	BF# 4 : 1 x 1800 m^3; GHM Production	0.945 MTPA	0.945 MTPA	No Change	0.945 MTPA
k)	**Total GHM Production**	**3.5 MTPA**	**2.555 MTPA**	**2.7 MTPA**	**2.7 MTPA**
l)	BF Gas Cleaning Plant	GCP: BF #2, #3 &	No Change	No Change	BF Gas Cleaning

S. No.	Plant Unit /Particulars	Plant Unit Configuration/Capacity			
		EC 2007 (with amendments)	**Existing / Implemented**	**Present Proposal**	**Final (Existing+ Proposed)**
	(GCP): BF #2, #3 & BF #4	BF #4			Plant (GCP) : BF #2, #3 & BF #4
m)	Slag Granulation Plant (SGP):	0.89 MTPA	0.89 MTPA	No Change	0.89 MTPA
n)	Pig Casting Machine	214000 TPA	214000 TPA	No Change	214000 TPA
6.	**Steel Melting Shop & Associated Facilities**				
i)	Hot Metal Mixer	2 x 1300t	2 x 1300t	No Change	2 x 1300t
j)	Hot Metal De-sulphurisation Unit : 1.4 MTPA	1.4 MTPA	Not installed	No Change	-
k)	Charging Ladles 140t for Hot Metal supply from Mixers to BOFs.	140t	140t	No Change	140t
l)	Basic Oxygen Furnaces (BOFs)	3x120t (3x110 m^3): 3/3 Convertor Operation	3x120t (3x110 m^3): 3/3 Convertor Operation	No Change	Basic Oxygen Furnaces (BOFs) 3x120t (3x110 m^3): 3/3 Convertor Operation.
m)	Laddle Furnace (LF)	2x130t (Existing) + 1x130t (New)	3x130t	No Change	3x130t
n)	RH de-gassing unit (new envisaged)	1X130t	Not installed	No Change	-
o)	Secondary Refining : Vacuum Arc Degassing (VAD)	1X130t	1X130t	No Change	1X130t
p)	Gas Cleaning Plant (GCP)	83000 Nm^3/hr	83000 Nm^3/hr	No Change	83000 Nm^3/hr
7.	**Casting Facilities**				
e)	Billet Caster	2X6 strand	2X6 strand	No Change	2X6 strand
f)	Bloom Caster	1X4 strand	1X4 strand	No Change	1X4 strand
g)	Bloom-cum-Round Caster	1X4 Strand	1X4 Strand	No Change	1X4 Strand
h)	Ingot Casting	100% Continuous casting replacing Ingot casting – blooming mill route.	Bottom Pouring Ingot Casting for 2.5% liquid steel (for high grade steel for wheels) & rest through	No Change	Bottom Pouring Ingot Casting for 2.5% liquid steel (for high grade steel for wheels) & rest through continuous

S. No.	Plant Unit /Particulars	Plant Unit Configuration/Capacity			
		EC 2007 (with amendments)	**Existing / Implemented**	**Present Proposal**	**Final (Existing+ Proposed)**
			continuous casting.		casting.
	Total Crude Steel Production : 3.0 MTPA	**3.0 MTPA**	**2.20**	**2.5 MTPA**	**2.5 MTPA**
8.	**Rolling Mills**				
i)	Existing Merchant Mill	0.33 MTPA	0.33 MTPA	Increase in Production Capacity from 0.33 MTPA to 0.4 MTPA	0.4 MTPA
j)	New Bar & Rod Mill:	Wire Rod Mill: 0.5 MTPA. New Merchant Mill: 0.8 MTPA	Not installed	New Bar Mill Capacity : 1.0 MTPA	New Bar Mill, Capacity : 1.0 MTPA
k)	Wheel & Axle Plant	0.16 MTPA	0.16 MTPA	Addition of Online Heat Treatment Facility in place of existing 4 nos. reheating furnaces	0.16 MTPA (with Online Heat Treatment Facility)
l)	Skelp Mill	0.22 MTPA	Not in Operation	Not to be in operation	-
m)	Section Mill	0.207 MTPA (Kept Out of Operation)	0.207 MTPA (Kept Out of Operation)	Bring Back in Operation (Capacity 0.207 MTPA) till Full Capacity Utilization of Medium Structural Mill.	Section Mill: Capacity 0.207 MTPA in Operation till Full Capacity Utilization of Medium Structural Mill
n)	New Medium Structural Mill (MSM)	1.0 MTPA	1.0 MTPA	No change	1.0 MTPA
o)	20 Nos. Soaking Pits Ingot-Stripping Facilities & Blooming Mills	Phased Out	Phased Out	No change	-
p)	Billet Mill; Producing 0.23 MTPA. Phased out	Phased Out	Phased Out	No change	-
	Total Finished Steel / Saleable Steel	**2.832 MTPA**	**2.29 MTPA**	**2.4104 MTPA**	**2.4104 MTPA**

S. No.	Plant Unit /Particulars	Plant Unit Configuration/Capacity			
		EC 2007 (with amendments)	**Existing / Implemented**	**Present Proposal**	**Final (Existing+ Proposed)**
	Production :				
9.	**Old Power Plant (OPP)**				
	Dual Fired (Coal & Cokeoven & BF Gas) Boiler	Boiler No. 1, 2, 5 & 6: Dual Fired Gas & Coal (68 TPH each) proposed to be replaced with Dual Fired (Coal & Gas) Boiler 3X125 TPH.	Boiler replacement not undertaken	No Change	Dual Fired (Gas & Coal) Boilers No. 1, 2, 5 & 6 (68 TPH each).
	Coke oven & BF Gas Fired Boiler	Three Gas Fired Boiler Nos. 3, 4 & 7 (68 TPH each).	No Change	Replacement of 7th 68 TPH Gas Fired Boiler with 100 TPH Gas Fired Boiler	Three Gas Fired Boilers: No. 3 & 4 (68 TPH each) & New No. 7 (100 TPH).
	Turbo-Alternators	Four Steam driven Turbo-Alternators 4X5 MW. Max. Power Generation 4x5 MW of Category –I Load; To be replaced with 3X20MW (2W+1S) Turbo-Alternator to produce 2x20MW Category –I Power	Replacement not undertaken	No Change	Four Steam driven Turbo-Alternators 4X5 MW with Max. Power Generation 4x5 MW (Category –I Load).
10.	**Associated Facilities**				
m)	Calcined Lime Plant (3X300 t/d)	0.2485 MTPA	0.2485 MTPA	No Change	0.2485 MTPA
n)	Calcined Dolomite Plant (1X300t/d)	0.0694 MTPA	0.0694 MTPA	No Change	0.0694 MTPA
o)	Oxygen Plant: Captive	2x350 TPD	2x350 TPD	• 1x350 TPD continues • 1x350 TPD Phasing out	1x350 TPD
p)	Oxygen Plant : BOO basis	1x700 TPD 1x350 TPD(new)	• 1x700 • 1x350 TPD-Not Installed	• New 1x1250 TPD BOO Basis in place of existing	1x1250 TPD (new)

S. No.	Plant Unit /Particulars	Plant Unit Configuration/Capacity			
		EC 2007 (with amendments)	Existing / Implemented	Present Proposal	Final (Existing+ Proposed)
				1x700 TPD	
q)	Foundry shop with EAF	Furnace 6t	Furnace 6t	No Change	Furnace 6t
r)	**Raw material Handling Complex**	9.1138 MTPA	7.5321 MTPA	No Change	7.5321 MTPA
s)	Coke Oven Gas Holder	56,000 m^3	56,000 m^3	To be replaced with New Gas Holder of Capacity 70,000 m^3	70,000 m^3
t)	BF Gas Holder	1,00,000m^3	1,00,000m^3	No Change	1,00,000m^3
u)	Existing BOF Gas Holder	40,000m^3	40,000m^3	No Change	40,000m^3
v)	Liquid Oxygen Holder	2,000t	2,000t	No Change	2,000t
w)	Propane Unit (2x200t)	2x200t = 400t	2x200t = 400t	No Change	2x200t = 400t
x)	LPG Storage Facility	4X500t	Not Installed	No Change	-

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

S. No.	Raw Material	Quantity required per annum			Source	Distance from site (kms)	Mode of Transportation
		EC 2007 and its amendments	Additional for the Proposed Project (t)	Total after Proposed Project (t)			
Gross Hot Metal Capacity (MTPA)		**3.5**		**2.7**			
1.	Iron Ore Lump	1137920	501080	1639000	Captive EMD Mines at Bolani / Gua	250	Rail
2.	Iron Ore Fines	4329360	-1649360	2680000	Captive EMD Mines at Bolani / Gua	250	Rail
3.	SMS Grade Iron Ore	33600	47400	81000	Captive EMD Mines at Bolani / Gua	250	Rail
4.	Lime stone for Lime Calcination Plant (LCP) / SMS	506688	0.0	506688	Jaisalmer, Rajasthan	1600	Rail
5.	Dolomite for Dolo plant (SMS)/Dolomite	141568	0.0	141568	Bhutan	600	Rail

S. No.	Raw Material	Quantity required per annum			Source	Distance from site (kms)	Mode of Transportation
		EC 2007 and its amendments	Additional for the Proposed Project (t)	Total after Proposed Project (t)			
	(Low/Silica)						
6.	Lime Stone for SP (BF)	392672	-261672	131000	Captive EMD Mines Kuteswar in Katni, MP / Imported	700	Rail
7.	Dolomite for SP / BF	537600	-325600	212000	Bhutan	600	Rail
8.	Mn Ore for BF	33600	-33600	0	Captive EMD Mines at Bolani / Gua	-	Rail
9.	Ferro Manganese	0	2500	2500	Private Suppliers	500	Rail
10.	Ferro Silicon	0	7600	7600	Private Suppliers	500	Rail
11.	Silico Manganese	0	41100	41100	Private Suppliers	500	Rail
12.	Ferro Alloys	48496	-48496	0	Private Suppliers	-	Rail
13.	Quartzite for BF	96992	-96992	0	Chaibasa, Ranchi	-	Road/Rail
14.	Coal for CDI	443520	-229520	214000	ECL / BCCL, Chasnala	250	Rail
15.	Coking Coal (1.7 MTPA Coke Production)	2675450	0.0	2675450	Imported / BCCL Chasnala / CCL	250	Rail
	Total	**10377466**	**-2045560**	**8331906**			
16.	Coal for Power Plant	172870	-130870	42000	Imported / BCCL Chasnala / CCL	250	Rail
	Grand Total	**10550336**	**-2176430**	**8373906**			

7.9.10 The requirement of make-up water for the project is estimated to be 5575 m^3/hr (1,33,800 KLD) which is sourced from Durgapur Barrage built on River Damodar, permission for the same has been obtained from Damodar Valley Corporation (DVC) vide agreement no. COML/WS/2012-13/WC dated 19.02.2016.

7.9.11 The power requirement for the proposed project is estimated to be 245.5 MVA, which will be met from NSPCL (NTPC-SAIL Power Company Limited, a joint venture of NTPC Limited and SAIL) / Damodar Valley Corporation (DVC) along with captive power plant of DSP.

7.9.12 Baseline Environmental Studies:

<table>
<tr><td>Period</td><td>Summer season 2020 & Sept-Oct 2020
Due to National Lockdown, additional one month monitoring in Sept-Oct 2020 with permission from MoEFCC has been carried out.</td></tr>
<tr><td>AAQ parameters at 8locations</td><td>$PM_{2.5}$ = 37 to 63 µg/m^3
PM_{10} = 55 to 106 µg/m^3
SO_2 = 13.5 to 33.1 µg/m^3
NOx = 20.1 to 39.9 µg/m^3
CO = 0.3 to 2.2 mg/m^3</td></tr>
<tr><td>AAQ modelling
(Max Incremental GLC)</td><td>PM10 = -1.5 µg/m^3 (4.6 km, ENE)
PM2.5 = -1.3 µg/m^3 (4.6 km, ENE)
SO2 = 0.8 µg/m^3 (0.15 km, N)
NOx = 0.9 µg/m^3 (5.3 km, NW)</td></tr>
<tr><td>Ground water quality at8 locations</td><td>pH: 7.0 to 7.3,
Total Hardness: 200 to 444 mg/l,
Chlorides: 40 to 114 mg/l,
Fluoride: 0.42 to 0.93 mg/l.
Heavy metals: within limits.</td></tr>
<tr><td>Surface water quality at 10 locations</td><td>pH: 7.2 to 7.9;
DO: 5.4 to 7.2 mg/l and
BOD: 3 to 5 mg/l.</td></tr>
<tr><td>Noise levels Leq (Day and Night)</td><td>38.8 to 66 dB for the day time;
37.6 to 53.7dB for the Night time.</td></tr>
<tr><td>Traffic assessment study findings</td><td>Traffic study has been conducted at DSP Main Gate (adjacent to plant) and Old Court more, NH-2, Durgapur which is approximately500 m from the plant site.
<table>
<tr><th>Traffic Monitoring Locations</th><th>Traffic Load Baseline (Max PCU/hr)</th><th>Additional load due to transportation in proposed project</th><th>Total</th><th>Carrying capacity as per: IRC:106-1990 (PCU’s per hour)</th></tr>
<tr><td>T1</td><td>1035</td><td rowspan="2">No additional load envisaged due to present proposal</td><td>1035</td><td>3600</td></tr>
<tr><td>T2</td><td>3896</td><td>3896</td><td>5400</td></tr>
</table>
100% Raw Material transportation through Road.

Safe – below carrying capacity of road.</td></tr>
<tr><td>Flora and fauna</td><td>Schedule-I fauna present in the buffer zone are Shikra, Black-winged</td></tr>
</table>

	Kite, Black Kite, Oriental Honey Buzzard, Osprey, Grey Wolf, Asian Elephant, Indian Rock Python, Golden Monitor, Purple Leaf Blue, Chestnut-streaked Sailer, Danaid Eggfly. Site-specific Wildlife Conservation Plan for Schedule-I Fauna has been prepared by Durgapur Wildlife Information and Nature Guide Society and is submitted to competent authority for approval. The total budget for implementation of Wildlife conservation plan is Rs. 401.17 Lakhs for the period of 10 years.

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

A) Solid Waste

S. No.	Type of Waste	Source	Quantity generated (TPA)	Mode of Treatment	Disposal
1	BF Slag	*Blast Furnace*	939034	Granulation	100% sold for Cement making
2	BF Flue dust	*Blast Furnace*	17321	-	100% reused in sinter plant/ Sold
3	BF Sludge	*Blast Furnace*	11588	-	100% used in Sinter making
4	BOF Slag	*SMS*	418298	Magnetic Separation and Screening	70-75 % used in Sinter making, BF as substitute of lime. Rest 25-30% will be utilization for road making.
5	BOF Sludge	*SMS*	40655	-	100% reused in sinter plant
6	Mill Scales	*Rolling Mills*	50066	-	100% reused in sinter plant
7	Lime Fines	*Lime Plant*	27094	-	100% reused in sinter plant
8	Waste Refractory	*All Furnaces / Ovens*	9504	-	100% sold in outside market
9	Cinder	*Power plant*	26861	-	100% Sold to Briquette manufacturers
10	SP ESP dust	*Sinter Plant*	198578	-	100% reused in sinter plant

B) Hazardous Waste

S.N.	Hazardous Waste	Source	Quantity Generated (TPA)	Mode of Utilisation/ Disposal
1.	Tar Sludge	Tar Decanter of Coal Chemical Plant of Coke Ovens	889	It is recovered from the bottom of tar decanter of Coal Chemical, dried in drying bed and used internally by blending with coal and charging into

S.N.	Hazardous Waste	Source	Quantity Generated (TPA)	Mode of Utilisation/ Disposal
				Coke Oven batteries.
2.	ETP Sludge	BOD Plant	4.45	Collected from BOD Plant sludge drying bed and used internally by blending with coal and subsequently charging into Coke Oven batteries.
3.	Used Oil	Lubricating oil used in Rolling mills, Transformers and other shops.	10.2	Collected in drums from the grounds of various machines in different shops and kept in used oil storage yard. From there it is distributed to different shops for reuse in the plant as well as sold to registered recyclers of Pollution Control Board viz. M/s Amit Lubricants, West Bengal, M/s OM Industries, Haryana, M/s Bristol Petroleum Ltd, West Bengal etc.
4.	Waste Lead Acid Battery	Garage, Loco shop, Telecom, ETL etc.	7.8376	Collected from various shops like garage, loco shop, telecom, ETL etc. by truck/jeep and kept in Central Stores and sold to registered recyclers of Pollution Control Board viz. M/s Adarsh Galai Udyog, Howrah, M/s Panchawati Metal Works, Kolkata, M/s J S Pigments Pvt. Ltd, Kolkata etc.
5.	Empty contaminated containers	Various Shops	4559	Collected from various shops and kept in the storage yard of Central Stores andsold to authorized recyclers of Pollution Control Board viz. M/s Goel Oil Containers, Haryana, M/s N K Company, West Bengal etc.

7.9.14 **Public Consultation:**

Details of advertisement	Notices made through advertisement: a. English News Paper: "Millennium Post" published on 01st December, 2021 b. Hindi News Paper: "Sanmarg" published on 01st December, 2021 c. Bengali News Paper: "Aajkal" published on 01st December, 2021.
Date of public consultation	5th January, 2022
Venue	Steel Club, R.K.Avenue, A-Zone, Durgapur-713204, Dist. Paschim Bardhaman, West Bengal

Presiding Officer	Additional District Magistrate (L&LR), Dist- Paschim Bardhaman, West Bengal
Major issues raised	The Project was largely welcomed by the Local Citizens. Major demands / issues were related to: • Development of roads • Educational facilities • Employment generation • Development of health infrastructure • Development of greenbelt

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

S. No.	Physical activity and action plan		Year of implementation (Budget in INR)				Total Expenditure (Rs. in Crores)
	Name of the Activity	Physical Targets	1st	2nd	3rd	Total	
1	Providing an Ambulance Car for the nearby villages including Old Court More and Patsov after discussion with the local State Government Hospital.	No. of Ambulance	1 (0.15)	-	-	1	0.15
2	Repairing of the existing roads of Gulf Nagar in consultation with local Municipality/ Panchayat.	Road length (Kms)	2 (0.4)	2 (0.4)	1 (0.2)	5	1.00
3	Set up a vocational Training Institute near Amrai village in consultation with local Municipality/ Panchayat.	No. of Institutes	-	-	1 (0.2)	1	0.20
4	Organise Eye testing camp in every 6 months in the nearby villages including Patsov village and Arati Gram.	No. of Camps/yr	2 (0.02)	2 (0.02)	2 (0.02) -Will Continue every year thereafter	6	0.06
5	Plantation for 50,000 saplings of fruit bearing plants and Ornamental plants in the A-Zone, Arati Gram and other nearby suitable areas.	Plantation for saplings	20,000 (0.2)	20,000 (0.2)	10,000 (0.1)	50,000	0.50
6	Wheelchairs will be provided to all Differently abled person of Palashdiha Village and nearby areas.	No. of wheelchair	30 (0.06)	20 (0.04)	-	50	0.10
						Total	**2.01**

7.9.15 The capital cost of the project is Rs. 3324 Crores and the capital cost for environmental protection measures is proposed as Rs433.51 Crores. The annual recurring cost towards the environmental protection measures is proposed as Rs0.79 Crores. The employment generation from the proposed project / expansion is about 667. The details of cost for environmental protection measures is as follows:

S. No.	Description of Item	Capital Cost (Rs. in Crores)	Recur. Cost/ annum (Rs. In Crores)
1.	Air, Noise, Solid/ Waste Management/ Water Conservation & Pollution Control Systems	430.84	0.79
2.	Green belt development	2.67	-
Sub-total Cost for Environmental Protection Measures		433.51	0.79
3.	Addressal of Public Consultation concerns	2.01	-
Total EMP implementation cost		**435.52**	**0.79**

7.9.16 Existing green belt has been developed in 239.66 ha area which is about 39.94% of the total plant area of 600 ha. However, overall green belt has been developed in 1976 ha area which is about 36.3% of the total area under possession of DSP (5444 ha) with total sapling of 31,61,600 Trees. Proposed greenbelt will be developed in 202 ha which is about 40.007% of the total area under possession of DSP.Thus total of 2178 ha area (40.007% of total project area) will be developed as greenbelt. A 2m - 20m wide greenbelt, consisting of at least 3 tiers around plant boundary will be developed as greenbelt and green cover as per CPCB/MoEF&CC, New Delhi guidelines. Local and native species will be planted with a density of 2500 trees per hectare. Total no. of 5,05,000 saplings will be planted and nurtured in 202 hectares in 3 years.

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

Certified Compliance Report from Integrated Regional Office

7.9.18 The Status of compliance of earlier EC was obtained from Regional Office, Kolkata vide letter no. J-11011/492/2007-IA II (I)dated 16/03/2021 in the name of M/s. Durgapur Steel Plant. No observations has been made by RO in the report dated 16.03.2021 mentioning "No non-compliances detected. No any further action is required".

7.9.19 The proposal was initially considered in the 6th EAC meeting held on 30-31st May, 2022 wherein the Committee recommended to defer the proposal and sought the requisite information. The deliberations and recommendations of the EAC are as follows:

Deliberations by the Committee (EAC during on 30-31st May, 2022)

7.9.20 The Committee noted the following:

1. Instant proposal is for revision and modification of configuration of its existing plant from 3.5 MTPA to 2.7 MTPA Gross Hot Metal (GHM).
2. Water bodies exist within the study area from the project site.
3. The net water requirement is estimated to be 5575 m^3/hr (1,33,800 KLD) which is sourced from Durgapur Barrage built on River Damodar.
4. There are Schedule - I species reported in study area, namely Shikra, Black-winged Kite, Black Kite, Oriental Honey Buzzard, Osprey, Grey Wolf, Asian Elephant, Indian Rock Python, Golden Monitor, Purple Leaf Blue, Chestnut-streaked Sailer, Danaid Eggfly. Site-specific Wildlife Conservation Plan for Schedule-I Fauna has been prepared by Durgapur Wildlife Information and Nature Guide Society and is submitted to competent authority for approval. The total budget for implementation of Wildlife conservation plan is Rs. 401.17 Lakhs for the period of 10 years.
5. As per the Central Pollution Control Board's Comprehensive Environmental Pollution Index (CEPI), Durgapur falls under 'Severely Polluted Area' (SPA). The same was taken into due consideration by the Expert Appraisal Committee in their meeting held during 26-28thAugust 2020 and accordingly the ToR was issued on 23rdSeptember 2020 with stringent conditions. By implementation of the schemes under the present proposal there will be a decrease in the PM emission load from the modernized/new units. The total Emission Load of SAIL-Durgapur Steel Plant is expected to reduce by around 50% from the existing level. Further, in order to comply with the ToR conditions, DSP has already undertaken several measures to limit PM emissions within 30 mg/Nm^3 for all existing units by 31st December, 2023. Due to this, it is expected that there will be a significant reduction in PM emission load of SAIL-Durgapur Steel Plant.

Recommendations of the Committee (EAC during on 30-31st May, 2022)

7.9.21 In view of the foregoing and after detailed deliberations, the committee **recommended** to **defer** the proposal and sought the requisite information.

1. As per the Central Pollution Control Board's Comprehensive Environmental Pollution Index (CEPI), Durgapur falls under 'Severely Polluted Area' (SPA). The PP shall revise the stringent mitigation maturases as one of the location in baseline study the PM10 is exceeding the prescribed limit. PP needs to recheck the data and come with stringent mitigation maturases.
2. The PP will submit progress made to maximize water reuse in compliance of EC condition and specific plan with time targets to complete the task.
3. The industry is having coke oven capacity of 1.7 MTPA. During coke oven emissions employees might be exposed to benzene, toluene and xylene along with polycyclic aromatic hydrocarbons (PAHs). Benzene and some PAHs (for e.g. Benzo(a) pyrene are carcinogenic in nature. Therefore, it is recommended to measure PM 10 & 2.5 dust in the occupational environments of coke oven plant, benzol plant, and Tar Plant and to quantify Polycyclic aromatic hydrocarbons (PAHs) and to ensure all the air pollutants are within permissible limits. PP needs to submit the details in this regard.
4. There were also some technical issues was also observed from the SAIL' end while making the presentation through Video Conferencing Mode. **In this context, EAC recommended that this instant proposal may be placed before the next EAC meeting to be held on June 13-14, 2022 for further deliberations.**

7.9.22 Based on the above, PP has submitted the ADS reply on 11/06/2022 The proposal is re-considered in the 7th meeting of the EAC for Industry-I sector held on 13-14thJune, 2022. The deliberations and recommendations of the EAC are as follows:

<table>
<tr><th>S. No.</th><th>ADS Point raised by EAC</th><th>Reply submitted by PP</th></tr>
<tr><td>1</td><td>As per the Central Pollution Control Board's Comprehensive Environmental Pollution Index (CEPI), Durgapur falls under 'Severely Polluted Area' (SPA). The PP shall revise the stringent mitigation maturases as one of the location in baseline study the PM10 is exceeding the prescribed limit. PP needs to recheck the data and come with stringent mitigation maturases</td><td>AAQ data at Netaji Colony (A4) and City Centre (A5) were exceeding the norms once during the monitoring period (Summer 2020 and Sept.-Oct. 2020). The C98 values for PM10 and PM2.5 were found to be within norm for all AAQ monitoring locations.
PM concentration exceeded the respective norms at A5 (City Center) that might be attributed to high vehicular movement at adjoining National Highway, main Bus Stand and commercial area present at City Centre. Netaji Colony consists of Basti colony and many other small scale industries. Further, monitoring has been carried out for 48 hrs during 8th-10th June, 2022 to monitor the existing level of PM10 and PM2.5 at both the locations by M/s R.V.Briggs & Co. Pvt. Ltd., a NABL accredited party.
Table 1: Results of AAQ Monitoring carried out during 8th-10th June, 2022
<table>
<tr><th>S.N</th><th>Location</th><th>Date</th><th>PM10(ug/m^3</th><th>PM2.5(ug/m^3</th></tr>
<tr><td rowspan="2">1</td><td rowspan="2">City Centre</td><td>8-9/06/2022</td><td>83</td><td>48</td></tr>
<tr><td>9-10/06/2022</td><td>94</td><td>56</td></tr>
<tr><td rowspan="2">2</td><td rowspan="2">Netaji Colony</td><td>8-9/06/2022</td><td>68</td><td>39</td></tr>
<tr><td>9-10/06/2022</td><td>75</td><td>41</td></tr>
</table>
In order to mitigate the impact and further restrict the release of pollutants, DSP is adopting stringent Mitigation measures and an Action Plan has been prepared. In order to check the quality of Ambient Air both DSP and WBPCB is continuously monitoring the AAQ of the region.
Stringent Mitigation Measures Proposed: Installation of Dog House in SMS- Dust Suppression System for Rs. 263 Crores. (Work Awarded to M/s SMS Group GmbH, Germany)
 Reduction of PM emission load of Durgapur Steel Plant by 50% by Dec., 2023 by implementing schemes for restricting PM emissions less than 30 mg/Nm3 from all units except coke ovens.
 Additional Green Belt Development (outside DSP plant) over an area of 202 ha by planting 5,05,000 no. of trees.
 Installation of Water sprinkler system by Durgapur Municipal Corporation (DMC) (coordinating agency: CMERI-CSIR) – A committee consisting of representative of WBPCB,</td></tr>
</table>

<table>
<tr><th>S. No.</th><th>ADS Point raised by EAC</th><th>Reply submitted by PP</th></tr>
<tr><td></td><td></td><td>DMC, CMERI and all major Industry is working to implement action plan to improve ambient air quality of Durgapur Region.
Additionally, in view of directions of Hon'ble National Green Tribunal (NGT) dated 10th July, 2019 and MoEFCC, New Delhi Office Memorandum dated 31st Oct., 2019, regarding considerations of proposals in CEPI area, DSP shall comply with all the statutory requirements/ conditions including implementation of control measures in the proposed units / schemes as specified / directed by the statutory authorities.</td></tr>
<tr><td>2</td><td>The PP will submit progress made to maximize water reuse in compliance of EC condition and specific plan with time targets to complete the task</td><td>DSP is implementing an action plan to reduce water consumption in the plant and to achieve “Zero Liquid Discharge” by adopting five schemes. Out of these, orders placed for 3 schemes and in advance stages of completion. FR/TS of other 2 schemes are under preparation.
Existing total water requirement is 5575 m3/hr (Drinking: 1434 m3/hr and Industrial Use: 4141 m3/hr. By implementing ZLD there will be reduction in industrial water consumption.
<table>
<tr><td>Year</td><td>Water Requirement (Industrial Use)</td><td>Remarks</td></tr>
<tr><td>Existing</td><td>4141 m^3/hr</td><td></td></tr>
<tr><td>Proposed(By Dec. 2022)</td><td>3000 m^3/hr</td><td>Reduction by ~ 27%</td></tr>
<tr><td>Proposed(By Dec. 2024)</td><td>2500 m^3/hr</td><td>Reduction by ~40%</td></tr>
</table>
Table 2: Action Plan for Reduction of water Consumption and to achieve ZLD
<table>
<tr><td>S. No.</td><td>Scheme</td><td>Present Status</td><td>Implementation Schedule</td></tr>
<tr><td>1</td><td>Recirculation of clean pit water from Wheel & Axle Plant</td><td>Order placed on M/s Eastern Metec Pvt. Ltd at a cost of Rs. 68.55 Lac (net of ITC) on 21st April, 2021.</td><td>Expected completion: June 2022</td></tr>
<tr><td>2</td><td>Recirculation of recovery pit water of SGP of Blast Furnace-3</td><td>Order placed on M/s Eastern Metec Pvt. Ltd. emerged at a cost of Rs.1.746 Cr (net of ITC) on 22nd May, 2021.</td><td>Expected completion: December 2022</td></tr>
<tr><td>3</td><td>Coke oven ZLD Phase-1</td><td>Order placed on M/s P Sen at a cost of Rs. 2.99</td><td>Expected completion: November</td></tr>
</table></td></tr>
</table>

<table>
<tr><th>S. No.</th><th>ADS Point raised by EAC</th><th>Reply submitted by PP</th></tr>
<tr><td></td><td></td><td>
<table>
<tr><td></td><td></td><td>Crore (net of ITC) on 28th July, 2021.</td><td>2022</td></tr>
<tr><td>4</td><td>Recirculation of Outfall 1,2 &3</td><td>Final TS & Cost Estimate has been prepared by CET after Soil Testing & Under Ground Mapping. Estimated expenditure: Rs. 56 Crores.</td><td>Expected completion: November 2024</td></tr>
<tr><td>5</td><td>Coke oven ZLD Phase-II</td><td>Final TS for Phase-II will be prepared after completion of Coke oven ZLD Phase-I scheme i.e. after November, 2022.</td><td>Expected completion: June 2024</td></tr>
</table>
</td></tr>
<tr><td>3</td><td>The industry is having coke oven capacity of 1.7 MTPA. During coke oven emissions employees might be exposed to benzene, toluene and xylene along with polycyclic aromatic hydrocarbons (PAHs). Benzene and some PAHs (for eg. Benzo(a)pyrene are carcinogeneic in nature. Therefore it is recommended to measure PM 10 & 2.5 dust in the occupational environments of coke oven plant, benzol plant, and Tar Plant and to quantify Polycyclic aromatic hydrocarbons (PAHs) and to ensure all the air pollutants are within permissible limits. PP needs to submit the details in this regard</td><td>DSP has closed down its Benzol plant, Tar plant and Naphthalene plant. Only Crude Benzol and Crude Tar is sold out to the downstram companies.
Monitoring has been carried out for 48 hrs during 8th -10th June, 2022 to monitor the existing level of PM10 and PM2.5 near coke oven plant, Benzol Plant and Tar plant by M/s R.V.Briggs & Co. Pvt. Ltd., a NABL accredited party. All monitored values was found within the norms.
<table>
<tr><th>S. No.</th><th>Locatopm</th><th>Date</th><th>PM10 (µg/m^3)</th><th>PM2.5 (µg/m^3)</th><th>Bemzine (µg/m^3)</th><th>Benzo (a) Pyrene (ng/m^3)</th></tr>
<tr><td></td><td colspan="2">As per NAAQS 2009</td><td>Norm: 100</td><td>Norm: 60</td><td>Norm: 5</td><td></td></tr>
<tr><td rowspan="2">1</td><td rowspan="2">Coke Oven Plant (near Office)</td><td>8-9/06/2022</td><td>89</td><td>51</td><td>2.14</td><td>0.63</td></tr>
<tr><td>9-10/06/2022</td><td>88</td><td>47</td><td>2.25</td><td>0.57</td></tr>
<tr><td rowspan="2">2</td><td rowspan="2">Near Benzol Plant</td><td>8-9/06/2022</td><td>78</td><td>45</td><td>2.92</td><td>0.52</td></tr>
<tr><td>9-10/06/2022</td><td>81</td><td>50</td><td>2.16</td><td>0.56</td></tr>
<tr><td rowspan="2">3</td><td rowspan="2">Near Tar Plant</td><td>8-9/06/2022</td><td>75</td><td>41</td><td>2.46</td><td>0.55</td></tr>
<tr><td>9-10/06/2022</td><td>78</td><td>47</td><td>2.88</td><td><0.50</td></tr>
</table>
Measures taken at Coke Oven Batteries:
1. Zero leak doors provided in all Batteries
2. HPLA system in all batteries
3. On main charging facility in all Batteries</td></tr>
</table>

S. No.	ADS Point raised by EAC	Reply submitted by PP
		4. Water sealed AP caps in all Batteries 5. Screw feeding charging mechanism in all Batteries 6. Lid luting regularly done in all batteries 7. Ceramic welding done in all batteries 8. Double GC main in COB-2 & 5 9. Computerised combustion control system in COB-2 & 5 **Measures taken at Coal Chemicals:** 1.Tar Plant- Production of Light oil and Heavy creosote oil stopped since 2017, leading to reduction in coke oven emissions (consisting of PAHs) 2. Benzol Plant- Production of Benzene and Toluene stopped since 2016, leading to significant reduction in coke oven emissions (consisting of PAHs)

Action Plan Regarding Proposal in CEPI Area

7.9.23 In view of directions of Hon'ble National Green Tribunal (NGT) dated 10th July, 2019 and MoEFCC, New Delhi Office Memorandum dated 31st Oct., 2019, regarding considerations of proposals in CEPI area, the Unit is complying with all the statutory requirements/ conditions including implementation of control measures in the proposed units / schemes as specified / directed by the statutory authorities.

Additionally, in view of the Hon'ble NGT order dated 19.08.2019 and MoEFCC directions dated 24.10.2019, West Bengal Pollution Control Board (WBPCB) framed short term and long term action point for industries falling in Durgapur Project Influence Area (PIA).

The status of the same for DSP is as follows:

1. Practices Already Followed at Durgapur Steel Plant (DSP) for Betterment of Environment

DSP has already implemented the following good practices for betterment of environmental quality of the area in addition to compliance with effluent and emission norms.

Table: Practices undertaken by DSP for Betterment of Environmental Quality

SN.	Practices for Betterment of Environmental Quality	Status at DSP	Status details
1.	Installation of Dust Suppression System	Installed	DSP has installed Dry Fog dust suppression systems in all potential areas like Raw Material Handling Plant (Wagon tippler, Screen House area and Crusher House area), Coal Handling Plant (Wagon Tippler and Selective crushing area in all floors), Selective crushing area (in all floors) and Blast Furnaces (Stock House & Highline area of all Blast Furnaces). DSP has also installed Space Dedusting system followed by 4 nos. of Electrostatic precipitators in Sinter Plant 1 & 2.

<table>
<tr><td>2.</td><td>Compliance to EC / NOC norms</td><td>Complied</td><td>Half yearly compliance reports are being regularly sent to IRO, MoEFCC, Kolkata and monthly monitoring reports are being sent to CPCB/WBPCB. Half yearly compliance reports are also available at SAIL's website.</td></tr>
<tr><td>3.</td><td>All internal roads paved</td><td>Complied</td><td>All internal roads are paved and are maintained.</td></tr>
<tr><td>4.</td><td>Installation of On-Line Continuous Emission Monitoring System (CEMS)</td><td>Installed</td><td>Online Continuous Emission Monitoring Systems are installed in all the stacks of DSP. Real time data being continuously transmitted to CPCB/WBPCB servers since February, 2019.</td></tr>
<tr><td>5.</td><td>Continuous Ambient Air Quality Monitoring System (CAAQMS)</td><td>Installed</td><td>Ambient Air Quality Monitoring Station was installed in the year of 2011 and is maintained under yearly AMC. Real time Data being transmitted regularly to CPCB/WBPCB servers.</td></tr>
<tr><td>6.</td><td>On-line Effluent Monitoring System.</td><td>Installed</td><td>Online Continuous Effluent Monitoring Systems are installed in all the Outfalls & ETPs of DSP. Real time data being continuously transmitted to CPCB/WBPCB servers since February, 2019.</td></tr>
<tr><td>7.</td><td>Green belt development</td><td>About 40% of the total plant area is covered under green-belt.</td><td>At present total green belt of 240 hectares has been developed within the plant area of 600 hectares.

Moreover, a total of 1976 hectares of green-belt has been developed by SAIL-DSP in plant, township and surrounding areas.</td></tr>
<tr><td>8.</td><td>Development of water bodies in neighbouring locality as rain water harvesting structure</td><td>Seven water bodies as water harvesting structure has been developed covering 117 hectare area.</td><td>DSP has built up different water bodies/ponds in Steel Township & surrounding villages under CSR project besides DSP's main water reservoir at Waria.
Surface Area wise details are given below:
<table>
<tr><td>Main Water Reservoir</td><td>8,50,000 m^2</td></tr>
<tr><td>MKM Park Lake</td><td>2,80,000 m^2</td></tr>
<tr><td>Water body at Vasundhara</td><td>35,000 m^2</td></tr>
<tr><td>Pond at Dampara</td><td>728 m^2</td></tr>
<tr><td>Pond at Akandara</td><td>1,200 m^2</td></tr>
<tr><td>Check-Dam at Baganpara</td><td>3,472 m^2</td></tr>
<tr><td>Pond at B-Zone Park</td><td>8,190 m^2</td></tr>
</table></td></tr>
</table>

2. Action Points to Restore Environmental Quality

The compliance to action points to restore environmental quality by DSP is briefed here under.

a) Short Term Action Points (Including Continuous Activities)

Table: Short Term Action Points

S. No.	Action Points (including Source and Mitigation Measures)	Expenditure (Rs.)	Status	Environmental Issues Addressed
1.	Development of Green Cover by planting target of 50,000 saplings	30 lakhs	DSP has planted 72,000 saplings in the year 2019-20; 20,000 in year 2020-21 and 40,000 in 2021-22	Green Belt developed in Plant and Township area for betterment of Air Quality

b) Medium Term Action Plan

Table: Medium Term Action Points

SN.	Action Points (including Source and Mitigation Measures)	Estimated Cost (Rs.)	Status	Environmental Issues Addressed
1.	Installation of Dust Suppression System	Rs. 263 Crores	• Work Awarded to M/s SMS Group GmbH, Germany on on 30th Jan., 2019. • Project Cost: Rs. 263.36 Crores • Commissioned in Sept' 2021	Fugitive Dust Control
2.	Provision of achieving ZLD in two phases	Rs. 100 & 300 Crores	Phase I: Recirculation of clean pit water from Wheel & Axle Plant- Order placed on M/s Eastern Metec Pvt. Ltd at a cost of Rs. 68.55 Lac (net of ITC) Recirculation of recovery pit water of SGP of Blast Furnace-3 - Order placed on M/s Eastern Metec Pvt. Ltd. emerged at a cost of Rs.1.746 Cr (net of ITC) Coke oven ZLD Phase-1- Order placed on M/s P Sen at a cost of Rs. 2.99 Crore (net of ITC)	Water Conservation & Control of contamination of receiving water bodies.
			Phase II: Recirculation of Outfall 1,2 &3 -Final TS & Cost Estimate has been prepared by CET after Soil Testing & Under Ground Mapping. Estimated Cost: 56 Crore	

			Coke oven ZLD Phase II -Final TS for Phase-II will be prepared after completion of Coke oven ZLD Phase-I scheme.	

Deliberations by the Committee

7.9.24 The Committee noted the following:

1. Instant proposal is for revised configuration of its existing plant from 3.5 MTPA to 2.7 MTPA Gross Hot Metal (GHM).
2. As per the Central Pollution Control Board's Comprehensive Environmental Pollution Index (CEPI), Durgapur falls under 'Severely Polluted Area' (SPA). The same was taken into due consideration by the Expert Appraisal Committee in their meeting held during 26-28th August 2020 and accordingly the ToR was issued on 23rd September 2020 with stringent conditions. By implementation of the schemes under the present proposal there will be a decrease in the PM emission load from the modernized/new units. The total Emission Load of SAIL-Durgapur Steel Plant is expected to reduce by around 50% from the existing level. Further, in order to comply with the ToR conditions, DSP has already undertaken several measures to limit PM emissions within 30 mg/Nm^3 for all existing units by 31st December, 2023. Due to this, it is expected that there will be a significant reduction in PM emission load of SAIL-Durgapur Steel Plant. The EAC deliberated the issues and found in order as the total Emission Load of Unit is expected to reduce by around 50% from the existing level.
3. Regarding considerations of proposals in CEPI area, an undertaking is submitted by Project Proponent as "DSP shall comply with all the statutory requirements/ conditions including implementation of control measures in the proposed units / schemes as specified / directed by the statutory authorities".
4. The committee deliberated on the stringent mitigation measures and an Action Plan submitted by proponent regarding for betterment of environment and found it satisfactory.
5. The EAC, constituted under the provision of the EIA Notification, 2006 comprising Expert Members/domain experts in various fields, examined the proposal submitted by the Project Proponent in desired format along with EIA/EMP reports prepared and submitted by the Consultant accredited by the QCI/ NABET on behalf of the Project Proponent.
6. The EAC noted that the Project Proponent has given an undertaking that the data and information given in the application and enclosures are true to the best of his knowledge and belief and no information has been suppressed in the EIA/EMP reports. If any part of data/information submitted is found to be false/ misleading at any stage, the project will be rejected and Environmental Clearance given, if any, will be revoked at the risk and cost of the project proponent.
7. The Committee noted that the EIA reports are in compliance of the ToR issued for the project, reflecting the present environmental status and the projected scenario for all the environmental components. The Committee deliberated on the proposed mitigation measure towards Air, Water, Noise and Soil pollutions. The Committee suggested that

the storage of toxic/explosive raw materials/products shall be undertaken with utmost precautions and following the safety norms and best practices.

8. The net water requirement is estimated to be 5575 m^3/hr (1,33,800 KLD) which is sourced from Durgapur Barrage built on River Damodar.
9. There are Schedule - I species reported in study area, namely Shikra, Black-winged Kite, Black Kite, Oriental Honey Buzzard, Osprey, Grey Wolf, Asian Elephant, Indian Rock Python, Golden Monitor, Purple Leaf Blue, Chestnut-streaked Sailer, Danaid Eggfly. Site-specific Wildlife Conservation Plan for Schedule-I Fauna has been prepared by Durgapur Wildlife Information and Nature Guide Society and is submitted to competent authority for approval. The total budget for implementation of Wildlife conservation plan is Rs. 401.17 Lakhs for the period of 10 years.
10. The Committee deliberated on the action plan and budget allocation for green belt development and noted that as committed by the PP the green belt development shall be completed within six months.
11. The Committee also deliberated on the public hearing issues along with action plan submitted by the proponent to address the issues raised during the public hearing and found it satisfactory.
12. The Committee deliberated upon the certified compliance report of IRO, MoEFCC as well as action taken report submitted by PP with respect to the observations reported by IRO and found it satisfactory.
13. The EAC also deliberated on the ADS reply submitted by the proponent and found it satisfactory.
14. The EAC deliberated on the proposal with due diligence in the process as notified under the provisions of the EIA Notification, 2006, as amended from time to time and accordingly made the recommendations to the proposal. The Experts Members of the EAC found the proposal in order and recommended for grant of environmental clearance.
15. The environmental clearance recommended to the project/activity is strictly under the provisions of the EIA Notification 2006 and its subsequent amendments. It does not tantamount/construe to approvals/consent/permissions etc. required to be obtained or standards/conditions to be followed under any other Acts/ Rules/ Subordinate legislations, etc., as may be applicable to the project. The project proponent shall obtain necessary permission as mandated under the Water (Prevention and Control of Pollution) Act, 1974 and the Air (Prevention and Control of Pollution) Act, 1981, as applicable from time to time, from the State Pollution Control Board, prior to construction & operation of the project.

Recommendations of the Committee

7.9.25 In view of the foregoing and after detailed deliberations w.r.t. reduction of total emission load by ~ 50% from the existing level, the committee **recommended** the instant proposal for grant of Environment Clearance for **Revised Configuration of Modernisation from 3.5 MTPA to 2.7 MTPA Gross Hot Metal, u**nder the provisions of EIA Notification, 2006 subject to the stipulation of following specific conditions and general conditions as per the Ministry's Office Memorandum No. 22-34/2018-III dated 9/8/2018 based on project specific requirements:

A. Specific conditions

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

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

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

iv. Three tier Green Belt shall be developed in a time frame of one year with native species all along the periphery of the project site of adequate width and tree density shall not be less than 2500 per ha. Survival rate of green belt developed shall be monitored on periodic basis to ensure that damaged plants are replaced with new plants in the subsequent years. Compliance status in this regard, shall be submitted to concerned Regional Office of the MoEF&CC. Green Belt shall be 40%.

v. Water bodies exists within the study area from the project site. The water bodies shall not be disturbed. Landscaping shall be done on both embankments, with green belt covering 10 m land on both sides. This shall be in addition to the 40% green belt development.

vi. Solid waste utilization

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

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

viii. 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.

ix. The new Stamp Charge Battery shall be equipped with Coke Dry Quenching system.

x. Coke Oven Gas shall be desulfurized.

xi. Blast Furnaces shall be equipped with Top Recovery Turbine (capacity more than 450m^3), dry gas cleaning plant, stove waste heat recovery, cast house and stock house ventilation system and slag granulation facility.

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

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

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

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

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

xvii. PM emissions from new units shall be shall be less than 30 mg/Nm3. All older units shall be modified /retrofitted to achieve 30 mg/Nm3 emissions by Dec. 2023. Coke oven emissions shall be maintained at less than 50 mg/Nm3.

xviii. Online monitoring arrangement shall be provided for PLL, PLD, PLO on all six batteries using time lapse rate cameras with recording facilities.

xix. The net water requirement is estimated to be 5575 m^3/hr (1,33,800 KLD) which is sourced from Durgapur Barrage built on River Damodar after obtaining necessary permission. No ground water abstraction is permitted.

xx. Three tier Green Belt shall be developed in a time frame of one year with native species all along the periphery of the project site of adequate width and tree density shall not be less than 2500 per ha. In addition, PP shall provide 50-meter-wide green belt towards Reserve Forest located at 0.50 km from project site. Survival rate of green belt developed shall be monitored on periodic basis to ensure that damaged plants are replaced with new plants in the subsequent years. Compliance status in this regard, shall be submitted to concerned Regional Office of the MoEF&CC.

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

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

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

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

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

xxvi. The coke oven area shall be monitored for Benzene, Toluene, Xylene (BTX) and Polycyclic Aromatic Hydrocarbons (PAHs) concentrations, as all of them are toxic in nature. The concentration shall not be exceeding with permissible limits.

xxvii. The industry should report on the total quantity of suspended particulate matter generated per annum and how much of this captured by the pollution control equipment.

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

B. General conditions

I. Statutory compliance:

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

II. Air quality monitoring and preservation

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

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

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

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

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

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

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

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

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

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

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

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

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

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

III. Water quality monitoring and preservation

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

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

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

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

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

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

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

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

IV. Noise monitoring and prevention

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

V. Energy Conservation measures

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

ii. Restrict Gas flaring to < 1%.

iii. Provide solar power generation on roof tops of buildings, for solar light system for all common areas, street lights, parking around project area and maintain the same regularly;

iv. Provide LED lights in their offices and residential areas.

v. Ensure installation of regenerative/recuperative type burners on all reheating furnaces.

VI. Waste management

i. Oil Collection pits shall be provided in oil cellars to collect and reuse/recycle spilled oil. Oil collection trays shall be provided under coils on saddles in cold rolled coil storage area.

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

VII. Green Belt

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

ii. Project proponent shall submit a study report within six months on Decarbonisation program, which would essentially consist of company's carbon emissions, carbon

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

VIII. Public hearing and Human health issues

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

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

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

IX. Environment Management

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

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

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

X. Miscellaneous

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

Consideration of amendment in TOR Proposals

Agenda No. 7.10

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

[Proposal no. IA/CG/IND/267097/2022; File No. J-11011/278/2020-IA.II(I)]

[Consultant: M/s. Pioneer Enviro Laboratories And Consultants Pvt Ltd; valid upto 21.09.2022]

7.10.1 M/s. Rama Power and Steel Pvt. Ltd.has made an application online *vide* proposal no. IA/CG/IND/267097/2022 dated 05.05.2022 along with Form 3, revised Form-1 and revised PFR seeking amendment in Terms of Reference accorded by the Ministry vide letter no. J-11011/278/2020-IA-II (I) dated 14.12.2020. The proposed project activity is listed at S. No. 3(a) Metallurgical Industries (ferrous & non-ferrous) under Category "A" of the schedule of the EIA Notification and appraised at central level.

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

Details submitted by Project proponent

7.10.3 M/s. Rama Power & Steel Pvt. Ltd. had earlier applied for grant of ToR vide proposal no. IA/CG/IND/182361/2020 dated 07.11.2020for Greenfield project comprising of 2x350 TPD DRI Kiln (2,31,000 TPA), 5x20 T Induction Furnace (3,30,000 TPA), 1x800 TPD Rolling Mill (2,64,000 TPA), Power Generation – 40 MW (20 MW through Waste Heat Recovery Boiler (WHRB) and 20 MW through Circulating Fluidized bed combustion (CFBC) Boiler)] located at Village – Khamaria, Tehsil – Tilda, District - Raipur, Chhattisgarh. The proposal was considered in 25th meeting of the Reconstituted Expert Appraisal Committee (Industry- 1) held on 25th November, 2020. Accordingly TOR was issued vide letter no. J-11011/278/2020-IA-II (I) dated 14th December, 2020.

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

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

S. No.	Units (Products)	Plant configuration & production capacities as per ToR issued by MOEF&CC dated 14th December, 2020	Plant configuration & production capacities (Proposed Amendment)
1.	DRI Kilns (Sponge Iron)	2 x 350 TPD (2,31,000 TPA)	**2 x 200 TPD (1,32,000 TPA)**
2.	Induction Furnace with Concast (MS Billets / Hot Billets)	5 x 20 T (3,30,000 TPA)	**4 x 15 T (1,98,000)**
3.	Rolling Mill (Structural Steel & Rolled products)	1 x 800 TPD (2,64,000 TPA)	**1 x 400 TPD (1,32,000 TPA)**
4.	Power generation through WHRB (Electricity)	20 MW	**10 MW**

S. No.	Units (Products)	Plant configuration & production capacities as per ToR issued by MOEF&CC dated 14th December, 2020	Plant configuration & production capacities (Proposed Amendment)
5.	Power generation through CFBC (Electricity)	20 MW	**10 MW**
Addition of following facilities:			
6.	**Fasifier for RHF**	**--**	**1190 Nm^3/Hr**
7.	**Ferro Alloys Unit (FeSi / FeMn / SiMn / FeCR / Pig Iron)**	**--**	**2 x 9 MVA (FeSi – 14,000 TPA/ FeMn – 50,400 TPA / SiMn – 28,800 TPA / FeCr – 30,000 TPA / Pig Iron – 47,500 TPA)**
8.	**Briquetting Plant**	**--**	**200 Kg/hour**
9.	**Brick Manufacturing Unit**	**--**	**50,000 Bricks**

7.10.6 **Other changes proposed in ToR:**

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

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

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

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

7.10.9 The proposal was initially considered in the 6th EAC meeting held on 30-31st May, 2022 wherein the Committee recommended to defer the proposal and sought the requisite information. The deliberations and recommendations of the EAC are as follows:

Deliberation by the Committee (EAC during 30-31st May, 2022)

7.10.10 The Committee noted the following:

i. ToR was issued to M/s. Rama Power and Steel Pvt. Ltd.*vide* letter no. J-11011/278/2020-IA-II (I) dated 14th December, 2020 for Greenfield project comprising of 2x350 TPD DRI Kiln (2,31,000 TPA), 5x20 T Induction Furnace (3,30,000 TPA), 1x800 TPD Rolling Mill (2,64,000 TPA), Power Generation – 40 MW (20 MW through Waste Heat Recovery Boiler (WHRB) and 20 MW through Circulating Fluidized bed combustion (CFBC) Boiler)] located at Village – Khamaria, Tehsil – Tilda, District - Raipur, Chhattisgarh.

ii. Instant proposal is for seeking amendment in ToR dated 14.12.2020 with respect to revised Plant configuration and water with drawl as detailed in para 7.8.5 and 7.8.6 above.

iii. In the granted ToR, the water requirement is mentioned as 1455 KLD, however, in the revised PFR, the water requirement is 900 KLD.

iv. PP is proposing amendment in almost all the Plant configuration & production capacities as per ToR issued by MOEF&CC dated 14th December, 2020

Recommendations of the Committee (EAC during 30-31st May, 2022)

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

7.10.12 Based on the above, the proposal was re-considered in the 7th meeting of the EAC for Industry-I sector held on 13-14thJune, 2022. The deliberations and recommendations of the EAC are as follows:

Deliberation by the Committee

7.10.13 The Committee noted the following:

i. ToR was issued to M/s. Rama Power and Steel Pvt. Ltd. *vide* letter no. J-11011/278/2020-IA-II (I) dated 14th December, 2020 for Greenfield project comprising of 2x350 TPD DRI Kiln (2,31,000 TPA), 5x20 T Induction Furnace (3,30,000 TPA), 1x800 TPD Rolling Mill (2,64,000 TPA), Power Generation – 40 MW (20 MW through Waste Heat Recovery Boiler (WHRB) and 20 MW through Circulating Fluidized bed combustion (CFBC) Boiler)] located at Village – Khamaria, Tehsil – Tilda, District - Raipur, Chhattisgarh.

ii. Instant proposal is for seeking amendment in ToR dated 14.12.2020 with respect to revised Plant configuration and water with drawl as detailed in para 7.8.5 and 7.8.6 above.

iii. EAC recommended that PP shall apply for permission for Ground water use on time.

Recommendations of the Committee

7.10.14 After deliberations, the Committee **recommended** the project proposal for amendment in Terms of Reference no. J-11011/278/2020-IA-II (I) dated 14th December, 2020 with respect to

the revised Plant configuration and water with drawl as detailed in para 7.10.5 and 7.10.6 above.

7.10.15 EAC has also recommended the **additional TOR** (i) PP shall submit the Permission letter for Ground water use during EC application. (ii) Project proponent conduct a study on Decarbonisation program, which would essentially consist of company's carbon emissions, carbon budgeting/ balancing, carbon sequestration activities and carbon offsetting strategies. Further, the report shall also contain time bound action plan to reduce its carbon intensity of its operations and supply chains, energy transition pathway from fossil fuels to Renewable energy etc. All these activities/ assessments should be measurable and monitorable with defined time frames.

Agenda No. 7.11

7.11 Proposed Integrated Cement Plant with capacity of Clinker 2.5 MTPA, Cement – 2.5 MPTA and WHRS - 12 MW by M/s Jindal Panther Cement Pvt. Ltd., located at Villages: Kosampali, Barmuda, Dhanagar, Saraipali, District Raigarh, Chhattisgarh. – Consideration of Sub-Committee of EAC visit report for TOR Proposal .

[Proposal No. IA/CG/IND/260478/2022; File No. IA-J-11011/92/2022-IA-II(IND-I)]

[Name of Consultant: M/s. J.M. EnviroNet Pvt. Ltd., Gurugram; QCI NABET Accreditation: valid upto 07/02/2023]

7.11.1 M/s. Jindal Panther Cement Pvt. Ltd has made an application online vide proposal no. IA/CG/IND/260478/2022 dated 17/03/2022 along with the application in prescribed format (Form-I), copy of pre-feasibility report and proposed ToR for undertaking detailed EIA study as per the EIA Notification, 2006 for the project mentioned above. The proposed project activity is listed at S.No. 3 (b) Cement plants Under Category 'A' of the schedule of the EIA Notification, 2006 and appraised at Central Level.

7.11.2 Name of the EIA consultant: M/s. J.M. EnviroNet Pvt. Ltd., [Sl. No. 43, List of ACOs with their Certificate / Extension Letter No: NABET/EIA/2023/RA 0186 valid till 07/02/2023; Rev. 23, May 09, 2022].

7.11.3 The aforementioned proposal was considered by the EAC (Industry 1) in its 3rd EAC meeting held on 11-12th April, 2022. After detailed deliberation, it was observed that

i. Three natural water pond are located in project site.
ii. Two villages are located adjacent to the proposed project site in East and West boundary wherein thick habitation is observed.
iii. There are some constructed sheds located at project site.
iv. Adjacent to the plant site, there is a cement grinding unit and integrated steel plant of the same project proponent.
v. Limestone source for the project is located at distance of 115km and will be transported to the plant site by trucks.
vi. Project proponent has not carried out the alternate site analysis.

7.11.4 In view of the foregoing and after deliberations, the Committee recommended that subcommittee of EAC Industry-1 shall undertake a site visit to the project site and based on the site visit report the instant proposal for ToR shall be considered.

7.11.5 Accordingly, the EAC (Industry-1) sub-committee, has conducted a site visit at Villages: Kosampali, Barmuda, Dhanagar, Saraipali, District Raigarh, Chhattisgarh on 03/06/2022 to ascertain the issues for the proposed project "Proposed Integrated Cement Plant with capacity of Clinker 2.5 MTPA, Cement – 2.5 MPTA and WHRS - 12 MW".

7.11.6 At this instance, the proposal was further re-considered by the EAC (Industry 1) in its 7th meeting of EAC held during 13-14th June, 2022.

Details submitted by Project proponent

7.11.7 The project of M/s. Jindal Panther Cement Pvt. Ltd is located at Villages: Kosampali, Barmuda, Dhanagar, Saraipali, District Raigarh, Chhattisgarh proposes for Proposed Integrated Cement Plant with capacity of Clinker 2.5 MTPA, Cement – 2.5 MPTA and WHRS - 12 MW.

7.11.8 Environmental site settings:

<table>
<tr><th>SNo</th><th>Particulars</th><th>Details</th><th>Remarks</th></tr>
<tr><td>i.</td><td>Total land</td><td>69.561 ha (171.88 acres)
[Private land: 61.643 ha;
Govt land: 6.744 ha;
Forest land:1.174 ha]</td><td>Land Use -</td></tr>
<tr><td>ii.</td><td>Land acquisition details as per MoEFCC O.M. dated 7/10/2014</td><td>Total land of 69.561 ha (171.88 acres) to be acquired by PP
(Out of total 69.561 ha land, 58.772 ha in the name of Jindal Steel & Power Ltd which will be transferred to JPCPL and remaing 10.789 ha land also to be acquired.</td><td></td></tr>
<tr><td>iii.</td><td>Existence of habitation & involvement of R&R, if any.</td><td>Plant Site – 02 habitation exists at the plant site.

Study Area
<table>
<tr><th>Habitation</th><th>Distance</th><th>Direction</th></tr>
<tr><td>Gejamuda</td><td>0.18</td><td>East</td></tr>
<tr><td>Kosampalli</td><td>Adjacent</td><td>East</td></tr>
<tr><td>Muralipali</td><td>1.02</td><td>East</td></tr>
<tr><td>Patrapali</td><td>1.64</td><td>NE</td></tr>
<tr><td>Patrapali</td><td>1.64</td><td>NE</td></tr>
<tr><td>Jorpali</td><td>1.74</td><td>SE</td></tr>
</table></td><td>R&R is applicable.</td></tr>
<tr><td></td><td>Latitude and Longitude of all corners of the plant site</td><td>
<table>
<tr><th>Point</th><th>Latitude</th><th>Longitude</th></tr>
<tr><td>A</td><td>21° 55’ 19.17” N</td><td>83° 20’ 16.56” E</td></tr>
<tr><td>B</td><td>21° 55’ 10.26” N</td><td>83° 20’ 09.64” E</td></tr>
<tr><td>C</td><td>21° 55’ 04.42” N</td><td>83° 20’ 12.72” E</td></tr>
<tr><td>D</td><td>21° 54’ 84.69” N</td><td>83° 20’ 09.68” E</td></tr>
<tr><td>E</td><td>21° 54’ 52.21” N</td><td>83° 20’ 13.85” E</td></tr>
</table></td><td>--</td></tr>
</table>

<table>
<tr><th>SNo</th><th>Particulars</th><th>Details</th><th>Remarks</th></tr>
<tr><td></td><td></td><td>
<table>
<tr><td>F</td><td>21° 54’ 23.96” N</td><td>83° 20’ 00.07” E</td></tr>
<tr><td>G</td><td>21° 54’ 22.69” N</td><td>83° 20’ 03.04” E</td></tr>
<tr><td>H</td><td>21° 54’ 46.72” N</td><td>83° 20’ 15.89” E</td></tr>
<tr><td>I</td><td>21° 54’ 44.26” N</td><td>83° 20’ 20.86” E</td></tr>
<tr><td>J</td><td>21° 54’ 46.66” N</td><td>83° 20’ 22.40” E</td></tr>
<tr><td>K</td><td>21° 54’ 45.98” N</td><td>83° 20’ 23.95” E</td></tr>
<tr><td>L</td><td>21° 54’ 31.71” N</td><td>83° 20’ 16.10” E</td></tr>
<tr><td>M</td><td>21° 54’ 31.00” N</td><td>83° 20’ 17.68” E</td></tr>
<tr><td>N</td><td>21° 54’ 28.54” N</td><td>83° 20’ 16.31” E</td></tr>
<tr><td>O</td><td>21° 54’ 26.63” N</td><td>83° 20’ 20.43” E</td></tr>
<tr><td>P</td><td>21° 54’ 24.70” N</td><td>83° 20’ 22.37” E</td></tr>
<tr><td>Q</td><td>21° 54’ 24.85” N</td><td>83° 20’ 23.56” E</td></tr>
<tr><td>R</td><td>21° 54’ 39.37” N</td><td>83° 20’ 30.55” E</td></tr>
<tr><td>S</td><td>21° 54’ 41.40” N</td><td>83° 20’ 25.54” E</td></tr>
<tr><td>T</td><td>21° 54’ 47.84” N</td><td>83° 20’ 28.60” E</td></tr>
<tr><td>U</td><td>21° 54’ 48.12” N</td><td>83° 20’ 27.15” E</td></tr>
<tr><td>V</td><td>21° 54’ 50.09” N</td><td>83° 20’ 27.94” E</td></tr>
<tr><td>W</td><td>21° 54’ 50.24” N</td><td>83° 20’ 27.38” E</td></tr>
<tr><td>X</td><td>21° 54’ 51.23” N</td><td>83° 20’ 27.40” E</td></tr>
<tr><td>Y</td><td>21° 54’ 51.48” N</td><td>83° 20’ 26.35” E</td></tr>
<tr><td>Z</td><td>21° 55’ 02.67” N</td><td>83° 20’ 32.26” E</td></tr>
<tr><td>A1</td><td>21° 55’ 06.10” N</td><td>83° 20’ 36.54” E</td></tr>
<tr><td>B1</td><td>21° 55’ 14.24” N</td><td>83° 20’ 26.00” E</td></tr>
<tr><td>C1</td><td>21° 55’ 10.69” N</td><td>83° 20’ 24.55” E</td></tr>
<tr><td>D1</td><td>21° 55’ 11.75” N</td><td>83° 20’ 21.39” E</td></tr>
<tr><td>E1</td><td>21° 55’ 15.29” N</td><td>83° 20’ 23.37” E</td></tr>
<tr><td>F1</td><td>21° 55’ 16.96” N</td><td>83° 20’ 22.93” E</td></tr>
</table>
</td><td></td></tr>
<tr><td>iv.</td><td>Elevation of the plant site</td><td>236 m above mean sea level</td><td>--</td></tr>
<tr><td>v.</td><td>Involvement of Forest land if any.</td><td>1.174 ha area under forest land involved. Application for diversion of the said forest land is under preparation and will be submitted shortly.</td><td></td></tr>
<tr><td>vi.</td><td>Water body exists within the plant site as well as study area</td><td>Project Site:
There are ponds existing in the proposed plant area and the in-principle approval has been granted for re-locating the ponds vide letter no. Sr. 1752 dated 23/02/2022.

Study area:
<table>
<tr><th>SNo</th><th>Water body</th><th>Distance</th><th>Direction</th></tr>
<tr><td>1.</td><td>Kokritaral Tal</td><td>~2 Km</td><td>NW</td></tr>
</table>
</td><td>--</td></tr>
</table>

SNo	Particulars	Details	Remarks
		2. Tipakhol Tal ~2.5km NNE 3. Kanthi Tal 3.5 km SSW 4. Doliva Nala ~4.5 km WSW 5. Kelo river ~6 km ENE 6. Mand river ~6 km WSW 7. Pathari Nala ~6.5 km WSW 8. Sanapkhar Nala ~6.5 km ENE 9. Ramjharan Nala ~7 Km W	
vii.	Existence of ESZ/ ESA/ National Park / Wildlife sanctuary / Biosphere reserve / Tiger reserve / Elephant reserve etc. if any within the study area	NIL However, Forests are existing within the Study area are as follows: • Protected Forest (~8.5 km in North) • Protected Forest (~ 7 km in NE) • Lakha PF (~7.5 km in NNE) • Barkachhar RF (~8.5 km in NNE) • Dungapani PF (~8 km in NE) • Barlia PF (~9 km in NE) • Boidadar RF (~7.5km in ENE) • Gajmar RF (~8.5 km in ESE) • Lamhidarha PF (~7.5KM IN ENE) • Protected Forest (~6 km in NE) • Urdana RF (~5 km in ENE)	--

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

S. No.	Plant equipment / Facility	Proposed Units	
		Configuration	Capacity
1.	Clinker	-	2.5 Million TPA
2.	Cement	VRM	2.5 Million TPA
3.	WHRS	-	12 MW
1.	DG set	-	500 KVA

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

S No	Name of Raw Material	Quantity (Million TPA)	Source	Approx. Distance from Plant site (Km)	Mode of Transportation
1.	Limestone	3.88	Godadih Mahal No.2 Tehsil Masturi, District Bilaspur	153	By road to the captive railway siding located at Jairamnagar and thereafter by Rail upto Raigarh IU

S No	Name of Raw Material	Quantity (Million TPA)	Source	Approx. Distance from Plant site (Km)	Mode of Transportation
2.	Iron ore/NOF slag	0.075	JSPL Raigarh	< 1	Will be transported through tippers
3.	BF Slag	1	JSPL Raigarh Steel Plant	< 1	Will be transported through tippers
4.	Gypsum (mineral and chemical)	0.075	Coromandel Fertilizers, Visakhapatnam OR Imported from Middle East	630	By Rail
5.	Fly ash & pond ash	0.375	JSPL Raigarh Power plant	< 1	Through bulkers
6.	Coal (Indian/ Imported Coal)	0.463/ 0.324	Korba coal fields/ imported	120	By Road & Rail
7.	Petcoke	0.241	Indian petroleum industry	Import/ Indian	Petcoke will be sourced from India/ abroad petroleum industry depending upon economic viability.

7.11.11 The water requirement for the plant is estimated as 1000 KLD, which will be sourced from Mahanadi River.

7.11.12 The power requirement for the proposed cement plant will be 35 MVA which will be sourced from Captive power generation and existing power plant of JSPL Raigarh.

7.11.13 The capital cost of the Proposed Integrated Cement Plant is Rs. 2119 Crores and the Capital cost for Environmental Protection Measures is proposed as approximately Rs. 100 Crores. The employment generation from the proposed plant is 80 persons during Implementation Phase and 574 Persons (335 Permanent & 239 Contractual) during Operation Phase.

7.11.14 Proposed Terms of Reference (Baseline data collection period: March to May, 2022):

Attributes	Parameters	Sampling		Remarks
		No. of Stations	Frequency	
A. Meteorology	Temperature, Relative Humidity, Wind Speed, Wind Direction	01 (Plant site)	Hourly	-
B. Air	PM_{10}, $PM_{2.5}$, SO_2, NO_2, CO and PAH	09	Twice a week (24 Hourly)	-

Attributes	Parameters	Sampling		Remarks
		No. of Stations	Frequency	
C. Noise	Equivalent noise levels in Leq in dB (A)	09	Once in a season (Day & Night-time)	-
D. Water				
a. Surface water/ b. Ground water quality parameters	Parameters as per IS 10500 - 2012	Surface Water - 04 Ground water - 08	Once in a season	-
E. Land				
a. Soil Quality	Parameters As per IS 2720/USDA	08	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 Study Area	Once in a Study period Season	-
F. Biological				
a. Aquatic	Flora and fauna	Study area	Once in a season	-
b. Terrestrial				
G. Socio-economic parameters	Economic Demography	Study area	Once in a season	-

7.11.15 It has been reported by PP that, court cases related to the project under consideration given as below:

The two court cases (WPC/6171/2011 & WPC/2290/2011) are pending before the Hon'ble High Court of Chhattisgarh, Bilaspur.

i. The matter related to case no. WPC/6171/2011 has been filed by the Petitioner claiming that notice of the land acquisition proceeding was not served to him due to which he could not have filed proper objection against the land acquisition proceedings. The matter is sub-judice and is pending for final hearing. The Hon'ble High Court has not passed any stay order in the matter.

ii. The matter related to case no. WPC/2290/2011 has been filed by the petitioner alleging that his objections during the land acquisition proceedings were not properly considered and also alleging inadequate land compensation. The matter is sub-judice and is pending for final hearing. The Hon'ble High Court has not passed any stay order in the matter.

7.11.16 EAC sub-committee presented the site visit report.

Deliberation by the Committee

7.11.17 The Committee noted the following from the subcommittee's site visit report:

i. There are two other companies of Jindal Group being operated adjacent to the proposed plant.
   1) JSPL ISP being operated after obtaining statutory clearances
   2) JSPL Cement grinding unit being operated after obtaining statutory clearances

ii. Two villages are located adjacent to the proposed project site in East and West boundary wherein thick habitation is observed.

iii. There are some constructed sheds located at project site.

iv. Three natural water pond are located in project site. Total area coved by these ponds is around 13.93 acres. Considerable water exists in one of these ponds even during peak summer time. Nearby Villages are using these ponds.

v. During the meeting Project proponent expressed the willingness to change the plant lay out by avoiding the three natural ponds from project site.

vi. The PP has agreed of revision of TOR application on Parivesh Portal.

Recommendations of the Committee

7.11.18 After deliberations considering the aforesaid observations and sub-Committee report, the Committee recommended the proposal of M/s. Jindal Panther Cement Pvt. Ltd. of ToR may be **return in present form to revise the application** as the whole process is online. New ToR application may be considered with revised land layout and following conditions.

i. Cumulative impact assessment along with integrated risk management study shall be carried out.

ii. Plan to achieve zero liquid discharge shall be submitted.

iii. Traffic management plan shall be submitted.

iv. Integrated water distribution network for all the units of JSPL Group with respect to water drawl from Mahanadi river considering zero ground water abstraction shall be submitted.

v. Three tier Green Belt shall be developed 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. A 50 m wide greenbelt, at plant boundary adjacent to the villages shall be developed for minimising the impact of the proposed project on the habitation.

vi. The layout of plant be in such a way that no discharge/runoff from the plant premises shall enter into the adjacent ponds.

The meeting ended with thanks to the Chair.

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ANNEXURE –1

GENERAL TERMS OF REFERENCE (ToR) IN RESPECT OF INDUSTRY SECTOR

1. **Executive Summary**
2. **Introduction**
   i. Details of the EIA Consultant including NABET accreditation
   ii. Information about the project proponent
   iii. Importance and benefits of the project
3. **Project Description**
   i. Cost of project and time of completion.
   ii. Products with capacities for the proposed project.
   iii. If expansion project, details of existing products with capacities and whether adequate land is available for expansion, reference of earlier EC if any.
   iv. List of raw materials required and their source along with mode of transportation.
   v. Other chemicals and materials required with quantities and storage capacities
   vi. Details of Emission, effluents, hazardous waste generation and their management.
   vii. Requirement of water, power, with source of supply, status of approval, water balance diagram, man/power requirement (regular and contract)
   viii. The project proponent shall furnish the requisite documents from the competent authority in support of drawl of ground water and surface water and supply of electricity.
   ix. Process description along with major equipment and machineries, process flow sheet (Quantitative) from raw material to products to be provided
   x. Hazard identification and details of proposed safety systems.
   xi. Expansion/modernization proposals:
      a. Copy of all the Environmental Clearance(s) including Amendments thereto obtained for the project from MoEF&CC/SEIAA shall be attached as an Annexure. A certified copy of the latest Monitoring Report of the Regional Office of the Ministry of Environment, Forest and Climate Change as per circular dated 30th May, 2012 on the status of compliance of conditions stipulated in all the existing environmental clearances including Amendments shall be provided. In addition, status of compliance of Consent to Operate for the ongoing /existing operation of the project from SPCB/PCC shall be attached with the EIA/EMP report.
      b. In case the existing project has not obtained environmental clearance, reasons for not taking EC under the provisions of the EIA Notification 1994 and/or EIA Notification 2006 shall be provided. Copies of Consent to Establish/No Objection Certificate and Consent to Operate (in case of units operating prior to EIA Notification 2006, CTE and CTO of FY 2005/2006) obtained from the SPCB shall be submitted. Further, compliance report to the conditions of consents from the SPCB shall be submitted.
4. **Site Details**
   i. Location of the project site covering village, Taluka/Tehsil, District and State, Justification for selecting the site, whether other sites were considered.

ii. A toposheet of the study area of radius of 10km and site location on 1:50,000/1:25,000 scale on an A3/A2 sheet. (including all eco/sensitive areas and environmentally sensitive places)

iii. Co/ordinates (lat/long) of all four corners of the site.

iv. Google map/Earth downloaded of the project site.

v. Layout maps indicating existing unit as well as proposed unit indicating storage area, plant area, greenbelt area, utilities etc. If located within an Industrial area/Estate/Complex, layout of Industrial Area indicating location of unit within the Industrial area/Estate.

vi. Photographs of the proposed and existing (if applicable) plant site. If existing, show photographs of plantation/greenbelt, in particular.

vii. Landuse break/up of total land of the project site (identified and acquired), government/private / agricultural, forest, wasteland, water bodies, settlements, etc shall be included. (not required for industrial area)

viii. A list of major industries with name and type within study area (10km radius) shall be incorporated. Land use details of the study area

ix. Geological features and Geo/hydrological status of the study area shall be included.

x. Details of Drainage of the project upto 5km radius of study area. If the site is within 1 km radius of any major river, peak and lean season river discharge as well as flood occurrence frequency based on peak rainfall data of the past 30 years. Details of Flood Level of the project site and maximum Flood Level of the river shall also be provided. (mega green field projects)

xi. Status of acquisition of land. If acquisition is not complete, stage of the acquisition process and expected time of complete possession of the land.

xii. R&R details in respect of land in line with state Government policy.

5. **Forest and wildlife related issues (if applicable):**

i. Permission and approval for the use of forest land (forestry clearance), if any, and recommendations of the State Forest Department. (if applicable).

ii. Land use map based on High resolution satellite imagery (GPS) of the proposed site delineating the forestland (*in case of projects involving forest land more than 40 ha).*

iii. Status of Application submitted for obtaining the stage I forestry clearance along with latest status shall be submitted.

iv. The projects to be located within 10 km of the National Parks, Sanctuaries, Biosphere Reserves, Migratory Corridors of Wild Animals, the project proponent shall submit the map duly authenticated by Chief Wildlife Warden showing these features vis/à/vis the project location and the recommendations or comments of the Chief Wildlife Warden/thereon.

v. Wildlife Conservation Plan duly authenticated by the Chief Wildlife Warden of the State Government for conservation of Schedule I fauna, if any exists in the study area.

vi. Copy of application submitted for clearance under the Wildlife (Protection) Act, 1972, to the Standing Committee of the National Board for Wildlife.

6. **Environmental Status**

i. Determination of atmospheric inversion level at the project site and site/specific micro/meteorological data using temperature, relative humidity, hourly wind speed and direction and rainfall.

ii. AAQ data (except monsoon) at 8 locations for PM_{10}, $PM_{2.5}$, SO_2, NO_X, CO and other parameters relevant to the project shall be collected. The monitoring stations shall be based CPCB guidelines and take into account the pre/dominant wind direction, population zone and sensitive receptors including reserved forests.

iii. Raw data of all AAQ measurement for 12 weeks of all stations as per frequency given in the NAQQM Notification of Nov. 2009 along with – min., max., average and 98% values for each of the AAQ parameters from data of all AAQ stations should be provided as an annexure to the EIA Report.

iv. Surface water quality of nearby River (60m upstream and downstream) and other surface drains at eight locations as per CPCB/MoEF&CC guidelines.

v. Whether the site falls near to polluted stretch of river identified by the CPCB/MoEF&CC.

vi. Ground water monitoring at minimum at 8 locations shall be included.

vii. Noise levels monitoring at 8 locations within the study area.

viii. Soil Characteristic as per CPCB guidelines.

ix. Traffic study of the area, type of vehicles, frequency of vehicles for transportation of materials, additional traffic due to proposed project, parking arrangement etc.

x. Detailed description of flora and fauna (terrestrial and aquatic) existing in the study area shall be given with special reference to rare, endemic and endangered species. If Schedule/I fauna are found within the study area, a Wildlife Conservation Plan shall be prepared and furnished.

xi. Socio/economic status of the study area.

7. **Impact Assessment and Environment Management Plan**

i. Assessment of ground level concentration of pollutants from the stack emission based on site/specific meteorological features. In case the project is located on a hilly terrain, the AQIP Modelling shall be done using inputs of the specific terrain characteristics for determining the potential impacts of the project on the AAQ. Cumulative impact of all sources of emissions (including transportation) on the AAQ of the area shall be well assessed. Details of the model used and the input data used for modelling shall also be provided. The air quality contours shall be plotted on a location map showing the location of project site, habitation nearby, sensitive receptors, if any.

ii. Water Quality modelling – in case, if the effluent is proposed to be discharged in to the local drain, then Water Quality Modelling study should be conducted for the drain water taking into consideration the upstream and downstream quality of water of the drain.

iii. Impact of the transport of the raw materials and end products on the surrounding environment shall be assessed and provided. In this regard, options for transport of raw materials and finished products and wastes (large quantities) by rail or rail/cum road transport or conveyor/cum/rail transport shall be examined.

iv. A note on treatment of wastewater from different plant operations, extent recycled and reused for different purposes shall be included. Complete scheme of effluent

treatment. Characteristics of untreated and treated effluent to meet the prescribed standards of discharge under E(P) Rules.

v. Details of stack emission and action plan for control of emissions to meet standards.

vi. Measures for fugitive emission control

vii. Details of hazardous waste generation and their storage, utilization and disposal. Copies of MOU regarding utilization of solid and hazardous waste shall also be included. EMP shall include the concept of waste/minimization, recycle/reuse/recover techniques, Energy conservation, and natural resource conservation.

viii. Proper utilization of fly ash shall be ensured as per Fly Ash Notification, 2009. A detailed plan of action shall be provided.

ix. Action plan for the green belt development plan in 33 % area i.e. land with not less than 1,500 trees per ha. Giving details of species, width of plantation, planning schedule etc. shall be included. The green belt shall be around the project boundary and a scheme for greening of the roads used for the project shall also be incorporated.

x. Action plan for rainwater harvesting measures at plant site shall be submitted to harvest rainwater from the roof tops and storm water drains to recharge the ground water and also to use for the various activities at the project site to conserve fresh water and reduce the water requirement from other sources.

xi. Total capital cost and recurring cost/annum for environmental pollution control measures shall be included.

xii. Action plan for post/project environmental monitoring shall be submitted.

xiii. Onsite and Offsite Disaster (natural and Man/made) Preparedness and Emergency Management Plan including Risk Assessment and damage control. Disaster management plan should be linked with District Disaster Management Plan.

8. **Occupational health**

i. Details of existing Occupational & Safety Hazards. What are the exposure levels of above mentioned hazards and whether they are within Permissible Exposure level (PEL). If these are not within PEL, what measures the company has adopted to keep them within PEL so that health of the workers can be preserved,

ii. Details of exposure specific health status evaluation of worker. If the workers' health is being evaluated by pre/designed format, chest x rays, Audiometry, Spirometry, Vision testing (Far & Near vision, colour vision and any other ocular defect) ECG, during pre/placement and periodical examinations give the details of the same. Details regarding last month analysed data of abovementioned parameters as per age, sex, duration of exposure and department wise.

iii. Annual report of health status of workers with special reference to Occupational Health and Safety.

iv. Plan and fund allocation to ensure the occupational health & safety of all contract and casual workers.

9. **Corporate Environment Policy**

i. Does the company have a well laid down Environment Policy approved by its Board of Directors? If so, it may be detailed in the EIA report.

ii. Does the Environment Policy prescribe for standard operating process / procedures to bring into focus any infringement / deviation / violation of the environmental or forest norms / conditions? If so, it may be detailed in the EIA.

iii. What is the hierarchical system or Administrative order of the company to deal with the environmental issues and for ensuring compliance with the environmental clearance conditions? Details of this system may be given.

iv. Does the company have system of reporting of non/compliances / violations of environmental norms to the Board of Directors of the company and / or shareholders or stakeholders at large? This reporting mechanism shall be detailed in the EIA report

10. Details regarding infrastructure facilities such as sanitation, fuel, restroom etc. to be provided to the labour force during construction as well as to the casual workers including truck drivers during operation phase.
11. To address the Public Hearing issues, provisions contained under Ministry's Office Memorandum vide F.No. 22/65/2017/IA.III dated 30/09/2020 shall be complied.
12. Any litigation pending against the project and/or any direction/order passed by any Court of Law against the project, if so, details thereof shall also be included. Has the unit received any notice under the Section 5 of Environment (Protection) Act, 1986 or relevant Sections of Air and Water Acts? If so, details thereof and compliance/ATR to the notice(s) and present status of the case.
13. A tabular chart with index for point wise compliance of above ToRs.
14. The ToRs prescribed shall be valid for a period of three years for submission of the EIA/EMP reports along with Public Hearing Proceedings (wherever stipulated).

<u>The following general points shall be noted:</u>

i. All documents shall be properly indexed, page numbered.
ii. Period/date of data collection shall be clearly indicated.
iii. Authenticated English translation of all material in Regional languages shall be provided.
iv. The letter/application for environmental clearance shall quote the MOEF&CC file No. and also attach a copy of the letter.
v. The copy of the letter received from the Ministry shall be also attached as an annexure to the final EIA/EMP Report.
vi. The index of the final EIA/EMP report must indicate the specific chapter and page no. of the EIA/EMP Report
vii. While preparing the EIA report, the instructions for the proponents and instructions for the consultants issued by MOEF&CC vide O.M. No. J/11013/41/2006/IA.II (I) dated 4th August, 2009, which are available on the website of this Ministry shall also be followed.
viii. The consultants involved in the preparation of EIA/EMP report after accreditation with Quality Council of India (QCl)/National Accreditation Board of Education and Training (NABET) would need to include a certificate in this regard in the EIA/EMP reports prepared by them and data provided by other organization/Laboratories including their status of approvals etc. Name of the Consultant and the Accreditation details shall be posted on the EIA/EMP Report as well as on the cover of the Hard Copy of the Presentation material for EC presentation.

ix. ToRs' prescribed by the Expert Appraisal Committee (Industry) shall be considered for preparation of EIA/EMP report for the project in addition to all the relevant information as per the 'Generic Structure of EIA' given in Appendix III and IIIA in the EIA Notification, 2006. Where the documents provided are in a language other than English, an English translation shall be provided. The draft EIA/EMP report shall be submitted to the State Pollution Control Board of the concerned State for conduct of Public Hearing. The SPCB shall conduct the Public Hearing/public consultation, district/wise, as per the provisions of EIA notification, 2006. The Public Hearing shall be chaired by an Officer not below the rank of Additional District Magistrate. The issues raised in the Public Hearing and during the consultation process and the commitments made by the project proponent on the same shall be included separately in EIA/EMP Report in a separate chapter and summarized in a tabular chart with financial budget (capital and revenue) along with time/schedule of implementation for complying with the commitments made. The final EIA report shall be submitted to the Ministry for obtaining environmental clearance.

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ANNEXURE-2

ADDITIONAL ToRS FOR INTEGRATED STEEL PLANT

1. Iron ore/coal linkage documents along with the status of environmental clearance of iron ore and coal mines
2. Quantum of production of coal and iron ore from coal & iron ore mines and the projects they cater to. Mode of transportation to the plant and its impact
3. For Large ISPs, a 3/D view i.e. DEM (Digital Elevation Model) for the area in 10 km radius from the proposal site. MRL details of project site and RL of nearby sources of water shall be indicated.
4. Recent land/use map based on satellite imagery. High/resolution satellite image data having 1m/5m spatial resolution like quickbird, Ikonos, IRS P/6 pan sharpened etc. for the 10 Km radius area from proposed site. The same shall be used for land used/land/cover mapping of the area.
5. PM (PM_{10} and $P_{2.5}$) present in the ambient air must be analysed for source analysis – natural dust/RSPM generated from plant operations (trace elements) of PM_{10} to be carried over.
6. All stock piles will have to be on top of a stable liner to avoid leaching of materials to ground water.
7. Plan for the implementation of the recommendations made for the steel plants in the CREP guidelines.
8. Plan for slag utilization
9. Plan for utilization of energy in off gases (coke oven, blast furnace)
10. System of coke quenching adopted with justification.
11. Trace metals Mercury, arsenic and fluoride emissions in the raw material.
12. Trace metals in waste material especially slag.
13. Trace metals in water
14. Details of proposed layout clearly demarcating various units within the plant.
15. Complete process flow diagram describing each unit, its processes and operations, along with material and energy inputs and outputs (material and energy balance).
16. Details on design and manufacturing process for all the units.
17. Details on environmentally sound technologies for recycling of hazardous materials, as per CPCB Guidelines, may be mentioned in case of handling scrap and other recycled materials.
18. Details on requirement of energy and water along with its source and authorization from the concerned department. Location of water intake and outfall points (with coordinates).
19. Details on toxic metal content in the waste material and its composition and end use (particularly of slag).
20. Details on toxic content (TCLP), composition and end use of slag.

ADDITIONAL ToRs FOR PELLET PLANT

1. Iron ore/coal linkage documents along with the status of environmental clearance of iron ore and coal mines
2. Quantum of production of coal and iron ore from coal & iron ore mines and the projects they cater to. Mode of transportation to the plant and its impact
3. Recent land/use map based on satellite imagery. High/resolution satellite image data having 1m/5m spatial resolution like quickbird, Ikonos, IRS P/6 pan sharpened etc. for the 10 Km radius area from proposed site. The same shall be used for land used/land/cover mapping of the area.
4. PM(PM_{10} and $P_{2.5}$) present in the ambient air must be analysed for source analysis – natural dust/RSPM generated from plant operations (trace elements) of PM_{10} to be carried over.
5. All stock piles will have to be on top of a stable liner to avoid leaching of materials to ground water.
6. Plan for the implementation of the recommendations made for the steel plants in the CREP guidelines.
7. Plan for slag utilization
8. Plan for utilization of energy in off gases (coke oven, blast furnace)
9. System of coke quenching adopted with justification.
10. Trace metals Mercury, arsenic and fluoride emissions in the raw material.
11. Trace metals in waste material especially slag.
12. Trace metals in water

ADDITIONAL ToRs FOR CEMENT INDUSTRY

1. Limestone and coal linkage documents along with the status of environmental clearance of limestone and coal mines
2. Quantum of production of coal and limestone from coal & limestone mines and the projects they cater to;
3. Present land use shall be prepared based on satellite imagery. High/resolution satellite image data having 1m/5m spatial resolution like quickbird, Ikonos, IRS P/6 pan sharpened etc. for the 10 Km radius area from proposed site. The same shall be used for land used/land/cover mapping of the area.
4. If the raw materials used have trace elements, an environment management plan shall also be included.
5. Plan for the implementation of the recommendations made for the cement plants in the CREP guidelines must be prepared.
6. Energy consumption per ton of clinker and cement grinding
7. Provision of waste heat recovery boiler
8. Arrangement for co/processing of hazardous waste in cement plant.
9. Trace metals in waste material especially slag.

ADDITIONAL ToRs FOR PULP AND PAPER INDUSTRY

i. A note on pulp washing system capable of handling wood pulp shall be included.

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

iii. Studies shall be conducted and a chapter shall be included to show that Soda pulping process can be employed for *Eucalyptus/Casuarina* to produce low kappa (bleachable) grade of pulp.

iv. Commitment that only elemental Chlorine/free technology will be used for the manufacture of paper and existing plant without chemical recovery plant will be closed within 2 years of issue of environment clearance.

v. A commitment that no extra chlorine base bleaching chemicals (more than being used now) will be employed and AOx will remain within limits as per CREP for used based mills. Plan for reduction of water consumption.

ADDITIONAL ToRs FOR LEATHER/SKIN/HIDE PROCESSING INDUSTRY

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

ADDITIONAL ToRs FOR COKE OVEN PLANT

1. Justification for selecting recovery/non/recovery (beehive) type batteries with the proposed unit size.
2. Details of proposed layout clearly demarcating various facilities such as coal storages, coke making, by/product recovery area,*etc* within the plant.
3. Details of coke oven plant (recovery/non/recovery type) including coal handling, coke oven battery operations, coke handling and preparation.
4. Scheme for coal changing, charging emission centre, Coke quenching technology, pushing emission control.
5. Scheme for coke oven effluent treatment plant details including scheme for meeting cyanide standard.

ADDITIONAL ToRs FOR ASBESTOS MILLING AND ASBESTOS BASED PRODUCTS

1. Type of the project – new/expansion/modernization
2. Type of fibres used (Asbestos and others) and preference of selection from techno/environmental angle should be furnished
3. As asbestos is used in several products and as the level of precautions differ from milling to usage in cement products, friction products gasketing, textiles and also differ with the process used, it is necessary to give process description and reasons for the choice for selection of process
4. Technology adopted, flow chart, process description and layout marking areas of potential environmental impacts
5. National standards and codes of practice in the use of asbestos particular to the industry should be furnished
6. In case of newly introduced technology, it should include the consequences of any failure of equipment/ technology and the product on environmental status.
7. In case of expansion project asbestos fibre to be measured at slack emission and work zone area, besides base line air quality.
8. In case of green field project asbestos fibre to be measured at ambient air.

ADDITIONAL ToRs FOR METALLURGICAL INDUSTRY (FERROUS AND NON/FERROUS)

1. Complete process flow diagram describing each unit, its processes and operations, along with material and energy inputs & outputs (material and energy balance).
2. Emission from sulphuric acid plant and sulphur muck management.
3. Details on installation of Continuous Emission Monitoring System with recording with proper calibration system
4. Details on toxic metals including fluoride emissions
5. Details on stack height.
6. Details on ash disposal and management
7. Complete process flow diagram describing process of lead/zinc/copper/ aluminium, *etc.*
8. Details on smelting, thermal refining, melting, slag fuming, and Waelz kiln operation
9. Details on Holding and de/gassing of molten metal from primary and secondary aluminium, materials pre/treatment, and from melting and smelting of secondary aluminium
10. Details on toxic metal content in the waste material and its composition and end use (particularly of slag).
11. Trace metals in waste material especially slag.
12. Plan for trace metal recovery
13. Trace metals in water

Executive Summary

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

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

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ANNEXURE-3

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

S. No.	Name	Position	13/06/2022	14/06/2022
1.	Shri. Rajive Kumar	Chairman	Present	Present
2.	Dr. S. Ranganathan	Member	Present	Present
3.	Dr. Ranjit Prasad	Member	Present	Present
4.	Dr. E V R Raju	Member	Present	Present
5.	Dr. S. K. Singh	Member	Present	Present
6.	Dr. Jai Krishna Pandey	Member	Present	Present
7.	Dr. Dipankar Shome	Member	Present	Present
8.	Dr. Tejaswini Ananthkumar	Member	Present	Present
9.	Dr. Hemant Sahasrabuddhe	Member	Present	Present
10.	Dr. B. N. Mohapatra, DG, (Representatives of NCCBM)	Member	Absent	Absent
11.	Representative of CPCB (Shri Nazimuddin, Scientist 'F')	Member	Present	Present
12.	Dr. S. Raghavan, Scientist 'D' National Institute of Occupational Health (NIOH)	*Member*	Present	Present
13.	Dr. Sanjay Bist, Scientist 'E' Indian Meteorological Department	Member	Present	Present
14.	Dr. R.B. Lal, Scientist E, MoEFCC	Member Secretary	Present	Present
Officials from MoEF&CC				
15.	Dr. Rajesh Prasad Rastogi	Scientist 'C'	Present	Present
16.	Dr. Sandeepan B.S.	Scientist 'B'	Present	Present

ANNEXURE-4

Approval of EAC Chairman

Email **Additional Director MoEFCC Dr R B LAL**

Re: Zero Draft Minutes of the 7th EAC (Industry 1 Sector) meeting held during 13-14 June, 2022(through Video Conferencing) for comments of the EAC and approval of the Chairman for uploading on PARIVESH.

From : chairman eac ind 1 <chairman.eac.ind.1@gmail.com> Thu, Jun 23, 2022 03:40 PM

Subject : Re: Zero Draft Minutes of the 7th EAC (Industry 1 Sector) meeting held during 13-14 June, 2022(through Video Conferencing) for comments of the EAC and approval of the Chairman for uploading on PARIVESH.

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

Cc : ranganathan metals <ranganathan.metals@gmail.com>, ranjitnitj@gmail.com, rajuevr60@gmail.com, sksinghdce@gmail.com, jaikrishnapandey@gmail.com, dshome61@gmail.com, tejaswini acf <tejaswini.acf@gmail.com>, sshemant 801 <sshemant_801@rediffmail.com>, NCCBM DIRECTOR GENERAL <dg@ncbindia.com>, Nazimuddin <nazim.cpcb@nic.in>, Raghavan S <raghuharihar@gov.in>, raghuharihar@yahoo.co.in, Sanjay Bist <sanjay.bist@imd.gov.in>

Dear Dr.Lal,

The minutes are approved. Kindly do needful.
Best wishes
Rajive Kumar

On Thu, Jun 23, 2022 at 2:54 PM Additional Director MoEFCC Dr R B LAL <rb.lal@nic.in> wrote:
Respected Chairman Sir,

The Zero Draft minutes were forwarded to the EAC on 20.06.2022. The suggestions made by the EAC has been incorporated and attached herewith.

Based on the comments/suggestions received from the EAC members, a draft copy of minutes of the 7th EAC (Industry 1 Sector) meeting held during June 13-14, 2022 is attached herewith for approval of the Chairman, Industry 1 Sector, please. After approval the minutes may be uploaded on Parivesh Portal.

Best Regards,

(Dr. R. B. LAL)
Additional Director/Scientist 'E' &
Member Secretary, Expert Appraisal Committee (Industry-1 Sector)