



Government of India
Ministry of Environment, Forest and Climate Change
IA Division
(Thermal Projects)



Minutes of AGENDA FOR 46th MEETING OF THE EXPERT APPRAISAL COMMITTEE (EAC) (THERMAL POWER PROJECTS) TO BE HELD ON 18TH JUNE, 2026 DURING 10:00 – 18.00 HRS THROUGH VIRTUAL MODE. meeting Thermal Projects held from 18/06/2026 to 18/06/2026

MoM ID: EC/MOM/EAC/182080/6/2026

Agenda ID: EC/AGENDA/EAC/182080/6/2026

Meeting Venue: N/A

Meeting Mode: Virtual

Date & Time:

18/06/2026	10:30 AM	06:00 PM
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1. Opening remarks

SUMMARY RECORD OF THE FORTY SIXTH (46th) MEETING OF EXPERT APPRAISAL COMMITTEE (EAC) HELD ON 18th JUNE 2026 FOR ENVIRONMENT APPRAISAL OF THERMAL SECTOR PROJECTS THROUGH VIRTUAL MODE.

18th JUNE, 2026 [THURSDAY]

At the outset, Shri. Inder Pal Singh Matharu (I.F.S Retd.), Chairman, Expert Appraisal Committee (Thermal Power & Coal Mining) welcomed the Expert members & other participants and requested to start the proceeding as per the agenda listed for this meeting. The list of EAC members who participated in the meeting is at **Annexure – I.**

[The main PDF of MoM is enclosed at Page no. 170 - 289]

2. Confirmation of the minutes of previous meeting

Confirmation of the minutes of the 45th meeting of the EAC (Thermal): The minutes of the 45th

meeting of the EAC (Thermal) held on 22nd May, 2026 through virtual mode have been confirmed by the EAC.

3. Details of proposals considered by the committee

Day 1 -18/06/2026

3.1. Agenda Item No 1:

3.1.1. Details of the proposal

Proposed 3200 MW Coal Based Ultra Super Critical Thermal Power Project at Villages Charuabakhra, Chirakuta I & II, Santoshpur, Revenue Circle Chapar, District Dhubri, Assam by Adani Power Limited by Adani Power Limited located at DHUBRI, ASSAM			
Proposal For		Fresh EC	
Proposal No	File No	Submission Date	Activity Sub-Activity (Schedule Item)
IA/AS/THE/580405/2026	J-13012/10/2025-IA.I(T)	30/05/2026	Thermal Power Plants Coal/Lignite based plants (1(d))

3.1.2. Project Salient Features

Agenda Item No. 46.1

46.1: Proposed 3200 MW (4x800MW) Coal Based Ultra Super Critical Thermal Power Project by **M/s Adani Power Limited** at Villages Charuabakhra, Chirakuta I & II, Santoshpur, Revenue Circle Chapar, District Dhubri, Assam - **Environmental Clearance (EC) – regarding.**

[Proposal no. IA/AS/THE/580405/2026, F. No. J-13012/10/2025-IA.I(T)]

46.1.1: M/s. Adani Power Limited has made an online application vide proposal no. IA/AS/THE/580405/2026 dated 30.05.2026 along with copy of EIA/EMP report, Form seeking Environment Clearance (EC) under the provisions of the EIA Notification, 2006 for the project mentioned above. The proposed project activity is listed at item no. 1(d) Under Category “A” of the schedule of the EIA Notification, 2006 and does not attract general condition and is appraised at Central Level.

Name of the EIA consultant: M/s Gaurang Environmental Solutions Pvt. Ltd. [S. No. 114, List of ACOs with their Certificate No. NABET/EIA /23-26/SA 0269 dated 10.03.2026 valid upto 7.12.2026.

Details of the proposal, as ascertained from the proposal documents and as revealed from the discussions held during the meeting, are given as under:

46.1.2: The project of M/s. Adani Power Limited located in Charuabakhra, Chirakuta I & II, Santoshpur Village, Revenue Circle Chapar, District Dhubri, Assam is for setting up of a new power plant with a capacity of 3200 MW.

46.1.3: Compliance to MoEF&CC Notification dated 11/07/2025 regarding SO₂ emission norms:

- Categorization details of TPP: Yet to be done as the project is of green field in nature
- Sulfur content of the coal to be fired in the boiler: <0.50 (%)

- iii. Status of SO₂ emission control facility for the existing unit: Not applicable as the project is of green field in nature
- iv. Action plan for installation of new stack in compliance to the notification number GSR 742 (E) dated the 30/08/1990 for the proposed expansion: 275 m Chimney (2 Bi-Flue stack with RCC shell) are proposed.

46.1.4: The detail of the ToR is furnished as below:

Proposal No with date	Consideration	Details	Date of accord	ToR Validity
IA/AS/THE/560845/2025	35 th EAC meeting	24.12 2025	19.01.2026	18.01.2030

46.1.5: Environmental site settings:

S. N o.	Particulars	Details	Remarks																				
1.	Total Land	585 Ha (Govt.:466.3 Ha, Private: 118.7 Ha)	Land use: Industrial																				
2.	Land use break up	<table><tr><th>Description</th><th>Propose Area (In Hectares)</th></tr><tr><td>Main Plant (Including BTG, Water Facility(CT), AHP Facility, Switchyard & Misc. Facility)</td><td>100</td></tr><tr><td>Coal Stock Yard, CHP (Including Rail Yard)</td><td>70</td></tr><tr><td>Reservoir</td><td>20</td></tr><tr><td>Green belt (33% of total area)</td><td>193</td></tr><tr><td>Ash Dyke</td><td>70</td></tr><tr><td>Others: [Land for Future expansion including CGU (11 Ha)]</td><td>132</td></tr><tr><td>Total</td><td>585 Ha</td></tr></table> Land use break up for railway siding and water supply	Description	Propose Area (In Hectares)	Main Plant (Including BTG, Water Facility(CT), AHP Facility, Switchyard & Misc. Facility)	100	Coal Stock Yard, CHP (Including Rail Yard)	70	Reservoir	20	Green belt (33% of total area)	193	Ash Dyke	70	Others: [Land for Future expansion including CGU (11 Ha)]	132	Total	585 Ha	The land is allotted by APDCL, Govt. of Assam				
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3.	Land acquisition details as per MoE F&CC O.M. dated 7/10/2014 & 19/02/2025	The land is already allotted by APDCL, Govt. of Assam	The land is allotted by APDCL, Govt. of Assam																				
4.	Existence of habitation & involvement of R&R, if any.	Project site: Name of villages - Charuabakhra, Chirakuta I & II, Santoshpur- No R&R Study area: <table><tr><th>S. No.</th><th>Habitation</th><th>Distance (km) w.r.t. TPP</th><th>Direction</th></tr><tr><td>1</td><td>Charua Bhakhra</td><td>0.6</td><td>NW</td></tr><tr><td>2</td><td>Chirakuta Pt I</td><td>1.0</td><td>W</td></tr><tr><td>3</td><td>Chirakuta Pt II</td><td>1.1</td><td>S</td></tr><tr><td>4</td><td>Santoshpur</td><td>1.1</td><td>SE</td></tr></table>	S. No.	Habitation	Distance (km) w.r.t. TPP	Direction	1	Charua Bhakhra	0.6	NW	2	Chirakuta Pt I	1.0	W	3	Chirakuta Pt II	1.1	S	4	Santoshpur	1.1	SE	Status of R&R. – No R&R involved. The land is allotted by APDCL, Govt. of Assam
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5.	Existence of school and hospital if any	A. School Project site:- None Study Area: <table><tr><th>S.No.</th><th>School</th><th>Distance (km)</th><th>Direction</th></tr><tr><td>1</td><td>Salkocha HS School, Salkocha</td><td>3.5</td><td>E</td></tr><tr><td>2</td><td>Silgara High School, Hapapara</td><td>3.1</td><td>N</td></tr><tr><td>3</td><td>Dwarshila High School, Ishilamari</td><td>5.5</td><td>SW</td></tr><tr><td>4</td><td>Tilapara HS School, Tilapara</td><td>3.1</td><td>S</td></tr><tr><td>5</td><td>Govt Model College, Bilasipara</td><td>2.2</td><td>W</td></tr><tr><td>6</td><td>Silgara ME School, Silgara</td><td>3.1</td><td>NE</td></tr><tr><td>7</td><td>Sankardev Sishu Viddya Nicatan, Salkocha</td><td>3</td><td>NE</td></tr></table> B. Hospital Project site :- None Study Area : <table><tr><th>S. No.</th><th>Hospital</th><th>Distance (km)</th><th>Direction</th></tr><tr><td>1</td><td>Salkocha Hospital, Salkocha</td><td>2.2</td><td>E</td></tr><tr><td>2</td><td>Diporkhuti Civil Hospital, Bilasipara</td><td>7.5</td><td>NW</td></tr></table> Protection measures to be adopted are as follows: In addition to EMP budget of 2611 Crore, a Budget of Rs. 40.5 Crore is proposed towards Socio-EMP (CER).	S.No.	School	Distance (km)	Direction	1	Salkocha HS School, Salkocha	3.5	E	2	Silgara High School, Hapapara	3.1	N	3	Dwarshila High School, Ishilamari	5.5	SW	4	Tilapara HS School, Tilapara	3.1	S	5	Govt Model College, Bilasipara	2.2	W	6	Silgara ME School, Silgara	3.1	NE	7	Sankardev Sishu Viddya Nicatan, Salkocha	3	NE	S. No.	Hospital	Distance (km)	Direction	1	Salkocha Hospital, Salkocha	2.2	E	2	Diporkhuti Civil Hospital, Bilasipara	7.5	NW	
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6.	Latitude and Longitude of all corners of the project site.	A. Plant Site <table><tr><th>S. No.</th><th>Latitude</th><th>Longitude</th></tr><tr><td>1</td><td>26°13'50.10"N</td><td>90°16'58.93"E</td></tr><tr><td>2</td><td>26°14'6.60"N</td><td>90°17'41.64"E</td></tr><tr><td>3</td><td>26°14'26.69"N</td><td>90°18'2.40"E</td></tr></table>	S. No.	Latitude	Longitude	1	26°13'50.10"N	90°16'58.93"E	2	26°14'6.60"N	90°17'41.64"E	3	26°14'26.69"N	90°18'2.40"E																																	
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7.	Elevation of the project site	63 m above mean sea level (Average)	--																																	
8.	Involvement of Forest land, if any.	Status of stage I Forest Clearance: Not Applicable Area of forest land involved: No Forest land involved.	--																																	
9.	Water body (Rivers, Lakes, Pond, Nala, Natural Drainage, Canal etc.) exists within the project site as well as study area	Project site :- None Study area: <table><tr><th>S. No.</th><th>Name</th><th>Aerial Distance (Km)</th><th>Direction</th></tr><tr><td>1</td><td>Gaurang River</td><td>2.9</td><td>W</td></tr><tr><td>2</td><td>Mar Gaurang Nala</td><td>0.56</td><td>SE</td></tr><tr><td>3</td><td>Chak Chaka Lake</td><td>3.3</td><td>E</td></tr><tr><td>4</td><td>Diple Lake</td><td>3.6</td><td>N</td></tr><tr><td>5</td><td>Brahmaputra River</td><td>4.8</td><td>S</td></tr><tr><td>6</td><td>Dhakra Bill</td><td>6</td><td>NE</td></tr><tr><td>7</td><td>Dhir Lake</td><td>7.1</td><td>E</td></tr></table> Protection measures to be adopted are as follows:	S. No.	Name	Aerial Distance (Km)	Direction	1	Gaurang River	2.9	W	2	Mar Gaurang Nala	0.56	SE	3	Chak Chaka Lake	3.3	E	4	Diple Lake	3.6	N	5	Brahmaputra River	4.8	S	6	Dhakra Bill	6	NE	7	Dhir Lake	7.1	E	HFL letter of the Gourang river is received from WRD which is 35.51 meter. Issued by WRD, Guwahati dated 09.02.2026	
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10.	Existence of ESZ/ESA/ national park/wildlife sanctuary/biosphere reserve/ tiger reserve/elephant reserve etc. if any within the study area	Study area Name of the ESZ/ESA: ESZ of Chakrashila Wildlife Sanctuary. Status of Notification: MoEF&CC Notification dated 08.04.2021 Distance of project from ESZ/ESA: 2.02 km in NNE direction from project site Authenticated map of ESZ projecting distance of ESZ from project site: Authenticated map certified by PCCF (Wildlife) & CWLW, Guwahati Status of NBWL approval: Not Applicable List of Reserved and protected forests: <table><tr><th>S.No.</th><th>Forests</th><th>Aerial Distance (Km)</th><th>Direction</th></tr><tr><td>1</td><td>Chakrashila Wildlife Sanctuary</td><td>5</td><td>N</td></tr><tr><td>2</td><td>Tokrabandha RF</td><td>2</td><td>SW</td></tr><tr><td>3</td><td>Dudhnath RF</td><td>1.5</td><td>S</td></tr><tr><td>4</td><td>Chandardinga RF</td><td>4.5</td><td>SE</td></tr><tr><td>5</td><td>Kaprigacha R.F</td><td>9.2</td><td>NW</td></tr><tr><td>6</td><td>Shrigrām R.F.</td><td>5.9</td><td>NE</td></tr></table>	S.No.	Forests	Aerial Distance (Km)	Direction	1	Chakrashila Wildlife Sanctuary	5	N	2	Tokrabandha RF	2	SW	3	Dudhnath RF	1.5	S	4	Chandardinga RF	4.5	SE	5	Kaprigacha R.F	9.2	NW	6	Shrigrām R.F.	5.9	NE	--					
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7	Charalkhola R.F.	9.2	NE								
8	Sarpamar R.F.	4.4	SE								
11.	Archaeological sites monuments/ historical temples etc.	None in 10 km radius study area.	--								
12.	Facility envisaged in CRZ area	Name of the facility in CRZ area – None within study area Recommendations of CZMA – Not Applicable Status of CRZ clearance – Not Applicable	CRZ map not applicable								
13.	Involvement of Critically Polluted Area/Severely Polluted area as per 2018 CEPI score	Involvement of CPA/SPA: None in project site Proximity to CPA/SPA: No CPA/SPA as declared by CPCB lies within 10 km radius area. The nearest CPA is in Brynihat Industrial area~ 159 km ESE from project site.	--								

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

Sr. No.	Existing Power Plant Configuration and Capacity	Proposed Power Plant Configuration and Capacity	Total	Technology Adopted
1	Not Applicable	4×800 MW	3200 MW	Ultra Super Critical

46.1.7: The details of the fuel (coal/gas/LDO) requirement for the proposed project along with its source and mode of transportation is given as below:

Details	Fuel requirement (MTPA)	Source	Distance from site (Kms)	Mode of Transportation	Coal characteristics (Worst case scenario)	Linkage document
Coal :						
Proposed TPP	13.27 MTPA	MCL/ECL/NECL Nearby Commercial Coal Mines & e-auction	350-690 KM	By Rail	Ash- <40 (%) Sulphur- <0.5 (%) Moisture- 13 (%) GCV – 3200 -4300 Kcal/Kg	FSA under Shakti Policy and E-auction
LDO/HSD:						
Proposed TPP	24000 KL/Annunum	Local Market/Vendor	50 – 100 KM	By Road	Low Sulphur (3-5% mass)	Local Market/ Vendor

46.1.8: Water Requirement: The water requirement for the proposed project is estimated as

1,53,600 m³/day (56 MCM), out of which 1,53,600 m³/day of freshwater requirement will be obtained from the Brahmaputra River. The permission for drawl of surface water is obtained from the Water Resources Department, Guwahati vide Letter No. 433516/678 dated 09.01.2026. The water will be transported to the plant site through pipeline. The specific water consumption for the power plant will be < 2.5 m³/MWhr.

46.1.9: Power Requirement: The power requirement for the proposed project is estimated as 176 MW, which will be obtained from the nearby substation.

46.1.10: Baseline Environmental Studies:

Period	October 2025 to December 2025	Additional study (if any)																		
AAQ parameters at 11 Locations (min and max)	PM _{2.5} : 8.59 µg/m ³ – 24.42 µg/m ³ PM ₁₀ : 16.82 µg/m ³ – 44.90 µg/m ³ SO ₂ : BLQ (≤ 4.0) - 7.88 µg/m ³ NO _x : BLQ (≤ 5.0) - 12.91 µg/m ³ CO: BLQ (≤ 2.0) - 0.51 mg/m ³ The values of Pb, Ni, Hg, O ₃ , As, C ₆ H ₆ , BaP were found to be Below detection limit.																			
Incremental GLC level	PM ₁₀ = Max. GLC: 0.684 µg/m ³ (Level at 3.5 km in SW Direction) PM _{2.5} = Max. GLC: 0.178 µg/m ³ (Level at 3.5 km in SW Direction) SO ₂ = Max GLC: 14.3 µg/m ³ (Level at 3.5 km in SW Direction) NO _x = Max GLC: 5.33 µg/m ³ (Level at 3.5 km in SW Direction)																			
Ground water quality at 11 locations	pH: 6.73 to 7.29, total Hardness: 58- 169 mg/l; Chloride; 22 to 64 mg/l, Fluoride: 0.21 to 0.42 mg/l; Heavy metals like Copper (as Cu) – BLQ (LOQ-0.01), Lead (as Pb) - BLQ(LOQ- 0.005), Cadmium (as Cd) - BLQ(LOQ-0.002), Chromium (as Cr) - BLQ(LOQ-0.02), Arsenic (as As)- BLQ(LOQ-0.005) and Mercury (as Hg)- BLQ(LOQ-0.001).																			
Surface water quality at 14 locations	pH 6.86 to 7.46, Dissolved Oxygen: 5.0 to 6.9 mg/l; BOD: 2.1 to 4.8 mg/l; COD: from 8 to 30 mg/l.																			
Effluent generation details and its treatment	<u>Effluent generation from TPP:</u> <u>Mode of treatment & reuse</u> <u>Domestic wastewater generation</u> <u>Mode of treatment & reuse</u>																			
Noise levels Leq (Day and Night) at 11 locations	32.1(A) – 46.9 (A) for the day time and 30.9 (A) – 38.7 dB (A) for the Night Time.																			
Traffic assessment study findings	<table><thead><tr><th>Road</th><th>Volume (in PCU/ hr)</th><th>Capacity (in PCU/ hr)</th><th>Existing V/C Ratio</th><th>LOS</th><th>Performance</th></tr></thead><tbody><tr><td>NH-17 near Diglipol</td><td>206.8 say 207</td><td>3600</td><td>0.33</td><td>B</td><td>Very Good</td></tr><tr><td>NH-17 near Khamarpara</td><td>196.3 say 196</td><td>1500</td><td>0.31</td><td>B</td><td>Very Good</td></tr></tbody></table>	Road	Volume (in PCU/ hr)	Capacity (in PCU/ hr)	Existing V/C Ratio	LOS	Performance	NH-17 near Diglipol	206.8 say 207	3600	0.33	B	Very Good	NH-17 near Khamarpara	196.3 say 196	1500	0.31	B	Very Good	
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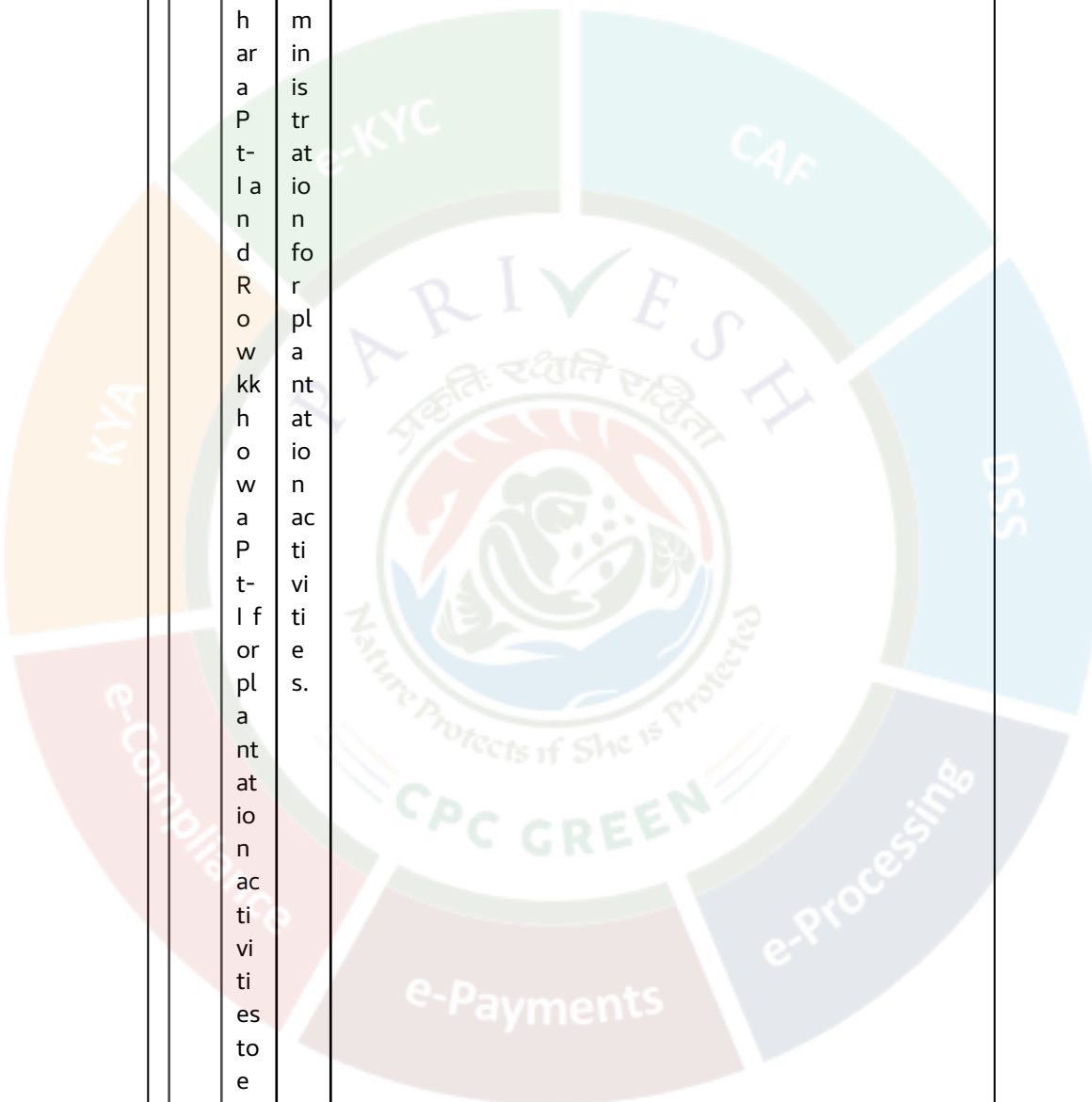
Period	October 2025 to December 2025					Additional study (if any)																						
	<table><tr><th rowspan="2">Road</th><th rowspan="2">Existing LOS</th><th colspan="4">Changed V/C and LOS after adding generated traffic from operational phase of proposed expansion project</th></tr><tr><th>V</th><th>C</th><th>V/C</th><th>Modified LOS</th></tr><tr><td>NH-17 near Diglidol</td><td>A 'Excellent'</td><td>207 + 23 = 230</td><td>3600</td><td>0.36</td><td>'B' Very Good</td></tr><tr><td>NH-17 near Khamarpara</td><td>A 'Excellent'</td><td>196+23=219</td><td>1500</td><td>0.35</td><td>'B' Very Good</td></tr></table> Conclusion: The level of service (LOS) will be unaltered remains B after additional traffic due to the proposed expansion project. Existing LOS is “B” due to NHAI work is in progress and is temporary in nature.	Road	Existing LOS	Changed V/C and LOS after adding generated traffic from operational phase of proposed expansion project				V	C	V/C	Modified LOS	NH-17 near Diglidol	A 'Excellent'	207 + 23 = 230	3600	0.36	'B' Very Good	NH-17 near Khamarpara	A 'Excellent'	196+23=219	1500	0.35	'B' Very Good					
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Soil Quality at 11 Locations	pH range 6.42 to 7.24; Electrical conductivity (EC); 0.235 to 0.296 μmhos/cm; calcium content: 54.62 to 98.0 mg/kg; sodium: 15.49 to 24.6 mg/kg; potassium: 92 to 135 mg/kg; Nitrogen: 128 to 200 mg/kg; Phosphorous: 14.2 to 20.9 mg/kg; Cation Exchange Capacity (CEC): 10.8 to 17.65 meq/100gm; Magnesium: 30 to 44 mg/kg; Organic Matter: 0.82% to 1.14%																											
Flora and fauna	23 Schedule I Species as per WP(A)A, 2022 have been observed in the study area. Wildlife conservation Plan for Schedule I species has been prepared by Reputed Govt. Institute and the approval of the same is under process.					The List of Flora & Fauna is duly certified by DFO, Dhubri vide letter no B/DBR/FOR/PERMIT/24/785/86 dated 24.02.2026.																						
Hydrogeology study	The action plan to address the recommendation of the Hydrogeology report and Watershed management plan are as below: <table><tr><th>S. No</th><th>Recommendations</th><th>Action Plan</th></tr><tr><td>1.</td><td>Construct recharge pits and percolation trenches to improve groundwater recharge</td><td>Construction of Percolation trenches (20 m × 1 m × 2 m) along 3rd-4th order streams. And recharge pits filled with gravel/sand and connect to storm drains. Quarterly monitoring of water levels in nearby wells.</td></tr><tr><td>2.</td><td>Link stormwater drains and runoff channels to recharge structures so rainwater is effectively captured and infiltrated</td><td>Storm water drain shall be connected with recharge structure and quarterly monitoring of water levels shall be done to assess recharge efficiency.</td></tr></table>					S. No	Recommendations	Action Plan	1.	Construct recharge pits and percolation trenches to improve groundwater recharge	Construction of Percolation trenches (20 m × 1 m × 2 m) along 3rd-4th order streams. And recharge pits filled with gravel/sand and connect to storm drains. Quarterly monitoring of water levels in nearby wells.	2.	Link stormwater drains and runoff channels to recharge structures so rainwater is effectively captured and infiltrated	Storm water drain shall be connected with recharge structure and quarterly monitoring of water levels shall be done to assess recharge efficiency.	Consultant details: Akshar Geo Services.													
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Period	October 2025 to December 2025			Additional study (if any)								
	<table><tr><td>3.</td><td>Carry out regular monitoring of groundwater levels and water quality to assess effectiveness of the measures and ensure long term sustainability</td><td>Quarterly monitoring of water levels shall be done to assess recharge efficiency. RO/suitable treatment shall be provided to maintain water quality, if required.</td></tr><tr><td>4.</td><td>Install rooftop rainwater harvesting tanks in plant and colony areas to reduce dependence on groundwater and improve water quality</td><td>Installation rooftop tanks (20 m³) with first-flush diversion. Stored rainwater shall be use for domestic needs. Quarterly water quality testing (pH, TDS, hardness, Iron etc.).</td></tr><tr><td>5.</td><td>Restore existing ponds by desilting, deepening, and strengthening bunds to enhance their recharge capacity</td><td>Desilting, deepening, bund strengthening, inlet/outlet regulation of existing 6 water bodies shall be done to enhance their recharge capacity.</td></tr></table>	3.	Carry out regular monitoring of groundwater levels and water quality to assess effectiveness of the measures and ensure long term sustainability	Quarterly monitoring of water levels shall be done to assess recharge efficiency. RO/suitable treatment shall be provided to maintain water quality, if required.	4.	Install rooftop rainwater harvesting tanks in plant and colony areas to reduce dependence on groundwater and improve water quality	Installation rooftop tanks (20 m ³) with first-flush diversion. Stored rainwater shall be use for domestic needs. Quarterly water quality testing (pH, TDS, hardness, Iron etc.).	5.	Restore existing ponds by desilting, deepening, and strengthening bunds to enhance their recharge capacity	Desilting, deepening, bund strengthening, inlet/outlet regulation of existing 6 water bodies shall be done to enhance their recharge capacity.		
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Impact study on biodiversity and aquatic ecology	Recommendations of study report: <table><tr><td>S. No.</td><td>Recommendations</td><td>Action Plan</td></tr><tr><td>1</td><td>Extensive green belt development with plantation</td><td>Abolition of 30,000 saplings with 100% replacement</td></tr></table>			S. No.	Recommendations	Action Plan	1	Extensive green belt development with plantation	Abolition of 30,000 saplings with 100% replacement	Consultant details: Indian Institute of Social Welfare and Business Management (University of Kolkata in association with NABET accredited Ecology and Biodiversity Expert in 2025)		
S. No.	Recommendations	Action Plan										
1	Extensive green belt development with plantation	Abolition of 30,000 saplings with 100% replacement										

Period	October 2025 to December 2025	Additional study (if any)
	nt sh all b e u n d er ta ke n in a n d ar o u n d th e pr oj ec t ar ea us in g n at iv e pl a nt s p ec ie s wi th hi g h Ai r e s p e ci es h av in g hi g h ca rb o n se q u e s tr a t i o n p ot e n t i a l s , s h a l b e pl a nt e d i n th e s ur ro u n d	

Period	October 2025 to December 2025	Additional study (if any)
	P ol lu ti o n T ol er a n ce In d ex (A P T L), la rg e le af ar ea in d e x, a n d hi gh ca rb o n se q u es tr at io n p ot e n g vil la g es	

Period	October 2025 to December 2025			Additional study (if any)
	2	Waste and degraded lands, along with available public lands, may be identified in village	Waste and degraded areas shall be identified in consultation with village	

Period	October 2025 to December 2025	Additional study (if any)
	es su c h as Ki lla h ar a P t- la n d R o w kk h o w a P t- l f o r p a n t a i o n a c t i v i t e s to e n h a n c e g r e e n c o c h ay a t/ a d m i n i s t r a t i o n f o r p l a n t a i o n a c t i v i t e s 	

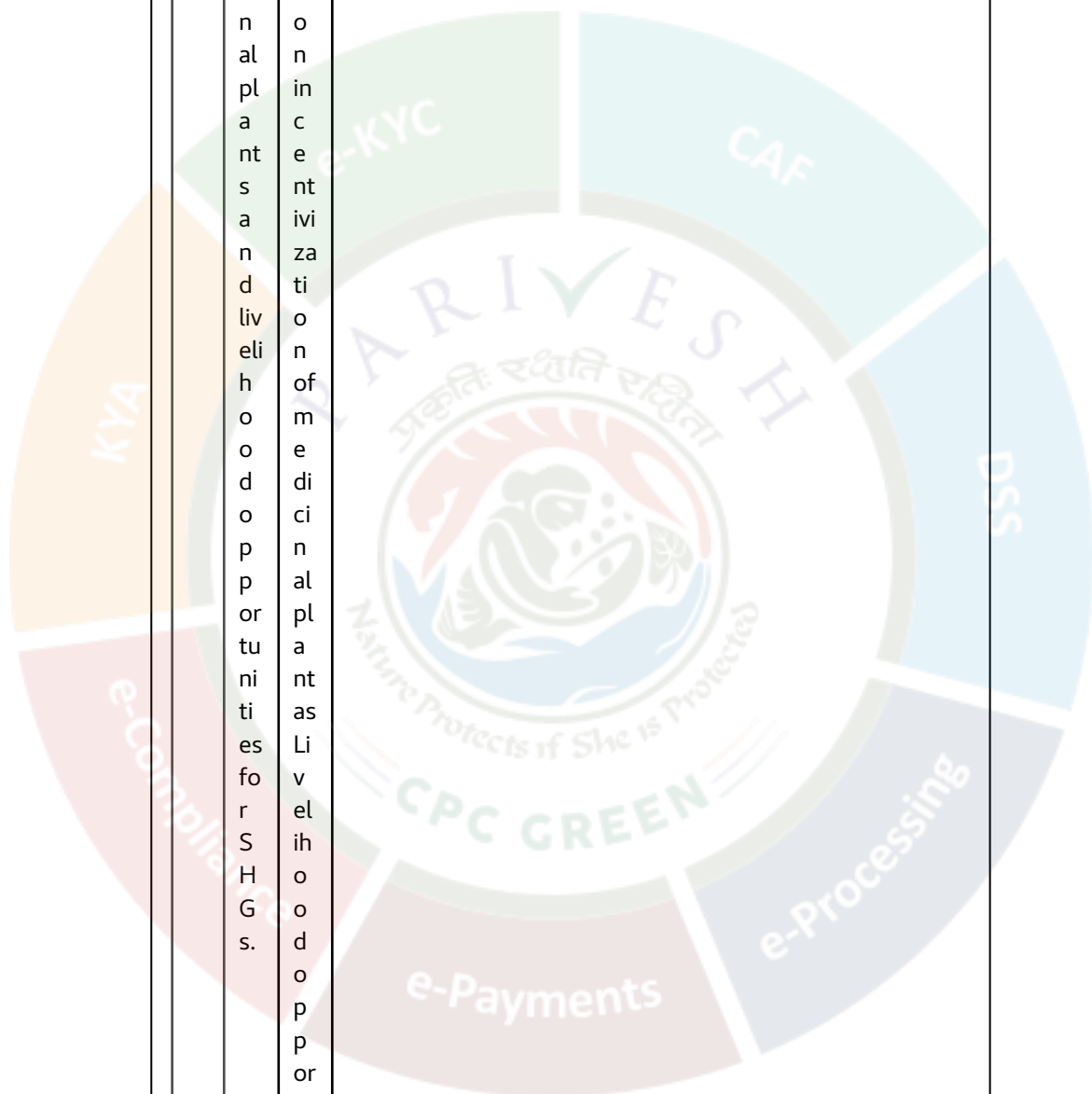
Period	October 2025 to December 2025			Additional study (if any)
		ver a n d ec ol o gi ca l s ta tu s.		
	3	W a t e r b o d i e s l o c a t e d i n v i l l a g e s s u c h a s K a m a r p a r a, M a l g a o n, a n d J o	P o n d d e e p e n i n g, d e s i l t i n g a n d b u n d s t r e n g t h e n i n g a c t i v i t i	

Period	October 2025 to December 2025			Additional study (if any)
		g, and plant activities. 4 In stallation of rain water harvesting/ storage/ auge ponds and co	CER has been taken for the same. Water shed development project plan has been prepared a	

Period	October 2025 to December 2025			Additional study (if any)
		ns tr u ct io n/ re p ai r of c h ec k d a m s a n d a n i c ut s wi th in su it a bl e w at er sh e d ar ea s.	n d b u d g et of R s. 1. 1 5 C ro re h as b e e n k e pt fo r th e sa m e.	
	5	Vi lla g e- le ve l	T hr o u g h A	

Period	October 2025 to December 2025	Additional study (if any)
	bi o di ve rs it y m a p p i n g m ay b e u n d e r ta ke n th ro u g h a p a r t i c i p a t o r y a p p r o a c h w i th e m p h as d a ni F o u n d at i o n, L o c a l v il l a g e le v el b i o d i v e r s i t y m a p p i n g s h a l b e u n d e r ta k e n w i t	

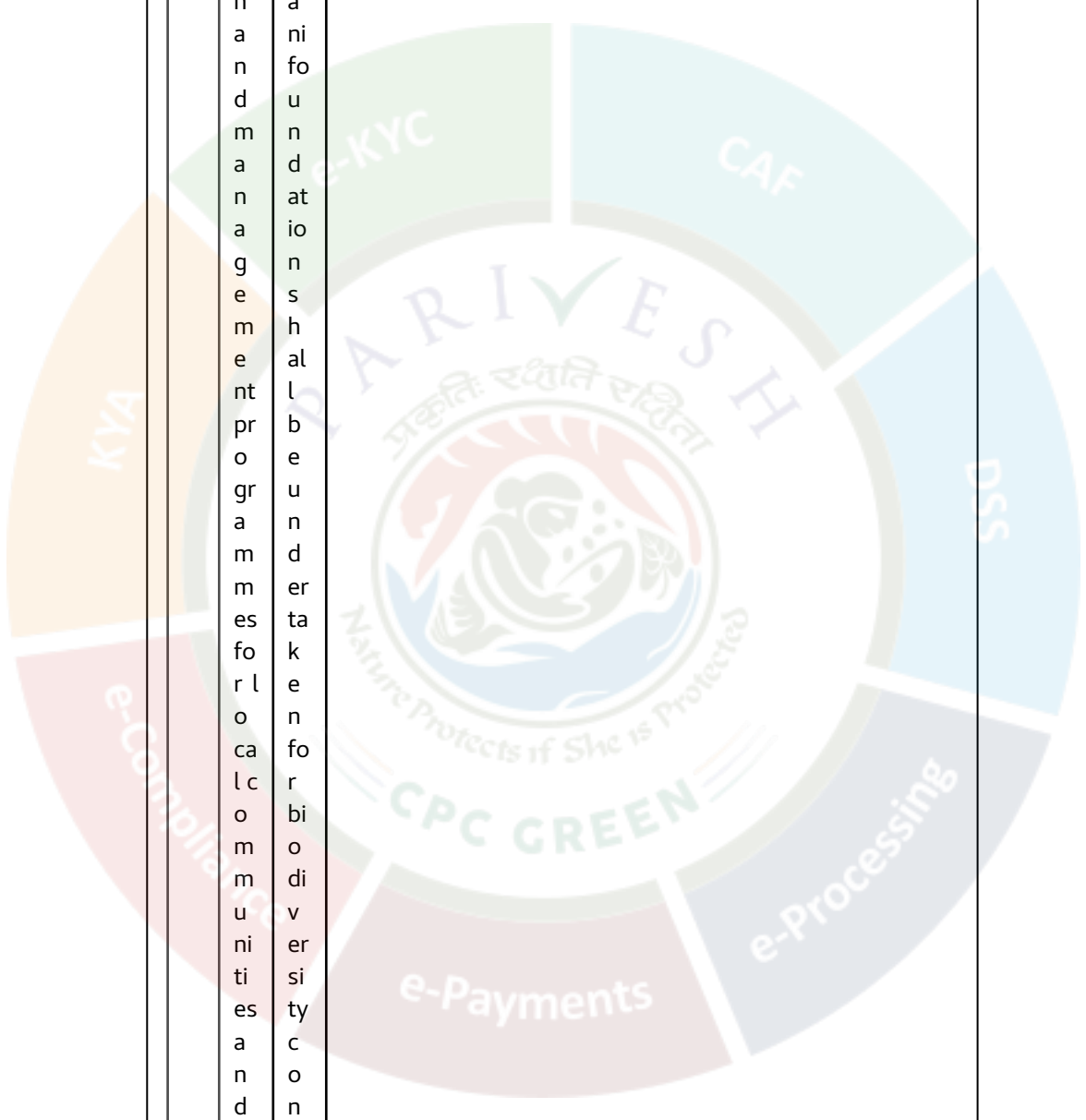
Period	October 2025 to December 2025			Additional study (if any)
		is on membership drive in plant societies and livelihoods of community for SHGs.	he membership drive in plant societies of medicinal plants as Livelihood opportunity for SHGs.	
	6	Dev	Ass	



Period	October 2025 to December 2025	Additional study (if any)
	el o p m e nt of ec ol o gi ca l p ar ks in o p e n gr as sl a n d ar ea s, su c h as S ua p at a P t.- l, to pr o m ot e bi o di is ta n c e w ill b e pr o vi d e d to vil la g es fo r d e v el o p m e nt of e c ol o gi ca l p ar ks. KYA e-KYC CAF DSS e-Processing e-Payments e-Compliance	

Period	October 2025 to December 2025			Additional study (if any)
		versity awareness and conservation.		
	7	Enforcement of restrictions on single-use plastic and	Noted and agreed.	

Period	October 2025 to December 2025	Additional study (if any)
	pr o m o t i o n of ec o- fri e n d y a l t e r n a t i v e s i n a n d a r o u n d t h e p r o j e c t a r e a 8 O r g a n i z e b i o d i v e r s i t y c A w a r e n e s s p r o g r a m t	

Period	October 2025 to December 2025	Additional study (if any)
	o n s e r v a t i o n a n d m a n a g e m e n t p r o g r a m e s f o r l o c a l c o m m u n i t i e s a n d s t a k e h o l d e r s t h r o o u g h A d a n i f o u n d a t i o n s h a l b e u n d e r t a k e n f o r b i o d i v e r s i t y c o n s e r v a t i o n. 	

Period	October 2025 to December 2025	Additional study (if any)
	u g h A d a n i F o u n d a t i o n.	
Risk assessment study	Project specific risk assessment with respect to storage of LDO & Coal storage and other hazardous chemicals is included in Final EIA-EMP Report. The appropriate preventive measures and necessary safeguards such as toxic and flammable gas detectors, alarm / interlock systems, breathing apparatus for working personnel, fire protection systems such as fire extinguishers, water curtain, fire water hydrants in place, the untoward consequences and the major risk due to the same could be eradicated.	Consultant details: Gaurang Environmental Solutions Pvt. Ltd.

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

S. No.	Type of Waste	Source	Quantity generated (TPA)	Mode of Treatment	Disposal
1.	Municipal Solid Waste	Plant Canteen	91 TPA	Collected; segregated using color coded waste bin, Organic waste converters (OWC)	Inorganic will be disposed via local municipal authorized vendor & Organic/Biodegradable waste by OWC.
2.	E-waste	IT & Telecom Equipment	~3.5 TPA	Collected; segregated and disposed	Authorized Recycler
3.	Battery waste from UPS	Automotive & Industrial	~7 TPA	Collected; segregated and disposed	Authorized Vendor
4	Bio medical waste	First aid center	0.12 TPA	Collected; segregated and disposed	Authorized Vendor

5.	Hazardous waste				
a.	Used / Spent Oil (Cat. 5.1)	Plant Operation	100 KL	Collected; segregated and disposed	Registered Recyclers / Reprocessor with SP CB
b.	Waste or residues Containing oil (Cat.5.2)	Plant Operation	5 TPA	Collected; segregated	Sent to Authorized Recycler
c.	Empty Barrels/ containers / liners Contaminated with Hazardous chemicals/ wastes (Cat.33.1)	Plant Operation	15 TPA	Collected; segregated and disposed	Sent to Authorized Recycler

46.1.12: Public Consultation:

Details of advertisement given	1. The Assam Tribune, dated 13.03.2026. 2. Asomiya Pratidin dated 13.03.2026.
Date of public consultation	23.04.2026
Venue	Playground of Charuabakhra Primary Health Booth (Old), Village Charuabakhra Janjal Block, Jamduar Road, Gram Panchayat Chirakuta, Revenue Circle Chapar, District Dhubri, Assam
Presiding Officer	1. Dr. Preety Lekha Deka, ACS, Co-District Commissioner, Bilasipara Co-District, District: Dhubri. 2. Er. Kulen Talukdar, Sr. Env. Engineer, Head Office, Guwahati-21, Assam Pollution Control Board. 3. Er. Kalyan Basumatary, Regional Executive Engineer, RLO Bongaigaon, Assam Pollution Control Board.
Major issues raised	For local Employment, community rural infrastructure development, education, community health & infrastructure development. Pollution control system and water management and Public expectations for modern technology, safeguards would be adopted.
No. of people attended	About 1150 Nos

Action plan as per MoEF&CC O.M. dated 30/09/2020 to address the view of public on Project

S. No	Key Area Identified under Socio-EMP (CER) based on needs highlighted during Public Hearing	Physical Target	Time bound (Year wise) expenditure (in Crores)					
A	Educational Initiatives		1 st	2 nd	3 rd	4 th	5 th	Total Budget (in Crore)

	Modernization, Repair & construction/ maintenance of identified Primary / Higher Secondary School of nearby villages of the project site in consultation with Local Government/School Authorities in villages Salkocha & Tilapara.	Identified about 4 schools	0.4	0.4	0.55	0.55	0.45	2.35
	Distribution of drinking water filters/ water coolers in schools in Pukhuripara, Salkocha and others nearby villages.	About 38 schools/ villages	0.2	0.2	0.2	0.2	0.35	1.15
	Basic teaching and learning infrastructure support to Govt. Schools, Supporting in creation of assembly halls, prayer halls, classrooms and smart class, computer room, space for mid-day meals, playground, school boundary walls etc. for government schools in villages Chirakuta, Salkocha, Santoshpur, Charuabakhra.	About 15 schools including ASDC	0.6	0.9	0.8	0.65	0.45	3.4
	Online courses for students such as Artificial Intelligence, Electric Vehicles, Renewable Energy etc. to equip students with job-ready skills through Adani Skill Development Centre (ASDC) on requirement basis in Santoshpur, Charuabakhra & other nearby villages	About 18 schools including ASDC	0.25	0.35	0.35	0.35	0.3	1.6
	Sub Total		1.45	1.85	1.9	1.75	1.55	8.5
B	Community Health Initiatives							
	Development of hospitals, strengthening of PHC's & CHC's and improvement of health facilities in Salkocha, Chirakuta & other nearby villages	2 Health Centres	0.5	0.7	1	1.1	1.1	4.4
	Rural Medical Camps through Medical Team of Primary Health Centre, Safe Menstrual Hygiene Management Awareness, Cataract Screening & Operation in Charuabakhra, Santoshpur, Gaurangtari, nearby villages.	About 4-5 camps	0.6	0.6	0.75	0.75	0.8	3.5
	Promotion of awareness of malnutrition and anemia.	About 42 schools villages	0.15	0.1	0.1	0.1	0.1	0.55
	Promotion of Poshan Vatika at backyard of villagers & Project Suposhan.	About 42 schools village	0.1	0.2	0.15	0.15	0.15	0.75

		es						
	Sub Total		1.35	1.6	2	2.1	2.1 5	9.2
C	Sustainable Livelihood and Women Empowerment							
	Adani Skill Development Centre (ASDC/SDC) to train the youth under different trades viz. Welding, Fitting, Masonry & Bar-bending, Electrical, industrial machine operating & digital literacy/smart classes.	About 5 ASDCs	0 .9	0 .9	1	1.2	1.3	5.3
	Development & Support for vegetable cultivation and livestock management in nearby villages.	About 18 villages	0 .3	0 .4	0.5	0.5	0.6	2.3
	Sub Total		1 .2	1 .3	1.5	1.7	1.9	7.6
D	Community Infrastructure Development							
	Repairing, strengthening & Maintenance of Existing Roads in consultation with Gram Panchayats/Local Administration in Salkocha & other nearby villages along with construction of bus stop sheds.	About 5 villages	1	1	1	0.9	0.9	4.8
	To support for potable drinking water and water supply in nearby villages	About 8 villages	0 .4	0 .4	0.4	0.4	0.4	2
	Upgradation & Renovation of sanitation facilities such as toilets in schools with priority for girls.	Provision of 10 Girls' Toilets in schools	0 .2 5	0 .6 5	0.6 5	0.7 5	0.7 5	3.05
	Provision of Solar Power and street lighting/panels in nearby schools, local health centers of nearby villages & district administration.	About 15 numbers	0 .3	0 .4	0.5	0.5	0.4	2.1
	Sub Total		1 .9 5	2 .4 5	2.5 5	2.5 5	2.4 5	11.95
E	Sports & Culture Development							
	Promotion of sports for youths and w	About 5 village	0	0	0.1	0.1	0.1	0.5

	omen	s	. 1	. 1				
	Cultural activities for villagers	About 8 village s	0 .0 5	0 .0 5	0.0 5	0.0 5	0.0 5	0.25
	Sub Total		0 .1 5	0 .1 5	0.1 5	0.1 5	0.1 5	0.75
F	Tree plantation in Govt. School and Community Health Centre in Villages Santoshpur, Charuabakhra, Chirakuta, Gaurangtari, nearby villages	About 30,000 saplings in 5 years	0 .6	0 .7	0.4	0.4	0.4	2.5
	Total Budget		6 .7	8 .0 5	8.5	8.6 5	8.6	40.5

46.1.13: Capital Cost: The capital cost of the proposed project is Rs 36,600 Crores and the capital cost for environmental protection measures is proposed as Rs 2,608. Crores. The annual recurring cost towards the environmental protection measures is proposed as Rs 26 Crores. The employment generation from the proposed project / expansion is Construction phase: 400 (permanent) + 8000 (contractual), Operation phase: 500 (permanent) + 2000 (contractual). The details of cost for environmental protection measures is as follows:

S. No.	EMP Description	Budget (Rs. In Cr.)
1	Air Pollution Control Measures	
	a) Electrostatic Precipitator (ESP)	958
	b) Selective Catalytic Reduction (SCR), Low Nox NOx burner	280
	c) Chimney/Stack (Bi-flue)- 2 Nos.	295
	d) Dust Extraction & suppression system (Bag Filters, Cyclonic Separators)	22
2	Noise Control	8
3	Water Pollution Control	
	a) Cooling Tower including civil works	371
	b) DM Plant and Wastewater Treatment System (ETP)	110

S. No.	EMP Description	Budget (Rs. In Cr.)
	c) Sewerage Collection, treatment & disposal (STP)	4
4	Ash Management	
	a) Ash handling (Ash Dyke) including ash water recirculation	451
	b) Ash Disposal Work (including Silos)	63
5	Environmental Monitoring & Management	
	a) Environmental Laboratory & Environmental Monitoring & HW Management	11
	b) CEMS, CAAQMS, EQMS monitoring system & main gate display board	12
6	Green Belt Development	18
7	Others	
	Rainwater harvesting	6
	Solar Power Harnessing	2
	Grand Total	2,611

46.1.14: Greenbelt Development Plan: Proposed greenbelt will be developed in 193 ha which is about 33% of the total project area. A 20-50 m wide greenbelt, consisting of at least 3 tiers around plant boundary will be developed as greenbelt and green cover as per CPCB guidelines. Local and native species will be planted with a density of 2500 trees per hectare. Total no. of 4,82,500 saplings will be planted and nurtured in 193 hectares in 5 years.

46.1.15: Ash management:

Details	Annual generation (MTPA)	Utilization (MTPA)	% of utilization	Balance quantity (MTPA)	No of storage silos with capacity
Ash (Fly and Bottom)	5.31	5.31	100 %	0	6x2500 MT

A. Ash Pond details:

S. No.	Details of Ash Pond	Ash Pond
1	Area (Ha)	70
2	Dyke Height (m)	15

3	Volume (m ³)	105 Lac m ³
4	Quantity of Ash to be Disposed (Metric Tons)	115.5 Lakh MT
5	Expected Life of Ash Pond (Number of Years and Months)	Life of ash dyke is calculated as 20 years
6	Type of Lining Carried in Ash Pond	HDPE
7	Mode of Disposal	HCSD/MCSD
8	Ratio of Ash : Water in Slurry Mix (1:--)	65:35
9	Ash Water Recycling System (AWRS)	Yes
10	Quantity of Wastewater from Ash Pond to be Discharged into Land or Water Body (m ³)	0
11	Details regarding dyke stability study and name of the organization who conducted the study	Shall be done during operational phase of the plant.

B. Ash utilization plan:

S. No.	Activity (as applicable)	Quantity	Percentage
1	Fly ash based products (bricks or blocks or tiles or fiber cement sheets or pipes or boards or panels)	0.106	2 %
2	Cement manufacturing	4.248	80 %
3	Construction of roads, road and fly over embankment	0.956	18 %
	Total	5.31	100 %

46.1.16: Comments of State Pollution Control Board, Assam as per Ministry's OM dated 14.01.2025 and SOP dated 08.10.2025 issued on 09/03/2026

In addition to the above, proponent paid a fee of Rs. 7,00,547.20 towards CTE Fees online on 18.02.2026.

46.1.17: Summary of violation under EIA, 2006/court case/show cause/direction if any, related to the project under consideration shall be furnished.

A. Summary of court cases: Nil

B. Summary of Show Cause Notices: Nil

C. Further, there is no violation cases under the Environmental Protection Act, 1986, Van (Sanraksha Evam Samvardhan) Adhiniyam, 1980 and The Wildlife (Protection) Act, 1972.

46.1.18: Written Submission:

Query 1: Revised Land use breakup of TPP and revised Plant Layout Plan as per 33% Greenbelt Area as per comments of APCB.

Reply: The revised land use details with breakup considering 33% greenbelt/plantation as below:

Description	Propose Area (In Hectares)
Main Plant (Including BTG, Water Facility(CT), AHP Facility, Switchyard & Misc. Facility)	100
Coal Stock Yard, CHP (Including Rail Yard)	70
Reservoir	20
Green belt (33% of total area)	193
Ash Dyke	70
Others: [Land for Future expansion including CGU (11 Ha)]	132
Total	585 Ha

Query 2: The updated Greenbelt Action Plan (33%) with updated Plant Layout is to be submitted

Reply: The revised Greenbelt action plan considering 33% along with budget allocation is given below.

Action Plan for Greenbelt Development

Total Plot area	585 Ha.
Total Greenbelt area	193 Ha (33 % of the Project Area)
Tree to tree distance	2 m
Minimum width of greenbelt area	20 m
Trees Calculation	2500 Trees /Ha
Total trees to be provided	4,82,500 nos.

Years	Area (Ha.)	No. of Trees	Capital cost	Recurring cost/Annnum
2026-27	25	62500	Plantation/ Green belt development	Maintenance/ Casualty replacement
2027-28	35	87500		
2028-29	30	75000		
2029-30	40	100000		
2030-31	45	112500		

Remaining Area gap filling	18	45000		
Total	193	482500	14 Crores	4 Crores
Grand Total			18 Crores	

Revised EMP is given below:

S. No.	EMP Description	Budget (Rs. In Cr.)
1	Air Pollution Control Measures	
	a) Electrostatic Precipitator (ESP)	958
	b) Selective Catalytic Reduction (SCR), Low Nox NOx burner	280
	c) Chimney/Stack (Bi-flue)- 2 Nos.	295
	d) Dust Extraction & suppression system (Bag Filters, Cyclonic Separators)	22
2	Noise Control	8
3	Water Pollution Control	
	a) Cooling Tower including civil works	371
	b) DM Plant and Wastewater Treatment System (ETP)	110
	c) Sewerage Collection, treatment & disposal (STP)	4
4	Ash Management	
	a) Ash handling (Ash Dyke) including ash water recirculation	451
	b) Ash Disposal Work (including Silos)	63
5	Environmental Monitoring & Management	
	a) Environmental Laboratory & Environmental Monitoring & H W Management	11
	b) CEMS, CAAQMS, EQMS monitoring system & main gate display board	12
6	Green Belt Development	18
7	Others	
	Rainwater harvesting	6
	Solar Power Harnessing	2

	Grand Total	2,611
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Query 3: The budgetary allocation for Watershed Management Plan to be increased

Reply: The budgetary allocation for watershed management plan has been increased to Rs. 1.15 Crore.

Query 4: Revised Public Hearing Action Plan including Physical and Financial Target

Reply: Revised PH Action plan is given below

S. No	Key Area Identified under Socio-EMP (CER) based on needs highlighted during Public Hearing	Physical Target	Time bound (Year wise) expenditure (in Crores)					
A	Educational Initiatives		1st	2nd	3rd	4th	5th	Total Budget (in Crore)
	Modernization, Repair & construction/ maintenance of identified Primary / Higher Secondary School of nearby villages of the project site in consultation with Local Government/School Authorities in villages Salkocha & Tilapara.	Identified about 4 schools	0.4	0.4	0.55	0.55	0.45	2.35
	Distribution of drinking water filters/ water coolers in schools in Pukhuripara, Salkocha and others nearby villages.	About 38 schools/ villages	0.2	0.2	0.2	0.2	0.35	1.15
	Basic teaching and learning infrastructure support to Govt. Schools, Supporting in creation of assembly halls, prayer halls, classrooms and smart class, computer room, space for mid-day meals, playground, school boundary walls etc. for government schools in villages Chirakuta, Salkocha, Santoshpur, Charuabakhra.	About 15 schools including ASDC	0.6	0.9	0.8	0.65	0.45	3.4
	Online courses for students such as Artificial Intelligence, Electric Vehicles, Renewable Energy etc. to equip students with job-ready skills through Adani Skill Development Centre (ASDC) on requirement basis in Santoshpur, Charuabakhra & other nearby villages	About 18 schools including ASDC	0.25	0.35	0.35	0.35	0.3	1.6
	Sub Total		1.45	1.85	1.9	1.75	1.55	8.5
B	Community Health Initiatives							
	Development of hospitals, strengthening of PHC's & CHC's and improvement of health facilities in Salkocha, Chirakuta & other nearby villages	2 Health Centers	0.5	0.7	1	1.1	1.1	4.4

S. No	Key Area Identified under Socio-EMP (CER) based on needs highlighted during Public Hearing	Physical Target	Time bound (Year wise) expenditure (in Crores)					
	Rural Medical Camps through Medical Team of Primary Health Centre, Safe Menstrual Hygiene Management Awareness, Cataract Screening & Operation in Charuabakhra, Santoshpur, Gaurangtari, nearby villages.	About 4-5 camps	0.6	0.6	0.75	0.75	0.8	3.5
	Promotion of awareness of malnutrition and anemia.	About 42 schools villages	0.15	0.1	0.1	0.1	0.1	0.55
	Promotion of Poshan Vatika at backyard of villagers & Project Suposhan.	About 42 schools villages	0.1	0.2	0.15	0.15	0.15	0.75
	Sub Total		1.35	1.6	2	2.1	2.15	9.2
C	Sustainable Livelihood and Women Empowerment							
	Adani Skill Development Centre (ASDC/SDC) to train the youth under different trades viz. Welding, Fitting, Masonry & Bar-bending, Electrical, industrial machine operating & digital literacy/smart classes.	About 5 ASDCs	0.9	0.9	1	1.2	1.3	5.3
	Development & Support for vegetable cultivation and livestock management in nearby villages.	About 18 villages	0.3	0.4	0.5	0.5	0.6	2.3
	Sub Total		1.2	1.3	1.5	1.7	1.9	7.6
D	Community Infrastructure Development							
	Repairing, strengthening & Maintenance of Existing Roads in consultation with Gram Panchayats/Local Administration in Salkocha & other nearby villages along with construction of bus stop sheds.	About 5 villages	1	1	1	0.9	0.9	4.8
	To support for potable drinking water and water supply in nearby villages	About 8 villages	0.4	0.4	0.4	0.4	0.4	2
	Upgradation & Renovation of sanitation facilities such as toilets in schools with priority for girls.	Provision of 10 Girls' Toilets in schools	0.25	0.65	0.65	0.75	0.75	3.05

S. No	Key Area Identified under Socio-EMP (CER) based on needs highlighted during Public Hearing	Physical Target	Time bound (Year wise) expenditure (in Crores)					
	Provision of Solar Power and street lighting/panels in nearby schools, local health centers of nearby villages & district administration.	About 15 numbers	0.3	0.4	0.5	0.5	0.4	2.1
	Sub Total		1.95	2.45	2.55	2.55	2.45	11.95
E	Sports & Culture Development							
	Promotion of sports for youths and women	About 5 villages	0.1	0.1	0.1	0.1	0.1	0.5
	Cultural activities for villagers	About 8 villages	0.05	0.05	0.05	0.05	0.05	0.25
	Sub Total		0.15	0.15	0.15	0.15	0.15	0.75
F	Tree plantation in Govt. School and Community Health Centre in Villages Santoshpur, Charuabakhra, Chirakuta, Gaurangtari, nearby villages	About 30,000 saplings in 5 years	0.6	0.7	0.4	0.4	0.4	2.5
	Total Budget		6.7	8.05	8.5	8.65	8.6	40.5

Query 5: Solar Power of 2 MW to be proposed

Reply: The solar power of 2 MW (1MW inside & 1MW outside the TPP) will be installed along with construction and operation phases.

Query 6: Improvement in livelihood through support to local people for improvement in Animal Husbandry and Agricultural practises

Reply: APL will work and focus for improvement in livelihood support to local people for Animal Husbandry and Agriculture through Sustainable Livelihood Development (SLD). Under the Socio-EMP (CER) program a budget of Rs. 7.6 Crores has been allocated for SLD.

3.1.3. Deliberations by the committee in previous meetings

N/A

3.1.4. Deliberations by the EAC in current meetings

Observation and deliberation of the EAC

46.1.19: The Committee observed and noted the following:

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

3.1.5. Recommendation of EAC

Recommended (Subject to submission of requisite information/ documents)

3.1.6. Details of Environment Conditions

3.1.6.1. Specific

[A] Environmental Management	
1.	Project proponent shall ensure that 100% utilization of ash generated from 4x800 MW in accordance with the ash utilization notification dated 31/12/2021 and its subsequent amendment. Area for the ash pond proposed for the Power Plant (4x800MW) shall not exceed 70 Ha as committed. Ash pond shall be lined, fenced and a green belt shall be developed all along the periphery of the ash pond area.
2.	All the environmental safeguards prescribed by the Assam Pollution Control Board on 09/03/2026 for the instant proposal in pursuance to the MoEF&CC O.M. dated 14.01.2025 and its subsequent amendment shall be complied with. Compliance in this regard shall be submitted to the Regional Office of MoEF&CC along with the six-monthly compliance report.
3.	Project proponent shall install Four Continuous Ambient Air Quality Monitoring Stations (CAAQMS) in and around the plant area and at the location at which Maximum GLC is occurring in consultation with APCB within one year from the date of grant of EC as committed.
4.	Project proponent shall comply with the recommendations made in the aquatic Ecology & Biodiversity assessment report, Hydrology and Hydrogeology study, Risk assessment Study in a time bound manner. Compliance status in this regard shall be submitted to the Regional Office of MoEF&CC along with the six monthly compliance report.
5.	The coal requirement for the proposed project is about 13.27 MTPA and same would be met under the Shakti Policy. The entire coal requirement for proposed project shall be transported by rail network only and no road transportation is permitted.
6.	The water requirement for proposed project is estimated as 1,53,600 m ³ /day and the same shall be met from Brahmaputra River. The specific water consumption shall be less than 2.5 m ³ /MWhr.
7.	Project proponent shall store harvested rainwater in the project boundary and utilize the same for plantation, recharging water in the pond and domestic utilization in colonies. A record shall be maintained of water collected through rainwater and its supply system. PP shall get the water audit done every year to optimize the water requirement.
8.	Project proponent shall implement the protective measure proposed in EMP in a time-bound manner. The budget earmarked for the same is Rs. 2611 crores and Rs. 26 crores (recurring) and should be kept in

	separate accounts and audited annually. The implementation status along with the amount spent with documentary proof shall be submitted to the concerned Regional Office for the activities carried out during the previous year.
9.	Project proponent shall assess the carbon footprint of the project and develop carbon sink/carbon sequestration resources using modern technologies. The implementation report shall be submitted to the concerned Regional Office of the MoEF&CC.
10.	Project proponent shall carry out study on site specific design earthquake parameters for proposed 3200 MW power project through reputed institute within a time frame of six months from the date of grant of EC as the proposed project site lies in an Earthquake sensitive zone V as per IS 1893 (Indian Seismic Code). Recommendations of the study report and its implementation status shall be submitted to the Regional Office along with the six monthly compliance report.
11.	Project proponent shall ensure that diesel operated vehicles will be switched over to E-Vehicles/BS6/CNG/LNG in a time bound manner and replace the passenger vehicles to E-vehicle in phased manner. Further, for local movement of officials, Contract of Vehicles deployment shall be awarded to Project affected people and all efforts for adopting heavy E-vehicles like Bulkers for ash transportation for short distance subject to availability of such E-vehicle and adequate charging infrastructure in the surrounding area shall be provided. PP shall submit the action taken report to concerned RO with amount spent, photographs (before & after), number of such non diesel vehicles deployed etc. in six monthly compliance report.
12.	The Project Proponent shall provide stack of 275 meters height and shall abide by the provisions of the notification number G.S.R 465 (E) dated 11/07/2025 related to SO ₂ emission norms. Along with Particulate Matter, SO ₂ , NO _x and Hg, CO and CO ₂ shall also be monitored for stack emissions.
13.	Ash pond area and fly ash utilization shall be as per Fly Ash Notification issued by Ministry/ CPCB from time to time.
14.	Project proponent shall ensure that pipelines carrying the fly ash and effluent shall be inspected regularly for any leakages.
15.	Effluent of 1996 KLD will be treated through Effluent Treatment Plant. As committed by the Project proponent, Zero liquid discharge shall be adopted for the proposed plant. No wastewater will be discharged outside the project site.
16.	PP shall install 2 MW Solar Energy Plant for conservation measures. Action plan in this regard shall be submitted to the Regional Office of the MoEF&CC and SPCB within two years from the date of grant of EC. PP should explore more opportunities to put solar PV in nearby Schools and other Government buildings also.
17.	PP shall implement the concurrent plantation plan in a time bound manner. Total of 193 ha area (33% of total project area) will be developed as greenbelt. A 20 - 50 m wide greenbelt, consisting of at least 3 tiers around plant boundary will be developed as greenbelt and green cover as per CPCB guidelines. The height of the saplings to be planted should be of minimum of 2 meter height. The budget earmarked for the green belt plantation shall be kept in a separate account and audited annually. PP should annually submit the audited statement of expenditure along with proof of activities viz. photographs (before & after with geolocation date & time), details of expert agency engaged, details of species planted, number of species planted, survival rate, density of plantation etc. to the Regional Office of MoEF&CC and on PARIVESH Portal as the case may be for the activities carried out during previous year.
18.	PP shall provide basic facilities to the nearby schools such as drinking water, sanitation facilities (sanitary napkin vending machines) and shall also develop green belt around the nearby schools. Further, PP shall organize quarterly awareness programs for school students to educate them on the significance and

	preservation of trees.
1 9.	Wildlife conservation plan approved by the competent authority shall be implemented. Additional, budget shall be added in the plan, in case additional measures suggested by state wildlife department. The final Wildlife conservation plan duly approved by the CWLW shall be submitted to RO, MoEF&CC within a time frame of three months from the date of grant of EC and the budget approved by the concerned authority shall be deposited in a government account.
2 0.	Project proponent shall install LED display of air quality (Continuous AAQ monitoring) and stack emission (Continuous emission monitoring) at prominent locations preferably outside the plant's main entrance for public viewing and in administrative complex and maintenance of devices shall be done regularly.
2 1.	Project proponent shall carry out Water Sprinkling on roads inside the plant area/ administrative/ residential areas and outside the plant area at least for 2 KM on a regular basis to control the air pollution. The strength of the shoulders of these roads portion shall be maintained adequate and no dust/ash shall be accumulated on the shoulders. A logbook shall be maintained for the activity and be in six-monthly compliance report.
2 2.	PP shall deploy vacuum based vehicle for everyday cleaning of the road in and around plant site at least for 5 KM .
2 3.	Environment Audit of plant shall be done annually, and report shall be submitted to Regional office of the Ministry.
2 4.	A detailed action plan regarding leachate handling shall be prepared and implemented in consultation with SPCB and the same shall be submitted to the Regional Office of the Ministry. Leachate shall be treated and reused. No treated leachate shall be discharged in any circumstances. Characteristics of Leachate and the treated leachate shall be monitored once in quarter and records shall be maintained.
2 5.	Oil and grease recovered from the treatment plant should be disposed only through authorized recyclers.
2 6.	Monitoring of surface water quality and Ground Water quality shall also be regularly conducted in and around the project site and records to be maintained. Further, monitoring points shall be located between the plant and drainage in the direction of flow of ground water and records maintained. Monitoring for heavy metals in ground water shall also be undertaken and results/findings submitted along with half yearly monitoring report. The monitored data shall be submitted regularly on PARIVESH portal as part of Half Yearly compliance report.
2 7.	For the DG sets, emission limits and the stack height shall be in conformity with the extant regulations and the CPCB guidelines. Acoustic enclosure shall be provided to DG set for controlling the noise pollution.
2 8.	PP shall ensure that all types of plastic waste generated from the plant shall be stored separately in isolated area and disposed of strictly adhering to the Plastic Waste Management Rules 2026 (as amended). In pursuant to the Ministry's OM dated 18/07/2022. PP shall also create awareness among the people working in the project area as well as in its surrounding area on the ban on Single Use Plastic (SUP) in order to ensure compliance of Ministry's Notification published by the Ministry on 12/08/2021. A report along with photograph on the measures taken shall also be included in the six monthly compliance report submitted by PP.
2 9.	PP is advised to implement the 'Ek Ped Maa Ke Naam' Campaign which was launched on 5th June 2024 on the occasion of the World Environment Day to increase the forest cover across the Country. This plantation drive is other than Green belt development. The action in this regard shall be submitted

	concerned RO in six monthly report.
30.	Project Proponent can implement Action Plan for Animal Husbandry and Agriculture improvement in the study area. A report along with photograph on the measures taken shall also be included in the six monthly compliance report submitted by PP.
[B] Socio-economic	
1.	A vision document comprising prospective plan for implementation of various CER activities, plantation programme outside the project cover area, rejuvenation and conservation of water bodies within 5 km radius of the project cover area shall be prepared and submitted to the Regional Office of the Ministry within 6 months. Implementation status of the same shall be reported to the Regional office in 6 monthly compliance report.
2.	Epidemiological Study among population within 5 km radius of project cover area shall be carried out on regular interval (Once in two year) through independent agency. Necessary measures shall be taken as per findings of study in consultation with district administration. Action taken report shall be submitted to the Regional Office of the Ministry.
3.	The budget proposed for PH is Rs. 40.5 Crores. The budget proposed shall be kept in a separate account and audited annually. Project proponent shall implement the action plan to address the issues raised during public hearing within a time frame of 5 years from the date of grant of EC. Compliance status in this regard shall be submitted along with the six monthly compliance to the concerned Regional Office of MoEF&CC. In addition to this, PP shall strengthen and improve the existing Government Primary Health Center (PHC) & Community Health Center (CHC) in the study area for better public health as committed. Compliance status in this regard shall be submitted along with the six monthly compliance to the concerned Regional Office of MoEF&CC.
4.	The establishment of a robust public grievance redressal mechanism to address concerns and complaints from local communities regarding the power plant's operations, environmental impacts, or social issues shall be developed. A Senior Officer shall review the functioning of the mechanism twice in a month.
5.	PP shall provide basic facilities to the nearby schools such as drinking water, sanitation facilities (sanitary napkin vending machines) and shall also develop green belt around the nearby schools. Further, PP shall organize quarterly awareness programs for school students to educate them on the conservation of trees.
[C] Miscellaneous	
1.	An Environmental Cell headed by the Environment Manager with postgraduate qualification in environmental science/environmental engineering, shall be created. It shall be ensured that the Head of the Cell shall directly report to the Head of the Plant who would be accountable for implementation of environmental regulations and social impact improvement/mitigation measures.
2.	Consent for the project shall be obtained from the State Pollution Control Board as required under the Air (Prevention and Control of Pollution) Act, 1981 and the Water (Prevention and Control of Pollution) Act, 1974.
3.	All necessary clearance from the concerned Authority, as may be applicable should be obtained prior to commencement of project or activity.

1(d)	Thermal Power Plants
Statutory compliance	
1.	Emission Standards for Thermal Power Plants as per Ministry's Notification S.O. 3305 (E) dated 7.12.2015, G.S.R.593 (E) dated 28.6.2018 and as amended from time to time shall be complied.
2.	MoEF&CC Notifications on Water Consumption vide Notification No. S.O. 3305 (E) dated 07.12.2015 read with G.S.R 593 (E) dated 28.6.2018 as amended from time to time shall be complied.
3.	The recommendation from Standing Committee of NBWL under the Wildlife (Protection) Act, 1972 should be obtained, if applicable.
4.	No Objection Certificate from Ministry of Civil Aviation be obtained for installation of requisite chimney height and its siting criteria for height clearance.
Ash content/mode of transportation of coal	
1.	MoEF&CC Notification issued vide S.O. 1561 (E) dated 21.05.2020 and as amended from time to time shall be complied which inter-alia include use of coal by Thermal Power Plants, without stipulations as regards ash content or distance, shall be permitted subject to compliance of conditions prescribed under (1) Setting Up Technology Solution for emission norms, (2) Management of Ash Ponds and (3) Transportation.
Air quality monitoring and Management	
1.	Project proponent shall abide by the provisions of the notification number G.S.R 465(E) dated 11/07/2025 related to SO ₂ emission norms.
2.	Low NO _x Burners with Over Fire Air (OFA) system shall be installed to achieve NO _x emission standard of 100 mg/Nm ³ .
3.	High efficiency Electrostatic Precipitators (ESPs) shall be installed and maintained in each unit to ensure that particulate matter (PM) emission to meet the stipulated standards of 30 mg/Nm ³ or less.
4.	Stack with a height of 275 meters shall be provided with continuous online monitoring instruments for SO ₂ , NO _x and Particulate Matter as per extant rules.
5.	Exit velocity of flue gases shall not be less than 20-25 m/s. Mercury emissions from stack shall also be monitored periodically.
6.	Continuous Ambient Air Quality monitoring system shall be set up to monitor common/criteria pollutants from the flue gases such as PM ₁₀ , PM _{2.5} , SO ₂ , NO _x within the plant area and in the buffer area, at four locations in consultation with ASPCB. The monitoring of other locations (at least three locations outside the plant area covering upwind and downwind directions at an angle of 120° each) shall be carried out manually.
7.	Adequate dust extraction/suppression system shall be installed in coal handling, ash handling areas and material transfer points to control fugitive emissions.
8.	Appropriate Air Pollution Control measures be provided at all the dust generating sources including sufficient water sprinkling arrangements at various locations viz., roads, excavation sites, crusher plants,

	transfer points, loading and unloading areas, etc.
Noise pollution and its control measures	
1.	The Ambient Noise levels shall meet the standards prescribed as per the Noise Pollution (Regulation and Control) Rules, 2000.
2.	Persons exposed to high noise generating equipment shall use Personal Protective Equipment (PPE) like earplugs/ear muffs, etc.
3.	Periodical medical examination on hearing loss shall be carried out for all the workers and maintain audiometric record and for treatment of any hearing loss including rotating to non-noisy/less noisy areas.
Human Health Environment	
1.	Bi-annual Health check-up of all the workers is to be conducted. The Occupational health study shall take into account of chronic exposure to noise which may lead to adverse effects like increase in heart rate and blood pressure, hypertension and peripheral vasoconstriction and thus increased peripheral vascular resistance. Similarly, the study shall also assess the health impacts due to air polluting agents.
2.	Impact of operation of power plant on agricultural crops, large water bodies (as applicable) once in two years by engaging an institute of repute. The study shall also include impact due to heavy metals associated with emission from power plant.
Water quality monitoring and Management	
1.	Induced/Natural draft closed cycle wet cooling system including cooling towers shall be set up with minimum Cycles of Concentration (COC) of 5.0 or above for power plants using fresh water to achieve specific water consumption of 2.5 m ³ /MW _{hr} .
2.	In case of the water withdrawal from river, a minimum flow 15% of the average flow of 120 consecutive leanest days should be maintained for environmental flow whichever is higher, to be released during the lean season after water withdrawal for proposed power plant.
3.	Records pertaining to measurements of daily water withdrawal and river flows (obtained from Irrigation Department/Water Resources Department) immediately upstream and downstream of withdrawal site shall be maintained.
4.	Regular (at least once in six months) monitoring of groundwater quality in and around the ash pond area including presence of heavy metals (Hg, Cr, As, Pb, etc.) shall be carried out as per CPCB guidelines. Surface water quality monitoring including Arsenic (As), shall be undertaken for major surface water bodies as per the EMP. The data so obtained should be compared with the baseline data so as to ensure that the groundwater and surface water quality is not adversely impacted due to the project & its activities.
5.	The treated effluents emanating from the different processes such as DM plant, boiler blow down, ash pond/dyke, sewage, etc. conforming to the prescribed standards shall be re-circulated and reused. Sludge/ rejects will be disposed in accordance with the Hazardous Waste Management Rules.
6.	Hot water dispensed from the condenser should be adequately cooled to ensure the temperature of the released surface water is not more than 5 degrees Celsius above the temperature of the intake water.
7.	Wastewater generation of 1996 KLD from various sources (viz. cooling tower blowdown, boiler blow down, wastewater from ash handling, etc) shall be treated to meet the standards of pH: 6.5-8.5; Total

	Suspended Solids: 100 mg/l; Oil & Grease: 20 mg/l; Copper: 1 mg/l; Iron:1 mg/l; Free Chlorine: 0.5; Zinc: 1.0 mg/l; Total Chromium: 0.2 mg/l; Phosphate: 5.0 mg/l.
8.	Sewage generation of 22 KLD will be treated by setting up Sewage Treatment plant to maintain the treated sewage characteristics of pH: 6.5-9.0; Bio-Chemical Oxygen Demand (BOD): 30 mg/l; Total Suspended Solids: 100 mg/l; Faecal Coliforms (Most Probable Number).
Risk Mitigation and Disaster Management	
1.	Adequate safety measures and environmental safeguards shall be provided in the plant area to control spontaneous fires in coal yard, especially during dry and humid season.
2.	Storage facilities for auxiliary liquid fuel such as LDO and HFO/LSHS shall be made as per the extant rules in the plant area in accordance with the directives of Petroleum & Explosives Safety Organisation (PESO). Low sulphur fuel shall be used.
3.	Ergonomic working conditions with First Aid and sanitation arrangements shall be made for the drivers and other contract workers during construction phase.
4.	Safety management plan based on Risk Assessment shall be prepared to limit the risk exposure to the workers within the plant boundary.
5.	Regular mock drills for on-site emergency management plan and Integrated Emergency Response System shall be developed for all kind of possible disaster situations.
6.	As the plant is located in the high-risk earthquake zone, disaster management plan be prepared for the same and adequate safety measures be taken.
Green belt and Biodiversity conservation	
1.	Green belt shall be developed in an area of 193 ha (33% of the total project area) with indigenous native tree species in accordance with CPCB guidelines. The green belt shall inter-alia cover an entire periphery of the plant.
2.	In-situ/ex-situ Conservation Plan for the conservation of flora and fauna should be prepared and implemented.
3.	PP shall distribute 25000 plants of not less than 2 meter height, mainly fruit plants especially to the farmers in the study area with incentive for 5 years.
Waste management	
1.	Solid waste management should be planned in accordance with extant Solid Waste Management Rules, 2026.
2.	Toxicity Characteristic Leachate Procedure (TCLP) test shall be conducted for any substance, potential of leaching heavy metals into the surrounding areas as well as into the groundwater.
3.	Ash pond shall be lined with impervious liner as per the soil conditions. Adequate dam/dyke safety measures shall also be implemented to protect the ash dyke from getting breached.
4.	Fly ash shall be collected in dry form and ash generated shall be used in phased manner as per provisions of the Notification on Ash Utilization issued by the Ministry S.O. 5481 dated 31.12.2021, S.O.6169 (E)

	dated 30.12.2021, S.O.05 (E) dated 01.01.2024 and amendment thereto.
5.	Unutilized ash if any shall be disposed off in the ash pond in the form of High Concentration Slurry method for fly ash and LCSD for Bottom Ash.
Monitoring of compliance	
1.	Environmental Audit of the project be taken up by the third party for preparation of Environmental Statement as per Form-V & Conditions stipulated in the EC and report be submitted to the Ministry.
2.	Resettlement & Rehabilitation Plan as per the extant rules of Govt. of India and respective State Govt. shall be followed, if applicable.
3.	Energy Conservation Plan to be implemented as envisaged in the EIA / EMP report. Renewable Energy Purchase Obligation as set by MoP/State Government shall be met either by establishing renewable energy power plant (such as solar, wind, etc.) or by purchasing Renewable Energy Certificates.
4.	Energy and Water Audit shall be conducted at least once in two years and recommendations arising out of the Report should be followed. A report in this regard shall be submitted to Ministry's Regional Office.
5.	The project proponent shall (Post-EC Monitoring): - Send a copy of environmental clearance letter to the heads of Local Bodies, Panchayat, Municipal bodies and relevant offices of the Government. - Upload the clearance letter on the web site of the company as a part of information to the general public. - Inform the public through advertisement within seven days from the date of issue of the clearance letter, at least in two local newspapers that are widely circulated in the region of which one shall be in the vernacular language that the project has been accorded environmental clearance by the Ministry and copies of the clearance letter are available with the SPCB and may also be seen at Website of the Ministry of Environment, Forest and Climate Change (MoEF&CC) at http://parviesh.nic.in. - Upload the status of compliance of the stipulated environment clearance conditions, including results of monitored data on their website and update the same periodically; - Monitor the criteria pollutants level namely; PM (PM10 & PM2.5 in case of ambient AAQ), 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; - Submit six monthly reports on the status of the compliance of the stipulated environmental conditions including results of monitored data (both in hard copies as well as by e-mail) to the Regional Office of MoEF&CC, the respective Zonal Office of CPCB and the SPCB; - 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; - Inform the Regional Office as well as the Ministry, the date of financial closure and final approval of the project and the date of commencement of the land development work.
Corporate Environmental Responsibility (CER) activities	
1.	CER activities will be carried out as per Ministry's OM F.No.22- 65/2017- IA.III dated 30th September, 2020 and 22-65/2017- IA.III dated 25.02.2021 or as proposed by the PP in reference to Public Hearing or as earmarked in the EIA/EMP report along with the detailed scheduled of implementation with appropriate budgeting. Statement on the commitments (activity-wise) made during public hearing to facilitate the discussion on the CER in compliance of the commitment shall be submitted.

3.2. Agenda Item No 2:

3.2.1. Details of the proposal

1x600 MW Super Critical and 2x800 MW Ultra-Super Critical Thermal Power Plant by M/s. Adani Power Limited, Raigarh located at Villages Chhote Bhandar, Bade Bhandar, Sarvani & Amli Bhanuna, Tehsil Puss ore, District Raigarh, Chhattisgarh. Reg. - Request for Amendment in Specific Condition No. xxvi of Environmental Clearance (EC) by Adani Power Limited located at RAIGARH, CHHATTISGARH			
Proposal For		Amendment in EC	
Proposal No	File No	Submission Date	Activity Sub-Activity (Schedule Item)
IA/CG/THE/531864/2026	J-13012/57/2008.IA.II (T)	26/05/2026	Thermal Power Plants Coal/Lignite based plants (1(d))

3.2.2. Project Salient Features

Agenda Item no. 46.2:

46.2: Coal Based Thermal Power Plant of 600 MW (1x600 MW) by **M/s. Adani Power Limited** at Villages Bade Bhandar, Chote Bhandar, Sarvani & Amali Bhona, in District Raigarh, Chhattisgarh - **Amendment in Specific condition no. (xxvi) of the EC dated 16th April, 2015 – regarding.**

[Proposal No: IA/CG/THE/531864/2026; F. No. J-13012/57/2008.IA.II (T)]

46.2.1: M/s Adani Power Limited, Raigarh has made an online application vide proposal no. IA/CG/THE/531864/2026 dated 28.03.2025 along with Form 4 seeking amendment in Environmental Clearance accorded by the Ministry vide letter no. J 13012/57/2008-IA.II (T) dated 20.05.2010 and its subsequent amendment granted therein under the provisions of the EIA Notification, 2006 for the above mentioned project.

Details of the proposal, as ascertained from the proposal documents and as revealed from the discussions held during the meeting, are given as under:

46.2.2: The existing project of 600 (1x600) MW (Phase I) was granted Environmental Clearance from Ministry vide letter no. J-13012/57/2008.IA.II(T) dated 20.05.2010, subsequent amendments in the EC dated 16.04.2015, 26.11.2019, 30.07.2020 & EC transferred dated 22.10.2019 & 24.04.2023 (from M/s Raigarh Energy Generation Limited to M/s Adani Power Limited) at Villages Chhote Bhandar, Bade Bhandar, Sarvani, & Amli Bhanuna of Raigarh District in Chhattisgarh. EC granted for Expansion of Raigarh TPP (Phase II, Under Construction) 1600 (2x800) MW Ultra Super-Critical TPP, vide File No: J-13012/57/2008. IA. II (T) dated 01.01.2025. Terms of Reference (ToR) for Expansion of Raigarh TPP 1600 (2x800 MW) (Phase III proposed) granted vide file no. J-13012/57/2008. IA. II(T) dated 06.12.2025.

46.2.3: The Implementation status of the existing EC is as follows:

S. No.	Product	As per EC dated 20.05.2010, subsequent amendments dated 16.04.2015, 26.11.2019, 30.07.2020, & EC Transfer dated 22.10.2019 & 24.04.2023	As per CTO dated 28.03.2025	Balance Quantity

1.1.	Electricity Generation	2200 MW Phase I: 600 (1x600) MW & Phase II: 1600 (2x800) MW (Under Construction)	600 MW (CTO received from CECB Raipur vide order no. 12341/TS/CECB/2025 Nava Raipur Atal Nagar, Raipur dated 28.03.2025 is valid till 31.03.2028)	1600 MW (2x800 MW) Is Under Construction.
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46.2.4: The details of the conditions for which amendment is sought and their justification for the same is as follows:

Conditions/ Points / S. No. of EC dated 20/05/2010 and its amendment dated 16/04/2015	Details of Conditions as per Existing EC conditions	Amendment Sought	Justification for Amendment
Specific Conditions (xxvi)	A long-term study of radioactivity and heavy metals contents on coal to be used shall be carried out through a reputed institute. Thereafter mechanism for an in-built continuous monitoring for radioactivity and heavy metals in coal and fly ash (including bottom ash) shall be put in place.	A long-term study of radioactivity and heavy metals contents on coal to be used shall be carried out through a reputed institute. <u>Proposed to Omit/Amend</u> - Thereafter mechanism for an in-built continuous monitoring for radioactivity and heavy metals in coal and fly ash (including bottom ash) shall be put in place.	In compliance to the stipulated condition periodically radioactivity analysis in Coal and Ash samples are being carried out on regular basis through a reputed institute "Department of Atomic Energy, Board of Radiation and Isotope Technology (BRIT)" Government of India. For Coal and Ash, heavy metal analysis is being carried out through NABL accreditation Laboratory and reports are being submitted periodically with Six monthly EC compliance report to MoEFCC, CPCB and CECB.

Justification for the proposed EC amendment:

In compliance to the stipulated condition periodically Radioactivity analysis in Coal and Ash samples are being carried out on regular basis through a reputed institute "Department of Atomic Energy, Board of Radiation and Isotope Technology (BRIT)" Government of India. For Coal and Ash, heavy metal analysis is being carried out through NABL accreditation Laboratory and reports are being submitted periodically with Six monthly EC compliance report to MoEFCC, CPCB and CECB.

For provision of Inbuilt mechanism for Continuous monitoring for radioactivity and heavy metals in coal and fly ash (including bottom ash), the technology and monitoring instruments are not available with the suppliers in the Country and is also technically not feasible to monitor in this mechanism

46.2.5: Summary of violation under EIA, 2006/court case/show cause/direction if any, related to the project under consideration shall be furnished.

A. Summary of court cases: There are Eleven (11) court cases related to Land and other arbitrations. However, there are no court cases pertaining to the Environment & Forest.

S.No.	Case No/ Title	Name of the Court	Brief summary of the case	Last date of hearing	Next date of hearing	Direction/ Action taken by the PP
1	WPC/2829/2025	High Court	A Writ Petition has been filed to stop the construction of a railway side road/bridge in Kurmapali village, claiming it is being built illegally on disputed land without the petitioner's consent or approval from PWD or Railway authorities. The construction is affecting access to the petitioner's petrol pump, causing business losses, and is allegedly using poor-quality materials. The petitioner seeks a stay on work and an investigation into the matter.	18.07.2025	Awaited	We are in receipt of the Petition on 06.10.2025. Reply to be filed by APL in as the Next Date is not given by HC. NOC from PWD and Railway received.
2	WPC/709/2025	High Court	The petitioner claims that several plots of land, including Survey Nos. 14/1/K/1, 6/1K, 14/1/Kh/1, 14/1/Kh/2, 6/1Kh, and 6/2Kh, have been marked for acquisition without following the legal procedures under the Land Acquisition Act, 2013. The petitioner has already raised objections under Section 11 of the Act and now seeks the Hon'ble Court's direction for the District Collector, SDO, and Tehsildar to ensure pr	17.10.2025	Awaited	Reply to be filed by CSIDC as APL is not a Party in this case. APL is a beneficiary only.

S.No.	Case No/ Title	Name of the Court	Brief summary of the case	Last date of hearing	Next date of hearing	Direction/ Action taken by the PP
			oper compliance with the mandatory provisions of the law.			
3	6/ B-105(3)/ 2016-17	Addl. Commissioner	Tikaram, son of Mahattar, filed a case regarding Survey No. 218/1 (area 0.817 hectares), claiming that KWPCL illegally took possession of his land without proper compensation. He suffered damage due to the encroachment, including the loss of 149 trees and farming activities on the land. He has requested the return of possession and fair compensation for the losses.	12.05.2026	18.06.2026	The PP is diligently pursuing the case
4	A.P./A-6/2017-18	Addl. Commissioner	Kulkitdas is claiming ownership on land sold Kh 275/6 area 0.282 hect. of village- Shan karpali. Appeal case filed against SDM court case no. 95/ A-6/2016-17 & Nayab tahsildar Pussour court case no. 341/ A-6/ 2015-16. Case filed by Kulkitdas against his daughter Lata & KWPCL. KWPCL purchased land from Mrs. Lata through sale deed on 05.07.2016. Petitioner has claimed the ownership on	20.03.2026	18.06.2026	The PP is diligently pursuing the case

S.No.	Case No/ Title	Name of the Court	Brief summary of the case	Last date of hearing	Next date of hearing	Direction/ Action taken by the PP
			sold land Kh 275/6 area 0.282 hect of village- Shankarpali.			
5	A/84/2025	District Court	A civil suit has been filed to stop the construction of a railway side road/bridge in Kurmapali village. The plaintiff claims that the work began on 22.04.2025 using heavy machinery and labourers, without any notice or permission, and in violation of road construction rules. The construction is blocking access to the plaintiff's petrol pump and harming their business operations.	24.04.2026	04.07.2026	The PP is diligently pursuing the case.
6	CS/72A/2020	District Court	Arjun Nishad has filed an appeal to get back possession of land that was earlier sold by his mother to a company. He claims that the company took over the land unfairly and is now requesting the court to return the land to him.	16.04.2026	17.06.2026	APL has filed their Addl. Application u/s 22(9) CPC, objection is yet to be filed
7	CS/12A/2012	District Court	Chandrashekhar has filed a case claiming ownership of land with Khat No. 155/8 in Chhote Bhandar village. They allege that M/s KWPCIL is threatening to v	02.04.2026	Disposed	The Court denied the plaintiffs' request for a permanent injunction against us meaning while the plaintiffs' owners

S.No.	Case No/ Title	Name of the Court	Brief summary of the case	Last date of hearing	Next date of hearing	Direction/ Action taken by the PP
			acate the land and forcibly demolish their house, and they are seeking protection of their property through the court.			hip is recognized, they were unsuccessful in legally prohibiting the company from its activities, as they could not prove the alleged interference on their specific land.
8	CS/130A/2024	District Court	Heeradhan has filed a suit against APL in the District Court, claiming ownership of land with Survey No. 222 in Village Shankarpali. According to the petitioner, APL is pressuring them to withdraw their claim, saying the land belongs to the government. However, the petitioner states that the land was originally barren and has been cultivated by their ancestors for over 100 years, which is why they believe they have rightful ownership.	22.04.2026	22.06.2026	WS has been filed by both the parties. State WS is still pending
9	WPC/5859/2025	Bhawani Shankar Vs State	17 Petitioners Filed a Writ against the Award dated 28.02.2025, Challenging the SIA had not done as per Act and did not Complied with the Provision of Act. Seeking Stay	01.05.2026	09.07.2026	Reply filed during the last hearing

S.No.	Case No/ Title	Name of the Court	Brief summary of the case	Last date of hearing	Next date of hearing	Direction/ Action taken by the PP
			on Award.			
10	WPC/692/2026	Bhawani Shankar Vs State	18 Petitioners seek to set aside the Award dated 11.08.2015 & Challenged entire award and also alleged that it followed Old Act despite New Act implemented since Jan 2014 and Provision have not complied as per both the Act	17.02.2026	09.07.2026	Petition has not been received yet.
11	SLP- Diary No. 24404/2026	Panchanand Gupta Vs State	Petitioner seeks stay on construction of Railway Side Road/bridge in the village of Kurmapali & seek for investigation		Awaited	Matter has not yet been listed. Caveat has been filed

B. Summary of Show Cause Notices (Last two years):

S. No	Issuing authority	Date	Reasons for issuance of SCN	Status of reply submission	Present status
1.	MoEFCC	31.07.2025	Non-compliance of Environmental Clearance conditions	The reply (ATR) was submitted on 22.08.2025 and 06.02.2026.	Personal Hearing for the existing 600 MW TPP was conducted on 22.01.2026, during which the compliance status of EC conditions was presented. As per the Minutes of Meeting issued thereafter, it was concluded that there are no pending non-compliances.

C. Summary of violation: There are no violation cases under the Environmental Protection Act 1986, Van (Sanrakshan Evam Samvardhan) Adhiniyam, 1980, and Wildlife (Protection) Act, 1972.

3.2.3. Deliberations by the committee in previous meetings

N/A

3.2.4. Deliberations by the EAC in current meetings

Observations and deliberation of the EAC

46.2.6: The Committee observed and noted the following:**Recommendations of the Committee:**

46.2.7: In view of the foregoing and after the detailed deliberations, the Committee **recommended** the instant proposal for grant of amendment in the EC dated 20/05/2010 and its subsequent amendment granted therein as detailed below. All other terms and conditions prescribed in EC dated 20/05/2010 and its subsequent amendments granted therein shall remain unchanged:

Conditions as per EC dated 20/05/2010 and its amendment dated 16/04/2015	Details of Conditions as per Existing EC conditions	Recommendations of EAC
Specific Conditions (xxvi)	A long-term study of radio activity and heavy metals contents on coal to be used shall be carried out through a reputed institute. There after mechanism for an in-built continuous monitoring for radio activity and heavy metals in coal and fly ash (including bottom ash) shall be put in place.	Agreed The EAC recommended to modify the condition as below: “Coal and Ash samples shall be analysed for radioactivity and heavy metals contents once in a year through 3rd party NABL accredited labs and the same shall be submitted along with six monthly compliance report.”

3.2.5. Recommendation of EAC

Recommended

3.2.6. Details of Environment Conditions**3.2.6.1. Specific**

N/A

3.2.6.2. Standard

1(d)	Thermal Power Plants
Statutory compliance	
1.	-

3.3. Agenda Item No 3:**3.3.1. Details of the proposal**

Expansion by addition of 1x660 MW Domestic Coal based Thermal Power Plant (Phase-II) at Mohabala MIDC Growth Centre in Warora (Tehsil), Chandrapur – District, Maharashtra by GMR WARORA ENERGY LI

MITED located at CHANDRAPUR, MAHARASHTRA			
Proposal For		Fresh ToR	
Proposal No	File No	Submission Date	Activity Sub-Activity (Schedule Item)
IA/MH/THE/576026/2026	J-13012/2/2008-IA.II(T)	22/05/2026	Thermal Power Plants Coal/Lignite based plants (1(d))

3.3.2. Project Salient Features

Agenda Item no. 46.3

46.3: Expansion of Existing Capacity of thermal power plant from 600 MW (Phase-I & II: 2 x 300 MW) to 1260 MW by addition of 1x660 MW (Phase-III) coal based thermal power plant within the existing premises of **M/s. GMR Warora Energy Limited** at Mohabala MIDC Growth Centre in Warora (Tehsil), Chandrapur-District, Maharashtra - Prescribing of Terms of Reference-regarding.

[Proposal no. IA/MH/THE/576026/2026, F.No. J-13012/2/2008-IA.II(T)]

46.3.1: M/s. GMR Warora Energy Limited (GWEL) has made an application vide online proposal no. IA/MH/THE/576026/2026 dated 20/04/2026 along with the application in prescribed format (CAF, Form - I Part A & B), copy of pre-feasibility report and proposed ToRs for undertaking detailed EIA study as per the EIA Notification, 2006 for the project mentioned above. The proposed project activity is listed at item no. 1(d) Under Category "A" of the schedule of the EIA Notification, 2006 and does not attract general condition and is appraised at Central Level.

Name of the EIA consultant: M/s. Enviro Infra Solutions Pvt Ltd [S. No. 84th, List of ACOs with their Certificate / Extension Letter no NABET/EIA/25-28/RA 0468 Valid: November 26. 2028]

Details of the proposal, as ascertained from the proposal documents and as revealed from the discussions held during the meeting, are given as under:

46.3.2: The existing project was accorded Environmental clearance on 19/05/2008 and 25/05/2010. Project has been implemented and the units are under operation. Consent to Operate renewal for the existing TPP was accorded by Maharashtra State Pollution Control Board vide letter no. Format1.0/CAC/UAN No. MPCB CONSENT-0000224325/CR/2501000380 dated 04.01.2025. The validity of CTO is up to 31.12.2029.

46.3.3: Implementation status of the existing EC

S. No.	Configuration	Capacity (MW)	As per EC dated	Implementation Status as on till date	Production as per CTO
1	2×135 MW	270	J-13011/2/2008-IA. II(T) dtd.19.05.2008	Functional	270 MW
2	1× 330 MW	330	J-13011/2/2008-IA. II(T) dtd. 04.06.2009	Amended in EC for change in Configuration	300 MW
3	1×300 MW	300	J13012/75/2008IA.II(T)	Functional	300 MW

			T) dtd. 25.05.2010		
4	1×300 MW	300	J-13011/02/2008-IA. I I(T) dtd.28.05.2012	Corrigendum in EC for change in Configurati on	300 MW
5	1×300 MW	300	J-13012/75/2008-IA. I I(T) dtd. 30.11.2010	Corrigendum in EC for corrections in EC con ditions.	300 MW
6	2×300 MW	600	J-13012/75/2008-IA. I I(T) dtd.07.05.2012	Corrigendum in EC for land requirement & C SR increase	600 MW
7	2×300 MW	600	J-13012/75/2008-IA. I I(T) pt. dtd.20.09.201 8	Transfer of EC	600 MW

46.3.5: Environmental site settings:

S. N o.	Particulars	Details				Remarks																												
1.	Total land	Total land requirement is 174 ha; Out of 174 Ha, existing area is 144 Ha and additional land for the proposed expansion is 30 Ha.				Land use: Industrial																												
2	Land use break up	<table><tr><th>Facilities</th><th>Existing Area (In Hectares)</th><th>Proposed Area (In Hectares)</th><th>Land Requirement after expansion</th></tr><tr><td>Power Plant Facilities, BTG, Water system, transformer & Switchyard (400KV system)</td><td>40</td><td>22</td><td>62</td></tr><tr><td>CHP & Fuel oil storage and Handling system</td><td>14</td><td>2</td><td>16</td></tr><tr><td>Ash Disposal area & handling system</td><td>14</td><td>0</td><td>14</td></tr><tr><td>Road & infrastructure</td><td>6</td><td>1</td><td>7</td></tr><tr><td>Green Belt</td><td>70</td><td>5</td><td>75</td></tr><tr><td>Total Area</td><td>144</td><td>30</td><td>174</td></tr></table>				Facilities	Existing Area (In Hectares)	Proposed Area (In Hectares)	Land Requirement after expansion	Power Plant Facilities, BTG, Water system, transformer & Switchyard (400KV system)	40	22	62	CHP & Fuel oil storage and Handling system	14	2	16	Ash Disposal area & handling system	14	0	14	Road & infrastructure	6	1	7	Green Belt	70	5	75	Total Area	144	30	174	
Facilities	Existing Area (In Hectares)	Proposed Area (In Hectares)	Land Requirement after expansion																															
Power Plant Facilities, BTG, Water system, transformer & Switchyard (400KV system)	40	22	62																															
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Ash Disposal area & handling system	14	0	14																															
Road & infrastructure	6	1	7																															
Green Belt	70	5	75																															
Total Area	144	30	174																															
3	Land acquisition details as per MoEF&CC O.M. dated 7/10/2014 & 19/02/2025	Entire 174 Ha is under the possession of the proponent.				Status of R&R: Nil																												
4.	Existence of school and hospital	Project site: Nil Study Area:																																

S. N o.	Particulars	Details			Remarks																																	
	pitals if any.	<table><tr><th>Habitation</th><th>Distance</th><th>Direction</th></tr><tr><td>Naideo</td><td>0.5 Km</td><td>S</td></tr><tr><td>Mohabala</td><td>2.0 Km</td><td>SSE</td></tr><tr><td>Charurkhati</td><td>2.0 Km</td><td>WSW</td></tr><tr><td>Nimsada</td><td>0.8 Km</td><td>E</td></tr></table>			Habitation	Distance	Direction	Naideo	0.5 Km	S	Mohabala	2.0 Km	SSE	Charurkhati	2.0 Km	WSW	Nimsada	0.8 Km	E																			
Habitation	Distance	Direction																																				
Naideo	0.5 Km	S																																				
Mohabala	2.0 Km	SSE																																				
Charurkhati	2.0 Km	WSW																																				
Nimsada	0.8 Km	E																																				
5.	Existence of school and hospitals if any.	A. School Project site: Nil Study Area: <table><tr><th>School</th><th>Distance</th><th>Direction</th></tr><tr><td>Z. P. Primary School Naydeo</td><td>1.20 Km</td><td>S</td></tr><tr><td>Z. P. U. Primary School dongarao</td><td>4.9 Km</td><td>NW</td></tr><tr><td>Z. P school, at Nimsada</td><td>0.81 Km</td><td>NE</td></tr><tr><td>Z. P school, at Mohabala</td><td>1.76 Km</td><td>S</td></tr><tr><td>Z. P school, at Chinora</td><td>2.69 Km</td><td>SE</td></tr><tr><td>Pawansut Podar Learn School, Chinora</td><td>3.0 Km</td><td>SW</td></tr><tr><td>Z.P.U. Primary School Charurkhati</td><td>1.95 Km</td><td>SW</td></tr></table> B. Hospital Project site: Nil Study Area: <table><tr><th>Hospital</th><th>Distance</th><th>Direction</th></tr><tr><td>Anand Niketan College, Hospital at Anandwan</td><td>4.99 Km</td><td>SE</td></tr><tr><td>Anand Niketan maha, Anandwan</td><td>4.3 Km</td><td>SE</td></tr></table>			School	Distance	Direction	Z. P. Primary School Naydeo	1.20 Km	S	Z. P. U. Primary School dongarao	4.9 Km	NW	Z. P school, at Nimsada	0.81 Km	NE	Z. P school, at Mohabala	1.76 Km	S	Z. P school, at Chinora	2.69 Km	SE	Pawansut Podar Learn School, Chinora	3.0 Km	SW	Z.P.U. Primary School Charurkhati	1.95 Km	SW	Hospital	Distance	Direction	Anand Niketan College, Hospital at Anandwan	4.99 Km	SE	Anand Niketan maha, Anandwan	4.3 Km	SE	
School	Distance	Direction																																				
Z. P. Primary School Naydeo	1.20 Km	S																																				
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Z.P.U. Primary School Charurkhati	1.95 Km	SW																																				
Hospital	Distance	Direction																																				
Anand Niketan College, Hospital at Anandwan	4.99 Km	SE																																				
Anand Niketan maha, Anandwan	4.3 Km	SE																																				
6.	Latitude and Longitude of all corners of the project site.	A. Plant site <table><tr><th>P o i n t</th><th>L a t i t u d e</th><th>L o n g i t u d e</th></tr><tr><td>A</td><td>20° 16' 19.66" N</td><td>78° 05' 13.62" E</td></tr></table>			P o i n t	L a t i t u d e	L o n g i t u d e	A	20° 16' 19.66" N	78° 05' 13.62" E																												
P o i n t	L a t i t u d e	L o n g i t u d e																																				
A	20° 16' 19.66" N	78° 05' 13.62" E																																				

S. N o.	Particulars	Details	Remarks																		
		<table><tr><td>B</td><td>2 0° 1 6' 2 1. 3 5" N</td><td>7 8° 5 8' 2 8. 3 0" E</td></tr><tr><td>C</td><td>2 0° 1 6' 3 0. 6 2" N</td><td>7 8° 5 8' 3 2. 8 1" E</td></tr><tr><td>D</td><td>2 0° 1 6' 3 2. 8 6" N</td><td>7 8° 5 8' 1 9. 3 1" E</td></tr><tr><td>E</td><td>2 0° 1 6' 4 0. 9 1" N</td><td>7 8° 5 8' 1 9. 3 5" E</td></tr><tr><td>F</td><td>2 0° 1 6' 4 0. 1 3" N</td><td>7 8° 5 8' 1 5. 2 8" E</td></tr><tr><td>G</td><td>2 0° 1 6' 4 8.</td><td>7 8° 5 8' 1 5.</td></tr></table>	B	2 0° 1 6' 2 1. 3 5" N	7 8° 5 8' 2 8. 3 0" E	C	2 0° 1 6' 3 0. 6 2" N	7 8° 5 8' 3 2. 8 1" E	D	2 0° 1 6' 3 2. 8 6" N	7 8° 5 8' 1 9. 3 1" E	E	2 0° 1 6' 4 0. 9 1" N	7 8° 5 8' 1 9. 3 5" E	F	2 0° 1 6' 4 0. 1 3" N	7 8° 5 8' 1 5. 2 8" E	G	2 0° 1 6' 4 8.	7 8° 5 8' 1 5.	
B	2 0° 1 6' 2 1. 3 5" N	7 8° 5 8' 2 8. 3 0" E																			
C	2 0° 1 6' 3 0. 6 2" N	7 8° 5 8' 3 2. 8 1" E																			
D	2 0° 1 6' 3 2. 8 6" N	7 8° 5 8' 1 9. 3 1" E																			
E	2 0° 1 6' 4 0. 9 1" N	7 8° 5 8' 1 9. 3 5" E																			
F	2 0° 1 6' 4 0. 1 3" N	7 8° 5 8' 1 5. 2 8" E																			
G	2 0° 1 6' 4 8.	7 8° 5 8' 1 5.																			

S. N o.	Particulars	Details			Remarks
			9 8" N	7 0" E	
		H	2 0° 1 6' 5 2. 0 1" N	7 8° 5 8' 2 4. 4 9" E	
		I	2 0° 1 6' 5 4. 8 3" N	7 8° 5 8' 2 3. 4 6" E	
		J	2 0° 1 7' 0. 6 0" N	7 8° 5 8' 2 5. 5 7" E	
		K	2 0° 1 7' 0. 7 5" N	7 8° 5 8' 3 5. 5 9" E	
		L	2 0° 1 7' 1 7. 5 1" N	7 8° 5 8' 3 6. 4 4" E	
		M	2 0° 1	7 8° 5	

S. N o.	Particulars	Details			Remarks
			7' 2 6. 3 6" N	8' 4 0. 3 5" E	
		N	2 0° 1 7' 2 6. 9 6" N	7 8° 5 8' 4 3. 5 7" E	
		O	2 0° 1 7' 2 6. 3 3" N	7 8° 5 8' 4 2. 9" E	
		P	2 0° 1 7' 2 0. 4 4" N	7 8° 5 8' 4 1. 0" E	
		Q	2 0° 1 6' 5 7. 5 9" N	7 8° 5 8' 5 2. 8" E	
		R	2 0° 1 6' 5 5. 2 0" N	7 8° 5 9' 1 4. 2 1" E	

S. N o.	Particulars	Details			Remarks
		S	2 0° 1 6' 4 4. 7 2" N	7 8° 5 9' 2 0. 3 1" E	
		T	2 0° 1 6' 3 9. 0 0 3" N	7 8° 5 9' 2 0. 0 7" E	
		U	2 0° 1 6' 3 7. 0 3" N	7 8° 5 9' 1 5. 6 6" E	
		V	2 0° 1 6' 3 2. 9 0" N	7 8° 5 9' 1 6. 6 6" E	
		W	2 0° 1 6' 2 9. 0 0 5" N	7 8° 5 9' 1 0. 1 2" E	
		X	2 0° 1 6' 3 7.	7 8° 5 9' 7. 5	

S. N o.	Particulars	Details	Remarks																								
		<table><tr><td></td><td>1 3" N</td><td>1" E</td></tr><tr><td>Y</td><td>2 0° 1 6' 3 6. 0 7" N</td><td>7 8° 5 9' 5. 8 0" E</td></tr><tr><td>Z</td><td>2 0° 1 6' 3 7. 3 4" N</td><td>7 8° 5 8' 5 0. 4 2" E</td></tr></table> B. Ash pond <table><tr><th>Point</th><th>Latitude</th><th>Longitude</th></tr><tr><td>A</td><td>20°28'72.08" N</td><td>78°97'74.92" E</td></tr><tr><td>B</td><td>20°28'17.57" N</td><td>78°97'62.23" E</td></tr><tr><td>C</td><td>20°28'15.84" N</td><td>78°97'37.27" E</td></tr><tr><td>D</td><td>20°28'31.58" N</td><td>78°97'41.66" E</td></tr></table>		1 3" N	1" E	Y	2 0° 1 6' 3 6. 0 7" N	7 8° 5 9' 5. 8 0" E	Z	2 0° 1 6' 3 7. 3 4" N	7 8° 5 8' 5 0. 4 2" E	Point	Latitude	Longitude	A	20°28'72.08" N	78°97'74.92" E	B	20°28'17.57" N	78°97'62.23" E	C	20°28'15.84" N	78°97'37.27" E	D	20°28'31.58" N	78°97'41.66" E	
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D	20°28'31.58" N	78°97'41.66" E																									
7.	Elevation of the project site	200-230 M above mean sea level																									
8.	Involvement of Forest land if any.	Status of stage I Forest Clearance: NA Area of the forest land involved: Nil	NA																								
9.	Water body (Rivers, Lakes, Pond, Nala, Natural Drainage, canal etc.) exists within the project site as well as study area	Project site: 2 Reservoir of 10 Ha Study area <table><tr><th>Water body</th><th>Distance</th><th>Direction</th></tr><tr><td>Wardha River</td><td>5.65 Km</td><td>SW</td></tr><tr><td>Daiwal River</td><td>1.38 Km</td><td>NW</td></tr><tr><td>Lendi Nala</td><td>1.33 Km</td><td>NE</td></tr></table>	Water body	Distance	Direction	Wardha River	5.65 Km	SW	Daiwal River	1.38 Km	NW	Lendi Nala	1.33 Km	NE													
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Daiwal River	1.38 Km	NW																									
Lendi Nala	1.33 Km	NE																									
10.	Existence of ESZ/ESA/	Study area Name of the ESZ/ESA: Nil																									

S. N o.	Particulars	Details			Remarks												
	national park/ wildlife sanctuary/ biosphere reserve/ tiger r eserve/ elepha nt reserve etc. if any within th e study area	Status of Notification: NA Distance of project from ESZ/ESA: NA Authenticated map of ESZ projecting distance of ESZ from project site: NA Status of NBWL approval: NA List of Reserved and protected forests: <table><tr><th>Forest Name</th><th>Distance</th><th>Direction</th></tr><tr><td>Shegoan reserve forest</td><td>5.9 Km</td><td>E</td></tr><tr><td>Kawadepur reserve forest</td><td>7.6 Km</td><td>ENE</td></tr><tr><td>Temurda reserve forest</td><td>9.22 Km</td><td>N</td></tr></table>			Forest Name	Distance	Direction	Shegoan reserve forest	5.9 Km	E	Kawadepur reserve forest	7.6 Km	ENE	Temurda reserve forest	9.22 Km	N	
Forest Name	Distance	Direction															
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Kawadepur reserve forest	7.6 Km	ENE															
Temurda reserve forest	9.22 Km	N															
11.	Archaeological s ites monument s/ historical tem ples etc.	NA			-												
12.	Facility envisage d in CRZ area On ly for coastal po wer plant)	Nil and Not applicable			-												
13.	Involvement of Critically Po lluted Area/Se verely Polluted area as per 20 18 CEPI score	<u>Involvement of CPA/SPA</u> <u>Nil</u> <u>Proximity to CPA/SPA</u> <u>NA</u>															
S. N o.	Existing power plant configur ation and capacity	Proposed power plant config uration and capacity	To tal	Technolog y adopted													
1	2X300 (600 MW)	1x660	1260	Supercritical technology													

46.3.7: The details of the fuel (Coal/LDO) requirement for the **proposed** project/ expansion cum proposed project along with its source and mode of transportation is given as below:

Details	Fuel requirement (MTPA)	Source	Distance from site (Kms)	Mode of Transportation	Coal characteristics (Worst case scenario)	Linkage document
Existing TPP	3.01 million tons Coal	From SECL and WCL	685 Km by rail	Transported by rail using BOX-N wagons	Ash- (45%max) Sulphur (0.5%max) Moisture (6.8%) GCV - 3300 Kcal/Kg	Enclosed

Details	Fuel requirement (MTPA)	Source	Distance from site (Kms)	Mode of Transportation	Coal characteristics (Worst case scenario)	Linkage document
Proposed TPP	3.6 million tons Coal and 3000 cu.m Light Diesel Oil (LDO)	Coal mines	15 Km	Proposed railway of WCL and LDO by road tankers.	Ash - (45%) Sulphur (0.5%) Moisture (6.8%) GCV 3300 Kcal/Kg	Indian coal would be sourced from coal mines belonging to Western Coal Fields (WCL). Coal from WCL will be transported to plant at Warora through the Indian Railway network at a distance of 15 Kms.

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

S. No	Category No./ Type	Quantity	UoM	Treatment	Disposal
1	5.1 Used or spent oil	5.4	KL/M	Recycle	Sale to authorised party
2	5.2 Wastes or residues containing oil	2.0	KL/M	Incineration	CHWTSDF
3	3.3 Sludge and filters contaminated with oil	15.0	MT/A	Incineration	CHWTSDF
4	33.1 Empty barrels /containers /liners contaminated with hazardous chemicals /wastes	40	MT/A	Recycle	Sale to authorised party
5	35.3 Chemical sludge from waste water treatment	50	MT/A	Landfill	CHWTSDF
6	35.4 Oil and grease skimming	15	MT/A	Incineration	CHWTSDF
7	35.2 Spent ion exchange resin containing toxic metals	2	MT/A	Landfill	CHWTSDF
8	Used Lead Acid Batteries(scrap)	8.00	MT/A		Send to authorized recycler

43.3.13: Ash Management:

A. Ash management for last three years

Ash management	Quantity generated	Quantity utilized	% of utilization	Balances	No of storage silos
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ent for last th ree years	erated (MT)	tilized (M T)	on	n ce quan tity (MTP)	with capacity
2025-2026	977353	977353	100%	00	4500 (3x1500) MT
2024-2025	1016453	1016453	100%	00	4500 (3x1500) MT
2023-2024	965561	965561+ 41418 (Legacy Ash)	104.3%	00	4500 (3x1500) MT

Fly Ash Details for 2025-2026 years =778292 MTPA

S. N o.	Activity	Quantit y	Percenta ge
1.	Fly ash-based products (bricks or blocks or tiles or fiber cement sheets or pipes or boards or panels)	293026	37.65
2.	Cement manufacturing	319113	41.00
3.	Ready mix concrete	42152	5.40
4.	Construction of roads, road and fly over embankment	206	0.02
5.	Filling up of low-lying area	123715	15.92
6.	Filling of mine voids:	80	0.01
	Total	778292	100

Fly Ash Details for 2024-2025 years =813162 MTPA

S. No.	Activity	Quantity (MT)	Percentage
1.	Fly ash based products (bricks or blocks or tiles or fiber cement sheets or pipes or boards or panels)	277178	34.09
2.	Cement manufacturing	332518	40.89
3.	Ready mix concrete	41154	5.06
4.	Construction of roads, road and fly over embankment	39294	4.83
5.	Filling up of low lying area	123022	15.13
	Total	813162	100

Fly Ash Details for 2023-2024 years =766519 MTPA

S. No.	Activity	Quantity (MT)	Percentage
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1.	Fly ash based products (bricks or blocks or tiles or fiber cement sheets or pipes or boards or panels)	240263	31.34
2.	Cement manufacturing	350802	45.77
3.	Ready mix concrete	66428	8.67
4.	Construction of roads, road and fly over embankment	36289	4.73
5.	Filling up of low lying area	72737	9.49
	Total	766519	100

Bottom Ash generation for 2025-2026 years = 199060 MTPA

S.N o.	Activity	Quantity	Percentage
1.	Fly ash based products (bricks or blocks or tiles or fiber cement sheets or pipes or boards or panels)	90027	45.20
2.	Filling up of low lying area	100733	50.60
3.	Filling of mine voids	8300	4.20
	Total	199060	100

Bottom Ash generation for 2025-2026 years = 203290 MTPA

S.N o.	Activity	Quantity	Percentage
1.	Fly ash based products (bricks or blocks or tiles or fiber cement sheets or pipes or boards or panels)	115923	57.03
2.	Construction of roads, road and fly over embankment	7243	3.56
3.	Filling up of low lying area	51300	25.23
4.	Filling of mine voids	28823	14.18
	Total	203290	100

Bottom Ash generation for 2025-2026 years = 199042 MTPA

S. N o.	Activity	Quantity	Percentage
1.	Fly ash based products (bricks or blocks or tiles or fiber cement sheets or pipes or boards or panels)	122086	61.34
2.	Construction of roads, road and fly over embankment	18876	9.48
3.	Filling up of low lying area	58080	29.17

	Total	199042	100
B. Legacy ash 2023-2024: 41418 MT			
S. No.	Activity	Quantit y	Percenta ge
1.	Fly ash based products (bricks or blocks or tiles or fiber cement s heets or pipes or boards or panels)	7555	18.24
2.	Construction of roads, road and fly over embankment	28809	69.56
3.	Filling of mine voids	5054	12.20
	Total	40418	100
S. No.	Details of Ash pond	Ash pond 1	
1.	Status of ash pond (Active / Exhausted (yet to be reclaime d)/ Reclaimed)	Active	
2.	Area (Ha)	14 Ha.	
3.	Dyke height (m)	7 m	
4.	Volume (m ³)	~6,00,000	
5.	Quantity of ash disposed (Metric Tons)	2,840,000 (2.84 million ton/Annum)	
6.	Available volume in percentage (per cent) and quantity of a sh can be further disposed (Metric Tons)	6.5 Lac.MT	
7.	Expected life of ash pond (number of years and months)	30 years (Remaining)	
8.	Type lining carried in ash pond: HDPE lining of LDPE lining or clay lining or No lining	HDPE	
9.	Mode of disposal: Dry disposal or wet slurry (in case of we t slurry please specify whether HCSD or MCSD or LCSD)	Dry Disposal	
10.	Ratio of ash: water in slurry mix (1:):	NA	
11.	Ash water recycling system (AWRS) installed and functionin g : Yes or No	Yes	
12.	Quantity of wastewater from ash pond discharged into land or water body (m ³)	NIL	
13.	Last date when the dyke stability study was conducted and name of the organization who conducted the study:	7th March, 2025 by -Vasudevan Cheloor by V Engineering Consu ltant, New Delhi	

S. No.	Details of Ash pond	Ash pond 1
14.	Last date when the audit was conducted and name of the organization who conducted the audit:	8th March 2026 Mr. D Deshpande, COO & Director, GWEL

D. Proposed ash utilization plan for expansion project

Details	Existing generation (Million TPA)	Proposed generation (Million TPA)	Total	Utilization (Million TPA)	% of utilization	Balance quantity (MTPA)	No of storage silos with capacity
Ash (Fly and Bottom)	1.22	1.62	2.84	2.84	100%	NIL	3 (1 more proposed) Total- 4

46.3.15: Written Submission:

Query 1: Clarification on the naming of phases of Existing and Proposed Units

Query 2: Submission of the EC transfer letter in the name of GMR Warora Energy Ltd.

Reply: M/s GMR Warora energy Ltd has already obtained name changed in the EC from M/s Emco Energy Ltd as per MOEF&CC office order dated 20.09.2018 vide letter No. J-13012/75/2008-IA.II(T)pt have been submitted.

Query 3: One Continuous Ambient Air Quality Monitoring Stations (CAAQMS) installation in the Buffer zone.

Reply: M/s GWEL submit that suitable location for the CAAQMS shall be studied during the EIA. The detailed EMP shall be developed and proposed in the EIA study including the additional CAAQMS and plantation in the buffer Zone.

Query 4: Clarification on Ash Pond Area.

Reply: The existing ash pond area of 14 ha land is envisaged to be sufficient to cater the need of proposed expansion project (1×660 MW). This aspect will be further studied in detail, during the EIA and shall be submitted. However, an additional area of 1 ha (part of 174 Ha) is proposed to be allocated exclusively for additional ash handling system (Fly Ash Silos).

Query 5: The area proposed for expansion currently having tree plantation. A detailed tree relocation plan, along with quantity and the budgetary provisions to be submitted.

Reply: For the proposed expansion area, approximately 2,450 plants within the proposed project footprint layout and shall be scientifically transplanted to suitable locations within the plant premises through a mechanized tree transplantation system. GWEL already in contact with expert agency for this work and a budget of 3 crores is estimated. The existing plants along the boundary of plot identified for main plant units shall be saved.

Query 6: Wind barriers to be installed for effectively control fugitive dust emissions and minimize wind-induced dispersion of ash particles.

Reply: GWEL will be included in the detail engineering and DPR for the proposed expansion 1×660 MW. The wind barriers along the coal stack yard will be included in EIA study. The proposed system will consider appropriate height, porosity, and alignment with prevailing wind directions to ensure optimal performance.

Query 7: Selection criteria for ESP

Reply: The ESP to achieve emission limits for proposed expansion shall be installed. The latest and efficient ESP design is already part of ongoing detailed engineering and DPR. The details of this aspect will also be the part of EIA.

Query 8: Rainwater harvesting system

Reply: Additional Rain water harvesting system shall be identified during EIA studies.

3.3.3. Deliberations by the committee in previous meetings

N/A

3.3.4. Deliberations by the EAC in current meetings

Observation and deliberation of the EAC

46.3.16: The Committee observed and noted the following:

Recommendations of the Committee:

46.3.17: The EAC after detailed deliberations on the information submitted and as presented during the meeting **recommended** the proposal for grant of ToR for conducting an EIA study subject to **uploading of written submissions on PARIVESH portal** for the above project under the provisions of the EIA Notification, 2006, as amended along with the following specific ToR in addition to the generic ToRs.

3.3.5. Recommendation of EAC

Recommended (Subject to submission of requisite information/ documents)

3.3.6. Details of Terms of Reference

3.3.6.1. Specific

[A] Environmental Management and Biodiversity Conservation	
1.	Project Proponent shall submit the certified compliance report for the existing TPPs as per MoEF&CC OM dated 08/06/2022.
2.	Project Proponent shall take necessary permissions from the State Forest Department before felling/translocation of trees.
3.	Certificate from concerned District Magistrate/Executive Engineer from the State Water Resources department (or) any officer authorized by the State Government in this regard shall be submitted stating that project site is not located within flood plain of Daiwal River and corresponding to one in 25 years of flood as per Ministry's O.M. dated 14/02/2022.
4.	PP needs to submit NOC/permission from the State Water resource Department/Irrigation Dept. in case of diversion of any Nala/Stream/water bodies.
5.	All the parameters as mentioned in the National Ambient Air Quality Standards (NAAQS) shall be monitored by the project proponent at the proposed locations and also include more locations in Downward direction.
6.	Project proponent shall carry out study and vetted by State Forest department regarding the impact of project on the nearby Reserved Forests, if any, along with the mitigation measures to be followed.
7.	EIA/EMP study shall take in to consideration the different scenarios arising due to change of coal source, impact on environmental attributes due to change of coal source along with corresponding mitigation measures with EMP budget shall be submitted.

8.	Biodiversity analysis of the project site and study area shall be done through any NABET accredited consultant. The study report shall inter-alia include impact of power plant on aquatic life of Wardha River and action plan for complying with the recommendations of the study report shall be submitted.
9.	Project proponent shall submit a study on site specific hydrological studies for area drainage for existing and proposed 1260 MW power plant structure through reputed Government institute. The study report along with the action plan for implementing the recommendations of the report shall be submitted along with the EIA/EMP report.
10.	Project proponent shall prepare an integrated watershed management plan including Rain water harvesting for protection and conservation of water bodies within the study area of the project site. The study report along with the action plan for implementing the recommendations of the report shall be submitted along with the EIA/EMP report.
11.	Radioactivity studies along with coal analysis to be provided (sulphur, ash percentage and heavy metals including Pb, Cr, As and Hg). Details of auxiliary fuel, if any including its quantity, quality, storage, etc should also be given.
12.	PP should submit the detailed plan in tabular format (year-wise) for concurrent afforestation and green belt development in and around the project site covering 75 Ha of the project area as per MoEF&CC OM dated 29.10.2025 of MoEF&CC for greenbelt/green cover requirement for industries. The PP shall submit the number of saplings to be planted, names of native species, area to be covered under afforestation & green belt, location of plantation, target for survival rate and budget earmarked for the afforestation & green belt development. The capital and recurring expenditure to be incurred needs to be submitted. Plantation plan shall be prepared in such a way that 80% of the plantation to be carried out in first 5 years and for the remaining years the proposal for gap filling. The seedling should be of native and few fruit bearing species mainly, of height not less than 2 meters to be selected and accordingly cost of plantation needs to be decided.
13.	Action plan for development of three-tier plantation programme along the periphery of the project boundary and the coal transportation route shall be provided. PP shall submit concurrent plantation plan.
14.	Detailed action plan shall be prepared for maintenance of air pollution control equipment for proposed units and shall be incorporated in the EIA/EMP report.
15.	Details of Ash management plan as per MoEF&CC notification dated 31/12/2021 & its subsequent amendment for the proposed project shall be submitted. MoU signed for ash utilization with companies shall be submitted.
16.	Action plan for dry ash collection system (Bottom ash and Fly ash) shall be submitted.
17.	Action plan for disposal of ash through High Concentration Slurry Disposal (only in emergency conditions) shall be submitted.
18.	Proper protection measures like high-density polyethylene (HDPE) lining, appropriate height of bund and adequate distance between the proposed Ash pond and water body etc. shall be planned to reduce the possibility of mixing leachate with any freshwater body for ash pond. A high-density Slurry disposal plan shall be prepared.
19.	Pond and ground water quality (10 locations within 2 km radius of the plant boundary) shall be studied and report be submitted along with EIA/EMP. Action plan for Ground water monitoring stations on all hotspots like schools/hospitals within 2 km radius of the plant boundary be submitted. Baseline Study for Heavy metals in Groundwater, Surface water and soil to be carried out and incorporated in EIA/EMP

	report.
20.	Details pertaining to water source, treatment and discharge should be provided.
21.	PP shall provide the details of wastewater treatment facilities to be installed within its capacity, timeline and budget.
22.	Project Proponent to conduct Environmental Cost Benefit Analysis for the project in EIA/EMP Report.
23.	An action plan shall be prepared for Water shed development within 10 km radius of the plant boundary in consultation with reputed government institution and incorporated in EIA/EMP report.
24.	PP should clearly bring out that what is the specific diesel consumption ~ (Liters/Tonne of total material handled) and steps to be taken for reduction of the same. The year-wise target for reduction in the specific diesel consumption needs to be submitted. PP shall also explore the possibility of using e-vehicles/LNG/CNG based machinery and trucks for the operation and transportation of Coal and ash and submit an implementation strategy.
25.	PP shall provide the details of transportation of fly ash from the plant, transportation route etc. Further, carry out a traffic study for at least one month and provide the impact of transportation along with the mitigation measures.
26.	PP shall submit the action plan to adhere to the Plastic Waste Management Rules 2026 and to adhere Ministry's OM dated 18/07/2022.
27.	Details on renewable energy (solar plant) proposed to be installed as energy conservation measures shall be submitted.
28.	The input parameters for the AAQ modelling and the influence of various combinations of these on the AAQ must be reported in the EIA/EMP Report. In addition to the Wind Rose diagram collected for one season during the preparation of the E.I.A., wind rose diagram for all seasons must be provided using secondary data from sources such as IMD/CPCB etc.
29.	Project proponent shall take all necessary steps to control the Air Quality and take additional mitigation measures for proposed TPP to maintain the Ambient Air Quality values within the limits. The action plan regarding maintaining ambient quality standards (Time weighted average for 24 hours and Annual both) be submitted. Further, project proponent shall submit an undertaking to abide by the provisions of the notification number G.S.R 465 (E) dated 11/07/2025 related to SO2 emission norms.
30.	Details of air pollution control devices to be installed in the proposed 1x660 MW TPP along with its maintenance schedule shall be incorporated in EIA/EMP report.
31.	Carbon emission due to proposed TPP and allied carbon sequestration/ carbon offsetting plan be submitted.
32.	PP is advised to implement the 'Ek Ped Maa Ke Naam' Campaign, which was launched on 5th June 2024 on the occasion of the World Environment Day to increase the forest cover across the Country. This plantation drive is other than Green belt development. An action plan in this regard shall be submitted.
[B] Disaster Management	
1.	A Disaster Management Plan shall be prepared and incorporated in the EIA/EMP report.

2.	Site specific risk assessment study followed by emergency preparedness plan shall be submitted.
[C] Socio-economic Study	
1.	Public Health Action Plan including the provisions for drinking water supply for the local population shall be in the EIA/EMP Report. The status of the existing medical facilities in the project area shall be discussed. Possibilities of strengthening of existing medical facilities, construction of new medical infrastructure etc. will be explored after assessing the needs of the labour force and local populace.
2.	Public consultation (Public Hearing and Written submission) shall be conducted as per the provisions of EIA Notification, 2006 and as amended. As per the Ministry's OM dated 30.09.2020, to address the concern raised during the Public Hearing, the Project Proponent is required to submit the detailed activities proposed with year wise budgetary provision (Capital and recurring) for 5 years. Activities proposed shall be part of EMP. Tentative no. of project affected families (if any) shall be identified and accordingly appropriate Rehabilitation & Resettlement plan shall be prepared. The recommendation Socio-economic study may also be considered while planning the activities & budget.
3.	A need based Social Impact Assessment Study shall also be carried out and an action plan on its recommendations may also be submitted with budgetary provisions.
4.	Demographic details and land use change details in 10 km area shall be submitted.
[D] Miscellaneous	
1.	Plot the wind rose diagram using the typical meteorological year (TMY) data for the period considered for the study. The monitoring units shall be deployed in the field based on the coverage area ratio and direction of the wind. A mathematical model shall be developed for the local site rather than using the standard model available in software for both air & water quality modelling.
2.	PP shall align its activities to one/few of the Sustainable Development Goals (SDG) and start working on the mission of net zero by 2050. PPs shall update the same to the EAC.
3.	PP shall submit the EIA/EMP report after the plagiarism check using authenticated plagiarism software.
4.	Detailed description of all the court cases along with its current status shall be submitted.
5.	PP should provide in the EIA Report details of all the statutory clearances, permissions, no objection certificates, consents etc. obtained for this project under various Acts, Rules and regulations shall be submitted. Further, all the permissions/MoUs obtained for this project shall be revalidated and submitted along with the EIA/EMP report.
6.	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 analyse the samples.
7.	PP should clearly bring out the details of the manpower to be engaged for this project with their roles /responsibilities/designations. In addition to this PP should mention the number and designation of persons to be engaged for the implementation of environmental management plan (EMP). The capital and recurring expenditure to be incurred needs to be submitted.
8.	PP should submit the year-wise, activity wise and time-bound budget earmarked for EMP, occupational health surveillance, and activities proposed to address the issues raised during Public Hearing. The capital and recurring expenditure to be incurred needs to be submitted.

9.	Activities shall be prepared based on the issues arise during public hearing conducted and fresh written submission with defined timeline and budgetary provisions.
10.	Aerial view video of project site and coal transportation route proposed for this project shall be recorded through drone and be submitted. Along with this plan of 3 tier plantation on coal transportation route shall be submitted.
11.	The PP should ensure that only NABET-accredited consultants shall be engaged for the preparation of EIA/EMP Reports. PP shall ensure that the accreditation of the consultant is valid during the collection of baseline data, preparation of EIA/EMP report and the appraisal process. The PP and consultant should submit an undertaking the information and data provided in the EIA Report and submitted to the Ministry are factually correct and the PP and consultant are fully accountable for the same.
12.	PP should provide in the EIA Report details of the statutory clearances, permissions, no objection certificates, consents etc. required for this project under various Acts, Rules and regulations and their status or estimated timeline after the grant of EC.
13.	All the certificates viz. involvement of Forest land, distance from the protected area, and list of flora & fauna should be duly authenticated by the Forest Department. The Certificate should bear the name, designation, official seal of the person signing the certificate and dispatch number.
14.	Necessary coordination shall be made with concerned SPCB (who is responsible for Compliance of OM dated 14.01.2025) regarding streamlining the implementation of GSR 702 and GSR 703 dated 12.11.2024 through which projects requiring prior EC were exempted from requirement of CTE.

3.3.6.2. Standard

1(d)	Thermal Power Plants
Statutory compliance	
1.	The proposed project shall be given a unique name in consonance with the name submitted to other Government Departments etc. for its better identification and reference.
2.	Vision document specifying prospective long term plan of the project shall be formulated and submitted.
3.	Latest compliance report duly certified by the Regional Office of MoEF&CC for the conditions stipulated in the environmental and CRZ clearances of the previous phase(s) for the expansion projects shall be submitted.
Details of the Project and Site	
1.	The project proponent needs to identify minimum three potential sites based on environmental, ecological and economic considerations, and choose one appropriate site having minimum impacts on ecology and environment. A detailed comparison of the sites in this regard shall be submitted.
2.	Executive summary of the project indicating relevant details along with recent photographs of the proposed site (s) shall be provided. Response to the issues raised during Public Hearing and the written representations (if any), along with a time bound Action Plan and budgetary allocations to address the same, shall be provided in a tabular form, against each action proposed.
3.	Harnessing solar power within the premises of the plant particularly at available roof tops and other

	available areas shall be formulated and for expansion projects, status of implementation shall also be submitted.
4.	The geographical coordinates (WGS 84) of the proposed site (plant boundary), including location of ash pond along with topo sheet (1:50,000 scale) and IRS satellite map of the area, shall be submitted. Elevation of plant site and ash pond with respect to HFL of water body/nallah/River and high tide level from the sea shall be specified, if the site is located in proximity to them.
5.	Layout plan indicating break-up of plant area, ash pond, green belt, infrastructure, roads etc. shall be provided.
6.	Land requirement for the project shall be optimized and in any case not more than what has been specified by CEA from time to time. Item wise break up of land requirement shall be provided.
7.	Present land use (including land class/kism) as per the revenue records and State Govt. records of the proposed site shall be furnished. Information on land to be acquired including coal transportation system, laying of pipeline, ROW, transmission lines etc. shall be specifically submitted. Status of land acquisition and litigation, if any, should be provided.
8.	If the project involves forest land, details of application, including date of application, area applied for, and application registration number, for diversion under FCA and its status should be provided along with copies of relevant documents.
9.	The land acquisition and R&R scheme with a time bound Action Plan should be formulated and addressed in the EIA report.
10.	Satellite imagery and authenticated topo sheet indicating drainage, cropping pattern, water bodies (wetland, river system, stream, nallahs, ponds etc.), location of nearest habitations (villages), creeks, mangroves, rivers, reservoirs etc. in the study area shall be provided.
11.	Topography of the study area supported by toposheet on 1:50,000 scale of Survey of India, along with a large scale map preferably of 1:25,000 scale and the specific information whether the site requires any filling shall be provided. In that case, details of filling, quantity of required fill material; its source, transportation etc. shall be submitted.
Ecology biodiversity and Environment	
1.	A detailed study on land use pattern in the study area shall be carried out including identification of common property resources (such as grazing and community land, water resources etc.) available and Action Plan for its protection and management shall be formulated. If acquisition of grazing land is involved, it shall be ensured that an equal area of grazing land be acquired and developed and detailed plan submitted.
2.	Location of any National Park, Sanctuary, Elephant/Tiger Reserve (existing as well as proposed), migratory routes / wildlife corridor, if any, within 10 km of the project site shall be specified and marked on the map duly authenticated by the Chief Wildlife Warden of the State or an officer authorized by him.
3.	A mineralogical map of the proposed site (including soil type) and information (if available) that the site is not located on potentially mineable mineral deposit shall be submitted.
4.	The water requirement shall be optimized (by adopting measures such as dry fly ash and dry bottom ash disposal system, air cooled condenser, concept of zero discharge) and in any case not more than that stipulated by CEA from time to time, to be submitted along with details of source of water and water balance diagram. Details of water balance calculated shall take into account reuse and re- circulation of

	effluents.
5.	Water body/Nallah (if any) passing across the site should not be disturbed as far as possible. In case any Nallah / drain is proposed to be diverted, it shall be ensured that the diversion does not disturb the natural drainage pattern of the area. Details of proposed diversion shall be furnished duly approved by the concerned Department of the State.
6.	It shall also be ensured that a minimum of 500 m distance of plant boundary is kept from the HFL of river system / streams etc. and the boundary of site should also be located 500 m away from railway track and National Highways.
7.	Hydro-geological study of the area shall be carried out through an institute/ organization of repute to assess the impact on ground and surface water regimes. Specific mitigation measures shall be spelt out and time bound Action Plan for its implementation shall be submitted
8.	Detailed Studies on the impacts of the ecology including fisheries of the River/Estuary/Sea due to the proposed withdrawal of water / discharge of treated wastewater into the River/Sea etc shall be carried out and submitted along with the EIA Report. In case of requirement of marine impact assessment study, the location of intake and outfall shall be clearly specified along with depth of water drawl and discharge into open sea.
9.	Source of water and its sustainability even in lean season shall be provided along with details of ecological impacts arising out of withdrawal of water and taking into account inter-state shares (if any). Information on other competing sources downstream of the proposed project and commitment regarding availability of requisite quantity of water from the Competent Authority shall be provided along with letter / document stating firm allocation of water.
10.	Detailed plan for rainwater harvesting and its proposed utilization in the plant shall be furnished. In addition, wherever ground water is drawn, PP shall submit detailed plan of Water charging activity to be undertaken.
11.	Feasibility of near zero discharge concept shall be critically examined and its details submitted.
12.	Optimization of Cycles of Concentration (COC) along with other water conservation measures in the project shall be specified.
13.	Plan for recirculation of ash pond water and its implementation shall be submitted.
14.	Detailed plan for conducting monitoring of water quality regularly with proper maintenance of records shall be formulated. Detail of methodology and identification of monitoring points (between the plant and drainage in the direction of flow of surface / ground water) shall be submitted. It shall be ensured that parameter to be monitored also include heavy metals. A provision for long-term monitoring of ground water table using Piezometer shall be incorporated in EIA, particularly from the study area.
15.	Hazards Characterization: Past incidents of hazard events within 10km radius of project area with detailed analysis of causes and probability of reoccurrence
Environmental Baseline study and mitigation measures	
1.	One complete season (critical season) site specific meteorological and AAQ data (except monsoon season) as per latest MoEF&CC Notification shall be collected along with past three year's meteorological data for that particular season for wind speed analysis and the dates of monitoring shall

	be recorded. The parameters to be covered for AAQ shall include PM10, PM2.5, SO2, NOx, CO and Hg. The location of the monitoring stations should be so decided so as to take into consideration the upwind direction, pre-dominant downwind direction, other dominant directions, habitation and sensitive receptors. There should be at least one monitoring station each in the upwind and in the pre - dominant downwind direction at a location where maximum ground level concentration is likely to occur.
2.	In case of expansion project, air quality monitoring data of 104 observations a year for relevant parameters at air quality monitoring stations as identified/stipulated shall be submitted to assess for compliance of AAQ Standards (annual average as well as 24 hrs).
3.	A list of industries existing and proposed in the study area shall be furnished.
4.	Cumulative impacts of all sources of emissions including handling and transportation of existing and proposed projects on the environment of the area shall be assessed in detail. Details of the Model used and the input data used for modelling shall also be provided. The air quality contours should be plotted on a location map showing the location of project site, habitation nearby, sensitive receptors, if any. The windrose and isopleths should also be shown on the location map. The cumulative study should also include impacts on water, soil and socio-economics.
5.	Radio activity and heavy metal contents of coal to be sourced shall be examined and submitted along with laboratory reports.
6.	Fuel analysis shall be provided. Details of auxiliary fuel, if any, including its quantity, quality, storage etc should also be furnished.
7.	Quantity of fuel required, its source and characteristics and documentary evidence to substantiate confirmed fuel linkage shall be furnished. The Ministry's Notification dated 02.01.2014 regarding ash content in coal shall be complied. For the expansion projects, the compliance of the existing units to the said Notification shall also be submitted
8.	Details of transportation of fuel from the source (including port handling) to the proposed plant and its impact on ambient AAQ shall be suitably assessed and submitted. If transportation entails a long distance it shall be ensured that rail transportation to the site shall be first assessed. Wagon loading at source shall preferably be through silo/conveyor belt.
9.	For proposals based on imported coal, inland transportation and port handling and rail movement shall be examined and details furnished. The approval of the Port and Rail Authorities shall be submitted.
10.	Details regarding infrastructure facilities such as sanitation, fuel, restrooms, medical facilities, safety during construction phase etc. to be provided to the labour force during construction as well as to the casual workers including truck drivers during operation phase should be adequately catered for and details furnished.
Environmental Management Plan	
1.	EMP to mitigate the adverse impacts due to the project along with item - wise cost of its implementation in a time bound manner shall be specified.
2.	A Disaster Management Plan (DMP) along with risk assessment study including fire and explosion issues due to storage and use of fuel should be prepared. It should take into account the maximum inventory of storage at site at any point of time. The risk contours should be plotted on the plant layout map clearly showing which of the proposed activities would be affected in case of an accident taking place. Based on the same, proposed safeguard measures should be provided. Measures to guard against fire hazards should also be invariably provided. Provision for mock drills shall be suitably incorporated to check the

	efficiency of the plans drawn.
3.	The DMP so formulated shall include measures against likely Fires/Tsunami/Cyclones/Storm Surges/ Earthquakes etc, as applicable. It shall be ensured that DMP consists of both On-site and Off-site plans, complete with details of containing likely disaster and shall specifically mention personnel identified for the task. Smaller version of the plan for different possible disasters shall be prepared both in English and local languages and circulated widely.
4.	Details of fly ash utilization plan as per the latest fly ash Utilization Notification of GOI along with firm agreements / MoU with contracting parties including other usages etc. shall be submitted. The plan shall also include disposal method / mechanism of bottom ash along with monitoring mechanism.
Green belt development	
1.	Detailed scheme for raising green belt of native species of appropriate width (50 to 100 m) and consisting of at least 3 tiers around plant boundary not less than 2000 tree per ha with survival rate of more than 85% shall be submitted. Photographic evidence must be created and submitted periodically including NRSA reports in case of expansion projects. A shrub layer beneath tree layer would serve as an effective sieve for dust and sink for CO ₂ and other gaseous pollutants and hence a stratified green belt should be developed.
2.	Over and above the green belt, as carbon sink, plan for additional plantation shall be drawn by identifying blocks of degraded forests, in close consultation with the District Forests Department. In pursuance to this the project proponent shall formulate time bound Action Plans along with financial allocation and shall submit status of implementation to the Ministry every six months
Socio-economic activities	
1.	Socio-economic study of the study area comprising of 10 km from the plant site shall be carried out through a reputed institute / agency which shall consist of detail assessment of the impact on livelihood of the local communities.
2.	Action Plan for identification of local employable youth for training in skills, relevant to the project, for eventual employment in the project itself shall be formulated and numbers specified during construction & operation phases of the Project.
3.	If the area has tribal population, it shall be ensured that the rights of tribals are well protected. The project proponent shall accordingly identify tribal issues under various provisions of the law of the land.
4.	A detailed CER plan along with activities wise break up of financial commitment shall be prepared in terms of the provisions OM No. 22-65/2017-IA.III dated 30.09.2020. CER component shall be identified considering need based assessment study and Public Hearing issues. Sustainable income generating measures which can help in upliftment of affected section of society, which is consistent with the traditional skills of the people shall be identified.
5.	While formulating CER schemes it shall be ensured that an in-built monitoring mechanism for the schemes identified are in place and mechanism for conducting annual social audit from the nearest government institute of repute in the region shall be prepared. The project proponent shall also provide Action Plan for the status of implementation of the scheme from time to time and dovetail the same with any Govt. scheme(s). CER details done in the past should be clearly spelt out in case of expansion projects.
6.	R&R plan, as applicable, shall be formulated wherein mechanism for protecting the rights and livelihood of the people in the region who are likely to be impacted, is taken into consideration. R&R plan shall be

	formulated after a detailed census of population based on socio economic surveys who were dependant on land falling in the project, as well as, population who were dependant on land not owned by them.
7.	Assessment of occupational health and endemic diseases of environmental origin in the study area shall be carried out and Action Plan to mitigate the same shall be prepared.
8.	Occupational health and safety measures for the workers including identification of work related health hazards shall be formulated. The company shall engage full time qualified doctors who are trained in occupational health. Health monitoring of the workers shall be conducted at periodic intervals and health records maintained. Awareness programme for workers due to likely adverse impact on their health due to working in non-conductive environment shall be carried out and precautionary measures like use of personal equipments etc. shall be provided. Review of impact of various health measures undertaken at intervals of two to three years shall be conducted with an excellent follow up plan of action wherever required.
Corporate Environment Policy	
1.	Does the company has a well laid down Environment Policy approved by its Board of Directors? If so, it may be detailed in the EIA report.
2.	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.
3.	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.
4.	Does the company has compliance management system in place wherein compliance status along with compliances / violations of environmental norms are reported to the CMD and the Board of Directors of the company and / or shareholders or stakeholders at large? This reporting mechanism should be detailed in the EIA report.
Miscellaneous	
1.	All the above details should be adequately brought out in the EIA report and in the presentation to the Committee.
2.	Details of litigation pending or otherwise with respect to project in any Court, Tribunal etc. shall invariably be furnished.
3.	In case any dismantling of old plants are envisaged, the planned land use & land reclamation of dismantled area to be furnished.

3.4. Agenda Item No 4:

3.4.1. Details of the proposal

Proposed Expansion by addition of 2 x 660 MW Supercritical Units of Chhattisgarh State Power Generation Co. Ltd (CSPGCL), Korba West, Chhattisgarh by CHHATTISGARH STATE POWER GENERATION COMPANY LIMITED located at KORBA, CHHATTISGARH	
Proposal For	Amendment in EC

Proposal No	File No	Submission Date	Activity Sub-Activity (Schedule Item)
IA/CG/THE/563165/2026	J-13012/24/2004-IA.II(T)	29/05/2026	Thermal Power Plants Coal/Lignite based plants (1(d))

3.4.2. Project Salient Features

Agenda Item no. 46.4:

46.4: Expansion of existing 1340 MW to 2660 MW by addition of 1320 MW [2 x 660 MW] Super Critical Units by **M/s. Chhattisgarh State Power Generation Company Limited (CSPGCL)** located at Darri Village, HTPS Korba west Tehsil, Korba District, Chhattisgarh - **Amendment in Environment Clearance with respect to Sulphur dioxide emission standards as per MoEF&CC Notification dated 11/07/2025 - regarding [Proposal No: IA/CG/THE/563165/2026; F. No. J-13012/24/2004-IA.II(T)]**

46.4.1: M/s Chhattisgarh State Power Generation Company Limited has made online application vide proposal no. IA/CG/THE/563165/2026 dated 30.12.2025 along with copy of Form 4 & Addendum EIA report prepared through QCI/NABET accredited consultant and sought for amendment in the Environmental Clearance accorded by the MoEF&CC vide letter no. J-13012/24/2004-IA II (T) dated 26.03.2025, for the above-mentioned project with respect to Sulphur dioxide emission standards as per MoEF&CC Notification dated 11/07/2025 under the provisions of the EIA Notification, 2006.

Name of the EIA consultant: Enviro Infra Solutions Private Limited, Ghaziabad [S. No. 82, List of ACOs with their Certificate no. NABET/EIA/25-28/RA 0468; Valid up to 26th November, 2028.

Details of the proposal, as ascertained from the proposal documents and as revealed from the discussions held during the meeting are given as under:

46.4.2: The existing project of CSPGCL was originally granted Environmental Clearance in favour of CSPGCL for Expansion of Existing 1340 MW to 2660 MW by addition of 1320 MW (2 x 660 MW) Supercritical Units at Village Darri, Tehsil-HTPS Korba West, District Korba, Chhattisgarh, vide letter no J-13012/24/2004-IA II (T) dated 26.03.2025 under EIA, 2006.

46.4.3: The implementation status of the existing EC dated 26/03/2025 is as follows:

S. No.	Configuration	Capacity (MW)	Date of accord of EC	Date of commissioning of units	Production as per CTO	Applicable emission norms as per notification dated 7/12/2015 & its amendment
1.	Expansion Project Capacity- 2 x 660 MW	1320	26.03.2025	Under Construction	Under Construction	PM: 30mg/Nm ³ SO ₂ :100 mg/Nm ³ NOx:100mg/Nm ³

In addition to the above, PP is operating following TPPs at the project site:

- Proponent is operating 4x210 MW TPP at Village Darri, Sub district Katghora, District Korba, Chhattisgarh.

- 1x500 MW TPP - EC was originally accorded in favour of CSEB for setting up 2x300 MW Thermal Power Plant at Village Darri, District Korba, Chhattisgarh, vide letter no J-13012/24/2004-IA II (T) dated 23.06.2005 under the provisions of EIA Notification, 2006. Subsequently, amendment to the EC was accorded on 05.05.2011 for change in configuration from 2x300 MW to 1x500 MW. EC was transferred from CSEB to CSPGCL by MoEF&CC on 05/08/2024.

The Consent to Operate (CTO) for (4x210 MW) plant was obtained on 16.09.2025 vide Letter No. - N0.6788/TS/CECB/2025 & for (1x500 MW) plant was obtained on 16.09.2025 vide Letter No. - No.6790/T S/CECB/2025 from Pollution Control Board.

Addition of 2x660 MW (1320 MW) Super critical Thermal Power Plant, located at Village- Darri, District- Korba, Chhattisgarh.

The Ministry of Environment & Forests (MoEF) accorded Environmental Clearance (EC) on 26.03.2025 vide File No: J-13012/24/2004-IA. II(T) for setting up the coal-based thermal power station.

Simultaneously, the Consent to Establish was obtained from Chhattisgarh Environment Conservation Board on 04/09/2025 vide letter No. 6000/Tech./CECB/2025.

46.4.4: Details of Thermal Power Plant:

Parameter	Details as per EC	Status as on June 2026	Remarks
Total Land Area (Ha)	70.73	67.61	3.12 Ha land of government land adjacent to the plant boundary to be acquired
Involvement of Forest Land (Ha)	NA	NA	Present proposal does not involve any forest land. However, Diversion of 111.761 ha of forest land for setting up of Stage- III unit(1x 500MW) has obtained FC vide - F. No 8-100/2004-FC, dated: 09.08.2005
NBWL Clearance	NA	NA	NA
CPA/SPA	NA	NA	Nearest Non-attainment city is Korba having CEPI score is 57.57 in S direction

46.4.5: Background for amendment sought by the proponent

46.4.6: The summary of the information submitted by the proponent in the addendum EIA report are as follows:

i. *Average coal consumption and the average Sulphur content of coal proposed to be used in Unit No 6 & 7: Not provided*

ii. *Minimum, maximum and 98th percentile levels of ambient PM₁₀, PM_{2.5}, NO_x, and SO₂ from secondary monitored AAQ data for last three months period.*

S. No.	Name of location	Parameters being monitored
1	A1 (Site area)	PM ₁₀ , PM _{2.5} , NO _x , and SO ₂
2	A2 (Sonpuri)	
3	A3 (Darri)	
4	A4 (Kohariya)	
5	A5 (Khatakhapara)	

6	A6 (Barampur)	
7	A7 (Dagnikhar)	
8	A8 (Semipali)	
9	A9 (Tihli)	
10	A10 (Chorbhathi)	

Summary of AAQ Result for October, November & December 2025:

S. No.	Name of location	Parameter	Concentration in $\mu\text{g}/\text{m}^3$			NAAQS
			Min	Max	98 th Percentile	
1	A1 (Site area)	PM ₁₀	62.8	73.4	73.1	100
		PM _{2.5}	35.8	41.8	41.7	60
		NO _x	26.3	32.2	32.0	80
		SO ₂	25.7	32.8	32.2	80
2	A2 (Sonpuri)	PM ₁₀	47.7	52.2	52.1	100
		PM _{2.5}	27.2	30.1	30.1	60
		NO _x	21.5	27.3	27.2	80
		SO ₂	11.8	16.8	16.4	80
3	A3 (Darri)	PM ₁₀	61.5	67.8	67.6	100
		PM _{2.5}	31.6	37.8	37.8	60
		NO _x	21.5	26.8	26.7	80
		SO ₂	12.8	15.3	15.3	80
4	A4 (Kohariya)	PM ₁₀	44.6	49.3	49.2	100
		PM _{2.5}	23.3	27.6	27.5	60
		NO _x	19.1	24.3	24.0	80
		SO ₂	9.8	16.5	16.3	80
5	A5 (Khatakhathipara)	PM ₁₀	47.6	51.9	51.8	100
		PM _{2.5}	24.6	29.5	29.4	60

S. No.	Name of location	Parameter	Concentration in $\mu\text{g}/\text{m}^3$			NAAQS
			Min	Max	98 th Percentile	
		NO _x	17.0	21.4	21.4	80
		SO ₂	12.6	16.8	16.6	80
6	A6 (Barampur)	PM ₁₀	51.2	57.1	56.0	100
		PM _{2.5}	27.9	31.8	31.7	60
		NO _x	17.9	23.2	23.1	80
		SO ₂	9.7	16.6	16.3	80
7	A7 (Dagnikhar)	PM ₁₀	42.2	47.4	47.1	100
		PM _{2.5}	23.6	27.5	27.3	60
		NO _x	11.8	16.2	16.2	80
		SO ₂	12.8	16.5	15.9	80
8	A8 (Semipali)	PM ₁₀	49.6	56.4	56.0	100
		PM _{2.5}	25.6	30.4	30.1	60
		NO _x	21.6	27.7	27.6	80
		SO ₂	15.8	20.5	20.3	80
9	A9 (Tihli)	PM ₁₀	54.3	58.5	58.2	100
		PM _{2.5}	29.4	32.7	32.5	60
		NO _x	18.5	23.1	23.0	80
		SO ₂	11.3	16.7	16.2	80
10	A10 (Chorbhathi)	PM ₁₀	49.7	53.4	53.4	100
		PM _{2.5}	27.3	30.8	30.3	60
		NO _x	21.3	26.2	25.7	80
		SO ₂	13.6	20.9	20.1	80

iii. Average stack emissions for PM, NO_x, and SO₂ parameters, flue gas concentration in mg/Nm³ for unit no 6 & 7: Not provided

Mass emission rate of pollutants in gram per second

Sr. No.	Parameters	Units	(2 X 660 MW)
1	Stack height	m	275m (Single Twin Flue)
2	No. of flue per stack	No.	2
3	Number of stacks	No	1
4	Flue internal diameter at top	m	3.25
5	Flue gas velocity/flue	m/sec	21.18
6	Flue gas temperature/flue	°C	60
7	Volumetric flow rate	Nm ³ /sec/ flue	129.85
8	Sulphur in coal (maximum)	%wt/wt	0.6
A	Particulate matter @ 30 mg/Nm ³	g/s	3.89
B	Sulphur dioxide (SO ₂) (based on Sulphur content in Coal 0.6%)	g/s	32.0
C	Oxide of Nitrogen (NO _x) (based on IFC norms 260 gm/giga joules)	g/s	24.0

iv. Current stack height in the TPP and compliance with the MoEF&CC Notification of August 30, 1990 (or) June 28, 2018.

As per EC dated 26/03/2025 the stack of 150 m is to be installed for 2x660 MW with FGD. Project Proponent is proposing to install 275m stack as per G.S.R 742 (E) dated 30th August 1990.

v. Assessment of maximum Ground Level Concentration (GLCs) of pollutants from the stack emission as per the envisaged stack height (as applicable) based on available site-specific meteorological parameters. Details of the model used, input data used for modelling and output data of the 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.

The predicted maximum Ground Level Concentration (GLCs) of PM₁₀, PM_{2.5}, NO_x, and SO₂ pollutants from 2 X 660 MW TPP based on available site-specific meteorological parameters & stack monitoring report has been done using AERMOD Dispersion model. Following are the input data

- Stack emission norms for PM for Project.
- SO₂ emissions based on fuel consumption with control measures or prescribed limits.
- NO_x emission based on prescribed limits or industry norms.
- Terrain features of the study area - from Google earth.
- Geo referencing of all the process stacks.
- Meteorological data for 03 months (Oct.'25 to Dec'25).
- Wash out due to rain is not considered

- viii. The stack tip down wash is not considered
- ix. Base map of the study area prepared using Open Series Map

GLCs are obtained in $\mu\text{g}/\text{m}^3$ for pollutants. Output of modelling gives concentration at uniform Cartesian receptors to get the resultant concentration with reference to baseline data.

GLC of pollutants ($\mu\text{g}/\text{m}^3$) at sampling location:

Considering Baseline data from the Month of October 2025 to December 2025

Receptor Location	GLC at Monitoring Location ($\mu\text{g}/\text{m}^3$)			
	PM ₁₀	PM _{2.5}	SO ₂	NO ₂
A1 (Site area)	72.66	41.44	32.42	32.12
A2 (Sonpuri)	52.61	30.38	17.07	27.46
A3 (Darri)	69.02	38.78	16.12	27.4
A4 (Kohariya)	49.43	27.66	16.42	24.32
A5 (Khatakhatipara)	53.01	30.09	17.31	21.99
A6 (Barampur)	60.69	34.27	18.5	25.14
A7 (Dagnikhar)	47.68	27.68	16.56	16.45
A8 (Semipali)	58.9	32.16	21.84	29.09
A9 (Tihli)	59.29	33.26	17.84	23.72
A10 (Chorbhathi)	53.54	30.8	20.68	26.08

SO₂ GLC concentrations are minimal, with the highest GLC being 2.00 $\mu\text{g}/\text{m}^3$ at 5.6 km from the stack.

vi. Environment Management Plan (EMP):

Details as prescribed by MoEF&CC	Information provided by Proponent
Environment Management Plan (EMP) covering the following:	EMP for Air Quality Management: · Provision of water sprinkling system at raw material storage yard and Ash Dyke; · Dust suppression system will be installed at all requisite points in CHP and coal stack yard; · Provision of dust extraction systems at dust generating source; · Installation of high efficiency Electrostatic Precipitators (ESP) of efficiency more than 99.9% to limit the PM concentrations below 30 mg/Nm³; · Provision of low NO_x burners, to control the NO_x emissions to less than 100 mg/Nm³; · Design of control equipment to meet the standards stipulated by CRP & MoEF&CC; and

- Online opacity meter and temperature measurement will be provided for stack.

To control fugitive emissions, the following measures will be adopted:

- Within and around the coal handling plant, coal dust extraction and suppression systems would be provided;
- Provision and periodic inspections of mechanical seals in pumps;
- Preventive maintenance of valves, flanges, joints, roof vents of storage tanks;
- Submerged filling of liquid fuel storage tanks.

EMP for Water Resources Management:

- The plant will have closed cycle cooling system with cooling towers. Entire cooling tower blow down will be used for various plant uses.
- The filter backwash water of PT plant will be collected and recycled back to the DM clarifier;
- The sludge from clarifiers of water PT Plant will be collected in a sump/ pit and will be pumped to bottom ash slurry sump for disposal to bottom ash dyke;
- The waste effluents from neutralization pits of DM Plant and condensate polishing plant will be collected in the respective neutralization pits and neutralized before pumping to the ash slurry sump before final disposal;
- A coal settling pond will be provided to remove coal particles from coal handling plant waste. Decanted water will be pumped back to the coal dust suppression system;
- Service water effluent collected from plant drains will be led to a sump. From the sump the service water will be pumped upto tube settler/ clarifier for treatment of suspended solids. Treated service water will be sent back to service water tank to the extent possible for re-use;
- All the plant liquid effluents will be mixed in Central Monitoring Basin (CMB) and finally to ETP/Recycling point;
- An independent plant effluent drainage system will be constructed so as to ensure that plant effluents do not mix with storm water drainage;
- For oily wastes, oil water separators will be provided. The separated oil will be removed from the top, the water at the bottom will be recycled or led to the plant effluent drain depending upon its quantity;
- The plant will have two different systems for ash disposal - conventional wet ash slurry disposal system with Ash Water Recirculation System (AWRS) for Bottom Ash and High Concentration Slurry Disposal System (HCSD) for fly ash. HCSD system will require less quantity of water and there will be no effluent from the fly ash disposal site;
- Efficient operation of various treatment schemes will be ensured so that the quality of treated effluent from CMB conforms to relevant standards, prescribed by regulatory agencies. The treated effluents will be recycled/reused to the existing plant water system; and the plant will have zero liquid discharge system.
- The sewage from plant and township will be treated in a sewage treatment plant. The treated effluent conforming to prescribed standards will be utilized for plantation to the extent possible.

EMP for Noise Management:

- Provision of acoustic barriers or shelters in noisy workplaces.
- Provision of hoods to noise generating equipment's like pumps.
- Provision of thick greenbelt to attenuate the noise levels; and
- Provision of personal protective equipment (PPE) such as earplugs, earmuffs to the workers working in high noise level area.

EMP for Solid Waste Management:

- About 80% of the ash will be generated as fly ash while 20% of the ash will be generated as bottom ash.
- The ash management scheme for fly ash and bottom ash involves dry collection of fly ash, supply of ash to entrepreneurs for utilization, promoting ash utilization and safe disposal of unused ash.
- Unused fly ash and bottom ash will be disposed off in the ash pond.
- After the ash pond is abandoned, it will be reclaimed through green vegetation. The unused ash will be taken to the existing ash pond.

EMP for Biodiversity:

- Inspect condition of re-vegetation during regular surveys.
- The greenbelt consists mainly of native plant species.
- Out of the total land area, 126.959 hectares is presently covered under existing plantation, and an additional 106.143 hectares has been proposed for further plantation development,
- Due to the expansion activity, total 2214 tree shall be felled instead of 2365. However, to compensate the above, 3600 nos. of trees will be planted within the HTPS premises

Monitoring, Reporting And Corrective Actions:

- Regular audits and reviews in accordance with this EMP will be undertaken.
- Recommendations and corrective actions arising from audits and reviews will be implemented.
- Non-Compliance and Incident Reporting will be reviewed and closed out by senior management to ensure prompt rectification and change management as required.

Air Pollution & Fugitive Emission Control Systems:

Emission Source / Area	Control System / Measure Implemented
Particulate Matter (PM)	High efficiency (>99.98%) electrostatic precipitators are proposed to be installed to limit the particulate matter emissions to below 30 mg/Nm ³ . Twin fuel single stacks of 275m height will be provided for better dispersion of the gaseous emissions.
Nitrogen Oxides (NOx)	NOx emissions from the steam generator will be controlled at the source using Low NOx Burners (LNB), combustion staging, and suitable tail-end technologies. Emission levels will be maintained below 100 mg/Nm ³ , with confirmation from the boiler manufacturer.
Coal Transportation	Tarpaulin-covered trucks are used.
Coal Handling & Storage	Coal crushers, Stacker cum reclaimers and associated conveying system. Suitable interconnection with existing coal handling system will be kept to meet emergency requirement of the proposed units. Enclosed galleries provided to arrest the coal dust generated at all the conveyor/ transfer points.

Coal Bunkers	Bag Filter of Adequate capacity provided in coal bunkers, Ground Hopper & transfer Tower.
Fly Ash Handling	· Minimum six vacuum streams will connect ESP, APH, and duct hoppers to ensure uniform ash distribution. · Each stream will have a 100% standby 3-cell tower and buffer hopper with bag filters. · Filter outlet air quality will be maintained below 30 mg/Nm³. · Four fly ash conveying streams will transfer ash to the main silo (3 working + 1 standby). · Fly ash will be transported in dry form through bulkers for utilization. · The system will evacuate 8-hour ash generation within 4 hours. · Two low-speed, oil-free air blowers (1 working + 1 standby) per unit will maintain ash temperature at ~160°C. · Four oil-free centrifugal air compressors (3 working + 1 standby) will be provided for conveying ash to silos. · Fly ash silos will have fluidizing systems to ensure smooth flow of dry ash. · RCC silos with 24-hour storage capacity (common for both units) will be provided. · Each silo will include outlets for: open truck loading (conditioned ash), closed tanker loading (dry ash), future use, HCSD (slurry disposal to ash pond), and pressure conveying to terminal silos. · The pressure conveying system will also transfer ash from existing silos to terminal silos. · Proper interconnection between existing and proposed silos will be ensured. · Regular inspection and maintenance of silos, valves, pipelines, and bag filters are undertaken to ensure proper functioning of the dust control system
Fly Ash Loading & Transport	· About 80% of the ash will be generated as fly ash while 20% of the ash will be generated as bottom ash. · The ash management scheme for fly ash and bottom ash involves dry collection of fly ash, supply of ash to entrepreneurs for utilization, promoting ash utilization and safe disposal of unused ash
Fly Ash Disposal	· For Bottom Ash - Extraction in wet form and disposal to ash pond through lean slurry mode. At the starting phase existing ash dyke shall be used. · Fly Ash - dry extraction would be adopted for gainful utilization. Provision for disposal by High Concentration Slurry Disposal (HCSD) mode to the ash disposal area shall also be kept to operate during exigency.
Fly Ash Utilization	The fly ash supply to entrepreneurs for utilization, promoting ash utilization and safe disposal of unused ash

46.4.7: Amendment sought: The details of the condition for which amendment is sought and justification for the same is as follows:

Sr. No.	Condition as per EC dated 26/03/2025	Amendment Sought	Justification & Request for Amendment
1.	Part-A: Spe	Amendment in Enviro	The subject project of CSPGCL is falling under Catego

	cific Condition (xvii): Space provision shall be kept for retrofitting of FGD, if required at a later date.	Environment Clearance with respect to Sulphur dioxide emission standards as per MoEF&CC Notification dated 11/07/2025	Category 'B' project. As per MoEF&CC Notification G.S.R. 465 (E) dated 11/07/2025 and scientific studies need to be carried out for review of category B Thermal Power Plants (TPPs) with respect to Sulphur dioxide emission standards & adequacy of current stack height. Based on the installed capacity of the plant, Sulphur content of the coal was assessed as well as monitored SO₂ emission levels, the project is capable of meeting the applicable emission norms without installation of a Flue Gas Desulphurization (FGD) system. Current Stack height is adequate enough as per G.S.R 742 (E) dated 30th August 1990. The regulatory position therefore allows consideration of exemption requests subject to submission of validated modelling results, monitoring data, and compliance records.
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46.4.8: Summary of court cases: Nil.

46.4.9: Summary of Show Cause Notices (Last two years): Nil.

46.4.10: Summary of violation under EIA, 2006/court case/show cause/direction if any, related to the project under consideration: - Nil.

3.4.3. Deliberations by the committee in previous meetings

N/A

3.4.4. Deliberations by the EAC in current meetings

Observations and deliberation of the EAC

46.4.11: **The Committee observed and noted the following:**

- i. The instant proposal is for seeking amendment in an EC condition as per MoEF&CC Notification dated 11/07/2025 for Sulphur dioxide emission standards prescribed in EC letter dated 26/03/2025.
- ii. The existing project of CSPGCL was originally granted Environmental Clearance in favour of CSPGCL for Expansion of Existing 1340 MW to 2660 MW by addition of 1320 MW (2 x 660 MW) Supercritical Units at Village Darri, Tehsil-HTPS Korba West, District Korba, Chhattisgarh, vide letter no J-13012/24/2004-IA II (T) dated 26.03.2025 under EIA, 2006.
- iii. Present proposal does not involve any forest land. However, Diversion of 111.761 ha of forest land for setting up of Stage- III unit(1x500MW) has obtained FC vide - F. No 8-100/2004-FC, dated: 09.08.2005
- iv. The project is near to the Non-attainment city of Korba having CEPI score is 57.57 which is in S direction.
- v. Coal consumption data for 2x660 MW has not been made available.
- vi. The Project Proponent (PP) presented ambient air quality data (PM₁₀, PM_{2.5}, NO_x, SO₂, etc.) for the core. The values for Ambient Air Quality are within the prescribed norms of NAAQMS 2009.
- vii. The stack emission values are within the stipulated norms for PM & NO_x.
- viii. The mass emission rate of pollutants for 2x660 MW has not been provided.
- ix. AAQ modelling analysis for the 150 meters and 275 meters stack height vis-à-vis GLCmax

location has not been provided.

x. As per the submitted addendum EIA report prepared through QCI/ NABET accredited consultant, the predicted maximum Ground Level Concentration (GLCs) using AERMOD View dispersion model from the stack emission as per the envisaged stack height and site specific meteorological parameters the maximum GLC of SO₂ is 5.6 µg/m³ at about 5.6 km. Maximum GLC for other parameters has not been furnished.

xi. EAC observed that the instant proposal is for 2x660MW and Project Proponent has already applied for FGD exemption for 1x500 MW unit separately. Besides, the status of FGD for the existing 4x210 MW not appraised to the EAC. EAC viewed this seriously and asked the proponent to submit a comprehensive proposal seeking for review for SO₂ emission norms for all the power generation units in the premises.

xii. EAC observed that the Project Proponent has not submitted the additional EMP measures for the proposed project. EAC asked the PP to submit the EMP with physical and financial outlay.

xiii. Project Proponent was unable to clarify the land use breakup, hence EAC asked the Project Proponent to provide the Land use breakup for the project.

xiv. EAC asked the Project Proponent to provide the Ambient air quality data of State Pollution Control Board taken in nearby areas of the project site.

xv. EAC observed that the existing Greenbelt area in project site is only 18%. EAC asked the Project Proponent to provide the Greenbelt Development Plan for covering 33% of the project area.

xvi. EAC noted that a show cause notice was served to the Project Proponent regarding Ash Dyke breach but Project Proponent has not furnished the information regarding the same, EAC asked the Project Proponent to submit the details and action taken regarding the same.

xvii. Project Proponent has not submitted the Environmental Site setting data with the brief writeup information, EAC asked the Project Proponent to submit the same.

xviii. Committee noted that the QCI/NABET accredited consultant namely Enviro Infra Solutions Private Limited, Ghaziabad has submitted the instant proposal without the basic details and the consultant was unable to answer to any of the queries of EAC.

Recommendations of the Committee

46.4.12: In view of the foregoing and after the detailed deliberations, the Committee recommended to defer the instant proposal and sought for following additional data/information:

i. Comprehensive EC amendment proposal seeking for review for SO₂ emission norms for all the power generation units in the premises.

ii. Fresh addendum to the EIA report for all the power generation units covering the following:

a. Environmental Site setting data

b. Land use breakup of the project site including ash pond and the environmental sensitive receptors within 10km radius of the power plant shall be submitted.

c. Unit wise Coal consumption for all the power generation units (under operation as well as implementation)

d. Unit wise Stack emission data for all the power generation units (under operation as well as implementation) along with the stack dimension

e. Baseline data

f. Comparison of baseline environment status as per the EIA report submitted at the time of grant of EC for the TPP vis a vis present monitored data for a period of last three months. Data shall be analysed for the down-wind and up-wind locations, maximum, average and standard deviations shall be presented. Any major deviations from the baseline shall be explained with scientific justification and the action plan for mitigations measures to be adopted.

g. Revised AAQ modelling for all the power generation units along with input and output data of modelling

h. Location of GLCmax and the sensitive receptors details

i. Revised EMP incorporating appropriate pollution control measures for all the power generation units (under operation as well as implementation) in the form of a time bound action plan to

address the PM levels in ambient air and PM & NO_x level in stack emissions with physical and financial outlay. Besides, EMP shall explicitly brought out the existing and proposed additional environmental safeguards with physical and financial outlay.

j. EC wise amendment logs for review of SO₂ emission norms.

iii. Ambient air quality data of State Pollution Control Board taken in nearby areas of the project site.

iv. Reasons not achieving mandatory 33 % Greenbelt Development and action Plan for achieving the same in a time bound manner.

v. Complete information, Action taken and current Status regarding the recent Ash Dyke breach incident.

vi. Undertaking in a non-judicial stamp paper from the PP to comply with the additional mitigation measures proposed under revised EMP shall be submitted.

vii. Latest six-monthly compliance report submitted to the Regional Office of MoEF&CC.

In addition to the above, EAC also recommended to issue a warning letter to the EIA consultant with an advisory to submit the proposal in line with the extant provisions of EIA Notification 2006 and expectations of EAC.

3.4.5. Recommendation of EAC

Deferred for ADS

3.5. Agenda Item No 5:

3.5.1. Details of the proposal

Amendment in Environmental Clearance for Exemption from Installation of FGD as per MoEF&CC Notification dated 11.07.2025 for -2 X 150 MW Coal Based Power Plant Installed within EC Validity period At S waminatham & Ottapidaram Villages, Ottapidaram Taluk, Dist. - Thoothukudi, Tamil Nadu by ORISSA ALLOY STEEL PVT. LTD. located at TUTICORIN, TAMIL NADU

Proposal For		Amendment in EC	
Proposal No	File No	Submission Date	Activity Sub-Activity (Schedule Item)
IA/TN/THE/563683/2026	J-13012/1/2026-IA.I(T)	14/01/2026	Thermal Power Plants Coal/Lignite based plants (1(d))

3.5.2. Project Salient Features

Agenda item no. 46.5

46.5: 2x150 MW Coal Based Power Plant, by M/s. Orissa Alloy Steel Private Limited located at Village Ottapidaram, District- Thoothukudi, Tamil Nadu – **Amendment in Environment Clearance with respect to Sulphur dioxide emission standards as per MoEF&CC Notification dated 11/07/2025 – regarding.**
[Proposal No.- IA/TN/THE/563683/2026; File No.- J-13012/1/2026-IA.I(T)].

46.5.1: M/s Orissa Alloy Steel Private Limited has made online application vide proposal no. IA/TN/THE/563683/2026 dated 31.12.2025 along with copy of Form 4 & Addendum EIA report prepared through QCI/NABET accredited consultant and sought for amendment in the Environmental Clearance accorded by the SEIAA, Tamil Nadu vide letter no. SEIAA/TN/EC/1(d)/013/F.No.282/2010 dated 10/11/2010 and its subsequent amendment granted therein for the above-mentioned project with respect to Sulphur dioxide emission standards as per MoEF&CC Notification dated 11/07/2025 under the provisions of the EIA Notification, 2006.

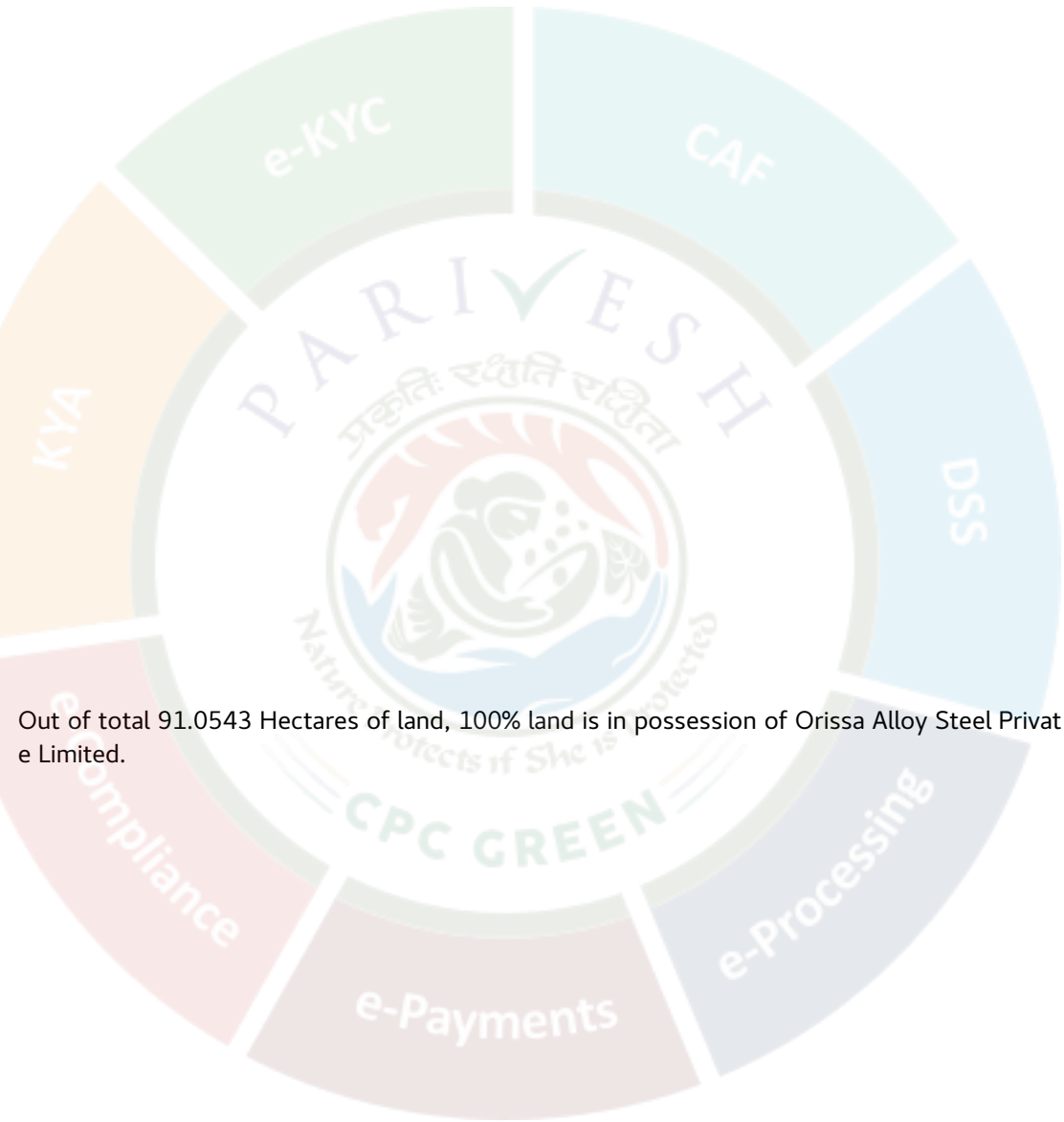
Name of the EIA consultant: M/s. Enviro Infra Solutions Private Limited, Ghaziabad [S. No. 82, List of ACOs with their Certificate no. NABET/EIA/25-28/RA 0468; Valid up to 26th November 2028.

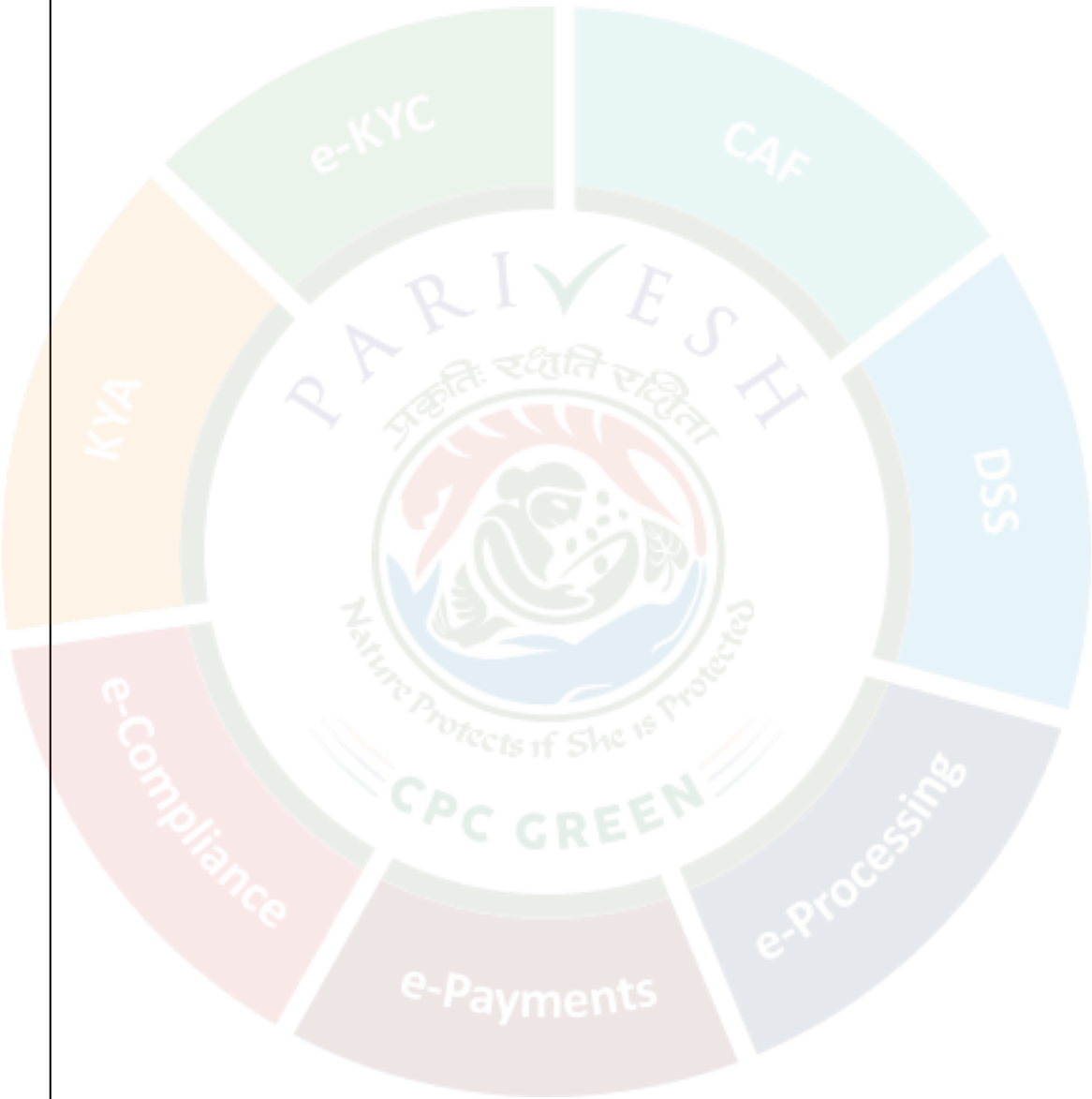
Details of the proposal, as ascertained from the proposal documents and as revealed from the discussions held during the meeting are given as under:

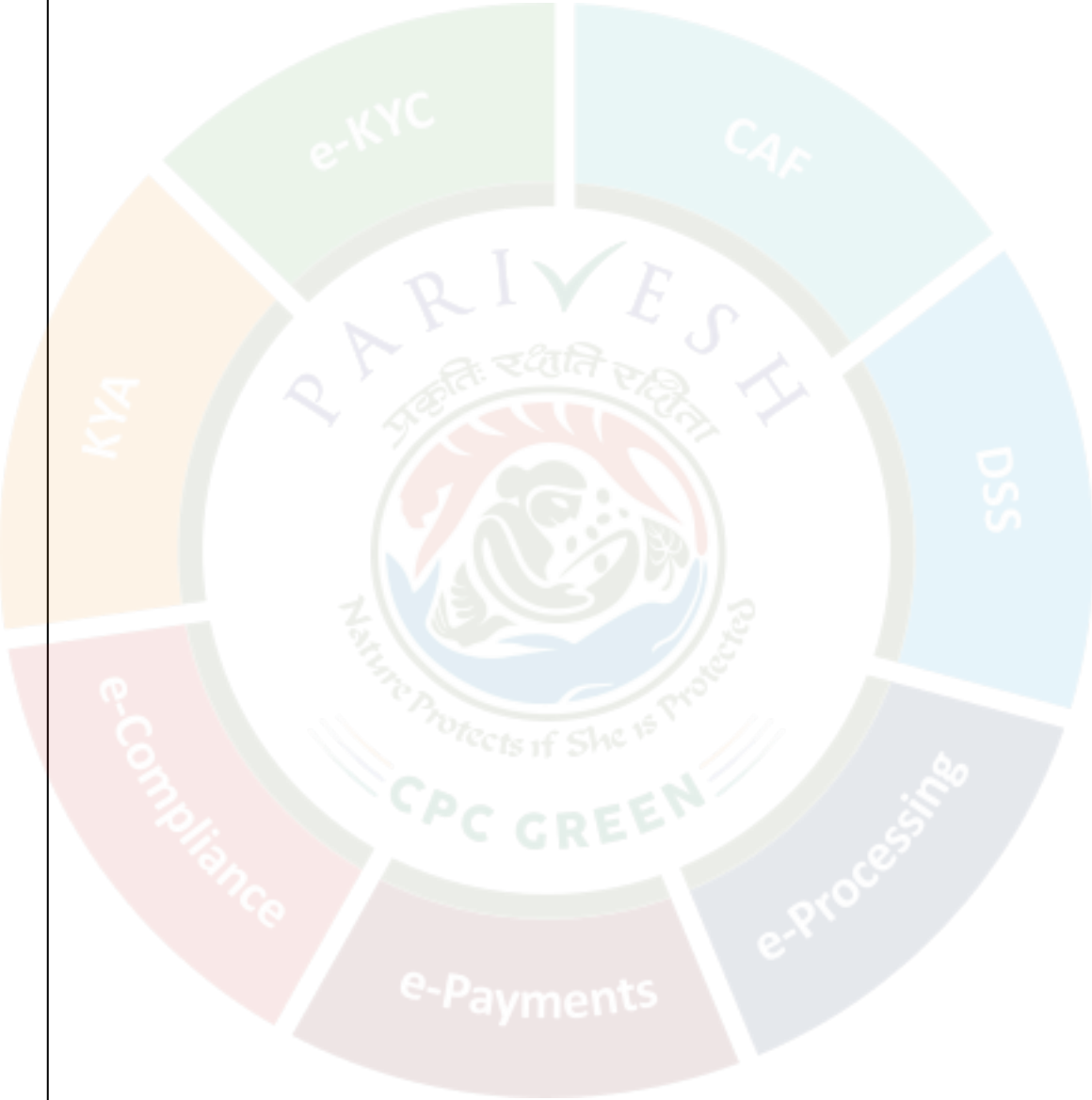
46.5.2: The existing project of M/s Orissa Alloy Steel Private Limited was originally granted Environmental Clearance in favour of M/s Ind-Bharat Thermal Power Limited (IBTPL) for setting up 3 x 150 MW Coal Based Thermal Power Plant at Swaminatham & Ottapidaram Villages, Ottapidaram Taluk, Dist. - Thoothukudi, Tamil Nadu vide letter no. SEIAA/TN/EC/1(d)/013/F.No.282/2010 dated 10/11/2010 under EIA, 2006. Subsequently amendment to the Environmental Clearance was accorded vide letter no. SEIAA/TN/EC/Amendment/F.No.282/2010 on 20.12.2010 for change in composition of fuel and EC transfer accorded by SEIAA, Tamil Nadu vide EC Identification No. EC24B0601TN5765287T ; File No. 11326 on 16.06.2025.

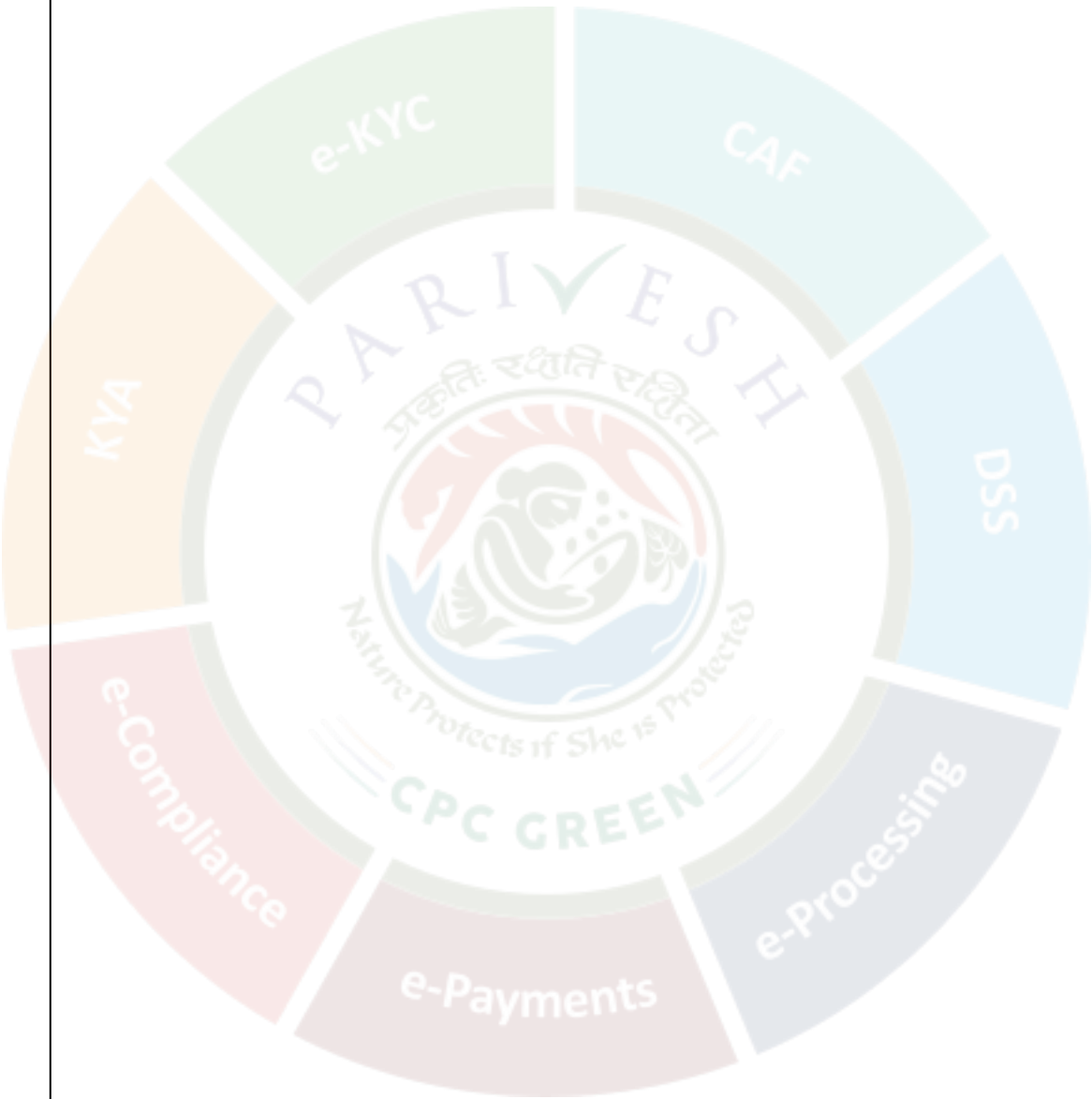
46.5.3: Environmental site settings

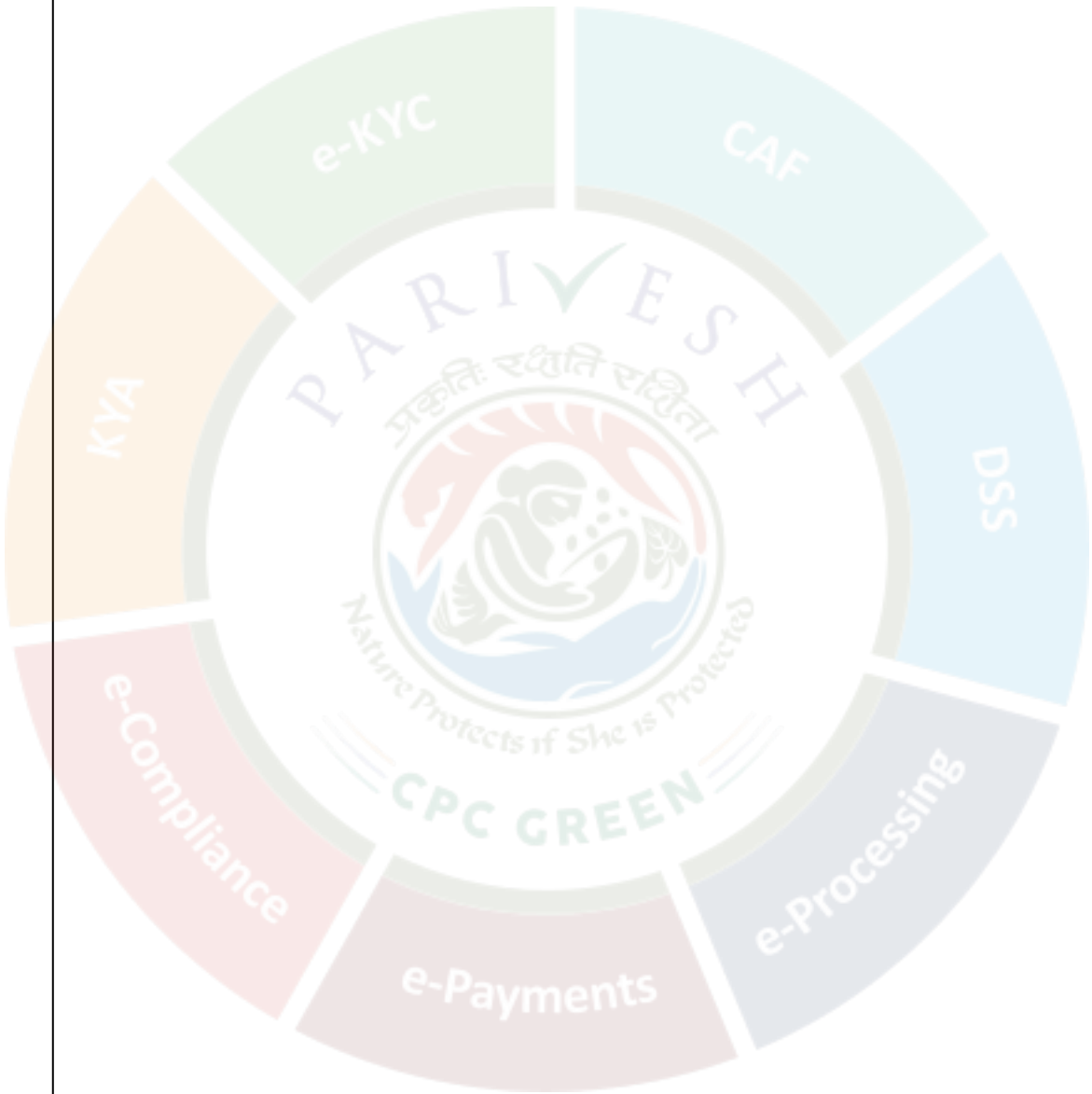
S. No.	Particulars	Details	Remarks																																				
1.	Total land	91.0543 Ha. [Private: 91.0543 ha]	Land use: Industrial																																				
2.	Land use break up	<table> <tr> <th>S. No.</th><th>Particulars</th><th>Existing Area (Ha)</th><th>Proposed Area (Ha)</th></tr> <tr> <td>1</td><td>Main Plant</td><td>12.70</td><td>12.70</td></tr> <tr> <td>2</td><td>Coal handling System</td><td>15.79</td><td>15.79</td></tr> <tr> <td>3</td><td>Water System</td><td>2.07</td><td>2.07</td></tr> <tr> <td>4</td><td>Switch Yard</td><td>1.67</td><td>1.67</td></tr> <tr> <td>5</td><td>Internal roads</td><td>7.68</td><td>7.68</td></tr> <tr> <td>6</td><td>Green Belt</td><td>26.30</td><td>30.35</td></tr> <tr> <td>7</td><td>Ash Pond</td><td>12.14</td><td>12.14</td></tr> <tr> <td>8</td><td>Others (Open Space / Truck Park</td><td>12.7043</td><td>8.6543</td></tr> </table>	S. No.	Particulars	Existing Area (Ha)	Proposed Area (Ha)	1	Main Plant	12.70	12.70	2	Coal handling System	15.79	15.79	3	Water System	2.07	2.07	4	Switch Yard	1.67	1.67	5	Internal roads	7.68	7.68	6	Green Belt	26.30	30.35	7	Ash Pond	12.14	12.14	8	Others (Open Space / Truck Park	12.7043	8.6543	
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S. No.	Particulars	Details			Remarks
		ing/Staff quarter, Fly Ash Brick Plant)			
		Total Project Area	91.0543	91.0543	
2.	Land acquisition details as per MoEF & CC O. M. dated 7/10/2014 and 20/02/2025	 Out of total 91.0543 Hectares of land, 100% land is in possession of Orissa Alloy Steel Private Limited.			Ind-Bharat Thermal Power Limited went under liquidation before NCLT Hyderabad, and Hon'ble

S. N o.	Pa rti cul ar s	Details	Re m ar ks
			N CL T or de re d l iqu i da tio n of th e Co m pa n y. M/ s Or iss a All oy Ste e l P riv at e Li mi te d w as de cl ar ed as th e hi gh es

S. No.	Particulars	Details	Remarks
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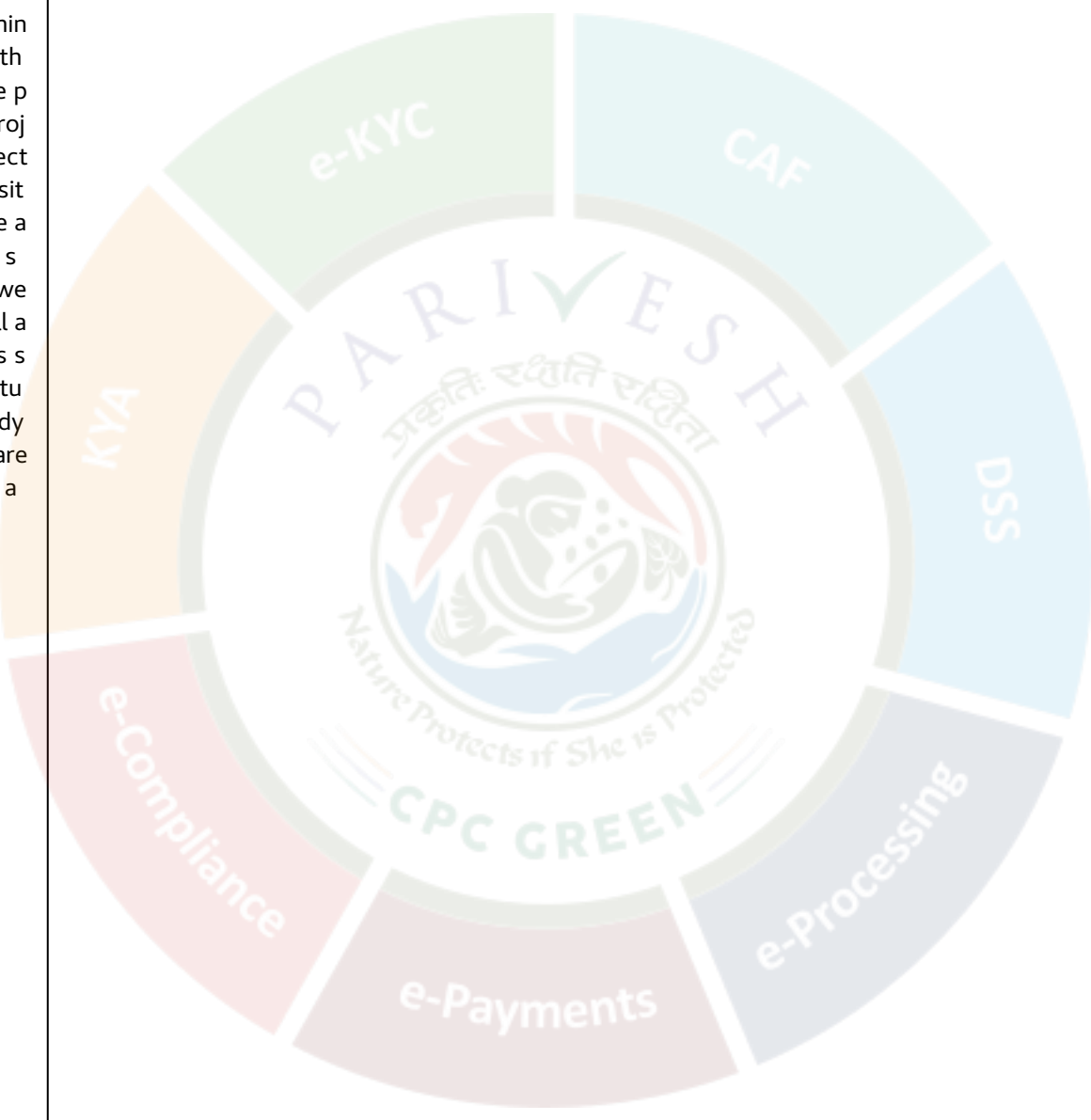
S. No.	Particulars	Details	Remarks
			as issued 'Sale Certificate' dated 20.07.2024 and 'Letter of Possession' dated 20.07.2024 in favour of M/s Or

S. No.	Particulars	Details	Remarks																																																																
			iss a All oy St ee l P riv ate Li mi ted.																																																																
3.	Existence of habitation & involvement of R&R, if any.	Project Site: No habitation in the proposed site. Nearest Habitation within 5 Km range: <table border="1"> <thead> <tr> <th>Sl.No</th><th>Habitation</th><th>Distance (Km)</th><th>Direction</th></tr> </thead> <tbody> <tr><td>1</td><td>Swaminattam</td><td>1.02</td><td>S</td></tr> <tr><td>2</td><td>Rajavinkovil</td><td>1.04</td><td>S</td></tr> <tr><td>3</td><td>Lakshmipuram</td><td>1.44</td><td>N</td></tr> <tr><td>4</td><td>Naduvakkurichi</td><td>1.93</td><td>W</td></tr> <tr><td>5</td><td>Sillanattam</td><td>2.00</td><td>E</td></tr> <tr><td>6</td><td>Subrahmanyapuram</td><td>2.28</td><td>N</td></tr> <tr><td>7</td><td>Pudiyamputtur</td><td>2.46</td><td>W</td></tr> <tr><td>8</td><td>Kalugachalapuram</td><td>2.89</td><td>W</td></tr> <tr><td>9</td><td>Muppulippatti</td><td>2.90</td><td>NW</td></tr> <tr><td>10</td><td>Vallinayakapuram</td><td>2.91</td><td>W</td></tr> <tr><td>11</td><td>Sindalakkattai</td><td>3.27</td><td>NNE</td></tr> <tr><td>12</td><td>Jambulingapuram</td><td>3.75</td><td>W</td></tr> <tr><td>13</td><td>Kumaragiri</td><td>3.76</td><td>S</td></tr> <tr><td>14</td><td>Mel Minakshipuram</td><td>3.88</td><td>N</td></tr> <tr><td>15</td><td>Periyanattam</td><td>4.09</td><td>NNE</td></tr> </tbody> </table>	Sl.No	Habitation	Distance (Km)	Direction	1	Swaminattam	1.02	S	2	Rajavinkovil	1.04	S	3	Lakshmipuram	1.44	N	4	Naduvakkurichi	1.93	W	5	Sillanattam	2.00	E	6	Subrahmanyapuram	2.28	N	7	Pudiyamputtur	2.46	W	8	Kalugachalapuram	2.89	W	9	Muppulippatti	2.90	NW	10	Vallinayakapuram	2.91	W	11	Sindalakkattai	3.27	NNE	12	Jambulingapuram	3.75	W	13	Kumaragiri	3.76	S	14	Mel Minakshipuram	3.88	N	15	Periyanattam	4.09	NNE	N o r e h a b i l i t a t i o n a n d r e s e t t l e m e n t i s i n v o l v e d f o r t h e s u b j e c t p r o j e c t.
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4.	Existence	A. School Project Site: No school at project site.	--																																																																

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ne of schools and hospital, if any.		Nearest Schools within 5 Km range:																																																																																				
		S. No		Name	Distance	Direction	1	Hindu Middle School, Saminatham	0.90	S	2	Tndta Ps, Rajavinkovil	1.01	S	3	Pups, Melalakshmipuram	1.19	N	4	Pups, Sillanatham	1.80	E	5	Pups, Naduvakurichi	1.87	W	6	V Net N&Ps, Puthiyamputhur	2.29	W	7	Tndta Ps Puthiyamputhur	2.57	W	8	Prasanna Matric Higher Secondary School Puthiyamputhur	2.63	W	9	John The Baptist Hss Puthiyamputhur	2.64	W	10	Rc Ms Puthiyamputhur	2.70	W	11	H.N.U.P N&Ps, Puthiamputhur	2.75	W	12	Pums Muppilivetti	3.07	NW	13	Tndta Primary School, Sinthalakattai	3.17	NE	14	Pups, Mettupatcheri	3.36	NW	15	Mahatma Matric Hr.Sec School, Putiyamputhur	3.50	W	16	Pups, T. Kumaragiri	3.69	S	17	Tdta Ps, Jambulingapuram	3.79	W	18	V.O.C. Ghss, Ottapidaram	3.97	NW	19	Indhira Gandhi Mat. School, Ottapidaram	3.99	NW	20	Tndta Ps, Periyannatham	4.15	NE
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19	Indhira Gandhi Mat. School, Ottapidaram	3.99	NW																																																																																			
20	Tndta Ps, Periyannatham	4.15	NE																																																																																			
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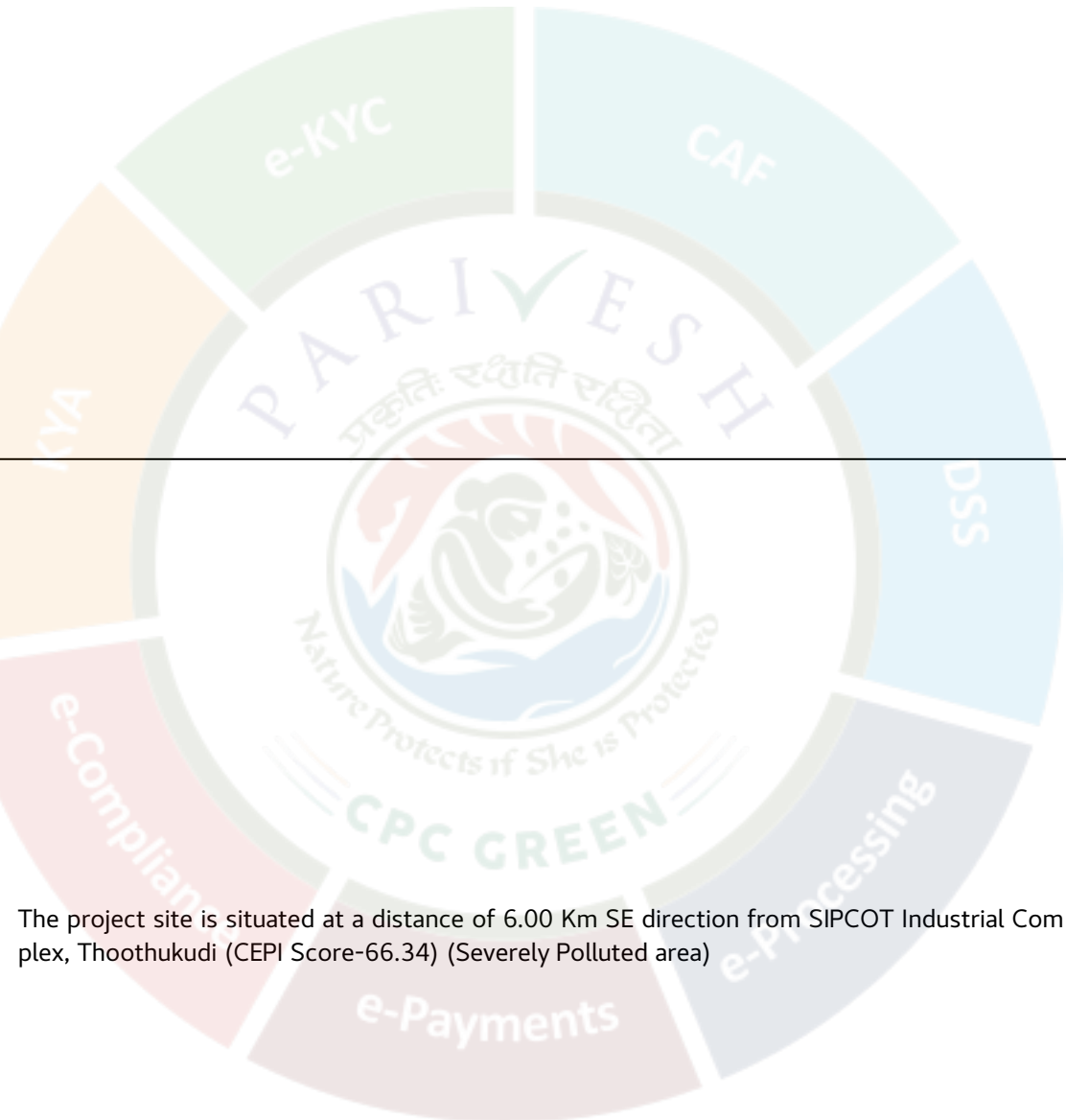
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5.	Elevation of the project site	Elevation of the project site varies from 55 m to 62 m AMSL.	--																								
6.	Involvement of Forest land if any.	No forest land involved.	NOC obtained from Tamil Nadu Forest Department																								

S. No.	Particulars	Details	Remarks																								
			e l et te r n o C. N o. D/ 30 6 4/ 20 10 da te d 0 9. 0 8. 20 1 0.																								
7.	Water body (Rivers, Lakes, Ponds, Nalla, Natural Drainage, Canal)	Project site: 01 No. rain water harvesting pond. Study area(Within 10 Km): <table border="1"> <thead> <tr> <th>S. No.</th><th>Name</th><th>Distance (Km)</th><th>Direction</th></tr> </thead> <tbody> <tr> <td>1</td><td>Water Bodies (Nayinapuram)</td><td>4.9</td><td>E</td></tr> <tr> <td>2</td><td>Water Bodies (Pudur Pandiyapuram)</td><td>8.48</td><td>E</td></tr> <tr> <td>3</td><td>Water Bodies (Arasadipanyur)</td><td>8.36</td><td>E</td></tr> <tr> <td>4</td><td>Water Bodies (Pullyamarattarasadi)</td><td>8.88</td><td>E</td></tr> <tr> <td>5</td><td>Water Bodies (Vallinayakapuram)</td><td>9.21</td><td>N</td></tr> </tbody> </table>	S. No.	Name	Distance (Km)	Direction	1	Water Bodies (Nayinapuram)	4.9	E	2	Water Bodies (Pudur Pandiyapuram)	8.48	E	3	Water Bodies (Arasadipanyur)	8.36	E	4	Water Bodies (Pullyamarattarasadi)	8.88	E	5	Water Bodies (Vallinayakapuram)	9.21	N	Lo ca l n all a s/ se as on al str ea m s an d ot he r wa ter bo di
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S. No.	Particulars	Details	Remarks
	etc.) exists within the project site as well as study area		es are present within the study area; however, no water body is passing through the proposed project site.
8.	Existence	Study area There are no national parks, Biosphere Reserves, Eco-sensitive zone, Tiger/Elephant Reserves	

S. N o.	Particulars	Details	Remarks
	nc e o f E S Z/ ES A/ na tio nal pa rk/ wil dli fe sa nc tu ar y/ bio sp he re res erv e / tig er res erv e/ ele ph an t r es erv e e tc. if a ny wit hin th e s tu dy are	and Wild Life Corridors within 10 km distance from the project site as ascertained from DSS (PARIVESH portal). · The Gulf of Mannar Marine National Park is at distance of 15.60 km and ESZ at a distance of 13.00 km with respect to TPP. · Vallanadu black buck Sanctuary is at distance of 24.60 km and ESZ at a distance of 24.30 km with respect to TPP. 	

S. N o.	Particulars	Details	Remarks
	a		
9	Archaeological sites monuments/historical temples etc.	 There is no Archaeological survey of India protected monuments located within 10 km radius of project site.	--
10.	Facility envisaged in CRZ area (Only for coastal power plant)	Not applicable	The plant is situated at an aerial distance of 11.30 Km from

S. N o.	Particulars	Details	Remarks
			m C RZ bo un da ry as as ce rt ai ne d f ro m D SS
1 1.	Inv olv em en t o f C rit ic al ly Pol lut ed Ar ea/ Se ver ely Pol lut ed are a a s p er 20 1 8.	 The project site is situated at a distance of 6.00 Km SE direction from SIPCOT Industrial Complex, Thoothukudi (CEPI Score-66.34) (Severely Polluted area)	--

46.5.4: The implementation status of the existing EC dated 10/11/2010 is as follows:

S. No.	Configuration	Capacity (MW) as per EC	Date of accord of EC	Date of commissioning of units	Production as per CTO	Applicable emission norms as per notification dated 7/12/2015 & its amendment
1.	3 X 150 MW	450 MW	10/11/2010; Amendment on 20.12.2010; *EC transfer-16.06.2025	03.08.2016	2 X 150 MW (300 MW)**	PM: 50 mg/Nm ³ SO ₂ : 600 mg/Nm ³ NO _x : 450 mg/Nm ³

*EC transfer from M/s Ind-Bharat Thermal Power Limited to M/s Orissa Alloy Steel Private Limited as per MoEF&CC OM IA3-22/19/2023-IA.III [E226246] dated 03.11.2023 for the facilities already implemented within the EC validity i.e. 2 x 150 MW was granted by SEIAA, Tamil Nadu.

** Consent to Operate for the existing unit was accorded by Tamil Nadu Pollution Control Board (TNPCB) for 2 x 150 MW under the Air and Water Acts on 03.08.2016, valid up to 31.03.2017.

Due to financial distress, company went under liquidation before NCLT Hyderabad, and Hon'ble NCLT ordered liquidation of the Company. NCLT by its order dated 31st March, 2023 taking note of the decision of Corporate Debtor of Ind-Bharat Thermal Power Limited directed liquidation of IBTPL. Following the due procedure, the official liquidator conducted an E-auction of assets of IBTPL on 14th June, 2024 under the provisions of Insolvency and Bankruptcy Code, 2016 "Code".

M/s Orissa Alloy Steel Private Limited was declared as the highest bidder for the assets of the IBTPL and has taken over IBTPL in E-auction of Corporate Debtor as a going concern belonging to the corporate debtor in accordance with the liquidation process regulations and the liquidator has issued 'Sale Certificate' dated 20.07.2024 and 'Letter of Possession' dated 20.07.2024 in favour of M/s Orissa Alloy Steel Private Limited.

Subsequently, Consents to Operate (CTOs) under the Air Act and Water Act were obtained from the Tamil Nadu Pollution Control Board (TNPCB) vide Orders 2505232653559 (Air Act) and 2505162653559 (Water Act) dated 24.03.2025, in the name of M/s Orissa Alloy Steel Private Limited, for the operation of 2 x 150 MW coal-based power plant, valid up to 31.03.2029.

46.5.5: Power Plant Details:

Total land requirement for the TPP is 91.0543 ha [Private land 91.0543 ha]. The nearest SPA is SIPCOT Industrial Complex, which is 6 km from project boundary in South-East Direction. CEPI Score of SIPCOT Industrial Complex is 66.34. There are no national parks, Biosphere Reserves, Eco-sensitive zone, Tiger/Elephant Reserves and Wild Life Corridors within 10 km distance from the project site as ascertained from DSS.

Parameter	Detail as per EC	Status as on June 2026	Remarks
Total Land Area (Ha.)	91.05	91.05	NA
Involvement of Forest Land	Nil	Nil	NA
NBWL Clearance	NA	NA	NA

CPA/SPA	NA	SIPCOT Industrial Complex (CE PI Score- 66.34)	At 6km from Plant in South-East Direction
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46.5.6: Background for amendment sought by the proponent

- Initially, MoEF&CC (erstwhile MoEF) notified stack emission standards for Particulate Matter (PM) parameter vide Notification dated 03.01.1989 requiring TPPs to install Electrostatic Precipitators (ESPs) to reduce emission.
- MoEF&CC notified stack height regulation for TPPs vide Notification dated 30.08.1990. The said notification outlined stack height regulations based on the plant's capacity and Sulphur content in the fuel, ensuring proper dispersion of the pollutants (SO₂ and NO_x) through adequately large stacks
- MoEF&CC vide its notification dated 07.12.2015 stipulated emission standards for coal/lignite-fired TPPs, which included revised emission standards for Particulate Matter (PM), and newly introduced emission standards for Sulphur dioxide (SO₂), Oxides of Nitrogen (NO_x), and Mercury (Hg) parameters with timelines
- MoEF&CC vide notification dated 11/07/2025 amended the provisions related to Sulphur dioxide emission standards for Category -B Thermal Power Plants (TPPs).
- As per the CPCB categorization dated 23/06/2022 with the respect to Sulphur di oxide (SO₂) emission norms, 2 x 150 MW TPP of M/s. Orissa Alloy Steel Private Limited (Formerly, IND-Bharat Thermal Power Limited) falls under Category B vide Sl. No. 117 & 118.
- In pursuance to the MoEF&CC Notification dated 11/07/2025, M/s Orissa Alloy Steel Private Limited has submitted their application for amendment in EC within the prescribed time frame seeking for review of Sulphur dioxide emission standards.

46.5.7: The summary of the information submitted by the proponent in the addendum EIA report are as follows:

i. Average coal consumption and the average Sulphur content of coal is being used in the TPP for last three months period.

Months	Quantity (TPM)		Total
	Indigenous-70%	Imported- 30%	
Feb 2026	50872	21802	72674
Mar 2026	19426	8326	27752
Apr 2026	47670	20430	68100
Imported/ Domestic Coal is being used while maintaining Sulphur content < 0.4 % in Indigenous Coal & less than 1.2 % in Imported Coal.			

ii. Minimum, maximum and 98th percentile levels of ambient PM₁₀, PM_{2.5}, NO_x, and SO₂ from secondary monitored AAQ data for last three months period.

S. No.	Name of location	Parameters being monitored	Remarks
Manual Monitoring Location (NABL Accredited Lab)			

S. No.	Name of location	Parameters being monitored	Remarks
1	Near Canteen Outside	PM ₁₀ , PM _{2.5} , SO ₂ and NO _x	Core Zone
2	Near Cooling System		Core Zone
3	Neat LTO Tank		Core Zone
4	Near Main Gate		Core Zone
Monitoring carried for 01 time in Month			
5	Jambalaingapuram	PM ₁₀ , PM _{2.5} , SO ₂ and NO _x	Buffer Zone
6	Pudupacheri		Buffer Zone
7	SettiUrani		Buffer Zone
8	Sillanatham		Buffer Zone
9	Kumaragiri		Buffer Zone
10	Sindalakottai		Buffer Zone
11	Mettupacheri		Buffer Zone

Summary of AAQ Result for May, October & November 2025:

S. N o.	Name of location	Parameter	Concentration in µg/m ³			NAAQS
			Min	Max	Average (of 03 months data)	
1	Near Canteen Outside	PM ₁₀	51.2	78.0	68.07	100
		PM _{2.5}	20.0	27.9	23.30	60
		SO ₂	12.4	25.4	20.87	80
		NO _x	17.8	32.8	27.00	80
2	Near Cooling System	PM ₁₀	55.3	82.0	72.10	100
		PM _{2.5}	26.0	28.0	26.67	60
		SO ₂	14.0	15.4	14.73	80
		NO _x	18.2	21.5	19.73	80

S. N o.	Name of location	Parameter	Concentration in µg/m ³			NAAQS
			Min	Max	Average (of 03 months dat a)	
3.	Neat LTO Tank	PM ₁₀	52.7	68.0	61.90	100
		PM _{2.5}	20.0	30.4	24.47	60
		SO ₂	16.4	22.1	19.97	80
		NO _x	22.7	26.5	24.87	80
4.	Near Main Gate	PM ₁₀	56.1	72.0	66.03	100
		PM _{2.5}	24.0	30.5	26.83	60
		SO ₂	14.6	21.8	19.27	80
		NO _x	21.6	26.4	24.53	80
			Monitoring carried for 01 month in Month of Oct'2025			
5.	Jambalaingapuram	PM ₁₀	46.55			100
		PM _{2.5}	27.83			60
		SO ₂	8.13			80
		NO _x	16.95			80
6.	Pudupacheri	PM ₁₀	48.77			100
		PM _{2.5}	27.24			60
		SO ₂	8.84			80
		NO _x	19.87			80
7.	SettiUrani	PM ₁₀	46.92			100
		PM _{2.5}	27.15			60
		SO ₂	8.25			80
		NO _x	19.11			80
		PM ₁₀	48.80			100

S. N o.	Name of location	Parameter	Concentration in $\mu\text{g}/\text{m}^3$			NAAQS
			Min	Max	Average (of 03 months data)	
8.	Sillanatham	PM _{2.5}	27.93			60
		SO ₂	12.15			80
		NO _x	21.66			80
9.	Kumaragiri	PM ₁₀	44.00			100
		PM _{2.5}	25.58			60
		SO ₂	7.74			80
		NO _x	18.91			80
10.	Sindalakottai	PM ₁₀	45.77			100
		PM _{2.5}	24.11			60
		SO ₂	9.11			80
		NO _x	21.36			80
11.	Mettupacheri	PM ₁₀	48.80			100
		PM _{2.5}	28.22			60
		SO ₂	8.43			80
		NO _x	20.29			80

iii. Average stack emissions for PM, NO_x, and SO₂ parameters for last three months, flue gas concentration in mg/Nm³

Post-acquisition & revamping work the trial of Boiler conducted in phase manner from April 2025 to October 2025. After completion of Grid connectivity work for one bay of substation, plant operation re-started on 31.01.2026.

In Month of May 2025, Oct.' 2025 & Feb' 2026, monitoring of stack carried by NABL accredit laboratory. The values are::

S. N o.	Name of stack	Parameter	Concentration in (mg/Nm ³)		
			Max	Min	Avg.
		PM	27.46	19.85	23.65

1	Boiler 1	SO ₂	69.94	64.70	67.32
		NO _x	30.07	28.28	29.17
2	Boiler 2	PM	24.12	16.80	20.46
		SO ₂	76.00	65.20	66.68
		NO _x	124.0	25.20	27.46

Mass emission rate of pollutants in gram per second

S. N o.	Parameters	Units	Unit 1	Unit 2
1	Stack Height	M	130	130
2	No. of flue	No.	1	1
3	Top diameter of flue	m	3.8	3.8
4	Flue gas velocity in each flue	m/s	22.96	23.21
5	Flue gas temperature	°K	389.75	386.22
6	Volumetric Flow rate of gas in each flue	Nm ³ /s	201.84	205.91
7	Emission Rates			
A	PM ₁₀	g/s	6.06	6.18
B	PM _{2.5}	g/s	3.64	3.71
C	SO ₂	g/s	131.27	133.47
D	NO _x	g/s	90.83	92.66

iv. Current stack height in the TPP and compliance with the MoEF&CC Notification of August 30, 1990 (or) June 28, 2018.

Current Stack height is of 130 m for 2 x 150 MW TPP with twin flue single stack as per G.S.R 742 (E) dated 30th August 1990

v. Assessment of maximum Ground Level Concentration (GLCs) of pollutants from the stack emission as per the envisaged stack height (as applicable) based on available site-specific meteorological parameters. Details of the model used, input data used for modelling and output data of the 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.

The predicted maximum Ground Level Concentration (GLCs) of PM₁₀, PM_{2.5}, NO_x, and SO₂ pollutants from 2 X 150 MW TPP based on available site-specific meteorological parameters & stack monitoring report has been done using AERMOD Dispersion

model. Following are the input data.

GLCs are obtained in $\mu\text{g}/\text{m}^3$ for pollutants. Output of modelling gives concentration at uniform Cartesian receptors to get the resultant concentration with reference to baseline data.

GLC of pollutants ($\mu\text{g}/\text{m}^3$) at sampling location:

A. Considering Baseline data of month of October 2025

Receptor Location	GLC at Monitoring Location ($\mu\text{g}/\text{m}^3$)			
	PM ₁₀	PM _{2.5}	SO ₂	NO _x
AAQ-1 (Near Canteen Outside)	51.264	27.930	12.898	18.177
AAQ-2 (Near Cooling system)	55.364	34.730	15.898	21.877
AAQ-3 (Near LTO Tank)	52.764	30.430	16.898	23.077
AAQ-4 (Near Main Gate)	56.164	30.530	15.098	21.977
AAQ-5 (Jambalaingapuram)	47.579	28.438	8.904	17.783
AAQ-6 (Pudupacheri)	49.812	27.820	9.342	20.538
AAQ-7 (Setti Urani)	47.910	27.705	8.783	19.566
AAQ-8 (Sillanatham)	50.044	28.616	14.259	23.587
AAQ-9 (Kumaragiri)	44.903	26.101	7.921	19.317
AAQ-10 (Sindalakottai)	46.902	24.695	10.839	23.031
AAQ-11 (Mettupacheri)	49.858	28.828	9.045	21.056

B. Considering Baseline data of month of November 2025

Receptor Location	GLC at Monitoring Location ($\mu\text{g}/\text{m}^3$)			
	PM ₁₀	PM _{2.5}	SO ₂	NO _x
AAQ-1 (Near Canteen Outside)	78.064	20.030	26.498	33.377
AAQ-2 (Near Cooling system)	82.064	28.030	23.498	20.377
AAQ-3 (Near LTO Tank)	65.064	20.030	23.498	26.377
AAQ-4 (Near Main Gate)	72.064	26.030	23.498	27.377

SO₂ GLC concentrations are minimal, with the highest GLC being $4.48 \mu\text{g}/\text{m}^3$ at 2.6 km from the stack and between 1.231 - $1.539 \mu\text{g}/\text{m}^3$ at receptor locations.

vi. Environment Management Plan (EMP):

Details as prescribed by MoEF&CC	Information provided by Proponent
Environment Management Plan (EMP) covering the following:	<u>EMP for Air Quality Management:</u> · A 130-m high common chimney with twin flues consistent with G.S.R. 7 42(E) dated August 30, 1990 is installed to disperse flue gases from the operational two boilers. · High-efficiency Electrostatic Precipitators (ESPs) with 99.99% efficiency is used to limit Suspended Particulate Matter (PM) in the flue gas to below 50 mg/Nm³. Modification of air pollution control systems such as bag filters and Electrostatic Precipitators (ESP) to minimize particulate emissions to 30 mg/Nm³. · Limestone dosing is used to capture over 80% of the sulphur in the fuel, thereby significantly lowering SO₂ emissions. Monitoring and maintaining efficient operation of Lime dosing to Boiler to control SO₂ emissions. · Coal handling areas, such as conveyor transfer points, unloading zones, and stockyards, is equipped with dust suppression and extraction systems. Additionally, all conveyor systems are enclosed, and seal plates is installed at the bottom of galleries to prevent dust escape. · Installation of wind barriers / dust screens or tall trees (Indian cork- <i>Millingtonia hortensis</i>, Silver Oak - <i>Grevillea robusta</i> and Casuarina tree- <i>Casuarina equisetifolia</i>) in high dust-generating areas · Dust collection systems are provided at coal bunkers to remove dust and hazardous gases like methane. The collected dust is returned to the conveyor or bunker for reuse. · Regular water spraying is carried out in the coal storage yard to further control dust generation. · Internal plant roads are paved with concrete or asphalt to reduce fugitive particulate emissions. · Strict speed control of vehicles within the project premises to reduce fugitive dust emissions. · 100% fly ash utilization is achieved in accordance with MoEF&CC guidelines. · Dry fly ash is completely collected in silos and supplied to industries such as cement and captive brick manufacturing unit. · Greenbelt development coverage upto 33% of the total plant area @ 2500 trees per hectare, providing a natural buffer to reduce dust and improve local air quality. · Online CEMS (PM & Gaseous) at major stacks is in place. Periodic third-party environmental audits to assess performance of pollution control systems and recommend improvements. · Maintenance of Plant roads and use of industrial vacuum cleaners/ mechanized road sweeping machines & water sprinkling at regular intervals. · Use of low sulphur fuel such as LSHS/LDO to minimize SO₂ emissions from DG sets. · Implementation of a preventive maintenance schedule for all APCDs (ESP, bag filters, Lime dosing plant & Low NO_x Burners) to ensure consistent efficiency. · Adopting continuous practice of environmental management cell (EMC) for regular monitoring, reporting, and compliance tracking. · Regular meteorological monitoring (wind speed, direction, temperature, stability class) to correlate with air quality data and take proactive action.

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- Development of plantation outside the project boundary almost 50,000 (CSR-based green initiatives) to improve regional air quality.

EMP for Water Resources Management:

- Reuse of auxiliary cooling water and boiler blowdown for greenbelt irrigation.
- Provision of a neutralization pit to adjust the pH of DM plant regeneration effluent.
- Implementation of rain water harvesting pond to capture excess runoff water.
- Adoption of measures to minimize wastewater generation to the greatest extent possible.
- Water after treatment in primary ETP with Oil & grease Separator & STP is reused in plant premises.
- Online CEMS (effluent) installed as per CPCB guideline.
- Adoption of 'ZERO EFFLUENT DISCHARGE' to ensure no discharge of wastewater.

EMP for Noise Management:

- Noise-intensive areas such as turbine halls, compressor rooms, and DG set locations are equipped with damping materials like thin rubber or lead sheets.
- A shock-absorbing method is implemented to minimize vibration-related noise.
- Roofs, walls, and floors are lined with sound-absorbing materials to reduce noise reflections.
- Control rooms are enclosed with glass panels to maintain a quieter working environment.
- Workers are provided with earplugs, and their proper use is strictly ensured.
- Personnel working in high-noise zones will have limited exposure durations in accordance with the Occupational Safety and Health Administration (OSHA) guidelines.
- Training programs are being conducted to raise awareness among staff about the harmful effects of excessive noise.
- Thick greenbelt and attenuation due to the physical barriers will be developed more which will reduce the impact of noise on the community level.

EMP for Solid Waste Management:

- Bottom ash is collected in dry form into hoppers and transported pneumatically to RCC storage silos of capacity 3 x 2000 Cu.m. Silos are provided with damper valves and bag filter.
- Bottom ash stored in the silos is periodically removed and disposed of as required.
- Fly ash is also collected dry in hoppers and conveyed pneumatically to RCC silos.
- Fly ash accumulated in the silos is periodically extracted and managed for disposal.
- Using closed trucks for fly ash transportation.
- Water sprinkling system / fog canon system provided in the ash disposal area to restrain flying of bottom ash due to wind.

EMP for Biodiversity:

- Inspect condition of re-vegetation during regular surveys.
- The greenbelt consists mainly of native plant species. 1500 trees per hectare in the areas measuring 26.32 Ha. (65 acres) is already developed by M/s Orissa Alloy Steel Private Limited. In current FY 2025-26 compa

nies has already planted 8,000 nos. of trees. Total plantation at the project site is 55,400 (@2105 tress per ha.)

- The company has proposed to increase the density of tress per hectare to 2500 nos. and replace the damage trees. Also the open space measuring 10 acres inside the plant premises will be developed under green belt.

Monitoring, Reporting and Corrective Actions:

- Regular audits and reviews in accordance with this EMP will be undertaken.
- Recommendations and corrective actions arising from audits and reviews will be implemented.
- Non-Compliance and Incident Reporting will be reviewed and closed out by senior management to ensure prompt rectification and change management as required.

Additional Measures for Sensitive Receptors at Maximum GLC Locations

Localized Green Barrier Intensification

- Develop extra-dense (≥2500 trees/ha) multi-layer plantation specifically along the WNW–NNW corridor between source and receptors
- Include evergreen, dust-tolerant species with thick foliage for better pollutant interception
- Development and maintenance of a dense greenbelt with species having high dust attenuation capacity, particularly along the plant boundary and in the north & west direction

Micro-Level Dust Suppression

- Deploy fixed/portable mist cannons near maximum GLC zones
- Increase frequency of water sprinkling during dry and windy conditions
- Introduce anti-smog guns during adverse meteorological conditions

Real-Time Monitoring & Alert System

- Install Sensor Based Air Quality Monitoring Stations (AAQMS) at/near maximum GLC points.
- Set up a threshold-based alert mechanism for PM₁₀, PM_{2.5}, SO₂, and NO_x exceedance trends
- Link monitoring data with plant operation control room for immediate action

Operational Control During Adverse Conditions

- Curtail or reschedule high-emission activities (material handling, loading/unloading) during low wind speed or inversion conditions
- Implement staggered operations to reduce peak emission load

Strengthening of Pollution Control Systems

- Maintain APCD efficiency >99% through periodic inspection and calibration
- Ensure lime dosing system and De-NO_x systems operate at optimal efficiency at all times
- Provide redundancy systems (ID Fan, Boiler Feed Pump & 7 field ESPs) for critical pollution control equipment

Traffic & Logistics Management

- Used dedicated transport routes avoiding sensitive receptor zones.
- Enforce vehicle emission checks (PUC compliance) for all incoming/outgoing vehicles
- Restrict night-time heavy industrial vehicle movement by the project near habitation areas

Community Protection Measures

- Used of mist fog / water cannon system in schools/clinics near maximum GLC zones
- Provision of protective infrastructure (boundary walls, vegetative screens)
- Conduct periodic health check-up camps and maintain health records

Emergency & Action Plan

Air Pollution & Fugitive Emission Control Systems

Emission Source / Area	Control System / Measure Implemented
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Particulate Matter (PM)	Individual 7 Filled Electrostatic Precipitator (ESP) of adequate capacity with each boiler is installed.
Nitrogen Oxides (NO _x)	Low NO _x burner is used
Coal Transportation	Tarpaulin-covered trucks are used.
Coal Handling & Storage	Enclosed galleries provided to arrest the coal dust generated at all the conveyor/ transfer points.
Coal Bunkers	Bag Filter of Adequate capacity provided in coal bunkers, Ground Hopper & transfer Tower.
Fly Ash Handling	Fly ash is collected in dry form. Bag filter of adequate capacity installed on top of intermediate silos & main fly ash silos (3 x 2000 m³) to restrict the escape of fly ash into the atmosphere during its unloading from ESP hoppers to silos. Also, approximately 30.00 acres Ash Pond is in place at the project site. Fly ash and bottom ash will be mixed with water and pumped as slurry into this ash pond. The ash pond has been designed with trenches to capture storm water during the monsoon season. A greenbelt has also been developed around the ash pond to control fugitive dust emissions. Regular inspection and maintenance of silos, valves, pipelines, and bag filters are undertaken to ensure proper functioning of the dust control system
Fly Ash Loading & Transport	· 100% fly ash extraction, storage and disposal facilities for utilization of fly ash in dry form. Closed trucks/ bulkers & containers to be used for this purpose. · To reduce the dust nuisance while loading the ash into the trucks from fly ash silos, telescopic chutes used with dust suppression systems (e.g., water spray or vacuum extraction) for loading bulkers/trucks to prevent airborne dust. · Top cover the ash in the open trucks with industrial grade tarpaulin to prevent flying of fine ash during transportation. · If transporting pond ash (wet), ensuring at least 15% moisture content to prevent the ash from becoming airborne during transit · Concrete paved areas around loading bays to prevent groundwater contamination. · Speed limits for vehicles are regulated (e.g., maximum 40 km/h) to reduce accidents and minimize dust disturbance. · Avoiding overloading of trucks/ bulkers.
Fly Ash Disposal	· Fly ash is captured in ESP hoppers, stored in silos, and transported via pneumatic systems or trucks for utilization in house brick plant of capacity 1,00,000 Nos. per day and also to nearby brick & block manufactures. · Fly ash in near future will also be sold to potential buyer for cement manufacturing. · To promote utilization of pond ash free issue of pond Ash for Road Construction and Low Lying area development, construction of embankment will be encouraged/ undertaken by the plant.
Fly Ash Utilization	Fly ash is used in existing brick plant of capacity 1,00,000 nos. per day and also supplied to nearby cement plant and brick manufacturing. Data w.r.t to ash generation and utilization is uploaded on Ash Availability & Utilization Portal [i

n compliance to Notification No: S.O.5481 (E) dated 31.12.2021].
The utilization practice ensures effective resource recovery, minimizes waste generation, and complies with applicable environmental guidelines / fly ash notification dated 31.12.2021 & its further amendment.

Revised Cost of Proposed Additional EMP

Description	Proposed Additional Measure	Capital cost, Rs. in crores			Recurring cost, Rs. in crores		
		Existing	Additional cost incurred/ Proposed (For revamping, up gradation & Augmentation)	Total	Existing ECs	Additional	Total
Cost of Air Pollution Control Devices/ System	1. Carry out timely maintenance of the equipment condition. 2.Periodic inspection and survey of ESP for physical health assessment of ESP and take corrective action repair/replacement for enhance ESP performance 3.APH flue gas temperature is being regularly monitored to prevent acid corrosion in the ESP ducts, pipelines and hoppers etc. 4.TRP rating of ESP to be maintained through trial charging and field current adjustment and necessary correction during and after AOH to improved and sustain ESP efficiency. 5.The ESP field is enhanced to 7 fields and the bag filter capacity is increased to improve air pollution control efficiency.	12.27	13.50	25.77	1.90	0.20	2.10
Cost of Water conservation & Pollution Control	1.Installation of New Water Sprinklers at least 80 nos., Water cannon system-01 no,	3.50	0.95	4.45	0.50	0.20	0.70

Description	Proposed Additional Measure	Capital cost, Rs. in crores			Recurring cost, Rs. in crores		
		Existing	Additional cost incurred/ Proposed (For revamping, up gradation & Augmentation)	Total	Existing ECs	Additional	Total
	movable water tanker-01 no, 2.Strengthening the RWH system and internal drain network.						
Cost of Solid Waste Management System	1.Fly Ash Handling & Transportation. 2.Cleaning & replace damage or inefficient filter bags as required. 3.Installation of brick plant (Capacity -1,00,000 nos./day)	2.50	2.80	5.30	0.50	0.30	0.80
Green belt development	1.Increasing the density of plantation inside the plant premises to 2500 trees per hectare with additional 20,500 plantations (1 st Year -10,300 nos. & 2 nd year -10,200 nos.). Total plantation on 30.36 hectare of land will be 75,900 nos. with avg. 10 meter width all around the plant boundary and will be achieved by FY. Year 2027-2028. 2.Green belt outside the plant premises will be carried out. In total additional 40,000 nos. of trees will be planted in a span of three year (by FY 2028-2029). The details area as: · In 1 st & 2 nd Year in nearby area (village-Swaminatham & Ot	3.00	4.65	7.65	0.30	0.75	1.05

Description	Proposed Additional Measure	Capital cost, Rs. in crores			Recurring cost, Rs. in crores		
		Existing	Additional cost incurred/ Proposed (For revamping, up gradation & Augmentation)	Total	Existing ECs	Additional	Total
	tapidaram in 1st & 2nd year) -10,000 nos. of trees in each Village. · In 2nd & 3rd year in nearby Health Centre (Sillanatham & Pudhiyamputhur)- 2500 nos. of trees in each location. · In 1st , 2nd & 3rd year in nearby School (TNDTA Primary School, Rajavinkovil & Panchayt Union Primary School, Melal akshmipuram & Panchayt Union Primary School, Sillanatham)- 3000 nos. of trees in each location. · In 3rd year along the village road & community hall/ worship place in Pudhiyamputhur village in consultation with local administration - 6000 nos. 1.Under CSR in collaboration with Govt. Agency green belt outside the project boundary with approximately 50,000 plantations to be carried out to improve the regional air quality.						
Noise Reduction Systems & Green energy initiative.	1.Installing heavy-duty, acoustic blanket, enclosure. 2.Solar power capacity	1.50	1.50**	3.00	0.10	0.30	0.40

Description	Proposed Additional Measure	Capital cost, Rs. in crores			Recurring cost, Rs. in crores		
		Existing	Additional cost incurred/ Proposed (For revamping, up gradation & Augmentation)	Total	Existing ECs	Additional	Total
	y of the plant to be increased to 100 KW by FY 26-27. Capacity will be further increased to 350 KW by FY 28-29. And in future if there is possibility of further capacity increase the same will be implemented.						
Occupational Health Management	Strengthening emergency medical facility, ambulance services and first aid arrangement.	1.25	0.20	1.45	0.20	0.08	0.28
Risk Mitigation & Safety Plan	In-house fire-fighter truck up gradation and modification of hydrant line system for effective fire emergency management.	1.20	0.40	1.60	0.15	0.08	0.23
Online Monitoring Surveillance System (New AAQMS & CEMS)	New sensor-based AAQMS stations installation (03 Nos.)	2.50	1.20	3.70	0.30	0.16	0.46
Implementation of Controlling measures to minimize impacts due to transportation and traffic	Promoting use of EV vehicle inside the plant premises by the Employee/Staff and provide financial benefit to encourage the employees.	1.00	1.00	2.00	0.20	0.07	0.27
Setting in house Environmental Laboratory	New in-house Monitoring systems install.	0.55	0.15	0.70	0.05	--	0.05

Description	Proposed Additional Measure	Capital cost, Rs. in crores			Recurring cost, Rs. in crores		
		Existing	Additional cost incurred/ Proposed (For revamping, up gradation & Augmentation)	Total	Existing ECs	Additional	Total
Grand Total		29.27	26.35	55.62	4.20	2.12	6.32
**Costing is only for Solar Power installation.							

46.5.8: Amendment sought: The details of the condition for which amendment is sought and justification for the same is as follows:

S. No.	Condition as per EC dated 10.11.2010	Amendment Sought	Justification & Request for Amendment
1.	Part-A: Specific Condition (xvii): Space provision shall be kept for retrofitting of FGD, if required at a later date.	Amendment in Environment Clearance with respect to Sulphur dioxide emission standards as per MoEF&CC Notification dated 11/07/2025	The subject project of OASPL (previously Ind-Bharath Thermal Power Ltd.) is falling under C category 'B' project. As per MoEF&CC Notification G.S.R. 465 (E) dated 11/07/2025 and scientific studies need to be carried out for review of category B Thermal Power Plants (TPPs) with respect to Sulphur dioxide emission standards & adequacy of current stack height. Based on the installed capacity of the plant, Sulphur content of the blended coal (30% imported coal and 70% indigenous coal), and assessed as well as monitored SO₂ emission levels, the project is capable of meeting the applicable emission norms without installation of a Flue Gas Desulphurization (FGD) system. Current Stack height is adequate enough as per G.S.R 742 (E) dated 30th August 1990. The regulatory position therefore allows consideration of exemption requests subject to submission of validated modelling results, monitoring data, and compliance records.

46.5.9: Summary of court cases: Nil.

46.5.10: Summary of Show Cause Notices (Last two years): Nil.

46.5.11: Summary of violation under EIA, 2006/court case/show cause/direction if any, related to the project under consideration: - Nil.

46.5.12: ADS Information in chronology:

M/s. Orissa Alloy Steel Private Limited made an online application vide proposal no. IA/TN/THE/563683/2026 dated 31.12.2025. The proposal was initially considered in 38th meeting of Reconstituted EAC (Thermal) held on 24.02.2026. Proposal was deferred for want of additional information. The point-wise reply to the observations, along with requisite

documents/information uploaded on PARIVESH portal on 23.05.2026.

The point wise compliance are as:

S. N O.	ADS Point	Information to be furnished by the Project Proponent																		
	Project proponent to submit the status of compliance to the EC dated 10/11/2010 with respect to obtaining of clearance under the Wildlife (Protection) Act, 1972.	The project of M/s Orissa Alloy Steel Private Limited (Previously M/s Ind-Bharat Thermal Power Limited) for located at Swaminatham & Ottapidaram Villages, Ottapidaram Taluk, Dist. - Thoothukudi, Tamil Nadu. Environmental Clearance issued vide letter no SEIAA/TN/EC/1(d)/013/ F. No.282/2010 dated 10/11/2010 under EIA, 2006 is subject to final orders of the Hon'ble Supreme Court of India in the matter of Goa foundation Vs. Union of India in Writ Petition (civil) No.460 of 2004 as may be applicable to this project. (EC General conditions point no-ix.). As per Hon'ble Supreme Court of India order dated 4.12.2006 [reported in (2011) 15 SCC 791] 'Prior clearance of NBWL is required for a project if it is located in 10 km of a Protected Area/ Sanctuary or Eco Sensitive Zone.' There are no national parks, Biosphere Reserves, Eco-sensitive zone, Tiger/Elephant Reserves and Wild Life Corridors within 10 km distance from the project site as ascertained from DSS (parivesh portal). · The Gulf of Mannar Marine National Park is at distance of 15.60 km and ESZ at a distance of 13.00 km with respect to TPP. · Vallanadu black buck Sanctuary is at distance of 24.60 km and ESZ at a distance of 24.30 km with respect to TPP.																		
	Map depicting existence of marine national park/ sanctuary and distance of the same from the project site shall be submitted.	Map depicting existence of marine national park/ sanctuary and distance of the same from the project site is attached with ADS reply and uploaded on PARIVESH portal.																		
	Proponent is requested to submit the detailed of blended coal being fired in the boiler (Quantity of indigenous and imported separately) for last three months.	<table><tr><th rowspan="2">Months</th><th colspan="2">Quantity (TPM)</th><th rowspan="2">Total</th></tr><tr><th>Indigenous-70%</th><th>Imported- 30%</th></tr><tr><td>Feb 2026</td><td>50872</td><td>21802</td><td>72674</td></tr><tr><td>Mar 2026</td><td>19426</td><td>8326</td><td>27752</td></tr><tr><td>Apr 2026</td><td>47670</td><td>20430</td><td>68100</td></tr></table>	Months	Quantity (TPM)		Total	Indigenous-70%	Imported- 30%	Feb 2026	50872	21802	72674	Mar 2026	19426	8326	27752	Apr 2026	47670	20430	68100
Months	Quantity (TPM)			Total																
	Indigenous-70%	Imported- 30%																		
Feb 2026	50872	21802	72674																	
Mar 2026	19426	8326	27752																	
Apr 2026	47670	20430	68100																	
	Mass emission rates for all the parameters from the stack need to be revisited as the said data is not matching with the stoichiometric calculations data.	The mass emission rates from all stacks have been recalculated based on the submitted EIA, approved EC, and current coal consumption, and are enclosed with ADS reply and uploaded on PARIVESH portal. The data has been reviewed for alignment with stoichiometric principles, and the values are submitted based on actual coal consumption pattern for your consideration.																		
	PP to submit the action plan for tree plantation for gaps filling as per CPCB norms	The greenbelt within the project premises predominantly comprises native plant species. An area measuring 26.32 hectares (65 acres) has already been developed under greenbelt by M/s Orissa Alloy Steel Private Limited, with an existing plantation density of approximately 1,500 trees per hectare. The Company proposes to further strengthen the greenbelt by increasing the plantation density to 2,500 trees per hectare through additional plantation and systematic replacement of damaged or non-surviving trees. In addition, an open area measuring approximately 10 acres within the plant premises has been identified and earmarked for greenbelt development.																		

S. N O.	ADS Point	Information to be furnished by the Project Proponent													
		During the current financial year 2025-26, the Company has undertaken plantation of 8,000 trees. As on date, the total plantation within the project site stands at 55,400 trees, achieving an average density of approximately 2105 trees per hectare. <table><tr><th rowspan="2">Land for Green Belt as per EC</th><th>Green Belt Area</th><th colspan="2">Number of Trees</th><th rowspan="2">Total</th></tr><tr><th>Proposed</th><th>Existing</th><th>Proposed</th></tr><tr><td>26.32 Hectare (65 Acres)</td><td>Additional land (open space inside the plant) measuring -10 acres to be developed under green belt in 02 years.</td><td>55,400 nos.</td><td>Increasing the density to 2500 nos. per hectare and additional green belt development in open space.</td><td>75,900 number of trees on 30.36 Hectares (75 Acres) i.e. (@ 2500 Number tree per hectare).</td></tr></table> To attain the targeted greenbelt density across the entire designated area, including the additional 10 acres, the Company plans to undertake further plantation of 20,500 trees in a phased manner—10,300 trees in the first year and 10,200 trees in the second year—at an estimated cost of ₹600 per tree. The entire plantation programme is scheduled for completion by the end of the financial year 2027-28.	Land for Green Belt as per EC	Green Belt Area	Number of Trees		Total	Proposed	Existing	Proposed	26.32 Hectare (65 Acres)	Additional land (open space inside the plant) measuring -10 acres to be developed under green belt in 02 years.	55,400 nos.	Increasing the density to 2500 nos. per hectare and additional green belt development in open space.	75,900 number of trees on 30.36 Hectares (75 Acres) i.e. (@ 2500 Number tree per hectare).
Land for Green Belt as per EC	Green Belt Area	Number of Trees		Total											
	Proposed	Existing	Proposed												
26.32 Hectare (65 Acres)	Additional land (open space inside the plant) measuring -10 acres to be developed under green belt in 02 years.	55,400 nos.	Increasing the density to 2500 nos. per hectare and additional green belt development in open space.	75,900 number of trees on 30.36 Hectares (75 Acres) i.e. (@ 2500 Number tree per hectare).											
	Performance Guarantee test report of ESP from the third party	The performance Guarantee test report of the ESPs (Unit I & Unit II) is enclosed with ADS reply and uploaded on PARIVESH portal.													
	PP to revisit the EMP in totality and incorporate appropriate pollution control measures in the form of a time bound action plan to address the PM levels in ambient air and PM & NOx level in stack emissions with physical and financial outlay. Besides, EMP shall explicitly brought out the existing and proposed additional environmental safeguards with physical and financial outlay.	In this regard, the Environmental Management Plan (EMP) has been comprehensively reviewed and updated to incorporate enhanced pollution control measures, clearly outlining existing systems and proposed additional safeguards along with defined implementation timelines and corresponding budgetary provisions. Existing & Strengthened Pollution Control Measures: - Proper selection, installation, and periodic maintenance of Air Pollution Control (APC) equipment to ensure stack emissions are maintained within 30 mg/Nm³ for Particular Matter. - Implementation of limestone dosing to capture over 80% of sulphur content in fuel, thereby significantly reducing SO₂ emissions. - A Pneumatic/covered conveying system for raw material handling to minimize fugitive dust emissions is adopted. - Internal roads have been black-topped/concreted, supported by regular water sprinkling and mechanized cleaning to control dust generation. - Deployment of industrial vacuum cleaners along with stringent housekeeping practices across the plant premises. - Provision made of covered sheds at unloading points to prevent dust dispersion. - Ash handling through closed-loop systems, with storage in silos and transportation through covered trucks/bulkers only. - Complete utilization of dry fly ash, collected in silos and supplied to cement and brick manufacturing industries. - Ensuring all transport vehicles are well-maintained and compliant with P													

S. N O.	ADS Point	Information to be furnished by the Project Proponent
		UC norms. · Development and maintenance of greenbelt along internal roads, plant boundary, and other designated areas to serve as an effective pollution sink. · Proper maintenance of designated parking areas to prevent secondary dust emissions. <u>Time-Bound Action Plan (Proposed Measures):</u> · Periodic performance evaluation and up gradation of Air Pollution Control (APC) systems to further enhance control of PM and NOx emissions. The ESP system has been strengthened by increasing the number of fields up to 7 for improving PM collection efficiency. · Delegated team/personnel engaged 24×7 for proper monitoring of continuous emission monitoring systems (CEMS) and strengthening of real-time data analysis for proactive compliance. · Phased strengthening of greenbelt development with increased plantation density and gap filling in existing areas. · Augmentation of road dust control measures through additional mechanized sweeping, mist-based dust suppression systems, and increased frequency of water sprinkling. · Improvement in material handling systems through further enclosure/covering of transfer points to reduce fugitive emissions. · Strict & regular preventive maintenance schedule for all pollution control equipment and material handling systems. · Continuous monitoring of stack emissions and ambient air quality, with prompt corrective and preventive actions to ensure compliance with prescribed norms. · Installing up to 50 Nos of additional water sprinklers has been implemented for effective dust suppression. · Water cannon mist systems are being installed/displayed at suitable locations to enhance fugitive dust control measures. <u>Financial Outlay:</u> Adequate budgetary provisions have been earmarked under the revised EMP for operation and maintenance of APC systems, pollution control infrastructure, greenbelt development, monitoring, and housekeeping activities, with periodic review for effective implementation. The revised EMP outlines existing and proposed measures with defined timelines and financial commitment, ensuring regulatory compliance and continuous environmental improvement. Total budgetary provision for the EMP is enclosed with ADS reply and uploaded on PARIVESH portal.
	Comparison of baseline environment status as per the EIA report submitted at the time of grant of EC for the TPP vis a vis present monitored data for a period of last three months. Data shall be analysed for the down-wind and up-wind locations, maximum, average and standard deviations shall be presented. Any major deviations from the baseline shall be explained with scientific justification and the action plan for	The comparison of baseline environmental status as per the EIA report at the time of EC grant and the present monitored data for the last three months is enclosed with ADS reply and uploaded on PARIVESH portal.

S. N O.	ADS Point	Information to be furnished by the Project Proponent																																								
	mitigations measures to be adopted.																																									
	Land use breakup of the project site including ash pond and the environmental sensitive receptors within 10 km radius of the power plant shall be submitted.	The land use breakup of the plant area is given below: <table><tr><th>S. No.</th><th>Particulars</th><th>Existing Area (Ha)</th><th>Proposed Area (Ha)</th></tr><tr><td>1</td><td>Main Plant</td><td>12.70</td><td>12.70</td></tr><tr><td>2</td><td>Coal handling System</td><td>15.79</td><td>15.79</td></tr><tr><td>3</td><td>Water System</td><td>2.07</td><td>2.07</td></tr><tr><td>4</td><td>Switch Yard</td><td>1.67</td><td>1.67</td></tr><tr><td>5</td><td>Internal roads</td><td>7.68</td><td>7.68</td></tr><tr><td>6</td><td>Green Belt</td><td>26.30</td><td>30.35</td></tr><tr><td>7</td><td>Ash Pond</td><td>12.14</td><td>12.14</td></tr><tr><td>8</td><td>Others (Open Space / Truck Parking/Staff quarter, Fly Ash Brick Plant)</td><td>12.7043</td><td>8.6543</td></tr><tr><td colspan="2">Total Project Area</td><td>91.0543</td><td>91.0543</td></tr></table> Environmental Sensitive Receptors of 10 km are enclosed with ADS reply and uploaded on PARIVESH portal.	S. No.	Particulars	Existing Area (Ha)	Proposed Area (Ha)	1	Main Plant	12.70	12.70	2	Coal handling System	15.79	15.79	3	Water System	2.07	2.07	4	Switch Yard	1.67	1.67	5	Internal roads	7.68	7.68	6	Green Belt	26.30	30.35	7	Ash Pond	12.14	12.14	8	Others (Open Space / Truck Parking/Staff quarter, Fly Ash Brick Plant)	12.7043	8.6543	Total Project Area		91.0543	91.0543
S. No.	Particulars	Existing Area (Ha)	Proposed Area (Ha)																																							
1	Main Plant	12.70	12.70																																							
2	Coal handling System	15.79	15.79																																							
3	Water System	2.07	2.07																																							
4	Switch Yard	1.67	1.67																																							
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8	Others (Open Space / Truck Parking/Staff quarter, Fly Ash Brick Plant)	12.7043	8.6543																																							
Total Project Area		91.0543	91.0543																																							
	Details of the sensitive receptors at maximum GLC location and control measures proposed in this regard shall be submitted.	Details of sensitive receptors at the maximum GLC location have been identified and assessed, and the same are enclosed with ADS reply and uploaded on PARIVESH portal.																																								
	Proponent to submit the compliance to the conditions prescribed in the notification dated 21/05/2020 regarding use of coal by Thermal Power Plants, without stipulations as regards ash content or distance as the PP is using coal having ash content more than 34%	The conditions stipulated under the notification are being complied and detailed compliance status is with ADS reply and uploaded on PARIVESH portal.																																								
	Undertaking in a non-judicial stamp paper from the PP to comply with the mitigation measures proposed under revised EMP shall be submitted.	The undertaking for compliance with the mitigation measures proposed under the revised Environmental Management Plan (EMP) is enclosed here with ADS reply and uploaded on PARIVESH portal.																																								
	Latest six-monthly compliance report submitted to the Regional Office of MoEF&C.	The latest Six-Monthly Compliance Report for the period April 2025 to September 2025 was submitted through the PARIVESH Portal vide Compliance ID: 702077578 dated 29.11.2025. A copy of the same is enclosed herewith ADS reply and uploaded on PARIVESH portal. The six-month EC Compliance for the period (Oct-25 to March-26) will be submitted on or before 1 st June 2026.																																								

46.5.13: Written Submission**Query 1: Land Use Break- up of the project:**

Reply: The plant is setup on land measuring 91.0543 Ha. The land use break up is as follows:

S. No.	Particulars	Existing Area (Ha)	Proposed Area (Ha)
1	Main Plant	12.70	12.70
2	Coal handling System	15.79	15.79
3	Water System	2.07	2.07
4	Switch Yard	1.67	1.67
5	Internal roads	7.68	7.68
6	Green Belt	26.30	30.35
7	Ash Pond	12.14	12.14
8	Others (Open Space / Truck Parking/Staff quarter, Fly Ash Brick Plant)	12.7043	8.6543
Total Project Area		91.0543	91.0543

Query 2: Revised Budget for Environmental Management Plan (EMP):

Reply: Revised EMP is given below

Description	Proposed Additional Measure	Capital cost, Rs. in crores			Recurring cost, Rs. in crores		
		Existing	Additional cost incurred/ Proposed (For revamping, up gradation & Augmentation)	Total	Existing ECs	Additional	Total
Cost of Air Pollution Control Devices/ System	1. Carry out timely maintenance of the equipment condition. 2.Periodic inspection and survey of ESP for physical health assessment of ESP and take corrective action repair/replacement for enhance ESP performance 3.APH flue gas tem	12.27	13.50	25.77	1.90	0.20	2.10

Description	Proposed Additional Measure	Capital cost, Rs. in crores			Recurring cost, Rs. in crores		
		Existing	Additional cost incurred/ Proposed (For revamping, up gradation & Augmentation)	Total	Existing ECs	Additional	Total
	perature is being regularly monitored to prevent acid corrosion in the ESP ducts, pipelines and hoppers etc. 4. TRP rating of ESP to be maintained through trial charging and field current adjustment and necessary correction during and after AOH to improve and sustain ESP efficiency. 5. The ESP field is enhanced to 7 fields and the bag filter capacity is increased to improve air pollution control efficiency.						
Cost of Water conservation & Pollution Control	1. Installation of New Water Sprinklers at least 80 nos., Water cannon system-01 no, movable water tanker-01 no, 2. Strengthening the RWH system and internal drain network.	3.50	0.95	4.45	0.50	0.20	0.70
Cost of Solid Waste Management	1. Fly Ash Handling & Transportation. 2. Cleaning & replace damage or inefficient filter bags as required. 3. Installation of brick plant (Capacity - 1,00,000 nos./day)	2.50	2.80	5.30	0.50	0.30	0.80

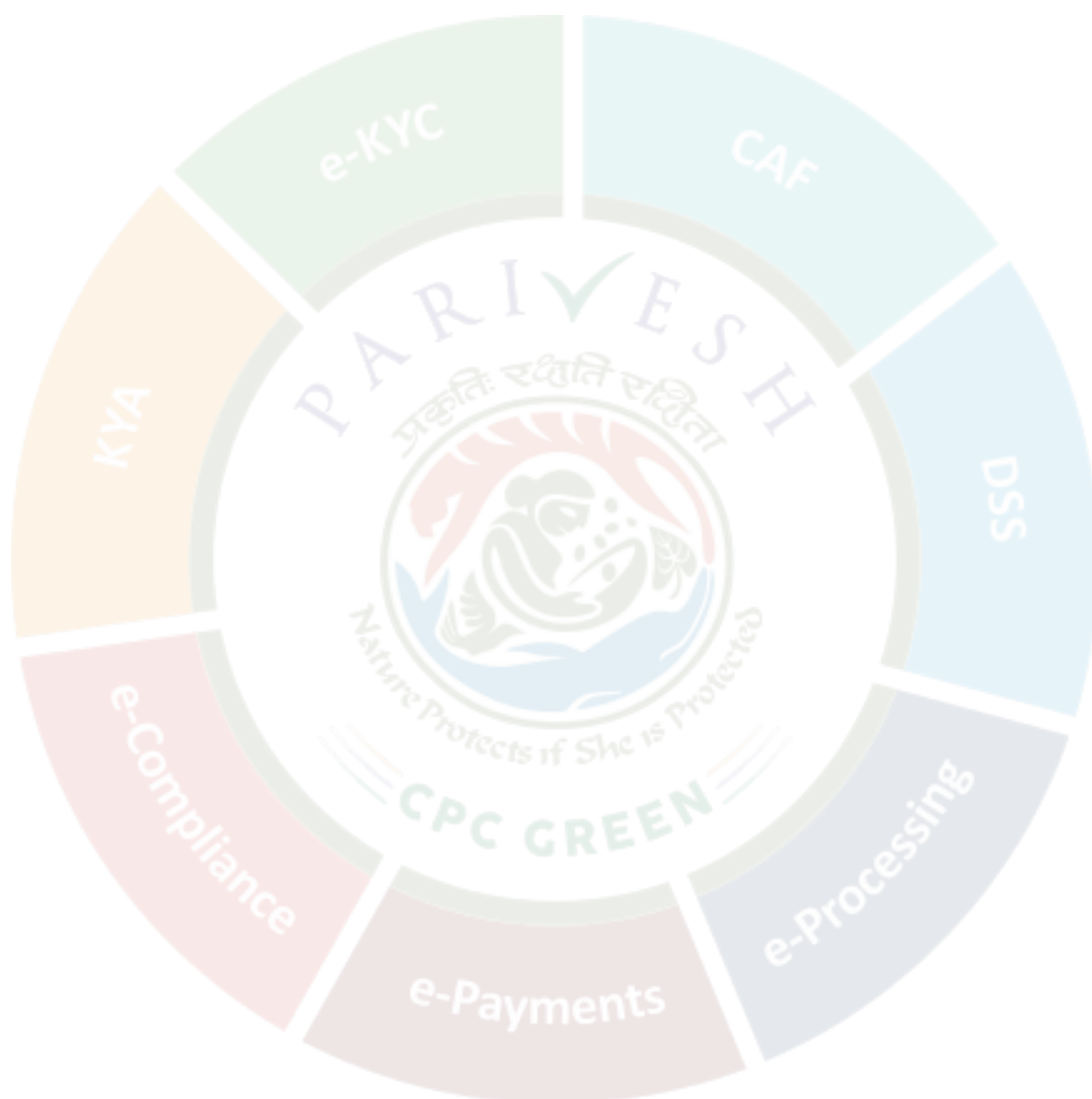
Description	Proposed Additional Measure	Capital cost, Rs. in crores			Recurring cost, Rs. in crores		
		Existing	Additional cost incurred/ Proposed (For revamping, up gradation & Augmentation)	Total	Existing ECs	Additional	Total
Green belt development	1. Increasing the density of plantation inside the plant premises to 2500 trees per hectare with an additional 20,500 plantations (1st Year -10,300 nos. & 2nd year -10,200 nos.). Total plantation on 30.36 hectare of land will be 75,900 nos. with avg. 10 meter width all around the plant boundary and will be achieved by FY. Year 2027-2028. 2. Green belt outside the plant premises will be carried out. In total additional 40,000 nos. of trees will be planted in a span of three years (by FY 2028-2029). The details are as: - In 1st & 2nd Year in nearby area (village-Swaminatham & Ottapidaram in 1st & 2nd year) -10,000 nos. of trees in each Village. - In 2nd & 3rd year in nearby Health Centre (Sillanatham & Pudhiyamputhur)- 2500 nos. of trees in each location. - In 1st, 2nd & 3rd year in nearby Sc	3.00	4.65	7.65	0.30	0.75	1.05

Description	Proposed Additional Measure	Capital cost, Rs. in crores			Recurring cost, Rs. in crores		
		Existing	Additional cost incurred/ Proposed (For revamping, up gradation & Augmentation)	Total	Existing ECs	Additional	Total
	hool (TNDTA Primary School, Rajavinkovil & Panchayt Union Primary School, Melalakshmiapuram & Panchayt Union Primary School, Sillanatham)- 3000 nos. of trees in each location. - In 3rd year along the village road & community hall/ worship place in Pudhiyamputhur village in consultation with local administration -6000 nos. - Under CSR in collaboration with Govt. Agency green belt outside the project boundary with approximately 50,000 plantations to be carried out to improve the regional air quality.						
Noise Reduction Systems & Green energy initiative.	Installing heavy-duty, acoustic blanket, enclosure. 2.Solar power capacity of the plant to be increased to 100 KW by FY 26-27. Capacity will be further increased to 350 KW by FY 28-29. And in future if there is possibility of	1.50	1.50**	3.00	0.10	0.30	0.40

Description	Proposed Additional Measure	Capital cost, Rs. in crores			Recurring cost, Rs. in crores		
		Existing	Additional cost incurred/ Proposed (For revamping, up gradation & Augmentation)	Total	Existing ECs	Additional	Total
	of further capacity in crease the same will be implemented.						
Occupational Health Management	Strengthening emergency medical facility, ambulance services and first aid arrangement.	1.25	0.20	1.45	0.20	0.08	0.28
Risk Mitigation & Safety Plan	In-house fire-fighter truck up gradation and modification of hydrant line system for effective fire emergency management.	1.20	0.40	1.60	0.15	0.08	0.23
Online Monitoring Surveillance System (New AAQMS & CEMS)	New sensor-based AAQM stations installation (03 Nos.)	2.50	1.20	3.70	0.30	0.16	0.46
Implementation of Controlling measures to minimize impacts due to transportation and traffic	Promoting use of EV vehicle inside the plant premises by the Employee/Staff and provide financial benefit to encourage the employees.	1.00	1.00	2.00	0.20	0.07	0.27
Setting in house Environmental Laboratory	New in-house Monitoring systems installation.	0.55	0.15	0.70	0.05	--	0.05
Grand Total		29.27	26.35	55.62	4.20	2.12	6.32
**Costing is only for Solar Power installation.							

3.5.3. Deliberations by the committee in previous meetings

Date of EAC 1 :24/02/2026



Deliberations of EAC 1 :

Observations and deliberation of the EAC

38.4.11: The Committee observed and noted the following:

- i. The instant proposal is for seeking amendment in a EC conditions as per MoEF&CC Notification dated 11/07/2025 for Sulphur dioxide emission standards prescribed in EC letter dated 10.11.2010 accorded for the project- 3 x 150 MW Coal Based Thermal Power Plant at Swaminatham & Ottapidaram Villages, Ottapidaram Taluk, Dist. - Thoothukudi, Tamil Nadu.
- ii. The existing project of M/s Orissa Alloy Steel Private Limited was originally granted Environmental Clearance in favour of M/s Ind-Bharat Thermal Power Limited (IBTPL) for setting up 3 x 150 MW Coal Based Thermal Power Plant at Swaminatham & Ottapidaram Villages, Ottapidaram Taluk, Dist. - Thoothukudi, Tamil Nadu vide letter no SEIAA/TN/EC/1(d)/013/F.No.282/2010 dated 10/11/2010 under EIA, 2006. Subsequently, amendment to the Environmental Clearance was accorded vide letter no. SEIAA/TN/EC/Amendment/F.No.282/2010 on 20.12.2010 for change in composition of fuel and EC transfer was accorded by SEIAA, Tamil Nadu vides EC Identification No. EC24B0601TN5765287T & File No. 11326 on 16.06.2025.
- iii. As per the EC accorded to the project vide letter dated 10.11.2010, the capacity of the project is 3x150MW, while currently the running capacity of the project is 2x150MW as per CTO.
- iv. There is no forest land involved in the project.
- v. As per as per DSS there is PF at distance of 5 Km from project site in NW direction.
- vi. The project is located near SIPCOT Industrial Complex a SPA that is 6 Km away from project boundary in South-East Direction having CEPI score of 66.34.
- vii. During the months of August, September and October 2025 the coal consumption for 2x150 MW is 34509.6 MT, 26382 MT and 33987 MT, respectively.
- viii. The Project Proponent (PP) presented ambient air quality data (PM₁₀, PM_{2.5}, NO_x, SO₂, etc.) for the core and buffer zones. The values for Ambient Air Quality are within the prescribed norms of NAAQMS 2009.
- ix. The mass emission rate of pollutants including PM₁₀, PM_{2.5} NO_x, and SO₂ were estimated 3.88 g/s, 2.33 g/s, 4.78 g/s and 11.04 g/s respectively for Unit 1 and 4.19 g/s, 2.52 g/s, 4.71 g/s and 11.44 g/s respectively for Unit 2.
- x. The stack emission from the Power plant is within the stipulated norms.
- xi. Project proponent has installed a 130 m bi-flue stack, which complies with the MoEF&CC Notification dated August 30, 1990.
- xii. There is mismatch in the data given in Addendum report as the SO₂ emission rate written as 1206.6 kg/hr i.e. 335.16 g/s while in brief writeup the emission rate is given as 11.04 g/s. PP needs to clarify the same.
- xiii. As per the submitted addendum EIA report prepared through QCI/NABET accredited consultant, the predicted maximum Ground Level Concentration (GLCs) using AERMOD View dispersion model from the stack emission as per the envisaged stack height and site-specific meteorological parameters the maximum GLC of SO₂ is 12.973 µg/m³ at 2.2 km distance.
- xiv. During the meeting, PP has shown the Drone video of the project and EAC has observed that there are many gaps within the plantation, EAC asked the PP to fill the gaps by adequate tree plantation.
- xv. PP has informed the EAC that it has plans to increase the current greenbelt area i.e. from 26.31 Ha to 36.43 Ha.
- xvi. EAC observed that the Performance Guarantee (PG) test report of ESP has some discrepancies in its data like temperature, velocity etc., EAC asked the PP to revisit the data of ESP PG test and submit the revised report of the same.

Recommendations of the Committee

38.4.12: In view of the foregoing and after the detailed deliberations, the Committee recommended to defer the instant proposal and sought for following additional data/information:

- i. Project proponent to submit the status of compliance to the EC dated 10/11/2010 with respect to obtaining of clearance under the Wildlife (Protection) Act, 1972.
- ii. Map depicting existence of marine national park/sanctuary and distance of the same from the project site shall be submitted.
- iii. Proponent is requested to submit the detailed of blended coal being fired in the boiler (Quantity of indigenous and imported separately) for last three months
- iv. Mass emission rates for all the parameters from the stack needs to be revisited as the said data is not matching with the stoichiometric calculations data.
- v. PP to submit the action plant for tree plantation for gaps filling as per CPCB norms.

- vi. Performance Guarantee test report of ESP from the third party.
- vii. PP to revisit the EMP in totality and incorporate appropriate pollution control measures in the form of a time bound action plan to address the PM levels in ambient air and PM & NO_x level in stack emissions with physical and financial outlay. Besides, EMP shall explicitly brought out the existing and proposed additional environmental safeguards with physical and financial outlay.
- viii. Comparison of baseline environment status as per the EIA report submitted at the time of grant of EC for the TPP vis a vis present monitored data for a period of last three months .Data shall be analysed for the down-wind and up-wind locations, maximum, average and standard deviations shall be presented. Any major deviations from the baseline shall be explained with scientific justification and the action plan for mitigations measures to be adopted.
- ix. Land use breakup of the project site including ash pond and the environmental sensitive receptors within 10km radius of the power plant shall be submitted.
- x. Details of the sensitive receptors at maximum GLC location and control measures proposed in this regard shall be submitted.
- xi. Proponent to submit the compliance to the conditions prescribed in the notification dated 21/05/2020 regarding use of coal by Thermal Power Plants, without stipulations as regards ash content or distance as the PP is using coal having ash content more than 34%
- xii. Undertaking in a non-judicial stamp paper from the PP to comply with the mitigation measures proposed under revised EMP shall be submitted.
- xiii. Latest six-monthly compliance report submitted to the Regional Office of MoEF&CC.

3.5.4. Deliberations by the EAC in current meetings

Observations and deliberation of the EAC

46.5.14: The Committee observed and noted the following:

Recommendations of the Committee

46.5.15: In view of the foregoing and after the detailed deliberations, the Committee **recommended** the instant proposal for grant of amendment in the EC granted vide letter no SEIAA/TN/EC/1(d)/013/F.No.282/2010 dated 10/11/2010 and its subsequent amendments as detailed below **subject to uploading of written submissions on PARIVESH portal** and stipulation of following additional specific conditions. All other terms and conditions prescribed in EC dated 10/11/2010 and its subsequent amendments shall remain unchanged.

Sl. No.	Condition No.	Details of Conditions as per EC	Recommendation of EAC
1	Part-A: Specific Condition (xvii):	Space provision shall be kept for retrofitting of FGD, if required at a later date.	Agreed. With regard to the said condition, Committee agreed the following: The Project Proponent shall maintain stack of 130 meters height and comply with the notification number GS R 742 (E) dated the 30th August, 1990.

3.5.5. Recommendation of EAC

Recommended (Subject to submission of requisite information/ documents)

3.5.6. Details of Environment Conditions

3.5.6.1. Specific

Additional specific conditions

Project proponent shall implement the protective measure proposed in additional EMP in a time-bound manner in addition to the existing EMP. The budget earmarked for the additional EMP is Rs. 26.35 Cr as capital cost and 2.12 Cr as recurring cost and should be kept in separate accounts and audited annually. The implementation status as per the action plan given below along with the amount spent with documentary proof shall be submitted to the concerned Regional Office along with the six monthly compliance report.

Description	Proposed Additional Measure	Capital cost, Rs. in crores			Recurring cost, Rs. in crores		
		Existing	Additional cost incurred/ Proposed (For revamping, up gradation & Augmentation)	Total	Existing ECs	Additional	Total
1. Cost of Air Pollution Control Devices/ System	1. Carry out timely maintenance of the equipment condition. 2.Periodic inspection and survey of ESP for physical health assessment of ESP and take corrective action repair/replacement for enhance ESP performance 3.APH flue gas temperature is being regularly monitored to prevent acid corrosion in the ESP ducts, pipelines and hoppers etc. 4.TRP rating of ESP to be maintained through trial charging and field current adjustment and necessary correction during and after AOH to improved and sustain ESP efficiency. 5.The ESP field is enhanced to 7 fields and the bag filter capacity is increased to improve air	12.27	13.50	25.77	1.90	0.20	2.10

Description	Proposed Additional Measure	Capital cost, Rs. in crores			Recurring cost, Rs. in crores		
		Existing	Additional cost incurred/ Proposed (For revamping, up gradation & Augmentation)	Total	Existing ECs	Additional	Total
	pollution control efficiency.						
Cost of Water conservation & Pollution Control	1.Installation of New Water Sprinklers at least 80 nos., Water cannon system-01 no, movable water tanker-01 no, 2.Strengthening the RWH system and internal drain network.	3.50	0.95	4.45	0.50	0.20	0.70
Cost of Solid Waste Management System	1.Fly Ash Handling & Transportation. 2.Cleaning & replace damage or inefficient filter bags as required. 3.Installation of brick plant (Capacity - 1,00,000 nos./day)	2.50	2.80	5.30	0.50	0.30	0.80
Green belt development	1.Increasing the density of plantation inside the plant premises to 2500 trees per hectare with additional 20,500 plantations (1 st Year -10,300 nos. & 2 nd year - 10,200 nos.). Total plantation on 30.36 hectare of land will be 75,900 nos. with avg. 10 meter width all around the plant boundary and will be achieved by FY. Year 2027-2028. 2.Green belt outside the plant premises will be carried out. In total additional 40,000 nos. of trees will be planted in a span of three year	3.00	4.65	7.65	0.30	0.75	1.05

Description	Proposed Additional Measure	Capital cost, Rs. in crores			Recurring cost, Rs. in crores		
		Existing	Additional cost incurred/ Proposed (For revamping, up gradation & Augmentation)	Total	Existing ECs	Additional	Total
	(by FY 2028-2029). The details area as: · In 1st & 2nd Year in nearby area (village- Swaminatham & Ottapidaram in 1st & 2nd year) - 10,000 nos. of trees in each Village. · In 2nd & 3rd year in nearby Health Centre (Sillanatham & Pudhiyamputhur)- 2500 nos. of trees in each location. · In 1st , 2nd & 3rd year in nearby School (TNDTA Primary School, Rajavinkovil & Panchayt Union Primary School, Melalakshmipuram & Panchayt Union Primary School, Sillanatham)- 3000 nos. of trees in each location. · In 3rd year along the village road & community hall/ worship place in Pudhiyamputhur village in consultation with local administration - 6000 nos. · Under CSR in collaboration with Govt. Agency green belt outside						

Description	Proposed Additional Measure	Capital cost, Rs. in crores			Recurring cost, Rs. in crores		
		Existing	Additional cost incurred/ Proposed (For revamping, up gradation & Augmentation)	Total	Existing ECs	Additional	Total
	the project boundary with approximately 50,000 plantations to be carried out to improve the regional air quality.						
Noise Reduction Systems & Green energy initiative.	- Installing heavy-duty, acoustic blanket, enclosure. - Solar power capacity of the plant to be increased to 100 KW by FY 26-27. Capacity will be further increased to 350 KW by FY 28-29. And in future if there is possibility of further capacity increase the same will be implemented.	1.50	1.50**	3.00	0.10	0.30	0.40
Occupational Health Management	Strengthening emergency medical facility, ambulance services and first aid arrangement.	1.25	0.20	1.45	0.20	0.08	0.28
Risk Mitigation & Safety Plan	In-house fire-fighter truck up gradation and modification of hydrant line system for effective fire emergency management.	1.20	0.40	1.60	0.15	0.08	0.23
Online Monitoring Surveillance System (New AAQMS & CEMS)	New sensor-based AAQM stations installation (03 Nos.)	2.50	1.20	3.70	0.30	0.16	0.46

	Description	Proposed Additional Measure	Capital cost, Rs. in crores			Recurring cost, Rs. in crores		
			Existing	Additional cost incurred/ Proposed (For revamping, up gradation & Augmentation)	Total	Existing ECs	Additional	Total
	Implementation of Controlling measures to minimize impacts due to transportation and traffic	Promoting use of EV vehicle inside the plant premises by the Employee/Staff and provide financial benefit to encourage the employees.	1.00	1.00	2.00	0.20	0.07	0.27
	Setting in house Environmental Laboratory	New in-house Monitoring systems install.	0.55	0.15	0.70	0.05	--	0.05
	Grand Total		29.27	26.35	55.62	4.20	2.12	6.32
	**Costing is only for Solar Power installation.							
2.	As committed in the additional EMP, in addition to the strengthening the green belt at TPP site, project proponent shall plant 50,000 saplings of native and fruit bearing species of not less than 2 meter height in and around the vicinity of TPP, nearby schools, any government land, transportation road side or any other suitable land within 2 years from the date of grant of amendment in EC. For this extra provision of the budget should be incorporated.							
3.	Project proponent shall monitor sulphate in particulate matters and Ammonia in ambient air in addition to the regular environmental monitoring parameters.							
4.	Project Proponent shall enhance the ESP field to 7 fields and the bag filter capacity is to be increased to improve air pollution control efficiency as committed.							
5.	Project Proponent shall install new water sprinklers at least 80 nos., Water cannon system-01 no. and movable water tanker-01 no as committed.							
6.	Project Proponent shall install brick plant of Capacity -1,00,000 nos./day as committed.							
7.	Project Proponent shall increase the density of plantation inside the plant premises to 2500 trees per hectare with additional 20,500 plantations and under CER/CSR green belt to be developed outside the project boundary with approximately 50,000 plantations to be carried out to improve the regional air quality as committed.							
8.	Project Proponent shall increase the Solar power capacity to 100 KW by FY 26-27 and capacity will be further increased to 350 KW by FY 28-29 as committed.							
9.	Project Proponent shall install 3 nos. of New sensor-based CAAQMS as committed.							

3.6. Agenda Item No 6:

3.6.1. Details of the proposal

Amendment in Environmental Clearance for seeking review of applicability of Sulphur dioxide standards and Exemption from Installation of FGD as per MoEF&CC Notification dated 11.07.2025 for 2×600 MW Anpara Thermal Power Plant at Village Anpara, District Sonbhadra, Uttar Pradesh. by MEIL ANPARA ENERGY LIMITED located at SONBHADRA,UTTAR PRADESH			
Proposal For		Amendment in EC	
Proposal No	File No	Submission Date	Activity Sub-Activity (Schedule Item)
IA/UP/THE/565006/2026	J- 13011/45/2007-IA-II (T)	10/01/2026	Thermal Power Plants Coal/Lignite based plants (1(d))

3.6.2. Project Salient Features

Agenda item no. 46.6

46.6: 2×600 MW Anpara Thermal Power Plant by M/s. MEIL Anpara Energy Limited located at village Anpara, District Sonbhadra, Uttar Pradesh – **Amendment in Environment Clearance regarding review of Sulphur dioxide emission standards for Category B TPP as per MoEF&CC Notification dated 11/07/2025 – regarding.**

[Proposal No: IA/UP/THE/565006/2026; F.No. J- 13011/45/2007-IA-II (T)]

46.6.1: M/s MEIL Anpara Energy Limited has made online application vide proposal no. IA/UP/THE/565006/2026 dated 10.01.2026 along with Form IV and EIA Addendum report for seeking amendment in the Environmental Clearance accorded by the Ministry vide letter no. J-13011/45/2007-IA-II (T) dated 26.11.2007 for the above-mentioned project with respect to Sulphur dioxide emission standards as per MoEF&CC Notification dated 11/07/2025 under the provisions of the EIA Notification, 2006.

Name of the EIA consultant: M/s Gaurang Environmental Solutions Pvt. Ltd. [S. No. 110, List of ACOs with their Certificate No. NABET/EIA /23-26/RA 0338 dated 16.07.2024 valid upto 7.12.2026].

Details of the proposal, as ascertained from the proposal documents and as revealed from the discussions held during the meeting are given as under:

46.6.2: The existing project of M/s MEIL Anpara Energy Limited was originally granted Environmental Clearance in favour of M/s. Lanco Anpara Private Limited for setting up 2x600 MW Anpara Thermal Power Plant at Village Anpara, District Sonbhadra, Uttar Pradesh vide letter no J-13011/45/2007-IA-II (T) dated 26.11.2007 under EIA, 2006. Subsequently, amendment to the EC was accorded on 31.07.2008. EC was transferred from “Lanco Anpara Private Limited” to “MEIL Anpara Energy Limited” vide letter no. J-13011/45/2007-IA-II(T) dated 13.01.2025.

46.6.3: Environmental site settings

S. No.	Particulars	Details	Remarks	
1.	Total land	112.005 Ha [Govt.: 112.005 Ha]	Land use: Industrial	

2.	Land use break up	<table><tr><th>Facilities</th><th>Existing Area (in Hectares)</th><th>Proposed Area (in Hectares)</th><th>Total Area (In Hectares)</th></tr><tr><td>Main Plant</td><td>12.442</td><td>0</td><td>12.442</td></tr><tr><td>Coal Handling System</td><td>29.140</td><td>0</td><td>29.140</td></tr><tr><td>Water System</td><td>5.386</td><td>0</td><td>5.386</td></tr><tr><td>Switch Yard</td><td>14.021</td><td>0</td><td>14.021</td></tr><tr><td>Green belt</td><td>37</td><td>(+)1.5</td><td>38.5</td></tr><tr><td>Roads</td><td>4.435</td><td>0</td><td>4.435</td></tr><tr><td>Ash pond</td><td>0</td><td>0</td><td>0</td></tr><tr><td>Railway Siding</td><td>2.275</td><td>0</td><td>2.275</td></tr><tr><td>Water supply pipeline</td><td>0.114</td><td>0</td><td>0.114</td></tr><tr><td>Ash transport pipeline</td><td>0.3</td><td>0</td><td>0.3</td></tr><tr><td>Others (Space for FGD, Other Utilities)</td><td>6.892</td><td>(-)1.5</td><td>5.392</td></tr><tr><td>Total</td><td>112.005 Ha</td><td>0</td><td>112.005 Ha</td></tr></table>	Facilities	Existing Area (in Hectares)	Proposed Area (in Hectares)	Total Area (In Hectares)	Main Plant	12.442	0	12.442	Coal Handling System	29.140	0	29.140	Water System	5.386	0	5.386	Switch Yard	14.021	0	14.021	Green belt	37	(+)1.5	38.5	Roads	4.435	0	4.435	Ash pond	0	0	0	Railway Siding	2.275	0	2.275	Water supply pipeline	0.114	0	0.114	Ash transport pipeline	0.3	0	0.3	Others (Space for FGD, Other Utilities)	6.892	(-)1.5	5.392	Total	112.005 Ha	0	112.005 Ha		
Facilities	Existing Area (in Hectares)	Proposed Area (in Hectares)	Total Area (In Hectares)																																																					
Main Plant	12.442	0	12.442																																																					
Coal Handling System	29.140	0	29.140																																																					
Water System	5.386	0	5.386																																																					
Switch Yard	14.021	0	14.021																																																					
Green belt	37	(+)1.5	38.5																																																					
Roads	4.435	0	4.435																																																					
Ash pond	0	0	0																																																					
Railway Siding	2.275	0	2.275																																																					
Water supply pipeline	0.114	0	0.114																																																					
Ash transport pipeline	0.3	0	0.3																																																					
Others (Space for FGD, Other Utilities)	6.892	(-)1.5	5.392																																																					
Total	112.005 Ha	0	112.005 Ha																																																					
3.	Land acquisition details as per MoE F&CC O. M, dated 07/10/2014 & 19/02/2025	The land is already under the possession of the company.	112.005 Ha Lease Deed executed between the Uttar Pradesh Rajya Vidyut Utpadan Nigam Limited (UPRVUNL) and Lanc o Anpara Power Private Limited dated 22.11.2007.																																																					
4.	Existence of habitation & involvement of R&R, if any.	Project site: No habitation within project site. Study Area: List of villages within 5 km of project site are given as under: <table><tr><th>S. No</th><th>Habitation</th><th>Distance *(Km)</th><th>Direction</th></tr><tr><td>1.</td><td>Anpara</td><td>1.15</td><td>WNW</td></tr></table>	S. No	Habitation	Distance *(Km)	Direction	1.	Anpara	1.15	WNW	Status of R&R - Not applicable as R&R not involved.																																													
S. No	Habitation	Distance *(Km)	Direction																																																					
1.	Anpara	1.15	WNW																																																					

	a		
2.	D ib ul g a nj	1. 25	N E
3.	M u ri s e m ar	1. 50	N
4.	K a k ar i	2. 00	S W
5.	R e n u s a g ar	2. 2	S S W
6.	K ar a hi y a	2. 50	E N E
7.	G ar b a n d h a	2. 6	S W
8.	L o d h ar a	3. 50	N N E
9.	M a n ra h w a	4. 60	S S W
1	K	5.	N

		<table><tr><td>0.</td><td>ul d o m ar i</td><td>3</td><td>E</td></tr></table>	0.	ul d o m ar i	3	E										
0.	ul d o m ar i	3	E													
5.	Existence of school and hospitals if any.	A. School Project site: None Study area: <table><tr><th>S. No.</th><th></th><th>Distance (K m)</th><th>Direction</th></tr><tr><td>1.</td><td>Govt. Primary School, Dibilganj</td><td></td><td>NE</td></tr><tr><td>2.</td><td>Aditya Birla Public School, R</td><td>1.18</td><td>S</td></tr></table>	S. No.		Distance (K m)	Direction	1.	Govt. Primary School, Dibilganj		NE	2.	Aditya Birla Public School, R	1.18	S		
S. No.		Distance (K m)	Direction													
1.	Govt. Primary School, Dibilganj		NE													
2.	Aditya Birla Public School, R	1.18	S													

		e n u s a g a r		
	3.	G o v e r n m e n t P r i m a r y S c h o o l , K u l d o m a r i	2. 1 5	N E
	4.	G o v t M i d d l e S c h o o l , G a r b a n d h	2. 3 4	S

5.	a IT I C ol le g e, A n p ar a	2. 7	S W
6.	G o v e r n m e n t m id d l e s c h o o l, K o h r o u l	7. 5 0	S S W
7.	G o v e r n m e n t H ig h s c h	9. 0 0	W N W

o		
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B. Hospitals

Project site: None

Study area:

S.No.	Hospital	Distance(Km)	Direction
1.	Government Hospital, Kuldomari	0.10	N
2.	Renusagar Health Centre, Renusagar	1.45	S
3.	Rural Development Hospital Hindalco, Renusagar	1.75	S

6.

Latitude and Longitude of all corners of the project site.

A. Plant site

Point	Latitude	Longitude
1	24°12'30.84"N	82°47'33.02"E
2	24°11'31.66"N	82°48'14.3"E
3	24°12'23.45"N	82°47'58.56"E
4	24°12'23.45"N	82°47'58.56"E

			4° 1 2' 2 3. 4 6" N	48' 9.4 0"E		
		5	2 4° 1 2' 9. 5 7" N	82° 48' 9.3 5"E		
		6	2 4° 1 2' 1 0. 2 8" N	82° 48' 21. 26" E		
		7	2 4° 1 2' 1. 9 8" N	82° 48' 29. 19" E		
		8	2 4° 1 1' 5 6. 5 3" N	82° 48' 29. 42" E		
		9	2 4° 1 1' 5 5. 5 4" N	82° 48' 15. 65" E		
		10	2 4° 1 2'	82° 48' 13. 42"		

			7. 9 8" N	E		
		1 1	2 4° 1 2' 6. 7 8" N	82° 47' 40. 86" E		
		1 2	2 4° 1 1' 5 3. 7 7" N	82° 47' 42. 41" E		
		1 3	2 4° 1 1' 3 5. 7 8" N	82° 47' 51. 69" E		
		1 4	2 4° 1 1' 4 5. 1 6" N	82° 47' 35. 13" E		
		1 5	2 4° 1 1' 4 2. 2 7" N	82° 46' 46. 96" E		
		1 6	2 4° 1 1' 5 0. 1	82° 47' 32. 29" E		

	0" N	
1 7	2 4° 1 1' 5 8. 1 1" N	82° 47' 39. 75" E
1 8	2 4° 1 1' 5 7. 5 5" N	82° 47' 24. 89" E
1 9	2 4° 1 2' 1. 7 2" N	82° 47' 24. 49" E
2 0	2 4° 1 2' 5. 5 6" N	82° 47' 34. 91" E

B. Ash pond

Point	Latitude	Longitude
1	24°12'16.41"N	82°53'29.54"E
2	24°12'13.76"N	82°53'41.53"E
3	24°12'21.23"N	82°55'9.78"E
4	24°12'16.20"N	82°55'23.23"E
5	24°12'13.05"N	82°55'23.29"E
6	24°12'14.67"N	82°55'7.87"E
7	24°12'10.21"N	82°54'57.85"E
8	24°12'7.55"N	82°55'8.10"E
9	24°12'4.11"N	82°55'0.31"E
10	24°11'51.64"N	82°54'55.50"E
11	24°11'38.41"N	82°54'39.58"E
12	24°11'34.59"N	82°54'24.38"E
13	24°11'25.81"N	82°54'19.58"E
14	24°11'23.50"N	82°54'37.51"E
15	24°11'14.19"N	82°54'16.99"E
16	24°11'26.43"N	82°54'5.20"E

		<table><tr><td>17</td><td>24°11'30.71"N</td><td>82°53'34.50"E</td></tr><tr><td>18</td><td>24°11'41.14"N</td><td>82°53'16.21"E</td></tr><tr><td>19</td><td>24°11'47.83"N</td><td>82°53'11.64"E</td></tr><tr><td>20</td><td>24°11'44.95"N</td><td>82°53'5.75"E</td></tr><tr><td>21</td><td>24°11'45.15"N</td><td>82°52'52.93"E</td></tr><tr><td>22</td><td>24°11'52.35"N</td><td>82°52'52.93"E</td></tr><tr><td>23</td><td>24°12'0.37"N</td><td>82°52'53.76"E</td></tr></table>	17	24°11'30.71"N	82°53'34.50"E	18	24°11'41.14"N	82°53'16.21"E	19	24°11'47.83"N	82°53'11.64"E	20	24°11'44.95"N	82°53'5.75"E	21	24°11'45.15"N	82°52'52.93"E	22	24°11'52.35"N	82°52'52.93"E	23	24°12'0.37"N	82°52'53.76"E																													
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7.	Elevation of the project site	275 m above mean sea level(Average)																																																		
8.	Involvement of Forest land if any.	Status of Forest Clearance: Stage II FC obtained on 07.03.2007 Area of the forest land involved: 3 Hectare																																																		
9.	Water body (Rivers, Lakes, Pond, Nala, Natural Drainage, Canal etc.) exists within the project site as well as study area	Project site: None Study area: <table><tr><th>S. No.</th><th>Water body</th><th>Distance (Km)</th><th>Direction</th></tr><tr><td>1.</td><td>Mamuar Nala</td><td>0.60</td><td>NE</td></tr><tr><td>2.</td><td>Govind Ballabh Pant Sagar</td><td>1.4</td><td>SSE</td></tr><tr><td>3.</td><td>Deohar Nadi</td><td>1.8</td><td>W</td></tr><tr><td>4.</td><td>Ghaghiya Nala</td><td>1.8</td><td>ENE</td></tr><tr><td>5.</td><td>Hathijariya Nadi</td><td>4.5</td><td>SSW</td></tr><tr><td>6.</td><td>Tippajhariya Nala</td><td>5.0</td><td>WSW</td></tr><tr><td>7.</td><td>Baran Nala</td><td>8.8</td><td>ENE</td></tr><tr><td>8.</td><td>Dhurwahiya Nala</td><td>8.9</td><td>N</td></tr><tr><td>9.</td><td>Murcha Nala</td><td>9.2</td><td>ENE</td></tr><tr><td>10.</td><td>Gaghawa Nadi</td><td>9.4</td><td>WNW</td></tr><tr><td>11.</td><td>Bijul Nadi</td><td>9.6</td><td>NW</td></tr></table>	S. No.	Water body	Distance (Km)	Direction	1.	Mamuar Nala	0.60	NE	2.	Govind Ballabh Pant Sagar	1.4	SSE	3.	Deohar Nadi	1.8	W	4.	Ghaghiya Nala	1.8	ENE	5.	Hathijariya Nadi	4.5	SSW	6.	Tippajhariya Nala	5.0	WSW	7.	Baran Nala	8.8	ENE	8.	Dhurwahiya Nala	8.9	N	9.	Murcha Nala	9.2	ENE	10.	Gaghawa Nadi	9.4	WNW	11.	Bijul Nadi	9.6	NW		
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10.	Existence of ESZ/ ESA/ national park/ wildlife sanctuary/ biosphere reserve/ tiger reserve/ elephant reserve etc. if any within the study area	Study area Name of the ESZ/ESA: None within study area Status of Notification: Not Applicable Distance of project from ESZ/ESA: Not Applicable Authenticated map of ESZ projecting distance of ESZ from project site: Not Applicable Status of NBWL approval: Not Applicable List of Reserved and Protected forests: <table><tr><th>S. No.</th><th>Particulars</th><th>Distance(K m)</th><th>Direction</th></tr><tr><td>1</td><td>Barpall R. F.</td><td>2.2</td><td>SW</td></tr><tr><td>2</td><td>Kudri P.F.</td><td>6.5</td><td>NNE</td></tr><tr><td>3</td><td>Tuman P.F.</td><td>7.3</td><td>SE</td></tr><tr><td>4</td><td>Bathapara R. F.</td><td>7.6</td><td>ESE</td></tr><tr><td>5</td><td>Pondibahar P. F.</td><td>7.8</td><td>NNE</td></tr></table>	S. No.	Particulars	Distance(K m)	Direction	1	Barpall R. F.	2.2	SW	2	Kudri P.F.	6.5	NNE	3	Tuman P.F.	7.3	SE	4	Bathapara R. F.	7.6	ESE	5	Pondibahar P. F.	7.8	NNE																										
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5	Pondibahar P. F.	7.8	NNE																																																	

		6	Ramapara P. F.	9.5	SE		
1.1.	Archaeological sites monuments/ historical temples etc.	There are no Archaeological sites present within 10 km radius of project site.					
1.2.	Facility envisaged in CRZ area (Only for coastal power plant)	<u>Name of the facility in CRZ area</u> – None within study area <u>Recommendations of CZMA</u> – Not Applicable <u>Status of CRZ clearance</u> – Not Applicable					
1.3.	Involvement of Critically Polluted Area/ Severely Polluted area as per 2018 CEPI score.	<u>Involvement of CPA/SPA</u> : Not Applicable <u>Proximity to CPA/SPA</u> : The nearest SPA is Singrauli industrial area which is 6.2 km from project boundary in W Direction.				Proposed additional environmental safeguards as per MoEF&CC OM dated 31/10/2019: Not Applicable	

46.6.4: The implementation status of the existing EC dated 26/11/2007 is as follows:

S. No.	Configuration	Capacity (MW)	Date of accord of EC	Date of commissioning of units	Production as per CTO	Applicable emission norms as per notification dated 7/12/2015 & its amendment
01.	2 x 600 MW (Unit -1 & 2)	1200 MW	26.11.2007	Units 1 : 10.12.2011 Units 2 : 18.01.2012	2 x 600 MW	Particulate Matter : 50 mg/Nm ³ Oxides of Nitrogen (NO _x): 450 mg/Nm ³

46.6.5: Details of Power Plant: Total land requirement for the TPP is 112.005 ha [Govt. Land 109.005 ha & Forest land:3 Ha]. Stage II FC obtained on 07.03.2007. The nearest SPA is Singrauli industrial area, which is 6.2 km from project boundary in W Direction. CEPI Score for Singrauli industrial area is 62.59. There are no national parks, Biosphere Reserves, Eco-sensitive zone, Tiger/Elephant Reserves and Wild Life Corridors within 10 km distance from the project site as ascertained from DSS.

Parameter	Details as per EC	Status as on June 2026	Remarks
Total Land Area (Ha)	112.005	112.005 [Govt. Land 109.005 ha & For	No acquisition of additional Land.

		est land:3 Ha]	
Involvement of Forest Land (Ha)	3 Ha	Stage II FC obtained vide letter dated 07.03.2007	FC available
NBWL Clearance	NA	NA	NA
CPA/SPA	NA	Nearest SPA is Singrauli industrial area(CEPI Score- 62.59)	Located at 6.2 km from project boundary in W Direction

46.6.6: Background for amendment sought by the proponent:

46.6.7: The summary of the information submitted by the proponent in the addendum EIA report are as follows:

i. Average coal consumption and the average Sulphur content of coal is being used in the TPP for last three months period (Nov 25- Jan26).

Month	Coal consumption in MT Unit wise		
	Unit 1	Unit 2	Total(MT)
Nov-25	46,259.79	2,00,965	2,47,224.79
Dec-25	1,11,046.28	2,49,262.00	3,60,308.28
Jan-26	2,46,365.5	2,22,398.1	4,68,763.6

ii. Minimum, maximum and 98th percentile levels of ambient PM₁₀, PM_{2.5}, NO_x, and SO₂ from secondary monitored AAQ data for last three months period.

S. No.	Name of location	Parameters being monitored	Remarks
CAAQMS Locations			
1	MEIL Township	PM ₁₀ , PM _{2.5} , SO ₂ , NO ₂	Core zone

Summary of AAQ Result for Nov'2025 to Jan'2026:

S. No.	Name of location	Parameter	Concentration in µg/m ³		
			Max	Min	Average
1.	MEIL Township	PM ₁₀	44.83	44.73	44.78
		PM _{2.5}	18.83	18.73	18.78
		SO ₂	10.03	9.94	9.98
		NO _x	23.37	23.31	23.34

iii. Average stack emissions for PM, NO_x, and SO₂ parameters for last three months, (Nov'2025 to Jan'2026) flue gas concentration in mg/Nm³

S. N o.	Name of stack	Parameter	Concentration in (mg/Nm ³) Period		
			Max	Min	Avg.
1	Unit - 1	PM	57.68	7.84	26.47
		SO ₂	846.37	596.58	739.25
		NO ₂	242.05	116.13	175.17
2	Unit -2	PM	49.09	13.32	30.96
		SO ₂	807.11	602.66	716.92
		NO ₂	296.11	135.88	211.08

Mass emission rate of pollutants in gram per second

S. No.	Parameters	Units	Unit1 (1x600)	Unit 2 (1x600)
1	Stack Height	M	275 (Bi Flue)	
2	No. of flue	No.	1	1
3	Top diameter of flue	m	6.8	6.8
4	Flue gas velocity in each flue	m/s	27.12	27.57
5	Flue gas temperature	°K	363	363
6	Volumetric Flow rate of gas in each flue	Nm ³ /s	984	1000
7	Emission Rates			
A	PM ₁₀	g/s	34.02	31.83
B	PM _{2.5}	g/s	8.5	7.96
C	SO ₂	g/s	841.5	863
D	NO _x	g/s	353.5	359

iv. Current stack height in the TPP and compliance with the MoEF&CC Notification of August 30, 1990 (or) June 28, 2018.

The Company has already constructed 275 m high Bi-flue stack before commissioning. The TPP has already complied with the stack height (275 meters) in terms of the notification number GSR 742 (E) dated 30th August'1990.

v. Assessment of maximum Ground Level Concentration (GLCs) of pollutants from the stack emission as per the envisaged stack height (as applicable) based on available site-specific meteorological parameters. Details of the model used, input data used for modelling and

output data of the 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. GLC of pollutants at sampling location:

Receptor Location	GLC at Monitoring Location ($\mu\text{g}/\text{m}^3$)			
	PM ₁₀	PM _{2.5}	SO ₂	NO _x
Track Hopper	0.226	0.056	7.07	2.45
Kakri	0.229	0.057	4.71	2.48
Diblujanj	0.25	0.06	6.31	2.76

vi. Environment Management Plan (EMP):

Details	Information provided by Proponent
Environment Management Plan (EMP) covering the following: a. Impact of ground level concentration on the environment if any and corresponding mitigation measures to be adopted. b. Additional mitigation measures proposed if any.	a. Based on coal quality, stack emission characteristics, ambient air quality observations, and model predictions, the Air Quality Impact Prediction (AQIP) study conclusively demonstrates that: - SO₂ contribution from MEIL Anpara C TPP is minimal, owing to the very low sulphur coal (0.29-0.38%), & 275 m high Bi-fuel stack. - AQIP reflects that even without FGD, the plant operations do not pose any ambient air quality risk related to SO₂ & it remains within NAAQS. b. Mitigation measures in place at MEIL Anpara C TPP are :- 275 m height chimney for dispersion of pollutants. - Continuous Emission Monitoring system (CEMS) installed and connected with CPCB. - Low Nox burners and over fire air dampers installed to suppress/control fugitive dust. 3 Nos. of CAAQMS is installed. - Online Effluent Quality monitoring system installed in ETP connected with CPCB. - Coal dust is being controlled through wind breaking wall and suppressed by water spraying arrangements at suitable locations such as transfer points, loading and unloading stations, coal stock piles etc. - To suppress fugitive dust, while loading the ash into the bulkers from fly ash silos, the fly ash is conditioned with water spray. Covered bulkers are used to prevent flying of fine ash during transportation. - A total greenbelt area of 37.0 Ha, constituting approximately 33% of the total plot area, has already been developed within the project premises by MEIL Anpara - C TPP. - MEIL undertakes to adhere to comply all the conditions stipulated in the EC as well as Consent and compliance reports are being submitted on regular basis to the MoEF&CC/CPCB/UPPCB. c. Additionally following measures are proposed : - Replacement of bag filters at a fixed interval of every 3-4 years. - ESP performance. Periodic inspection and calibration of OFA dampers for uniform air distribution. - Execution of MoU with cement manufacturing companies for 100% utilization of fly ash in compliance with MoEF&CC Fly Ash Notification dated 31.12.2021 and subsequent amendments - Additional area of 1.5 ha, presently earmarked for FGD installation is

	proposed to be covered under plantation & greenbelt making total greenbelt area within premises as 38.5 ha (34.37 % of total plot area). - Plantation activities within the plant premises are also being intensified, including in areas such as the Coal Handling Plant (CHP), AWRS, and other suitable locations, to further strengthen the greenbelt and enhance overall environmental quality. - Enhancement of green cover in nearby areas of MEIL Anpara C TPP in consultation with Forest Department using native species. - Installation of Solar Panel – 500 KW. - Deployment of Electric Vehicles. - Avenue plantation along the transportation route of ash. - Fixed sprinkler network with mist nozzles along the transportation route of ash.
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Air Pollution & Fugitive Emission Control Systems

Emission Source / Area	Control System / Measure Implemented
Particulate Matter (PM)	- Hybrid Electrostatic Precipitators (ESP + Bag Filters) installed in Unit-1 & Unit-2 275 m high stack for effective dispersion
Nitrogen Oxides (NOx)	- Low-NOx burners - Over-Fire Air (OFA) dampers in steam generators
Coal Transportation	Coal is transported through Rail-based MGR system
Coal Handling & Storage	- Water spraying at transfer points, loading/unloading stations & stockpiles - Dust extraction systems at crusher houses & bunker transfer towers - Water sprinklers in coal yard during stacking & reclaiming.
Coal Bunkers	- Bunker ventilation system for dust evacuation - Collected dust recycled to conveyor/bunkers
Fly Ash Handling	- Pneumatic closed-pipeline fly ash evacuation from ESP hoppers - Bag filters installed on top of fly ash silos
Fly Ash Loading & Transport	- Fly ash conditioned with water spray during loading - Covered bulkers used to prevent airborne dispersion
Fly Ash Disposal	- Primarily supplied to cement industries by road - Wet slurry disposal system during emergency conditions
Fly Ash Utilization	- Continuous efforts for 100% fly ash utilization in compliance with MoEF&CC Notification dated 31.12.2021. - Annual audit. - Advertisement for bidding

Additional EMP cost as proposed by PP: [EC: Existing Capital; AC: Additional Cost; ER: Existing Recurring; AR: Additional Recurring; TR: Total Recurring]

Description	Measure	EC Cost (Rs Cr)	AC Proposed (Rs Cr)	TC Cost (Rs Cr)	ER Cost (Rs Cr)	AR Cost (Rs Cr)	TR Cost (Rs Cr)
Cost of Air Pollution Control Devices/System	Existing - Hybrid Electrostatic Precipitators (ESP + Bag Filters) installed in Unit-1 & Unit-2. 275 m high stack for effective dispersion. - Low-NOx burners - Over-Fire Air (OFA) dampers in steam generators - Coal is transported through Rail-based MGR system - Water spraying at transfer points, loading/unloading stations & stockpiles - Dust extraction systems at crusher houses & bunker transfer towers - Water sprinklers in coal yard during stacking & reclaiming - Bunker ventilation system for dust evacuation - Collected dust recycled to conveyor/bunkers Proposed - Replacement of conventional bags with PTFE coated bag filters for improved collection efficiency with regular maintenance and replacement of the filters at regular intervals - Conduct ESP performance tests at regular intervals - Carry out timely maintenance based on test findings and equipment condition. - CFD of ESP inlet & outlet duct and installation of guide vane. - Periodic inspection and survey of ESP internals in every AOH for physical health assessment of ESP internals like emitting electrode, collecting electrode, and take corrective action repair/replacement for improving ESP performance. - Water cleaning of ESP internal, trial charging and adjusting field current and correction during and after AOH to improve and sustain ESP performance. - High-Pressure Dust Suppression / Fogging System (Automated operation linked with belt movement). - Fixed and motorized long distance for	271.17	10.88	282.05	16.33	0.752	17.082

Description	Measure	EC Cost (Rs Cr)	AC Proposed (Rs Cr)	TC Cost (Rs Cr)	ER Cost (Rs Cr)	AR Cost (Rs Cr)	TR Cost (Rs Cr)
	- g cannon in coal piles. - Strengthen water-mist, fogging, and DS systems at transfer points and junction houses. - Conduct periodic nozzle inspection and health checks. - Installation of efficient 4-way fogger system for pre-wetting of rakes at Track Hopper - Paved & Black-Topped Roads (ensuring road health) - Carry out regular water sprinkling on internal roads. - Enforce vehicle speed limits to minimize road dust. - Mechanical Road Sweeper						
Cost of Solid Waste Management System	Existing - Pneumatic closed-pipeline fly ash evacuation from ESP hoppers - Bag filters installed on top of fly ash silos - Fly ash conditioned with water spray during loading - Covered bulkers used to prevent airborne dispersion - Primarily supplied to cement industries by road - Wet slurry disposal system during emergency conditions - Continuous efforts for 100% fly ash utilization in compliance with MoEF&C Notification dated 31.12.2021. - Annual audit. - Advertisement for bidding Proposed - Fixed sprinkler network with mist nozzles along the transportation route of ash. - Installation of Bulker Wheel washing point - Installation of automatic vent telescopic spout below silo to control fugitive emission. - Wet Fog Dust Suppression Systems installation - Inspect the healthiness of bag filters in silos regularly. - Cleaning & replace damaged or inefficient filter bags as required.	180.6	0.92	181.52	29.028	0.16	29.188

Description	Measure	EC Cost (Rs Cr)	AC Proposed (Rs Cr)	TC Cost (Rs Cr)	ER Cost (Rs Cr)	AR Cost (Rs Cr)	TR Cost (Rs Cr)
Green Belt Development	Existing: Proposed · Avenue plantation along the transportation route of ash (8000 nos.) · Additional plantation around CHP (2000 trees) · Additional Plantation around AWRS (1000 trees) · Additional Plantation around Workshop and Cooling Tower (7000 trees) · Additional Plantation around Area designated for FGD (3750 trees) · Additional plantation outside plant through forest dept. (25000 Nos.)	30.0	3.7	33.7	0.70	0.202	0.902
Green Energy Initiative	Proposed · Installation of Solar Panel – 2 MW · Deployment of Electric Vehicles · Installation of Rain Water Harvesting units 02 Nos.	--	8.68	8.68	--	1.44	1.44
Grand Total		481.77	24.18	505.95	46.058	2.554	48.612

The summary of the Environmental Management Plan expenditure is as follows:

S.No.	Component	Capital cost (In Rs. Crore)		Recurring cost (In Rs. Cr per annum)	
		Existing	Proposed	Existing	Proposed
1.	Cost of Air Pollution Control Devices/System	271.17	10.88	16.33	0.752
2.	Cost of Solid Waste Management System	180.6	0.92	29.028	0.16
3.	Green Belt Development	30.0	3.7	0.70	0.202
4.	Green Energy Initiative	--	8.68	--	1.44
	Total	481.77	24.18	46.058	2.554

46.6.8: Amendment sought: The details of the condition for which amendment is sought and justification for the same is as follows:

S. No.	Condition as per EC dated 26.11.2007	Amendment Sought	Justification & Request for Amendment
1	Condition no vi stated that "space provision shall be made for installation of FGD of requisite efficiency of SO ₂ removal, if required at a later stage"	MEIL is seeking exemption for installation of FGD under the rule no. 2 i (c), iii, A of MoEF&CC notification dated 11.07.2025 and review of the applicability of Sulphur dioxide standards.	- The Units are operational since 2011 (Unit-1) & 2012 (Unit-2) with 275m height of RCC Chimney (bi-flue). This complies with the stack height criteria notified vide notification no.- GSR 742 (E) dated the 30th August'1990. - Domestic Coal is being used while maintaining Sulphur contents <0.5%. - Regular environmental parameters monitoring & analysis are being carried out in and around the TPP through NABL Accredited and CPCB recognized Laboratory. - The GLC values were assessed and reported in the EIA (2007). Since then, no addition of units or expansion of the project has been done, and the emission sources remain unchanged. - Accordingly, the incremental GLC presented in the EIA continues to represent the project's contribution, and current ambient air quality reflects this without any increase, in compliance with applicable standards. - The assessment of ambient air quality data w.r.t SO₂ concentrations in the region remains well within NAAQS and hence it is requested that MEIL Anpara C TPP may please be exempted from FGD installation.

46.6.9: Summary of court cases: Nil.

46.6.10: Summary of Show Cause Notices (Last two years): Nil.

46.6.11: Summary of violation under EIA, 2006/court case/show cause/direction if any, related to the project under consideration: - Nil.

46.6.12: ADS Information in chronology:

M/s. MEIL Anpara Energy Limited made an online application vide proposal no. IA/UP/THE/565006/2026 dated 10.01.2026. The proposal was initially considered in 36th and 38th meeting of Reconstituted EAC (Thermal) held on 22.01.2026 and 24.02.2026, respectively. Proposal was deferred for want of additional information. The point-wise reply to the observations, along with requisite documents/information uploaded on parivesh portal on 07.05.2026.

The point wise compliance are as:

S. No.	ADS	Submission
1	Justification for variation in AAQ data of UPPCB and data submitted by the proponent for the proposed pr	Reason for observed NAAQS exceedance of PM in UPPCB monitored locations: UPPCB data are being monitored at Renusagar Colony and An

S L. N o.	ADS	Submission
	oject.	para Colony which are at a distance of 2.25 km and 1.6 km r espectively from Anpara C TPP and are surrounded by industr ies, like Hindalco Industries Limited (adjacent to Renusagar) Anpara TPP A and B (UPRVUNL) to Anpara Colony. · Additionally, vehicular emissions and fugitive dust generated due to material transportation activities, several TPPs in the a rea significantly contribute to the observed particulate matte r concentration. · Anpara-C TPP of MEIL is operating with Hybrid ESP (ESP+ Ba g filter), Low-NOx burners with Over-Fire Air (OFA) dampers in steam generators & a stack of 275 m is installed to limit e missions within prescribed standards. · Therefore, the variation between MEIL monitored AAQ data a nd UPPCB monitored data can be reasonably attributed to th ese localized external influences. The detailed justification is enclosed in ADS Reply
2	Action plan for the green belt devel opment as per CPCB norms.	· A total greenbelt area of 37.0 Ha, constituting approximately 33% of the total plot area, has already been developed within the project premises by MEIL Anpara - C TPP. · Further, an additional area of 1.5 ha, presently earmarked for FGD installation will also be covered under plantation & gree nbelt making total greenbelt area within premises as 38.5 ha (34.37 % of total plot area). · Plantation activities are also being strengthened through gap filling using Miyawaki technique within the plant, including in areas such as the Coal Handling Plant (CHP), Ash Handling ar eas, and other suitable locations, to further augment the gre enbelt and improve the overall environmental quality. Present ly 54,447 no. of trees have been planted covering an area of 37 Ha. · MEIL is also committed to enhancing green cover in the surro unding areas of the MEIL Anpara -C TPP in consultation with the Forest Department, with a focus on plantation of native s pecies. Request letter dated 09.12.2025 has been submitted to DFO, Renukoot for the same. Copy of the same is enclose d in ADS Reply. Letter obtained from DFO, Renukoot dated 2 2.12.2025 for plantation. Copy of the same enclosed in ADS Reply. · The action plan, including detailed provisions for the propose d plantation along with the associated financial allocations, is enclosed in ADS Reply.
3	Ash Utilization plan for 100% ash ut ilization along with the data of lega cy ash and the volume of ash dyke a rea.	The total ash dyke area is 383 ha with an overall storage capacit y of 88.15 million m³. The ash pond/dyke facility is a common as h disposal system shared with Anpara A, B and D of UPRVUNL, as per the Facilities and Sharing agreement. The ash pond has b een designed and is being operated and maintained by UPRVUN L. The copy of the agreement is enclosed in ADS Reply MEIL Anpara-C TPP is in advance stage of enhancing ash utilizati

S L N o.	ADS	Submission
		on and is committed to achieving 100% utilization in compliance with the MoEF&CC Ash Utilization Notification dated 31.12.2021. The detailed action plan outlining the same is enclosed in ADS Reply
4	Action plan for prevention of ash flow into the Govind Vallabh Pant Sagar Dam and for control of fugitive dust emission from ash pond.	· Ash is being evacuated through a dedicated, closed-loop slurry pipeline system equipped with proper sealing to prevent any leakage or spillage during transportation to the ash pond. · The pipelines are strategically routed with adequate supports, anchoring, and expansion joints to prevent mechanical failure and accidental leakage. · Flow measurement systems (D-meters) have been installed and are regularly calibrated to continuously monitor slurry flow, ensuring controlled and uniform transfer of ash. · The slurry pipelines are provided with adequate pressure monitoring arrangements to detect abnormalities (such as blockage or leakage) and enable immediate corrective action. · Regular inspection, preventive maintenance, and integrity testing of pipelines, valves, and joints are being undertaken to eliminate any chances of leakage or rupture. · Standby/parallel pipeline arrangements are in place to ensure uninterrupted ash evacuation during maintenance or in case of failure of the main line, thereby avoiding overflow or spillage. · All transfer points and junctions are designed with leak-proof connections and proper anchoring. · The system is supported with automation and monitoring mechanisms for real-time tracking of slurry movement and prompt response to any deviations. · Adequate slope and proper hydraulic design of pipelines are being maintained to avoid choking, sedimentation, and subsequent overflow conditions. The time-bound action plan, along with budgetary allocation detailing each of the above measures, is enclosed in ADS Reply.
5	Performance Guarantee test report of ESP from the third party.	The performance evaluation of the ESPs (Unit I & Unit II) has been carried out by SGS India Private Limited. The copy of the test report is enclosed in ADS Reply
6	Water quality monitoring report of the Reservoir along the Ash Pond area from the secondary monitored data.	Water quality monitoring has been carried out by ITS Testing Laboratory Private Limited, an NABL-certified laboratory (Certificate no. TC-11181 valid up to 20.11.2028). The copy of the water quality monitoring report is enclosed in ADS Reply
7	Facility Service Agreement of the MEIL with UPRVNL for usages of the common facilities such as ash pond area, etc.	The Facility Service Agreement between MEIL and UPRVNL for usage of common facilities, including the ash pond area, is enclosed in ADS Reply

S L N o.	ADS	Submission																				
8	Details of the sensitive receptors at maximum GLC location (2.17 km) and control measures proposed in this regard.	· There are no forests, Wildlife Sanctuaries, Biosphere Reserves, National Parks, any ASI protected monuments, located where the maximum GLC has been predicted. · No schools, habitations, &/or places of worship are located where the maximum GLC has been predicted. · Mitigation measures to be implemented at the maximum GLC location are as follows: · Regular monitoring of ambient air quality in the vicinity of maximum GLC location as part of the post-EC monitoring plan is proposed.																				
9	Comparison of baseline environmental status as per the EIA report submitted at the time of grant of EC for the TPP vis a vis present monitored data for a period of last three months. Data shall be analysed for the down-wind and up-wind locations, maximum, average and standard deviations shall be presented. Any major deviations from the baseline shall be explained with scientific justification and the action plan for mitigation measures to be adopted.	The baseline environmental status has been compared with the present monitored data and is enclosed in ADS Reply. Marginal increase has been observed; however, the variation remains within acceptable limits. Mitigation measures and the action plan to be adopted is enclosed in ADS Reply.																				
10	Land use breakup of the project site including ash pond and the environmental sensitive receptors within 10 km radius of the power plant shall be submitted.	Land Use Break up presented below: <table><tr><th>Particular</th><th>Area (Ha)</th></tr><tr><td>Main Plant</td><td>12.442</td></tr><tr><td>Coal Storage and Handling</td><td>29.140</td></tr><tr><td>Switchyard</td><td>14.021</td></tr><tr><td>Greenbelt</td><td>37</td></tr><tr><td>Water Reservoir & water system</td><td>5.50</td></tr><tr><td>Misc</td><td>8.51</td></tr><tr><td>Ash Disposal</td><td>0*</td></tr><tr><td>Township</td><td>5.392</td></tr><tr><td>Total</td><td>112.005</td></tr></table> *Note – Existing ash pond of UPRVUNL is being used. Environmental Sensitive receptors within 10 km radius of TPP is enclosed in ADS Reply	Particular	Area (Ha)	Main Plant	12.442	Coal Storage and Handling	29.140	Switchyard	14.021	Greenbelt	37	Water Reservoir & water system	5.50	Misc	8.51	Ash Disposal	0*	Township	5.392	Total	112.005
Particular	Area (Ha)																					
Main Plant	12.442																					
Coal Storage and Handling	29.140																					
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Water Reservoir & water system	5.50																					
Misc	8.51																					
Ash Disposal	0*																					
Township	5.392																					
Total	112.005																					
11	Revisit the EMP in totality and incorporate appropriate pollution control measures in the form of a time bound action plan to address the PM levels in ambient air and PM & NOx level in stack emissions with physical and financial outlay. Besides, EMP shall explicitly brought out the ex	The EMP has been revisited to strengthen control of PM (ambient air) and PM & NOx (stack) emissions. Existing control measures are implemented, and additional mitigation measures with time bound action plan and defined physical targets & financial outlay are enclosed in ADS Reply																				

S L N o.	ADS	Submission
	isting and proposed additional environmental safeguards with physical and financial outlay.	
1 2	Undertaking in a non-judicial stamp paper from the PP to comply with the mitigation measures proposed under revised EMP shall be submitted.	An undertaking from the Project Proponent to comply with the prescribed mitigation measures is enclosed in ADS Reply.
1 3	Latest six-monthly compliance report submitted to the Regional Office of MoEF&CC.	Submission receipt of the six-monthly compliance report for the period from April'25 to September'25 is enclosed in ADS Reply.

46.6.13: Written Submission:

Query 1: Revised EMP with the financial and the physical outlay

Reply: Revised EMP is given below:

Description	Measure	EC Cost (Rs Cr)	AC Proposed (Rs Cr)	TC Cost (Rs Cr)	ER Cost (Rs Cr)	AR Cost (Rs Cr)	TR Cost (Rs Cr)
Cost of Air Pollution Control Devices/System	Existing - Hybrid Electrostatic Precipitators (ESP + Bag Filters) installed in Unit-1 & Unit-2. 275 m high stack for effective dispersion. - Low-NOx burners - Over-Fire Air (OFA) dampers in steam generators - Coal is transported through Rail-based MGR system - Water spraying at transfer points, loading/unloading stations & stockpiles - Dust extraction systems at crusher houses & bunker transfer towers - Water sprinklers in coal yard during stacking & reclaiming - Bunker ventilation system for dust evacuation - Collected dust recycled to conveyor/bunkers Proposed - Replacement of conventional bags with PTFE coated bag filters for improved collection efficiency with regular maintenance and replacement of the filters at regular intervals	271.17	10.88	282.05	16.33	0.752	17.082

Description	Measure	EC Cost (Rs Cr)	AC Proposed (Rs Cr)	TC Cost (Rs Cr)	ER Cost (Rs Cr)	AR Cost (Rs Cr)	TR Cost (Rs Cr)
	- Conduct ESP performance tests at regular intervals - Carry out timely maintenance based on test findings and equipment condition. - CFD of ESP inlet & outlet duct and installation of guide vane. - Periodic inspection and survey of ESP internals in every AOH for physical health assessment of ESP internals like emitting electrode, collecting electrode, and take corrective action repair/replacement for improving ESP performance. - Water cleaning of ESP internal, trial charging and adjusting field current and correction during and after AOH to improve and sustain ESP performance. - High-Pressure Dust Suppression / Fogging System (Automated operation linked with belt movement). - Fixed and motorized long distance fog cannon in coal piles. - Strengthen water-mist, fogging, and DS systems at transfer points and junction houses. - Conduct periodic nozzle inspection and health checks. - Installation of efficient 4-way fogger system for pre-wetting of rakes at Track Hopper - Paved & Black-Topped Roads (ensuring road health) - Carry out regular water sprinkling on internal roads. - Enforce vehicle speed limits to minimize road dust. - Mechanical Road Sweeper						
Cost of Solid Waste Management System	Existing - Pneumatic closed-pipeline fly ash evacuation from ESP hoppers - Bag filters installed on top of fly ash silos - Fly ash conditioned with water spray during loading - Covered bulkers used to prevent airborne dispersion - Primarily supplied to cement industries	180.6	0.92	181.52	29.028	0.16	29.188

Description	Measure	EC Cost (Rs Cr)	AC Proposed (Rs Cr)	TC Cost (Rs Cr)	ER Cost (Rs Cr)	AR Cost (Rs Cr)	TR Cost (Rs Cr)
	- s by road - Wet slurry disposal system during emergency conditions - Continuous efforts for 100% fly ash utilization in compliance with MoEF&C Notification dated 31.12.2021. - Annual audit. - Advertisement for bidding Proposed - Fixed sprinkler network with mist nozzles along the transportation route of ash. - Installation of Bulker Wheel washing point - Installation of automatic vent telescopic spout below silo to control fugitive emission. - Wet Fog Dust Suppression Systems installation - Inspect the healthiness of bag filters in silos regularly. - Cleaning & replace damaged or inefficient filter bags as required.						
Green Belt Development	Existing: Proposed - Avenue plantation along the transportation route of ash (8000 nos.) - Additional plantation around CHP (2000 trees) - Additional Plantation around AWRS (1000 trees) - Additional Plantation around Workshop and Cooling Tower (7000 trees) - Additional Plantation around Area designated for FGD (3750 trees) - Additional plantation outside plant through forest dept. (25000 Nos.)	30.0	3.7	33.7	0.70	0.202	0.902
Green Energy Initiative	Proposed - Installation of Solar Panel – 2 MW - Deployment of Electric Vehicles - Installation of Rain Water Harvesting units 02 Nos.	--	8.68	8.68	--	1.44	1.44
Grand Total		481.77	24.18	505.95	46.058	2.554	48.612

The summary of the Environmental Management Plan expenditure is as follows:

S. No.	Component	Capital cost (In Rs. Crore)		Recurring cost (In Rs. Cr per annum)	
		Existing	Proposed	Existing	Proposed
1.	Cost of Air Pollution Control Devices/System	271.17	10.88	16.33	0.752
2.	Cost of Solid Waste Management System	180.6	0.92	29.028	0.16
3.	Green Belt Development	30.0	3.7	0.70	0.202
4.	Green Energy Initiative	--	8.68	--	1.44
	Total	481.77	24.18	46.058	2.554

3.6.3. Deliberations by the committee in previous meetings

Date of EAC 1 :22/01/2026

Deliberations of EAC 1 :

The project proponent vide email dated 19/01/2026 expressed inability to participate in the EIA meeting due to certain unavoidable circumstances and sought for deferment of the proposal. In view of the foregoing, the Committee recommended to consider the proposal in the next EAC meeting to be held in the month of February, 2026.

Date of EAC 2 :24/02/2026

Deliberations of EAC 2 :

Observations and deliberation of the EAC

38.1.11: The Committee observed and noted the following:

- i. The instant proposal is for seeking amendment in a EC conditions as per MoEF&CC Notification dated 11/07/2025 for Sulphur dioxide emission standards, prescribed in EC letter dated 26.11.2007, accorded for the project “ 2×600 MW Thermal Power Plant by M/s. MEIL Anpara Energy Limited located at village Anpara, District Sonbhadra, Uttar Pradesh.
- ii. The existing project was accorded Environmental Clearance dated 26.11.2007 from MoEF&CC for setting up of 2×600 MW Anpara Thermal Power Plant, and subsequently amended on 31.07.2008. Further, EC was transferred to M/s. MEIL Anpara Energy Limited from M/s. Lanco Anpara Private Limited on 13.01.2025. CTO is valid up to 31.12.2029.
- iii. The Stage-II Forest Clearance (FC) for diversion of 3.0 ha of forest land, located within the existing project site, was obtained by the project proponent vide letter dated 07.03.2007.
- iv. There are no national parks, Biosphere Reserves, Eco-sensitive zone, Tiger/Elephant Reserves and Wild Life Corridors within 10 km distance from the project site as ascertained from DSS.
- v. The project site is not located within the Critically Polluted Area (CPA) but nearest Severally Polluted Area (SPA) is Singrauli industrial area, which is about 6.2 km from project boundary in West Direction and CEPI score is 62.59 as per CPCB 2018 assessment.
- vi. During the last three months, the total coal requirement for Unit-1 and Unit-2 was 470678.96 MT, 407186.67 MT, and 247224.79 MT for the months of September, October and November 2025, respectively. Domestic coal is being used, while maintaining a sulphur content of less than 0.6 %.
- vii. The mass emission rate of pollutants including PM₁₀, PM_{2.5}, NO_x, and SO₂ were estimated 34.02, 8.5, 841.5, 353.5 g/s, respectively for unit-1 and 31.83, 7.96, 863 and 359 g/s, respectively, for unit-2.
- viii. Project proponent has installed a 275 m bi-flue stack, which complies with the MoEF&CC Notification dated August 30, 1990.
- ix. As per the submitted addendum EIA report prepared through QCI/NABET accredited consultant, the predicted maximum Ground Level Concentration (GLCs) using AERMOD View dispersion model from the stack emission as per the envisaged stack height and site-specific meteorological parameters the maximum incremental GLC of PM₁₀ is 0.6 µg/m³, PM_{2.5} is 0.15 µg/m³, SO₂ is 15.31 µg/m³ and NO_x is 6.40 µg/m³ at 2.17 Km in SSE direction. Details of the sensitive receptors at location of maximum GLC (2.17 km) and control measures proposed in this regard have not been submitted.
- x. The committee noted in the vicinity of the project site, there are another seven power-generating units (3x210MW and 4x500MW) of M/s. UPRVUNL which are already under operation.
- xi. The Proponent has submitted an updated EMP with additional capital cost of Rs. 1021 lakhs

and recurring cost of Rs. 24.5 lakhs.

xii. The Project Proponent (PP) presented ambient air quality data (PM_{10} , $PM_{2.5}$, NO_x , SO_2 , etc.) for the core and buffer zones. However, the EAC observed that the reported concentrations of PM_{10} and $PM_{2.5}$ at Renusagar Colony ($156 \mu g/m^3$ and $75 \mu g/m^3$, respectively) and Anpara Colony ($133 \mu g/m^3$ and $70 \mu g/m^3$, respectively), as submitted by the PP, are above the CPCB prescribed standards. Further, the PM, and SO_2 concentrations in the ambient air showed significant variation while comparing the data with the UPPCB data. Neither the proponent nor the consultant was able to explain the reasons for variation in the AAQ data with proper justification.

xiii. EAC asked the project proponent to show the drone video of the project and the environmental protection measures taken by them, but the PP was unable to produce the same.

xiv. Tree plantation done by the proponent is very scanty having low density i.e. 1400 plants/ ha against the required 2500 plants/ha. EAC suggested to develop the plantation as per CPCB norms and submit the action plan for the same.

xv. EAC observed that during the last three years the ash utilization of the project is low i.e. in the range of 20% to 60%. EAC asked the Project proponent to give the Ash Utilization plan for its 100% utilization. EAC also sought the data of legacy ash and the volume of ash dyke.

xvi. EAC observed that as per the last CCR dated 18.12.2025, there are two non-compliances regarding Greenbelt development and 100% Ash utilization. EAC asked the PP to submit the action plan regarding the same.

xvii. EAC observed that the Ash dyke of the project is adjacent to the Govind Vallabh Pant Sagar Dam. No preventive measures has been adopted by the proponent to check the Ash flow into the Dam. EAC asked the PP to submit the action plan for prevention of ash flow into the dam and for control of fugitive dust emission from ash pond.

xviii. PP has submitted the Performance Guarantee test report of ESP, however the data related to flue gas velocity needs to be rechecked. EAC asked the PP to get the ESP performance test to be done by the third party.

xix. EAC sought the water quality monitoring report of the Reservoir along the Ash Pond area.

xx. During the meeting it was brought to the notice of EAC that there are three TPPs along with the instant power project. Three TPPs (Anpara-A, B & D) present near the existing project (Anpara-C) belongs to UPRVUNL. The instant project (Anpara-C) uses some common facilities for example Ash pond area of Anpara A, B & D. EAC sought the Facility Service Agreement of the MEIL with UPRVUNL for the same.

xxi. Project proponent has submitted the time bound action plan to reduce the PM level from stack emission within 12 months, however, EAC asked the PP to revise the action plan with measured output result.

xxii. The committee asked the proponent to address all the above shortcomings for further consideration by the EAC.

Recommendations of the Committee

38.1.12: In view of the foregoing and after the detailed deliberations, the Committee recommended to defer the instant proposal and sought for following additional data/information:

- i. Justification for variation in AAQ data of UPPCB and data submitted by the proponent for the proposed project.
- ii. Action plan for the green belt development as per CPCB norms.
- iii. Ash Utilization plan for 100% ash utilization along with the data of legacy ash and the volume of ash dyke area.
- iv. Action plan for prevention of ash flow into the Govind Vallabh Pant Sagar Dam and for control of fugitive dust emission from ash pond.
- v. Performance Guarantee test report of ESP from the third party.
- vi. Water quality monitoring report of the Reservoir along the Ash Pond area from the secondary monitored data.
- vii. Facility Service Agreement of the MEIL with UPRUVNL for usages of the common facilities such as ash pond area, etc.
- viii. Details of the sensitive receptors at maximum GLC location (2.17 km) and control measures proposed in this regard.
- ix. Comparison of baseline environment status as per the EIA report submitted at the time of grant of EC for the TPP vis a vis present monitored data for a period of last three months .Data shall be analysed for the down-wind and up-wind locations, maximum, average and standard deviations shall be presented. Any major deviations from the baseline shall be explained with scientific justification and the action plan for mitigations measures to be adopted.
- x. Land use breakup of the project site including ash pond and the environmental sensitive receptors within 10km radius of the power plant shall be submitted.
- xi. Revisit the EMP in totality and incorporate appropriate pollution control measures in the form of a time bound action plan to address the PM levels in ambient air and PM & NO_x level in stack emissions with physical and financial outlay. Besides, EMP shall explicitly brought out the existing and proposed additional environmental safeguards with physical and financial outlay.
- xii. Undertaking in a non-judicial stamp paper from the PP to comply with the mitigation measures proposed under revised EMP shall be submitted.
- xiii. Latest six monthly compliance report submitted to the Regional Office of MoEF&CC.

3.6.4. Deliberations by the EAC in current meetings

Observations and deliberation of the EAC

46.6.14: The Committee observed and noted the following:

- xii. Tree plantation done by the proponent is very scanty having low density, EAC suggested to develop the plantation as per CPCB norms.

Recommendations of the Committee

46.6.15: In view of the foregoing and after the detailed deliberations, the Committee **recommended** the instant proposal for grant of amendment in the EC granted vide letter no J-13011/45/2007-IA-II (T) dated 26/11/2007 and its subsequent amendments as detailed below **subject to uploading of written submissions on PARIVESH portal** and stipulation of following additional specific conditions. All other terms and conditions prescribed in EC dated 26/11/2007 and its subsequent amendments shall remain unchanged.

S. No.	Condition No.	Details of Conditions as per EC	Recommendation of EAC
1	Condition no VI	"Space provision shall be made for installation of FGD of requisite efficiency of SO ₂ removal, if required at a later stage"	Agreed. With regard to the said condition, Committee agreed the following: The Project Proponent shall maintain stack of 275 meters height and comply with the notification number GSR 742 (E) dated the 30th August, 1990.

3.6.5. Recommendation of EAC

Recommended (Subject to submission of requisite information/ documents)

3.6.6. Details of Environment Conditions

3.6.6.1. Specific

Additional specific conditions

1.	Project proponent shall implement the protective measure proposed in additional EMP in a time-bound manner in addition to the existing EMP. The budget earmarked for the additional EMP is Rs. 24.18 Cr as capital cost and 2.554 Cr as recurring cost and should be kept in a separate account and audited annually. The implementation status as per the action plan given below along with the amount spent with documentary proof shall be submitted to the concerned Regional Office along with the six monthly compliance report.							
	Description	Measure	EC Cost (Rs Cr)	AC Proposed (Rs Cr)	TC Cost (Rs Cr)	ER Cost (Rs Cr)	AR Cost (Rs Cr)	TR Cost (Rs Cr)
	Cost of Air Pollution Control Devices/System	Existing · Hybrid Electrostatic Precipitators (ESP + Bag Filters) installed in Unit-1 & Unit-2. · 275 m high stack for effective	271.17	10.88	282.05	16.33	0.752	17.082

Description	Measure	EC Cost (Rs Cr)	AC Proposed (Rs Cr)	TC Cost (Rs Cr)	ER Cost (Rs Cr)	AR Cost (Rs Cr)	TR Cost (Rs Cr)
	dispersion. - Low-NOx burners - Over-Fire Air (OFA) dampers in steam generators - Coal is transported through Rail-based MGR system - Water spraying at transfer points, loading/unloading stations & stockpiles - Dust extraction systems at crusher houses & bunker transfer towers - Water sprinklers in coal yard during stacking & reclaiming - Bunker ventilation system for dust evacuation - Collected dust recycled to conveyor/bunkers Proposed - Replacement of conventional bags with PTFE coated bag filters for improved collection efficiency with regular maintenance and replacement of the filters at regular intervals - Conduct ESP performance tests at regular intervals - Carry out timely maintenance based on test findings and equipment condition. - CFD of ESP inlet & outlet duct and installation of guide vane. - Periodic inspection and survey of ESP internals in every AOH for physical health assessment of ESP internals like emitting electrode, collecting electrode, and take corrective action repair/ replacement for improving ESP performance. - Water cleaning of ESP internal, trial charging and adjusting field current and correction during and after AOH to improve and sustain ESP performance. - High-Pressure Dust Suppression / Fogging System (Automated operation linked with belt movement). - Fixed and motorized long distance fog cannon in coal piles. - Strengthen water-mist, fogging, and DS systems at transfer						

Description	Measure	EC Cost (Rs Cr)	AC Proposed (Rs Cr)	TC Cost (Rs Cr)	ER Cost (Rs Cr)	AR Cost (Rs Cr)	TR Cost (Rs Cr)
	points and junction houses. · Conduct periodic nozzle inspection and health checks. · Installation of efficient 4-way fogger system for pre-wetting of rakes at Track Hopper · Paved & Black-Topped Roads (ensuring road health) · Carry out regular water sprinkling on internal roads. · Enforce vehicle speed limits to minimize road dust. · Mechanical Road Sweeper						
Cost of Solid Waste Management System	Existing · Pneumatic closed-pipeline fly ash evacuation from ESP hoppers · Bag filters installed on top of fly ash silos · Fly ash conditioned with water spray during loading · Covered bulkers used to prevent airborne dispersion · Primarily supplied to cement industries by road · Wet slurry disposal system during emergency conditions · Continuous efforts for 100% fly ash utilization in compliance with MoEF&CC Notification dated 31.12.2021. · Annual audit. · Advertisement for bidding Proposed · Fixed sprinkler network with mist nozzles along the transportation route of ash. · Installation of Bulker Wheel washing point · Installation of automatic vent telescopic spout below silo to control fugitive emission. · Wet Fog Dust Suppression Systems installation Inspect the healthiness of bag filters in silos regularly. · Cleaning & replace damaged or inefficient filter bags as required.	180.6	0.92	181.52	29.028	0.16	29.188
Green Belt Development	Existing: Proposed · Avenue plantation along the transportation route of ash (8000 nos.)	30.0	3.7	33.7	0.70	0.202	0.902

Description	Measure	EC Cost (Rs Cr)	AC Proposed (Rs Cr)	TC Cost (Rs Cr)	ER Cost (Rs Cr)	AR Cost (Rs Cr)	TR Cost (Rs Cr)
	· Additional plantation around CHP (2000 trees) · Additional Plantation around AWRS (1000 trees) · Additional Plantation around Workshop and Cooling Tower (7000 trees) · Additional Plantation around Area designated for FGD (3750 trees) · Additional plantation outside plant through forest dept. (25000 Nos.)						
Green Energy Initiative	Proposed · Installation of Solar Panel – 2 MW · Deployment of Electric Vehicles · Installation of Rain Water Harvesting units 02 Nos.	--	8.68	8.68	--	1.44	1.44
Grand Total		481.77	24.18	505.95	46.058	2.554	48.612

The summary of the Environmental Management Plan expenditure is as follows:

S. No.	Component	Capital cost (In Rs. Crore)		Recurring cost (In Rs. Cr per annum)	
		Existing	Proposed	Existing	Proposed
1.	Cost of Air Pollution Control Devices/System	271.17	10.88	16.33	0.752
2.	Cost of Solid Waste Management System	180.6	0.92	29.028	0.16
3.	Green Belt Development	30.0	3.7	0.70	0.202
4.	Green Energy Initiative	--	8.68	--	1.44
	Total	481.77	24.18	46.058	2.554

2.	Project proponent shall monitor sulfate in particulate matters and Ammonia in ambient air in addition to the regular environmental monitoring parameters.
3.	Project Proponent shall replace conventional bag filters with PTFE coated bag filters for improved collection efficiency with regular maintenance and replacement of the filters at regular intervals as committed.
4.	Project Proponent shall install fix motorized long distance fog cannon in coal piles and Carry out regular water sprinkling on internal roads to control fugitive dust emission as committed.
5.	Project Proponent shall install fixed sprinkler network with mist nozzles along the transportation route of ash and automatic vent telescopic spout below silo to control fugitive emission as committed.
6.	Project Proponent shall Install Solar Panel of 2 MW capacity and deploy of Electric Vehicles as committed.
7.	Project Proponent shall carry out Avenue plantation of not less then 2 meter height seedlings along the transportation route of ash (Minimum 8000 nos.), around CHP area (Minimum 2000 trees), around AWRS (Minimum1000 trees), around Workshop and Cooling Tower (Minimum7000 trees), around FGD Area (Minimum3750 trees) and additional plantation outside plant through forest dept. (Minimum 25000 Nos.) as committed within 2 years after obtaining the amendment in EC.

4. Any Other Item(s)

N/A

5. List of Attendees

Sr. No.	Name	Designation	Email ID	Remarks
1	Sh Inder Pal Singh Matharu IFS	Chairman, EAC	mat*****@gmail.com	Present
2	Shri K B Biswas	Member (EAC)	bis*****@gmail.com	Present
3	Shri Mahi Pal Singh	Member (EAC)	mps*****@nic.in	Present
4	Sh Lalit Kapur	Member (EAC)	lka*****@yahoo.com	Present
5	Sh Savalge Chandrasekhar	Member (EAC)	sav*****@gmail.com	Present
6	Prof Shyam Shanker Singh	Member (EAC)	sin*****@gmail.com	Present
7	Dr Vinod Agrawal	Member (EAC)	vin*****@yahoo.com	Present
8	Shri Harmeet Sahany	Member (EAC)	har*****@imd.gov.in	Absent
9	Prof R M Bhattacharjee	Member (EAC)	rmb*****@iitism.ac.in	Absent
10	Dr Santoshkumar Hampannavar	Member (EAC)	san*****@yahoo.com	Absent
11	Sundar Ramanathan	Scientist - F	r.s*****@nic.in	Present
12	Dr. Umesh Jagannathrao Kahalekar	Member	uka*****@rediffmail.com	Present
13	Shri Prasoon Gargava, Scientist - F	Member	pra*****@nic.in	Present
14	Shri B C Mallick	Principal Chief Engineer Central Electricity Authority (Special invitee)	bik*****@gov.in	Present

**Ministry of Environment, Forest and Climate Change
Impact Assessment Division
(Thermal sector)**

Date of zero draft MoM sent to Chairman: 23/06/2026

Approval by Chairman: 24/06/2026

Uploading on PARIVESH:24/06/2026

SUMMARY RECORD OF THE FORTY SIXTH (46th) MEETING OF EXPERT APPRAISAL COMMITTEE (EAC) HELD ON 18th JUNE 2026 FOR ENVIRONMENT APPRAISAL OF THERMAL SECTOR PROJECTS THROUGH VIRTUAL MODE.

18th JUNE, 2026 [THURSDAY]

At the outset, Shri. Inder Pal Singh Matharu (I.F.S Retd.), Chairman, Expert Appraisal Committee (Thermal Power & Coal Mining) welcomed the Expert members & other participants and requested to start the proceeding as per the agenda listed for this meeting. The list of EAC members who participated in the meeting is at **Annexure – I**.

Confirmation of the minutes of the 45th meeting of the EAC (Thermal): The minutes of the 45th meeting of the EAC (Thermal) held on 22nd May, 2026 through virtual mode have been confirmed by the EAC.

Agenda Item No. 46.1

46.1: Proposed 3200 MW (4x800MW) Coal Based Ultra Super Critical Thermal Power Project by **M/s Adani Power Limited** at Villages Charuabakhra, Chirakuta I & II, Santoshpur, Revenue Circle Chapar, **District Dhubri, Assam - Environmental Clearance (EC) – regarding.**

[Proposal no. IA/AS/THE/580405/2026, F. No. J-13012/10/2025-IA.I(T)]

46.1.1: M/s. **Adani Power Limited** has made an online application vide proposal no. IA/AS/THE/580405/2026 dated 30.05.2026 along with copy of EIA/EMP report, Form seeking Environment Clearance (EC) under the provisions of the EIA Notification, 2006 for the project mentioned above. The proposed project activity is listed at item no. 1(d) Under Category “A” of the schedule of the EIA Notification, 2006 and does not attract general condition and is appraised at Central Level.

Name of the EIA consultant: M/s Gaurang Environmental Solutions Pvt. Ltd. [S. No. 114, List of ACOs with their Certificate No. NABET/EIA /23-26/SA 0269 dated 10.03.2026 valid upto 7.12.2026.

Details of the proposal, as ascertained from the proposal documents and as revealed from the discussions held during the meeting, are given as under:

46.1.2: The project of M/s. Adani Power Limited located in Charuabakhra, Chirakuta I & II, Santoshpur Village, Revenue Circle Chapar, District Dhubri, Assam is for setting up of a new power plant with a capacity of 3200 MW.

46.1.3: Compliance to MoEF&CC Notification dated 11/07/2025 regarding SO₂ emission norms:

- i. Categorization details of TPP: Yet to be done as the project is of green field in nature

- ii. Sulfur content of the coal to be fired in the boiler: <0.50 (%)
- iii. Status of SO₂ emission control facility for the existing unit: Not applicable as the project is of green field in nature
- iv. Action plan for installation of new stack in compliance to the notification number GSR 742 (E) dated the 30/08/1990 for the proposed expansion: 275 m Chimney (2 Bi-Flue stack with RCC shell) are proposed.

46.1.4: The detail of the ToR is furnished as below:

Proposal No with date	Consideration	Details	Date of accord	ToR Validity
IA/AS/THE/560845/2025	35 th EAC meeting	24.12 2025	19.01.2026	18.01.2030

46.1.5: Environmental site settings:

70.1.3. Environmental site settings.				
S. No.	Particulars	Details		Remarks
1.	Total Land	585 Ha (Govt.:466.3 Ha, Private: 118.7 Ha)		Land use: Industrial
2.	Land use break up	Description	Propose Area (In Hectares)	The land is allotted by APDCL, Govt. of Assam
		Main Plant (Including BTG, Water Facility(CT), AHP Facility, Switchyard & Misc. Facility)	100	
		Coal Stock Yard, CHP (Including Rail Yard)	70	
		Reservoir	20	
		Green belt (33% of total area)	193	
		Ash Dyke	70	
		Others: [Land for Future expansion including CGU (11 Ha)]	132	
		Total	585 Ha	
		Land use break up for railway siding and water supply		
• The request letter for RoW/RoU land (outside the Project Boundary) for Railway Siding was submitted to APDCL. • The Railway siding (Station) is located at a distance of 4.8 km from the project site. Dedicated railway siding will be developed within the project/plant area by laying railway line from Bilasipara Railway station to TPP. • The total land requirement (RoW) will be about 53.877 ha, comprising ~28.385 ha of Government land and ~25.492 ha of private land which will be provided by APDCL. • The request letter submitted to APDCL for RoU land (outside the Project Boundary) for dedicated water pipeline. The land requirement under RoU will be about 7.583 ha, comprising ~4.4486 ha of Government land and ~3.1339 ha of private land which will be provided by APDCL.				
3.	Land acquisition details as per MoEF&CC O.M. dated 7/10/2014 & 19/02/2025	The land is already allotted by APDCL, Govt. of Assam		The land is allotted by APDCL, Govt. of Assam

4.	Existence of habitation & involvement of R&R, if any.	Project site: Name of villages - Charuabakhra, Chirakuta I & II, Santoshpur- No R&R Study area: <table> <tr> <th>S. No.</th><th>Habitation</th><th>Distance (km)w.r.t. TPP</th><th>Direction</th></tr> <tr><td>1</td><td>Charua Bhakhra</td><td>0.6</td><td>NW</td></tr> <tr><td>2</td><td>Chirakuta Pt I</td><td>1.0</td><td>W</td></tr> <tr><td>3</td><td>Chirakuta Pt II</td><td>1.1</td><td>S</td></tr> <tr><td>4</td><td>Santoshpur</td><td>1.1</td><td>SE</td></tr> <tr><td>5</td><td>Baniapara Pt II</td><td>5.3</td><td>E</td></tr> <tr><td>6</td><td>Baniapara Pt I</td><td>4.5</td><td>SE</td></tr> <tr><td>7</td><td>Salkocha</td><td>4.3</td><td>SE</td></tr> <tr><td>8</td><td>Geravita</td><td>4.0</td><td>SW</td></tr> <tr><td>9</td><td>Gourangtari Pt I</td><td>2.5</td><td>NE</td></tr> <tr><td>10</td><td>Hapapara</td><td>1.5</td><td>N</td></tr> <tr><td>11</td><td>Khamarpara</td><td>3.4</td><td>SE</td></tr> <tr><td>12</td><td>Tokrabandha</td><td>2.4</td><td>SW</td></tr> <tr><td>13</td><td>Bilasipara</td><td>5.0</td><td>E</td></tr> <tr><td>14</td><td>Jamduar Pt II</td><td>2.7</td><td>NW</td></tr> <tr><td>15</td><td>Chandardinga</td><td>7.0</td><td>SE</td></tr> </table>	S. No.	Habitation	Distance (km)w.r.t. TPP	Direction	1	Charua Bhakhra	0.6	NW	2	Chirakuta Pt I	1.0	W	3	Chirakuta Pt II	1.1	S	4	Santoshpur	1.1	SE	5	Baniapara Pt II	5.3	E	6	Baniapara Pt I	4.5	SE	7	Salkocha	4.3	SE	8	Geravita	4.0	SW	9	Gourangtari Pt I	2.5	NE	10	Hapapara	1.5	N	11	Khamarpara	3.4	SE	12	Tokrabandha	2.4	SW	13	Bilasipara	5.0	E	14	Jamduar Pt II	2.7	NW	15	Chandardinga	7.0	SE	Status of R&R. – No R&R involved. The land is allotted by APDCL, Govt. of Assam
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5.	Existence of school and hospital if any	A. School Project site:- None Study Area: <table> <tr> <th>S.No.</th><th>School</th><th>Distance (km)</th><th>Direction</th></tr> <tr><td>1</td><td>Salkocha HS School, Salkocha</td><td>3.5</td><td>E</td></tr> <tr><td>2</td><td>Silgara High School, Hapapara</td><td>3.1</td><td>N</td></tr> <tr><td>3</td><td>Dwarshila High School, Ishilamari</td><td>5.5</td><td>SW</td></tr> <tr><td>4</td><td>Tilapara HS School, Tilapara</td><td>3.1</td><td>S</td></tr> <tr><td>5</td><td>Govt Model College, Bilasipara</td><td>2.2</td><td>W</td></tr> <tr><td>6</td><td>Silgara ME School, Silgara</td><td>3.1</td><td>NE</td></tr> <tr><td>7</td><td>Sankardev Sishu Viddya Nicatan, Salkocha</td><td>3</td><td>NE</td></tr> </table> B. Hospital Project site :- None Study Area : <table> <tr> <th>S. No.</th><th>Hospital</th><th>Distance (km)</th><th>Direction</th></tr> <tr><td>1</td><td>Salkocha Hospital, Salkocha</td><td>2.2</td><td>E</td></tr> <tr><td>2</td><td>Diporkhuti Civil Hospital, Bilasipara</td><td>7.5</td><td>NW</td></tr> </table> Protection measures to be adopted are as follows: - Installation of Highly efficient pollution control equipment such as Electrostatic Precipitator (with 99.98% efficiency), Dust Extraction and Suppression systems, STP, ETP etc. - Deployment of road sweeping machine for regular cleaning	S.No.	School	Distance (km)	Direction	1	Salkocha HS School, Salkocha	3.5	E	2	Silgara High School, Hapapara	3.1	N	3	Dwarshila High School, Ishilamari	5.5	SW	4	Tilapara HS School, Tilapara	3.1	S	5	Govt Model College, Bilasipara	2.2	W	6	Silgara ME School, Silgara	3.1	NE	7	Sankardev Sishu Viddya Nicatan, Salkocha	3	NE	S. No.	Hospital	Distance (km)	Direction	1	Salkocha Hospital, Salkocha	2.2	E	2	Diporkhuti Civil Hospital, Bilasipara	7.5	NW																					
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		of road dust. • Deployment of fog cannons, Dust Extraction System, and Dry fog diffusion systems to suppress fugitive dust near the Coal & Ash Handling Plants. • Wind breaking wall/ green net with adequate height will be provided in Coal stock & CHP Area. • Thick and intensive plantation/green belt will be developed towards the direction of adjacent villages located within 500 m of the project site. • The ash pond is proposed with adequate HDPE lining and peripheral plantation. • The project is based on Zero Liquid Discharge (ZLD) • Installation of one CAAQMS in the nearby village and three CAAQMS close to the plant boundary w.r.t wind direction and in consultation with APCB. In addition to EMP budget of 2611 Crore, a Budget of Rs. 40.5 Crore is proposed towards Socio-EMP (CER).																																																	
6.	Latitude and Longitude of all corners of the project site.	<table><tr><th colspan="3">A. Plant Site</th></tr><tr><th>S. No.</th><th>Latitude</th><th>Longitude</th></tr><tr><td>1</td><td>26°13'50.10"N</td><td>90°16'58.93"E</td></tr><tr><td>2</td><td>26°14'6.60"N</td><td>90°17'41.64"E</td></tr><tr><td>3</td><td>26°14'26.69"N</td><td>90°18'2.40"E</td></tr><tr><td>4</td><td>26°14'37.75"N</td><td>90°18'47.05"E</td></tr><tr><td>5</td><td>26°14'2.46"N</td><td>90°19'1.55"E</td></tr><tr><td>6</td><td>26°13'35.93"N</td><td>90°18'56.79"E</td></tr><tr><td>7</td><td>26°13'6.10"N</td><td>90°18'10.04"E</td></tr><tr><td>8</td><td>26°13'19.28"N</td><td>90°17'34.83"E</td></tr><tr><th colspan="3">B. Ash Pond</th></tr><tr><td>1</td><td>26°14'04.15"N</td><td>90°17'43.94"E</td></tr><tr><td>2</td><td>26°13'41.41"N</td><td>90°17'43.89"E</td></tr><tr><td>3</td><td>26°13'41.56"N</td><td>90°17'58.71"E</td></tr><tr><td>4</td><td>26°14'03.54"N</td><td>90°17'58.90"E</td></tr><tr><td>5</td><td>26°13'52.49"N</td><td>90°17'51.58"E</td></tr></table>	A. Plant Site			S. No.	Latitude	Longitude	1	26°13'50.10"N	90°16'58.93"E	2	26°14'6.60"N	90°17'41.64"E	3	26°14'26.69"N	90°18'2.40"E	4	26°14'37.75"N	90°18'47.05"E	5	26°14'2.46"N	90°19'1.55"E	6	26°13'35.93"N	90°18'56.79"E	7	26°13'6.10"N	90°18'10.04"E	8	26°13'19.28"N	90°17'34.83"E	B. Ash Pond			1	26°14'04.15"N	90°17'43.94"E	2	26°13'41.41"N	90°17'43.89"E	3	26°13'41.56"N	90°17'58.71"E	4	26°14'03.54"N	90°17'58.90"E	5	26°13'52.49"N	90°17'51.58"E	
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7.	Elevation of the project site	63 m above mean sea level (Average)	--																																																
8.	Involvement of Forest land, if any.	Status of stage I Forest Clearance: Not Applicable Area of forest land involved: No Forest land involved.	--																																																
9.	Water body (Rivers, Lakes, Pond, Nala, Natural Drainage, Canal etc.) exists within the project site as well as study area	Project site :- None Study area: <table><tr><th>S.No.</th><th>Name</th><th>Aerial Distance (Km)</th><th>Direction</th></tr><tr><td>1</td><td>Gaurang River</td><td>2.9</td><td>W</td></tr><tr><td>2</td><td>Mar Gaurang Nala</td><td>0.56</td><td>SE</td></tr><tr><td>3</td><td>Chak Chaka Lake</td><td>3.3</td><td>E</td></tr><tr><td>4</td><td>Diple Lake</td><td>3.6</td><td>N</td></tr><tr><td>5</td><td>Brahmaputra River</td><td>4.8</td><td>S</td></tr><tr><td>6</td><td>Dhakra Bill</td><td>6</td><td>NE</td></tr><tr><td>7</td><td>Dhir Lake</td><td>7.1</td><td>E</td></tr></table>	S.No.	Name	Aerial Distance (Km)	Direction	1	Gaurang River	2.9	W	2	Mar Gaurang Nala	0.56	SE	3	Chak Chaka Lake	3.3	E	4	Diple Lake	3.6	N	5	Brahmaputra River	4.8	S	6	Dhakra Bill	6	NE	7	Dhir Lake	7.1	E	HFL letter of the Gourang river is received from WRD which is 35.51 meter. Issued by WRD, Guwahati date 09.02.2026																
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		Protection measures to be adopted are as follows: • Plantation and greenbelt will be developed along the plant boundary, internal roads, and available areas of the proposed Thermal Power Plant. • Landscaping and Green Carpet will be developed to minimize Soil erosion. • The Plant will be based on Zero Liquid Discharge. • ETP and STP is propose to install and treated water will be reused in AHP, CHP, Dust suppression and green belt development. • Installation of fine -mess screens at water intake to prevent entrapment of fish and other aquatic organisms. • WRD directions/ recommendations will be adhered and implemented. • Water quality will be monitored regularly. • Conservation of existing water bodies and strengthening water availability through measures such as pond deepening, connecting drainage line, storm water collection pond nearby water bodies with regular maintenance of ponds and streams. • Storm water drainage systems with sedimentation traps will be constructed to prevent siltation and contamination.																																					
10.	Existence of ESZ/ ESA/ national park/wildlife sanctuary/biosphere reserve/ tiger reserve/elephant reserve etc. if any within the study area	Study area Name of the ESZ/ESA: ESZ of Chakrashila Wildlife Sanctuary. Status of Notification: MoEF&CC Notification dated 08.04.2021 Distance of project from ESZ/ESA: 2.02 km in NNE direction from project site Authenticated map of ESZ projecting distance of ESZ from project site: Authenticated map certified by PCCF (Wildlife) & CWLW, Guwahati Status of NBWL approval: Not Applicable List of Reserved and protected forests: <table border="1"> <thead> <tr> <th>S.No.</th><th>Forests</th><th>Aerial Distance (Km)</th><th>Direction</th></tr> </thead> <tbody> <tr> <td>1</td><td>Chakrashila Wildlife Sanctuary</td><td>5</td><td>N</td></tr> <tr> <td>2</td><td>Tokrabandha RF</td><td>2</td><td>SW</td></tr> <tr> <td>3</td><td>Dudhnath RF</td><td>1.5</td><td>S</td></tr> <tr> <td>4</td><td>Chandardinga RF</td><td>4.5</td><td>SE</td></tr> <tr> <td>5</td><td>Kaprigacha R.F</td><td>9.2</td><td>NW</td></tr> <tr> <td>6</td><td>Shrigrām R.F.</td><td>5.9</td><td>NE</td></tr> <tr> <td>7</td><td>Charalkhola R.F.</td><td>9.2</td><td>NE</td></tr> <tr> <td>8</td><td>Sarpamar R.F.</td><td>4.4</td><td>SE</td></tr> </tbody> </table> Protection measures to be adopted are as follows: • Extensive plantation to be carried out along with green belt development using native plant species to enhance vegetation cover and improve the ecological status of the area. • Nearby plantation and conservation of forest will be done in consultation with State Forest Department.	S.No.	Forests	Aerial Distance (Km)	Direction	1	Chakrashila Wildlife Sanctuary	5	N	2	Tokrabandha RF	2	SW	3	Dudhnath RF	1.5	S	4	Chandardinga RF	4.5	SE	5	Kaprigacha R.F	9.2	NW	6	Shrigrām R.F.	5.9	NE	7	Charalkhola R.F.	9.2	NE	8	Sarpamar R.F.	4.4	SE	-
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		• APL will enforce a prohibition on single use plastic and actively encourages the use of sustainable and eco-friendly products in and around the TPP. • Conduct awareness programs for local communities/ villages / stakeholders to conserve & promote Biodiversity importance for sustainable livelihoods.	
11.	Archaeological sites monuments/ historical temples etc.	None in 10 km radius study area.	--
12.	Facility envisaged in CRZ area	Name of the facility in CRZ area – None within study area Recommendations of CZMA – Not Applicable Status of CRZ clearance – Not Applicable	CRZ map not applicable
13.	Involvement of Critically Polluted Area/Severely Polluted area as per 2018 CEPI score	• Involvement of CPA/SPA: None in project site • Proximity to CPA/SPA: No CPA/SPA as declared by CPCB lies within 10 km radius area. The nearest CPA is in Brynihat Industrial area~ 159 km ESE from project site.	--

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

Sr. No.	Existing Power Plant Configuration and Capacity	Proposed Power Plant Configuration and Capacity	Total	Technology Adopted
1	Not Applicable	4×800 MW	3200 MW	Ultra Super Critical

46.1.7: The details of the fuel (coal/gas/LDO) requirement for the proposed project along with its source and mode of transportation is given as below:

Details	Fuel requirement (MTPA)	Source	Distance from site (Kms)	Mode of Transportation	Coal characteristics (Worst case scenario)	Linkage document
Coal :						
Proposed TPP	13.27 MTPA	MCL/ECL/NECL Nearby Commercial Coal Mines & e-auction	350-690 KM	By Rail	Ash- <40 (%) Sulphur- <0.5 (%) Moisture- 13 (%) GCV – 3200 -4300 Kcal/Kg	FSA under Shakti Policy and E-auction
LDO/HSD:						
Proposed TPP	24000 KL/Annum	Local Market/Vendor	50 – 100 KM	By Road	Low Sulphur (3-5% mass)	Local Market/ Vendor

46.1.8: Water Requirement: The water requirement for the proposed project is estimated as 1,53,600 m³/day (56 MCM), out of which 1,53,600 m³/day of freshwater requirement will be obtained from the Brahmaputra River. The permission for drawl of surface water is obtained from the Water Resources Department, Guwahati vide Letter No. 433516/678 dated 09.01.2026. The water will be transported to the plant site through pipeline. The specific water consumption for the power plant will be < 2.5 m³/MWhr.

46.1.9: Power Requirement: The power requirement for the proposed project is estimated as 176 MW, which will be obtained from the nearby substation.

46.1.10: Baseline Environmental Studies:

Period	October 2025 to December 2025	Additional study (if any)																		
AAQ parameters at 11 Locations (min and max)	PM _{2.5} : 8.59 µg/m ³ – 24.42 µg/m ³ PM ₁₀ : 16.82 µg/m ³ – 44.90 µg/m ³ SO ₂ : BLQ (≤ 4.0) - 7.88 µg/m ³ NO _x : BLQ (≤ 5.0) - 12.91 µg/m ³ CO: BLQ (≤ 2.0) - 0.51 mg/m ³ The values of Pb, Ni, Hg, O ₃ , As, C ₆ H ₆ , BaP were found to be Below detection limit.																			
Incremental GLC level	PM ₁₀ = Max. GLC: 0.684 µg/m ³ (Level at 3.5 km in SW Direction) PM _{2.5} = Max. GLC: 0.178 µg/m ³ (Level at 3.5 km in SW Direction) SO ₂ = Max GLC: 14.3 µg/m ³ (Level at 3.5 km in SW Direction) NO _x = Max GLC: 5.33 µg/m ³ (Level at 3.5 km in SW Direction)																			
Ground water quality at 11 locations	pH: 6.73 to 7.29, total Hardness: 58– 169 mg/l; Chloride; 22 to 64 mg/l, Fluoride: 0.21 to 0.42 mg/l; Heavy metals like Copper (as Cu) – BLQ (LOQ-0.01), Lead (as Pb) - BLQ(LOQ- 0.005), Cadmium (as Cd) - BLQ(LOQ-0.002), Chromium (as Cr) - BLQ(LOQ-0.02), Arsenic (as As)- BLQ(LOQ-0.005) and Mercury (as Hg)- BLQ(LOQ-0.001).																			
Surface water quality at 14 locations	pH 6.86 to 7.46, Dissolved Oxygen: 5.0 to 6.9 mg/l; BOD: 2.1 to 4.8 mg/l; COD: from 8 to 30 mg/l.																			
Effluent generation details and its treatment	Effluent generation from TPP: - Industrial wastewater: 1996 KLD Mode of treatment & reuse - Industrial Wastewater: In ETP of capacity 2400 KLD. ETP treated water will be recycled in process, ash quenching and dust suppression at CHP. Domestic wastewater generation - Domestic Effluent: 22 KLD Mode of treatment & reuse - Domestic Wastewater: In STP of capacity 30 KLD. STP treated water will be reused for plantation/Green Belt development/ Horticulture.																			
Noise levels Leq (Day and Night) at 11 locations	32.1(A) – 46.9 (A) for the day time and 30.9 (A) – 38.7 dB (A) for the Night Time.																			
Traffic assessment study findings	- Traffic study has been conducted at National Highway-17 near Diglidol and near Khamarpara which is approximately 0.80 km towards NW and at 1.60 km towards SE direction respectively from project site. - Transportation of raw material (coal) will be done 100% by rail. - Existing PCU is 207 PCU/hr and 196 PCU/hr on NH-17 near Diglidol and near Khamarpara respectively and existing level of service (LOS) is B respectively. <table><tr><th>Road</th><th>Volume (in PCU/hr)</th><th>Capacity (in PCU/hr)</th><th>Existing V/C Ratio</th><th>LOS</th><th>Performance</th></tr><tr><td>NH-17 near Diglidol</td><td>206.8 say 207</td><td>3600</td><td>0.33</td><td>B</td><td>Very Good</td></tr><tr><td>NH-17 near Khamarpara</td><td>196.3 say 196</td><td>1500</td><td>0.31</td><td>B</td><td>Very Good</td></tr></table> - PCU load after proposed project will be 207 (NH-17 near Diglidol) & 196 at NH-17 near Khamarpara (existing) +23	Road	Volume (in PCU/hr)	Capacity (in PCU/hr)	Existing V/C Ratio	LOS	Performance	NH-17 near Diglidol	206.8 say 207	3600	0.33	B	Very Good	NH-17 near Khamarpara	196.3 say 196	1500	0.31	B	Very Good	
Road	Volume (in PCU/hr)	Capacity (in PCU/hr)	Existing V/C Ratio	LOS	Performance															
NH-17 near Diglidol	206.8 say 207	3600	0.33	B	Very Good															
NH-17 near Khamarpara	196.3 say 196	1500	0.31	B	Very Good															

Period	October 2025 to December 2025	Additional study (if any)																						
	(additional) PCU/Hr and Level of Service (LOS) will be : <table><tr><th rowspan="2">Road</th><th rowspan="2">Existin g LOS</th><th colspan="4">Changed V/C and LOS after adding generated traffic from operational phase of proposed expansion project</th></tr><tr><th>V</th><th>C</th><th>V/ C</th><th>Modifie d LOS</th></tr><tr><td>NH-17 near Diglidol</td><td>A 'Excell ent'</td><td>207 + 23= 230</td><td>360 0</td><td>0.3 6</td><td>'B' Very Good</td></tr><tr><td>NH-17 near Khamarpara</td><td>A 'Excell ent'</td><td>196+23=21 9</td><td>150 0</td><td>0.3 5</td><td>'B' Very Good</td></tr></table> Conclusion: The level of service (LOS) will be unaltered remains B after additional traffic due to the proposed expansion project. Existing LOS is "B" due to NHAI work is in progress and is temporary in nature.	Road	Existin g LOS	Changed V/C and LOS after adding generated traffic from operational phase of proposed expansion project				V	C	V/ C	Modifie d LOS	NH-17 near Diglidol	A 'Excell ent'	207 + 23= 230	360 0	0.3 6	'B' Very Good	NH-17 near Khamarpara	A 'Excell ent'	196+23=21 9	150 0	0.3 5	'B' Very Good	
Road	Existin g LOS			Changed V/C and LOS after adding generated traffic from operational phase of proposed expansion project																				
		V	C	V/ C	Modifie d LOS																			
NH-17 near Diglidol	A 'Excell ent'	207 + 23= 230	360 0	0.3 6	'B' Very Good																			
NH-17 near Khamarpara	A 'Excell ent'	196+23=21 9	150 0	0.3 5	'B' Very Good																			
Soil Quality at 11 Locations	pH range 6.42 to 7.24; Electrical conductivity (EC); 0.235 to 0.296 µmhos/cm; calcium content: 54.62 to 98.0 mg/kg; sodium: 15.49 to 24.6 mg/kg; potassium: 92 to 135 mg/kg; Nitrogen: 128 to 200 mg/kg; Phosphorous: 14.2 to 20.9 mg/kg; Cation Exchange Capacity (CEC): 10.8 to 17.65 meq/100gm; Magnesium: 30 to 44 mg/kg; Organic Matter: 0.82% to 1.14%	DSS																						
Flora and fauna	23 Schedule I Species as per WP(A)A, 2022 have been observed in the study area. Wildlife conservation Plan for Schedule I species has been prepared by Reputed Govt. Institute and the approval of the same is under process.	The List of Flora & Fauna is duly certified by DFO, Dhubri vide letter no B/DBR/FOR/P ERMIT/24/785/86 dated 24.02.2026.																						
Hydrogeology study	The action plan to address the recommendation of the Hydrogeology report and Watershed management plan are as below: <table><tr><th>S. No</th><th>Recommendations</th><th>Action Plan</th></tr><tr><td>1.</td><td>Construct recharge pits and percolation trenches to improve groundwater recharge</td><td>Construction of Percolation trenches (20 m × 1 m × 2 m) along 3rd–4th order streams. And recharge pits filled with gravel/sand and connect to storm drains. Quarterly monitoring of water levels in nearby wells.</td></tr><tr><td>2.</td><td>Link stormwater drains and runoff channels to recharge structures so rainwater is effectively captured and infiltrated</td><td>Storm water drain shall be connected with recharge structure and quarterly monitoring of water levels shall be done to assess recharge efficiency.</td></tr><tr><td>3.</td><td>Carry out regular monitoring of groundwater levels and water quality to</td><td>Quarterly monitoring of water levels shall be done to assess recharge efficiency. RO/suitable</td></tr></table>	S. No	Recommendations	Action Plan	1.	Construct recharge pits and percolation trenches to improve groundwater recharge	Construction of Percolation trenches (20 m × 1 m × 2 m) along 3rd–4th order streams. And recharge pits filled with gravel/sand and connect to storm drains. Quarterly monitoring of water levels in nearby wells.	2.	Link stormwater drains and runoff channels to recharge structures so rainwater is effectively captured and infiltrated	Storm water drain shall be connected with recharge structure and quarterly monitoring of water levels shall be done to assess recharge efficiency.	3.	Carry out regular monitoring of groundwater levels and water quality to	Quarterly monitoring of water levels shall be done to assess recharge efficiency. RO/suitable	Consultant details: Akshar Geo Services.										
S. No	Recommendations	Action Plan																						
1.	Construct recharge pits and percolation trenches to improve groundwater recharge	Construction of Percolation trenches (20 m × 1 m × 2 m) along 3rd–4th order streams. And recharge pits filled with gravel/sand and connect to storm drains. Quarterly monitoring of water levels in nearby wells.																						
2.	Link stormwater drains and runoff channels to recharge structures so rainwater is effectively captured and infiltrated	Storm water drain shall be connected with recharge structure and quarterly monitoring of water levels shall be done to assess recharge efficiency.																						
3.	Carry out regular monitoring of groundwater levels and water quality to	Quarterly monitoring of water levels shall be done to assess recharge efficiency. RO/suitable																						

Period	October 2025 to December 2025			Additional study (if any)
		assess effectiveness of the measures and ensure long term sustainability	treatment shall be provided to maintain water quality, if required.	
	4.	Install rooftop rainwater harvesting tanks in plant and colony areas to reduce dependence on groundwater and improve water quality	Installation rooftop tanks (20 m ³) with first-flush diversion. Stored rainwater shall be use for domestic needs. Quarterly water quality testing (pH, TDS, hardness, Iron etc.).	
	5.	Restore existing ponds by desilting, deepening, and strengthening bunds to enhance their recharge capacity	Desilting, deepening, bund strengthening, inlet/outlet regulation of existing 6 water bodies shall be done to enhance their recharge capacity.	
Impact study on biodiversity and aquatic ecology	Recommendations of study report:			Consultant details: Indian Institute of Social Welfare and Business Management (University of Kolkata in association with NABET accredited Ecology and Biodiversity Expert in 2025
	S. No.	Recommendations	Action Plan	
	1	Extensive greenbelt development shall be undertaken in and around the project area using native plant species with high Air Pollution Tolerance Index (APTI), large leaf area index, and high carbon sequestration potential.	About 30,000 sapling with native species having high carbon sequestration potentials, shall be planted in the surrounding villages	
	2	Waste and degraded land, along with available public land, may be identified in villages such as Killahara Pt-I and Rowkhowa Pt-I for plantation activities to enhance green cover and ecological status.	Waste and degraded areas shall be identified in consultation with village panchayat/administration for plantation activities.	
	3	Water bodies located in villages such as Kamarpara, Malgaon, and Jornagra Pt. IV may be conserved through deepening, desilting, embankment strengthening, and plantation activities.	Pond deepening, desilting and bund strengthening activities shall be done in village ponds for water conservation and separate budget under CER has been kept for the same.	
	4	Installation of rainwater harvesting/storage ponds and construction/repair of check dams and anicuts within suitable watershed areas.	Watershed development plan has been prepared and budget of Rs. 1.15 Crore has been kept for the same.	

Period	October 2025 to December 2025			Additional study (if any)
	5	Village-level biodiversity mapping may be undertaken through a participatory approach with emphasis on medicinal plants and livelihood opportunities for SHGs.	Through Adani Foundation, Local village level biodiversity mapping shall be undertaken with emphasis on incentivization of medicinal plant as Livelihood opportunity for SHGs.	
	6	Development of ecological parks in open grassland areas, such as Suapata Pt.-I, to promote biodiversity awareness and conservation.	Assistance will be provided to villages for development of ecological parks.	
	7	Enforcement of restrictions on single-use plastic and promotion of eco-friendly alternatives in and around the project area.	Noted and agreed.	
	8	Organize biodiversity conservation and management programmes for local communities and stakeholders through Adani Foundation.	Awareness program through Adani foundation shall be undertaken for biodiversity conservation.	
Risk assessment study	Project specific risk assessment with respect to storage of LDO & Coal storage and other hazardous chemicals is included in Final EIA-EMP Report. The appropriate preventive measures and necessary safeguards such as toxic and flammable gas detectors, alarm / interlock systems, breathing apparatus for working personnel, fire protection systems such as fire extinguishers, water curtain, fire water hydrants in place, the untoward consequences and the major risk due to the same could be eradicated.			Consultant details: Gaurang Environmental Solutions Pvt. Ltd.

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

S. No.	Type of Waste	Source	Quantity generated (TPA)	Mode of Treatment	Disposal
1.	Municipal Solid Waste	Plant Canteen	91 TPA	Collected; segregated using color coded waste bin, Organic waste converters (OWC)	Inorganic will be disposed via local municipal authorized vendor & Organic/Biodegradable waste by OWC.
2.	E-waste	IT & Telecom Equipment	~3.5 TPA	Collected; segregated and disposed	Authorized Recycler
3.	Battery waste from UPS	Automotive & Industrial	~7 TPA	Collected; segregated and disposed	Authorized Vendor
4	Bio medical waste	First aid center	0.12 TPA	Collected; segregated and disposed	Authorized Vendor

5.	Hazardous waste					
a.	Used / Spent Oil (Cat.5.1)	Plant Operation	100 KL	Collected; segregated and disposed	and	Registered Recyclers / Reprocessor with SPCB
b.	Waste or residues Containing oil (Cat.5.2)	Plant Operation	5 TPA	Collected; segregated		Sent to Authorized Recycler
c.	Empty Barrels/ containers / liners Contaminated with Hazardous chemicals/ wastes (Cat.33.1)	Plant Operation	15 TPA	Collected; segregated and disposed	and	Sent to Authorized Recycler

46.1.12: Public Consultation:

Details of advertisement given	1. The Assam Tribune, dated 13.03.2026. 2. Asomiya Pratidin dated 13.03.2026.
Date of public consultation	23.04.2026
Venue	Playground of Charuabakhra Primary Health Booth (Old), Village Charuabakhra Jangal Block, Jamduar Road, Gram Panchayat Chirakuta, Revenue Circle Chapar, District Dhubri, Assam
Presiding Officer	1. Dr. Preety Lekha Deka, ACS, Co-District Commissioner, Bilasipara Co-District, District: Dhubri. 2. Er. Kulen Talukdar, Sr. Env. Engineer, Head Office, Guwahati-21, Assam Pollution Control Board. 3. Er. Kalyan Basumatary, Regional Executive Engineer, RLO Bongaigaon, Assam Pollution Control Board.
Major issues raised	For local Employment, community rural infrastructure development, education, community health & infrastructure development. Pollution control system and water management and Public expectations for modern technology, safeguards would be adopted.
No. of people attended	About 1150 Nos

Action plan as per MoEF&CC O.M. dated 30/09/2020 to address the view of public on Project

S. No	Key Area Identified under Socio-EMP (CER) based on needs highlighted during Public Hearing	Physical Target	Time bound (Year wise) expenditure (in Crores)					
A	Educational Initiatives		1 st	2 nd	3 rd	4 th	5 th	Total Budget (in Crore)
	Modernization, Repair & construction/ maintenance of identified Primary / Higher Secondary School of nearby villages of the project site in consultation with Local Government/School Authorities in villages Salkocha & Tilapara.	Identified about 4 schools	0.4	0.4	0.55	0.55	0.45	2.35
	Distribution of drinking water filters/ water coolers in schools in Pukhuripara, Salkocha and others nearby villages.	About 38 schools/ villages	0.2	0.2	0.2	0.2	0.35	1.15

MoM of 46th meeting of the EAC for Thermal sector held on 18th June, 2026

	Basic teaching and learning infrastructure support to Govt. Schools, Supporting in creation of assembly halls, prayer halls, classrooms and smart class, computer room, space for mid-day meals, playground, school boundary walls etc. for government schools in villages Chirakuta, Salkocha, Santoshpur, Charuabakhra.	About 15 schools including ASDC	0.6	0.9	0.8	0.65	0.45	3.4
	Online courses for students such as Artificial Intelligence, Electric Vehicles, Renewable Energy etc. to equip students with job-ready skills through Adani Skill Development Centre (ASDC) on requirement basis in Santoshpur, Charuabakhra & other nearby villages	About 18 schools including ASDC	0.25	0.35	0.35	0.35	0.3	1.6
	Sub Total		1.45	1.85	1.9	1.75	1.55	8.5
B	Community Health Initiatives							
	Development of hospitals, strengthening of PHC's & CHC's and improvement of health facilities in Salkocha, Chirakuta & other nearby villages	2 Health Centers	0.5	0.7	1	1.1	1.1	4.4
	Rural Medical Camps through Medical Team of Primary Health Centre, Safe Menstrual Hygiene Management Awareness, Cataract Screening & Operation in Charuabakhra, Santoshpur, Gaurangtari, nearby villages.	About 4-5 camps	0.6	0.6	0.75	0.75	0.8	3.5
	Promotion of awareness of malnutrition and anemia.	About 42 schools villages	0.15	0.1	0.1	0.1	0.1	0.55
	Promotion of Poshan Vatika at backyard of villagers & Project Suposhan.	About 42 schools villages	0.1	0.2	0.15	0.15	0.15	0.75
	Sub Total		1.35	1.6	2	2.1	2.15	9.2
C	Sustainable Livelihood and Women Empowerment							
	Adani Skill Development Centre (ASDC/SDC) to train the youth under different trades viz. Welding, Fitting, Masonry & Bar-bending, Electrical, industrial machine operating & digital literacy/smart classes.	About 5 ASDCs	0.9	0.9	1	1.2	1.3	5.3
	Development & Support for vegetable cultivation and livestock management in nearby villages.	About 18 villages	0.3	0.4	0.5	0.5	0.6	2.3
	Sub Total		1.2	1.3	1.5	1.7	1.9	7.6
D	Community Infrastructure Development							
	Repairing, strengthening & Maintenance of Existing Roads in consultation with Gram Panchayats/Local Administration in Salkocha & other nearby villages along with construction of bus stop sheds.	About 5 villages	1	1	1	0.9	0.9	4.8
	To support for potable drinking water and water supply in nearby villages	About 8 villages	0.4	0.4	0.4	0.4	0.4	2

	Upgradation & Renovation of sanitation facilities such as toilets in schools with priority for girls.	Provision of 10 Girls' Toilets in schools	0.25	0.65	0.65	0.75	0.75	3.05
	Provision of Solar Power and street lighting/panels in nearby schools, local health centers of nearby villages & district administration.	About 15 numbers	0.3	0.4	0.5	0.5	0.4	2.1
	Sub Total		1.95	2.45	2.55	2.55	2.45	11.95
E	Sports & Culture Development							
	Promotion of sports for youths and women	About 5 villages	0.1	0.1	0.1	0.1	0.1	0.5
	Cultural activities for villagers	About 8 villages	0.05	0.05	0.05	0.05	0.05	0.25
	Sub Total		0.15	0.15	0.15	0.15	0.15	0.75
F	Tree plantation in Govt. School and Community Health Centre in Villages Santoshpur, Charuabakhra, Chirakuta, Gaurangtari, nearby villages	About 30,000 saplings in 5 years	0.6	0.7	0.4	0.4	0.4	2.5
	Total Budget		6.7	8.05	8.5	8.65	8.6	40.5

46.1.13: Capital Cost: The capital cost of the proposed project is Rs 36,600 Crores and the capital cost for environmental protection measures is proposed as Rs 2,608. Crores. The annual recurring cost towards the environmental protection measures is proposed as Rs 26 Crores. The employment generation from the proposed project / expansion is Construction phase: 400 (permanent) + 8000 (contractual), Operation phase: 500 (permanent) + 2000 (contractual). The details of cost for environmental protection measures is as follows:

S. No.	EMP Description	Budget (Rs. In Cr.)
1	Air Pollution Control Measures	
	a) Electrostatic Precipitator (ESP)	958
	b) Selective Catalytic Reduction (SCR), Low Nox NOx burner	280
	c) Chimney/Stack (Bi-flue)- 2 Nos.	295
	d) Dust Extraction & suppression system (Bag Filters, Cyclonic Separators)	22
2	Noise Control	8
3	Water Pollution Control	
	a) Cooling Tower including civil works	371
	b) DM Plant and Wastewater Treatment System (ETP)	110
	c) Sewerage Collection, treatment & disposal (STP)	4
4	Ash Management	
	a) Ash handling (Ash Dyke) including ash water recirculation	451
	b) Ash Disposal Work (including Silos)	63
5	Environmental Monitoring & Management	
	a) Environmental Laboratory & Environmental Monitoring & HW Management	11
	b) CEMS, CAAQMS, EQMS monitoring system & main gate display board	12
6	Green Belt Development	18
7	Others	
	Rainwater harvesting	6

S. No.	EMP Description	Budget (Rs. In Cr.)
	Solar Power Harnessing	2
	Grand Total	2,611

46.1.14: Greenbelt Development Plan: Proposed greenbelt will be developed in 193 ha which is about 33% of the total project area. A 20-50 m wide greenbelt, consisting of at least 3 tiers around plant boundary will be developed as greenbelt and green cover as per CPCB guidelines. Local and native species will be planted with a density of 2500 trees per hectare. Total no. of 4,82,500 saplings will be planted and nurtured in 193 hectares in 5 years.

46.1.15: Ash management:

Details	Annual generation (MTPA)	Utilization (MTPA)	% of utilization	Balance quantity (MTPA)	No of storage silos with capacity
Ash (Fly and Bottom)	5.31	5.31	100 %	0	6x2500 MT

A. Ash Pond details:

S. No.	Details of Ash Pond	Ash Pond
1	Area (Ha)	70
2	Dyke Height (m)	15
3	Volume (m ³)	105 Lac m ³
4	Quantity of Ash to be Disposed (Metric Tons)	115.5 Lakh MT
5	Expected Life of Ash Pond (Number of Years and Months)	Life of ash dyke is calculated as 20 years
6	Type of Lining Carried in Ash Pond	HDPE
7	Mode of Disposal	HCSD/MCSD
8	Ratio of Ash : Water in Slurry Mix (1:--)	65:35
9	Ash Water Recycling System (AWRS)	Yes
10	Quantity of Wastewater from Ash Pond to be Discharged into Land or Water Body (m ³)	0
11	Details regarding dyke stability study and name of the organization who conducted the study	Shall be done during operational phase of the plant.

B. Ash utilization plan:

S. No.	Activity (as applicable)	Quantity	Percentage
1	Fly ash based products (bricks or blocks or tiles or fiber cement sheets or pipes or boards or panels)	0.106	2 %
2	Cement manufacturing	4.248	80 %
3	Construction of roads, road and fly over embankment	0.956	18 %
	Total	5.31	100 %

46.1.16: Comments of State Pollution Control Board, Assam as per Ministry's OM dated 14.01.2025 and SOP dated 08.10.2025 issued on 09/03/2026

- Project Proponent must obtain all necessary permission/clearances from various Govt. Authorities as applicable for the project.
- The project proponent shall develop a greenbelt/plantation area with native trees only at least 33% of the total plot area to develop Green Belt and Carbon Sink.

- Personnel working industry areas shall be provided with protective respiratory devices and they shall also be imparted adequate training and information on safety and health aspects.
- The project authority should implement the CSR & EMP Plan properly.
- Project Proponent must comply the recommendation related to Environmental Safeguard, Water Pollution Safeguard, Air Pollution Safeguard, Solid, E Waste and Hazardous Waste Management

In addition to the above, proponent paid a fee of Rs. 7,00,547.20 towards CTE Fees online on 18.02.2026.

46.1.17: Summary of violation under EIA, 2006/court case/show cause/direction if any, related to the project under consideration shall be furnished.

A. Summary of court cases: Nil

B. Summary of Show Cause Notices: Nil

C. Further, there is no violation cases under the Environmental Protection Act, 1986, Van (Sanraksha Evam Samvardhan) Adhiniyam, 1980 and The Wildlife (Protection) Act, 1972.

46.1.18: Written Submission:

Query 1: Revised Land use breakup of TPP and revised Plant Layout Plan as per 33% Greenbelt Area as per comments of APCB.

Reply: The revised land use details with breakup considering 33% greenbelt/plantation as below:

Description	Propose Area (In Hectares)
Main Plant (Including BTG, Water Facility(CT), AHP Facility, Switchyard & Misc. Facility)	100
Coal Stock Yard, CHP (Including Rail Yard)	70
Reservoir	20
Green belt (33% of total area)	193
Ash Dyke	70
Others: [Land for Future expansion including CGU (11 Ha)]	132
Total	585 Ha

Query 2: The updated Greenbelt Action Plan (33%) with updated Plant Layout is to be submitted

Reply: The revised Greenbelt action plan considering 33% along with budget allocation is given below.

Action Plan for Greenbelt Development

Total Plot area	585 Ha.
Total Greenbelt area	193 Ha (33 % of the Project Area)
Tree to tree distance	2 m
Minimum width of greenbelt area	20 m
Trees Calculation	2500 Trees /Ha

Total trees to be provided	4,82,500 nos.
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Years	Area (Ha.)	No. of Trees	Capital cost	Recurring cost/Annum
2026-27	25	62500	Plantation/ Greenbelt development	Maintenance/ Casualty replacement
2027-28	35	87500		
2028-29	30	75000		
2029-30	40	100000		
2030-31	45	112500		
Remaining Area gap filling	18	45000		
Total	193	482500	14 Crores	4 Crores
Grand Total			18 Crores	

Revised EMP is given below:

S. No.	EMP Description	Budget (Rs. In Cr.)
1	Air Pollution Control Measures	
	a) Electrostatic Precipitator (ESP)	958
	b) Selective Catalytic Reduction (SCR), Low Nox NOx burner	280
	c) Chimney/Stack (Bi-flue)- 2 Nos.	295
	d) Dust Extraction & suppression system (Bag Filters, Cyclonic Separators)	22
2	Noise Control	8
3	Water Pollution Control	
	a) Cooling Tower including civil works	371
	b) DM Plant and Wastewater Treatment System (ETP)	110
	c) Sewerage Collection, treatment & disposal (STP)	4
4	Ash Management	
	a) Ash handling (Ash Dyke) including ash water recirculation	451
	b) Ash Disposal Work (including Silos)	63
5	Environmental Monitoring & Management	
	a) Environmental Laboratory & Environmental Monitoring & HW Management	11
	b) CEMS, CAAQMS, EQMS monitoring system & main gate display board	12
6	Green Belt Development	18
7	Others	
	Rainwater harvesting	6
	Solar Power Harnessing	2
	Grand Total	2,611

Query 3: The budgetary allocation for Watershed Management Plan to be increased

Reply: The budgetary allocation for watershed management plan has been increased to Rs. 1.15 Crore.

Query 4: Revised Public Hearing Action Plan including Physical and Financial Target

Reply: Revised PH Action plan is given below

S. No	Key Area Identified under Socio-EMP (CER) based on needs highlighted during Public Hearing	Physical Target	Time bound (Year wise) expenditure (in Crores)					
A	Educational Initiatives		1st	2nd	3rd	4th	5th	Total Budget (in Crore)
	Modernization, Repair & construction/ maintenance of identified Primary / Higher Secondary School of nearby villages of the project site in consultation with Local Government/School Authorities in villages Salkocha & Tilapara.	Identified about 4 schools	0.4	0.4	0.55	0.55	0.45	2.35
	Distribution of drinking water filters/ water coolers in schools in Pukhuripara, Salkocha and others nearby villages.	About 38 schools/ villages	0.2	0.2	0.2	0.2	0.35	1.15
	Basic teaching and learning infrastructure support to Govt. Schools, Supporting in creation of assembly halls, prayer halls, classrooms and smart class, computer room, space for mid-day meals, playground, school boundary walls etc. for government schools in villages Chirakuta, Salkocha, Santoshpur, Charuabakhra.	About 15 schools including ASDC	0.6	0.9	0.8	0.65	0.45	3.4
	Online courses for students such as Artificial Intelligence, Electric Vehicles, Renewable Energy etc. to equip students with job-ready skills through Adani Skill Development Centre (ASDC) on requirement basis in Santoshpur, Charuabakhra & other nearby villages	About 18 schools including ASDC	0.25	0.35	0.35	0.35	0.3	1.6
	Sub Total		1.45	1.85	1.9	1.75	1.55	8.5
B	Community Health Initiatives							
	Development of hospitals, strengthening of PHC's & CHC's and improvement of health facilities in Salkocha, Chirakuta & other nearby villages	2 Health Centers	0.5	0.7	1	1.1	1.1	4.4
	Rural Medical Camps through Medical Team of Primary Health Centre, Safe Menstrual Hygiene Management Awareness, Cataract Screening & Operation in Charuabakhra, Santoshpur, Gaurangtari, nearby villages.	About 4-5 camps	0.6	0.6	0.75	0.75	0.8	3.5
	Promotion of awareness of malnutrition and anemia.	About 42 schools villages	0.15	0.1	0.1	0.1	0.1	0.55
	Promotion of Poshan Vatika at backyard of villagers & Project Suposhan.	About 42 schools villages	0.1	0.2	0.15	0.15	0.15	0.75
	Sub Total		1.35	1.6	2	2.1	2.15	9.2
C	Sustainable Livelihood and Women Empowerment							
	Adani Skill Development Centre (ASDC/SDC) to train the youth under different trades viz. Welding, Fitting, Masonry & Bar-bending, Electrical, industrial machine operating & digital	About 5 ASDCs	0.9	0.9	1	1.2	1.3	5.3

S. No	Key Area Identified under Socio-EMP (CER) based on needs highlighted during Public Hearing	Physical Target	Time bound (Year wise) expenditure (in Crores)					
	literacy/smart classes.							
	Development & Support for vegetable cultivation and livestock management in nearby villages.	About 18 villages	0.3	0.4	0.5	0.5	0.6	2.3
	Sub Total		1.2	1.3	1.5	1.7	1.9	7.6
D	Community Infrastructure Development							
	Repairing, strengthening & Maintenance of Existing Roads in consultation with Gram Panchayats/Local Administration in Salkocha & other nearby villages along with construction of bus stop sheds.	About 5 villages	1	1	1	0.9	0.9	4.8
	To support for potable drinking water and water supply in nearby villages	About 8 villages	0.4	0.4	0.4	0.4	0.4	2
	Upgradation & Renovation of sanitation facilities such as toilets in schools with priority for girls.	Provision of 10 Girls' Toilets in schools	0.25	0.65	0.65	0.75	0.75	3.05
	Provision of Solar Power and street lighting/panels in nearby schools, local health centers of nearby villages & district administration.	About 15 numbers	0.3	0.4	0.5	0.5	0.4	2.1
	Sub Total		1.95	2.45	2.55	2.55	2.45	11.95
E	Sports & Culture Development							
	Promotion of sports for youths and women	About 5 villages	0.1	0.1	0.1	0.1	0.1	0.5
	Cultural activities for villagers	About 8 villages	0.05	0.05	0.05	0.05	0.05	0.25
	Sub Total		0.15	0.15	0.15	0.15	0.15	0.75
F	Tree plantation in Govt. School and Community Health Centre in Villages Santoshpur, Charuabakhra, Chirakuta, Gaurangtari, nearby villages	About 30,000 saplings in 5 years	0.6	0.7	0.4	0.4	0.4	2.5
Total Budget			6.7	8.05	8.5	8.65	8.6	40.5

Query 5: Solar Power of 2 MW to be proposed

Reply: The solar power of 2 MW (1MW inside & 1MW outside the TPP) will be installed along with construction and operation phases.

Query 6: Improvement in livelihood through support to local people for improvement in Animal Husbandry and Agricultural practises

Reply: APL will work and focus for improvement in livelihood support to local people for Animal Husbandry and Agriculture through Sustainable Livelihood Development (SLD).

Under the Socio- EMP (CER) program a budget of Rs. 7.6 Crores has been allocated for SLD.

Observation and deliberation of the EAC

46.1.19: The Committee observed and noted the following:

- i. Instant proposal is for installation of Proposed 3200 MW (4x800MW) Coal Based Ultra Super Critical Thermal Power Project at Villages Charuabakhra, Chirakuta I & II, Santoshpur, Revenue Circle Chapar, District Dhubri, Assam by M/s Adani Power Limited.
- ii. The committee observed that no alternative sites considered by the Project proponent, since the project area has been allotted specifically for the project by the Assam Power Distribution Company Limited (APDCL), Govt. of Assam. Total land requirement for the proposed project is 585 ha (Private: 118.7 Ha + Govt. 466.3 Ha). No R & R is involved in the proposed project.
- iii. The EAC reviewed the KML file of the project site, as presented by the Project Proponent, along with the Decision Support System (DSS) analysis available on the PARIVESH portal using Google Earth imagery.
- iv. The EAC observed that the villages (Charua Bhakhra, Chirakuta Pt I&II, and Santoshpur), Schools (Sankardev Sishu Viddya Nicatan, Salkocha, Govt Model College, Bilasipara and Silgara ME School, Silgara) and hospitals (Salkocha Hospital, Silkocha) are located within 3 Km distance of the proposed project site.
- v. No forest land is involved in the proposed project area.
- vi. EAC observed that the Mar Gaurang Nala is located adjacent to the project site, and therefore, flow and biodiversity of Nalla will be maintained by the PP.
- vii. The Gaurang River is located at a distance of approximately 2.9 km. from the project boundary. The authenticated High Flood Level (HFL) of Gaurang River is 35.5 m. as per the letter dated 09.02.2026 obtained from WRD, Guwahati.
- viii. As per the DSS analysis, Reserve and Protected forest are located outside the project site and within study area which are Dudhnath RF. (S, at 1.5km), Tokrabandha RF. (SW, at 2 km), Sarpamar R.F.. (SE, at 4.4 km), Chandardinga RF. (SE, at 4.5 km), and Chakrashila Wildlife Sanctuary. (N, at 5 km).
- ix. Chakrashila Wildlife Sanctuary is located at a distance of 5.2 Km and 2.52 km from Eco sensitive zone from the proposed TPP. There are no national parks, Biosphere Reserves, Tiger/Elephant Reserves and Corridors within 10 km distance from the project site as ascertained from DSS.
- x. The water requirement for the proposed project is estimated as 1,53,600 m³/day (56 MCM), out of which 1,53,600 m³/day of freshwater requirement will be obtained from the Brahmaputra River. The permission for drawl of surface water is obtained from the Water Resources Department, Guwahati vide Letter No. 433516/678 dated 09.01.2026. The water will be transported to the plant site through pipeline. The specific water consumption for the power plant will be < 2.5 m³/MWhr.
- xi. The power requirement for the proposed project is estimated as 176 MW, which will be obtained from the nearby substation.
- xii. The capital cost of the proposed project is Rs 36,600 Crores and the capital cost for environmental protection measures is proposed as Rs 2,608. Crores. The annual

recurring cost towards the environmental protection measures is proposed as Rs 26 Crores. The employment generation from the proposed project is Construction phase: 400 (permanent) + 8000 (contractual), Operation phase: 500 (permanent) + 2000 (contractual).

- xiii. Coal requirement for the proposed project is about 13.27 MTPA that will be sourced from Nearby Commercial Coal Mines (MCL/ECL/NECL) & e-auction and transported through railway wagons. There will be no road transportation of coal for proposed project. Only LDO/HSD (24,000 KL/ Annum) will be transported by road.
- xiv. The Proposed greenbelt will be developed in 193 ha which is about 33% of the total project area. Thus, total of 193 ha area (33% of total project area) will be developed as greenbelt. A 20 m wide greenbelt, consisting of at least 3 tiers around plant boundary will be developed as greenbelt and green cover as per CPCB guidelines. Local and native species will be planted with a density of 2500 trees per hectare. Total no. of 4,82,500 saplings will be planted and nurtured in 193 hectares in 5 years.
- xv. The project site is not located within a Critically Polluted Area (CPA) or Severely Polluted Area (SPA).
- xvi. Ash pond will be developed in 70 ha area (i.e., 0.02 Ha/MW) with 15 m of ash dyke height. About 5.31 MTPA ash (Fly Ash: 4.25 MTPA + Bottom ash: 1.06 MTPA) will be generated and the same will be disposed with 100 % utilization by cement manufacturing, bricks manufacturing industries and filling mines etc. Unused fly ash, if any, will be stored to ash dyke.
- xvii. The committee noted that with respect to water pollution control, proponent shall use Sewage treatment plant and treated sewage water shall be utilized for horticulture purpose. Effluent will be treated in ETP. There will be no effluent discharge from the premises, hence the ZLD will be maintained. Along with this, the water from the cooling towers will be recirculated. A state-of-the-art roof top rainwater harvesting system shall be provided to collect the run-off for ground water recharging
- xviii. EAC deliberated on construction of stack height and observed that stack height for proposed plant would be 275 m. as per the provisions contained under Notification no GSR 465 (E) dated 11/07/2025.
- xix. The waste water generated (Domestic 22 KLD + Industrial 1996 KLD) in the proposed project shall be treated by STP (30 KLD) and ETP (2400 KLD). Zero liquid discharge (ZLD) facility shall be adopted since the cooling water, blow down water, wastewater and ash water would be recycled back to the system after suitable treatment for reuse.
- xx. The Committee deliberated on the baseline data (October-December 2025) and incremental GLC. The committee noted that the proponent is providing High Efficiency Electrostatic Precipitator (ESP) to meet the stack emission standards for Particulate Matters 30 mg/Nm³, Low Nox Burner, and Dust Extraction & Suppression System to control the emission of Particulate matter, NO_x, and stack with a height of 275 m will be provided to control & regulate the air emission from the proposed project.
- xxi. The Committee also deliberated on the comments of APCB and opined to incorporate the same in the EC conditions.
- xxii. EAC has considered the comments of the APCB and asked the Project Proponent to increase the Greenbelt area to at least 33% and revise the plant layout to increase the

width of Greenbelt along the plant boundary.

- xxiii. EAC asked the Project Proponent to explore the feasibility of Bottom Ash handling and develop the Fly Ash storage area for 24 hrs.
- xxiv. EAC asked the Project Proponent to revise the Water Shed Management plan including all the water body in study area and rejuvenate the ponds in study area.
- xxv. Project Proponent has proposed 1 MW solar power in the Power Plant, however, EAC suggested the PP to increase the Solar Power to 2 MW.
- xxvi. EAC asked the Project Proponent to develop the railway siding to the earliest so that no coal can be transported by road.
- xxvii. EAC asked the Project Proponent to develop the 3 tier Greenbelt Development all along the plant boundary and develop the Smart Classes and toilets in the nearby schools.
- xxviii. EAC asked the Project Proponent to make an Action plan for Animal Husbandry and Agriculture improvement plan for the study area.
- xxix. 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.
- xxx. 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.
- xxxi. EAC deliberated on the written submission submitted by the Project Proponent and found it satisfactory.

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

A. Specific conditions

[A] Environmental Management

1. Project proponent shall ensure that 100% utilization of ash generated from 4x800 MW in accordance with the ash utilization notification dated 31/12/2021 and its subsequent amendment. Area for the ash pond proposed for the Power Plant (4x800MW) shall not exceed 70 Ha as committed. Ash pond shall be lined, fenced and a green belt shall be developed all along the periphery of the ash pond area.
2. All the environmental safeguards prescribed by the Assam Pollution Control Board on 09/03/2026 for the instant proposal in pursuance to the MoEF&CC O.M. dated 14.01.2025 and its subsequent amendment shall be complied with. Compliance in this regard shall be submitted to the Regional Office of MoEF&CC along with the six-monthly compliance report.

3. Project proponent shall install Four Continuous Ambient Air Quality Monitoring Stations (CAAQMS) in and around the plant area and at the location at which Maximum GLC is occurring in consultation with APCB within one year from the date of grant of EC as committed.
4. Project proponent shall comply with the recommendations made in the aquatic Ecology & Biodiversity assessment report, Hydrology and Hydrogeology study, Risk assessment Study in a time bound manner. Compliance status in this regard shall be submitted to the Regional Office of MoEF&CC along with the six monthly compliance report.
5. The coal requirement for the proposed project is about 13.27 MTPA and same would be met under the Shakti Policy. The entire coal requirement for proposed project shall be transported by rail network only and no road transportation is permitted.
6. The water requirement for proposed project is estimated as 1,53,600 m³/day and the same shall be met from Brahmaputra River. The specific water consumption shall be less than 2.5 m³/MW_{hr}.
7. Project proponent shall store harvested rainwater in the project boundary and utilize the same for plantation, recharging water in the pond and domestic utilization in colonies. A record shall be maintained of water collected through rainwater and its supply system. PP shall get the water audit done every year to optimize the water requirement.
8. Project proponent shall implement the protective measure proposed in EMP in a time-bound manner. The budget earmarked for the same is Rs. 2611 crores and Rs. 26 crores (recurring) and should be kept in separate accounts and audited annually. The implementation status along with the amount spent with documentary proof shall be submitted to the concerned Regional Office for the activities carried out during the previous year.
9. Project proponent shall assess the carbon footprint of the project and develop carbon sink/carbon sequestration resources using modern technologies. The implementation report shall be submitted to the concerned Regional Office of the MoEF&CC.
10. Project proponent shall carry out study on site specific design earthquake parameters for proposed 3200 MW power project through reputed institute within a time frame of six months from the date of grant of EC as the proposed project site lies in an Earthquake sensitive zone V as per IS 1893 (Indian Seismic Code). Recommendations of the study report and its implementation status shall be submitted to the Regional Office along with the six monthly compliance report.
11. Project proponent shall ensure that diesel operated vehicles will be switched over to E-Vehicles/BS6/CNG/LNG in a time bound manner and replace the passenger vehicles to E-vehicle in phased manner. Further, for local movement of officials, Contract of Vehicles deployment shall be awarded to Project affected people and all efforts for adopting heavy E-vehicles like Bulkiers for ash transportation for short distance subject to availability of such E-vehicle and adequate charging infrastructure in the surrounding area shall be provided. PP shall submit the action taken report to concerned RO with amount spent, photographs (before & after), number of such non diesel vehicles deployed etc. in six monthly compliance report.

12. The Project Proponent shall provide stack of 275 meters height and shall abide by the provisions of the notification number G.S.R 465 (E) dated 11/07/2025 related to SO₂ emission norms. Along with Particulate Matter, SO₂, NO_x and Hg, CO and CO₂ shall also be monitored for stack emissions.
13. Ash pond area and fly ash utilization shall be as per Fly Ash Notification issued by Ministry/ CPCB from time to time.
14. Project proponent shall ensure that pipelines carrying the fly ash and effluent shall be inspected regularly for any leakages.
15. Effluent of 1996 KLD will be treated through Effluent Treatment Plant. As committed by the Project proponent, Zero liquid discharge shall be adopted for the proposed plant. No wastewater will be discharged outside the project site.
16. PP shall install 2 MW Solar Energy Plant for conservation measures. Action plan in this regard shall be submitted to the Regional Office of the MoEF&CC and SPCB within two years from the date of grant of EC. PP should explore more opportunities to put solar PV in nearby Schools and other Government buildings also.
17. PP shall implement the concurrent plantation plan in a time bound manner. Total of 193 ha area (33% of total project area) will be developed as greenbelt. A 20 - 50 m wide greenbelt, consisting of at least 3 tiers around plant boundary will be developed as greenbelt and green cover as per CPCB guidelines. The height of the saplings to be planted should be of minimum of 2 meter height. The budget earmarked for the green belt plantation shall be kept in a separate account and audited annually. PP should annually submit the audited statement of expenditure along with proof of activities viz. photographs (before & after with geolocation date & time), details of expert agency engaged, details of species planted, number of species planted, survival rate, density of plantation etc. to the Regional Office of MoEF&CC and on PARIVESH Portal as the case may be for the activities carried out during previous year.
18. PP shall provide basic facilities to the nearby schools such as drinking water, sanitation facilities (sanitary napkin vending machines) and shall also develop green belt around the nearby schools. Further, PP shall organize quarterly awareness programs for school students to educate them on the significance and preservation of trees.
19. Wildlife conservation plan approved by the competent authority shall be implemented. Additional, budget shall be added in the plan, in case additional measures suggested by state wildlife department. The final Wildlife conservation plan duly approved by the CWLW shall be submitted to RO, MoEF&CC within a time frame of three months from the date of grant of EC and the budget approved by the concerned authority shall be deposited in a government account.
20. Project proponent shall install LED display of air quality (Continuous AAQ monitoring) and stack emission (Continuous emission monitoring) at prominent locations preferably outside the plant's main entrance for public viewing and in administrative complex and maintenance of devices shall be done regularly.
21. Project proponent shall carry out Water Sprinkling on roads inside the plant area/ administrative/ residential areas and outside the plant area at least for 2 KM on a regular basis to control the air pollution. The strength of the shoulders of these roads portion shall be maintained adequate and no dust/ash shall be accumulated on the

shoulders. A logbook shall be maintained for the activity and be in six-monthly compliance report.

22. PP shall deploy vacuum based vehicle for everyday cleaning of the road in and around plant site at least for 5 KM .
23. Environment Audit of plant shall be done annually, and report shall be submitted to Regional office of the Ministry.
24. A detailed action plan regarding leachate handling shall be prepared and implemented in consultation with SPCB and the same shall be submitted to the Regional Office of the Ministry. Leachate shall be treated and reused. No treated leachate shall be discharged in any circumstances. Characteristics of Leachate and the treated leachate shall be monitored once in quarter and records shall be maintained.
25. Oil and grease recovered from the treatment plant should be disposed only through authorized recyclers.
26. Monitoring of surface water quality and Ground Water quality shall also be regularly conducted in and around the project site and records to be maintained. Further, monitoring points shall be located between the plant and drainage in the direction of flow of ground water and records maintained. Monitoring for heavy metals in ground water shall also be undertaken and results/findings submitted along with half yearly monitoring report. The monitored data shall be submitted regularly on PARIVESH portal as part of Half Yearly compliance report
27. For the DG sets, emission limits and the stack height shall be in conformity with the extant regulations and the CPCB guidelines. Acoustic enclosure shall be provided to DG set for controlling the noise pollution.
28. PP shall ensure that all types of plastic waste generated from the plant shall be stored separately in isolated area and disposed of strictly adhering to the Plastic Waste Management Rules 2026 (as amended). In pursuant to the Ministry's OM dated 18/07/2022. PP shall also create awareness among the people working in the project area as well as in its surrounding area on the ban on Single Use Plastic (SUP) in order to ensure compliance of Ministry's Notification published by the Ministry on 12/08/2021. A report along with photograph on the measures taken shall also be included in the six monthly compliance report submitted by PP.
29. PP is advised to implement the '**Ek Ped Maa Ke Naam**' Campaign which was launched on 5th June 2024 on the occasion of the World Environment Day to increase the forest cover across the Country. This plantation drive is other than Green belt development. The action in this regard shall be submitted concerned RO in six monthly report.
30. Project Proponent can implement Action Plan for Animal Husbandry and Agriculture improvement in the study area. A report along with photograph on the measures taken shall also be included in the six monthly compliance report submitted by PP.

[B] Socio-economic

1. A vision document comprising prospective plan for implementation of various CER activities, plantation programme outside the project cover area, rejuvenation and conservation of water bodies within 5 km radius of the project cover area shall be prepared and submitted to the Regional Office of the Ministry within 6 months.

Implementation status of the same shall be reported to the Regional office in 6 monthly compliance report.

2. Epidemiological Study among population within 5 km radius of project cover area shall be carried out on regular interval (Once in two year) through independent agency. Necessary measures shall be taken as per findings of study in consultation with district administration. Action taken report shall be submitted to the Regional Office of the Ministry.
3. The budget proposed for PH is Rs. 40.5 Crores. The budget proposed shall be kept in a separate account and audited annually. Project proponent shall implement the action plan to address the issues raised during public hearing within a time frame of 5 years from the date of grant of EC. Compliance status in this regard shall be submitted along with the six monthly compliance to the concerned Regional Office of MoEF&CC. In addition to this, PP shall strengthen and improve the existing Government Primary Health Center (PHC) & Community Health Center (CHC) in the study area for better public health as committed. Compliance status in this regard shall be submitted along with the six monthly compliance to the concerned Regional Office of MoEF&CC.
4. The establishment of a robust public grievance redressal mechanism to address concerns and complaints from local communities regarding the power plant's operations, environmental impacts, or social issues shall be developed. A Senior Officer shall review the functioning of the mechanism twice in a month.
5. PP shall provide basic facilities to the nearby schools such as drinking water, sanitation facilities (sanitary napkin vending machines) and shall also develop green belt around the nearby schools. Further, PP shall organize quarterly awareness programs for school students to educate them on the conservation of trees.

[C] Miscellaneous

1. An Environmental Cell headed by the Environment Manager with postgraduate qualification in environmental science/environmental engineering, shall be created. It shall be ensured that the Head of the Cell shall directly report to the Head of the Plant who would be accountable for implementation of environmental regulations and social impact improvement/mitigation measures.
2. Consent for the project shall be obtained from the State Pollution Control Board as required under the Air (Prevention and Control of Pollution) Act, 1981 and the Water (Prevention and Control of Pollution) Act, 1974.
3. All necessary clearance from the concerned Authority, as may be applicable should be obtained prior to commencement of project or activity.

B. General conditions

A. Statutory compliance:

1. Emission Standards for Thermal Power Plants as per Ministry's Notification S.O. 3305 (E) dated 7.12.2015, G.S.R.593 (E) dated 28.6.2018 and as amended from time to time shall be complied.

2. MoEF&CC Notifications on Water Consumption vide Notification No. S.O. 3305 (E) dated 07.12.2015 read with G.S.R 593 (E) dated 28.6.2018 as amended from time to time shall be complied.
3. The recommendation from Standing Committee of NBWL under the Wildlife (Protection) Act, 1972 should be obtained, if applicable.
4. No Objection Certificate from Ministry of Civil Aviation be obtained for installation of requisite chimney height and its siting criteria for height clearance.

B. Ash content/ mode of transportation of coal:

1. MoEF&CC Notification issued vide S.O. 1561 (E) dated 21.05.2020 and as amended from time to time shall be complied which inter-alia include use of coal by Thermal Power Plants, without stipulations as regards ash content or distance, shall be permitted subject to compliance of conditions prescribed under (1) Setting Up Technology Solution for emission norms, (2) Management of Ash Ponds and (3) Transportation.

C. Air quality monitoring and Management:

1. Project proponent shall abide by the provisions of the notification number G.S.R 465(E) dated 11/07/2025 related to SO₂ emission norms.
2. Low NO_x Burners with Over Fire Air (OFA) system shall be installed to achieve NO_x emission standard of 100 mg/Nm³.
3. High efficiency Electrostatic Precipitators (ESPs) shall be installed and maintained in each unit to ensure that particulate matter (PM) emission to meet the stipulated standards of 30 mg/Nm³ or less.
4. Stack with a height of 275 meters shall be provided with continuous online monitoring instruments for SO₂, NO_x and Particulate Matter as per extant rules.
5. Exit velocity of flue gases shall not be less than 20-25 m/s. Mercury emissions from stack shall also be monitored periodically.
6. Continuous Ambient Air Quality monitoring system shall be set up to monitor common/criteria pollutants from the flue gases such as PM₁₀, PM_{2.5}, SO₂, NO_x within the plant area and in the buffer area, at four locations in consultation with ASPCB. The monitoring of other locations (at least three locations outside the plant area covering upwind and downwind directions at an angle of 120° each) shall be carried out manually.
7. Adequate dust extraction/suppression system shall be installed in coal handling, ash handling areas and material transfer points to control fugitive emissions.
8. Appropriate Air Pollution Control measures be provided at all the dust generating sources including sufficient water sprinkling arrangements at various locations viz., roads, excavation sites, crusher plants, transfer points, loading and unloading areas, etc.

D. Noise pollution and its control measures:

1. The Ambient Noise levels shall meet the standards prescribed as per the Noise Pollution (Regulation and Control) Rules, 2000.

2. Persons exposed to high noise generating equipment shall use Personal Protective Equipment (PPE) like earplugs/ear muffs, etc.
3. Periodical medical examination on hearing loss shall be carried out for all the workers and maintain audiometric record and for treatment of any hearing loss including rotating to non-noisy/less noisy areas.

E. Human Health Environment:

1. Bi-annual Health check-up of all the workers is to be conducted. The Occupational health study shall take into account of chronic exposure to noise which may lead to adverse effects like increase in heart rate and blood pressure, hypertension and peripheral vasoconstriction and thus increased peripheral vascular resistance. Similarly, the study shall also assess the health impacts due to air polluting agents.
2. Impact of operation of power plant on agricultural crops, large water bodies (as applicable) once in two years by engaging an institute of repute. The study shall also include impact due to heavy metals associated with emission from power plant.

F. Water quality monitoring and Management:

1. Induced/Natural draft closed cycle wet cooling system including cooling towers shall be set up with minimum Cycles of Concentration (COC) of 5.0 or above for power plants using fresh water to achieve specific water consumption of 2.5 m³/MWhr.
2. In case of the water withdrawal from river, a minimum flow 15% of the average flow of 120 consecutive leanest days should be maintained for environmental flow whichever is higher, to be released during the lean season after water withdrawal for proposed power plant.
3. Records pertaining to measurements of daily water withdrawal and river flows (obtained from Irrigation Department/Water Resources Department) immediately upstream and downstream of withdrawal site shall be maintained.
4. Regular (at least once in six months) monitoring of groundwater quality in and around the ash pond area including presence of heavy metals (Hg, Cr, As, Pb, etc.) shall be carried out as per CPCB guidelines. Surface water quality monitoring including Arsenic (As), shall be undertaken for major surface water bodies as per the EMP. The data so obtained should be compared with the baseline data so as to ensure that the groundwater and surface water quality is not adversely impacted due to the project & its activities.
5. The treated effluents emanating from the different processes such as DM plant, boiler blow down, ash pond/dyke, sewage, etc. conforming to the prescribed standards shall be re-circulated and reused. Sludge/ rejects will be disposed in accordance with the Hazardous Waste Management Rules.
6. Hot water dispensed from the condenser should be adequately cooled to ensure the temperature of the released surface water is not more than 5 degrees Celsius above the temperature of the intake water.
7. Wastewater generation of 1996 KLD from various sources (viz. cooling tower blowdown, boiler blow down, wastewater from ash handling, etc) shall be treated to meet the standards of pH: 6.5-8.5; Total Suspended Solids: 100 mg/l; Oil & Grease: 20 mg/l; Copper: 1 mg/l; Iron:1 mg/l; Free Chlorine: 0.5; Zinc: 1.0 mg/l; Total Chromium: 0.2 mg/l; Phosphate: 5.0 mg/l.

8. Sewage generation of 22 KLD will be treated by setting up Sewage Treatment plant to maintain the treated sewage characteristics of pH: 6.5-9.0; Bio-Chemical Oxygen Demand (BOD): 30 mg/l; Total Suspended Solids: 100 mg/l; Faecal Coliforms (Most Probable Number).

G. Risk Mitigation and Disaster Management:

1. Adequate safety measures and environmental safeguards shall be provided in the plant area to control spontaneous fires in coal yard, especially during dry and humid season.
2. Storage facilities for auxiliary liquid fuel such as LDO and HFO/LSHS shall be made as per the extant rules in the plant area in accordance with the directives of Petroleum & Explosives Safety Organisation (PESO). Low sulphur fuel shall be used.
3. Ergonomic working conditions with First Aid and sanitation arrangements shall be made for the drivers and other contract workers during construction phase.
4. Safety management plan based on Risk Assessment shall be prepared to limit the risk exposure to the workers within the plant boundary.
5. Regular mock drills for on-site emergency management plan and Integrated Emergency Response System shall be developed for all kind of possible disaster situations.
6. As the plant is located in the high-risk earthquake zone, disaster management plan be prepared for the same and adequate safety measures be taken.

H. Green belt and Biodiversity conservation:

1. Green belt shall be developed in an area of 193 ha (33% of the total project area) with indigenous native tree species in accordance with CPCB guidelines. The green belt shall inter-alia cover an entire periphery of the plant.
2. In-situ/ex-situ Conservation Plan for the conservation of flora and fauna should be prepared and implemented.
3. PP shall distribute 25000 plants of not less than 2 meter height, mainly fruit plants especially to the farmers in the study area with incentive for 5 years.

I. Waste management:

1. Solid waste management should be planned in accordance with extant Solid Waste Management Rules, 2026.
2. Toxicity Characteristic Leachate Procedure (TCLP) test shall be conducted for any substance, potential of leaching heavy metals into the surrounding areas as well as into the groundwater.
3. Ash pond shall be lined with impervious liner as per the soil conditions. Adequate dam/dyke safety measures shall also be implemented to protect the ash dyke from getting breached.
4. Fly ash shall be collected in dry form and ash generated shall be used in phased manner as per provisions of the Notification on Ash Utilization issued by the Ministry S.O. 5481 dated 31.12.2021, S.O.6169 (E) dated 30.12.2021, S.O.05 (E) dated 01.01.2024 and amendment thereto.
5. Unutilized ash if any shall be disposed off in the ash pond in the form of High Concentration Slurry method for fly ash and LCSD for Bottom Ash.

J. Monitoring of compliance:

1. Environmental Audit of the project be taken up by the third party for preparation of Environmental Statement as per Form-V & Conditions stipulated in the EC and report be submitted to the Ministry.
2. Resettlement & Rehabilitation Plan as per the extant rules of Govt. of India and respective State Govt. shall be followed, if applicable.
3. Energy Conservation Plan to be implemented as envisaged in the EIA / EMP report. Renewable Energy Purchase Obligation as set by MoP/State Government shall be met either by establishing renewable energy power plant (such as solar, wind, etc.) or by purchasing Renewable Energy Certificates.
4. Energy and Water Audit shall be conducted at least once in two years and recommendations arising out of the Report should be followed. A report in this regard shall be submitted to Ministry's Regional Office.
5. The project proponent shall (Post-EC Monitoring):
 - a. Send a copy of environmental clearance letter to the heads of Local Bodies, Panchayat, Municipal bodies and relevant offices of the Government.
 - b. Upload the clearance letter on the web site of the company as a part of information to the general public.
 - c. Inform the public through advertisement within seven days from the date of issue of the clearance letter, at least in two local newspapers that are widely circulated in the region of which one shall be in the vernacular language that the project has been accorded environmental clearance by the Ministry and copies of the clearance letter are available with the SPCB and may also be seen at Website of the Ministry of Environment, Forest and Climate Change (MoEF&CC) at <http://parviesh.nic.in>.
 - d. Upload the status of compliance of the stipulated environment clearance conditions, including results of monitored data on their website and update the same periodically;
 - e. Monitor the criteria pollutants level namely; PM (PM10 & PM2.5 in case of ambient AAQ), SO₂, NO_x (ambient levels as well as stack emissions) or critical sectoral parameters, indicated for the projects and display the same at a convenient location for disclosure to the public and put on the website of the company;
 - f. Submit six monthly reports on the status of the compliance of the stipulated environmental conditions including results of monitored data (both in hard copies as well as by e-mail) to the Regional Office of MoEF&CC, the respective Zonal Office of CPCB and the SPCB;
 - g. 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;
 - h. Inform the Regional Office as well as the Ministry, the date of financial closure and final approval of the project and the date of commencement of the land development work.

K. Corporate Environmental Responsibility (CER) activities:

1. CER activities will be carried out as per Ministry's OM F.No.22- 65/2017- IA.III dated 30th September, 2020 and 22-65/2017- IA.III dated 25.02.2021 or as proposed by the PP in reference to Public Hearing or as earmarked in the EIA/EMP report along with the detailed scheduled of implementation with appropriate budgeting. Statement on the commitments (activity-wise) made during public hearing to facilitate the discussion on the CER in compliance of the commitment shall be submitted.

Agenda Item no. 46.2:

46.2: Coal Based Thermal Power Plant of 600 MW (1x600 MW) by **M/s. Adani Power Limited** at Villages Bade Bhandar, Chote Bhandar, Sarvani & Amali Bhona, in District Raigarh, Chhattisgarh - **Amendment in Specific condition no. (xxvi) of the EC dated 16th April, 2015 – regarding.**

[Proposal No: IA/CG/THE/531864/2026; F. No. J-13012/57/2008.IA.II (T)]

46.2.1: M/s Adani Power Limited, Raigarh has made an online application *vide* proposal no. IA/CG/THE/531864/2026 dated 28.03.2025 along with Form 4 seeking amendment in Environmental Clearance accorded by the Ministry *vide* letter no. J 13012/57/2008-IA.II (T) dated 20.05.2010 and its subsequent amendment granted therein under the provisions of the EIA Notification, 2006 for the above mentioned project.

Details of the proposal, as ascertained from the proposal documents and as revealed from the discussions held during the meeting, are given as under:

46.2.2: The existing project of 600 (1x600) MW (Phase I) was granted Environmental Clearance from Ministry *vide* letter no. J-13012/57/2008.IA.II(T) dated 20.05.2010, subsequent amendments in the EC dated 16.04.2015, 26.11.2019, 30.07.2020 & EC transferred dated 22.10.2019 & 24.04.2023 (from M/s Raigarh Energy Generation Limited to M/s Adani Power Limited) at Villages Chhote Bhandar, Bade Bhandar, Sarvani, & Amli Bhanuna of Raigarh District in Chhattisgarh. EC granted for Expansion of Raigarh TPP (Phase II, Under Construction) 1600 (2x800) MW Ultra Super-Critical TPP, *vide* File No: J-13012/57/2008. IA. II (T) dated 01.01.2025. Terms of Reference (ToR) for Expansion of Raigarh TPP 1600 (2x800 MW) (Phase III proposed) granted *vide* file no. J-13012/57/2008. IA. II(T) dated 06.12.2025.

46.2.3: The Implementation status of the existing EC is as follows:

S. No.	Product	As per EC dated 20.05.2010, subsequent amendments dated 16.04.2015, 26.11.2019, 30.07.2020, & EC Transfer dated 22.10.2019 & 24.04.2023	As per CTO dated 28.03.2025	Balance Quantity
1.	Electricity Generation	2200 MW Phase I: 600 (1x600) MW & Phase II: 1600 (2x800) MW (Under Construction)	600 MW (CTO received from CECB Raipur <i>vide</i> order no. 12341/TS/CECB/2025	1600 MW (2x800 MW) Is Under Construction.

			Nava Raipur Atal Nagar, Raipur dated 28.03.2025 is valid till 31.03.2028)	
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46.2.4: The details of the conditions for which amendment is sought and their justification for the same is as follows:

Conditions/ Points / S. No. of EC dated 20/05/2010 and its amendment dated 16/04/2015	Details of Conditions as per Existing EC conditions	Amendment Sought	Justification for Amendment
Specific Conditions (xxvi)	A long-term study of radio activity and heavy metals contents on coal to be used shall be carried out through a reputed institute. There after mechanism for an in-built continuous monitoring for radio activity and heavy metals in coal and fly ash (including bottom ash) shall be put in place.	A long-term study of radioactivity and heavy metals contents on coal to be used shall be carried out through a reputed institute. Proposed to Omit/Amend – There after mechanism for an in-built continuous monitoring for radio activity and heavy metals in coal and fly ash (including bottom ash) shall be put in place.	In compliance to the stipulated condition periodically radioactivity analysis in Coal and Ash samples are being carried out on regular basis through a reputed institute “Department of Atomic Energy, Board of Radiation and Isotope Technology (BRIT)” Government of India. For Coal and Ash, heavy metal analysis is being carried out through NABL accreditation Laboratory and reports are being submitted periodically with Six monthly EC compliance report to MoEFCC, CPCB and CECB.

Justification for the proposed EC amendment:

In compliance to the stipulated condition periodically Radioactivity analysis in Coal and Ash samples are being carried out on regular basis through a reputed institute “Department of Atomic Energy, Board of Radiation and Isotope Technology (BRIT)” Government of India. For Coal and Ash, heavy metal analysis is being carried out through NABL accreditation Laboratory and reports are being submitted periodically with Six monthly EC compliance report to MoEFCC, CPCB and CECB.

For provision of Inbuilt mechanism for Continuous monitoring for radioactivity and heavy metals in coal and fly ash (including bottom ash), the technology and monitoring instruments are not available with the suppliers in the Country and is also technically not feasible to monitor in this mechanism

46.2.5: Summary of violation under EIA, 2006/court case/show cause/direction if any, related to the project under consideration shall be furnished.

A. Summary of court cases: There are Eleven (11) court cases related to Land and other arbitrations. However, there are no court cases pertaining to the Environment & Forest.

MoM of 46th meeting of the EAC for Thermal sector held on 18th June, 2026

S.No.	Case No/ Title	Name of the Court	Brief summary of the case	Last date of hearing	Next date of hearing	Direction/ Action taken by the PP
1	WPC/28 29/2025	High Court	A Writ Petition has been filed to stop the construction of a railway side road/bridge in Kurmapali village, claiming it is being built illegally on disputed land without the petitioner's consent or approval from PWD or Railway authorities. The construction is affecting access to the petitioner's petrol pump, causing business losses, and is allegedly using poor-quality materials. The petitioner seeks a stay on work and an investigation into the matter.	18.07.2025	Awaited	We are in receipt of the Petition on 06.10.2025. Reply to be filed by APL in as the Next Date is not given by HC. NOC from PWD and Railway received.
2	WPC/70 9/2025	High Court	The petitioner claims that several plots of land, including Survey Nos. 14/1/K/1, 6/1K, 14/1/Kh/1, 14/1/Kh/2, 6/1Kh, and 6/2Kh, have been marked for acquisition without following the legal procedures under the Land Acquisition Act, 2013. The petitioner has already raised objections under Section 11 of the Act and now seeks the Hon'ble Court's direction for the District Collector, SDO, and Tehsildar to ensure proper compliance with the mandatory provisions of the law.	17.10.2025	Awaited	Reply to be filed by CSIDC as APL is not a Party in this case. APL is a beneficiary only.
3	6/ B- 105(3)/ 2016-17	Addl. Commi ssioner	Tikaram, son of Mahattar, filed a case regarding Survey No. 218/1 (area 0.817 hectares), claiming that KWPCIL illegally took possession of his land without proper compensation. He suffered damage due to the encroachment, including the loss of 149 trees and farming activities on the land. He has requested the return of possession and fair compensation for the losses.	12.05.2026	18.06.2026	The PP is diligently pursuing the case
4	A.P./A- 6/2017- 18	Addl. Commi ssioner	Kulkitdas is claiming ownership on land sold Kh 275/6 area 0.282 hect. of village- Shankarpali. Appeal case filed against SDM court case no. 95/ A-6/2016- 17 & Nayab tahsildar Pussour court case no. 341/ A-6/ 2015-16.	20.03.2026	18.06.2026	The PP is diligently pursuing the case

MoM of 46th meeting of the EAC for Thermal sector held on 18th June, 2026

S.No.	Case No/ Title	Name of the Court	Brief summary of the case	Last date of hearing	Next date of hearing	Direction/ Action taken by the PP
			Case filed by Kulkitdas against his daughter Lata & KWPCCL. KWPCCL purchased land from Mrs. Lata through sale deed on 05.07.2016. Petitioner has claimed the ownership on sold land Kh 275/6 area 0.282 hect of village- Shankarpali.			
5	A/84/202 5	District Court	A civil suit has been filed to stop the construction of a railway side road/bridge in Kurmapali village. The plaintiff claims that the work began on 22.04.2025 using heavy machinery and labourers, without any notice or permission, and in violation of road construction rules. The construction is blocking access to the plaintiff's petrol pump and harming their business operations.	24.04.2026	04.07.2026	The PP is diligently pursuing the case.
6	CS/72A/ 2020	District Court	Arjun Nishad has filed an appeal to get back possession of land that was earlier sold by his mother to a company. He claims that the company took over the land unfairly and is now requesting the court to return the land to him.	16.04.2026	17.06.2026	APL has filed their Addl. Application u/s 22(9) CPC, objection is yet to be filed
7	CS/12A/ 2012	District Court	Chandrashekhar has filed a case claiming ownership of land with Khata No. 155/8 in Chhote Bhandar village. They allege that M/s KWPCCL is threatening to vacate the land and forcibly demolish their house, and they are seeking protection of their property through the court.	02.04.2026	Disposed	The Court denied the plaintiffs' request for a permanent injunction against us meaning while the plaintiffs' ownership is recognized, they were unsuccessful in legally prohibiting the company from its activities, as they could not prove the alleged interference on their specific land.

S.No.	Case No/ Title	Name of the Court	Brief summary of the case	Last date of hearing	Next date of hearing	Direction/ Action taken by the PP
8	CS/130A /2024	District Court	Heeradhan has filed a suit against APL in the District Court, claiming ownership of land with Survey No. 222 in Village Shankarpali. According to the petitioner, APL is pressuring them to withdraw their claim, saying the land belongs to the government. However, the petitioner states that the land was originally barren and has been cultivated by their ancestors for over 100 years, which is why they believe they have rightful ownership.	22.04.2026	22.06.2026	WS has been filed by both the parties. State WS is still pending
9	WPC/58 59/2025	Bhawani Shankar Vs State	17 Petitioners Filed a Writ against the Award dated 28.02.2025, Challenging the SIA had not done as per Act and did not Complied with the Provision of Act. Seeking Stay on Award.	01.05.2026	09.07.2026	Reply filed during the last hearing
10	WPC/69 2/2026	Bhawani Shankar Vs State	18 Petitioners seek to set aside the Award dated 11.08.2015 & Challenged entire award and also alleged that it followed Old Act despite New Act implemented since Jan 2014 and Provision have not complied as per both the Act	17.02.2026	09.07.2026	Petition has not been received yet.
11	SLP-Diary No.2440 4/2026	Panchanand Gupta Vs State	Petitioner seeks stay on construction of Railway Side Road/bridge in the village of Kurmapali & seek for investigation		Awaited	Matter has not yet been listed. Cavet has been filed

B. Summary of Show Cause Notices (Last two years):

S. No	Issuing authority	Date	Reasons for issuance of SCN	Status of reply submission	Present status
1.	MoEFCC	31.07.2025	Non-compliance of Environmental Clearance conditions	The reply (ATR) was submitted on 22.08.2025 and 06.02.2026.	Personal Hearing for the existing 600 MW TPP was conducted on 22.01.2026, during which the compliance status of EC conditions was presented. As per the Minutes of Meeting issued thereafter, it was concluded that there are no pending non-compliances.

C. Summary of violation: There are no violation cases under the Environmental Protection Act 1986, Van (Sanrakshan Evam Samvardhan) Adhiniyam, 1980, and Wildlife (Protection) Act, 1972.

Observations and deliberation of the EAC

46.2.6: The Committee observed and noted the following:

- i. Instant proposal is for seeking amendment in Coal Based Thermal Power Plant of 600 MW (1x600 MW) at Villages Bade Bhandar, Chote Bhandar, Sarvani & Amali Bhona, in District Raigarh, Chhattisgarh by M/s. Adani Power Limited- Amendment in Specific condition no. (xxvi) of the EC dated 20/05/2010 and its amendment dated 16/04/2015.
- ii. The Committee examined the proposed amendment in the Specific Conditions (xxvi) regarding the A long-term study of radio activity and heavy metals contents on coal to be used shall be carried out through a reputed institute. There after mechanism for an in-built continuous monitoring for radio activity and heavy metals in coal and fly ash.
- iii. Project Proponent has given justification that Radioactivity analysis in Coal and Ash samples are being carried out on regular basis through a reputed institute “Department of Atomic Energy, Board of Radiation and Isotope Technology (BRIT)” Government of India. For Coal and Ash, heavy metal analysis is being carried out through NABL accreditation Laboratory and reports are being submitted periodically with Six monthly EC compliance report to MoEFCC, CPCB and CECB and For provision of Inbuilt mechanism for Continuous monitoring for radioactivity and heavy metals in coal and fly ash (including bottom ash), the technology and monitoring instruments are not available with the suppliers in the Country and is also technically not feasible to monitor in this mechanism.
- iv. 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 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.

Recommendations of the Committee:

46.2.7: In view of the foregoing and after the detailed deliberations, the Committee **recommended** the instant proposal for grant of amendment in the EC dated 20/05/2010 and its subsequent amendment granted therein as detailed below. All other terms and conditions prescribed in EC dated 20/05/2010 and its subsequent amendments granted therein shall remain unchanged:

Conditions as per EC dated 20/05/2010 and its amendment dated 16/04/2015	Details of Conditions as per Existing EC conditions	Recommendations of EAC
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Specific Conditions (xxvi)	A long-term study of radio activity and heavy metals contents on coal to be used shall be carried out through a reputed institute. There after mechanism for an in-built continuous monitoring for radio activity and heavy metals in coal and fly ash (including bottom ash) shall be put in place.	Agreed The EAC recommended to modify the condition as below: “Coal and Ash samples shall be analysed for radioactivity and heavy metals contents once in a year through 3rd party NABL accredited labs and the same shall be submitted along with six monthly compliance report.”
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Agenda Item no. 46.3

46.3: Expansion of Existing Capacity of thermal power plant from 600 MW (Phase-I & II: 2 x 300 MW) to 1260 MW by addition of 1x660 MW (Phase-III) coal based thermal power plant within the existing premises of **M/s. GMR Warora Energy Limited** at Mohabala MIDC Growth Centre in Warora (Tehsil), **Chandrapur-District, Maharashtra – Prescribing of Terms of Reference-regarding.**

[Proposal no. IA/MH/THE/576026/2026, F.No. J-13012/2/2008-IA.II(T)]

46.3:1: **M/s. GMR Warora Energy Limited (GWEL)** has made an application vide online proposal no. IA/MH/THE/576026/2026 dated 20/04/2026 along with the application in prescribed format (CAF, Form – I Part A & B), copy of pre-feasibility report and proposed ToRs for undertaking detailed EIA study as per the EIA Notification, 2006 for the project mentioned above. The proposed project activity is listed at item no. 1(d) Under Category “A ” of the schedule of the EIA Notification, 2006 and does not attract general condition and is appraised at Central Level.

Name of the EIA consultant: M/s. Enviro Infra Solutions Pvt Ltd [S. No. 84th, List of ACOs with their Certificate / Extension Letter no NABET/EIA/25-28/RA 0468 Valid: November 26. 2028

Details of the proposal, as ascertained from the proposal documents and as revealed from the discussions held during the meeting, are given as under:

46.3.2: The existing project was accorded Environmental clearance on 19/05/2008 and 25/05/2010. Project has been implemented and the units are under operation. Consent to Operate renewal for the existing TPP was accorded by Maharashtra State Pollution Control Board vide letter no. Format1.0/CAC/UAN No. MPCB CONSENT-0000224325/CR/2501000380 dated 04.01.2025. The validity of CTO is up to 31.12.2029.

46.3.3: Implementation status of the existing EC

S. No.	Configuration	Capacity (MW)	As per EC dated	Implementation Status as on till date	Production as per CTO
1	2×135 MW	270	J-13011/2/2008-IA. II(T) dtd.19.05.2008	Functional	270 MW
2	1× 330 MW	330	J-13011/2/2008-IA. II(T) dtd. 04.06.2009	Amended in EC for change in Configuration	300 MW

3	1×300 MW	300	J13012/75/2008IA.II(T) dtd. 25.05.2010	Functional	300 MW
4	1×300 MW	300	J-13011/02/2008-IA. II(T) dtd.28.05.2012	Corrigendum in EC for change in Configuration	300 MW
5	1×300 MW	300	J-13012/75/2008-IA. II(T) dtd. 30.11.2010	Corrigendum in EC for corrections in EC conditions.	300 MW
6	2×300 MW	600	J-13012/75/2008-IA. II(T) dtd.07.05.2012	Corrigendum in EC for land requirement & CSR increase	600 MW
7	2×300 MW	600	J-13012/75/2008-IA. II(T) pt. dtd.20.09.2018	Transfer of EC	600 MW

46.3.4: Compliance to MoEF&CC Notification dated 11/07/2025 regarding SO₂ emission norms: The status of compliance to the SO₂ emission furnished as per the MoEF&CC Notification dated 11/07/2025.

- Categorization details of TPP: 'C'
- Sulfur content of the coal to be fired in the boiler: 0.5% max.
- Status of SO₂ emission control facility for the existing unit: Stack Height for existing unit is 275 Mtrs.
- Action plan for installation of new stack in compliance to the notification number GSR 742 (E) dated the 30/08/1990 for the proposed expansion: Stack Height for the proposed unit is 275 Mtrs.

46.3.5: Environmental site settings:

S. No.	Particulars	Details				Remarks
1.	Total land	Total land requirement is 174 ha; Out of 174 Ha, existing area is 144 Ha and additional land for the proposed expansion is 30 Ha.				Land use: Industrial
2	Land use break up	Facilities	Existing Area (In Hectares)	Proposed Area (In Hectares)	Land Requirement after expansion	
		Power Plant Facilities, Water transformer & Switchyard (400KV system)	40	22	62	
		CHP & Fuel oil storage and Handling system	14	2	16	
		Ash Disposal area & handling system	14	0	14	
		Road & infrastructure	6	1	7	
		Green Belt	70	5	75	
		Total Area	144	30	174	
3	Land acquisition details as per MoEF&CC O.M. dated	Entire 174 Ha is under the possession of the proponent.				Status of R&R: Nil

S. No.	Particulars	Details			Remarks
	7/10/2014 & 19/02/2025				
4.	Existence of school and hospitals if any.	Project site: Nil			
		Study Area:			
		Habitation	Distance	Direction	
		Naideo	0.5 Km	S	
		Mohabala	2.0 Km	SSE	
		Charurkhathi	2.0 Km	WSW	
		Nimsada	0.8 Km	E	
5.	Existence of school and hospitals if any.	A. School			
		Project site: Nil			
		Study Area:			
		School	Distance	Direction	
		Z. P. Primary School Naydeo	1.20 Km	S	
		Z. P. U. Primary School dongarao	4.9 Km	NW	
		Z. P school, at Nimsada	0.81 Km	NE	
		Z. P school, at Mohabala	1.76 Km	S	
		Z. P school, at Chinora	2.69 Km	SE	
		Pawansut Podar Learn School, Chinora	3.0 Km	SW	
		Z.P.U. Primary School Charurkhathi	1.95 Km	SW	
		B. Hospital			
		Project site: Nil			
		Study Area:			
		Hospital	Distance	Direction	
		Anand Niketan College, Hospital at Anandwan	4.99 Km	SE	
		Anand Niketan maha, Anandwan	4.3 Km	SE	
6.	Latitude and Longitude of all corners of the project site.	A. Plant site			
		Point	Latitude	Longitude	
		A	20°16'19.66"N	78°58'36.21"E	
		B	20°16'21.35"N	78°58'28.30"E	
		C	20°16'30.62"N	78°58'32.81"E	
		D	20°16'32.86"N	78°58'19.31"E	
		E	20°16'40.91"N	78°58'19.35"E	
		F	20°16'40.13"N	78°58'15.28"E	
		G	20°16'48.98"N	78°58'15.70"E	
		H	20°16'52.01"N	78°58'24.49"E	
		I	20°16'54.83"N	78°58'23.46"E	
		J	20°17'0.60"N	78°58'25.57"E	
		K	20°17'0.75"N	78°58'35.59"E	
		L	20°17'17.51"N	78°58'36.44"E	
		M	20°17'26.36"N	78°58'40.35"E	
		N	20°17'26.96"N	78°58'43.57"E	
		O	20°17'26.33"N	78°58'44.29"E	
		P	20°17'20.44"N	78°58'44.10"E	
		Q	20°16'57.59"N	78°58'56.28"E	

S. No.	Particulars	Details			Remarks
		R	20°16'55.20"N	78°59'14.21"E	
		S	20°16'44.72"N	78°59'20.31"E	
		T	20°16'39.03"N	78°59'20.07"E	
		U	20°16'37.03"N	78°59'15.66"E	
		V	20°16'32.90"N	78°59'16.66"E	
		W	20°16'29.05"N	78°59'10.12"E	
		X	20°16'37.13"N	78°59'7.51"E	
		Y	20°16'36.07"N	78°59'5.80"E	
		Z	20°16'37.34"N	78°58'50.42"E	
		B. Ash pond			
		Point	Latitude	Longitude	
		A	20°28'72.08" N	78°97'74.92" E	
		B	20°28'17.57" N	78°97'62.23" E	
		C	20°28'15.84" N	78°97'37.27" E	
		D	20°28'31.58" N	78°97'41.66" E	
7.	Elevation of the project site	200-230 M above mean sea level			
8.	Involvement of Forest land if any.	Status of stage I Forest Clearance: NA Area of the forest land involved: Nil			NA
9.	Water body (Rivers, Lakes, Pond, Nala, Natural Drainage, canal etc.) exists within the project site as well as study area	Project site: 2 Reservoir of 10 Ha Study area Water bodyDistanceDirection Wardha River5.65 KmSW Daiwal River1.38 KmNW Lendi Nala1.33 KmNE			
10.	Existence of ESZ/ESA/ national park/ wildlife sanctuary/ biosphere reserve/ tiger reserve/ elephant reserve etc. if any within the study area	Study area Name of the ESZ/ESA: Nil Status of Notification: NA Distance of project from ESZ/ESA: NA Authenticated map of ESZ projecting distance of ESZ from project site: NA Status of NBWL approval: NA List of Reserved and protected forests: Forest NameDistanceDirection Shegoan reserve forest5.9 KmE Kawadepur reserve forest7.6 KmENE Temurda reserve forest9.22 KmN			
11.	Archaeological sites monuments/ historical temples etc.	NA			-
12.	Facility envisaged in CRZ area Only for coastal power plant)	Nil and Not applicable			-
13.	Involvement of Critically Polluted	Involvement of CPA/SPA Nil			

S. No.	Particulars	Details	Remarks
	Area/Severely Polluted area as per 2018 CEPI score	<u>Proximity to CPA/SPA</u> <u>NA</u>	

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

S. No.	Existing power plant configuration and capacity	Proposed power plant configuration and capacity	Total	Technology adopted
1	2X300 (600 MW)	1x660	1260	Supercritical technology

46.3.7: The details of the fuel (Coal/LDO) requirement for the proposed project/ expansion cum proposed project along with its source and mode of transportation is given as below:

Details	Fuel requirement (MTPA)	Source	Distance from site (Kms)	Mode of Transportation	Coal characteristics (Worst case scenario)	Linkage document
Existing TPP	3.01 million tons Coal	From SECL and WCL	685 Km by rail	Transported by rail using BOX-N wagons	Ash- (45%max) Sulphur (0.5%max) Moisture (6.8%) GCV - 3300 Kcal/Kg	Enclosed
Proposed TPP	3.6 million tons Coal and 3000 cu.m Light Diesel Oil (LDO)	Coal mines	15 Km	Proposed railway of WCL and LDO by road tankers.	Ash - (45%) Sulphur (0.5%) Moisture (6.8%) GCV 3300 Kcal/Kg	Indian coal would be sourced from coal mines belonging to Western Coal Fields (WCL). Coal from WCL will be transported to plant at Warora through the Indian Railway network at a distance of 15 Kms.

43.3.8: Water Requirement: Existing Water requirement is 35,000 m³/day, which is obtained from Wardha River and permission for the same has been obtained from MIDC Mumbai vide letter no.1761/of 2009 dated 30.09.2009. The project has a water allocation for a quantity of 50000 m³/day from MIDC. The water requirement for the proposed project is estimated as 38000 m³/day. The balance water requirement of 23000 m³/day of fresh water will be obtained from the MIDC who will be supplying the balance water requirement. The water will be transported to the plant site through pipeline. The specific water consumption for the power plant is 2.4 m³/MWhr. The surface water permission shall be obtained before project operation.

46.3.9: Power Requirement: Existing power requirement for the operational plant is accommodated against Aux. power of plant production. The power requirement for the proposed project is estimated as 2.25 MW.

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

S. No	Category No./ Type	Quantity	UoM	Treatment	Disposal
1	5.1 Used or spent oil	5.4	KL/M	Recycle	Sale to authorised party
2	5.2 Wastes or residues containing oil	2.0	KL/M	Incineration	CHWTSDF
3	3.3 Sludge and filters contaminated with oil	15.0	MT/A	Incineration	CHWTSDF
4	33.1 Empty barrels /containers /liners contaminated with hazardous chemicals /wastes	40	MT/A	Recycle	Sale to authorised party
5	35.3 Chemical sludge from waste water treatment	50	MT/A	Landfill	CHWTSDF
6	35.4 Oil and grease skimming	15	MT/A	Incineration	CHWTSDF
7	35.2 Spent ion exchange resin containing toxic metals	2	MT/A	Landfill	CHWTSDF
8	Used Led Acid Batteries(scrap)	8.00	MT/A		Send to authorized recycler

46.3.11: Project Cost: Existing capital cost of project was 4,20,000.00 Lakhs. The capital cost of the proposed project is Rs 7,20,000.00 Lakhs Crores. The employment generation from the proposed expansion is 500 (100 Permanent and 400 Contractual).

46.3.12: Greenbelt Development: Existing green belt has been developed in around 70 ha area which is about 40 % of the total project area of 174 ha with total sapling of 125450 Trees. A 3 m wide greenbelt, consisting of at least 3 tiers around plant boundary has been developed as greenbelt and green cover as per CPCB guidelines. The existing green belt area will be enhanced by additional 5 Ha land corresponding to additional 3% which will accommodate 15000 saplings with a density of 2500 trees per hectare. The total greenbelt area after expansion will be 75 ha (43.10% of total project area of 174 ha) Further, approximately 2,450 trees falling within the proposed project footprint shall be scientifically transplanted to suitable locations within the plant premises through a mechanized tree transplantation system. The Project Proponent is committed to ensure a survival rate of 98% through comprehensive planning, expert supervision, regular monitoring, irrigation, and post-transplantation maintenance. To support this initiative, a dedicated capital budget of ₹3 Crore shall be earmarked exclusively for the transplantation, maintenance, and survival enhancement of the relocated trees.

43.3.13: Ash Management:

A. Ash management for last three years

Ash management for last three years	Quantity generated (MT)	Quantity utilized (MT)	% utilization	Balance quantity (MTP)	No of storage silos with capacity
2025-2026	977353	977353	100%	00	4500 (3x1500) MT
2024-2025	1016453	1016453	100%	00	4500 (3x1500) MT
2023-2024	965561	965561+ 41418 (Legacy Ash)	104.3%	00	4500 (3x1500) MT

Fly Ash Details for 2025-2026 years =778292 MTPA

S. No.	Activity	Quantity	Percentage
1.	Fly ash-based products (bricks or blocks or tiles or fiber cement sheets or pipes or boards or panels)	293026	37.65
2.	Cement manufacturing	319113	41.00
3.	Ready mix concrete	42152	5.40
4.	Construction of roads, road and fly over embankment	206	0.02
5.	Filling up of low-lying area	123715	15.92
6.	Filling of mine voids:	80	0.01
	Total	778292	100

Fly Ash Details for 2024-2025 years =813162 MTPA

S. No.	Activity	Quantity (MT)	Percentage
1.	Fly ash based products (bricks or blocks or tiles or fiber cement sheets or pipes or boards or panels)	277178	34.09
2.	Cement manufacturing	332518	40.89
3.	Ready mix concrete	41154	5.06
4.	Construction of roads, road and fly over embankment	39294	4.83
5.	Filling up of low lying area	123022	15.13
	Total	813162	100

Fly Ash Details for 2023-2024 years =766519 MTPA

S. No.	Activity	Quantity (MT)	Percentage
1.	Fly ash based products (bricks or blocks or tiles or fiber cement sheets or pipes or boards or panels)	240263	31.34
2.	Cement manufacturing	350802	45.77
3.	Ready mix concrete	66428	8.67
4.	Construction of roads, road and fly over embankment	36289	4.73
5.	Filling up of low lying area	72737	9.49

	Total	766519	100
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Bottom Ash generation for 2025-2026 years = 199060 MTPA

S.No.	Activity	Quantity	Percentage
1.	Fly ash based products (bricks or blocks or tiles or fiber cement sheets or pipes or boards or panels)	90027	45.20
2.	Filling up of low lying area	100733	50.60
3.	Filling of mine voids	8300	4.20
	Total	199060	100

Bottom Ash generation for 2025-2026 years = 203290 MTPA

S.No.	Activity	Quantity	Percentage
1.	Fly ash based products (bricks or blocks or tiles or fiber cement sheets or pipes or boards or panels)	115923	57.03
2.	Construction of roads, road and fly over embankment	7243	3.56
3.	Filling up of low lying area	51300	25.23
4.	Filling of mine voids	28823	14.18
	Total	203290	100

Bottom Ash generation for 2025-2026 years = 199042 MTPA

S. No.	Activity	Quantity	Percentage
1.	Fly ash based products (bricks or blocks or tiles or fiber cement sheets or pipes or boards or panels)	122086	61.34
2.	Construction of roads, road and fly over embankment	18876	9.48
3.	Filling up of low lying area	58080	29.17
	Total	199042	100

B. Legacy ash 2023-2024: 41418 MT

S. No.	Activity	Quantity	Percentage
1.	Fly ash based products (bricks or blocks or tiles or fiber cement sheets or pipes or boards or panels)	7555	18.24
2.	Construction of roads, road and fly over embankment	28809	69.56
3.	Filling of mine voids	5054	12.20
	Total	40418	100

C. Ash Pond Details

S. No.	Details of Ash pond	Ash pond 1
1.	Status of ash pond (Active / Exhausted (yet to be reclaimed)/ Reclaimed)	Active
2.	Area (Ha)	14 Ha.
3.	Dyke height (m)	7 m
4.	Volume (m ³)	~6,00,000
5.	Quantity of ash disposed (Metric Tons)	2,840,000 (2.84 million ton/Annum)

S. No.	Details of Ash pond	Ash pond 1
6.	Available volume in percentage (per cent) and quantity of ash can be further disposed (Metric Tons)	6.5 Lac.MT
7.	Expected life of ash pond (number of years and months)	30 years (Remaining)
8.	Type lining carried in ash pond: HDPE lining of LDPE lining or clay lining or No lining	HDPE
9.	Mode of disposal: Dry disposal or wet slurry (in case of wet slurry please specify whether HCSD or MCSD or LCSD)	Dry Disposal
10.	Ratio of ash: water in slurry mix (1:_____):	NA
11.	Ash water recycling system (AWRS) installed and functioning : Yes or No	Yes
12.	Quantity of wastewater from ash pond discharged into land or water body (m ³)	NIL
13.	Last date when the dyke stability study was conducted and name of the organization who conducted the study:	7th March, 2025 by -Vasudevan Cheloor by V Engineering Consultant, New Delhi
14.	Last date when the audit was conducted and name of the organization who conducted the audit:	8th March 2026 Mr. D Deshpande, COO & Director, GWEL

D. Proposed ash utilization plan for expansion project

Details	Existing generation (Million TPA)	Proposed generation (Million TPA)	Total	Utilization (Million TPA)	% utilization	Balance quantity (MTPA)	No of storage silos with capacity
Ash (Fly and Bottom)	1.22	1.62	2.84	2.84	100%	NIL	3 (1 more proposed) Total- 4

46.3.14: Summary of violation under EIA, 2006/court case/show cause/direction if any, related to the project under consideration: No court cases related to Environment

There is no violation cases under the Environmental Protection Act, 1986, Van (Sanraksha Evam Samvardhan) Adhiniyam, 1980 and The Wildlife (Protection) Act, 1972.

46.3.15: Written Submission:

Query 1: Clarification on the naming of phases of Existing and Proposed Units

Reply: M/s GWEL hereby submit that the proposed expansion project shall hereinafter be referred to as "Phase-III (1 × 660 MW)."

Query 2: Submission of the EC transfer letter in the name of GMR Warora Energy Ltd.

Reply: M/s GMR Warora energy Ltd has already obtained name changed in the EC from M/s Emco Energy Ltd as per MOEF&CC office order dated 20.09.2018 vide letter No. J-13012/75/2008-IA.II(T)pt have been submitted.

Query 3: One Continuous Ambient Air Quality Monitoring Stations (CAAQMS) installation in the Buffer zone.

Reply: M/s GWEL submit that suitable location for the CAAQMS shall be studied during the EIA. The detailed EMP shall be developed and proposed in the EIA study including the additional CAAQMS and plantation in the buffer Zone.

Query 4: Clarification on Ash Pond Area.

Reply: The existing ash pond area of 14 ha land is envisaged to be sufficient to cater the need of proposed expansion project (1×660 MW). This aspect will be further studied in detail, during the EIA and shall be submitted. However, an additional area of 1 ha (part of 174 Ha) is proposed to be allocated exclusively for additional ash handling system (Fly Ash Silos).

Query 5: The area proposed for expansion currently having tree plantation. A detailed tree relocation plan, along with quantity and the budgetary provisions to be submitted.

Reply: For the proposed expansion area, approximately 2,450 plants within the proposed project footprint layout and shall be scientifically transplanted to suitable locations within the plant premises through a mechanized tree transplantation system. GWEL already in contact with expert agency for this work and a budget of 3 crores is estimated. The existing plants along the boundary of plot identified for main plant units shall be saved.

Query 6: Wind barriers to be installed for effectively control fugitive dust emissions and minimize wind-induced dispersion of ash particles.

Reply: GWEL will be included in the detail engineering and DPR for the proposed expansion 1×660 MW. The wind barriers along the coal stack yard will be included in EIA study. The proposed system will consider appropriate height, porosity, and alignment with prevailing wind directions to ensure optimal performance.

Query 7: Selection criteria for ESP

Reply: The ESP to achieve emission limits for proposed expansion shall be installed. The latest and efficient ESP design is already part of ongoing detailed engineering and DPR. The details of this aspect will also be the part of EIA.

Query 8: Rainwater harvesting system

Reply: Additional Rain water harvesting system shall be identified during EIA studies.

Observation and deliberation of the EAC

46.3.16: The Committee observed and noted the following:

- i. The instant proposal is for Expansion of Existing Capacity of thermal power plant from 600 MW (Phase-I & II: 2 x 300 MW) to 1260 MW by addition of 1x660 MW (phase-III) coal based thermal power plant in the existing premises at Mohabala MIDC Growth Centre in Warora (Tehsil), Chandrapur-District, Maharashtra by M/s. GMR Warora Energy Limited
- ii. The committee observed that no alternative sites considered by the Project proponent, since the proposed project area has been coming inside the existing plant area. Total land requirement for the proposed project is 174 ha (Private:174 ha). No R & R is involved in the proposed project.

- iii. The project site is not located within any Critically Polluted Area/ Severely Polluted area as per 2018 CEPI score.
- iv. The committee noted that Lendi Nala is 1.33 km(NE), Daiwal River is 1.38 km(NW) to project site and Wardha River is located at 5.65 km (SW), from the project boundary. The committee observed that Shegoan RF Kawadepur RF and Temurda RF is located 5.9(E), 7.6(ENE) and 9.22(N) km, respectively, within the study area.
- v. Coal requirement for the proposed project is about 3.6 MTPA that will be sourced from Western Coal Fields and transported through railway wagons and LDO (300KL/ Annum) will be transported by Road.
- vi. Existing Water requirement is 35,000 m³/day, which is obtained from Wardha River and permission for the same has been obtained from MIDC MUMBAI vide letter no.1761/of 2009 dated 30.09.2009. The project has a water allocation for a quantity of 50000 m³ /day from MIDC. The water requirement for the proposed project is estimated as 38000 m³ /day. The balance water requirement of 23000 m³/day of fresh water will be obtained from the MIDC who will be supplying the balance water requirement. The water will be transported to the plant site through pipeline. The specific water consumption for the power plant is 2.4m³/MWhr. The surface water permission shall be obtained before project operation.
- vii. Existing power requirement for the operational plant is accommodated against Aux. power of plant production. The power requirement for the proposed project is estimated as 2.25 MW.
- viii. Existing capital cost of project was 4,20,000.00 Lakhs. The capital cost of the proposed project is Rs 7,20,000.00 Lakhs Crores. The employment generation from the proposed expansion is 500 (100 Permanent and 400 Contractual).
- ix. Existing green belt has been developed in 70 ha area which is about 40 % of the total project area of 174 ha with total sapling of 125450 Trees. A 3 m wide greenbelt, consisting of at least 3 tiers around plant boundary has been developed as greenbelt and green cover as per CPCB guidelines. The existing green belt area will be enhanced by additional 5 Ha land corresponding to additional 3% which will accommodate 15000 saplings with a density of 2500 trees per hectare. The total greenbelt area after expansion will be 75 ha (43.10% of total project area of 174 ha). Further, approximately 2,450 trees falling within the proposed project footprint shall be scientifically transplanted to suitable locations within the plant premises through a mechanized tree transplantation system. The Project Proponent shall ensure a good survival rate through comprehensive planning, expert supervision, regular monitoring, irrigation, and post-transplantation maintenance. To support this initiative, a dedicated capital budget of ₹ 3 Crore shall be earmarked exclusively for the transplantation, maintenance, and survival enhancement of the relocated trees.
- x. The proposed units (1x800 MW) will incorporate high-efficiency Electrostatic Precipitators (ESP) to control particulate matter and selective catalytic reduction system (SCR) to control the NO_x emission. For SO₂ emission, FGD and 275 m high Chimney is proposed. EAC suggested to incorporate detailed SO₂ emission norms and their control facility/technology in the EIA/EMP reports.
- xi. EAC asked the Project Proponent to install the wind barriers along the coal handling area to prevent the fugitive dust emission.
- xii. EAC observed that there would be translocation of about 2450 Trees within the plant

site in this regard EAC asked the Project proponent to prepare a tree translocation plan with consultation of the State Forest Department.

- xiii. EAC asked the Project Proponent to make necessary provisions like Rainwater harvesting system to reduce the freshwater consumption.
- xiv. EAC asked the Project Proponent to increase the monitoring stations in downwind direction.
- xv. EAC deliberated on the written submission submitted by the Project Proponent and find is satisfactory.

Recommendations of the Committee:

46.3.17: The EAC after detailed deliberations on the information submitted and as presented during the meeting **recommended** the proposal for grant of ToR for conducting an EIA study subject to **uploading of written submissions on PARIVESH portal** for the above project under the provisions of the EIA Notification, 2006, as amended along with the following specific ToR in addition to the generic ToRs.

[A] Environmental Management and Biodiversity Conservation

- i. Project Proponent shall submit the certified compliance report for the existing TPPs as per MoEF&CC OM dated 08/06/2022.
- ii. Project Proponent shall take necessary permissions from the State Forest Department before felling/translocation of trees.
- iii. Certificate from concerned District Magistrate/Executive Engineer from the State Water Resources department (or) any officer authorized by the State Government in this regard shall be submitted stating that project site is not located within flood plain of Daiwal River and corresponding to one in 25 years of flood as per Ministry's O.M. dated 14/02/2022.
- iv. PP needs to submit NOC/permission from the State Water resource Department/Irrigation Dept. in case of diversion of any Nala/Stream/water bodies.
- v. All the parameters as mentioned in the National Ambient Air Quality Standards (NAAQS) shall be monitored by the project proponent at the proposed locations and also include more locations in Downward direction.
- vi. Project proponent shall carry out study and vetted by State Forest department regarding the impact of project on the nearby Reserved Forests, if any, along with the mitigation measures to be followed.
- vii. EIA/EMP study shall take in to consideration the different scenarios arising due to change of coal source, impact on environmental attributes due to change of coal source along with corresponding mitigation measures with EMP budget shall be submitted.
- viii. Biodiversity analysis of the project site and study area shall be done through any NABET accredited consultant. The study report shall inter-alia include impact of power plant on aquatic life of Wardha River and action plan for complying with the recommendations of the study report shall be submitted.
- ix. Project proponent shall submit a study on site specific hydrological studies for area drainage for existing and proposed 1260 MW power plant structure through reputed

Government institute. The study report along with the action plan for implementing the recommendations of the report shall be submitted along with the EIA/EMP report.

- x. Project proponent shall prepare an integrated watershed management plan including Rain water harvesting for protection and conservation of water bodies within the study area of the project site. The study report along with the action plan for implementing the recommendations of the report shall be submitted along with the EIA/EMP report.
- xi. Radioactivity studies along with coal analysis to be provided (sulphur, ash percentage and heavy metals including Pb, Cr, As and Hg). Details of auxiliary fuel, if any including its quantity, quality, storage, etc should also be given.
- xii. PP should submit the detailed plan in tabular format (year-wise) for concurrent afforestation and green belt development in and around the project site covering 75 Ha of the project area as per MoEF&CC OM dated 29.10.2025 of MoEF&CC for greenbelt/green cover requirement for industries. The PP shall submit the number of saplings to be planted, names of native species, area to be covered under afforestation & green belt, location of plantation, target for survival rate and budget earmarked for the afforestation & green belt development. The capital and recurring expenditure to be incurred needs to be submitted. Plantation plan shall be prepared in such a way that 80% of the plantation to be carried out in first 5 years and for the remaining years the proposal for gap filling. The seedling should be of native and few fruit bearing species mainly, of height not less than 2 meters to be selected and accordingly cost of plantation needs to be decided.
- xiii. Action plan for development of three-tier plantation programme along the periphery of the project boundary and the coal transportation route shall be provided. PP shall submit concurrent plantation plan.
- xiv. Detailed action plan shall be prepared for maintenance of air pollution control equipment for proposed units and shall be incorporated in the EIA/EMP report.
- xv. Details of Ash management plan as per MoEF&CC notification dated 31/12/2021 & its subsequent amendment for the proposed project shall be submitted. MoU signed for ash utilization with companies shall be submitted.
- xvi. Action plan for dry ash collection system (Bottom ash and Fly ash) shall be submitted.
- xvii. Action plan for disposal of ash through High Concentration Slurry Disposal (only in emergency conditions) shall be submitted.
- xviii. Proper protection measures like high-density polyethylene (HDPE) lining, appropriate height of bund and adequate distance between the proposed Ash pond and water body etc. shall be planned to reduce the possibility of mixing leachate with any freshwater body for ash pond. A high-density Slurry disposal plan shall be prepared.
- xix. Pond and ground water quality (10 locations within 2 km radius of the plant boundary) shall be studied and report be submitted along with EIA/EMP. Action plan for Ground water monitoring stations on all hotspots like schools/hospitals within 2 km radius of the plant boundary be submitted. Baseline Study for Heavy metals in Groundwater, Surface water and soil to be carried out and incorporated in EIA/EMP report.
- xx. Details pertaining to water source, treatment and discharge should be provided.

- xxi. PP shall provide the details of wastewater treatment facilities to be installed within its capacity, timeline and budget.
- xxii. Project Proponent to conduct Environmental Cost Benefit Analysis for the project in EIA/EMP Report.
- xxiii. An action plan shall be prepared for Water shed development within 10 km radius of the plant boundary in consultation with reputed government institution and incorporated in EIA/EMP report.
- xxiv. PP should clearly bring out that what is the specific diesel consumption ~ (Liters/Tonne of total material handled) and steps to be taken for reduction of the same. The year-wise target for reduction in the specific diesel consumption needs to be submitted. PP shall also explore the possibility of using e-vehicles/LNG/CNG based machinery and trucks for the operation and transportation of Coal and ash and submit an implementation strategy.
- xxv. PP shall provide the details of transportation of fly ash from the plant, transportation route etc. Further, carry out a traffic study for at least one month and provide the impact of transportation along with the mitigation measures.
- xxvi. PP shall submit the action plan to adhere to the Plastic Waste Management Rules 2026 and to adhere Ministry's OM dated 18/07/2022.
- xxvii. Details on renewable energy (solar plant) proposed to be installed as energy conservation measures shall be submitted.
- xxviii. The input parameters for the AAQ modelling and the influence of various combinations of these on the AAQ must be reported in the EIA/EMP Report. In addition to the Wind Rose diagram collected for one season during the preparation of the E.I.A., wind rose diagram for all seasons must be provided using secondary data from sources such as IMD/CPCB etc.
- xxix. Project proponent shall take all necessary steps to control the Air Quality and take additional mitigation measures for proposed TPP to maintain the Ambient Air Quality values within the limits. The action plan regarding maintaining ambient quality standards (Time weighted average for 24 hours and Annual both) be submitted. Further, project proponent shall submit an undertaking to abide by the provisions of the notification number G.S.R 465 (E) dated 11/07/2025 related to SO₂ emission norms.
- xxx. Details of air pollution control devices to be installed in the proposed 1x660 MW TPP along with its maintenance schedule shall be incorporated in EIA/EMP report.
- xxxi. Carbon emission due to proposed TPP and allied carbon sequestration/ carbon offsetting plan be submitted.
- xxxii. PP is advised to implement the 'Ek Ped Maa Ke Naam' Campaign, which was launched on 5th June 2024 on the occasion of the World Environment Day to increase the forest cover across the Country. This plantation drive is other than Green belt development. An action plan in this regard shall be submitted.

[B] Disaster Management

- i. A Disaster Management Plan shall be prepared and incorporated in the EIA/EMP report.

- ii. Site specific risk assessment study followed by emergency preparedness plan shall be submitted.

[C] Socio-economic Study

- i. Public Health Action Plan including the provisions for drinking water supply for the local population shall be in the EIA/EMP Report. The status of the existing medical facilities in the project area shall be discussed. Possibilities of strengthening of existing medical facilities, construction of new medical infrastructure etc. will be explored after assessing the needs of the labour force and local populace.
- ii. Public consultation (Public Hearing and Written submission) shall be conducted as per the provisions of EIA Notification, 2006 and as amended. As per the Ministry's OM dated 30.09.2020, to address the concern raised during the Public Hearing, the Project Proponent is required to submit the detailed activities proposed with year wise budgetary provision (Capital and recurring) for 5 years. Activities proposed shall be part of EMP. Tentative no. of project affected families (if any) shall be identified and accordingly appropriate Rehabilitation & Resettlement plan shall be prepared. The recommendation Socio-economic study may also be considered while planning the activities & budget.
- iii. A need based Social Impact Assessment Study shall also be carried out and an action plan on its recommendations may also be submitted with budgetary provisions.
- iv. Demographic details and land use change details in 10 km area shall be submitted.

[D] Miscellaneous

- i. Plot the wind rose diagram using the typical meteorological year (TMY) data for the period considered for the study. The monitoring units shall be deployed in the field based on the coverage area ratio and direction of the wind. A mathematical model shall be developed for the local site rather than using the standard model available in software for both air & water quality modelling.
- ii. PP shall align its activities to one/few of the Sustainable Development Goals (SDG) and start working on the mission of net zero by 2050. PPs shall update the same to the EAC.
- iii. PP shall submit the EIA/EMP report after the plagiarism check using authenticated plagiarism software.
- iv. Detailed description of all the court cases along with its current status shall be submitted.
- v. PP should provide in the EIA Report details of all the statutory clearances, permissions, no objection certificates, consents etc. obtained for this project under various Acts, Rules and regulations shall be submitted. Further, all the permissions/MoUs obtained for this project shall be revalidated and submitted along with the EIA/EMP report.
- vi. The PP should submit the photograph of monitoring stations & sampling locations. The photograph should bear the date, time, latitude & longitude of the monitoring station/sampling location. In addition to this PP should submit the original test reports and certificates of the labs, which will analyse the samples.
- vii. PP should clearly bring out the details of the manpower to be engaged for this project with their roles /responsibilities/designations. In addition to this PP should mention

the number and designation of persons to be engaged for the implementation of environmental management plan (EMP). The capital and recurring expenditure to be incurred needs to be submitted.

- viii. PP should submit the year-wise, activity wise and time-bound budget earmarked for EMP, occupational health surveillance, and activities proposed to address the issues raised during Public Hearing. The capital and recurring expenditure to be incurred needs to be submitted.
- ix. Activities shall be prepared based on the issues arise during public hearing conducted and fresh written submission with defined timeline and budgetary provisions.
- x. Aerial view video of project site and coal transportation route proposed for this project shall be recorded through drone and be submitted. Along with this plan of 3 tier plantation on coal transportation route shall be submitted.
- xi. The PP should ensure that only NABET-accredited consultants shall be engaged for the preparation of EIA/EMP Reports. PP shall ensure that the accreditation of the consultant is valid during the collection of baseline data, preparation of EIA/EMP report and the appraisal process. The PP and consultant should submit an undertaking the information and data provided in the EIA Report and submitted to the Ministry are factually correct and the PP and consultant are fully accountable for the same.
- xii. PP should provide in the EIA Report details of the statutory clearances, permissions, no objection certificates, consents etc. required for this project under various Acts, Rules and regulations and their status or estimated timeline after the grant of EC.
- xiii. All the certificates viz. involvement of Forest land, distance from the protected area, and list of flora & fauna should be duly authenticated by the Forest Department. The Certificate should bear the name, designation, official seal of the person signing the certificate and dispatch number.
- xiv. Necessary coordination shall be made with concerned SPCB (who is responsible for Compliance of OM dated 14.01.2025) regarding streamlining the implementation of GSR 702 and GSR 703 dated 12.11.2024 through which projects requiring prior EC were exempted from requirement of CTE.

Agenda Item no. 46.4:

46.4: Expansion of existing 1340 MW to 2660 MW by addition of 1320 MW [2 x 660 MW] Super Critical Units by **M/s. Chhattisgarh State Power Generation Company Limited (CSPGCL)** located at Darri Village, HTPS Korba west Tehsil, Korba District, Chhattisgarh - **Amendment in Environment Clearance with respect to Sulphur dioxide emission standards as per MoEF&CC Notification dated 11/07/2025 – regarding**

[Proposal No: IA/CG/THE/563165/2026; F. No. J-13012/24/2004-IA.II(T)]

46.4.1: M/s Chhattisgarh State Power Generation Company Limited has made online application vide proposal no. IA/CG/THE/563165/2026 dated 30.12.2025 along with copy of Form 4 & Addendum EIA report prepared through QCI/NABET accredited consultant and sought for amendment in the Environmental Clearance accorded by the MoEF&CC vide letter no. J-13012/24/2004-IA II (T) dated 26.03.2025, for the above-mentioned project

with respect to Sulphur dioxide emission standards as per MoEF&CC Notification dated 11/07/2025 under the provisions of the EIA Notification, 2006.

Name of the EIA consultant: Enviro Infra Solutions Private Limited, Ghaziabad [S. No. 82, List of ACOs with their Certificate no. NABET/EIA/25-28/RA 0468; Valid up to 26th November, 2028.

Details of the proposal, as ascertained from the proposal documents and as revealed from the discussions held during the meeting are given as under:

46.4.2: The existing project of CSPGCL was originally granted Environmental Clearance in favour of CSPGCL for Expansion of Existing 1340 MW to 2660 MW by addition of 1320 MW (2 x 660 MW) Supercritical Units at Village Darri, Tehsil-HTPS Korba West, District Korba, Chhattisgarh, vide letter no J-13012/24/2004-IA II (T) dated 26.03.2025 under EIA, 2006.

46.4.3: The implementation status of the existing EC dated 26/03/2025 is as follows:

S. No.	Configuration	Capacity (MW)	Date of accord of EC	Date of commissioning of units	Production as per CTO	Applicable emission norms as per notification dated 7/12/2015 & its amendment
1.	Expansion Project Capacity- 2 x 1320 660 MW		26.03.2025	Under Construction	Under Construction	PM: 30mg/Nm ³ SO ₂ :100 mg/Nm ³ NOx:100mg/Nm ³

In addition to the above, PP is operating following TPPs at the project site:

- Proponent is operating 4x210 MW TPP at Village Darri, Sub district Katghora, District Korba, Chhattisgarh.
- 1x500 MW TPP - EC was originally accorded in favour of CSEB for setting up 2x300 MW Thermal Power Plant at Village Darri, District Korba, Chhattisgarh, vide letter no J-13012/24/2004-IA II (T) dated 23.06.2005 under the provisions of EIA Notification, 2006. Subsequently, amendment to the EC was accorded on 05.05.2011 for change in configuration from 2x300 MW to 1x500 MW. EC was transferred from CSEB to CSPGCL by MoEF&CC on 05/08/2024.

The Consent to Operate (CTO) for (4x210 MW) plant was obtained on 16.09.2025 vide Letter No. - N0.6788/TS/CECB/2025 & for (1x500 MW) plant was obtained on 16.09.2025 vide Letter No. - No.6790/TS/CECB/2025 from Pollution Control Board.

Addition of 2x660 MW (1320 MW) Super critical Thermal Power Plant, located at Village- Darri, District- Korba, Chhattisgarh.

The Ministry of Environment & Forests (MoEF) accorded Environmental Clearance (EC) on 26.03.2025 vide File No: J-13012/24/2004-IA. II(T) for setting up the coal-based thermal power station.

Simultaneously, the Consent to Establish was obtained from Chhattisgarh Environment Conservation Board on 04/09/2025 vide letter No. 6000/Tech./CECB/2025.

46.4.4: Details of Thermal Power Plant:

Parameter	Details as	Status as on	Remarks
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	per EC	June 2026	
Total Land Area (Ha)	70.73	67.61	3.12 Ha land of government land adjacent to the plant boundary to be acquired
Involvement of Forest Land (Ha)	NA	NA	Present proposal does not involve any forest land. However, Diversion of 111.761 ha of forest land for setting up of Stage- III unit(1x500MW) has obtained FC vide - F. No 8-100/2004-FC, dated: 09.08.2005
NBWL Clearance	NA	NA	NA
CPA/SPA	NA	NA	Nearest Non-attainment city is Korba having CEPI score is 57.57 in S direction

46.4.5: Background for amendment sought by the proponent

- Initially, MoEF&CC (erstwhile MoEF) notified stack emission standards for Particulate Matter (PM) parameter vide Notification dated 03.01.1989 requiring TPPs to install Electrostatic Precipitators (ESPs) to reduce emission.
- MoEF&CC notified stack height regulation for TPPs vide Notification dated 30.08.1990. The said notification outlined stack height regulations based on the plant's capacity and Sulphur content in the fuel, ensuring proper dispersion of the pollutants (SO₂ and NO_x) through adequately large stacks
- MoEF&CC vide its notification dated 07.12.2015 stipulated emission standards for coal/lignite-fired TPPs, which included revised emission standards for Particulate Matter (PM), and newly introduced emission standards for Sulphur dioxide (SO₂), Oxides of Nitrogen (NO_x), and Mercury (Hg) parameters with timelines.
- MoEF&CC vide notification dated 11/07/2025 amended the provisions related to sulphur dioxide emission standards for Category –B Thermal Power Plants (TPPs)
- As per the CPCB categorization dated 27/04/2026 with the respect to Sulphur dioxide (SO₂) emission norms, Hasdeo TPP of M/s Chhattisgarh State Power Generation Company Limited falls under Category B and listed at S. No 8 and 9.
- In pursuance to the MoEF&CC Notification dated 11/07/2025, Chhattisgarh State Power Generation Company Limited has submitted their application for amendment in EC within the prescribed time frame seeking for review of Sulphur dioxide emission standards.

46.4.6: The summary of the information submitted by the proponent in the addendum EIA report are as follows:

i. *Average coal consumption and the average Sulphur content of coal proposed to be used in Unit No 6 & 7: Not provided*

ii. *Minimum, maximum and 98th percentile levels of ambient PM₁₀, PM_{2.5}, NO_x, and SO₂ from secondary monitored AAQ data for last three months period.*

S. No.	Name of location	Parameters being monitored
1	A1 (Site area)	PM ₁₀ , PM _{2.5} , NO _x , and SO ₂
2	A2 (Sonpuri)	
3	A3 (Darri)	
4	A4 (Kohariya)	
5	A5 (Khatakhataipara)	
6	A6 (Barampur)	

7	A7 (Dagnikhar)	
8	A8 (Semipali)	
9	A9 (Tihli)	
10	A10 (Chorbhathi)	

Summary of AAQ Result for October, November & December 2025:

S. No.	Name of location	Parameter	Concentration in $\mu\text{g}/\text{m}^3$			NAAQS
			Min	Max	98 th Percentile	
1	A1 (Site area)	PM ₁₀	62.8	73.4	73.1	100
		PM _{2.5}	35.8	41.8	41.7	60
		NO _x	26.3	32.2	32.0	80
		SO ₂	25.7	32.8	32.2	80
2	A2 (Sonpuri)	PM ₁₀	47.7	52.2	52.1	100
		PM _{2.5}	27.2	30.1	30.1	60
		NO _x	21.5	27.3	27.2	80
		SO ₂	11.8	16.8	16.4	80
3	A3 (Darri)	PM ₁₀	61.5	67.8	67.6	100
		PM _{2.5}	31.6	37.8	37.8	60
		NO _x	21.5	26.8	26.7	80
		SO ₂	12.8	15.3	15.3	80
4	A4 (Kohariya)	PM ₁₀	44.6	49.3	49.2	100
		PM _{2.5}	23.3	27.6	27.5	60
		NO _x	19.1	24.3	24.0	80
		SO ₂	9.8	16.5	16.3	80
5	A5 (Khatakhathipara)	PM ₁₀	47.6	51.9	51.8	100
		PM _{2.5}	24.6	29.5	29.4	60
		NO _x	17.0	21.4	21.4	80
		SO ₂	12.6	16.8	16.6	80
6	A6 (Barampur)	PM ₁₀	51.2	57.1	56.0	100
		PM _{2.5}	27.9	31.8	31.7	60
		NO _x	17.9	23.2	23.1	80
		SO ₂	9.7	16.6	16.3	80
7	A7 (Dagnikhar)	PM ₁₀	42.2	47.4	47.1	100
		PM _{2.5}	23.6	27.5	27.3	60
		NO _x	11.8	16.2	16.2	80
		SO ₂	12.8	16.5	15.9	80
8	A8 (Semipali)	PM ₁₀	49.6	56.4	56.0	100
		PM _{2.5}	25.6	30.4	30.1	60
		NO _x	21.6	27.7	27.6	80
		SO ₂	15.8	20.5	20.3	80
9	A9 (Tihli)	PM ₁₀	54.3	58.5	58.2	100
		PM _{2.5}	29.4	32.7	32.5	60
		NO _x	18.5	23.1	23.0	80
		SO ₂	11.3	16.7	16.2	80
10	A10 (Chorbhathi)	PM ₁₀	49.7	53.4	53.4	100
		PM _{2.5}	27.3	30.8	30.3	60

S. No.	Name of location	Parameter	Concentration in $\mu\text{g}/\text{m}^3$			NAAQS
			Min	Max	98 th Percentile	
		NO _x	21.3	26.2	25.7	80
		SO ₂	13.6	20.9	20.1	80

iii. Average stack emissions for PM, NO_x, and SO₂ parameters, flue gas concentration in mg/Nm³ for unit no 6 & 7: Not provided

Mass emission rate of pollutants in gram per second

Sr. No.	Parameters	Units	(2 X 660 MW)
1	Stack height	m	275m (Single Twin Flue)
2	No. of flue per stack	No.	2
3	Number of stacks	No	1
4	Flue internal diameter at top	m	3.25
5	Flue gas velocity/flue	m/sec	21.18
6	Flue gas temperature/flue	°C	60
7	Volumetric flow rate	Nm ³ /sec/ flue	129.85
8	Sulphur in coal (maximum)	%wt/wt	0.6
A	Particulate matter @ 30 mg/Nm ³	g/s	3.89
B	Sulphur dioxide (SO ₂) (based on Sulphur content in Coal 0.6%)	g/s	32.0
C	Oxide of Nitrogen (NO _x) (based on IFC norms 260 gm/giga joules)	g/s	24.0

iv. Current stack height in the TPP and compliance with the MoEF&CC Notification of August 30, 1990 (or) June 28, 2018.

As per EC dated 26/03/2025 the stack of 150 m is to be installed for 2x660 MW with FGD. Project Proponent is proposing to install 275m stack as per G.S.R 742 (E) dated 30th August 1990.

v. Assessment of maximum Ground Level Concentration (GLCs) of pollutants from the stack emission as per the envisaged stack height (as applicable) based on available site-specific meteorological parameters. Details of the model used, input data used for modelling and output data of the 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.

The predicted maximum Ground Level Concentration (GLCs) of PM₁₀, PM_{2.5}, NO_x, and SO₂ pollutants from 2 X 660 MW TPP based on available site-specific meteorological parameters & stack monitoring report has been done using AERMOD Dispersion model. Following are the input data

- Stack emission norms for PM for Project.
- SO₂ emissions based on fuel consumption with control measures or prescribed limits.
- NO_x emission based on prescribed limits or industry norms.
- Terrain features of the study area - from Google earth.
- Geo referencing of all the process stacks.
- Meteorological data for 03 months (Oct.'25 to Dec'25).
- Wash out due to rain is not considered

- viii. The stack tip down wash is not considered
- ix. Base map of the study area prepared using Open Series Map

GLCs are obtained in $\mu\text{g}/\text{m}^3$ for pollutants. Output of modelling gives concentration at uniform Cartesian receptors to get the resultant concentration with reference to baseline data.

GLC of pollutants ($\mu\text{g}/\text{m}^3$) at sampling location:

Considering Baseline data from the Month of October 2025 to December 2025

Receptor Location	GLC at Monitoring Location ($\mu\text{g}/\text{m}^3$)			
	PM ₁₀	PM _{2.5}	SO ₂	NO ₂
A1 (Site area)	72.66	41.44	32.42	32.12
A2 (Sonpuri)	52.61	30.38	17.07	27.46
A3 (Darri)	69.02	38.78	16.12	27.4
A4 (Kohariya)	49.43	27.66	16.42	24.32
A5 (Khatakhathipara)	53.01	30.09	17.31	21.99
A6 (Barampur)	60.69	34.27	18.5	25.14
A7 (Dagnikhar)	47.68	27.68	16.56	16.45
A8 (Semipali)	58.9	32.16	21.84	29.09
A9 (Tihli)	59.29	33.26	17.84	23.72
A10 (Chorbhathi)	53.54	30.8	20.68	26.08

SO₂ GLC concentrations are minimal, with the highest GLC being 2.00 $\mu\text{g}/\text{m}^3$ at 5.6 km from the stack.

vi. Environment Management Plan (EMP):

Details as prescribed by MoEF&CC	Information provided by Proponent
Environment Management Plan (EMP) covering the following: a. Impact of ground level concentration on the environment if any and corresponding mitigation measures to be adopted. b. Additional mitigation measures proposed if any.	EMP for Air Quality Management: • Provision of water sprinkling system at raw material storage yard and Ash Dyke; • Dust suppression system will be installed at all requisite points in CHP and coal stack yard; • Provision of dust extraction systems at dust generating source; • Installation of high efficiency Electrostatic Precipitators (ESP) of efficiency more than 99.9% to limit the PM concentrations below 30 mg/Nm³; • Provision of low NO_x burners, to control the NO_x emissions to less than 100 mg/Nm³ • Design of control equipment to meet the standards stipulated by CREP & MoEF&CC; and • Online opacity meter and temperature measurement will be provided for stack. To control fugitive emissions, the following measures will be adopted: • Within and around the coal handling plant, coal dust extraction and suppression systems would be provided; • Provision and periodic inspections of mechanical seals in pumps; • Preventive maintenance of valves, flanges, joints, roof vents of storage tanks;

	• Submerged filling of liquid fuel storage tanks. <u>EMP for Water Resources Management:</u> • The plant will have closed cycle cooling system with cooling towers. Entire cooling tower blow down will be used for various plant usages. • The filter backwash water of PT plant will be collected and recycled back to the DM clarifier; • The sludge from clarifiers of water PT Plant will be collected in a sump/ pit and will be pumped to bottom ash slurry sump for disposal to bottom ash dyke; • The waste effluents from neutralization pits of DM Plant and condensate polishing plant will be collected in the respective neutralization pits and neutralized before pumping to the ash slurry sump before final disposal; • A coal settling pond will be provided to remove coal particles from coal handling plant waste. Decanted water will be pumped back to the coal dust suppression system; • Service water effluent collected from plant drains will be led to a sump. From the sump the service water will be pumped upto tube settler/ clarifier for treatment of suspended solids. Treated service water will be sent back to service water tank to the extent possible for re-use; • All the plant liquid effluents will be mixed in Central Monitoring Basin (CMB) and finally to ETP/Recycling point; • An independent plant effluent drainage system will be constructed so as to ensure that plant effluents do not mix with storm water drainage; • For oily wastes, oil water separators will be provided. The separated oil will be removed from the top, the water at the bottom will be recycled or led to the plant effluent drain depending upon its quantity; • The plant will have two different systems for ash disposal - conventional wet ash slurry disposal system with Ash Water Recirculation System (AWRS) for Bottom Ash and High Concentration Slurry Disposal System (HCSD) for fly ash. HCSD system will require less quantity of water and there will be no effluent from the fly ash disposal site; • Efficient operation of various treatment schemes will be ensured so that the quality of treated effluent from CMB conforms to relevant standards, prescribed by regulatory agencies. The treated effluents will be recycled/reused to the existing plant water system; and the plan will have zero liquid discharge system. • The sewage from plant and township will be treated in a sewage treatment plant. The treated effluent conforming to prescribed standards will be utilized for plantation to the extent possible. <u>EMP for Noise Management:</u> • Provision of acoustic barriers or shelters in noisy workplaces. • Provision of hoods to noise generating equipment's' like pumps. • Provision of thick greenbelt to attenuate the noise levels; and • Provision of personal protective equipment (PPE) such as earplugs, earmuffs to the workers working in high noise level
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	area. EMP for Solid Waste Management: - About 80% of the ash will be generated as fly ash while 20% of the ash will be generated as bottom ash. - The ash management scheme for fly ash and bottom ash involves dry collection of fly ash, supply of ash to entrepreneurs for utilization, promoting ash utilization and safe disposal of unused ash. - Unused fly ash and bottom ash will be disposed off in the ash pond. - After the ash pond is abandoned, it will be reclaimed through green vegetation. The unused ash will be taken to the existing ash pond. EMP for Biodiversity: - Inspect condition of re-vegetation during regular surveys. - The greenbelt consists mainly of native plant species. - Out of the total land area, 126.959 hectares is presently covered under existing plantation, and an additional 106.143 hectares has been proposed for further plantation development, - Due to the expansion activity, total 2214 tree shall be felled instead of 2365. However, to compensate the above, 3600 nos. of trees will be planted within the HTPS premises Monitoring, Reporting And Corrective Actions: - Regular audits and reviews in accordance with this EMP will be undertaken. - Recommendations and corrective actions arising from audits and reviews will be implemented. - Non-Compliance and Incident Reporting will be reviewed and closed out by senior management to ensure prompt rectification and change management as required.
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Air Pollution & Fugitive Emission Control Systems:

Emission Source / Area	Control System / Measure Implemented
Particulate Matter (PM)	High efficiency (>99.98%) electrostatic precipitators are proposed to be installed to limit the particulate matter emissions to below 30 mg/Nm ³ . Twin flue single stacks of 275m height will be provided for better dispersion of the gaseous emissions.
Nitrogen Oxides (NOx)	NOx emissions from the steam generator will be controlled at the source using Low NOx Burners (LNB), combustion staging, and suitable tail-end technologies. Emission levels will be maintained below 100 mg/Nm ³ , with confirmation from the boiler manufacturer.
Coal Transportation	Tarpaulin-covered trucks are used.
Coal Handling & Storage	Coal crushers, Stacker cum reclaimers and associated conveying system. Suitable interconnection with existing coal handling system will be kept to meet emergency requirement of the proposed units. Enclosed galleries provided to arrest the coal dust generated at all the conveyor/ transfer points.
Coal Bunkers	Bag Filter of Adequate capacity provided in coal bunkers, Ground Hopper & transfer Tower.
Fly Ash Handling	- Minimum six vacuum streams will connect ESP, APH, and duct hoppers to ensure uniform ash distribution. - Each stream will have a 100% standby 3-cell tower and buffer hopper

	with bag filters. • Filter outlet air quality will be maintained below 30 mg/Nm³. • Four fly ash conveying streams will transfer ash to the main silo (3 working + 1 standby). • Fly ash will be transported in dry form through bulkers for utilization. • The system will evacuate 8-hour ash generation within 4 hours. • Two low-speed, oil-free air blowers (1 working + 1 standby) per unit will maintain ash temperature at ~160°C. • Four oil-free centrifugal air compressors (3 working + 1 standby) will be provided for conveying ash to silos. • Fly ash silos will have fluidizing systems to ensure smooth flow of dry ash. • RCC silos with 24-hour storage capacity (common for both units) will be provided. • Each silo will include outlets for: open truck loading (conditioned ash), closed tanker loading (dry ash), future use, HCSD (slurry disposal to ash pond), and pressure conveying to terminal silos. • The pressure conveying system will also transfer ash from existing silos to terminal silos. • Proper interconnection between existing and proposed silos will be ensured. • Regular inspection and maintenance of silos, valves, pipelines, and bag filters are undertaken to ensure proper functioning of the dust control system
Fly Ash Loading & Transport	• About 80% of the ash will be generated as fly ash while 20% of the ash will be generated as bottom ash. • The ash management scheme for fly ash and bottom ash involves dry collection of fly ash, supply of ash to entrepreneurs for utilization, promoting ash utilization and safe disposal of unused ash
Fly Ash Disposal	• For Bottom Ash - Extraction in wet form and disposal to ash pond through lean slurry mode. At the starting phase existing ash dyke shall be used. • Fly Ash - dry extraction would be adopted for gainful utilization. Provision for disposal by High Concentration Slurry Disposal (HCSD) mode to the ash disposal area shall also be kept to operate during exigency.
Fly Ash Utilization	The fly ash supply to entrepreneurs for utilization, promoting ash utilization and safe disposal of unused ash

46.4.7: Amendment sought: The details of the condition for which amendment is sought and justification for the same is as follows:

Sr. No.	Condition as per EC dated 26/03/2025	Amendment Sought	Justification & Request for Amendment
1.	Part-A: Specific Condition (xvii): Space provision shall be kept for retrofitting of FGD, if required at a	Amendment in Environment Clearance with respect to Sulphur dioxide emission standards as per MoEF&CC Notification dated 11/07/2025	The subject project of CSPGCL is falling under Category 'B' project. As per MoEF&CC Notification G.S.R. 465 (E) dated 11/07/2025 and scientific studies need to be carried out for review of category B Thermal Power Plants (TPPs) with respect to Sulphur dioxide emission standards & adequacy of current stack height. Based on the installed capacity of the plant, Sulphur

	later date.		content of the coal was assessed as well as monitored SO ₂ emission levels, the project is capable of meeting the applicable emission norms without installation of a Flue Gas Desulphurization (FGD) system. Current Stack height is adequate enough as per G.S.R 742 (E) dated 30 th August 1990. The regulatory position therefore allows consideration of exemption requests subject to submission of validated modelling results, monitoring data, and compliance records.
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46.4.8: Summary of court cases: Nil.

46.4.9: Summary of Show Cause Notices (Last two years): Nil.

46.4.10: Summary of violation under EIA, 2006/court case/show cause/direction if any, related to the project under consideration: - Nil.

Observations and deliberation of the EAC

46.4.11: The Committee observed and noted the following:

- i. The instant proposal is for seeking amendment in an EC condition as per MoEF&CC Notification dated 11/07/2025 for Sulphur dioxide emission standards prescribed in EC letter dated 26/03/2025.
- ii. The existing project of CSPGCL was originally granted Environmental Clearance in favour of CSPGCL for Expansion of Existing 1340 MW to 2660 MW by addition of 1320 MW (2 x 660 MW) Supercritical Units at Village Darri, Tehsil-HTPS Korba West, District Korba, Chhattisgarh, vide letter no J-13012/24/2004-IA II (T) dated 26.03.2025 under EIA, 2006.
- iii. Present proposal does not involve any forest land. However, Diversion of 111.761 ha of forest land for setting up of Stage- III unit(1x500MW) has obtained FC vide - F. No 8-100/2004-FC, dated: 09.08.2005
- iv. The project is near to the Non-attainment city of Korba having CEPI score is 57.57 which is in S direction.
- v. Coal consumption data for 2x660 MW has not been made available.
- vi. The Project Proponent (PP) presented ambient air quality data (PM₁₀, PM_{2.5}, NO_x, SO₂, etc.) for the core. The values for Ambient Air Quality are within the prescribed norms of NAAQMS 2009.
- vii. The stack emission values are within the stipulated norms for PM & NO_x.
- viii. The mass emission rate of pollutants for 2x660 MW has not been provided.
- ix. AAQ modelling analysis for the 150 meters and 275 meters stack height vis-à-vis GLCmax location has not been provided.
- x. As per the submitted addendum EIA report prepared through QCI/ NABET accredited consultant, the predicted maximum Ground Level Concentration (GLCs) using AERMOD View dispersion model from the stack emission as per the envisaged stack height and site specific meteorological parameters the maximum GLC of SO₂ is 5.6 µg/m³ at about 5.6 km. Maximum GLC for other parameters has not been furnished.

- xi. EAC observed that the instant proposal is for 2x660MW and Project Proponent has already applied for FGD exemption for 1x500 MW unit separately. Besides, the status of FGD for the existing 4x210 MW not appraised to the EAC. EAC viewed this seriously and asked the proponent to submit a comprehensive proposal seeking for review for SO₂ emission norms for all the power generation units in the premises.
- xii. EAC observed that the Project Proponent has not submitted the additional EMP measures for the proposed project. EAC asked the PP to submit the EMP with physical and financial outlay.
- xiii. Project Proponent was unable to clarify the land use breakup, hence EAC asked the Project Proponent to provide the Land use breakup for the project.
- xiv. EAC asked the Project Proponent to provide the Ambient air quality data of State Pollution Control Board taken in nearby areas of the project site.
- xv. EAC observed that the existing Greenbelt area in project site is only 18%. EAC asked the Project Proponent to provide the Greenbelt Development Plan for covering 33% of the project area.
- xvi. EAC noted that a show cause notice was served to the Project Proponent regarding Ash Dyke breach but Project Proponent has not furnished the information regarding the same, EAC asked the Project Proponent to submit the details and action taken regarding the same.
- xvii. Project Proponent has not submitted the Environmental Site setting data with the brief writeup information, EAC asked the Project Proponent to submit the same.
- xviii. Committee noted that the QCI/NABET accredited consultant namely Enviro Infra Solutions Private Limited, Ghaziabad has submitted the instant proposal without the basic details and the consultant was unable to answer to any of the queries of EAC.

Recommendations of the Committee

46.4.12: In view of the foregoing and after the detailed deliberations, the Committee recommended to **defer** the instant proposal and sought for following additional data/information:

- i. Comprehensive EC amendment proposal seeking for review for SO₂ emission norms for all the power generation units in the premises.
- ii. Fresh addendum to the EIA report for all the power generation units covering the following:
 - a. Environmental Site setting data
 - b. Land use breakup of the project site including ash pond and the environmental sensitive receptors within 10km radius of the power plant shall be submitted.
 - c. Unit wise Coal consumption for all the power generation units (under operation as well as implementation)
 - d. Unit wise Stack emission data for all the power generation units (under operation as well as implementation) along with the stack dimension
 - e. Baseline data
 - f. Comparison of baseline environment status as per the EIA report submitted at the time of grant of EC for the TPP vis a vis present monitored data for a period of last three months. Data shall be analysed for the down-wind and up-wind locations, maximum, average and standard deviations shall be presented. Any major deviations from the baseline shall be explained with scientific justification and the action plan for mitigations measures to be adopted.

- g. Revised AAQ modelling for all the power generation units along with input and output data of modelling
- h. Location of GLCmax and the sensitive receptors details
- i. Revised EMP incorporating appropriate pollution control measures for all the power generation units (under operation as well as implementation) in the form of a time bound action plan to address the PM levels in ambient air and PM & NOx level in stack emissions with physical and financial outlay. Besides, EMP shall explicitly brought out the existing and proposed additional environmental safeguards with physical and financial outlay.
- j. EC wise amendment logs for review of SO2 emission norms.
- iii. Ambient air quality data of State Pollution Control Board taken in nearby areas of the project site.
- iv. Reasons not achieving mandatory 33 % Greenbelt Development and action Plan for achieving the same in a time bound manner.
- v. Complete information, Action taken and current Status regarding the recent Ash Dyke breach incident.
- vi. Undertaking in a non-judicial stamp paper from the PP to comply with the additional mitigation measures proposed under revised EMP shall be submitted.
- vii. Latest six-monthly compliance report submitted to the Regional Office of MoEF&CC.

In addition to the above, EAC also recommended to issue a warning letter to the EIA consultant with an advisory to submit the proposal in line with the extant provisions of EIA Notification 2006 and expectations of EAC.

Agenda item no. 46.5

46.5: 2x150 MW Coal Based Power Plant, by **M/s. Orissa Alloy Steel Private Limited** located at Village Ottapidaram, District- Thoothukudi, Tamil Nadu – **Amendment in Environment Clearance with respect to Sulphur dioxide emission standards as per MoEF&CC Notification dated 11/07/2025 – regarding.**

[Proposal No.- IA/TN/THE/563683/2026; File No.- J-13012/1/2026-IA.I(T)].

46.5.1: **M/s Orissa Alloy Steel Private Limited** has made online application vide proposal no. IA/TN/THE/563683/2026 dated 31.12.2025 along with copy of Form 4 & Addendum EIA report prepared through QCI/NABET accredited consultant and sought for amendment in the Environmental Clearance accorded by the SEIAA, Tamil Nadu vide letter no. SEIAA/TN/EC/1(d)/013/F.No.282/2010 dated 10/11/2010 and its subsequent amendment granted therein for the above-mentioned project with respect to Sulphur dioxide emission standards as per MoEF&CC Notification dated 11/07/2025 under the provisions of the EIA Notification, 2006.

Name of the EIA consultant: M/s. Enviro Infra Solutions Private Limited, Ghaziabad [S. No. 82, List of ACOs with their Certificate no. NABET/EIA/25-28/RA 0468; Valid up to 26th November 2028.

Details of the proposal, as ascertained from the proposal documents and as revealed from the discussions held during the meeting are given as under:

46.5.2: The existing project of M/s Orissa Alloy Steel Private Limited was originally granted Environmental Clearance in favour of M/s Ind-Bharat Thermal Power Limited (IBTPL) for setting up 3 x 150 MW Coal Based Thermal Power Plant at Swaminatham & Ottapidaram Villages, Ottapidaram Taluk, Dist. - Thoothukudi, Tamil Nadu vide letter no SEIAA/TN/EC/1(d)/013/F.No.282/2010 dated 10/11/2010 under EIA, 2006. Subsequently amendment to the Environmental Clearance was accorded vide letter no. SEIAA/TN/EC/Amendment/F.No.282/2010 on 20.12.2010 for change in composition of fuel and EC transfer accorded by SEIAA, Tamil Nadu vide EC Identification No. EC24B0601TN5765287T ; File No. 11326 on 16.06.2025.

46.5.3: Environmental site settings

S. No.	Particulars	Details				Remarks
1.	Total land	91.0543 Ha. [Private: 91.0543 ha]				Land use: Industrial
2.	Land use break up	S. No.	Particulars	Existing Area (Ha)	Proposed Area (Ha)	
		1	Main Plant	12.70	12.70	
		2	Coal handling System	15.79	15.79	
		3	Water System	2.07	2.07	
		4	Switch Yard	1.67	1.67	
		5	Internal roads	7.68	7.68	
		6	Green Belt	26.30	30.35	
		7	Ash Pond	12.14	12.14	
		8	Others (Open Space / Truck Parking/Staff quarter, Fly Ash Brick Plant)	12.7043	8.6543	
		Total Project Area		91.0543	91.0543	
2.	Land acquisition details as per MoEF&CC O.M. dated 7/10/2014 and 20/02/2025	Out of total 91.0543 Hectares of land, 100% land is in possession of Orissa Alloy Steel Private Limited.				Ind-Bharat Thermal Power Limited went under liquidation before NCLT Hyderabad, and Hon'ble NCLT ordered liquidation of the Company. M/s Orissa Alloy Steel Private Limited was declared as the highest bidder for the assets of the IBTPL and has taken over IBTPL in E-auction of Corporate Debtor as a going concern belonging to the corporate debtor in accordance with the liquidation process regulations and the

S. No.	Particulars	Details	Remarks																																																																
			liquidator has issued 'Sale Certificate' dated 20.07.2024 and 'Letter of Possession' dated 20.07.2024 in favour of M/s Orissa Alloy Steel Private Limited.																																																																
3.	Existence of habitation & involvement of R&R, if any.	Project Site: No habitation in the proposed site. Nearest Habitation within 5 Km range: <table border="1"> <thead> <tr> <th>Sl. No</th><th>Habitation</th><th>Distance (Km)</th><th>Direction</th></tr> </thead> <tbody> <tr><td>1</td><td>Swaminattam</td><td>1.02</td><td>S</td></tr> <tr><td>2</td><td>Rajavinkovil</td><td>1.04</td><td>S</td></tr> <tr><td>3</td><td>Lakshmipuram</td><td>1.44</td><td>N</td></tr> <tr><td>4</td><td>Naduvakkurichi</td><td>1.93</td><td>W</td></tr> <tr><td>5</td><td>Sillanattam</td><td>2.00</td><td>E</td></tr> <tr><td>6</td><td>Subrahmanyapuram</td><td>2.28</td><td>N</td></tr> <tr><td>7</td><td>Pudiyamputtur</td><td>2.46</td><td>W</td></tr> <tr><td>8</td><td>Kalugachalapuram</td><td>2.89</td><td>W</td></tr> <tr><td>9</td><td>Muppulippatti</td><td>2.90</td><td>NW</td></tr> <tr><td>10</td><td>Vallinayakapuram</td><td>2.91</td><td>W</td></tr> <tr><td>11</td><td>Sindalakkattai</td><td>3.27</td><td>NNE</td></tr> <tr><td>12</td><td>Jambulingapuram</td><td>3.75</td><td>W</td></tr> <tr><td>13</td><td>Kumaragiri</td><td>3.76</td><td>S</td></tr> <tr><td>14</td><td>Mel Minakshipuram</td><td>3.88</td><td>N</td></tr> <tr><td>15</td><td>Perianattam</td><td>4.09</td><td>NNE</td></tr> </tbody> </table>	Sl. No	Habitation	Distance (Km)	Direction	1	Swaminattam	1.02	S	2	Rajavinkovil	1.04	S	3	Lakshmipuram	1.44	N	4	Naduvakkurichi	1.93	W	5	Sillanattam	2.00	E	6	Subrahmanyapuram	2.28	N	7	Pudiyamputtur	2.46	W	8	Kalugachalapuram	2.89	W	9	Muppulippatti	2.90	NW	10	Vallinayakapuram	2.91	W	11	Sindalakkattai	3.27	NNE	12	Jambulingapuram	3.75	W	13	Kumaragiri	3.76	S	14	Mel Minakshipuram	3.88	N	15	Perianattam	4.09	NNE	No rehabilitation and resettlement is involved for the subject project.
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4.	Existence of school and hospitals, if any.	A. School Project Site: No school at project site. Nearest Schools within 5 Km range: <table border="1"> <thead> <tr> <th>S. No</th><th>Name</th><th>Distance</th><th>Direction</th></tr> </thead> <tbody> <tr><td>1</td><td>Hindu Middle School, Saminatham</td><td>0.90</td><td>S</td></tr> <tr><td>2</td><td>Tndta Ps, Rajavinkovil</td><td>1.01</td><td>S</td></tr> <tr><td>3</td><td>Pups, Melalakshmipuram</td><td>1.19</td><td>N</td></tr> <tr><td>4</td><td>Pups, Sillanatham</td><td>1.80</td><td>E</td></tr> <tr><td>5</td><td>Pups, Naduvakurichi</td><td>1.87</td><td>W</td></tr> <tr><td>6</td><td>V Net N&Ps, Puthiyamputhur</td><td>2.29</td><td>W</td></tr> <tr><td>7</td><td>Tndta Ps Puthiyamputhur</td><td>2.57</td><td>W</td></tr> <tr><td>8</td><td>Prasanna Matric Higher Secondary School Puthiyamputhur</td><td>2.63</td><td>W</td></tr> <tr><td>9</td><td>John The Baptist Hss Puthiyamputhur</td><td>2.64</td><td>W</td></tr> <tr><td>10</td><td>Rc Ms Puthiyamputhur</td><td>2.70</td><td>W</td></tr> <tr><td>11</td><td>H.N.U.P N&Ps, Puthiyamputhur</td><td>2.75</td><td>W</td></tr> <tr><td>12</td><td>Pums Muppilivetti</td><td>3.07</td><td>NW</td></tr> <tr><td>13</td><td>Tndta Primary School, Sinthalakattai</td><td>3.17</td><td>NE</td></tr> <tr><td>14</td><td>Pups, Mettupatcheri</td><td>3.36</td><td>NW</td></tr> </tbody> </table>	S. No	Name	Distance	Direction	1	Hindu Middle School, Saminatham	0.90	S	2	Tndta Ps, Rajavinkovil	1.01	S	3	Pups, Melalakshmipuram	1.19	N	4	Pups, Sillanatham	1.80	E	5	Pups, Naduvakurichi	1.87	W	6	V Net N&Ps, Puthiyamputhur	2.29	W	7	Tndta Ps Puthiyamputhur	2.57	W	8	Prasanna Matric Higher Secondary School Puthiyamputhur	2.63	W	9	John The Baptist Hss Puthiyamputhur	2.64	W	10	Rc Ms Puthiyamputhur	2.70	W	11	H.N.U.P N&Ps, Puthiyamputhur	2.75	W	12	Pums Muppilivetti	3.07	NW	13	Tndta Primary School, Sinthalakattai	3.17	NE	14	Pups, Mettupatcheri	3.36	NW	--				
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S. No.	Particulars	Details				Remarks
		15	Mahatma Matric Hr.Sec School, Putiyamputhur	3.50	W	
		16	Pups, T. Kumaragiri	3.69	S	
		17	Tdta Ps, Jambulingapuram	3.79	W	
		18	V.O.C. Ghss, Ottapidaram	3.97	NW	
		19	Indhira Gandhi Mat. School, Ottapidaram	3.99	NW	
		20	Tndta Ps, Periyatham	4.15	NE	
		B. Hospital				
		Project Site: No hospital at project site.				
		Nearest Hospitals within 5 Km range:				
		SL. NO	Name	Distance	Direction	
		1	Health Center Sillavatham	1.8	E	
		2	Health Center Pudiyamputhur	2.4	W	
		3	Health Center Puthiamputhur	2.9	W	
		4	Health Center Mettupatcheri	3.1	NW	
		5	V.O.C Govt Hospital	3.9	NW	
		6	Health Center Ottapidaram	4.0	NW	
		7	Health Center S.Kailasapuram	7.0	SW	
		8	Health Center K.Kailasapuram	7.2	SW	
		9	Health Center Savarimangalam	7.5	SW	
		10	Health Center Kulasekaranallur	7.9	W	
11	Health Center Katcheri Talavaipuram	8.4	N			
12	Health Center Vellaram	8.9	NW			
13	Health Center Madathur	9.5	SE			
14	Esic Hospital Thoothukudi	9.5	SE			
15	Health Center Mapillaioorani	9.6	SW			
4.	Latitude of the project site and the	A. Plant Site				
		Site	Latitude	Longitude		
		Point 1	8°52'23.04"N	78°03'10.97"E		
		Point 2	8°52'52.02"N	78°03'16.58"E		
		Point 3	8°53'24.66"N	78°03'31.06"E		
		Point 4	8°53'23.69"N	78°03'04.80"E		
		Point 5	8°52'51.39"N	78°03'10.51"E		
		Point 6	8°52'37.06"N	78°03'07.77"E		
		B. Ash Pond				
		Point A	8°53'17.93"N	78°03'31.42"E		
		Point B	8°53'21.51"N	78°03'21.49"E		

S. No.	Particulars	Details			Remarks																								
		Point C	8°53'22.50"N	78°03'08.36"E																									
		Point D	8°53'18.29"N	78°03'04.83"E																									
5.	Elevation of the project site	Elevation of the project site varies from 55 m to 62 m AMSL.			--																								
6.	Involvement of Forest land if any.	No forest land involved.			NOC obtained from Tamil Nadu Forest Department vide letter no C. No. D/3064/2010 dated 09.08.2010.																								
7.	Water body (Rivers, Lakes, Pond, Nala, Natural Drainage, Canal etc.) exists within the project site as well as study area	Project site: 01 No. rain water harvesting pond. Study area(Within 10 Km): <table><tr><th>S. No.</th><th>Name</th><th>Distance (Km)</th><th>Direction</th></tr><tr><td>1</td><td>Water Bodies (Nayinapuram)</td><td>4.9</td><td>E</td></tr><tr><td>2</td><td>Water Bodies (Pudur Pandiyapuram)</td><td>8.48</td><td>E</td></tr><tr><td>3</td><td>Water Bodies (Arasadipanyur)</td><td>8.36</td><td>E</td></tr><tr><td>4</td><td>Water Bodies (Pullyamarattarasadi)</td><td>8.88</td><td>E</td></tr><tr><td>5</td><td>Water Bodies (Vallinayakapuram)</td><td>9.21</td><td>N</td></tr></table>			S. No.	Name	Distance (Km)	Direction	1	Water Bodies (Nayinapuram)	4.9	E	2	Water Bodies (Pudur Pandiyapuram)	8.48	E	3	Water Bodies (Arasadipanyur)	8.36	E	4	Water Bodies (Pullyamarattarasadi)	8.88	E	5	Water Bodies (Vallinayakapuram)	9.21	N	Local nallas/ seasonal streams and other water bodies are present within the study area; however, no water body is passing through the proposed project site.
S. No.	Name	Distance (Km)	Direction																										
1	Water Bodies (Nayinapuram)	4.9	E																										
2	Water Bodies (Pudur Pandiyapuram)	8.48	E																										
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4	Water Bodies (Pullyamarattarasadi)	8.88	E																										
5	Water Bodies (Vallinayakapuram)	9.21	N																										
8.	Existence of ESZ/ ESA/ national park/ wildlife sanctuary/ biosphere reserve / tiger reserve/ elephant reserve etc. if any within the study area	Study area There are no national parks, Biosphere Reserves, Eco-sensitive zone, Tiger/Elephant Reserves and Wild Life Corridors within 10 km distance from the project site as ascertained from DSS (PARIVESH portal). - The Gulf of Mannar Marine National Park is at distance of 15.60 km and ESZ at a distance of 13.00 km with respect to TPP. - Vallanadu black buck Sanctuary is at distance of 24.60 km and ESZ at a distance of 24.30 km with respect to TPP.																											
9	Archaeological sites monuments/ historical temples etc.	There is no Archaeological survey of India protected monuments located within 10 km radius of project site.			--																								
10.	Facility envisaged in CRZ area (Only for coastal power plant)	Not applicable			The plant is situated at an aerial distance of 11.30 Km from CRZ boundary as ascertained from DSS																								
11.	Involvement of Critically Polluted Area/ Severely Polluted area as per 2018.	The project site is situated at a distance of 6.00 Km SE direction from SIPCOT Industrial Complex, Thoothukudi (CEPI Score-66.34) (Severely Polluted area)			--																								

46.5.4: The implementation status of the existing EC dated 10/11/2010 is as follows:

S. No.	Configuration	Capacity (MW) as per EC	Date of accord of EC	Date of commissioning of units	Production as per CTO	Applicable emission norms as per notification dated 7/12/2015 & its amendment
1.	3 X 150 MW	450 MW	10/11/2010; Amendment on 20.12.2010; *EC transfer-16.06.2025	03.08.2016	2 X 150 MW (300 MW)**	PM: 50 mg/Nm ³ SO ₂ : 600 mg/Nm ³ NOx: 450 mg/Nm ³
*EC transfer from M/s Ind-Bharat Thermal Power Limited to M/s Orissa Alloy Steel Private Limited as per MoEF&CC OM IA3-22/19/2023-IA.III [E226246] dated 03.11.2023 for the facilities already implemented within the EC validity i.e. 2 x 150 MW was granted by SEIAA, Tamil Nadu. ** Consent to Operate for the existing unit was accorded by Tamil Nadu Pollution Control Board (TNPCB) for 2 x 150 MW under the Air and Water Acts on 03.08.2016, valid up to 31.03.2017. Due to financial distress, company went under liquidation before NCLT Hyderabad, and Hon'ble NCLT ordered liquidation of the Company. NCLT by its order dated 31st March, 2023 taking note of the decision of Corporate Debtor of Ind-Bharat Thermal Power Limited directed liquidation of IBTPL. Following the due procedure, the official liquidator conducted an E-auction of assets of IBTPL on 14th June, 2024 under the provisions of Insolvency and Bankruptcy Code, 2016 "Code". M/s Orissa Alloy Steel Private Limited was declared as the highest bidder for the assets of the IBTPL and has taken over IBTPL in E-auction of Corporate Debtor as a going concern belonging to the corporate debtor in accordance with the liquidation process regulations and the liquidator has issued 'Sale Certificate' dated 20.07.2024 and 'Letter of Possession' dated 20.07.2024 in favour of M/s Orissa Alloy Steel Private Limited. Subsequently, Consents to Operate (CTOs) under the Air Act and Water Act were obtained from the Tamil Nadu Pollution Control Board (TNPCB) vide Orders 2505232653559 (Air Act) and 2505162653559 (Water Act) dated 24.03.2025, in the name of M/s Orissa Alloy Steel Private Limited, for the operation of 2 x 150 MW coal-based power plant, valid up to 31.03.2029.						

46.5.5: Power Plant Details:

Total land requirement for the TPP is 91.0543 ha [Private land 91.0543 ha]. The nearest SPA is SIPCOT Industrial Complex, which is 6 km from project boundary in South-East Direction. CEPI Score of SIPCOT Industrial Complex is 66.34. There are no national parks, Biosphere Reserves, Eco-sensitive zone, Tiger/Elephant Reserves and Wild Life Corridors within 10 km distance from the project site as ascertained from DSS.

Parameter	Detail as per EC	Status as on June 2026	Remarks
Total Land Area (Ha.)	91.05	91.05	NA
Involvement of Forest Land	Nil	Nil	NA
NBWL Clearance	NA	NA	NA
CPA/SPA	NA	SIPCOT Industrial Complex (CEPI Score- 66.34)	At 6km from Plant in South-East Direction

46.5.6: Background for amendment sought by the proponent

- Initially, MoEF&CC (erstwhile MoEF) notified stack emission standards for Particulate Matter (PM) parameter vide Notification dated 03.01.1989 requiring TPPs to install Electrostatic Precipitators (ESPs) to reduce emission.

- b. MoEF&CC notified stack height regulation for TPPs vide Notification dated 30.08.1990. The said notification outlined stack height regulations based on the plant's capacity and Sulphur content in the fuel, ensuring proper dispersion of the pollutants (SO₂ and NO_x) through adequately large stacks
- c. MoEF&CC vide its notification dated 07.12.2015 stipulated emission standards for coal/lignite-fired TPPs, which included revised emission standards for Particulate Matter (PM), and newly introduced emission standards for Sulphur dioxide (SO₂), Oxides of Nitrogen (NO_x), and Mercury (Hg) parameters with timelines
- d. MoEF&CC vide notification dated 11/07/2025 amended the provisions related to Sulphur dioxide emission standards for Category –B Thermal Power Plants (TPPs).
- e. As per the CPCB categorization dated 23/06/2022 with the respect to Sulphur dioxide (SO₂) emission norms, 2 x 150 MW TPP of M/s. Orissa Alloy Steel Private Limited (Formerly, IND-Bharat Thermal Power Limited) falls under Category B vide Sl. No. 117 & 118.
- f. In pursuance to the MoEF&CC Notification dated 11/07/2025, M/s Orissa Alloy Steel Private Limited has submitted their application for amendment in EC within the prescribed time frame seeking for review of Sulphur dioxide emission standards.

46.5.7: The summary of the information submitted by the proponent in the addendum EIA report are as follows:

i. Average coal consumption and the average Sulphur content of coal is being used in the TPP for last three months period.

Months	Quantity (TPM)		Total
	Indigenous-70%	Imported- 30%	
Feb 2026	50872	21802	72674
Mar 2026	19426	8326	27752
Apr 2026	47670	20430	68100
Imported/ Domestic Coal is being used while maintaining Sulphur content < 0.4 % in Indigenous Coal & less than 1.2 % in Imported Coal.			

ii. Minimum, maximum and 98th percentile levels of ambient PM₁₀, PM_{2.5}, NO_x, and SO₂ from secondary monitored AAQ data for last three months period.

S. No.	Name of location	Parameters being monitored	Remarks
Manual Monitoring Location (NABL Accredited Lab)			
1	Near Canteen Outside	PM ₁₀ , PM _{2.5} , SO ₂ and NO _x	Core Zone
2	Near Cooling System		Core Zone
3	Neat LTO Tank		Core Zone
4	Near Main Gate		Core Zone
Monitoring carried for 01 time in Month			
5	Jambalaingapuram	PM ₁₀ , PM _{2.5} , SO ₂ and NO _x	Buffer Zone
6	Pudupacheri		Buffer Zone
7	SettiUrani		Buffer Zone
8	Sillanatham		Buffer Zone
9	Kumaragiri		Buffer Zone
10	Sindalakottai		Buffer Zone
11	Mettupacheri		Buffer Zone

Summary of AAQ Result for May, October & November 2025:

S. No.	Name of location	Parameter	Concentration in µg/m ³			NAAQS
			Min	Max	Average (of 03 months data)	
1	Near Canteen Outside	PM ₁₀	51.2	78.0	68.07	100
		PM _{2.5}	20.0	27.9	23.30	60
		SO ₂	12.4	25.4	20.87	80
		NO _x	17.8	32.8	27.00	80
2	Near Cooling System	PM ₁₀	55.3	82.0	72.10	100
		PM _{2.5}	26.0	28.0	26.67	60
		SO ₂	14.0	15.4	14.73	80
		NO _x	18.2	21.5	19.73	80
3.	Neat LTO Tank	PM ₁₀	52.7	68.0	61.90	100
		PM _{2.5}	20.0	30.4	24.47	60
		SO ₂	16.4	22.1	19.97	80
		NO _x	22.7	26.5	24.87	80
4.	Near Main Gate	PM ₁₀	56.1	72.0	66.03	100
		PM _{2.5}	24.0	30.5	26.83	60
		SO ₂	14.6	21.8	19.27	80
		NO _x	21.6	26.4	24.53	80
			Monitoring carried for 01 month in Month of Oct'2025			
5.	Jambalaingapuram	PM ₁₀	46.55			100
		PM _{2.5}	27.83			60
		SO ₂	8.13			80
		NO _x	16.95			80
6.	Pudupacheri	PM ₁₀	48.77			100
		PM _{2.5}	27.24			60
		SO ₂	8.84			80
		NO _x	19.87			80
7.	SettiUrani	PM ₁₀	46.92			100
		PM _{2.5}	27.15			60
		SO ₂	8.25			80
		NO _x	19.11			80
8.	Sillanatham	PM ₁₀	48.80			100
		PM _{2.5}	27.93			60
		SO ₂	12.15			80
		NO _x	21.66			80
9.	Kumaragiri	PM ₁₀	44.00			100
		PM _{2.5}	25.58			60
		SO ₂	7.74			80
		NO _x	18.91			80
10.	Sindalakottai	PM ₁₀	45.77			100
		PM _{2.5}	24.11			60
		SO ₂	9.11			80

S. No.	Name of location	Parameter	Concentration in $\mu\text{g}/\text{m}^3$			NAAQS
			Min	Max	Average (of 03 months data)	
		NO _x		21.36		80
11.	Mettupacheri	PM ₁₀		48.80		100
		PM _{2.5}		28.22		60
		SO ₂		8.43		80
		NO _x		20.29		80

iii. Average stack emissions for PM, NO_x, and SO₂ parameters for last three months, flue gas concentration in mg/Nm³

Post-acquisition & revamping work the trial of Boiler conducted in phase manner from April 2025 to October 2025. After completion of Grid connectivity work for one bay of substation, plant operation re-started on 31.01.2026.

In Month of May 2025, Oct.' 2025 & Feb' 2026, monitoring of stack carried by NABL accredit laboratory. The values are::

S. No.	Name of stack	Parameter	Concentration in (mg/Nm ³)		
			Max	Min	Avg.
1	Boiler 1	PM	27.46	19.85	23.65
		SO ₂	69.94	64.70	67.32
		NO _x	30.07	28.28	29.17
2	Boiler 2	PM	24.12	16.80	20.46
		SO ₂	76.00	65.20	66.68
		NO _x	124.0	25.20	27.46

Mass emission rate of pollutants in gram per second

S. No.	Parameters	Units	Unit 1	Unit 2
1	Stack Height	M	130	130
2	No. of flue	No.	1	1
3	Top diameter of flue	m	3.8	3.8
4	Flue gas velocity in each flue	m/s	22.96	23.21
5	Flue gas temperature	°K	389.75	386.22
6	Volumetric Flow rate of gas in each flue	Nm ³ /s	201.84	205.91
7	Emission Rates			
A	PM ₁₀	g/s	6.06	6.18
B	PM _{2.5}	g/s	3.64	3.71
C	SO ₂	g/s	131.27	133.47
D	NO _x	g/s	90.83	92.66

iv. Current stack height in the TPP and compliance with the MoEF&CC Notification of August 30, 1990 (or) June 28, 2018.

Current Stack height is of 130 m for 2 x 150 MW TPP with twin flue single stack as per G.S.R 742 (E) dated 30th August 1990

v. Assessment of maximum Ground Level Concentration (GLCs) of pollutants from the stack emission as per the envisaged stack height (as applicable) based on available site-specific meteorological parameters. Details of the model used, input data used for modelling and output data of the 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.

The predicted maximum Ground Level Concentration (GLCs) of PM₁₀, PM_{2.5}, NO_x, and SO₂ pollutants from 2 X 150 MW TPP based on available site-specific meteorological parameters & stack monitoring report has been done using AERMOD Dispersion model. Following are the input data.

- Stack emission norms for PM for Project.
- SO₂ emissions based on fuel consumption with control measures or prescribed limits.
- NO_x emission based on prescribed limits or industry norms.
- Terrain features of the study area - from Google earth/Bhuvan-NRSC.
- Geo referencing of all the process stacks.
- Meteorological data for 03 months (Sept.'25 to Dec'25).
- Wash out due to rain is not considered
- The stack tip down wash is not considered
- Base map of the study area prepared using Open Series Map

GLCs are obtained in µg/m³ for pollutants. Output of modelling gives concentration at uniform Cartesian receptors to get the resultant concentration with reference to baseline data.

GLC of pollutants (µg/m³) at sampling location:

A. Considering Baseline data of month of October 2025

Receptor Location	GLC at Monitoring Location (µg/m ³)			
	PM ₁₀	PM _{2.5}	SO ₂	NO _x
AAQ-1 (Near Canteen Outside)	51.264	27.930	12.898	18.177
AAQ-2 (Near Cooling system)	55.364	34.730	15.898	21.877
AAQ-3 (Near LTO Tank)	52.764	30.430	16.898	23.077
AAQ-4 (Near Main Gate)	56.164	30.530	15.098	21.977
AAQ-5 (Jambalaingapuram)	47.579	28.438	8.904	17.783
AAQ-6 (Pudupacheri)	49.812	27.820	9.342	20.538
AAQ-7 (Setti Urani)	47.910	27.705	8.783	19.566
AAQ-8 (Sillanatham)	50.044	28.616	14.259	23.587
AAQ-9 (Kumaragiri)	44.903	26.101	7.921	19.317
AAQ-10 (Sindalakottai)	46.902	24.695	10.839	23.031
AAQ-11 (Mettupacheri)	49.858	28.828	9.045	21.056

B. Considering Baseline data of month of November 2025

Receptor Location	GLC at Monitoring Location (µg/m ³)			
	PM ₁₀	PM _{2.5}	SO ₂	NO _x
AAQ-1 (Near Canteen Outside)	78.064	20.030	26.498	33.377
AAQ-2 (Near Cooling system)	82.064	28.030	23.498	20.377
AAQ-3 (Near LTO Tank)	65.064	20.030	23.498	26.377

AAQ-4 (Near Main Gate)	72.064	26.030	23.498	27.377
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SO₂ GLC concentrations are minimal, with the highest GLC being 4.48 µg/m³ at 2.6 km from the stack and between 1.231-1.539 µg/m³ at receptor locations.

vi. Environment Management Plan (EMP):

Details as prescribed by MoEF&CC	Information provided by Proponent
Environment Management Plan (EMP) covering the following: c. Impact of ground level concentration on the environment if any and corresponding mitigation measures to be adopted. d. Additional mitigation measures proposed if any.	<u>EMP for Air Quality Management:</u> • A 130-m high common chimney with twin flues consistent with G.S.R. 742(E) dated August 30, 1990 is installed to disperse flue gases from the operational two boilers. • High-efficiency Electrostatic Precipitators (ESPs) with 99.99% efficiency is used to limit Suspended Particulate Matter (PM) in the flue gas to below 50 mg/Nm³. Modification of air pollution control systems such as bag filters and Electrostatic Precipitators (ESP) to minimize particulate emissions to 30 mg/Nm³. • Limestone dosing is used to capture over 80% of the sulphur in the fuel, thereby significantly lowering SO₂ emissions. Monitoring and maintaining efficient operation of Lime dosing to Boiler to control SO₂ emissions. • Coal handling areas, such as conveyor transfer points, unloading zones, and stockyards, is equipped with dust suppression and extraction systems. Additionally, all conveyor systems are enclosed, and seal plates is installed at the bottom of galleries to prevent dust escape. • Installation of wind barriers / dust screens or tall trees (Indian cork- <i>Millingtonia hortensis</i>, Silver Oak - <i>Grevillea robusta</i> and Casuarina tree- <i>Casuarina equisetifolia</i>) in high dust-generating areas • Dust collection systems are provided at coal bunkers to remove dust and hazardous gases like methane. The collected dust is returned to the conveyor or bunker for reuse. • Regular water spraying is carried out in the coal storage yard to further control dust generation. • Internal plant roads are paved with concrete or asphalt to reduce fugitive particulate emissions. • Strict speed control of vehicles within the project premises to reduce fugitive dust emissions. • 100% fly ash utilization is achieved in accordance with MoEF&CC guidelines. • Dry fly ash is completely collected in silos and supplied to industries such as cement and captive brick manufacturing unit. • Greenbelt development coverage upto 33% of the total plant area @ 2500 trees per hectare, providing a natural buffer to reduce dust and improve local air quality. • Online CEMS (PM & Gaseous) at major stacks is in place. Periodic third-party environmental audits to assess performance of pollution control systems and recommend improvements. • Maintenance of Plant roads and use of industrial vacuum cleaners/ mechanized road sweeping machines & water sprinkling at regular intervals. • Use of low sulphur fuel such as LSHS/LDO to minimize SO₂ emissions from DG sets. • Implementation of a preventive maintenance schedule for all APCDs (ESP, bag filters, Lime dosing plant & Low NO_x Burners) to ensure consistent efficiency. • Adopting continuous practice of environmental management cell (EMC)

	for regular monitoring, reporting, and compliance tracking. • Regular meteorological monitoring (wind speed, direction, temperature, stability class) to correlate with air quality data and take proactive actions. • Development of plantation outside the project boundary almost 50,000 (CSR-based green initiatives) to improve regional air quality. <u>EMP for Water Resources Management:</u> • Reuse of auxiliary cooling water and boiler blowdown for greenbelt irrigation. • Provision of a neutralization pit to adjust the pH of DM plant regeneration effluent. • Implementation of rain water harvesting pond to capture excess run off water. • Adoption of measures to minimize wastewater generation to the greatest extent possible. • Water after treatment in primary ETP with Oil & grease Separator & STP is reused in plant premises. • Online CEMS (effluent) installed as per CPCB guideline. • Adoption of 'ZERO EFFLUENT DISCHARGE' to ensure no discharge of wastewater. <u>EMP for Noise Management:</u> • Noise-intensive areas such as turbine halls, compressor rooms, and DG set locations is equipped with damping materials like thin rubber or lead sheets. • A shock-absorbing method is implemented to minimize vibration-related noise. • Roofs, walls, and floors are lined with sound-absorbing materials to reduce noise reflections. • Control rooms are enclosed with glass panels to maintain a quieter working environment. • Workers are provided with earplugs, and their proper use is strictly ensured. • Personnel working in high-noise zones will have limited exposure durations in accordance with the Occupational Safety and Health Administration (OSHA) guidelines. • Training programs are being conducted to raise awareness among staff about the harmful effects of excessive noise. • Thick greenbelt and attenuation due to the physical barriers will be developed more which will reduce the impact of noise on the community level. <u>EMP for Solid Waste Management:</u> • Bottom ash is collected in dry form into hoppers and transported pneumatically to RCC storage silos of capacity 3 x 2000 Cu.m. Silos are provided with damper valves and bag filter. • Bottom ash stored in the silos is periodically removed and disposed of as required. • Fly ash is also collected dry in hoppers and conveyed pneumatically to RCC silos. • Fly ash accumulated in the silos is periodically extracted and managed for disposal. • Using closed trucks for fly ash transportation. • Water sprinkling system / fog canon system provided in the ash disposal area to restrain flying of bottom ash due to wind. <u>EMP for Biodiversity:</u>
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	• Inspect condition of re-vegetation during regular surveys. • The greenbelt consists mainly of native plant species. 1500 trees per hectare in the areas measuring 26.32 Ha. (65 acres) is already developed by M/s Orissa Alloy Steel Private Limited. In current FY 2025-26 companies has already planted 8,000 nos. of trees. Total plantation at the project site is 55,400 (@2105 tress per ha.) • The company has proposed to increase the density of tress per hectare to 2500 nos. and replace the damage trees. Also the open space measuring 10 acres inside the plant premises will be developed under green belt. <u>Monitoring, Reporting and Corrective Actions:</u> • Regular audits and reviews in accordance with this EMP will be undertaken. • Recommendations and corrective actions arising from audits and reviews will be implemented. • Non-Compliance and Incident Reporting will be reviewed and closed out by senior management to ensure prompt rectification and change management as required.
Additional Measures for Sensitive Receptors at Maximum GLC Locations	
Localized Green Barrier Intensification	
• Develop extra-dense (≥ 2500 trees/ha) multi-layer plantation specifically along the WNW–NNW corridor between source and receptors • Include evergreen, dust-tolerant species with thick foliage for better pollutant interception • Development and maintenance of a dense greenbelt with species having high dust attenuation capacity, particularly along the plant boundary and in the north & west direction	
Micro-Level Dust Suppression	
• Deploy fixed/portable mist cannons near maximum GLC zones • Increase frequency of water sprinkling during dry and windy conditions • Introduce anti-smog guns during adverse meteorological conditions	
Real-Time Monitoring & Alert System	
• Install Sensor Based Air Quality Monitoring Stations (AAQMS) at/near maximum GLC points. • Set up a threshold-based alert mechanism for PM₁₀, PM_{2.5}, SO₂, and NO_x exceedance trends • Link monitoring data with plant operation control room for immediate action	
Operational Control During Adverse Conditions	
• Curtail or reschedule high-emission activities (material handling, loading/unloading) during low wind speed or inversion conditions • Implement staggered operations to reduce peak emission load	
Strengthening of Pollution Control Systems	
• Maintain APCD efficiency >99% through periodic inspection and calibration • Ensure lime dosing system and De-NO_x systems operate at optimal efficiency at all times • Provide redundancy systems (ID Fan, Boiler Feed Pump & 7 field ESPs) for critical pollution control equipment	
Traffic & Logistics Management	
• Used dedicated transport routes avoiding sensitive receptor zones. • Enforce vehicle emission checks (PUC compliance) for all incoming/outgoing vehicles • Restrict night-time heavy industrial vehicle movement by the project near habitation areas	
Community Protection Measures	
• Used of mist fog / water cannon system in schools/clinics near maximum GLC zones • Provision of protective infrastructure (boundary walls, vegetative screens) • Conduct periodic health check-up camps and maintain health records	
Emergency & Action Plan	
• Maintain standby dust suppression systems like water tank, mist cannon system and road sewing machine for immediate deployment.	

Air Pollution & Fugitive Emission Control Systems

Emission Source / Area	Control System / Measure Implemented
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Particulate Matter (PM)	Individual 7 Filled Electrostatic Precipitator (ESP) of adequate capacity with each boiler is installed.
Nitrogen Oxides (NOx)	Low NOx burner is used
Coal Transportation	Tarpaulin-covered trucks are used.
Coal Handling & Storage	Enclosed galleries provided to arrest the coal dust generated at all the conveyor/ transfer points.
Coal Bunkers	Bag Filter of Adequate capacity provided in coal bunkers, Ground Hopper & transfer Tower.
Fly Ash Handling	Fly ash is collected in dry form. Bag filter of adequate capacity installed on top of intermediate silos & main fly ash silos (3 x 2000 m³) to restrict the escape of fly ash into the atmosphere during its unloading from ESP hoppers to silos. Also, approximately 30.00 acres Ash Pond is in place at the project site. Fly ash and bottom ash will be mixed with water and pumped as slurry into this ash pond. The ash pond has been designed with trenches to capture storm water during the monsoon season. A greenbelt has also been developed around the ash pond to control fugitive dust emissions. Regular inspection and maintenance of silos, valves, pipelines, and bag filters are undertaken to ensure proper functioning of the dust control system
Fly Ash Loading & Transport	• 100% fly ash extraction, storage and disposal facilities for utilization of fly ash in dry form. Closed trucks/ bulkers & containers to be used for this purpose. • To reduce the dust nuisance while loading the ash into the trucks from fly ash silos, telescopic chutes used with dust suppression systems (e.g., water spray or vacuum extraction) for loading bulkers/trucks to prevent airborne dust. • Top cover the ash in the open trucks with industrial grade tarpaulin to prevent flying of fine ash during transportation. • If transporting pond ash (wet), ensuring at least 15% moisture content to prevent the ash from becoming airborne during transit • Concrete paved areas around loading bays to prevent groundwater contamination. • Speed limits for vehicles are regulated (e.g., maximum 40 km/h) to reduce accidents and minimize dust disturbance. • Avoiding overloading of trucks/ bulkers.
Fly Ash Disposal	• Fly ash is captured in ESP hoppers, stored in silos, and transported via pneumatic systems or trucks for utilization in house brick plant of capacity 1,00,000 Nos. per day and also to nearby brick & block manufactures. • Fly ash in near future will also be sold to potential buyer for cement manufacturing. • To promote utilization of pond ash free issue of pond Ash for Road Construction and Low Lying area development, construction of embankment will be encouraged/ undertaken by the plant.
Fly Ash Utilization	Fly ash is used in existing brick plant of capacity 1,00,000 nos. per day and also supplied to nearby cement plant and brick manufacturing. Data w.r.t to ash generation and utilization is uploaded on Ash Availability & Utilization Portal [in compliance to Notification No: S.O.5481 (E) dated 31.12.2021]. The utilization practice ensures effective resource recovery, minimizes waste generation, and complies with applicable environmental guidelines / fly ash notification dated 31.12.2021 & its further amendment.

Revised Cost of Proposed Additional EMP

Description	Proposed Additional Measure	Capital cost, Rs. in crores			Recurring cost, Rs. in crores		
		Existing	Additional cost incurred/ Proposed (For revamping, up gradation & Augmentation)	Total	Existing ECs	Additional	Total
Cost of Air Pollution Control Devices/ System	1. Carry out timely maintenance of the equipment condition. 2.Periodic inspection and survey of ESP for physical health assessment of ESP and take corrective action repair/replacement for enhance ESP performance 3.APH flue gas temperature is being regularly monitored to prevent acid corrosion in the ESP ducts, pipelines and hoppers etc. 4.TRP rating of ESP to be maintained through trial charging and field current adjustment and necessary correction during and after AOH to improved and sustain ESP efficiency. 5.The ESP field is enhanced to 7 fields and the bag filter capacity is increased to improve air pollution control efficiency.	12.27	13.50	25.77	1.90	0.20	2.10
Cost of Water conservation & Pollution Control	1.Installation of New Water Sprinklers at least 80 nos., Water cannon system-01 no, movable water tanker-01 no, 2.Strengthening the RWH system and internal drain network.	3.50	0.95	4.45	0.50	0.20	0.70

Description	Proposed Additional Measure	Capital cost, Rs. in crores			Recurring cost, Rs. in crores		
		Existing	Additional cost incurred/ Proposed (For revamping, up gradation & Augmentation)	Total	Existing ECs	Additional	Total
Cost of Solid Waste Management System	1.Fly Ash Handling & Transportation. 2.Cleaning & replace damage or inefficient filter bags as required. 3.Installation of brick plant (Capacity - 1,00,000 nos./day)	2.50	2.80	5.30	0.50	0.30	0.80
Green belt development	1.Increasing the density of plantation inside the plant premises to 2500 trees per hectare with additional 20,500 plantations (1st Year -10,300 nos. & 2nd year -10,200 nos.). Total plantation on 30.36 hectare of land will be 75,900 nos. with avg. 10 meter width all around the plant boundary and will be achieved by FY. Year 2027-2028. 2.Green belt outside the plant premises will be carried out. In total additional 40,000 nos. of trees will be planted in a span of three year (by FY 2028-2029). The details area as: - In 1st & 2nd Year in nearby area (village- Swaminatham & Ottapidaram in 1st & 2nd year) - 10,000 nos. of trees in each Village. - In 2nd & 3rd year in nearby Health Centre (Sillanatham &	3.00	4.65	7.65	0.30	0.75	1.05

Description	Proposed Additional Measure	Capital cost, Rs. in crores			Recurring cost, Rs. in crores		
		Existing	Additional cost incurred/ Proposed (For revamping, up gradation & Augmentation)	Total	Existing ECs	Additional	Total
	Pudhiyamputhur)- 2500 nos. of trees in each location. - In 1st , 2nd & 3rd year in nearby School (TNDTA Primary School, Rajavinkovil & Panchayt Union Primary School, Melalakshmipura m & Panchayt Union Primary School, Sillanatham)- 3000 nos. of trees in each location. - In 3rd year along the village road & community hall/ worship place in Pudhiyamputhur village in consultation with local administration - 6000 nos. 1.Under CSR in collaboration with Govt. Agency green belt outside the project boundary with approximately 50,000 plantations to be carried out to improve the regional air quality.						
Noise Reduction Systems & Green energy initiative.	1.Installing heavy-duty, acoustic blanket, enclosure. 2.Solar power capacity of the plant to be increased to 100 KW by FY 26-27. Capacity will be further increased to 350 KW by FY 28-29. And in future if there is possibility of	1.50	1.50**	3.00	0.10	0.30	0.40

Description	Proposed Additional Measure	Capital cost, Rs. in crores			Recurring cost, Rs. in crores		
		Existing	Additional cost incurred/ Proposed (For revamping, up gradation & Augmentation)	Total	Existing ECs	Additional	Total
	further capacity increase the same will be implemented.						
Occupational Health Management	Strengthening emergency medical facility, ambulance services and first aid arrangement.	1.25	0.20	1.45	0.20	0.08	0.28
Risk Mitigation & Safety Plan	In-house fire-fighter truck up gradation and modification of hydrant line system for effective fire emergency management.	1.20	0.40	1.60	0.15	0.08	0.23
Online Monitoring Surveillance System (New AAQMS & CEMS)	New sensor-based AAQM stations installation (03 Nos.)	2.50	1.20	3.70	0.30	0.16	0.46
Implementation of Controlling measures to minimize impacts due to transportation and traffic	Promoting use of EV vehicle inside the plant premises by the Employee/Staff and provide financial benefit to encourage the employees.	1.00	1.00	2.00	0.20	0.07	0.27
Setting in house Environmental Laboratory	New in-house Monitoring systems install.	0.55	0.15	0.70	0.05	--	0.05
Grand Total		29.27	26.35	55.62	4.20	2.12	6.32
**Costing is only for Solar Power installation.							

46.5.8: Amendment sought: The details of the condition for which amendment is sought and justification for the same is as follows:

S. No.	Condition as per EC dated 10.11.2010	Amendment Sought	Justification & Request for Amendment
1.	Part-A: Specific Condition (xvii): Space provision shall be kept for	Amendment in Environment Clearance with respect to Sulphur dioxide emission standards as per	The subject project of OASPL (previously Ind-Bharath Thermal Power Ltd.) is falling under Category 'B' project. As per MoEF&CC Notification G.S.R. 465 (E) dated 11/07/2025 and scientific studies need to be carried out for review of category B Thermal Power Plants

retrofitting of FGD, if required at a later date.	MoEF&CC Notification dated 11/07/2025	(TPPs) with respect to Sulphur dioxide emission standards & adequacy of current stack height. Based on the installed capacity of the plant, Sulphur content of the blended coal (30% imported coal and 70% indigenous coal), and assessed as well as monitored SO₂ emission levels, the project is capable of meeting the applicable emission norms without installation of a Flue Gas Desulphurization (FGD) system. Current Stack height is adequate enough as per G.S.R 742 (E) dated 30th August 1990. The regulatory position therefore allows consideration of exemption requests subject to submission of validated modelling results, monitoring data, and compliance records.
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46.5.9: Summary of court cases: Nil.

46.5.10: Summary of Show Cause Notices (Last two years): Nil.

46.5.11: Summary of violation under EIA, 2006/court case/show cause/direction if any, related to the project under consideration: - Nil.

46.5.12: ADS Information in chronology:

M/s. Orissa Alloy Steel Private Limited made an online application vide proposal no. IA/TN/THE/563683/2026 dated 31.12.2025. The proposal was initially considered in 38th meeting of Reconstituted EAC (Thermal) held on 24.02.2026. Proposal was deferred for want of additional information. The point-wise reply to the observations, along with requisite documents/information uploaded on PARIVESH portal on 23.05.2026.

The point wise compliance are as:

S. NO.	ADS Point	Information to be furnished by the Project Proponent
i.	Project proponent to submit the status of compliance to the EC dated 10/11/2010 with respect to obtaining of clearance under the Wildlife (Protection) Act, 1972.	The project of M/s Orissa Alloy Steel Private Limited (Previously M/s Ind-Bharat Thermal Power Limited) for located at Swaminatham & Ottapidaram Villages, Ottapidaram Taluk, Dist. - Thoothukudi, Tamil Nadu. Environmental Clearance issued vide letter no SEIAA/TN/EC/1(d)/013/F.No.282/2010 dated 10/11/2010 under EIA, 2006 is subject to final orders of the Hon'ble Supreme Court of India in the matter of Goa foundation Vs. Union of India in Writ Petition (civil) No.460 of 2004 as may be applicable to this project. (EC General conditions point no-ix.). As per Hon'ble Supreme Court of India order dated 4.12.2006 [reported in (2011) 15 SCC 791] 'Prior clearance of NBWL is required for a project if it is located in 10 km of a Protected Area/ Sanctuary or Eco Sensitive Zone.' There are no national parks, Biosphere Reserves, Eco-sensitive zone,

S. NO.	ADS Point	Information to be furnished by the Project Proponent			
		Tiger/Elephant Reserves and Wild Life Corridors within 10 km distance from the project site as ascertained from DSS (parivesh portal). • The Gulf of Mannar Marine National Park is at distance of 15.60 km and ESZ at a distance of 13.00 km with respect to TPP. • Vallanadu black buck Sanctuary is at distance of 24.60 km and ESZ at a distance of 24.30 km with respect to TPP.			
ii.	Map depicting existence of marine national park/ sanctuary and distance of the same from the project site shall be submitted.	Map depicting existence of marine national park/ sanctuary and distance of the same from the project site is attached with ADS reply and uploaded on PARIVESH portal.			
iii.	Proponent is requested to submit the detailed of blended coal being fired in the boiler (Quantity of indigenous and imported separately) for last three months.	Months	Quantity (TPM)		Total
			Indigenous-70%	Imported-30%	
		Feb 2026	50872	21802	72674
		Mar 2026	19426	8326	27752
		Apr 2026	47670	20430	68100
iv.	Mass emission rates for all the parameters from the stack need to be revisited as the said data is not matching with the stoichiometric calculations data.	The mass emission rates from all stacks have been recalculated based on the submitted EIA, approved EC, and current coal consumption, and are enclosed with ADS reply and uploaded on PARIVESH portal. The data has been reviewed for alignment with stoichiometric principles, and the values are submitted based on actual coal consumption pattern for your consideration.			
v.	PP to submit the action plan for tree plantation for gaps filling as per CPCB norms	The greenbelt within the project premises predominantly comprises native plant species. An area measuring 26.32 hectares (65 acres) has already been developed under greenbelt by M/s Orissa Alloy Steel Private Limited, with an existing plantation density of approximately 1,500 trees per hectare.			
		The Company proposes to further strengthen the greenbelt by increasing the plantation density to 2,500 trees per hectare through additional plantation and systematic replacement of damaged or non-surviving trees. In addition, an open area measuring approximately 10 acres within the plant premises has been identified and earmarked for greenbelt development.			
		During the current financial year 2025–26, the Company has undertaken plantation of 8,000 trees. As on date, the total plantation within the project site stands at 55,400 trees, achieving an average density of approximately 2105 trees per hectare.			
		Land for Green Belt as per EC	Green Belt Area	Number of Trees	
		Proposed	Existing	Proposed	
	26.32 Hectare (65 Acres)	Additional land (open space inside the plant)	55,400 nos.	Increasing the density to 2500 nos. per hectare and	75,900 number of trees on 30.36

S. NO.	ADS Point	Information to be furnished by the Project Proponent				
			measuring - 10 acres to be developed under green belt in 02 years.		additional green belt development in open space.	Hectares (75 Acres) i.e. (@ 2500 Number tree per hectare).
		To attain the targeted greenbelt density across the entire designated area, including the additional 10 acres, the Company plans to undertake further plantation of 20,500 trees in a phased manner—10,300 trees in the first year and 10,200 trees in the second year—at an estimated cost of ₹600 per tree. The entire plantation programme is scheduled for completion by the end of the financial year 2027–28.				
vi.	Performance Guarantee test report of ESP from the third party	The performance Guarantee test report of the ESPs (Unit I & Unit II) is enclosed with ADS reply and uploaded on PARIVESH portal.				
vii.	PP to revisit the EMP in totality and incorporate appropriate pollution control measures in the form of a time bound action plan to address the PM levels in ambient air and PM & NO _x level in stack emissions with physical and financial outlay. Besides, EMP shall explicitly brought out the existing and proposed additional environmental safeguards with physical and financial outlay.	In this regard, the Environmental Management Plan (EMP) has been comprehensively reviewed and updated to incorporate enhanced pollution control measures, clearly outlining existing systems and proposed additional safeguards along with defined implementation timelines and corresponding budgetary provisions. <u>Existing & Strengthened Pollution Control Measures:</u> • Proper selection, installation, and periodic maintenance of Air Pollution Control (APC) equipment to ensure stack emissions are maintained within 30 mg/Nm³ for Particular Matter. • Implementation of limestone dosing to capture over 80% of sulphur content in fuel, thereby significantly reducing SO₂ emissions. • A Pneumatic/covered conveying system for raw material handling to minimize fugitive dust emissions is adopted. • Internal roads have been black-topped/concreted, supported by regular water sprinkling and mechanized cleaning to control dust generation. • Deployment of industrial vacuum cleaners along with stringent housekeeping practices across the plant premises. • Provision made of covered sheds at unloading points to prevent dust dispersion. • Ash handling through closed-loop systems, with storage in silos and transportation through covered trucks/bulkers only. • Complete utilization of dry fly ash, collected in silos and supplied to cement and brick manufacturing industries. • Ensuring all transport vehicles are well-maintained and compliant with PUC norms. • Development and maintenance of greenbelt along internal roads, plant boundary, and other designated areas to serve as an effective pollution sink. • Proper maintenance of designated parking areas to prevent secondary dust emissions. <u>Time-Bound Action Plan (Proposed Measures):</u> • Periodic performance evaluation and up gradation of Air Pollution				

S. NO.	ADS Point	Information to be furnished by the Project Proponent
		Control (APC) systems to further enhance control of PM and NOx emissions. The ESP system has been strengthened by increasing the number of fields up to 7 for improving PM collection efficiency. • Delegated team/personnel engaged 24×7 for proper monitoring of continuous emission monitoring systems (CEMS) and strengthening of real-time data analysis for proactive compliance. • Phased strengthening of greenbelt development with increased plantation density and gap filling in existing areas. • Augmentation of road dust control measures through additional mechanized sweeping, mist-based dust suppression systems, and increased frequency of water sprinkling. • Improvement in material handling systems through further enclosure/covering of transfer points to reduce fugitive emissions. • Strict & regular preventive maintenance schedule for all pollution control equipment and material handling systems. • Continuous monitoring of stack emissions and ambient air quality, with prompt corrective and preventive actions to ensure compliance with prescribed norms. • Installing up to 50 Nos of additional water sprinklers has been implemented for effective dust suppression. • Water cannon mist systems are being installed/displayed at suitable locations to enhance fugitive dust control measures. <u>Financial Outlay:</u> Adequate budgetary provisions have been earmarked under the revised EMP for operation and maintenance of APC systems, pollution control infrastructure, greenbelt development, monitoring, and housekeeping activities, with periodic review for effective implementation. The revised EMP outlines existing and proposed measures with defined timelines and financial commitment, ensuring regulatory compliance and continuous environmental improvement. Total budgetary provision for the EMP is enclosed with ADS reply and uploaded on PARIVESH portal.
viii.	Comparison of baseline environment status as per the EIA report submitted at the time of grant of EC for the TPP vis a vis present monitored data for a period of last three months. Data shall be analysed for the down-wind and up-wind locations, maximum, average and standard deviations shall be presented. Any major deviations from the baseline shall be explained with scientific justification and the action plan for mitigations measures to be	The comparison of baseline environmental status as per the EIA report at the time of EC grant and the present monitored data for the last three months is enclosed with ADS reply and uploaded on PARIVESH portal.

S. NO.	ADS Point	Information to be furnished by the Project Proponent																																								
	adopted.																																									
ix.	Land use breakup of the project site including ash pond and the environmental sensitive receptors within 10 km radius of the power plant shall be submitted.	The land use breakup of the plant area is given below: <table><tr><th>S. No.</th><th>Particulars</th><th>Existing Area (Ha)</th><th>Proposed Area (Ha)</th></tr><tr><td>1</td><td>Main Plant</td><td>12.70</td><td>12.70</td></tr><tr><td>2</td><td>Coal handling System</td><td>15.79</td><td>15.79</td></tr><tr><td>3</td><td>Water System</td><td>2.07</td><td>2.07</td></tr><tr><td>4</td><td>Switch Yard</td><td>1.67</td><td>1.67</td></tr><tr><td>5</td><td>Internal roads</td><td>7.68</td><td>7.68</td></tr><tr><td>6</td><td>Green Belt</td><td>26.30</td><td>30.35</td></tr><tr><td>7</td><td>Ash Pond</td><td>12.14</td><td>12.14</td></tr><tr><td>8</td><td>Others (Open Space / Truck Parking/Staff quarter, Fly Ash Brick Plant)</td><td>12.7043</td><td>8.6543</td></tr><tr><td colspan="2">Total Project Area</td><td>91.0543</td><td>91.0543</td></tr></table> Environmental Sensitive Receptors of 10 km are enclosed with ADS reply and uploaded on PARIVESH portal.	S. No.	Particulars	Existing Area (Ha)	Proposed Area (Ha)	1	Main Plant	12.70	12.70	2	Coal handling System	15.79	15.79	3	Water System	2.07	2.07	4	Switch Yard	1.67	1.67	5	Internal roads	7.68	7.68	6	Green Belt	26.30	30.35	7	Ash Pond	12.14	12.14	8	Others (Open Space / Truck Parking/Staff quarter, Fly Ash Brick Plant)	12.7043	8.6543	Total Project Area		91.0543	91.0543
S. No.	Particulars	Existing Area (Ha)	Proposed Area (Ha)																																							
1	Main Plant	12.70	12.70																																							
2	Coal handling System	15.79	15.79																																							
3	Water System	2.07	2.07																																							
4	Switch Yard	1.67	1.67																																							
5	Internal roads	7.68	7.68																																							
6	Green Belt	26.30	30.35																																							
7	Ash Pond	12.14	12.14																																							
8	Others (Open Space / Truck Parking/Staff quarter, Fly Ash Brick Plant)	12.7043	8.6543																																							
Total Project Area		91.0543	91.0543																																							
x.	Details of the sensitive receptors at maximum GLC location and control measures proposed in this regard shall be submitted.	Details of sensitive receptors at the maximum GLC location have been identified and assessed, and the same are enclosed with ADS reply and uploaded on PARIVESHportal.																																								
xi.	Proponent to submit the compliance to the conditions prescribed in the notification dated 21/05/2020 regarding use of coal by Thermal Power Plants, without stipulations as regards ash content or distance as the PP is using coal having ash content more than 34%	The conditions stipulated under the notification are being complied and detailed compliance status is with ADS reply and uploaded on PARIVESH portal.																																								
xii.	Undertaking in a non-judicial stamp paper from the PP to comply with the mitigation measures proposed under revised EMP shall be submitted.	The undertaking for compliance with the mitigation measures proposed under the revised Environmental Management Plan (EMP) is enclosed herewith ADS reply and uploaded on PARIVESH portal.																																								
xiii.	Latest six-monthly compliance report submitted to the Regional Office of MoEF&CC.	The latest Six-Monthly Compliance Report for the period April 2025 to September 2025 was submitted through the PARIVESH Portal vide Compliance ID: 702077578 dated 29.11.2025. A copy of the same is enclosed herewith ADS reply and uploaded on PARIVESH portal. The six-month EC Compliance for the period (Oct-25 to March-26) will be submitted on or before 1 st June 2026.																																								

46.5.13: Written Submission**Query 1: Land Use Break- up of the project:**

Reply: The plant is setup on land measuring 91.0543 Ha. The land use break up is as follows:

S. No.	Particulars	Existing Area (Ha)	Proposed Area (Ha)
1	Main Plant	12.70	12.70
2	Coal handling System	15.79	15.79
3	Water System	2.07	2.07
4	Switch Yard	1.67	1.67
5	Internal roads	7.68	7.68
6	Green Belt	26.30	30.35
7	Ash Pond	12.14	12.14
8	Others (Open Space / Truck Parking/Staff quarter, Fly Ash Brick Plant)	12.7043	8.6543
Total Project Area		91.0543	91.0543

Query 2: Revised Budget for Environmental Management Plan (EMP):

Reply: Revised EMP is given below

Description	Proposed Additional Measure	Capital cost, Rs. in crores			Recurring cost, Rs. in crores		
		Existing	Additional cost incurred/ Proposed (For revamping, up gradation & Augmentation)	Total	Existing ECs	Additional	Total
Cost of Air Pollution Control Devices/ System	1. Carry out timely maintenance of the equipment condition. 2.Periodic inspection and survey of ESP for physical health assessment of ESP and take corrective action repair/replacement for enhance ESP performance 3.APH flue gas temperature is being regularly monitored to prevent acid corrosion in the ESP ducts, pipelines and hoppers etc. 4.TRP rating of ESP to be maintained	12.27	13.50	25.77	1.90	0.20	2.10

Description	Proposed Additional Measure	Capital cost, Rs. in crores			Recurring cost, Rs. in crores		
		Existing	Additional cost incurred/ Proposed (For revamping, up gradation & Augmentation)	Total	Existing ECs	Additional	Total
	through trial charging and field current adjustment and necessary correction during and after AOH to improved and sustain ESP efficiency. 5.The ESP field is enhanced to 7 fields and the bag filter capacity is increased to improve air pollution control efficiency.						
Cost of Water conservation & Pollution Control	1.Installation of New Water Sprinklers at least 80 nos., Water cannon system-01 no, movable water tanker-01 no, 2.Strengthening the RWH system and internal drain network.	3.50	0.95	4.45	0.50	0.20	0.70
Cost of Solid Waste Management System	1.Fly Ash Handling & Transportation. 2.Cleaning & replace damage or inefficient filter bags as required. 3.Installation of brick plant (Capacity -1,00,000 nos./day)	2.50	2.80	5.30	0.50	0.30	0.80
Green belt development	1.Increasing the density of plantation inside the plant premises to 2500 trees per hectare with additional 20,500 plantations (1 st Year -10,300 nos. & 2 nd year - 10,200 nos.). Total plantation on 30.36 hectare of land will be 75,900 nos. with	3.00	4.65	7.65	0.30	0.75	1.05

Description	Proposed Additional Measure	Capital cost, Rs. in crores			Recurring cost, Rs. in crores		
		Existing	Additional cost incurred/ Proposed (For revamping, up gradation & Augmentation)	Total	Existing ECs	Additional	Total
	avg. 10 meter width all around the plant boundary and will be achieved by FY. Year 2027-2028. 2.Green belt outside the plant premises will be carried out. In total additional 40,000 nos. of trees will be planted in a span of three year (by FY 2028-2029). The details area as: • In 1st & 2nd Year in nearby area (village- Swaminatham & Ottapidaram in 1st & 2nd year) - 10,000 nos. of trees in each Village. • In 2nd & 3rd year in nearby Health Centre (Sillanatham & Pudhiyamputhur) - 2500 nos. of trees in each location. • In 1st, 2nd & 3rd year in nearby School (TNDTA Primary School, Rajavinkovil & Panchayt Union Primary School, Melalakshmipura m & Panchayt Union Primary School, Sillanatham)- 3000 nos. of trees in each location. • In 3rd year along the village road & community						

Description	Proposed Additional Measure	Capital cost, Rs. in crores			Recurring cost, Rs. in crores		
		Existing	Additional cost incurred/ Proposed (For revamping, up gradation & Augmentation)	Total	Existing ECs	Additional	Total
	hall/ worship place in Pudhiyamputhur village in consultation with local administration - 6000 nos. • Under CSR in collaboration with Govt. Agency green belt outside the project boundary with approximately 50,000 plantations to be carried out to improve the regional air quality.						
Noise Reduction Systems & Green energy initiative.	Installing heavy-duty, acoustic blanket, enclosure. 2.Solar power capacity of the plant to be increased to 100 KW by FY 26-27. Capacity will be further increased to 350 KW by FY 28-29. And in future if there is possibility of further capacity increase the same will be implemented.	1.50	1.50**	3.00	0.10	0.30	0.40
Occupational Health Management	Strengthening emergency medical facility, ambulance services and first aid arrangement.	1.25	0.20	1.45	0.20	0.08	0.28
Risk Mitigation & Safety Plan	In-house fire-fighter truck up gradation and modification of hydrant line system for effective fire emergency management.	1.20	0.40	1.60	0.15	0.08	0.23

Description	Proposed Additional Measure	Capital cost, Rs. in crores			Recurring cost, Rs. in crores		
		Existing	Additional cost incurred/ Proposed (For revamping, up gradation & Augmentation)	Total	Existing ECs	Additional	Total
Online Monitoring Surveillance System (New AAQMS & CEMS)	New sensor-based AAQM stations installation (03 Nos.)	2.50	1.20	3.70	0.30	0.16	0.46
Implementation of Controlling measures to minimize impacts due to transportation and traffic	Promoting use of EV vehicle inside the plant premises by the Employee/Staff and provide financial benefit to encourage the employees.	1.00	1.00	2.00	0.20	0.07	0.27
Setting in house Environmental Laboratory	New in-house Monitoring systems install.	0.55	0.15	0.70	0.05	--	0.05
Grand Total		29.27	26.35	55.62	4.20	2.12	6.32
**Costing is only for Solar Power installation.							

Observations and deliberation of the EAC

46.5.14: The Committee observed and noted the following:

- The instant proposal is for seeking amendment in a EC conditions as per MoEF&CC Notification dated 11/07/2025 for Sulphur dioxide emission standards prescribed in EC letter dated 10.11.2010 accorded for the project- 3 x 150 MW Coal Based Thermal Power Plant at Swaminatham & Ottapidaram Villages, Ottapidaram Taluk, Dist. - Thoothukudi, Tamil Nadu.
- The existing project of M/s Orissa Alloy Steel Private Limited was originally granted Environmental Clearance in favour of M/s Ind-Bharat Thermal Power Limited (IBTPL) for setting up 3 x 150 MW Coal Based Thermal Power Plant at Swaminatham & Ottapidaram Villages, Ottapidaram Taluk, Dist. - Thoothukudi, Tamil Nadu vide letter no SEIAA/TN/EC/1(d)/013/F.No.282/2010 dated 10/11/2010 under EIA, 2006. Subsequently, amendment to the Environmental Clearance was accorded vide letter no. SEIAA/TN/EC/Amendment/F.No.282/2010 on 20.12.2010 for change in composition of fuel and EC transfer was accorded by SEIAA, Tamil Nadu vides EC Identification No. EC24B0601TN5765287T & File No. 11326 on 16.06.2025.
- As per the EC accorded to the project vide letter dated 10.11.2010, the capacity of the project is 3x150MW, while currently the running capacity of the project is 2x150MW as per CTO. The remaining 150 MW has not been implemented by the proponent.

- iv. There is no forest land involved in the project.
- v. As per as per DSS there is PF at distance of 5 Km from project site in NW direction.
- vi. The project is located near SIPCOT Industrial Complex a SPA that is 6 Km away from project boundary in South-East Direction having CEPI score of 66.34.
- vii. During the months of February, March and April 2026 the coal consumption for 2x150 MW is 72674 MT, 27752 MT and 68100 MT, respectively.
- viii. The Project Proponent (PP) presented ambient air quality data (PM₁₀, PM_{2.5}, NO_x, SO₂, etc.) for the core and buffer zones. The values for Ambient Air Quality are within the prescribed norms of NAAQMS 2009.
- ix. The mass emission rate of pollutants including PM₁₀, PM_{2.5} NO_x, and SO₂ were estimated 6.06 g/s, 3.64 g/s, 90.83 g/s and 131.27 g/s respectively for Unit 1 and 6.18 g/s, 3.71 g/s, 92.66 g/s and 133.47 g/s respectively for Unit 2.
- x. The stack emission from the Power plant is within the stipulated norms.
- xi. Project proponent has installed a 130 m bi-flue stack, which complies with the MoEF&CC Notification dated August 30, 1990.
- xii. As per the submitted addendum EIA report prepared through QCI/NABET accredited consultant, the predicted maximum Ground Level Concentration (GLCs) using AERMOD View dispersion model from the stack emission as per the envisaged stack height and site-specific meteorological parameters the maximum GLC of SO₂ is 4.48 µg/m³ at 2.6 km distance.
- xiii. EAC asked the Project Proponent to increase the green belt area in surrounding area of power plant.
- xiv. EAC observed that the Proposed cost for Additional EMP is 26.35 Crore as capital cost and 2.12 Crore as recurring cost.
- xv. EAC deliberated on the written submission submitted by the Project Proponent and found it satisfactory.

Recommendations of the Committee

46.5.15: In view of the foregoing and after the detailed deliberations, the Committee **recommended** the instant proposal for grant of amendment in the EC granted vide letter no SEIAA/TN/EC/1(d)/013/F.No.282/2010 dated 10/11/2010 and its subsequent amendments as detailed below **subject to uploading of written submissions on PARIVESH portal** and stipulation of following additional specific conditions. All other terms and conditions prescribed in EC dated 10/11/2010 and its subsequent amendments shall remain unchanged.

Sl. No.	Condition No.	Details of Conditions as per EC	Recommendation of EAC
1	Part-A: Specific Condition (xvii):	Space provision shall be kept for retrofitting of FGD, if required at a later date.	Agreed. With regard to the said condition, Committee agreed the following: The Project Proponent shall maintain stack of 130 meters height and comply with the notification number GS R 742 (E) dated

			the 30th August, 19 90.
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Additional specific conditions

- i. Project proponent shall implement the protective measure proposed in additional EMP in a time-bound manner in addition to the existing EMP. The budget earmarked for the additional EMP is Rs. 26.35 Cr as capital cost and 2.12 Cr as recurring cost and should be kept in separate accounts and audited annually. The implementation status as per the action plan given below along with the amount spent with documentary proof shall be submitted to the concerned Regional Office along with the six monthly compliance report.

Description	Proposed Additional Measure	Capital cost, Rs. in crores			Recurring cost, Rs. in crores		
		Existing	Additional cost incurred/ Proposed (For revamping, up gradation & Augmentation)	Total	Existing ECs	Additional	Total
Cost of Air Pollution Control Devices/ System	1. Carry out timely maintenance of the equipment condition. 2.Periodic inspection and survey of ESP for physical health assessment of ESP and take corrective action repair/replacement for enhance ESP performance 3.APH flue gas temperature is being regularly monitored to prevent acid corrosion in the ESP ducts, pipelines and hoppers etc. 4.TRP rating of ESP to be maintained through trial charging and field current adjustment and necessary correction during and after AOH to improved and sustain ESP efficiency. 5.The ESP field is enhanced to 7 fields and the bag filter capacity is increased to improve air pollution control efficiency.	12.27	13.50	25.77	1.90	0.20	2.10

Description	Proposed Additional Measure	Capital cost, Rs. in crores			Recurring cost, Rs. in crores		
		Existing	Additional cost incurred/ Proposed (For revamping, up gradation & Augmentation)	Total	Existing ECs	Additional	Total
Cost of Water conservation & Pollution Control	1.Installation of New Water Sprinklers at least 80 nos., Water cannon system-01 no, movable water tanker-01 no, 2.Strengthening the RWH system and internal drain network.	3.50	0.95	4.45	0.50	0.20	0.70
Cost of Solid Waste Management System	1.Fly Ash Handling & Transportation. 2.Cleaning & replace damage or inefficient filter bags as required. 3.Installation of brick plant (Capacity - 1,00,000 nos./day)	2.50	2.80	5.30	0.50	0.30	0.80
Green belt development	1.Increasing the density of plantation inside the plant premises to 2500 trees per hectare with additional 20,500 plantations (1 st Year - 10,300 nos. & 2 nd year -10,200 nos.). Total plantation on 30.36 hectare of land will be 75,900 nos. with avg. 10 meter width all around the plant boundary and will be achieved by FY. Year 2027-2028. 2.Green belt outside the plant premises will be carried out. In total additional 40,000 nos. of trees will be planted in a span of three year (by FY 2028-2029). The details area as: • In 1 st & 2 nd Year in nearby area (village- Swaminatham & Ottapidaram in 1 st	3.00	4.65	7.65	0.30	0.75	1.05

Description	Proposed Additional Measure	Capital cost, Rs. in crores			Recurring cost, Rs. in crores		
		Existing	Additional cost incurred/ Proposed (For revamping, up gradation & Augmentation)	Total	Existing ECs	Additional	Total
	& 2nd year) - 10,000 nos. of trees in each Village. - In 2nd & 3rd year in nearby Health Centre (Sillanatham & Pudhiyamputhur)- 2500 nos. of trees in each location. - In 1st , 2nd & 3rd year in nearby School (TNDTA Primary School, Rajavinkovil & Panchayt Union Primary School, Melalakshmipura m & Panchayt Union Primary School, Sillanatham)- 3000 nos. of trees in each location. - In 3rd year along the village road & community hall/ worship place in Pudhiyamputhur village in consultation with local administration - 6000 nos. - Under CSR in collaboration with Govt. Agency green belt outside the project boundary with approximately 50,000 plantations to be carried out to improve the regional air quality.						
Noise Reduction Systems & Green energy initiative.	- Installing heavy-duty, acoustic blanket, enclosure. - Solar power	1.50	1.50**	3.00	0.10	0.30	0.40

Description	Proposed Additional Measure	Capital cost, Rs. in crores			Recurring cost, Rs. in crores		
		Existing	Additional cost incurred/ Proposed (For revamping, up gradation & Augmentation)	Total	Existing ECs	Additional	Total
	capacity of the plant to be increased to 100 KW by FY 26-27. Capacity will be further increased to 350 KW by FY 28-29. And in future if there is possibility of further capacity increase the same will be implemented.						
Occupational Health Management	Strengthening emergency medical facility, ambulance services and first aid arrangement.	1.25	0.20	1.45	0.20	0.08	0.28
Risk Mitigation & Safety Plan	In-house fire-fighter truck up gradation and modification of hydrant line system for effective fire emergency management.	1.20	0.40	1.60	0.15	0.08	0.23
Online Monitoring Surveillance System (New AAQMS & CEMS)	New sensor-based AAQM stations installation (03 Nos.)	2.50	1.20	3.70	0.30	0.16	0.46
Implementation of Controlling measures to minimize impacts due to transportation and traffic	Promoting use of EV vehicle inside the plant premises by the Employee/Staff and provide financial benefit to encourage the employees.	1.00	1.00	2.00	0.20	0.07	0.27
Setting in house Environmental Laboratory	New in-house Monitoring systems install.	0.55	0.15	0.70	0.05	--	0.05
Grand Total		29.27	26.35	55.62	4.20	2.12	6.32
**Costing is only for Solar Power installation.							

- ii. As committed in the additional EMP, in addition to the strengthening the green belt at TPP site, project proponent shall plant 50,000 saplings of native and fruit bearing species of not less than 2 meter height in and around the vicinity of TPP, nearby schools, any government land, transportation road side or any other suitable land

within 2 years from the date of grant of amendment in EC. For this extra provision of the budget should be incorporated.

- iii. Project proponent shall monitor sulphate in particulate matters and Ammonia in ambient air in addition to the regular environmental monitoring parameters.
- iv. Project Proponent shall enhance the ESP field to 7 fields and the bag filter capacity is to be increased to improve air pollution control efficiency as committed.
- v. Project Proponent shall install new water sprinklers at least 80 nos., Water cannon system-01 no. and movable water tanker-01 no as committed.
- vi. Project Proponent shall install brick plant of Capacity -1,00,000 nos./day as committed.
- vii. Project Proponent shall increase the density of plantation inside the plant premises to 2500 trees per hectare with additional 20,500 plantations and under CER/CSR green belt to be developed outside the project boundary with approximately 50,000 plantations to be carried out to improve the regional air quality as committed
- viii. Project Proponent shall increase the Solar power capacity to 100 KW by FY 26-27 and capacity will be further increased to 350 KW by FY 28-29 as committed.
- ix. Project Proponent shall install 3 nos. of New sensor-based CAAQMS as committed.

Agenda item no. 46.6

46.6: 2×600 MW Anpara Thermal Power Plant by M/s. MEIL Anpara Energy Limited located at village Anpara, District Sonbhadra, Uttar Pradesh – **Amendment in Environment Clearance regarding review of Sulphur dioxide emission standards for Category B TPP as per MoEF&CC Notification dated 11/07/2025 – regarding.**

[Proposal No: IA/UP/THE/565006/2026; F.No. J- 13011/45/2007-IA-II (T)]

46.6.1: M/s MEIL Anpara Energy Limited has made online application vide proposal no. IA/UP/THE/565006/2026 dated 10.01.2026 along with Form IV and EIA Addendum report for seeking amendment in the Environmental Clearance accorded by the Ministry vide letter no. J-13011/45/2007-IA-II (T) dated 26.11.2007 for the above-mentioned project with respect to Sulphur dioxide emission standards as per MoEF&CC Notification dated 11/07/2025 under the provisions of the EIA Notification, 2006.

Name of the EIA consultant: M/s Gaurang Environmental Solutions Pvt. Ltd. [S. No. 110, List of ACOs with their Certificate No. NABET/EIA /23-26/RA 0338 dated 16.07.2024 valid upto 7.12.2026].

Details of the proposal, as ascertained from the proposal documents and as revealed from the discussions held during the meeting are given as under:

46.6.2: The existing project of M/s MEIL Anpara Energy Limited was originally granted Environmental Clearance in favour of M/s. Lanco Anpara Private Limited for setting up 2x600 MW Anpara Thermal Power Plant at Village Anpara, District Sonbhadra, Uttar Pradesh vide letter no J-13011/45/2007-IA-II (T) dated 26.11.2007 under EIA, 2006. Subsequently, amendment to the EC was accorded on 31.07.2008. EC was transferred from

“Lanco Anpara Private Limited” to “MEIL Anpara Energy Limited” vide letter no. J-13011/45/2007-IA-II(T) dated 13.01.2025.

46.6.3: Environmental site settings

S. No	Particulars	Details				Remarks																																												
1.	Total land	112.005 Ha [Govt.: 112.005 Ha]				Land use: Industrial																																												
2.	Land use break up	Facilities	Existing Area (in Hectares)	Proposed Area (in Hectares)	Total Area (In Hectares)																																													
		Main Plant	12.442	0	12.442																																													
		Coal Handling System	29.140	0	29.140																																													
		Water System	5.386	0	5.386																																													
		Switch Yard	14.021	0	14.021																																													
		Green belt	37	(+)1.5	38.5																																													
		Roads	4.435	0	4.435																																													
		Ash pond	0	0	0																																													
		Railway Siding	2.275	0	2.275																																													
		Water supply pipeline	0.114	0	0.114																																													
		Ash transport pipeline	0.3	0	0.3																																													
		Others (Space for FGD, Other Utilities)	6.892	(-)1.5	5.392																																													
		Total	112.005 Ha	0	112.005 Ha																																													
		3.	Land acquisition details as per MoEF&CC O.M, dated 07/10/2014 & 19/02/2025	The land is already under the possession of the company.				112.005 Ha Lease Deed executed between the Uttar Pradesh Rajya Vidyut Utpadan Nigam Limited (UPRVUNL) and Lanco Anpara Power Private Limited dated 22.11.2007.																																										
4.	Existence of habitation & involvement of R&R, if any.	Project site: No habitation within project site. Study Area: List of villages within 5 km of project site are given as under: <table><tr><th>S. No</th><th>Habitation</th><th>Distance*(Km)</th><th>Direction</th></tr><tr><td>1.</td><td>Anpara</td><td>1.15</td><td>WNW</td></tr><tr><td>2.</td><td>Dibulganj</td><td>1.25</td><td>NE</td></tr><tr><td>3.</td><td>Murisemar</td><td>1.50</td><td>N</td></tr><tr><td>4.</td><td>Kakari</td><td>2.00</td><td>SW</td></tr><tr><td>5.</td><td>Renusagar</td><td>2.2</td><td>SSW</td></tr><tr><td>6.</td><td>Karahiya</td><td>2.50</td><td>ENE</td></tr><tr><td>7.</td><td>Garbandha</td><td>2.6</td><td>SW</td></tr><tr><td>8.</td><td>Lodhara</td><td>3.50</td><td>NNE</td></tr><tr><td>9.</td><td>Manrahwa</td><td>4.60</td><td>SSW</td></tr><tr><td>10.</td><td>Kuldomari</td><td>5.3</td><td>NE</td></tr></table>				S. No	Habitation	Distance*(Km)	Direction	1.	Anpara	1.15	WNW	2.	Dibulganj	1.25	NE	3.	Murisemar	1.50	N	4.	Kakari	2.00	SW	5.	Renusagar	2.2	SSW	6.	Karahiya	2.50	ENE	7.	Garbandha	2.6	SW	8.	Lodhara	3.50	NNE	9.	Manrahwa	4.60	SSW	10.	Kuldomari	5.3	NE	Status of R&R. - Not applicable as R&R not involved.
S. No	Habitation	Distance*(Km)	Direction																																															
1.	Anpara	1.15	WNW																																															
2.	Dibulganj	1.25	NE																																															
3.	Murisemar	1.50	N																																															
4.	Kakari	2.00	SW																																															
5.	Renusagar	2.2	SSW																																															
6.	Karahiya	2.50	ENE																																															
7.	Garbandha	2.6	SW																																															
8.	Lodhara	3.50	NNE																																															
9.	Manrahwa	4.60	SSW																																															
10.	Kuldomari	5.3	NE																																															

5.	Existence of school and hospitals if any.	A. School Project site: None Study area: <table><tr><th>S. No.</th><th>School</th><th>Distance (Km)</th><th>Direction</th></tr><tr><td>1.</td><td>Govt. Primary School, Dibulganj</td><td>0.65</td><td>NE</td></tr><tr><td>2.</td><td>Aditya Birla Public School, Renusagar</td><td>1.18</td><td>S</td></tr><tr><td>3.</td><td>Government Primary School, Kuldomari</td><td>2.15</td><td>NE</td></tr><tr><td>4.</td><td>Govt Middle School, Garbandha</td><td>2.34</td><td>S</td></tr><tr><td>5.</td><td>ITI College, Anpara</td><td>2.7</td><td>SW</td></tr><tr><td>6.</td><td>Government middle school, Kohroul</td><td>7.50</td><td>SSW</td></tr><tr><td>7.</td><td>Government High school, Churki</td><td>9.00</td><td>WNW</td></tr></table> B. Hospitals Project site: None Study area: <table><tr><th>S.No.</th><th>Hospital</th><th>Distance(Km)</th><th>Direction</th></tr><tr><td>1.</td><td>Government Hospital, Kuldomari</td><td>0.10</td><td>N</td></tr><tr><td>2.</td><td>Renusagar Health Centre, Renusagar</td><td>1.45</td><td>S</td></tr><tr><td>3.</td><td>Rural Development Hospital Hindalco, Renusagar</td><td>1.75</td><td>S</td></tr></table>	S. No.	School	Distance (Km)	Direction	1.	Govt. Primary School, Dibulganj	0.65	NE	2.	Aditya Birla Public School, Renusagar	1.18	S	3.	Government Primary School, Kuldomari	2.15	NE	4.	Govt Middle School, Garbandha	2.34	S	5.	ITI College, Anpara	2.7	SW	6.	Government middle school, Kohroul	7.50	SSW	7.	Government High school, Churki	9.00	WNW	S.No.	Hospital	Distance(Km)	Direction	1.	Government Hospital, Kuldomari	0.10	N	2.	Renusagar Health Centre, Renusagar	1.45	S	3.	Rural Development Hospital Hindalco, Renusagar	1.75	S															
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7.	Elevation of the project site	275 m above mean sea level(Average)																																																																									
8.	Involvement of Forest land if any.	Status of Forest Clearance: Stage II FC obtained on 07.03.2007 Area of the forest land involved: 3 Hectare																																																																									
9.	Water body (Rivers, Lakes, Pond, Nala, Natural Drainage, Canal etc.) exists within the project site as well as study area	Project site: None Study area: <table><tr><th>S. No.</th><th>Water body</th><th>Distance (Km)</th><th>Direction</th></tr><tr><td>1.</td><td>Mamuar Nala</td><td>0.60</td><td>NE</td></tr><tr><td>2.</td><td>Govind Ballabh Pant Sagar</td><td>1.4</td><td>SSE</td></tr><tr><td>3.</td><td>Deohar Nadi</td><td>1.8</td><td>W</td></tr><tr><td>4.</td><td>Ghaghiya Nala</td><td>1.8</td><td>ENE</td></tr><tr><td>5.</td><td>Hathijariya Nadi</td><td>4.5</td><td>SSW</td></tr><tr><td>6.</td><td>Tippajhariya Nala</td><td>5.0</td><td>WSW</td></tr><tr><td>7.</td><td>Baran Nala</td><td>8.8</td><td>ENE</td></tr><tr><td>8.</td><td>Dhurwahiya Nala</td><td>8.9</td><td>N</td></tr><tr><td>9.</td><td>Murcha Nala</td><td>9.2</td><td>ENE</td></tr><tr><td>10.</td><td>Gaghawa Nadi</td><td>9.4</td><td>WNW</td></tr><tr><td>11.</td><td>Bijul Nadi</td><td>9.6</td><td>NW</td></tr></table>	S. No.	Water body	Distance (Km)	Direction	1.	Mamuar Nala	0.60	NE	2.	Govind Ballabh Pant Sagar	1.4	SSE	3.	Deohar Nadi	1.8	W	4.	Ghaghiya Nala	1.8	ENE	5.	Hathijariya Nadi	4.5	SSW	6.	Tippajhariya Nala	5.0	WSW	7.	Baran Nala	8.8	ENE	8.	Dhurwahiya Nala	8.9	N	9.	Murcha Nala	9.2	ENE	10.	Gaghawa Nadi	9.4	WNW	11.	Bijul Nadi	9.6	NW																									
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10.	Existence of ESZ/ ESA/ national park/ wildlife sanctuary/ biosphere reserve/ tiger reserve/ elephant reserve etc. if any within the study area	Study area Name of the ESZ/ESA: None within study area Status of Notification: Not Applicable Distance of project from ESZ/ESA: Not Applicable Authenticated map of ESZ projecting distance of ESZ from project site: Not Applicable Status of NBWL approval: Not Applicable List of Reserved and Protected forests: <table> <tr> <th>S. No.</th><th>Particulars</th><th>Distance(Km)</th><th>Direction</th></tr> <tr> <td>1</td><td>Barpall R. F.</td><td>2.2</td><td>SW</td></tr> <tr> <td>2</td><td>Kudri P.F.</td><td>6.5</td><td>NNE</td></tr> <tr> <td>3</td><td>Tuman P.F.</td><td>7.3</td><td>SE</td></tr> <tr> <td>4</td><td>Bathapara R. F.</td><td>7.6</td><td>ESE</td></tr> <tr> <td>5</td><td>Pondibahar P.F.</td><td>7.8</td><td>NNE</td></tr> <tr> <td>6</td><td>Ramapara P. F.</td><td>9.5</td><td>SE</td></tr> </table>	S. No.	Particulars	Distance(Km)	Direction	1	Barpall R. F.	2.2	SW	2	Kudri P.F.	6.5	NNE	3	Tuman P.F.	7.3	SE	4	Bathapara R. F.	7.6	ESE	5	Pondibahar P.F.	7.8	NNE	6	Ramapara P. F.	9.5	SE	
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11.	Archaeologic al sites monuments/ historical temples etc.	There are no Archaeological sites present within 10 km radius of project site.																													
12.	Facility envisaged in CRZ area (Only for coastal power plant)	Name of the facility in CRZ area – None within study area Recommendations of CZMA – Not Applicable Status of CRZ clearance – Not Applicable	DSS																												
13.	Involvement of Critically Polluted Area/ Severely Polluted area as per 2018 CEPI score.	Involvement of CPA/SPA : Not Applicable Proximity to CPA/SPA : The nearest SPA is Singrauli industrial area which is 6.2 km from project boundary in W Direction.	Proposed additional environmental safeguards as per MoEF&CC OM dated 31/10/2019: Not Applicable																												

46.6.4: The implementation status of the existing EC dated 26/11/2007 is as follows:

S. No.	Configuration	Capacity (MW)	Date of accord of EC	Date of commissioning of units	Production as per CTO	Applicable emission norms as per notification dated 7/12/2015 & its amendment
01.	2 x 600 MW (Unit -1 & 2)	1200 MW	26.11.2007	Units 1 : 10.12.2011 Units 2 : 18.01.2012	2 x 600 MW	Particulate Matter : 50 mg/Nm ³ Oxides of Nitrogen (NOx): 450 mg/Nm ³

46.6.5: Details of Power Plant: Total land requirement for the TPP is 112.005 ha [Govt. Land 109.005 ha & Forest land:3 Ha]. Stage II FC obtained on 07.03.2007. The nearest SPA is Singrauli industrial area, which is 6.2 km from project boundary in W Direction. CEPI

Score for Singrauli industrial area is 62.59. There are no national parks, Biosphere Reserves, Eco-sensitive zone, Tiger/Elephant Reserves and Wild Life Corridors within 10 km distance from the project site as ascertained from DSS.

Parameter	Details as per EC	Status as on June 2026	Remarks
Total Land Area (Ha)	112.005	112.005 [Govt. Land 109.005 ha & Forest land:3 Ha]	No acquisition of additional Land.
Involvement of Forest Land (Ha)	3 Ha	Stage II FC obtained vide letter dated 07.03.2007	FC available
NBWL Clearance	NA	NA	NA
CPA/SPA	NA	Nearest SPA is Singrauli industrial area(CEPI Score-62.59)	Located at 6.2 km from project boundary in W Direction

46.6.6: Background for amendment sought by the proponent:

- Initially, MoEF&CC (erstwhile MoEF) notified stack emission standards for Particulate Matter (PM) parameter vide Notification dated 03.01.1989 requiring TPPs to install Electrostatic Precipitators (ESPs) to reduce emission.
- MoEF&CC notified stack height regulation for TPPs vide Notification dated 30.08.1990. The said notification outlined stack height regulations based on the plant's capacity and Sulphur content in the fuel, ensuring proper dispersion of the pollutants (SO₂ and NO_x) through adequately large stacks
- MoEF&CC vide its notification dated 07.12.2015 stipulated emission standards for coal/lignite-fired TPPs, which included revised emission standards for Particulate Matter (PM), and newly introduced emission standards for Sulphur dioxide (SO₂), Oxides of Nitrogen (NO_x), and Mercury (Hg) parameters with timelines
- MoEF&CC vide notification dated 11/07/2025 amended the provisions related to sulphur dioxide emission standards for Category –B Thermal Power Plants (TPPs).
- As per the CPCB categorization dated 23/06/2022 with the respect to Sulphur di-oxide (SO₂) emission norms, Anpara TPP of Lanco Power falls under Category-B at Sl. No. 127&128.
- In pursuance to the MoEF&CC Notification dated 11/07/2025, M/s. MEIL Anpara Energy Limited has submitted their application for amendment in EC within the prescribed time frame seeking for review of Sulphur dioxide emission standards.

46.6.7: The summary of the information submitted by the proponent in the addendum EIA report are as follows:

i. Average coal consumption and the average Sulphur content of coal is being used in the TPP for last three months period (Nov 25- Jan26).

Month	Coal consumption in MT Unit wise		
	Unit 1	Unit 2	Total(MT)
Nov-25	46,259.79	2,00,965	2,47,224.79
Dec-25	1,11,046.28	2,49,262.00	3,60,308.28

Jan-26	2,46,365.5	2,22,398.1	4,68,763.6
Domestic Coal is being used with maintaining Sulphur contents is < 0.5%			

ii. Minimum, maximum and 98th percentile levels of ambient PM₁₀, PM_{2.5}, NO_x, and SO₂ from secondary monitored AAQ data for last three months period.

S. No.	Name of location	Parameters being monitored	Remarks
CAAQMS Locations			
1	MEIL Township	PM ₁₀ , PM _{2.5} , SO ₂ , NO ₂	Core zone

Summary of AAQ Result for Nov'2025 to Jan'2026:

S. No.	Name of location	Parameter	Concentration in µg/m ³		
			Max	Min	Average
1.	MEIL Township	PM ₁₀	44.83	44.73	44.78
		PM _{2.5}	18.83	18.73	18.78
		SO ₂	10.03	9.94	9.98
		NO _x	23.37	23.31	23.34

iii. Average stack emissions for PM, NO_x, and SO₂ parameters for last three months, (Nov'2025 to Jan'2026) flue gas concentration in mg/Nm³

S. No.	Name of stack	Parameter	Concentration in (mg/Nm ³) Period		
			Max	Min	Avg.
1	Unit - 1	PM	57.68	7.84	26.47
		SO ₂	846.37	596.58	739.25
		NO ₂	242.05	116.13	175.17
2	Unit -2	PM	49.09	13.32	30.96
		SO ₂	807.11	602.66	716.92
		NO ₂	296.11	135.88	211.08

Mass emission rate of pollutants in gram per second

S. No.	Parameters	Units	Unit1 (1x600)	Unit 2 (1x600)
1	Stack Height	M	275 (Bi Flue)	
2	No. of flue	No.	1	1
3	Top diameter of flue	m	6.8	6.8
4	Flue gas velocity in each flue	m/s	27.12	27.57
5	Flue gas temperature	°K	363	363
6	Volumetric Flow rate of gas in each flue	Nm ³ /s	984	1000
7	Emission Rates			
A	PM ₁₀	g/s	34.02	31.83
B	PM _{2.5}	g/s	8.5	7.96
C	SO ₂	g/s	841.5	863
D	NO _x	g/s	353.5	359

iv. Current stack height in the TPP and compliance with the MoEF&CC Notification of August 30, 1990 (or) June 28, 2018.

The Company has already constructed 275 m high Bi-flue stack before commissioning. The TPP has already complied with the stack height (275 meters) in terms of the notification number GSR 742 (E) dated 30th August'1990.

v. Assessment of maximum Ground Level Concentration (GLCs) of pollutants from the stack emission as per the envisaged stack height (as applicable) based on available site-specific meteorological parameters. Details of the model used, input data used for modelling and output data of the 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.

GLC of pollutants at sampling location:

Receptor Location	GLC at Monitoring Location (µg/m ³)			
	PM ₁₀	PM _{2.5}	SO ₂	NO _x
Track Hopper	0.226	0.056	7.07	2.45
Kakri	0.229	0.057	4.71	2.48
Dibluganj	0.25	0.06	6.31	2.76

vi. Environment Management Plan (EMP):

Details	Information provided by Proponent
Environment Management Plan (EMP) covering the following: a. Impact of ground level concentration on the environment if any and corresponding mitigation measures to be adopted. b. Additional mitigation measures proposed if any.	a. Based on coal quality, stack emission characteristics, ambient air quality observations, and model predictions, the Air Quality Impact Prediction (AQIP) study conclusively demonstrates that: • SO₂ contribution from MEIL Anpara C TPP is minimal, owing to the very low sulphur coal (0.29-0.38%), & 275 m high Bi-flue stack. • AQIP reflects that even without FGD, the plant operations do not pose any ambient air quality risk related to SO₂ & it remains within NAAQS. b. Mitigation measures in place at MEIL Anpara C TPP are :- • Hybrid ESP (High efficiency: 99.9%) installed to limit PM emission level well within prescribed standards. • 275 m height chimney for dispersion of pollutants. • Continuous Emission Monitoring system (CEMS) installed and connected with CPCB. • Low Nox burners and over fire air dampers installed to suppress/control fugitive dust. • 3 Nos. of CAAQMS is installed. • Online Effluent Quality monitoring system installed in ETP connected with CPCB. • Coal dust is being controlled through wind breaking wall and suppressed by water spraying arrangements at suitable locations such as transfer points, loading and unloading stations, coal stock piles etc. • To suppress fugitive dust, while loading the ash into the bulkers from fly ash silos, the fly ash is conditioned with water spray. Covered bulkers are used to prevent flying of fine ash during transportation.

	• A total greenbelt area of 37.0 Ha, constituting approximately 33% of the total plot area, has already been developed within the project premises by MEIL Anpara - C TPP. • MEIL undertakes to adhere to comply all the conditions stipulated in the EC as well as Consent and compliance reports are being submitted on regular basis to the MoEF&CC/CPCB/UPPCB. c. Additionally following measures are proposed : • Replacement of bag filters at a fixed interval of every 3-4 years. • ESP performance. Periodic inspection and calibration of OFA dampers for uniform air distribution. • Execution of MoU with cement manufacturing companies for 100% utilization of fly ash in compliance with MoEF&CC Fly Ash Notification dated 31.12.2021 and subsequent amendments • Additional area of 1.5 ha, presently earmarked for FGD installation is proposed to be covered under plantation & greenbelt making total greenbelt area within premises as 38.5 ha (34.37 % of total plot area). • Plantation activities within the plant premises are also being intensified, including in areas such as the Coal Handling Plant (CHP), AWRS, and other suitable locations, to further strengthen the greenbelt and enhance overall environmental quality. • Enhancement of green cover in nearby areas of MEIL Anpara C TPP in consultation with Forest Department using native species. • Installation of Solar Panel – 500 KW. • Deployment of Electric Vehicles. • Avenue plantation along the transportation route of ash. • Fixed sprinkler network with mist nozzles along the transportation route of ash.
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Air Pollution & Fugitive Emission Control Systems

Emission Source / Area	Control System / Measure Implemented
Particulate Matter (PM)	• Hybrid Electrostatic Precipitators (ESP + Bag Filters) installed in Unit-1 & Unit-2 • 275 m high stack for effective dispersion
Nitrogen Oxides (NO_x)	• Low-NO_x burners • Over-Fire Air (OFA) dampers in steam generators
Coal Transportation	• Coal is transported through Rail-based MGR system
Coal Handling & Storage	• Water spraying at transfer points, loading/unloading stations & stockpiles • Dust extraction systems at crusher houses & bunker transfer towers • Water sprinklers in coal yard during stacking & reclaiming.
Coal Bunkers	• Bunker ventilation system for dust evacuation • Collected dust recycled to conveyor/bunkers
Fly Ash Handling	• Pneumatic closed-pipeline fly ash evacuation from ESP hoppers • Bag filters installed on top of fly ash silos

Fly Ash Loading & Transport	• Fly ash conditioned with water spray during loading • Covered bulkers used to prevent airborne dispersion
Fly Ash Disposal	• Primarily supplied to cement industries by road • Wet slurry disposal system during emergency conditions
Fly Ash Utilization	• Continuous efforts for 100% fly ash utilization in compliance with MoEF&CC Notification dated 31.12.2021. • Annual audit. • Advertisement for bidding

Additional EMP cost as proposed by PP: [EC: Existing Capital; AC: TC: Total Capital; Additional Cost; ER: Existing Recurring; AR: Additional Recurring; TR: Total Recurring]

Description	Measure	EC Cost (Rs Cr)	AC Proposed (Rs Cr)	TC Cost (Rs Cr)	ER Cost (Rs Cr)	AR Cost (Rs Cr)	TR Cost (Rs Cr)
Cost of Air Pollution Control Devices/System	Existing • Hybrid Electrostatic Precipitators (ESP + Bag Filters) installed in Unit-1 & Unit-2. • 275 m high stack for effective dispersion. • Low-NOx burners • Over-Fire Air (OFA) dampers in steam generators • Coal is transported through Rail-based MGR system • Water spraying at transfer points, loading/unloading stations & stockpiles • Dust extraction systems at crusher houses & bunker transfer towers • Water sprinklers in coal yard during stacking & reclaiming • Bunker ventilation system for dust evacuation • Collected dust recycled to conveyor/bunkers Proposed • Replacement of conventional bags with PTFE coated bag filters for improved collection efficiency with regular maintenance and replacement of the filters at regular intervals • Conduct ESP performance tests at regular intervals Carry out timely maintenance based on test findings and equipment condition. • CFD of ESP inlet & outlet duct and installation of guide vane. • Periodic inspection and survey of ESP internals in every AOH for physical health assessment of ESP internals like emitting electrode, collecting electrode, and take corrective action repair/ replacement	271.17	10.88	282.05	16.33	0.752	17.082

Description	Measure	EC Cost (Rs Cr)	AC Proposed (Rs Cr)	TC Cost (Rs Cr)	ER Cost (Rs Cr)	AR Cost (Rs Cr)	TR Cost (Rs Cr)
	for improving ESP performance. • Water cleaning of ESP internal, trial charging and adjusting field current and correction during and after AOH to improve and sustain ESP performance. • High-Pressure Dust Suppression / Fogging System (Automated operation linked with belt movement). • Fixed and motorized long distance fog cannon in coal piles. • Strengthen water-mist, fogging, and DS systems at transfer points and junction houses. • Conduct periodic nozzle inspection and health checks. • Installation of efficient 4-way fogger system for pre-wetting of rakes at Track Hopper • Paved & Black-Topped Roads (ensuring road health) • Carry out regular water sprinkling on internal roads. • Enforce vehicle speed limits to minimize road dust. • Mechanical Road Sweeper						
Cost of Solid Waste Management System	Existing • Pneumatic closed-pipeline fly ash evacuation from ESP hoppers • Bag filters installed on top of fly ash silos • Fly ash conditioned with water spray during loading • Covered bulkers used to prevent airborne dispersion • Primarily supplied to cement industries by road • Wet slurry disposal system during emergency conditions • Continuous efforts for 100% fly ash utilization in compliance with MoEF&CC Notification dated 31.12.2021. • Annual audit. • Advertisement for bidding Proposed • Fixed sprinkler network with mist nozzles along the transportation route of ash. • Installation of Bulker Wheel washing point • Installation of automatic vent telescopic spout below silo to control fugitive emission. • Wet Fog Dust Suppression Systems installation - Inspect the healthiness of bag filters in silos regularly. • Cleaning & replace damaged or	180.6	0.92	181.52	29.028	0.16	29.188

Description	Measure	EC Cost (Rs Cr)	AC Proposed (Rs Cr)	TC Cost (Rs Cr)	ER Cost (Rs Cr)	AR Cost (Rs Cr)	TR Cost (Rs Cr)
	inefficient filter bags as required.						
Green Belt Development	Existing: 33% plantation with existing 54447 nos. of trees. Proposed - Avenue plantation along the transportation route of ash (8000 nos.) - Additional plantation around CHP (2000 trees) - Additional Plantation around AWRS (1000 trees) - Additional Plantation around Workshop and Cooling Tower (7000 trees) - Additional Plantation around Area designated for FGD (3750 trees) - Additional plantation outside plant through forest dept. (25000 Nos.)	30.0	3.7	33.7	0.70	0.202	0.902
Green Energy Initiative	Proposed - Installation of Solar Panel – 2 MW - Deployment of Electric Vehicles - Installation of Rain Water Harvesting units 02 Nos.	--	8.68	8.68	--	1.44	1.44
Grand Total		481.77	24.18	505.95	46.058	2.554	48.612

The summary of the Environmental Management Plan expenditure is as follows:

S.No.	Component	Capital cost (In Rs. Crore)		Recurring cost (In Rs. Cr per annum)	
		Existing	Proposed	Existing	Proposed
1.	Cost of Air Pollution Control Devices/System	271.17	10.88	16.33	0.752
2.	Cost of Solid Waste Management System	180.6	0.92	29.028	0.16
3.	Green Belt Development	30.0	3.7	0.70	0.202
4.	Green Energy Initiative	--	8.68	--	1.44
	Total	481.77	24.18	46.058	2.554

46.6.8: Amendment sought: The details of the condition for which amendment is sought and justification for the same is as follows:

S. No.	Condition as per EC dated 26.11.2007	Amendment Sought	Justification & Request for Amendment
1	Condition no vi stated that “space provision shall be made for installation of FGD of requisite efficiency of SO ₂ removal, if required	MEIL is seeking exemption for installation of FGD under the rule no. 2 i (c), iii, A of MoEF&CC notification dated 11.07.2025 and	- The Units are operational since 2011 (Unit-1) & 2012 (Unit-2) with 275m height of RCC Chimney (bi-flue). This complies with the stack height criteria notified vide notification no.- GSR 742 (E) dated the 30th August’1990. - Domestic Coal is being used while maintaining Sulphur contents <0.5%.

S. No.	Condition as per EC dated 26.11.2007	Amendment Sought	Justification & Request for Amendment
	at a later stage”	review of the applicability of Sulphur dioxide standards.	- Regular environmental parameters monitoring & analysis are being carried out in and around the TPP through NABL Accredited and CPCB recognized Laboratory. - The GLC values were assessed and reported in the EIA (2007). Since then, no addition of units or expansion of the project has been done, and the emission sources remain unchanged. - Accordingly, the incremental GLC presented in the EIA continues to represent the project's contribution, and current ambient air quality reflects this without any increase, in compliance with applicable standards. - The assessment of ambient air quality data w.r.t SO₂ concentrations in the region remains well within NAAQS and hence it is requested that MEIL Anpara C TPP may please be exempted from FGD installation.

46.6.9: Summary of court cases: Nil.

46.6.10: Summary of Show Cause Notices (Last two years): Nil.

46.6.11: Summary of violation under EIA, 2006/court case/show cause/direction if any, related to the project under consideration: - Nil.

46.6.12: ADS Information in chronology:

M/s. MEIL Anpara Energy Limited made an online application vide proposal no. IA/UP/THE/565006/2026 dated 10.01.2026. The proposal was initially considered in 36th and 38th meeting of Reconstituted EAC (Thermal) held on 22.01.2026 and 24.02.2026, respectively. Proposal was deferred for want of additional information. The point-wise reply to the observations, along with requisite documents/information uploaded on parivesh portal on 07.05.2026.

The point wise compliance are as:

Sl. No.	ADS	Submission
1	Justification for variation in AAQ data of UPPCB and data submitted by the proponent for the proposed project.	Reason for observed NAAQS exceedance of PM in UPPCB monitored locations: - UPPCB data are being monitored at Renusagar Colony and Anpara Colony which are at a distance of 2.25 km and 1.6 km respectively from Anpara C TPP and are surrounded by industries, like Hindalco Industries Limited (adjacent to Renusagar) Anpara TPP A and B (UPRVUNL) to Anpara Colony. - Additionally, vehicular emissions and fugitive dust generated due to material transportation activities, several TPPs in the

Sl. No.	ADS	Submission
		area significantly contribute to the observed particulate matter concentration. • Anpara-C TPP of MEIL is operating with Hybrid ESP (ESP+ Bag filter), Low-NO_x burners with Over-Fire Air (OFA) dampers in steam generators & a stack of 275 m is installed to limit emissions within prescribed standards. • Therefore, the variation between MEIL monitored AAQ data and UPPCB monitored data can be reasonably attributed to these localized external influences. The detailed justification is enclosed in ADS Reply
2	Action plan for the green belt development as per CPCB norms.	• A total greenbelt area of 37.0 Ha, constituting approximately 33% of the total plot area, has already been developed within the project premises by MEIL Anpara - C TPP. • Further, an additional area of 1.5 ha, presently earmarked for FGD installation will also be covered under plantation & greenbelt making total greenbelt area within premises as 38.5 ha (34.37 % of total plot area). • Plantation activities are also being strengthened through gap filling using Miyawaki technique within the plant, including in areas such as the Coal Handling Plant (CHP), Ash Handling areas, and other suitable locations, to further augment the greenbelt and improve the overall environmental quality. Presently 54,447 no. of trees have been planted covering an area of 37 Ha. • MEIL is also committed to enhancing green cover in the surrounding areas of the MEIL Anpara –C TPP in consultation with the Forest Department, with a focus on plantation of native species. Request letter dated 09.12.2025 has been submitted to DFO, Renukoot for the same. Copy of the same is enclosed in ADS Reply. Letter obtained from DFO, Renukoot dated 22.12.2025 for plantation. Copy of the same enclosed in ADS Reply. • The action plan, including detailed provisions for the proposed plantation along with the associated financial allocations, is enclosed in ADS Reply.
3	Ash Utilization plan for 100% ash utilization along with the data of legacy ash and the volume of ash dyke area.	The total ash dyke area is 383 ha with an overall storage capacity of 88.15 million m³. The ash pond/dyke facility is a common ash disposal system shared with Anpara A, B and D of UPRVUNL, as per the Facilities and Sharing agreement. The ash pond has been designed and is being operated and maintained by UPRVUNL. The copy of the agreement is enclosed in ADS Reply MEIL Anpara–C TPP is in advance stage of enhancing ash utilization and is committed to achieving 100% utilization in compliance with the MoEF&CC Ash Utilization Notification dated 31.12.2021. The detailed action plan outlining the same is enclosed in ADS Reply

Sl. No.	ADS	Submission
4	Action plan for prevention of ash flow into the Govind Vallabh Pant Sagar Dam and for control of fugitive dust emission from ash pond.	- Ash is being evacuated through a dedicated, closed-loop slurry pipeline system equipped with proper sealing to prevent any leakage or spillage during transportation to the ash pond. - The pipelines are strategically routed with adequate supports, anchoring, and expansion joints to prevent mechanical failure and accidental leakage. - Flow measurement systems (D-meters) have been installed and are regularly calibrated to continuously monitor slurry flow, ensuring controlled and uniform transfer of ash. - The slurry pipelines are provided with adequate pressure monitoring arrangements to detect abnormalities (such as blockage or leakage) and enable immediate corrective action. - Regular inspection, preventive maintenance, and integrity testing of pipelines, valves, and joints are being undertaken to eliminate any chances of leakage or rupture. - Standby/parallel pipeline arrangements are in place to ensure uninterrupted ash evacuation during maintenance or in case of failure of the main line, thereby avoiding overflow or spillage. - All transfer points and junctions are designed with leak-proof connections and proper anchoring. - The system is supported with automation and monitoring mechanisms for real-time tracking of slurry movement and prompt response to any deviations. - Adequate slope and proper hydraulic design of pipelines are being maintained to avoid choking, sedimentation, and subsequent overflow conditions. The time-bound action plan, along with budgetary allocation detailing each of the above measures, is enclosed in ADS Reply.
5	Performance Guarantee test report of ESP from the third party.	The performance evaluation of the ESPs (Unit I & Unit II) has been carried out by SGS India Private Limited. The copy of the test report is enclosed in ADS Reply
6	Water quality monitoring report of the Reservoir along the Ash Pond area from the secondary monitored data.	Water quality monitoring has been carried out by ITS Testing Laboratory Private Limited, an NABL-certified laboratory (Certificate no. TC-11181 valid up to 20.11.2028). The copy of the water quality monitoring report is enclosed in ADS Reply
7	Facility Service Agreement of the MEIL with UPRUVNL for usages of the common facilities such as ash pond area, etc.	The Facility Service Agreement between MEIL and UPRVUNL for usage of common facilities, including the ash pond area, is enclosed in ADS Reply
8	Details of the sensitive receptors at maximum GLC location (2.17 km) and control measures proposed in this regard.	- There are no forests, Wildlife Sanctuaries, Biosphere Reserves, National Parks, any ASI protected monuments, located where the maximum GLC has been predicted. - No schools, habitations, &/or places of worship are located where the maximum GLC has been predicted. - Mitigation measures to be implemented at the maximum GLC location are as follows: - Regular monitoring of ambient air quality in the vicinity of maximum GLC location as part of the post-EC monitoring plan is proposed.
9	Comparison of baseline environment status as per the EIA report submitted at the time of grant of EC for the TPP vis a vis present monitored data for a period of last	The baseline environmental status has been compared with the present monitored data and is enclosed in ADS Reply. Marginal increase has been observed; however, the variation remains within acceptable limits. Mitigation measures and the

Sl. No.	ADS	Submission																				
	three months. Data shall be analysed for the down-wind and up-wind locations, maximum, average and standard deviations shall be presented. Any major deviations from the baseline shall be explained with scientific justification and the action plan for mitigations measures to be adopted.	action plan to be adopted is enclosed in ADS Reply.																				
10	Land use breakup of the project site including ash pond and the environmental sensitive receptors within 10 km radius of the power plant shall be submitted.	Land Use Break up presented below: <table><tr><th>Particular</th><th>Area (Ha)</th></tr><tr><td>Main Plant</td><td>12.442</td></tr><tr><td>Coal Storage and Handling</td><td>29.140</td></tr><tr><td>Switchyard</td><td>14.021</td></tr><tr><td>Greenbelt</td><td>37</td></tr><tr><td>Water Reservoir & water system</td><td>5.50</td></tr><tr><td>Misc</td><td>8.51</td></tr><tr><td>Ash Disposal</td><td>0*</td></tr><tr><td>Township</td><td>5.392</td></tr><tr><td>Total</td><td>112.005</td></tr></table> *Note – Existing ash pond of UPRVUNL is being used. Environmental Sensitive receptors within 10 km radius of TPP is enclosed in ADS Reply	Particular	Area (Ha)	Main Plant	12.442	Coal Storage and Handling	29.140	Switchyard	14.021	Greenbelt	37	Water Reservoir & water system	5.50	Misc	8.51	Ash Disposal	0*	Township	5.392	Total	112.005
Particular	Area (Ha)																					
Main Plant	12.442																					
Coal Storage and Handling	29.140																					
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Water Reservoir & water system	5.50																					
Misc	8.51																					
Ash Disposal	0*																					
Township	5.392																					
Total	112.005																					
11	Revisit the EMP in totality and incorporate appropriate pollution control measures in the form of a time bound action plan to address the PM levels in ambient air and PM & NOx level in stack emissions with physical and financial outlay. Besides, EMP shall explicitly brought out the existing and proposed additional environmental safeguards with physical and financial outlay.	The EMP has been revisited to strengthen control of PM (ambient air) and PM & NOx (stack) emissions. Existing control measures are implemented, and additional mitigation measures with time bound action plan and defined physical targets & financial outlay are enclosed in ADS Reply																				
12	Undertaking in a non-judicial stamp paper from the PP to comply with the mitigation measures proposed under revised EMP shall be submitted.	An undertaking from the Project Proponent to comply with the prescribed mitigation measures is enclosed in ADS Reply.																				
13	Latest six-monthly compliance report submitted to the Regional Office of MoEF&CC.	Submission receipt of the six-monthly compliance report for the period from April'25 to September'25 is enclosed in ADS Reply.																				

46.6.13: Written Submission:

Query 1: Revised EMP with the financial and the physical outlay

Reply: Revised EMP is given below:

Description	Measure	EC Cost (Rs Cr)	AC Proposed (Rs Cr)	TC Cost (Rs Cr)	ER Cost (Rs Cr)	AR Cost (Rs Cr)	TR Cost (Rs Cr)
Cost of Air Pollution Control Devices/System	Existing • Hybrid Electrostatic Precipitators (ESP + Bag Filters) installed in Unit-1 & Unit-2. • 275 m high stack for effective dispersion. • Low-NOx burners • Over-Fire Air (OFA) dampers in steam generators • Coal is transported through Rail-based MGR system • Water spraying at transfer points, loading/unloading stations & stockpiles • Dust extraction systems at crusher houses & bunker transfer towers • Water sprinklers in coal yard during stacking & reclaiming • Bunker ventilation system for dust evacuation • Collected dust recycled to conveyor/bunkers Proposed • Replacement of conventional bags with PTFE coated bag filters for improved collection efficiency with regular maintenance and replacement of the filters at regular intervals • Conduct ESP performance tests at regular intervals Carry out timely maintenance based on test findings and equipment condition. • CFD of ESP inlet & outlet duct and installation of guide vane. • Periodic inspection and survey of ESP internals in every AOH for physical health assessment of ESP internals like emitting electrode, collecting electrode, and take corrective action repair/ replacement for improving ESP performance. • Water cleaning of ESP internal, trial charging and adjusting field current and correction during and after AOH to improve and sustain ESP performance. • High-Pressure Dust Suppression / Fogging System (Automated operation linked with belt movement). • Fixed and motorized long distance fog cannon in coal piles. • Strengthen water-mist, fogging, and DS systems at transfer points and junction houses. • Conduct periodic nozzle inspection and health checks. • Installation of efficient 4-way fogger system for pre-wetting of rakes at	271.17	10.88	282.05	16.33	0.752	17.082

Description	Measure	EC Cost (Rs Cr)	AC Proposed (Rs Cr)	TC Cost (Rs Cr)	ER Cost (Rs Cr)	AR Cost (Rs Cr)	TR Cost (Rs Cr)
	Track Hopper • Paved & Black-Topped Roads (ensuring road health) • Carry out regular water sprinkling on internal roads. • Enforce vehicle speed limits to minimize road dust. • Mechanical Road Sweeper						
Cost of Solid Waste Management System	Existing • Pneumatic closed-pipeline fly ash evacuation from ESP hoppers • Bag filters installed on top of fly ash silos • Fly ash conditioned with water spray during loading • Covered bulkers used to prevent airborne dispersion • Primarily supplied to cement industries by road • Wet slurry disposal system during emergency conditions • Continuous efforts for 100% fly ash utilization in compliance with MoEF&CC Notification dated 31.12.2021. • Annual audit. • Advertisement for bidding Proposed • Fixed sprinkler network with mist nozzles along the transportation route of ash. • Installation of Bulker Wheel washing point • Installation of automatic vent telescopic spout below silo to control fugitive emission. • Wet Fog Dust Suppression Systems installation Inspect the healthiness of bag filters in silos regularly. • Cleaning & replace damaged or inefficient filter bags as required.	180.6	0.92	181.52	29.028	0.16	29.188
Green Belt Development	Existing: • 33% plantation with existing 54447 nos. of trees. Proposed • Avenue plantation along the transportation route of ash (8000 nos.) • Additional plantation around CHP (2000 trees) • Additional Plantation around AWRS (1000 trees) • Additional Plantation around Workshop and Cooling Tower (7000 trees) • Additional Plantation around Area designated for FGD (3750 trees) • Additional plantation outside plant through forest dept. (25000 Nos.)	30.0	3.7	33.7	0.70	0.202	0.902

Description	Measure	EC Cost (Rs Cr)	AC Proposed (Rs Cr)	TC Cost (Rs Cr)	ER Cost (Rs Cr)	AR Cost (Rs Cr)	TR Cost (Rs Cr)
Green Energy Initiative	Proposed • Installation of Solar Panel – 2 MW • Deployment of Electric Vehicles • Installation of Rain Water Harvesting units 02 Nos.	--	8.68	8.68	--	1.44	1.44
Grand Total		481.77	24.18	505.95	46.058	2.554	48.612

The summary of the Environmental Management Plan expenditure is as follows:

S. No.	Component	Capital cost (In Rs. Crore)		Recurring cost (In Rs. Cr per annum)	
		Existing	Proposed	Existing	Proposed
1.	Cost of Air Pollution Control Devices/System	271.17	10.88	16.33	0.752
2.	Cost of Solid Waste Management System	180.6	0.92	29.028	0.16
3.	Green Belt Development	30.0	3.7	0.70	0.202
4.	Green Energy Initiative	--	8.68	--	1.44
	Total	481.77	24.18	46.058	2.554

Observations and deliberation of the EAC

46.6.14: The Committee observed and noted the following:

- The instant proposal is for seeking amendment in a EC conditions as per MoEF&CC Notification dated 11/07/2025 for Sulphur dioxide emission standards, prescribed in EC letter dated 26.11.2007, accorded for the project “ 2×600 MW Thermal Power Plant by M/s. MEIL Anpara Energy Limited located at village Anpara, District Sonbhadra, Uttar Pradesh.
- The existing project was accorded Environmental Clearance dated 26.11.2007 from MoEF&CC for setting up of 2×600 MW Anpara Thermal Power Plant, and subsequently amended on 31.07.2008. Further, EC was transferred to M/s. MEIL Anpara Energy Limited from M/s. Lanco Anpara Private Limited on 13.01.2025. CTO is valid up to 31.12.2029.
- The Stage-II Forest Clearance (FC) for diversion of 3.0 ha of forest land, located within the existing project site, was obtained by the project proponent vide letter dated 07.03.2007.
- There are no national parks, Biosphere Reserves, Eco-sensitive zone, Tiger/Elephant Reserves and Wild Life Corridors within 10 km distance from the project site as ascertained from DSS.
- The project site is not located within the Critically Polluted Area (CPA) but nearest Severally Polluted Area (SPA) is Singrauli industrial area, which is about 6.2 km from project boundary in West Direction and CEPI score is 62.59.
- During the last three months, the total coal requirement for Unit-1 was 46259.79 MT, 111046.28 MT, 246365.5 MT and Unit-2 was 200965 MT, 249262 MT, and 222398.1

MT for the months of November 2025, December 2025 and January 2026, respectively. Domestic coal is being used, while maintaining a sulphur content of less than 0.5 %.

- vii. The mass emission rate of pollutants including PM₁₀, PM_{2.5}, NO_x, and SO₂ were estimated 34.02, 8.5, 841.5, 353.5 g/s, respectively, for unit-1 and 31.83, 7.96, 863 and 359 g/s, respectively, for unit-2.
- viii. Project proponent has installed a 275 m bi-flue stack, which complies with the MoEF&CC Notification dated August 30, 1990.
- ix. As per the submitted addendum EIA report prepared through QCI/NABET accredited consultant, the predicted maximum Ground Level Concentration (GLCs) using AERMOD View dispersion model from the stack emission as per the envisaged stack height and site-specific meteorological parameters the maximum GLC of PM₁₀ is 0.6 µg/m³, PM_{2.5} is 0.15 µg/m³, SO₂ is 15.31 µg/m³ and NO_x is 6.40µg/m³ at 2.17 Km in SSE direction.
- x. The committee noted in the vicinity of the project site, there are another seven power-generating units (3x210MW and 4x500MW) of M/s. UPRVUNL which are already under operation.
- xi. The Project Proponent has submitted a revised Additional EMP with capital cost of Rs. 24.18 Crore and recurring cost of Rs. 2.554 Crore.
- xii. Tree plantation done by the proponent is very scanty having low density, EAC suggested to develop the plantation as per CPCB norms.
- xiii. EAC observed that the Ash dyke of the project is adjacent to the Govind Vallabh Pant Sagar Dam. Hence EAC asked the Project Proponent ensure that no ash should flow into the dam and fugitive dust emission from ash pond should be controlled.
- xiv. EAC observed that the PM values from stack are going near to the prescribed 50mg/Nm³ norms, in this regard EAC asked the Project Proponent to ensure the consistent performance of ESP and Preventive Maintenance of ESP to be done regularly.
- xv. EAC deliberated on the written submission submitted by the Project Proponent and found it satisfactory.

Recommendations of the Committee

46.6.15: In view of the foregoing and after the detailed deliberations, the Committee **recommended** the instant proposal for grant of amendment in the EC granted vide letter no J-13011/45/2007-IA-II (T) dated 26/11/2007 and its subsequent amendments as detailed below **subject to uploading of written submissions on PARIVESH portal** and stipulation of following additional specific conditions. All other terms and conditions prescribed in EC dated 26/11/2007 and its subsequent amendments shall remain unchanged.

S. No.	Condition No.	Details of Conditions as per EC	Recommendation of EAC
1	Condition no VI	“Space provision shall be made for installation of FGD of requisite efficiency of SO ₂ removal, if required at a	Agreed. With regard to the said condition, Committee agreed the following: The Project Proponent shall maintain stack of 275 meters height and comply with the

		later stage”	notification number GS R 742 (E) dated the 30th August, 1990.
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Additional specific conditions

- Project proponent shall implement the protective measure proposed in additional EMP in a time-bound manner in addition to the existing EMP. The budget earmarked for the additional EMP is Rs. 24.18 Cr as capital cost and 2.554 Cr as recurring cost and should be kept in a separate account and audited annually. The implementation status as per the action plan given below along with the amount spent with documentary proof shall be submitted to the concerned Regional Office along with the six monthly compliance report.

Description	Measure	EC Cost (Rs Cr)	AC Proposed (Rs Cr)	TC Cost (Rs Cr)	ER Cost (Rs Cr)	AR Cost (Rs Cr)	TR Cost (Rs Cr)
Cost of Air Pollution Control Devices/System	Existing - Hybrid Electrostatic Precipitators (ESP + Bag Filters) installed in Unit-1 & Unit-2. 275 m high stack for effective dispersion. - Low-NOx burners - Over-Fire Air (OFA) dampers in steam generators - Coal is transported through Rail-based MGR system - Water spraying at transfer points, loading/unloading stations & stockpiles - Dust extraction systems at crusher houses & bunker transfer towers - Water sprinklers in coal yard during stacking & reclaiming - Bunker ventilation system for dust evacuation - Collected dust recycled to conveyor/bunkers Proposed - Replacement of conventional bags with PTFE coated bag filters for improved collection efficiency with regular maintenance and replacement of the filters at regular intervals - Conduct ESP performance tests at regular intervals Carry out timely maintenance based on test findings and equipment condition. - CFD of ESP inlet & outlet duct and installation of guide vane. - Periodic inspection and survey of ESP internals in every AOH for physical health assessment of ESP internals like emitting electrode, collecting electrode, and take corrective action repair/ replacement for improving ESP performance.	271.17	10.88	282.05	16.33	0.752	17.082

Description	Measure	EC Cost (Rs Cr)	AC Proposed (Rs Cr)	TC Cost (Rs Cr)	ER Cost (Rs Cr)	AR Cost (Rs Cr)	TR Cost (Rs Cr)
	• Water cleaning of ESP internal, trial charging and adjusting field current and correction during and after AOH to improve and sustain ESP performance. • High-Pressure Dust Suppression / Fogging System (Automated operation linked with belt movement). • Fixed and motorized long distance fog cannon in coal piles. • Strengthen water-mist, fogging, and DS systems at transfer points and junction houses. • Conduct periodic nozzle inspection and health checks. • Installation of efficient 4-way fogger system for pre-wetting of rakes at Track Hopper • Paved & Black-Topped Roads (ensuring road health) • Carry out regular water sprinkling on internal roads. • Enforce vehicle speed limits to minimize road dust. • Mechanical Road Sweeper						
Cost of Solid Waste Management System	Existing • Pneumatic closed-pipeline fly ash evacuation from ESP hoppers • Bag filters installed on top of fly ash silos • Fly ash conditioned with water spray during loading • Covered bulkers used to prevent airborne dispersion • Primarily supplied to cement industries by road • Wet slurry disposal system during emergency conditions • Continuous efforts for 100% fly ash utilization in compliance with MoEF&CC Notification dated 31.12.2021. • Annual audit. • Advertisement for bidding Proposed • Fixed sprinkler network with mist nozzles along the transportation route of ash. • Installation of Bulker Wheel washing point • Installation of automatic vent telescopic spout below silo to control fugitive emission. • Wet Fog Dust Suppression Systems installation • Inspect the healthiness of bag filters in silos regularly. • Cleaning & replace damaged or inefficient filter bags as required.	180.6	0.92	181.52	29.028	0.16	29.188

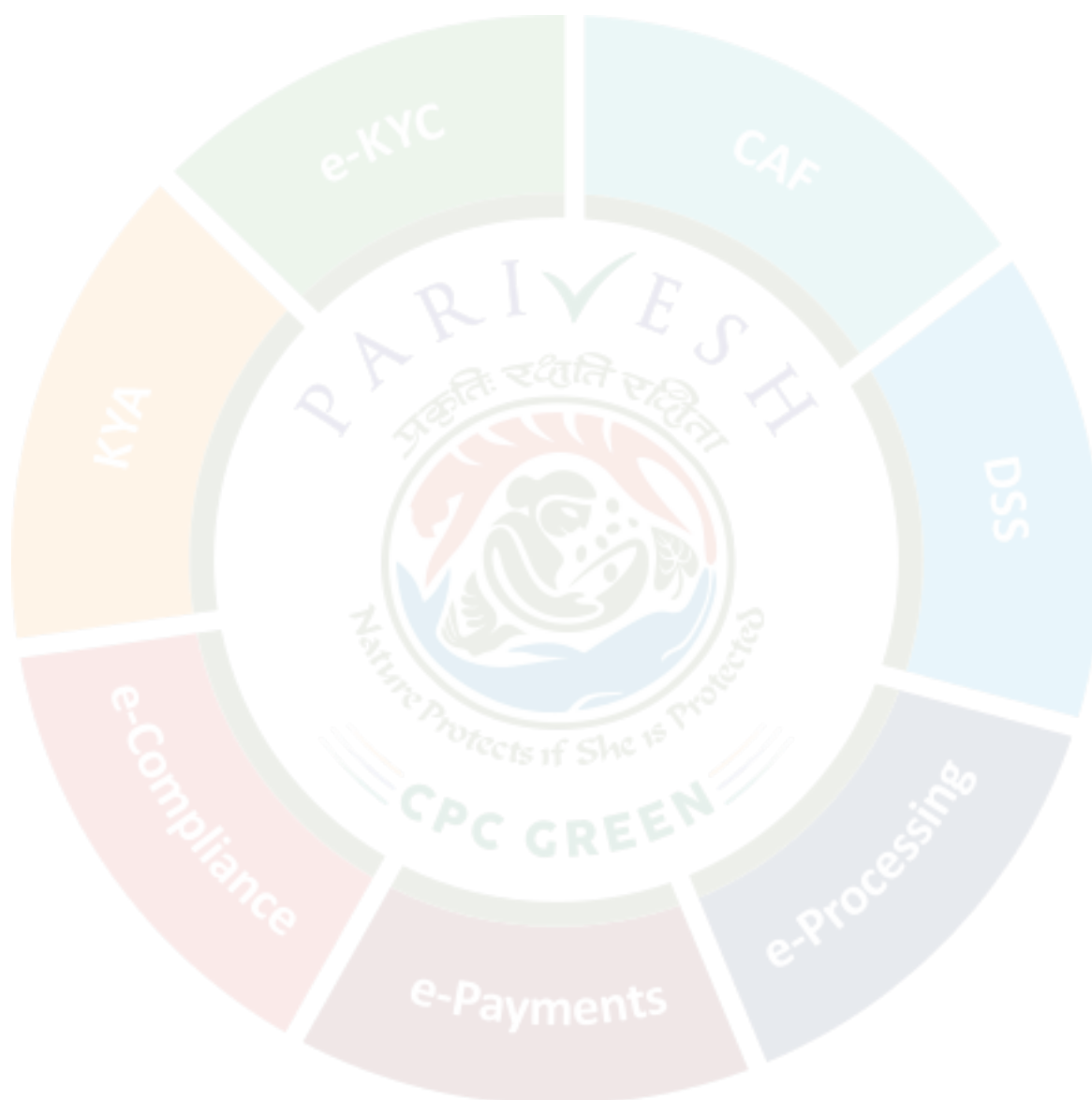
Description	Measure	EC Cost (Rs Cr)	AC Proposed (Rs Cr)	TC Cost (Rs Cr)	ER Cost (Rs Cr)	AR Cost (Rs Cr)	TR Cost (Rs Cr)
Green Belt Development	Existing: • 33% plantation with existing 54447 nos. of trees. Proposed • Avenue plantation along the transportation route of ash (8000 nos.) • Additional plantation around CHP (2000 trees) • Additional Plantation around AWRS (1000 trees) • Additional Plantation around Workshop and Cooling Tower (7000 trees) • Additional Plantation around Area designated for FGD (3750 trees) • Additional plantation outside plant through forest dept. (25000 Nos.)	30.0	3.7	33.7	0.70	0.202	0.902
Green Energy Initiative	Proposed • Installation of Solar Panel – 2 MW • Deployment of Electric Vehicles • Installation of Rain Water Harvesting units 02 Nos.	--	8.68	8.68	--	1.44	1.44
Grand Total		481.77	24.18	505.95	46.058	2.554	48.612

The summary of the Environmental Management Plan expenditure is as follows:

S. No.	Component	Capital cost (In Rs. Crore)		Recurring cost (In Rs. Cr per annum)	
		Existing	Proposed	Existing	Proposed
1.	Cost of Air Pollution Control Devices/System	271.17	10.88	16.33	0.752
2.	Cost of Solid Waste Management System	180.6	0.92	29.028	0.16
3.	Green Belt Development	30.0	3.7	0.70	0.202
4.	Green Energy Initiative	--	8.68	--	1.44
	Total	481.77	24.18	46.058	2.554

- ii. Project proponent shall monitor sulfate in particulate matters and Ammonia in ambient air in addition to the regular environmental monitoring parameters.
- iii. Project Proponent shall replace conventional bag filters with PTFE coated bag filters for improved collection efficiency with regular maintenance and replacement of the filters at regular intervals as committed.
- iv. Project Proponent shall install fix motorized long distance fog cannon in coal piles and Carry out regular water sprinkling on internal roads to control fugitive dust emission as committed.
- v. Project Proponent shall install fixed sprinkler network with mist nozzles along the transportation route of ash and automatic vent telescopic spout below silo to control fugitive emission as committed
- vi. Project Proponent shall Install Solar Panel of 2 MW capacity and deploy of Electric Vehicles as committed.

- vii. Project Proponent shall carry out Avenue plantation of not less than 2 meter height seedlings along the transportation route of ash (Minimum 8000 nos.), around CHP area (Minimum 2000 trees), around AWRS (Minimum 1000 trees), around Workshop and Cooling Tower (Minimum 7000 trees), around FGD Area (Minimum 3750 trees) and additional plantation outside plant through forest dept. (Minimum 25000 Nos.) as committed within 2 years after obtaining the amendment in EC.



ANNEXURE-I

LIST OF PARTICIPANTS OF EAC (THERMAL) IN 46th MEETING HELD DURING 18th JUNE, 2026 THROUGH VIRTUAL MODE

S. No.	Name & Address	Role	18.06.2026
1.	Shri Inder Pal Singh Matharu, (I.F.S. Retd.)	Chairman	Present
2.	Shri Lalit Kapur	Member	Present
3.	Dr. Umesh Jagannathrao Kahalekar	Member	Present
4.	Dr. Santosh Kumar Hampannavar	Member	Absent
5.	Shri Savalge Chandrasekhar	Member	Present
6.	Shri K. B. Biswas	Member	Present
7.	Prof. Shyam Shanker Singh	Member	Present
8.	Dr. Vinod Agrawal	Member	Present
9.	Shri Mahi Pal Singh, Chief Engineer	Representative of Central Electricity Authority (CEA)	Present
10.	Shri Harmeet Sawhney, Scientist 'E'	Representative of Indian Meteorological Department (IMD)	Absent
11.	Prof. R M Bhattacharjee	Representative of IIT/ISM Dhanbad	Absent
12.	Shri Prasoon Gargava, Scientist 'F'	Representative of Central Pollution Control Board	Present
13.	Shri B C Mallick, Principal Chief Engineer	Special invitee as Representative of Central Electricity Authority (CEA)	Present
14.	Shri Sundar Ramanathan	Scientist 'F' & Member Secretary	Present
15.	Dr. Rajesh Prasad Rastogi	Scientist 'D'	Present

ANNEXURE-II

APPROVAL OF CHAIRMAN – EAC

6/24/26, 4:00 PM

(346 unread) - Inbox - Mail (rp.rastogi@gov.in)

Re: Final MoM of the 46th EAC Thermal meeting held on 18th June 2026

Inderpal Singh Matharu <matharu0204@gmail.com>

Wed, 24 Jun 2026 2:57:36 PM +0530 INBOX

"RAJESH PRASAD RASTOGI" <rp.rastogi@gov.in>

"Sundar Ramanathan" <r.sundar@nic.in>

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Dear Rastogi ji,

Thanks for finalizing the MoM of the 46th EAC Thermal meeting held on 18/06/2026.. All the points which were discussed during the meeting and later on amended in zero draft of it, have been incorporated very articulately. I approve the final MoM Of 46th EAC held on 18th June 2026.

Sincerely Yours

Inder Pal Singh Matharu

Chairman

EAC for Coal Mining and Thermal Power

MoEF&CC, GoI