सत्यमेव जयते

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

Minutes of 42nd Meeting of the Expert Appraisal Committee (EAC) (Thermal Power Project) to be held on 30th April, 2026 meeting Thermal Projects held from 30/04/2026 to 30/04/2026 **Date:** 11/05/2026

MoM ID: EC/MOM/EAC/890843/4/2026

Agenda ID: EC/AGENDA/EAC/890843/4/2026

Meeting Venue: Indus Conference Hall, Jal Wing, Ground Floor, MoEFCC

Meeting Mode: Physical

Date & Time:

30/04/2026	10:00 AM	06:00 PM

1. Opening remarks

SUMMARY RECORD OF THE FORTY SECOND (42nd) MEETING OF EXPERT APPRAISAL COMMITTEE (EAC) HELD DURING 30th APRIL 2026 FOR ENVIRONMENT APPRAISAL OF THERMAL SECTOR PROJECTS THROUGH PHYSICAL MODE.

30th APRIL, 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. 157 - 236]

2. Confirmation of the minutes of previous meeting

Confirmation of the Minutes of the 41st Meeting of the EAC (Thermal): The minutes of the 41st Meeting of the EAC (Thermal) held on 8th April, 2026, has been confirmed by the EAC as uploaded on PARIVESH.

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3. Details of proposals considered by the committee

Day 1 -30/04/2026

3.1. Agenda Item No 1:

3.1.1. Details of the proposal

Expansion of Existing Capacity of thermal power plant from 600 MW to 1400 MW by addition of 1x800 MW coal based Ultra supercritical thermal power plant (phase-II) in the existing premises of M/s Jhabua Power Ltd at village-Barela & Gorakhpur, Tehsil -Ghansore, Dist.-Seoni, Madhya Pradesh by **JHABUA PO WER LIMITED** located at **SEONI,MADHYA PRADESH**

Proposal For		Fresh ToR	
Proposal No	**File No**	**Submission Date**	**Activity Sub-Activity (Schedule Item)**
IA/MP/THE/569574/2026	J-13012/105/2008-IA.II(T)	07/04/2026	Thermal Power Plants Coal/Lignite based plants (1(d))

3.1.2. Project Salient Features

Agenda Item No. 42.1

42.1: Expansion of Existing Capacity of thermal power plant from 600 MW to 1400 MW by addition of 1x800 MW coal based Ultra supercritical thermal power plant (phase-II) in the existing premises of **M/s. Jhabua Power Limited** at village-Barela & Gorakhpur, Tehsil – Ghansore, Dist.-Seoni, Madhya Pradesh – **Terms of Reference-Regarding**.

[Proposal no. IA/MP/THE/569574/2026, F.No. J-13012/105/2008-IA.II(T)]

42.1.1: M/s. Jhabua Power Limited has made an online application vide proposal no. IA/MP/THE/569574/2026 dated 07/04/2026 along with application in prescribed format CAF, Form – I (Part A and Part B), copy of PFR and proposed TORs for 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 appraised at Central Level. The project does not attract the provisions of general condition of the EIA Notification, 2006.

Name of the EIA consultant: M/s MITCON Consultancy & Engineering Services Ltd., Pune, Maharashtra. Certificate No. NABET/EIA/24-27/RA 0343. Valid up to 05.02.2027.

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
42.1.2: The Committee observed and noted the following

i. The instant proposal is for Proposed Expansion of the Existing Capacity of thermal power plant from 600 MW to 1400 MW by addition of 1x800 MW coal based Ultra supercritical thermal power plant (phase-II) in the existing premises of M/s. Jhabua Power Limited at village-Barela & Gorakhpur, Tehsil – Ghansore, Dist.-Seoni, Madhya Pradesh.
ii. As per existing Environmental Clearance the Ash Pond area is 36.4 Ha, while during the discussion, EAC observed that Project Proponent has developed a temporary ash storage area inside the main plant. Besides, some quantum of ash is also being disposed of outside the plant premises. In this regard, neither the PP nor the consultant has shown any statutory permissions obtained from the State Pollution Control Board.
iii. Project Proponent was unable to describe the salient features of the proposed expansion project including the proposed environmental safeguards.
iv. The baseline data for the proposed expansion was taken for the period of January to March 2026, but Project Proponent was unable to explain the data in the EAC.
v. EAC noted that the total build-up area for township was greater than 20,000 sqm. However, Project Proponent was unable to provide the status of statuary clearance for the same.
vi. EAC noted that Ministry is in receipt of a Public Representation against this proposal and asked the Project Proponent to submit the point wise reply of the representation received.
Recommendations of the Committee
42.1.3: In view of the foregoing and after detailed deliberations, the ***Committee recommended to return the proposal in its present form.***

3.1.5. Recommendation of EAC

Returned in present form

3.2. Agenda Item No 2:

3.2.1. Details of the proposal

Expansion of Raipur Thermal Power Plant from 2970 MW [Phase I (2x685)MW + Phase II (2x800)MW] to 4570 MW by adding 2x800 MW (Under Phase III) Ultra Super Critical TPP at Villages Raikheda, Gaitara & Chicholi, Tilda Block, Raipur District, Chhattisgarh by Adani Power Limited, Raipur by **Adani Power Limite d** located at **RAIPUR,CHHATTISGARH**

Proposal For		Fresh ToR	
Proposal No	**File No**	**Submission Date**	**Activity Sub-Activity (Schedule Item)**
IA/CG/THE/574628/2026	J.13012/62/2008-IA.II (T)	13/04/2026	Thermal Power Plants Coal/Lignite based plants (1(d))

3.2.2. Project Salient Features

Agenda Item No. 42.2
42.2: Expansion of Raipur Thermal Power Plant from 2970 MW [Phase I (2x685)MW + Phase II

(2x800)MW] to 4570 MW by adding 2x800 MW (Under Phase III) Ultra Super Critical TPP by **M/s. Adani Power Limited**, at Villages Raikheda, Gaitara & Chicholi, Tilda Block, Raipur **District, Chhattisgarh – Prescribing of Terms of Reference- regarding.**

[Proposal no. IA/CG/THE/574628/2026, F.No. J-13012/62/2008-IA. II(T)]

42.2.1: M/s Adani Power Limited (APL), Raipur has made an application online vide proposal no.: IA/CG/THE/574628/2026 dated 13.04.2026 in the prescribed format (CAF, Form – I Part A & B) along with the copy of Pre-Feasibility Report and proposed Terms of References 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 appraised at Central Level. The project does not attract the provisions of general condition of the EIA Notification, 2006.

Name of the EIA consultant: M/s Gaurang Environmental Solutions Pvt. Ltd. [S. No. 98, List of ACOs with their Certificate No. NABET/EIA /23-26/RA 0338 dated 16.07.2024 valid upto 07.12.2026].

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

42.2.2: The existing project of 1370 (2x685) MW was accorded Environmental Clearance vide letter no. J-13012/62/2008-IA. II (T) dated 09.05.2011 and subsequent amendments in the EC dated 13.06.2013, 18.11.2014, 04.02.2015, 09.12.2015, 20.01.2026 and EC transferred dated 05.11.2019 & 24.04.2023 for 1370 (2x685) MW (Phase- I). EC for 1600 (2x800) MW (Phase-II) accorded on dated 01.11.2024. Consent to Operate for the Phase I was accorded by Chhattisgarh Environment Conservation Board(CECB) vide lr. No. 11738 /TS/CECB/2025 dated 11.03.2025. The validity of CTO is up to 31.03.2028.

42.2.3: Implementation status of the existing EC:

S. No.	Configu -ration	Capacity (MW)	As per EC dated:	Implementation Status as on 17.04.2026	Production as per CTO
1	Phase I: 2x685 MW	1370 MW	09.05.2011 and subsequent EC amendments dated 13.06.2013,18.11.2014, 04.02.2015, 09.12.2015, 20.01.2026 & EC transfer dated 05.11.2019 & 24.04.2023	Both the units are operational: Unit 1: 01.06.2015 Unit 2: 01.04.2016	1370 MW
2	Phase II: 2x800 MW	1600 MW	01.11.2024	Units are Under Construction	

42.2.4: Compliance to MoEF&CC Notification dated 11/07/2025 regarding SO_2 emission norms: The status of compliance to the SO_2 emission norms shall be furnished as per the MoEF&CC Notification dated 11/07/2025:

i. Categorization details of TPP: "C" (of existing units)
ii. Sulfur content of the coal to be fired in the boiler: **<0.50 (%)**
iii. Status of SO_2 emission control facility for the existing unit:
    Phase I (Operational): 275 m Chimney as per MoEFCC notification dated 11.07.2025.
    Phase II (Under Construction): 120 m Chimney with FGD.
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 (bi-flue) is proposed, MoEF&CC Notification dated 11.07.2025 shall be followed.

42.2.5: Environmental site settings:

<table>
<tr><th>S. No.</th><th>Particulars</th><th>Details</th><th>Remarks</th></tr>
<tr><td>1.</td><td>Total Land</td><td>578.84 Ha (Existing: 358.15 Ha, Proposed: 220.69 Ha) (Private land: 578.84 Ha)</td><td>Land use: Industrial</td></tr>
<tr><td>2.</td><td>Land use break up</td><td>
<table>
<tr><th rowspan="2">Description</th><th colspan="3">Land Break up (Ha)</th></tr>
<tr><th>2 x 685 MW Ph I</th><th>2 x 800 MW Ph II</th><th>2 x 800 MW Ph III</th></tr>
<tr><td>Main Plant</td><td>14.16</td><td>20.23</td><td>23.00</td></tr>
<tr><td>Coal Handling System</td><td>23.48</td><td>10.11</td><td>31.00</td></tr>
<tr><td>Water System</td><td>34.4</td><td>32.37</td><td>32.0</td></tr>
</table>
</td><td>--</td></tr>
</table>

S. No.	Particulars	Details			Remarks
		Switch Yard	Included in main Plant area		
		Green belt	142.85	55.17	
		Roads	Included in main Plant area		
		Ash pond	60.70	26.00	
		Railway Siding	Outside Plant Boundary		
		Water supply pipelin	Included in water system		

S. No.	Particulars	Details				Remarks
		e (inside plant boundary)				
		Ash transportipeline	Included in main Plant area			
		Others: (Plant road, Township &	13.76	6.09	53.52	

S. No.	Particulars	Details	Remarks
		Misc Building etc)	
		Sub Total	358.15 220.69
		Total (Phase I, II & III)	578.84
3.	Land acquisition details as per MoEF&CC O.M. date	358.15 Ha land is already in possession with APL for Phase I & II. An Additional 220.69 Ha land required for Phase III is under process of acquisition.	Land Documents for the existing plant are submitte

<table>
<tr><th>S. No.</th><th>Particulars</th><th>Details</th><th>Remarks</th></tr>
<tr><td></td><td>d 7/ 10/ 2014</td><td></td><td>d along with To R application.</td></tr>
<tr><td>4.</td><td>Existence of habitation & involvement of R&R, if any.</td><td>Project site: Nil
Name of villages - Raikheda, Gaitra & Chicoli- No R&R
Study area:
<table>
<tr><th>S. No.</th><th>Habitation</th><th>Distance (km)</th><th>Direction</th></tr>
<tr><td>1</td><td>Gaitara</td><td>0.19</td><td>N</td></tr>
<tr><td>2</td><td>Bhatapara</td><td>0.2</td><td>SE</td></tr>
<tr><td>3</td><td>Raikhera</td><td>0.42</td><td>SSE</td></tr>
<tr><td>4.</td><td>Khapri</td><td>0.6</td><td>WNW</td></tr>
<tr><td>5.</td><td>Gaurkhera</td><td>1.40</td><td>NE</td></tr>
<tr><td>6.</td><td>Sontara</td><td>1.42</td><td>SW</td></tr>
<tr><td>7.</td><td>Murra</td><td>1.96</td><td>SE</td></tr>
<tr><td>8</td><td>Chicholi</td><td>2.3</td><td>NE</td></tr>
<tr><td>9</td><td>Marhi</td><td>2.45</td><td>WSW</td></tr>
<tr><td>10</td><td>Tarashiv</td><td>2.71</td><td>N</td></tr>
<tr><td>11</td><td>Dhansuli</td><td>3.10</td><td>S</td></tr>
<tr><td>12</td><td>Khamaria</td><td>3.20</td><td>NW</td></tr>
<tr><td>13</td><td>Deogaon</td><td>3.57</td><td>SW</td></tr>
<tr><td>14</td><td>Amliralav</td><td>3.60</td><td>SW</td></tr>
<tr><td>15</td><td>Mohrenga</td><td>3.70</td><td>ESE</td></tr>
<tr><td>16</td><td>Nakti Khapri</td><td>3.75</td><td>NW</td></tr>
<tr><td>17</td><td>Janjgira</td><td>4.00</td><td>W</td></tr>
<tr><td>18</td><td>Konari</td><td>4.20</td><td>NW</td></tr>
<tr><td>19</td><td>Bangoli</td><td>4.4</td><td>S</td></tr>
<tr><td>20</td><td>Chataud</td><td>4.40</td><td>NNE</td></tr>
<tr><td>21</td><td>Khaulidabri</td><td>4.66</td><td>E</td></tr>
<tr><td>22</td><td>Kurra</td><td>4.7</td><td>SSW</td></tr>
</table></td><td>Status of R&R. - Not applicable as R&R not involved. There are 84 Villages in study area of 10 km ra</td></tr>
</table>

<table>
<tr><th>S. No.</th><th>Particulars</th><th>Details</th><th>Remarks</th></tr>
<tr><td></td><td></td><td></td><td>dius.</td></tr>
<tr><td>5.</td><td>Existence of school and hospital if any</td><td>
Project site: - None
Study Area:
<table>
<tr><th>S. No.</th><th>School</th><th>Distance (km)</th><th>Direction</th></tr>
<tr><td colspan="4">Schools/Educational Institutions</td></tr>
<tr><td>1</td><td>Swami Atmanand High School, Sontara,</td><td>1.0</td><td>South</td></tr>
<tr><td>2</td><td>Govt. Primary School Mura</td><td>1.0</td><td>ESE</td></tr>
<tr><td>3</td><td>Middle School, Mura</td><td>1.0</td><td>ESE</td></tr>
<tr><td>4</td><td>Govt. Primary School Khapri</td><td>1.28</td><td>W</td></tr>
<tr><td>5</td><td>PVT Shiran Public School Kumhari</td><td>1.39</td><td>SE</td></tr>
<tr><td>6</td><td>Uday Canvent School</td><td>1.5</td><td>SE</td></tr>
<tr><td>7</td><td>Govt Primary School Gourkheda</td><td>1.56</td><td>NE</td></tr>
<tr><td>8</td><td>Govt. High School Tarashiv</td><td>1.85</td><td>North</td></tr>
<tr><td>9</td><td>Govt. Higher Secondary School, Mohrenga</td><td>1.9</td><td>ESE</td></tr>
<tr><td>10</td><td>Govt. Primary School Madhi</td><td>2.0</td><td>West</td></tr>
<tr><td>11</td><td>Govt Primary school chicholi</td><td>2.3</td><td>ENE</td></tr>
<tr><td>12</td><td>Elementary school, Chicholi</td><td>2.3</td><td>ENE</td></tr>
<tr><td>13.</td><td>Govt New Primary School Mohrenga</td><td>2.5</td><td>SE</td></tr>
<tr><td>14.</td><td>Govt Primary School Khaulidabri</td><td>2.5</td><td>ESE</td></tr>
<tr><td>15.</td><td>Primary School, Dhansuli</td><td>3.15</td><td>South</td></tr>
<tr><td>16.</td><td>Government High School, Kundru</td><td>4.7</td><td>NW</td></tr>
</table>
Project site:- None
Study Area:
<table>
<tr><th>S. No.</th><th>Hospital</th><th>Distance (k</th><th>Direction</th></tr>
</table>
</td><td></td></tr>
</table>

S. No.	Particulars	Details	Remarks

		m)	
Hospitals/Health care facilities			
1	SHC Murra	1.0	SE
2	SHC Mohrenga	2.23	East
3	Praathmik Swaasthya Kendra, Bangoli	3.8	South
4	Govt. Ayurvedic Hospital, Khauna	5.76	SW
5	Kanti Devi Memorial Hospital	6.7	SE
6	Anand Hospital, Kharora	8.0	SE
7	MRM Multispecialty Hospital, Kharora,	8.49	SE

6. Latitude and Longitude of all corners of the project site.

S.NO.	LATITUDE	LONGITUDE
Phase I & II Coordinates		
1	21°27'16.93"N	81°52'5.32"E
2	21°27'5.66"N	81°52'11.12"E
3	21°27'2.23"N	81°52'6.66"E
4	21°26'53.45"N	81°52'5.59"E
5	21°26'39.41"N	81°51'53.99"E
6	21°26'35.53"N	81°51'50.97"E
7	21°26'27.93"N	81°51'45.99"E
8	21°26'22.65"N	81°51'32.72"E
9	21°26'38.64"N	81°51'24.60"E
10	21°26'37.05"N	81°51'9.59"E
11	21°26'34.69"N	81°50'58.19"E
12	21°26'25.62"N	81°50'48.16"E
13	21°26'45.32"N	81°50'48.42"E
14	21°26'49.55"N	81°50'53.63"E
15	21°26'52.42"N	81°50'44.48"E
16	21°26'58.32"N	81°50'49.59"E
17	21°27'0.07"N	81°50'41.39"E
18	21°27'3.98"N	81°50'39.90"E
19	21°27'5.50"N	81°50'42.05"E
20	21°27'17.06"N	81°50'40.90"E
21	21°27'15.28"N	81°50'35.33"E
22	21°27'18.24"N	81°50'33.10"E
23	21°27'21.92"N	81°50'31.90"E
24	21°27'23.03"N	81°50'34.26"E

S. No.	Particulars	Details			Remarks
		25	21°27'21.16"N	81°50'38.28"E	
		26	21°27'27.07"N	81°50'36.24"E	
		27	21°27'26.95"N	81°50'39.03"E	
		28	21°27'19.29"N	81°50'49.49"E	
		29	21°27'17.33"N	81°51'0.22"E	
		30	21°27'14.74"N	81°51'6.38"E	
		31	21°27'21.92"N	81°51'8.22"E	
		32	21°27'25.57"N	81°51'9.49"E	
		33	21°27'27.95"N	81°51'10.09"E	
		34	21°27'27.85"N	81°51'5.37"E	
		35	21°27'23.29"N	81°50'59.62"E	
		36	21°27'21.39"N	81°51'0.25"E	
		37	21°27'21.35"N	81°50'57.96"E	
		38	21°27'26.86"N	81°50'56.62"E	
		39	21°27'28.19"N	81°50'57.76"E	
		40	21°27'31.61"N	81°51'3.27"E	
		41	21°27'35.06"N	81°51'0.11"E	
		42	21°27'36.97"N	81°50'58.77"E	
		43	21°27'39.89"N	81°51'0.07"E	
		44	21°27'41.30"N	81°51'1.21"E	
		45	21°27'41.42"N	81°51'4.19"E	
		46	21°27'40.28"N	81°51'5.18"E	
		47	21°27'39.32"N	81°51'7.44"E	
		48	21°27'39.57"N	81°51'8.66"E	
		49	21°27'37.79"N	81°51'13.86"E	
		50	21°27'33.76"N	81°51'17.53"E	
		51	21°27'35.36"N	81°51'20.67"E	
		52	21°27'37.60"N	81°51'17.76"E	
		53	21°27'41.49"N	81°51'19.66"E	
		54	21°27'41.95"N	81°51'21.77"E	
		55	21°27'41.49"N	81°51'26.43"E	
		56	21°27'42.82"N	81°51'30.80"E	
		57	21°27'42.33"N	81°51'34.72"E	
		58	21°27'40.43"N	81°51'37.59"E	
		59	21°27'45.22"N	81°51'37.78"E	
		60	21°27'43.75"N	81°51'44.16"E	
		61	21°27'46.01"N	81°51'45.01"E	
		62	21°27'45.96"N	81°51'51.76"E	
		63	21°27'44.64"N	81°51'53.49"E	
		64	21°27'41.09"N	81°51'52.27"E	
		65	21°27'38.17"N	81°51'57.16"E	

S. No.	Particulars	Details			Remarks
		66	21°27'35.82"N	81°51'57.20"E	
		67	21°27'31.84"N	81°51'52.50"E	
		68	21°27'28.95"N	81°51'50.42"E	
		69	21°27'26.69"N	81°51'44.88"E	
		70	21°27'23.75"N	81°51'41.59"E	
		71	21°27'21.98"N	81°51'44.88"E	
		72	21°27'19.90"N	81°51'36.66"E	
		73	21°27'18.02"N	81°51'33.26"E	
		74	21°27'18.19"N	81°51'28.34"E	
		75	21°27'20.50"N	81°51'24.01"E	
		76	21°27'26.23"N	81°51'18.13"E	
		77	21°27'15.35"N	81°51'20.82"E	
		78	21°27'1.81"N	81°51'20.26"E	
		79	21°27'0.76"N	81°51'33.41"E	
		80	21°27'8.98"N	81°51'44.09"E	
		81	21°27'10.68"N	81°51'34.93"E	
		82	21°27'10.88"N	81°51'30.33"E	
		83	21°27'13.26"N	81°51'30.50"E	
		84	21°27'12.16"N	81°51'56.93"E	
		85	21°27'16.86"N	81°51'57.80"E	
		Phase III Coordinates			
		86	21°26'44.90"N	81°50'42.05"E	
		87	21°26'32.15"N	81°50'42.76"E	
		88	21°26'23.77"N	81°50'46.44"E	
		89	21°26'19.41"N	81°50'40.29"E	
		90	21°26'21.17"N	81°50'35.97"E	
		91	21°26'30.38"N	81°50'32.72"E	
		92	21°26'36.68"N	81°50'35.84"E	
		93	21°26'38.17"N	81°50'31.43"E	
		94	21°26'30.72"N	81°50'25.64"E	
		95	21°26'33.23"N	81°50'17.87"E	
		96	21°26'38.42"N	81°50'14.96"E	
		97	21°26'42.49"N	81°50'14.56"E	
		98	21°26'47.27"N	81°50'14.25"E	
		99	21°26'54.99"N	81°50'14.23"E	
		100	21°26'51.93"N	81°50'9.20"E	
		101	21°26'50.80"N	81°50'4.93"E	
		102	21°26'48.34"N	81°49'52.41"E	
		103	21°26'51.71"N	81°49'45.86"E	
		104	21°26'44.37"N	81°49'38.36"E	
		105	21°26'47.09"N	81°49'37.03"E	

<table>
<tr><th>S. No.</th><th>Particulars</th><th>Details</th><th>Remarks</th></tr>
<tr><td></td><td></td><td>
<table>
<tr><td>106</td><td>21°26'49.22"N</td><td>81°49'33.28"E</td></tr>
<tr><td>107</td><td>21°26'55.31"N</td><td>81°49'32.37"E</td></tr>
<tr><td>108</td><td>21°27'2.97"N</td><td>81°49'34.48"E</td></tr>
<tr><td>109</td><td>21°27'2.12"N</td><td>81°49'40.48"E</td></tr>
<tr><td>110</td><td>21°27'15.54"N</td><td>81°49'48.97"E</td></tr>
<tr><td>111</td><td>21°27'15.90"N</td><td>81°49'54.97"E</td></tr>
<tr><td>112</td><td>21°27'13.21"N</td><td>81°49'56.14"E</td></tr>
<tr><td>113</td><td>21°27'13.31"N</td><td>81°49'59.06"E</td></tr>
<tr><td>114</td><td>21°27'18.82"N</td><td>81°49'55.62"E</td></tr>
<tr><td>115</td><td>21°27'23.49"N</td><td>81°50'2.01"E</td></tr>
<tr><td>116</td><td>21°27'17.46"N</td><td>81°50'15.06"E</td></tr>
<tr><td>117</td><td>21°27'27.76"N</td><td>81°50'21.36"E</td></tr>
<tr><td>118</td><td>21°27'29.05"N</td><td>81°50'34.57"E</td></tr>
</table>
<table>
<tr><th>S.no.</th><th>Latitude</th><th>Longitude</th></tr>
<tr><td>1</td><td>21°27'11.33"N</td><td>81°49'54.41"E</td></tr>
<tr><td>2</td><td>21°27'11.39"N</td><td>81°50'0.42"E</td></tr>
<tr><td>3</td><td>21°27'17.84"N</td><td>81°49'59.48"E</td></tr>
<tr><td>4</td><td>21°27'18.95"N</td><td>81°49'58.41"E</td></tr>
<tr><td>5</td><td>21°27'21.47"N</td><td>81°50'1.75"E</td></tr>
<tr><td>6</td><td>21°27'18.30"N</td><td>81°50'10.15"E</td></tr>
<tr><td>7</td><td>21°27'15.20"N</td><td>81°50'15.63"E</td></tr>
<tr><td>8</td><td>21°27'4.82"N</td><td>81°50'15.41"E</td></tr>
<tr><td>9</td><td>21°27'4.74"N</td><td>81°49'54.44"E</td></tr>
</table>
</td><td></td></tr>
<tr><td>7.</td><td>Elevation of the project site</td><td>· Minimum site elevation is 287 m AMSL
· Maximum site elevation is 317 m AMSL</td><td></td></tr>
<tr><td>8.</td><td>Involvement of Forest land, i</td><td>No forest land is involved in the project.</td><td></td></tr>
</table>

<table>
<tr><th>S. No.</th><th>Particulars</th><th>Details</th><th>Remarks</th></tr>
<tr><td></td><td>f any.</td><td></td><td></td></tr>
<tr><td>9.</td><td>Water body (Rivers, Lakes, Pond, Nala, Natural Drainage, Canal etc.) exists within the project site as well as study area</td><td>Project site :- None
Study area:
<table>
<tr><th colspan="4">Water bodies</th></tr>
<tr><th>S. No.</th><th>Particulars</th><th>Distance (km)</th><th>Direction</th></tr>
<tr><td>1</td><td>Bhatapara Branch distributary</td><td>1.1</td><td>WSW</td></tr>
<tr><td>2</td><td>Jamuniya Nadi</td><td>2.15</td><td>NE</td></tr>
<tr><td>3.</td><td>Pindraon Tank</td><td>2.5</td><td>SSE</td></tr>
<tr><td>4.</td><td>Khauna Minor</td><td>3.4</td><td>SW</td></tr>
<tr><td>5.</td><td>Kirna Tank</td><td>3.6</td><td>WNW</td></tr>
<tr><td>6</td><td>Sillari Distributary</td><td>4.0</td><td>WSW</td></tr>
<tr><td>7</td><td>Kumhari Tank</td><td>4.35</td><td>NE</td></tr>
<tr><td>8</td><td>DhumnaNala</td><td>5.9</td><td>WNW</td></tr>
<tr><td>9</td><td>Patthra Nala</td><td>6.8</td><td>SW</td></tr>
<tr><td>10</td><td>Banjari Nala</td><td>8.0</td><td>NE</td></tr>
<tr><td>11</td><td>Pikndih Minor</td><td>8.2</td><td>S</td></tr>
</table></td><td></td></tr>
<tr><td>1</td><td>Ar</td><td>None in 10 km radius study area.</td><td>No</td></tr>
</table>

<table>
<tr><th>S. No.</th><th>Particulars</th><th>Details</th><th>Remarks</th></tr>
<tr><td>0.</td><td>chaeological sites monuments/ historical temples etc.</td><td></td><td>t Applicable</td></tr>
<tr><td>11.</td><td>Existence of ESZ/ ESA/ national park/ wildlife sanctuary/ biosphere reserv</td><td>No wildlife sanctuary, ESZ, Biosphere reserve, National Park in 10 km radius area. Hence NBWL clearance is 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></td><td>Khaulidabari P.F.</td><td>2.9</td><td>ESE</td></tr>
</table></td><td>--</td></tr>
</table>

S. No.	Particulars	Details	Remarks
	e/ tiger reserve/ elephant reserve etc. if any within the study area		
12.	Facility envisaged in CRZ area (Only for coastal power plant)	**Name of the facility in CRZ area** NA **Recommendations of CZMA** – NA **Status of CRZ clearance - NA**	Not Applicable
1	Inv	· Involvement of CPA/SPA: None in project s	

S. No.	Particulars	Details	Remarks
3.	olvement of Critically Polluted Area/ Severely Polluted area as per 2018 CEPI score	ite · Proximity to CPA/SPA: No CPA/SPA as declared by CPCB lies with in 10 km radius area. The nearest CPA is in Siltara ~ 24.5 km SW from project site.	

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

S. No.	Existing power plant configuration and capaci	Proposed powerPlant c	Total	Technology adopted

	ty	onfigurationandcapacity		
1.	1370 MW (2x685) MW	1600 (2x800) MW	4570 MW (1385+1600+1600)	Super&UltraSuper-Critical
2	1600 MW (2x800) MW-Under Construction			

42.2.7: The details of the fuel (coal/gas/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)	Linkaged ocument
Coal :						
Existing TPP (Phase-I)	6.77	Gondulpara Coal Mines in Hazaribagh District of Jhar	670 km	By Rail	Ash-<42 (%) Sulphur-<0.5 (%) Moisture- 17 (%) GCV – 3200 Kcal/Kg	Fuel Supply Agreement (FSA) & e-auction.
Existing TPP (P	6.6				Ash-<40(%) Sulphur-<0.5 (%)	Fuel Suppl

Details	Fuel requirement (MTPA)	Source	Distance from site (Kms)	Mode of Transportation	Coal characteristics (Worst case scenario)	Linkage document
has e-II) Under Construction		khand through e-auction			Moisture- 17 (%) GCV – 3200 - 4300 Kcal/Kg	yAgreement (FSA) & e-auction.
Proposed TPP (Phase-III)	6.5					
LDO/HSD:						
LDO/HSD (Ope	2500 KL/An	Local Market	50 – 100 KM	Road	Low Sulphur (3-5% mass)	Local Market

Details	Fuel requirement (MTPA)	Source	Distance from site (Kms)	Mode of Transportation	Coal characteristics (Worst case scenario)	Linkaged ocument
rational Phase-I)	num	t/Vendor				t/Vendor
LDO/HSD (Under Construction Phase-II)	8000KL/Annum	Local Market/Vendor	50–100KM	Road	Low Sulphur (3-5% mass)	Local Market/Vendor
LDO/HSD	8000KL/	Local Mar	50–100	Road	Low Sulphur (3-5% mas	Local Mar

Details	Fuel requirement (MTPA)	Source	Distance from site (Kms)	Mode of Transportation	Coal characteristics (Worst case scenario)	Linkage document
(Proposed Phase-III)	Annum	ket/ Vendor	KM		s)	ket/ Vendor

42.2.8: Water requirement: Existing Water requirement is 1,67,123 m^3/day, sourced from Samoda Dam at Mahanadi River approx. at 35 km from Plant Site and the same has been obtained from Rajya Nivesh Prothsahan Board (Chhattisgarh Govt.) vide letter no. 354/SIPB/2021/238 dated 15.03.2024. The water requirement for the proposed project is estimated as 87,671 m^3/day, will be sourced from Kodar reservoir at 44 km from project site and application has been submitted to WRD, Raipur on 20.03.2026. The total water requirement for the proposed project is estimated as 32 MCM. The water will be transported to the plant site through dedicated pipelines. The specific water consumption for the power plant will be <2.5 m^3/MWhr.

42.2.9: Power Requirement: Existing power requirement of ~178 MW is obtained from existing plant. The power requirement for the proposed project is estimated as 96 MW, which will be obtained from the existing plant.

42.2.10: 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.	Type of Waste	Source	Quantity generated (TPA)	Mode of Treatment	Disposal
1	Municipal Solid Waste	Plant Canteen	50	Collected; segregated using color	Inorganic will be disposed via local municipal authorized vendor & Organic/Biodegradable waste by OWC.

S. No.	Type of Waste	Source	Quantity generated (TPA)	Mode of Treatment	Disposal
				coded waste bin, Organic waste converters (OWC)	
2	E-waste	IT & Telecom Equipment	~3 TPA	Collected; segregated	CPCB/SPCB Authorized Recycler
3	Battery waste from UPS	Automotive & Industrial	~6 TPA	Collected; segregated	CPCB/SPCB Authorized Recycler
4	Bio medical waste	First aid center	0.1 TPA	Collected; segregated	Authorized CBWTF&/or hospital having BMW disposal agreement with CBWTF
5	Ash	Plant Operation	Fly ash-2080000 TPA & Bottom ash- 5,20,000 TPA		Cement plants, brick/block manufacturing industries, Mine Voids, Highway Construction, Export.
6	Hazardous waste				
a.	Used / Spent Oil (Cat.5.1)	Plant Operation	60 TPA	Collected; segregated	CPCB/SPCB Authorized Recycler
b.	Waste or residues Containing oil (Cat.5.2)	Plant Operation	5 TPA	Collected; segregated	CPCB/SPCB Authorized Recycler
c.	Empty Barrels/ containers/liners Contaminated with Hazardous chemicals/ wastes (Cat.33.1)	Plant Operation	12 TPA	Collected; segregated	CPCB/SPCB Authorized Recycler

42.2.11: Project Cost: Existing capital cost of project was 21,890 Cr. The capital cost of the proposed project is Rs. 15,740 Crores and the capital cost for environmental protection measures is proposed as Rs 1521 Crores. The annual recurring cost towards the environmental protection measures is proposed as Rs. 15.21 Crores The employment generation from the proposed expansion project is 276.

42.2.12: Greenbelt development: Existing green belt has been developed in 142.85 ha area which is about 39.88% of the total project area 358.15 ha with total sapling of 3,57,125 Trees

(under development for Phase II: 24.85 Ha, 62,125 nos.of trees). Proposed greenbelt will be developed in 55.17 ha which is about 25 % of the total project area. Thus, total of 198.02 ha area (34.21 % of total project area 578.84 Ha) 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 1,37,925 saplings will be planted and nurtured in 55.17 hectares in 5 years.

42.2.13: Ash Management: Ash management for last three years:

Year	Quantity Generated (MT)	Quantity Utilized (MT)	% of utilization	Balance Quantity (MTP)	No of storage silos with capacity
2023-24	2316683	2318767	100.09	-	Existing 1200 MT x 3 No's Proposed 2500 MT x 3 No's
2024-25	2687915	2688431	100.02	-	
2025-26	2398140	2407025	100.37	-	

A. Fly ash Details for last three years: 592479 TPA

S. No.	Activity (as applicable)	Quantity	Percentage	Remarks (Prior approval of SPCB details to be mentioned)
1	Fly ash based products (bricks or blocks or tiles or fiber cement sheets or pipes or boards or panels)	60430	1.01	-
2	Cement manufacturing	2797373	47.21	-
3	Construction of roads, road and fly over embankment	23767	0.40	-
4	Filling up of low lying area	2345222	39.58	NOC Obtained
5	Filling of mine voids:	697999	11.78	NOC Obtained
	Total	5924791		-

B. Bottom ash generation for last three years: 1489433 TPA

S. No.	Activity (as applicable)	Quantity	Percentage	Remarks (Prior approval of SPCB details to be mentioned)

1.	Filling of mine voids:	1489433	100	NOC Obtained
	Total	1489433	100	

C. Legacy ash details: Nil

D. Ash Pond details: -

S. No.	Details of Ash pond	Ash pond 1	Total
1.	Status of ash pond (Active / Exhausted (yet to be reclaimed)/ Reclaimed)	Active	Active
2.	Area (Ha)	60.70	60.70
3.	Dyke height (m)	7.5	7.5
4.	Volume (m^3)	4552500	4552500
5.	Quantity of ash disposed (Metric Tons)	154406	154406
6.	Available volume in percentage (per cent) and quantity of ash can be further disposed (Metric Tons)	4853344	4853344
7.	Expected life of ash pond (number of years and months)	15 years	15 years
8.	Type lining carried in ash pond: HDPE lining of LDPE lining or clay lining or No lining	HDPE	HDPE
9.	Mode of disposal: Dry disposal or wet slurry (in case of wet slurry please specify whether HCSD or MCSD or LCSD)	HCSD	HCSD
10.	Ratio of ash: water in slurry mix (1:_):	65:35	65:35
11.	Ash water recycling system (AWRS) installed and functioning : Yes or No	Yes	Yes
12.	Quantity of wastewater from ash pond discharged into land or water body (m^3)	Nil	Nil
13.	Last date when the dyke stability study was conducted and name of the organization who conducted the study:	25.02.2026, NIT Delhi	25.02.2026, NIT Delhi
14.	Last date when the audit was conducted and name of the organization who conducted the audit:	30.09.2025 NIT, Delhi	30.09.2025 NIT, Delhi

E. Proposed ash utilization plan for expansion project.

Det	Exi	Pro	To	Utili	% of	Bal	No

ails	sting Generated (MTPA)	posed Generated (MTPA)	tal	zed (MTPA)	utilization	anceQuantity (LMTPA)	ofstoragesilowithcapacity
Ash (Fly & Bottom)	Phase I 2.84	Phase II: 2.64 Phase III: 2.60	8.08	8.08	100%	-	Existing 1200MTx3Nos. Proposed 2500MTx

							4 Nos.

F. Ash pond details:

S. No.	Details of Ash pond	Ash pond
1.	Area (Ha)	26
2.	Dyke height (m)	15
3.	Volume (m^3)	39 Lac m^3
4.	Quantity of ash to be disposed (Metric Tons)	42.9 Lakh MT
5.	Expected life of ash pond (number of years and months)	Life of ash dyke is calculated as 20 years
6.	Type lining carried in ash pond: HDPE lining of LDPE lining or clay lining or No lining	HDPE
7.	Mode of disposal: Dry disposal or wet slurry (in case of wet slurry please specify whether HCSD or MCSD or LCSD)	HCSD/MCSD
8.	Ratio of ash: water in slurry mix (1:___):	65:35
9.	Ash water recycling system (AWRS): Yes or No	Yes
10.	Quantity of wastewater from ash pond to be discharged into land or water body (m^3)	0

42.2.14: Summary of violation under EIA, 2006/court case/show cause/direction if any, related to the project under consideration: There are 14 cases related to civil & other arbitrations. None of them are pertaining to Environment & Forest.

Summary of court cases

S. No.	Case no.	Court Details	Brief Summary of the Case	Last date of hearing	Next date/ Order Passed	Action taken by PP
1	W.P.PIL 87/2016 Court on its own motion vs State of CG and Ors.	Chhattisgarh High Court (Bilaspur Bench)	In the light of the Judgement passed by Hon'ble Supreme Court on 31st January 2014, with reference the Writ Petition No 79/2005 between Occupational Health and Safety Association and Union of India and other. Hon'ble Supreme Court of India has directed to all the High Courts of various State	06.02.2026	27.04.26	PP is diligently pursuing this matter.

S. No.	Case no.	Court Details	Brief Summary of the Case	Last date of hearing	Next date/ Order Passed	Action taken by PP
			to examine whether CFTPPs are complying with safety standards and the rules and regulations relating to the health of the employees working in various CFTPPs throughout the country. The High Court should examine whether there is adequate and effective health delivery in place and whether there is any evaluation of occupational health status of workers and examine whether any effective medical treatment is provided to them. It is also appropriate to relegate it to the various High Courts to examine these issues with the assistance of the State Government after calling for necessary Reports from the CFTPPS situated in their respective States			
2	47/2013 Dy. Director- Industrial Health & Safety / Factory Inspector vs Rajkumar & Anr.	Labor Court, Raipur	There was a fatal accident at site where an employee of Simplex Sri Manoj Baraik died. On 07.10.2013 appearance of manager acknowledged. Bail obtained. Case against the Factory Manager has been disposed of on 06.05.2015, while against the occupier it is still pending.	06.05.2015	Awaited	The Occupier will contest the matter.
3	LPA 338/2015 Union of India Vs Gmr Chhattisgarh Energy Limited	Delhi High Court	Appellant Ministry of Railway aggrieved by the order of High Court dated 06.02.2015 passed in WP(C) No. 3047 of 2014 had filed this Letter of Patent Appeal Rules, High Court of Delhi assailing the legality and correctness of the Order of the sin	15.10.2015	Awaited	PP is diligently pursuing this matter.

S. No.	Case no.	Court Details	Brief Summary of the Case	Last date of hearing	Next date/ Order Passed	Action taken by PP
			gle judge wherein the court allowed writ petition of GCEL by the invoking the doctrine of promissory estoppel that the Railway could not be permitted to contend subsequently that the permission which was granted to the GMR on 04.07.2011 was subject to the condition of logistics plan and passed the order on 06.02.2015.s			
4	WP(C) 1801/2017 M/S.GMR, Chhattisgarh Energy LTD.GCEL vs. Regional Commissioner	Orissa High Court	Regional Commissioner of the Regional Coal Mines Office, Sambalpur vide letter dated 15.09.2016 directed for payment towards the coal Mines Provident Fund as per the CMPF & MP Act, 1948. The said demand is being challenged in this petition on the premise that the employees are under the EPF Act and as such it would not be in the interest of such employees to shift to the CMPF. The High Court vide order dt. 22.02.2017 has stayed the operation of the demand from the Regional Commissioner.	22.02.2017	Awaited	PP is diligently pursuing this matter.
5	SLP (Civil) 13112/2019-- Converted to C.A. No. 13826/2025 GMR Chhattisgarh Energy Limited Vs Union of India	Supreme Court	SLP filed by GCEL against the order of Delhi High court wherein the Delhi High court has dismissed the petition of GCEL on the grounds of Delay and Latches. GCEL in its petition before Delhi High Court prayed for surrender of Ganeshpur Coal mine due to subsequent notification of Ministry of power to impose cap/ upper ceiling on the fixed charg	12.02.2026	17.04.2026 (Tentative)	PP is diligently pursuing this matter.

S. No.	Case no.	Court Details	Brief Summary of the Case	Last date of hearing	Next date/ Order Passed	Action taken by PP
			e/capacity charge. Performance Security BG = Rs. 159.34 Crores Paid 50% of Upfront Payment = Rs. 12.52 Crores Paid Fixed Charges = Rs. 5.72 Cro res Total = 177.58 Crore s Plus Incidental expense s towards Mining Lease & Coal Block Developme nt Activities			
6	SLP (Civil) 1315 1/2019-Convert ed to C.A. No. 1 3827/2025 GMR Chhattisga rh Energy Limite d Vs Union of India	Supreme C ourt	SLP filed by GCEL agains t the order of Delhi High court wherein the Delhi High court has dismissed the petition of GCEL on t he grounds of Delay and Latches. GCEL in its petit ion before Delhi High Co urt prayed for surrender of Talabira Coal mine du e to subsequent notificat ion of Ministry of power to impose cap/ upper cei ling on the fixed charge/ capacity charge. Perform ance Security BG = Rs. 2 94.95 Crores Paid 50% o f Upfront Payment = Rs. 43.89 Crores Paid Fixed Charges = Rs. 11.68 Cro res Total = Rs. 350.52 C rores Plus Incidental exp enses towards Mining Le ase & Coal Block Develo pment Activities	12.02.20 26	Awaited	PP is dili gently p ursuing t his matt er.
7	W.A. No. 1377 of 2022 M/s. Adani Pow er Limited (Raip ur Enenrgen Lim ited) Vs M/s. Hindalco. I ndustries Ltd.	Orissa Hig h Court	Appeal preferred against the dismissal order of th e High Courtin the Writ Petition filed by GMR ag ainst the order dated 18. 04.2018 passed by Colle ctor, Sambalpur whereby the collector has made t he GCEL liable for the ac ts done by Hindalco and asked to pay 80% of the total compensation awar ded which ought to have	04.08.20 23	Awaited	PP is dili gently p ursuing t his matt er.

S. No.	Case no.	Court Details	Brief Summary of the Case	Last date of hearing	Next date/ Order Passed	Action taken by PP
			been the liability of Hindalco as per pervious orders. The total compensation to be paid is around Rs.12,50,000			
8	WPC No. 1284/2023 Adani Power Limited Vs South East Central Railway	Chhattisgarh High Court	APL challenged the imposition and recovery of Engine Hire Charges by SECR under the EOL Scheme, which Adani Power claims is arbitrary and contrary to the agreement and policy, as they do not use the railway engine for shunting during loading/unloading. Amount involved: ₹7.14 crores (excluding GST) in EHC invoices, plus ₹2.2 crores already recovered through other charges, totaling over ₹9 crores in dispute	28.10.2025	Awaited	PP is diligently pursuing this matter.
9	W.P.(C) 12296/2022 Raipur Energen Limited Vs Union Of India & Ors.	Delhi High Court	Petition filed seeking to restrain the Mahanadi Coalfields Limited (MCL) from arbitrarily terminating the FSA dated 12.09.2020 between REL and MCL executed under Shakti Scheme. To further restrain MCL from forfeiting/appropriating the amount of INR 19,47,00,000 deposited by REL as Bid Security and that no coercive action until the disposal of this Petition.	20.02.2026	11.08.2026 (Tentative)	PP is diligently pursuing this matter.
10	752/2015 (Case not yet registered as the issue of payment of Court fees still pending) Rakesh Kr. Agrawal vs GCEL & Ors.	District Court Raipur	Claim for damage due to leak in water pipeline to the tune of Rs. 6.02 Cr. by the applicant. National Insurance Co. has assessed the alleged loss to the tune of Rs. 13.37 lacs. Court dismissed the matter on account of deficient Court fees. Applicant went to High Court - ma	07.10.2025	Awaited	PP is diligently pursuing this matter.

S. No.	Case no.	Court Details	Brief Summary of the Case	Last date of hearing	Next date/ Order Passed	Action taken by PP
			tter disposed of by High Court saying that the Court fees issue be decided by Trial Court afresh between Applicant and State. Matter pending in the Trial Court.			
11	MSME online Application No.: UDYAM-TN-02-0161824/M/00001 M/s Valtech Technical Services Vs M/s Raipur Energen Limited	MSEFC Chennai	Contractor/Petitioner had claimed Rs. 51,72,492/- (Rs. 24,37,212/- towards principal amount and Rs. 27,35,280/- towards the 24% monthly interest) for delay in payments allegedly made under SO No. 4800149371 dated 27.02.2019 & 4800149969 dated 27.02.2019	12.02.2026	Awaited	PP is diligently pursuing this matter.
12	WPC No. 2328/2019 Girdhar V/s State Chhattisgarh & 3 Ors. (APL is Respondent. No. 4)	Chhattisgarh High Court	One Girdhar from village Chaprid (falling under Samoda barrage land submergence) has claimed compensation for land acquired @ 4 times the award rate as barrage has been constructed for industrial purpose. He has appealed to the High Court against the order dated 12.04.2019 of the Lower Court dealing in LA matters at Raipur wherein the learned Lower Court has deleted respondent no. 4 (M/s GMR Energy Ltd.) from the array of parties.	Disposed on 27.04.2022		
13	Case no. 400A/2024 Adani Power Ltd., Raipur Vs. Johar CG Party & Anr.	Chief Judicial Magistrate, Raipur	Workers under the banner of Johar CG Party agitated and stopped those, willing to attend regular duties. They created unrest amongst the workers, instigated them to go for indefinite strike to fulfil their unjustified demands from the company	Disposed on 24.6.2025		

S. No.	Case no.	Court Details	Brief Summary of the Case	Last date of hearing	Next date/ Order Passed	Action taken by PP
14	Appeal No 448 of 2019	APTEL	Appeal against CERC Order dated 08.03.2019 in Petition no 92/MP/2015 regarding determination of Stranded Transmission Capacity and computation of Relinquishment charges. LTA relinquished- 816 MW.	17/10/2025	Awaited	Motion Hearing.

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

Observation and deliberation of the EAC

42.2.15: The Committee observed and noted the following:

i. The instant proposal is for Expansion of Raipur Thermal Power Plant from 2970 MW [Phase I (2x685) MW + Phase II (2x800) MW] to 4570 MW by adding 2x800 MW (Under Phase III) Ultra Super Critical TPP by M/s. Adani Power Limited, at Villages Raikheda, Gaitara & Chicholi, Tilda Block, Raipur District, Chhattisgarh Raipur.

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 578.84 ha (Private: 578.84 ha). No R & R is involved in the proposed project.

iii. There is no involvement of forest land in the proposed project.

iv. The project site is not located within any Critically Polluted Area/ Severaly Polluted area as per 2018 CEPI score.

v. The committee noted that Jamuniya Nadi, Bhatapara Branch distributary and Pindraon Tank are located at 1.1 (WSW), 2.15 (NE) and 2.5 (SSE) Km, respectively, from the project boundary. The committee observed that Khaulidabri P.F is located within the study area.

vi. Coal requirement for the proposed project is about 6.5 MTPA that will be sourced from Nearby Commercial Coal Mines and transported through railway wagons. LDO (8000KL/ Annum) will be transported by Road.

vii. Existing Water requirement is 1,67,123 m3/day, that will be sourced from Samoda Dam at Mahanadi River approx. at 35 km from Plant Site and permission for the same has been obtained from Rajya Nivesh Prothsahan Board (Chhattisgarh Govt.) vide letter no. 354/SIPB/2021/238 dated 15.03.2024. The water requirement for the proposed project is estimated as 87,671 m3/day, will be obtain/sourced from Kodar reservoir at 44 km from project site and application has been submitted to WRD, Raipur on 20.03.2026. The total water requirement for the proposed project is estimated as 32 MCM. The water will be transported to the plant site through dedicated pipelines. The specific water consumption for the power plant will be <2.5

m3/MWhr.
viii. Existing power requirement of ~178 MW is obtained from self-generation. The power requirement for the proposed project is estimated as 96 MW, which will be obtained from the self-generation.
ix. Existing capital cost of project was 21,890 Cr. The capital cost of the proposed project is Rs. 15,740 Crores and the capital cost for environmental protection measures is proposed as Rs 1521 Crores. The annual recurring cost towards the environmental protection measures is proposed as Rs. 15.21 Crores. The employment generation from the proposed expansion project is 276.
x. Existing green belt has been developed in 142.85 ha area which is about 39.88% of the total project area 358.15 ha with total sapling of 3,57,125 Trees (under development for Phase II: 24.85 Ha, 62,125 nos.of trees). Proposed greenbelt will be developed in 55.17 ha which is about 25 % of the total project area. Thus total of 198.02 ha area (34.21 % of total project area 578.84 Ha) 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 1,37,925 saplings will be planted and nurtured in 55.17 hectares in 5 years.
xi. Ash pond will be developed in 26 ha area (i.e., 0.01 Ha/MW) with 15m ash dyke height. About 2.60 MTPA ash 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.
xii. The proposed units (2x800 MW) will incorporate high-efficiency Electrostatic Precipitators (ESP) to control particulate matter and selective catalytic reduction system (SCR) to control the NOx emission. For SO_2 emission, 275m high Chimney is proposed. EAC suggested to incorporate detailed SO_2 emission norms and their control facility/technology in the EIA/EMP reports.
xiii. The waste water generated (Domestic 60 KLD + Industrial 6000 KLD) in the proposed project shall be treated by STP (80 KLD) and ETP (7940 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.
xiv. EAC observed that the Phase III is coming adjacent to the existing Phase I&II, hence EAC suggested to carry out a Risk Assessment Study. EAC also suggested to carry out cumulative impact assessment study for Phase I, II & III.
xv. EAC suggested the PP to increase the solar capacity up to 2 MW.
xvi. EAC suggested the Project Proponent to develop Greenbelt around the Ash Pond area and also do the fencing along the Ash Dyke.
Recommendations of the Committee:
42.2.16: 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 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.

3.2.5. Recommendation of EAC

Recommended

3.2.6. Details of Terms of Reference

3.2.6.1. Specific

[A] Environmental Management and Biodiversity Conservation	
1.	Project Proponent shall carry out the project specific Risk Assessment Study for the existing and proposed project by duly taking in to consideration all hazards including quantum of coal storage which shall be part of the EIA/EMP study.
2.	Project Proponent shall carry out the Air quality modelling for Phase III considering the cumulative emission impact of the existing Phase I and upcoming Phase II.
3.	Project Proponent shall explore the feasibility of using treated sewage from Sewage Treatment Plants located within 50 km radius of the proposed project as an alternative to the fresh water source to minimize the freshwater drawl from surface water bodies. Action plan in this regard shall be submitted.
4.	Project proponent shall explore the feasibility of using air cooled condenser in place of water-cooled condenser and details shall be incorporated in the final EIA/EMP report.
5.	Project Proponent to get the CCR report from the MoEF&CC IRO office for the existing ECs as per MoEF&CC OM dated 08/06/2022.
6.	Certificate from concerned District Magistrate/Executive Engineer from the State Water Resources department (or) any officer authorized by the State Government shall be submitted stating that project site is not located within flood plain of Mahanadi River and corresponding to one in 25 years of flood as per Ministry's O.M. dated 14/02/2022.
7.	PP needs to submit NOC/permission from the State Water resource Department/Irrigation Dept. in case of diversion of any Nala/Stream/water bodies.
8.	Project proponent shall also obtain recommendations from the State Forest department regarding the impact of project on the nearby Reserved Forests, if any, along with the mitigation measures to be followed.
9.	All the parameters as mentioned in the National Ambient Air Quality Standards (NAAQS) shall be monitored by the project proponent at the proposed locations.
10.	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.
11.	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 Samoda Dam at Mahanadi River and action plan for complying with the recommendations of the study report shall be submitted.
12.	Project proponent shall submit a study on site specific hydrological studies for area drainage for existing and proposed 4570 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.
13.	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.
14.	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 198.02 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 should 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 should 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. In addition to this, Project Proponent can submit the detailed action plan for greenbelt development around the ash dyke area along with the fencing.
15.	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.
16.	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.
17.	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.
18.	Action plan for dry ash collection system (Bottom ash and Fly ash) shall be submitted.
19.	Action plan for disposal of ash through High Concentration Slurry Disposal (only in emergency conditions) shall be submitted.
20.	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.
21.	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.
22.	Details pertaining to water source, treatment and discharge should be provided.
23.	PP shall provide the details of wastewater treatment facilities to be installed within its capacity, timeline and budget.
24.	Project Proponent to conduct Environmental Cost Benefit Analysis for the project in EIA/EMP Report.
25.	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.
2	PP should clearly bring out that what is the specific diesel consumption ~ (Liters/Tonne of total material

6.	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.
27.	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.
28.	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.
29.	Details on renewable energy (solar plant) proposed to be installed as energy conservation measures shall be submitted.
30.	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.
31.	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.
32.	Details of air pollution control devices to be installed in the proposed 2x800 MW TPP along with its maintenance schedule shall be incorporated in EIA/EMP report.
33.	Carbon emission due to proposed TPP and allied carbon sequestration/ carbon offsetting plan be submitted.
34.	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.	Project proponent shall carry out study on site specific design earthquake parameters for proposed power project through reputed institute.
3.	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 modeling.
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 analyze 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.

3.2.6.2. 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 wins speed analysisand 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 CO2 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). CERdetails 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-conducive 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.

3.3. Agenda Item No 3:

3.3.1. Details of the proposal

Expansion by addition of 1x350 MW Imported Coal based Thermal Power Plant (Phase-ll) at village Kama langa, in Odapada Taluk, Dhenkanal District, Odisha by **GMR KAMALANGA ENERGY LIMITED** located at **D HENKANAL,ODISHA**			
Proposal For		Amendment in EC	
Proposal No	**File No**	**Submission Date**	**Activity Sub-Activity (Schedule Item)**
IA/OR/THE/561475/2026	J-13012/73/2011-IA. II (T)	10/02/2026	Thermal Power Plants Coal/Lignite based plants (1(d))

3.3.2. Project Salient Features

Agenda Item No. 42.3

42.3: 3x350 MW project by **M/s. GMR Kamalanga Energy Limited** located at village Kamalanga, Taluk Odapada, District Dhenkanal, Odisha **– Amendment in Environment Clearance with respect to Sulphur dioxide emission standards as per MoEF&CC Notification dated 11/07/2025 – regarding.**

[Proposal No: IA/OR/THE/561475/2026; F. No. J-13012/73/2011-IA. II (T)]

42.3.1: M/s GMR Kamalanga Energy Ltd. (GKEL) has made online application vide proposal no. IA/OR/THE/561475/2026 dated 29.12.2025 along with copy of Form 4 & Addendum EIA report prepared through QCI/NABET accredited consultant and sought for amendment in the Environmental Clearances accorded by the Ministry vide letter no. J-13011/ 64/2007-IA.II (T) dated 05/02/2008 for the project mentioned above and its subsequent amendments 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 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:

42.3.2 The existing project of M/s GMR Kamalanga Energy Ltd. (GKEL) was granted Environmental Clearance for 3 x 350 MW Thermal Power Plant (Phase-I) by MoEF&CC vide letter No. J-13011/ 64/2007-IA.II (T) dated 05.02.2008. Thereafter, another Environmental Clearance for 1 x 350 MW Thermal Power Plant (Phase-II) was granted by MoEF&CC vide letter No. J-13012/73/2011-IA.II (T). The said EC was amended on 05.12.2011, 11.01.2019 folowed by validity extension on 11.04.2019. Out of 4x350 MW, proponent has commissioned only the 3x350 MW TPP and the remaining 1x350 MW could not be commissioned within the prescribed validity period. In view of this, proponent obtained fresh EC for 1x350 MW on 23/07/2025 under the provisions of S.O. 1247 (E) dated 18/03/2021.

42.3.3: Environmental Site settings:

<table>
<tr><th>S. No.</th><th>Particulars</th><th>Details</th><th>Remarks</th></tr>
<tr><td>1</td><td>Total land</td><td>468.85 ha [Private: 383.64 ha; Govt.: 53.63 ha; Forest land: 32.092 ha;]</td><td>Land use: Industrial</td></tr>
<tr><td>2</td><td>Land use break up</td><td>
<table>
<tr><th>Description</th><th>Total Area (Ha.)</th><th>Green Belt out of total area of different facility of plant (Ha.)</th></tr>
<tr><td>Steam Turbine Generator & accessories, TG Building</td><td>14.97</td><td></td></tr>
<tr><td>Switch Yard</td><td>4.05</td><td></td></tr>
<tr><td>Cooling towers & CW pump house</td><td>9.71</td><td></td></tr>
<tr><td>River water pump house & pipe line</td><td>2.43</td><td></td></tr>
<tr><td>Water Treatment Plant & Accessories</td><td>7.28</td><td></td></tr>
<tr><td>Ash Disposal Area</td><td>117.24</td><td></td></tr>
</table>
</td><td></td></tr>
</table>

		Ground mounted Solar PV Plant over existing Ash pond: 10 Additional Greenbelt over existing Ash Pond: 31.82 / 31.82 Coal Handling Plant: 55.45 Fuel Handling System: 1.62 Fire Fighting System: 0.40 Ash Handling System & Silos: 2.02 / - Misc. Non-Plant Building: 3.24 / - Reservoir & pump house: 20.64 / - Green Belt around periphery of the plant: 129.50 / 129.50 Left-Out Plots inside Plant Boundary: 12.63 / 12.63 Green belt developed on both side of Direct Approach Road to the plant: 9.87 / 2.68 Others plant area: 12.55 / 9.91 Merry Go Round Railway Line connectivity outside plant boundary: 12.46 / - Permissive Possession of Govt. Land inside the Plant Boundary: 7.99 / - Periphery Development at Outside of the Plant boundary: 2.97 / - **Total Land: 468.86 / 186.54**	
3	Land acquisition details as per MoEF&CC O.M. dated 7/10/2014 & 19/02/2025	The project site is now industrial land as proposed unit shall be located in vicinity of already operation units and construction of 4th unit has already been reached to approximately 63.7 %.	Land requirement for ultimate capacity – 468.86 Ha. Land is already in possession of the project developer.
4	Existence of habitation & involvement of R&R, if any	Project site: Name of village (if any) Study Area: NA	No R&R required
5	Existence of school and hospitals if any.	A. School Project site: No Study Area:	

Habitation	Distance	Direction
Mangalpur	3.13	SE
Kamalanga	1.52	NE
Budhapanka	2.8	WSW
Maniabeda	0.75	NE
Bhogamunda	0.85	E
Hatatota	9.5	NW
Achalapur	6.44	WNW
Banarpal	6.1	SW
Kharagaprasad	7.3	SE

S	D	Di

school	istance	rection
DAV, Ekamra Nagar	1.0 Km	E E S
Kuruntiu. P School c	3.66 km	S E
Govt. High School, Kusupanga	2.54 km	S E
An	0.4	S E

		ganwadiKendraManpur	8km			
		MangalpurHighSchool	0.80km	SE		
		KamalangHighSchool	1.71km	N		
		Lingaraakata Pr	3.22km	NW		

imary School		
Delhi public school bananar pal	3.15 km	W
Chitipada Primary School	7.91 km	S

B. Hospital

Project site: No

Study Area:

Hospital	Distance	Direction
S	3.	S

		amal Care Multispeciality Hospital Angul 82 km W	
6	Latitude and Longitude of all corners of the project site.	**A. Plant site** **S.No. / Latitude / Longitude** 1 / 20°52'34.14"N / 85°15'32.20"E 2 / 20°52'32.48"N / 85°16'10.12"E 3 / 20°52'20.81"N / 85°16'14.57"E 4 / 20°52'18.16"N / 85°16'23.31"E 5 / 20°51'50.53"N / 85°16'28.51"E 6 / 20°51'21.25"N / 85°16'9.39"E 7 / 20°51'20.81"N / 85°16'5.88"E 8 / 20°51'13.10"N / 85°15'59.57"E 9 / 20°51'12.76"N / 85°15'48.41"E 10 / 20°51'33.93"N / 85°15'22.98"E 11 / 20°51'40.78"N / 85°15'23.40"E 12 / 20°51'45.88"N / 85°15'22.01"E 13 / 20°51'50.99"N / 85°15'29.28"E 14 / 20°51'53.21"N / 85°15'23.21"E 15 / 20°52'26.59"N / 85°15'25.86"E **B. Ash pond** **S.No. / Latitude / Longitude** 1 / 20°52'10.41"N / 85°15'36.34"E 2 / 20°51'46.03"N / 85°15'48.59"E 3 / 20°51'21.97"N / 85°15'47.98"E 4 / 20°51'32.02"N / 85°15'29.63"E 5 / 20°51'46.78"N / 85°15'27.23"E 6 / 20°51'50.56"N / 85°15'31.26"E 7 / 20°51'59.29"N / 85°15'30.44"E	

<table>
<tr><td>7</td><td>Elevation of the project site</td><td>79m – 97m AMSL</td><td></td></tr>
<tr><td>8</td><td>Involvement of Forest land if any.</td><td>The forest land was involved in phase I project and Stage-II forest clearance for 32.092 ha land vide letter No.- 5-ORC083/2008/FCE 07.01.2011 has been accorded</td><td></td></tr>
<tr><td>9</td><td>Water body (Rivers, Lakes, Pond, Nala, Natural Drainage, Canal etc.) exists within the project site as well as study area</td><td><u>Project site:</u> NIL
Study area<table><tr><th>Waterbody</th><th>Distance</th><th>Direction</th></tr><tr><td>Brahmani River</td><td>2.6 km</td><td>E</td></tr><tr><td>Balaramma Prasad Branch Canal</td><td>10.1 km</td><td>WSW</td></tr><tr><td>Nandira Jor</td><td>1.9 km</td><td>WNW</td></tr><tr><td>Talcher Left Mai</td><td>9.1 km</td><td>NE</td></tr></table></td><td>HFL of nearest water body Brahmani River- 2.6 Km East from the Plant) is 58.24 m.</td></tr>
</table>

nCanal			
Ghorhadi an Nala	4.1 km	NE	
Baularn ala Jharana	7.1 km	ESE	
Ria Jor	8.7 km	ESE	
Rengali Right Main Canal	2.7 km	SSE	
Kisinda Jor	4.8 km	SSE	
Lingara Na	8.8 km	S	

		di	
10	Existence of ESZ/ ESA/ national park/ wildlife sanctuary/ biosphere reserve / tiger reserve / elephant reserve etc. if any within the study area	There are no National parks, Wildlife Sanctuary, Biospheres reserves, ESA/ESZ and corridors within 10 km radius.	-
11	Archaeological sites monuments/ historical temples etc.	NA	No such sites present in Study Area
11	Involvement of Critically Polluted Area/ Severely Polluted area as per 2018 CEPI score	No such sites present in Study Area	No such sites present in Study Area

42.3.4: The implementation status of the existing EC dated 05/02/2008 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.	Phase-I 3 X 350 MW	1050 MW	05/02/2008	April 2013 (Unit-1), Nov 2013 (Unit-2) and March 2014 (Unit-3)	3 X 350 MW (1050 MW)	PM: 50 mg/Nm^3 SO_2: 200 mg/Nm^3 NOx: 450 mg/Nm^3

Note: Further, MoEF&CC has accorded another expansion EC for expansion of existing 1050 MW to 1400 MW by addition of 1 x 350 MW Unit at village Kamalanga, Taluk Odapada, District Dhenkanal, Odisha. The said TPP is yet to be categorized by the CPCB and in the instant amendment proposal only 3x350 MW is considered. Proponent assured to apply for amendment in EC for review of SO2 emission norm based on the categorization to be issued by the Task Force of CPCB.

42.3.5 Details of Thermal Power Plant

Parameter	Details as per EC	Status as on May 2026	Remarks
Total Land Area (Ha)	468.85	468.85	No additional land acquired
Involvement of Forest Land	32.092	FC Stage II is accorded vide letter dated 07.01.2011	FC accorded

NBWL Clearance	NA	NA	NA
CPA/SPA	Nil	Nil	Nil

42.3.6 Background for amendment sought by the proponent

With respect to the instant EC amendment proposal, following was apprised to the members of the EAC during the meeting:

a. 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 NOx) 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 (NOx), 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 di oxide (SO_2) emission norms, 3 x 350 MW TPP of GMR Kamalanga Energy Ltd. (GKEL) falls under Category B at Sl. No. 100,101 &102.
f. In pursuance to the MoEF&CC Notification dated 11/07/2025, M/s GMR Kamalanga Energy Ltd. (GKEL) has submitted their application for amendment in EC within the prescribed time frame seeking for review of Sulphur dioxide emission standards.

42.3.7: 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.

Month	**Coal consumption in MT for 3 x 350 MW TPP**
September - 2025	532,342
October - 2025	579,032
November - 2025	401,265
Domestic Coal is being used while maintaining Sulphur content < 0.45 %.	

ii. Minimum, maximum and 98th percentile levels of ambient PM_{10}, $PM_{2.5}$, NOX, and SO_2 from secondary monitored AAQ data for last three month period.

S. No.	**Name of location**	**Parameters being monitored**	**Remarks**
Manual Monitoring Location (NABL Accredited Lab)			
1	Near Rain Water pump House Pit	PM_{10}, $PM_{2.5}$, SO_2 and NO_x	Core Zone

2	Near Security Watch Tower - 3		
3	Near Budhapanka Material		Buffer Zone
4	Mangalpur		
5	Kamalanga		
6	Budhapanka		
7	Maniabeda		
8	Bhogamunda		
9	Hatatota		
10	Achalapur		
11	Banarpal		
12	Kharagaprasad		

Summary of AAQ Result for September to November 2025:

S. No.	Name of location	Parameter	Concentration in µg/m^3			NAAQS
			Min	Max	Average	
1	Near Rain Water pump House Pit	PM_{10}	36.1	52.8	44.7	100
		$PM_{2.5}$	15.1	25.5	20.07	60
		SO_2	9.2	15.3	12.27	80
		NO_x	19.88	27.05	22.99	80
2	Near Security Watch Tower - 3	PM_{10}	37.5	54	44.37	100
		$PM_{2.5}$	14.5	27.6	20.26	60
		SO_2	9.8	15.9	13.07	80
		NO_x	16.8	25.66	21.26	80
3	Near Budhapanka Material	PM_{10}	36.6	54.8	44.26	100
		$PM_{2.5}$	14.7	28.8	20.42	60
		SO_2	9.5	14	11.67	80

S. No.	Name of location	Parameter	Concentration in µg/m^3			NAAQS
			Min	Max	Average	
		NO_x	16.8	23.35	20.28	80
4	Mangalpur	PM_{10}	36.2	56.5	42.72	100
		$PM_{2.5}$	11.7	31.5	19.65	60
		SO_2	9.5	14.3	11.51	80
		NO_x	16.1	24.25	19.74	80
5	Kamalanga	PM_{10}	46	66.8	57.20	100
		$PM_{2.5}$	20.3	29.1	24.60	60
		SO_2	10.5	20.5	17.1	80
		NO_x	25.5	38.3	33.37	80
6	Budhapanka	PM_{10}	40.4	64.4	54.07	100
		$PM_{2.5}$	19.4	29.1	24.13	60
		SO_2	10.5	20.4	17.23	80
		NO_x	27.3	36.7	32.75	80
7.	Maniabeda	PM_{10}	36.2	56.5	42.72	100
		$PM_{2.5}$	11.7	31.5	19.65	60
		SO_2	9.5	14.3	11.51	80
		NO_x	16.1	24.3	19.76	80
8	Bhogamunda	PM_{10}	49.1	66	57.61	100
		$PM_{2.5}$	19.6	28.8	24.37	60
		SO_2	11	20.1	37.2	80
		NO_x	28.9	37.2	33.32	80
9	Hatatota	PM_{10}	42	54.5	49.4	100
		$PM_{2.5}$	21.6	29.1	26.0	60

S. No.	Name of location	Parameter	Concentration in µg/m^3			NAAQS
			Min	Max	Average	
		SO_2	10.2	15.8	12.7	80
		NO_x	15.5	28.6	21.4	80
10	Achalapur	PM_{10}	44.0	54.2	49.3	100
		$PM_{2.5}$	23.7	29.1	26.1	60
		SO_2	10.2	16.2	14.0	80
		NO_x	17.5	26.1	22.3	80
11	Banarpal	PM_{10}	37.2	54.4	45.28	100
		$PM_{2.5}$	14.7	29.4	21.26	60
		SO_2	9.2	12.8	11.35	80
		NO_x	16.8	22.4	19.10	80
12	Kharagaprasad	PM_{10}	38	56.5	50.0	100
		$PM_{2.5}$	17.3	30.0	26.2	60
		SO_2	7.8	13.6	11.5	80
		NO_x	15.4	28.6	19.7	80

iii. Average stack emissions for PM, NOx, and SO_2 parameters for last three months, flue gas concentration in mg/Nm^3

Stack emissions data from August 2025 - October 2025, monitored by NABL accredited laboratory-

S. No.	Name of stack	Parameter	Concentration in (mg/Nm^3)		
			Max	Min	Avg.
1	ST- 1: Stack attached to ESP outlet of Unit-1	PM	37	35.4	36.3
		SO_2	1223	1165	1200.6
		NO_x	305	287	296.6
2	ST- 2: Stack attached to ESP outlet of Unit-2	PM	28.5	26.5	27.5
		SO_2	1254	1192	1230.6

		NO_x	346	324	335
3	ST- 3: Stack attached to ESP outlet of Unit-3	PM	27.7	25.3	26.5
		SO_2	1285	1225	1254.6
		NO_x	367	345	356

Mass emission rate of pollutants in gram per second

Sl. No	Particulars	Values (3X350) MW
1	Coal Consumption	5.520 MTPA
2	Source	Boilers (3 nos.)
3	Power Generation Capacity(MW)	3X350
4	Max. Coal consumption (MTPA) at MCR	6.42
5	Sulphur Content (%)	0.5
6	Number of stacks	Two
7	Stack Height (m)	275
8	Internal Stack Diameter (m)	5.8
9	Stack Gas Temperature (0K)	413
10	Velocity (m/s)	25
11	Volumetric Flow Rate (Nm^3/hr)	3102338.108
12	Particulate Matter (PM_{10}) g/sec	12.36545555
13	Particulate matter ($PM_{2.5}$) g/sec	7.419273333
14	Sulphur Dioxide (SO_2) g/sec	1067.549847
15	NO_2 g/sec	281.402769

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 two stacks each of 275 m height (bi-flue and one single flue) 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.

The predicted maximum Ground Level Concentration (GLCs) of PM_{10}, $PM_{2.5}$, NO_X, and SO_2 pollutants 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.
- SO_2 emissions based on fuel consumption with control measures or prescribed limits.
- NOx 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 Nov'25).

GLCs are obtained in µg/m^3 for pollutants. Output of modeling gives concentration at uniform Cartesian receptors to get the resultant concentration with reference to baseline data.

Resultant GLC of pollutants (µg/$m^{3)}$ at sampling location: Maximum SO_2 GLC was 10.8 ug/m^3

Incremental GLC (µg/m^3) in Downwind Direction					
Distance (Km)	Direction	PM_{10}	$PM_{2.5}$	SO_2	NO_x
1.0	EES	1.8	0.7	10.8	1.4
2.7	SSE	0.4	0.2	3.6	0.5
3.66	SE	0.2	0.1	1.8	0.2
2.54	SE	0.2	0.1	1.8	0.2
0.48	SE	0.5	0.3	5.4	0.7
0.80	SE	0.4	0.2	3.6	0.5
2.00	SSE	0.4	0.2	3.6	0.5
7.1	ESE	0.2	0.1	1.8	0.2
8.7	ESE	0.2	0.1	1.8	0.2

vi. Environment Management Plan (EMP):

Details as prescribed by MoEF&CC	**Information provided by Proponent**
Environment Management Plan (EMP) covering the foll owing: **a.** Impact of ground level c oncentration on the e nvironment if any and corresponding mitigati on measures to be ad	**<u>EMP for Air Quality Management:</u>** · The list of pollution control equipment and measures for fugitive and stack emission in power plant are summarised in section 4.3.2. · The resultant air quality will conform to the stipulated standards. · Electrostatic precipitators (ESPs) and bag filters for controlling partic ulate emissions from the power plant have been installed for Phas e-I (3 × 350 MW). · The Company has already constructed two stacks each of 275 m hei

Details as prescribed by MoEF&CC	Information provided by Proponent
opted. **b.** Additional mitigation measures proposed if any.	ght (bi-flue and one single flue). Particulate emission from stacks is expected to be below 30 mg/Nm^3 · Transport of raw material will be by road through covered trucks initially and then through covered conveyor. · Green belt/ green cover development programs will be undertaken around the plant in the available area. **EMP for Water Resources Management:** · DM Plant regeneration waste water after passing through neutralization pit shall be used for irrigation of green belt and horticulture. · Treated waste water from sewage treatment systems will be used for irrigation of green belt in plant area. · Waste water from blow downs of various cooling systems will be collected in common basin, neutralised if required and reused in sprinkling, watering, irrigation of green belt and horticulture, etc. **EMP for Noise Management:** · Equipment will be designed to conform to noise levels prescribed by regulatory agencies where necessary, high noise generating equipment shall be acoustically treated or housed. · Provision of green belt and plantation would further help in attenuating noise. Acoustic system for machines, turbines, etc. will be provided. Noise attenuation measures are likely to keep noise level to 85 dB (A) at 1 m distance. · Employees working in high noise areas will be provided with ear plugs/ear muffs as protective device. · Maintenance of all equipment as per schedule **EMP for Solid Waste Management:** · Fly ash generated from power plant will be used as raw material in brick, cement, road making, low lying area leveling, backfilling mines, etc. · Any unutilized ash and bottom ash will be sent to the ash dyke in slurry form and the water level will be maintained in the dyke to avoid fugitive emission. · Organic component of municipal solid waste due to everyday sweeping, canteen and worker activities will be composed and used as manure. **EMP for Thermal pollution:** · Since a re-circulating cooling system with cooling tower shall be adopted, low thermal pollution is anticipated. “Common Monitoring Basin” shall be there to receive and cool the water prior to use in horticulture, etc. **EMP for Fire & Safety:** · Prepare and implement Onsite Emergency Plan. · A well-laid firefighting system and fire extinguishers will be installed as per fire safety norms. · Regular fire safety training and mock drills will be conducted. **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)	Use of high efficiency electrostatic precipitators in power plant. The boiler/ steam generating unit would be provided with four (4) nos. of electrostatic precipitators
Nitrogen Oxides (NOx)	To reduce the NOx emission from the boiler/ steam generator necessary provisions in the Steam Generator design and fuel firing system, will be made
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 handling system will consist of fly ash pressure conveying system, Intermediate silo, dry unloading of ash in terminal silo, fuidizing air system and compressed air system Complete dry extraction up to silos shall take place through pressurized and pneumatic conveying from hoppers up to Fly Ash intermediate surge hopper and pressurized conveying of Fly Ash to terminal ash silo. Ash from the silos will be evacuated by closed trucks to ash disposal area through lean phase slurry disposal system. Company has earmarked 85.79 Ha as ash pond area and 154. 72 Ha as green belt (Total – 240.51 Ha). When disposal will be slurry form, the ash will be laid layer by layer in pre designated parts of the ash pond sequentially. The layering of ash shall be done uniformly in planned manner so that the height gained by the stack is uniform in the designated area. Insides and bottom surface of ash pond area shall be lined with impermeable High Density Poly Ethylene (HDPE) lining.
Fly Ash Loading & Transport	The transportation of ash shall take place through bulkers/ trucks to re-users in dry form. The main points that will be kept in mind for transportation shall be as follows: a. Provision of plain, wide & hard surfaces access roads to the loading point within the thermal power plant b. Automated ash loading system at point of generation/ storage point. c. Water sprinkling arrangement - to minimize flying /spillage of particulate matter. d. Periodical transport road cleaning - to avoid air pollution problem due to fugitive dust e. Maintaining the transport vehicles (tippers)- to avoid break downs & road blockages. f. Maintenance of road and strengthening the stability of slope road at the deposition point.

Fly Ash Disposal	Fly ash will be reused as per the Ash Utilization Notification 2021. Bottom ash will be in slurry form and conveyed through pipelines to Ash Disposal Area.
Fly Ash Utilization	Fly ash will be 100% reused as per Ash Utilization Notification 2021. It will be used in cement making, brick making, block making, aggregate making, road making, mine backfilling, low lying area filling

Cost of Existing EMP and Additional Proposed EMP

Sl No.	Breakup of EMP Activities	Existing Annual in Cr	Additional Commitment in Cr	Physical target and time line
1	APCD O&M Cost	13.70	-	
2	Solid Waste Management facilities: Fly Ash - Utilizatio	6.00	-	

Sl No.	Breakup of EMP Activities	Existing Annual in Cr	Additional Commitment in Cr	Physical target and time line
	n			
3	Env Monitoring	0.35	-	
4	Environment Education and Awareness	0.15	-	
5	Third Party Monitoring Cost (cov	0.30	-	

Sl No.	Breakup of EMP Activities	Existing Annual in Cr	Additional Commitment in Cr	Physical target and time line
	er GLC Location)			
6	ISO Certifications & External Env. Audit	0.50	-	
7	Green Belt upkeep (cover GLC Locatio	2.00	-	

Sl No.	Breakup of EMP Activities	Existing Annual in Cr	Additional Commitment in Cr	Physical target and time line
	n)			
8	ESG and EHS Dashboard	0.30	-	
9	Implementation of Rainwater Harvesting	2.25	-	
10	Additional Green Belt	-	2.50	

Sl No.	Breakup of EMP Activities	Existing Annual in Cr	Additional Commitment in Cr	Physical target and time line
	Development (cover GLC Location)			
11	ESP retrofit by installing Ultra Frequency Transformer	-	10.00	Under Technical evaluation. shall be executed within next 2 to 3 years.
12	Roof-	-	5.0	The project

Sl No.	Breakup of EMP Activities	Existing Annual in Cr	Additional Commitment in Cr	Physical target and time line
	top Solar Plants in GKEL.		0	shall be executed over an area of 10000 Sq M. over the existing Non-plant buildings and residential facilities. The same shall be executed by FY 2026-2027. Capacity: 1000kWp
13	Use o	-	0.5	GMR shall

Sl No.	Breakup of EMP Activities	Existing Annual in Cr	Additional Commitment in Cr	Physical target and time line
	f EV for internal movement of men and material		0	procure 5 numbers of EV by the end of FY- 2026-2027.
14	Solar PV within GKEL premises by GMR	-	38.00	10 MWp capacity to be executed over an area of 10.00 ha. by the end of FY 2026-2027. This land sh

Sl No.	Breakup of EMP Activities	Existing Annual in Cr	Additional Commitment in Cr	Physical target and time line
				all be used over the existing unutilized ash pond area.
15	Forestation on 31.82 Ha area of ash pond	-	4.25	· 10 Ha in FY 2026-27. · 10 Ha in FY 2027-28. · Remai

Sl No.	Break up of EMP Activities	Existing Annual in Cr	Additional Commitment in Cr	Physical target and time line
				ning 11.82 Ha in FY-28-29.
16	Miyawaki plantation on 3 Ha area of ash pond	-	0.60	
1	Bio		0.	In FY-

Sl No.	Breakup of EMP Activities	Existing Annual in Cr	Additional Commitment in Cr	Physical target and time line
7	mass Availability Mapping Study and Feasibility		25	27-28
18	Assessment Carbon footprint for existing green belt pl		0.03	FY 2026-27

Sl No.	Breakup of EMP Activities	Existing Annual in Cr	Additional Commitment in Cr	Physical target and time line
	antation			
	Total	25.80	61.08	

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

As per EC dated 05.02. 2008				
S. No	**Condition No**	**Details of Conditions as per EC**	**Amendment Sought**	**Justification**
1	Condition No. (vii)	Approximate emitigation measure shal	Approximate emitigation measure shall b	The project of GMR Kamalanga Energy Ltd. (GKEL) is falling under Catego

As per EC dated 05.02. 2008				
S. No	**Condition No**	**Details of Conditions as per EC**	**Amendment Sought**	**Justification**
		l b e a d o p t e d t o r e d u c e t h e e m i s s i o n s	e a d o p t e d t o r e d u c e t h e e m i s s i o n s o f	ry ‘ B’ pr oje ct. As pe r M oE F& CC No tifi cat ion G. S. R. 46 5 (E) dat ed 1 1/ 0 7/

As per EC dated 05.02. 2008				
S. No	**Condition No**	**Details of Condition as per EC**	**Amendment Sought**	**Justification**
		of SO_2. It shall be ensured that at no point to	SO_2. It shall be ensured that at no point to	2025 and scientific studies need to be carried out for review of category Bh

As per EC dated 05.02. 2008				
S. No	**Condition No**	**Details of Conditions as per EC**	**Amendment Sought**	**Justification**
		oint of time the ground level concentra	f time the ground level concentration of	erma l Pow er Pla nts (T PP s) with r es pe ct to Sul ph ur dio xid e e mi ssi on St an dar

As per EC dated 05.02. 2008				
S. No	**Condition No**	**Details of Conditions as per EC**	**Amendment Sought**	**Justification**
		tion of SO_2 in the impact zone exceed	SO_2 in the impact zone exceeds the pr	ds & adequacy of current stack height. Based on the ambient air SO_2 level

As per EC dated 05.02. 2008				
S. No	**Condition No**	**Details of Conditions as per EC**	**Amendment Sought**	**Justification**
		s the prescribed limit. The proposen	escribed limit. The proponent shall now	s within a 10 km radius are significantly lower than the prescri

As per EC dated 05.02. 2008				
S. No	**Condition No**	**Details of Conditions as per EC**	**Amendment Sought**	**Justification**
		t shall now it self also provide space fo	it self also provide other suitable measu	bed National Ambient Air Quality (NAAQ) standards. Furthermor

As per EC dated 05.02. 2008				
S. No	**Condition No**	**Details of Conditions as per EC**	**Amendment Sought**	**Justification**
		r installation of FGD or other suitable me	res, if required at later stage.	e, as per the 11, July 2025 notification issued by the Ministry of En

As per EC dated 05.02. 2008				
S. No	**Condition No**	**Details of Conditions as per EC**	**Amendment Sought**	**Justification**
		assures, if required a talaterstage.		vironment, Forest and Climate Change (MoEFCC), the plant is eli

As per EC dated 05.02. 2008				
S. No	**Condition No**	**Details of Conditions as per EC**	**Amendment Sought**	**Justification**
				gible for exemption from the installation of a Flue Gas Desulphu

As per EC dated 05.02. 2008				
S. No	**Condition No**	**Details of Conditions as per EC**	**Amendment Sought**	**Justification**
				rization (FGD) system, subject to compliance with the stipulated

As per EC dated 05.02. 2008				
S. No	**Condition No**	**Details of Conditions as per EC**	**Amendment Sought**	**Justification**
				conditions. Current Stack height (275 M) is adequate enough as per G. S.

As per EC dated 05.02. 2008				
S. No	**Condition No**	**Details of Conditions as per EC**	**Amendment Sought**	**Justification**
				R 742 (E) dated 30th August 1990.

42.3.9: Summary of court cases: Nil

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

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

42.3.12: Written submissions:

The proponent vide letter dated 30th April 2026 has submitted the following written submission as suggested by the EAC during the meeting.

I. Details of Revised Land utilization including present & proposed plantation

Reply: Details of Land utilization including present & proposed plantation.

Revised Land Breakup

	Total Area (Ha)	Existing Area of Green Belt (Ha)
Steam Turbine Generator & accessories, TG Building	14.97	-
Switch Yard	4.05	-
Cooling towers & CW pump house	9.71	-
River water pump house & pipeline	2.43	-
Water Treatment Plant & Accessories	7.28	-
Ash Disposal Area	117.24	-
Ground mounted Solar PV Plant over existing Ashpond	10.00	-
Additional Green Belt over existing Ashpond	31.82	31.82
Coal Handling Plant	55.44	-
Fuel Handling System	1.62	-
Fire Fighting System	0.40	-
Ash Handling System & Silos	2.02	-
Misc. Non-Plant Building	3.24	-
Reservoir & pump house	20.64	-
Green Belt around periphery of the plant	129.50	129.50
Left-Out Plots inside Plant Boundary	12.62	12.62
Green belt developed on both side of Direct Approach Road to the plant	9.92	2.68
Others plant area	12.55	9.92
Merry Go Round Railway Line connectivity outside plant boundary	12.46	-
Permissive Possession of Govt. Land inside the Plant Boundary	7.99	-
Periphery Development at outside of the Plant boundary	2.97	-
Total Land	**468.87**	**186.54**

The existing land allocated for ash pond is 159.06 ha for the purpose of ash disposal. However, looking towards ash utilization by 100% for last 5 years, the land requirement for ash pond is

now reduced by 20% which shall be 117.4 ha. In the remaining land of 41.82 (159.06 – 117.4), 31.82 ha will be brought under green belt and the remaining 10 ha will be utilized for solar power generation.

II. Existing and Proposed EMP including Physical and Financial target

***Reply*: Recurring expenditure towards EMP**

Sl No.	Breakup of EMP Activities	Existing Annual in Cr	Additional Commitment in Cr	Physical target and time line
1	APCDO&M Cost	13.70	-	
2	Solid Waste Management facilities: Fly Ash - Utilization	6.00	-	
3	Env	0.3	-	

Sl No.	Breakup of EMP Activities	Existing Annual in Cr	Additional Commitment in Cr	Physical target and time line
	Monitoring	5		
4	Environment Education and Awareness	0.15	-	
5	Third Party Monitoring Cost (cover GLC Loca	0.30	-	

Sl No.	Breakup of EMP Activities	Existing Annual in Cr	Additional Commitment in Cr	Physical target and time line
	tion)			
6	ISO Certifications & External Env. Audit	0.50	-	
7	Green Belt upkeep (cover GLC Location)	2.00	-	
8	ESG a	0.3	-	

Sl No.	Breakup of EMP Activities	Existing Annual in Cr	Additional Commitment in Cr	Physical target and time line
	nd EHS Dashboard	0		
9	Implementation of Rain water Harvesting	2.25	-	
10	Additional Green Belt Develop me	-	2.50	

Sl No.	Breakup of EMP Activities	Existing Annual in Cr	Additional Commitment in Cr	Physical target and time line
	nt (cover GLC Location)			
11	ESP retrofit by installing Ultra Frequency Transformer	-	10.00	Under Technical evaluation. shall be executed within next 2 to 3 years.
12	Roof-top Solar Pla	-	5.00	The project shall be executed ove

Sl No.	Breakup of EMP Activities	Existing Annual in Cr	Additional Commitment in Cr	Physical target and time line
	nts in GKEL.			r an area of 10000 Sq M. over the existing Non-plant buildings and residential facilities. The same shall be executed by FY 2026-2027. Capacity: 1000kWp
13	Use of EV for inte	-	0.50	GMR shall procure 5 numbers of

Sl No.	Breakup of EMP Activities	Existing Annual in Cr	Additional Commitment in Cr	Physical target and time line
	rnal movement of men and material			EV by the end of FY- 2026-2027.
14	Solar PV within GKEL premises by GMR	-	38.00	10 MWp capacity to be executed over an area of 10.00 ha. by the end of FY 2026-2027. This land shall be used over the exi

Sl No.	Breakup of EMP Activities	Existing Annual in Cr	Additional Commitment in Cr	Physical target and time line
				sting unutilized ash pond area.
15	Forestation on 31.82 Ha area of ash pond	-	4.25	· 10 Ha in FY 2026-27. · 10 Ha in FY 2027-28. · Remaining 11.82 Ha

Sl No.	Breakup of EMP Activities	Existing Annual in Cr	Additional Commitment in Cr	Physical target and time line
				in FY-28-29.
16	Miyawaki plantation on 3 Hare a of ash pond	-	0.60	
17	Biomass Availability Mapping Stu		0.25	In FY-27-28

Sl No.	Breakup of EMP Activities	Existing Annual in Cr	Additional Commitment in Cr	Physical target and time line
	dy and d Feasibility			
18	Assessment Carbon footprint for existing green belt plantation		0.03	FY 2026-27
	Total	25.80	61.08	

Apart from above,

- GKEL shall also be spending INR 14.50 Cr over wildlife management plan over a period of next five years.
- An amount of INR 68 Cr is being spent on flyash transportation

III. Mode of Coal Transportation:

Reply: The coal required for plant operation shall be transported from mine end in a proportion of 70%~75%: 30% ~25% through rail and road respectively.

3.3.3. Deliberations by the committee in previous meetings

Date of EAC 1 :25/02/2026

Deliberations of EAC 1 :

Observations and deliberation of the EAC

39.3.11: ***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 05.02.2008 and 23.07.2025, accorded for the project-Expansion by addition of 1x350 MW Imported Coal based Thermal Power Plant (Phase-ll) at village Kamalanga, in Odapada Taluk, Dhenkanal District, Odisha

ii. The existing project of M/s GMR Kamalanga Energy Ltd. (GKEL) was granted Environmental Clearance for 3 x 350 MW Thermal Power Plant (Phase-I) by MoEF&CC vide letter No. J-13011/ 64/2007-IA.II (T) dated 05.02.2008 and Environmental Clearance for 1 x 350 MW Thermal Power Plant (Phase-II) was granted by MoEF&CC vide letter No. J-13012/73/2011-IA.II (T) dated 05.12.2011, Amendment dated 11.01.2019 & Validity Extension dated 11.04.2019. The existing EC dated 05.12.2011 is valid up to 04.12.2022 including the time period (1 year) exempted due to Corona Pandemic. Again, the validity of EC is extended up to 03.12.2023. As the proposed project of 1 X 350 MW could not be completed because of some reason or other, GMR has obtained fresh EC on 23.07.2025, vide letter no.- J-13012/73/2011-IA. II (T) CTO is valid up to 31.03.2028

iii. The Stage–II Forest Clearance (FC) for diversion of 31.58 ha of forest land, located within the existing project site, was obtained by the project proponent vide letter dated 07.01.2011.

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).

vi. During the months of September-November 2025, the total coal requirement for Unit-1, Unit-2 and Unit-3 was 532342 MT, 579032 MT and 401,265 MT, respectively. Domestic Coal is being used while maintaining Sulphur content < 0.45 %.

vii. 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. The values for Ambient Air Quality is within the prescribed norms of NAAQMS 2009.

viii. The mass emission rate of pollutants including PM10, PM2.5, NOx, and SO2 were estimated 12.5 g/s, 2.9 g/s,24.8 g/s and 17.6 g/s, respectively, for the existing 3X350 MW TPP. These emission rates to be rechecked as the said data is not matching stoichiometric calculations.

ix. Project proponent has installed a 275 m bi-flue stack, which complies with the MoEF&CC Notification dated August 30, 1990.

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 PM10 is 2.8 µg/m³ PM2.5 is 1.9 µg/m³, SO2 is 7.7 µg/m³ and NOx is 6.6 µg/m³ at 1km distance in South East direction.

xi. PP has applied the application for 3 x 350 MW Thermal Power Plant (Phase-I) and 1 x 350 MW Thermal Power Plant (Phase-II), but as per the CPCB categorization dated 23/06/2022 there is categorization of only 3 x 350 MW Thermal Power Plant (Phase-I), hence EAC has only considered the Phase I proposal.

xii. EAC observed that the details of GLC submitted by PP needs to be rechecked and resubmit the data.

xiii. During the discussion, it was brought to the notice of EAC that PP is transporting about 75% coal by Rail and 25% by Road. EAC asked the PP to submit the environmental protection measures taken while transporting the coal by Road.

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 tree plantation.

xv. EAC suggested the PP to take the guidance of Original Equipment Manufacturer (OEM) for improvement of the efficiency of existing ESP.

xvi. EAC asked the PP to revisit the EMP 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.

Recommendations of the Committee

39.3.12: In view of the foregoing, the EAC recommended to defer the proposal and asked the proponent to submit the following additional information for further consideration of the proposal:

i. 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%.
ii. Revisit the modelling results as maximum GLC is reported at 1000 meter distance which appears to be not in order as the stack height is 270 meters. Input as well as output data used for revised air quality modelling shall be submitted.
iii. 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.
iv. PP to submit the action plant for tree plantation for gaps filling as per CPCB norms.
v. 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.
vi. 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.
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 & 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.
viii. Project proponent to submit the unit wise coal consumption and stack emission data.
ix. Undertaking in a non-judicial stamp paper from the PP to comply with the mitigation measures proposed under revised EMP shall be submitted.
x. Latest six monthly compliance report submitted to the Regional Office of MoEF&CC.

3.3.4. Deliberations by the EAC in current meetings

Observations and deliberation of the EAC

42.3.13: The Committee observed and noted the following:

Recommendations of the Committee

42.3.14: 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-13011/64/2007-IA.II (T) dated 05/02/2008 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 05/02/2008 shall remain unchanged.

S. No.	Condition No	Details of Conditions as per EC	Recommendation of EAC
1	Condition No. (vii)	Approximate mitigation measures shall be adopted to reduce the emissions of SO2. It shall be ensured that at no point of time the ground level concentration of SO2 in the impact zone exceeds the prescribed limit. The proponent shall now itself also provide space for installation of FGD or other suitable measures, 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.*

3.3.5. Recommendation of EAC

Recommended (Subject to submission of requisite information/ documents)

3.3.6. Details of Environment Conditions

3.3.6.1. Specific

<table>
<tr><th colspan="2">Additional specific conditions</th></tr>
<tr><td>1.</td><td>Project proponent shall apply for amendment in EC dated 23/07/2025 (1x350 MW) for review of SO_2 emission norm based on the categorization to be issued by the Task Force of CPCB</td></tr>
<tr><td>2.</td><td>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. 61.08 Cr 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.
<table>
<tr><th>S. No.</th><th>Breakup of EMP Activities</th><th>Additional Commitment in Cr</th><th>Physical target and time line</th></tr>
<tr><td>1</td><td>Additional Green Belt Development (cover GLC Location)</td><td>2.50</td><td>Within 3 years from the date of issue of the amendment in EC</td></tr>
<tr><td>2</td><td>ESP retrofit by installing Ultra Frequency Transformer</td><td>10.00</td><td>Under Technical evaluation. shall be executed within next 2 to 3 years.</td></tr>
<tr><td>3</td><td>Roof-top Solar Plants in GKEL.</td><td>5.00</td><td>The project shall be executed over an area of 10000 SqM. over the existing Non-plant buildings and residential facilities. The same shall be executed by FY 2026-2027. Capacity: 1000kWp</td></tr>
<tr><td>4</td><td>Use of EV for internal movement of men and material</td><td>0.50</td><td>GMR shall procure 5 numbers of EV by the end of FY- 2026-2027.</td></tr>
<tr><td>5</td><td>Solar PV within GKEL premises by GMR</td><td>38.00</td><td>10 MW capacity to be executed over an area of 10.00 ha. by the end of FY 2026-2027. This land shall be used over the existing unutilized ash pond area.</td></tr>
<tr><td>6</td><td>Forestation on 31.82 Ha area of ash pond</td><td>4.25</td><td>· 10 Ha in FY 2026-27.
· 10 Ha in FY 2027-28.
· Remaining 11.82 Ha in FY-28-29.</td></tr>
<tr><td>7</td><td>Miyawaki plantation on 3 Ha area of ash pond</td><td>0.60</td><td></td></tr>
<tr><td>8</td><td>Biomass Availability</td><td>0.25</td><td>In FY-27-28</td></tr>
</table>
</td></tr>
</table>

	<table><tr><th>S. No.</th><th>Breakup of EMP Activities</th><th>Additional Commitment in Cr</th><th>Physical target and time line</th></tr><tr><td></td><td>Mapping Study and Feasibility</td><td></td><td></td></tr><tr><td>9</td><td>Assessment Carbon footprint for existing green belt plantation</td><td>0.03</td><td>FY 2026-27</td></tr><tr><td></td><td>Total</td><td>61.08</td><td></td></tr></table>
3.	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
4.	Project Proponent shall restrict the Coal transportation by road to maximum 25% and environment mitigation measures as stated in the Notification issued vide S.O. 1561 (E) dated 21.05.2020 shall be complied with
5.	Project proponent shall monitor sulfate in particulate matters and Ammonia in ambient air in addition to the regular environmental monitoring parameters
6.	In addition to this existing 3 CAAQMS, PP shall install one additional continuous ambient air quality monitoring station preferably nearby the maximum GLC location in consultation with OSPCB within 1 year from the date of grant of amendment in EC.
7.	Project proponent shall develop additional green belt in an area of 31.82 Ha, and Miyawaki plantation on 3 Ha area of ash pond
8.	Project proponent shall retrofit ESP by installing Ultra Frequency Transformer as committed
9.	Project proponent shall install 11 MW Solar PV within GKEL premises and use of EV for internal movement as committed
10.	Project proponent shall carry out Carbon footprint study for existing green belt plantation and Biomass Availability Mapping Study for its feasibility for using in the boilers

3.4. Agenda Item No 4:

3.4.1. Details of the proposal

ASSESSMENT FOR DETERMINING NECESSITY OF INSTALLING FGD AT DPPS, DPL, DURGAPUR, WEST B ENGAL by **THE DURGAPUR PROJECTS LIMITED** located at **PASCHIM BARDHAMAN,WEST BENGAL**	
Proposal For	Amendment in EC

Proposal No	File No	Submission Date	Activity Sub-Activity (Schedule Item)
IA/WB/THE/565148/2026	J-13012/11/2004-IA.II(T)	19/02/2026	Thermal Power Plants Coal/Lignite based plants (1(d))

3.4.2. Project Salient Features

Agenda Item no. 42.4:

42.4: 1x250 MW and 1x300 MW by **M/s. Durgapur Projects Limited** at Durgapur, District Burdwan, West Bengal **– Amendment in Environment Clearance with respect to Sulphur dioxide emission standards as per MoEF&CC Notification dated 11/07/2025 – regarding**.

[Proposal No: IA/WB/THE/565148/2026; F.No. J-13011/26/2007-IA.II(T)]

42.4.1: M/s The Durgapur Projects Limited has made online application vide proposal no. IA/WB/THE/565148/2026 dated 11/01/2026 along with Form 4 & addendum EIA report prepared through QCI/NABET accredited consultant and sought for amendment in the Environmental Clearance accorded by the Ministry vide letter no. G.S.R. 465(E dated 11/07/2025 for the project mentioned above 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: Ecogenesis Consultancy Pvt Ltd, QCI/NABET/ENV/ACO/25/3661 dated June 10, 2025, Valid upto May 20,2028

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

42.4.3: Environmental site settings

<table>
<tr><th>S. No.</th><th>Particulars</th><th>Details</th><th>Remarks</th></tr>
<tr><td>1</td><td>Total land</td><td>297.47 ha [Govt.: 297.47 ha]</td><td>Land use: Industrial Area</td></tr>
<tr><td>2</td><td>Land use break up</td><td><table><tr><th>Facilities</th><th>Existing Area (In Hectares)</th></tr><tr><td>Main Pla</td><td>1</td></tr></table></td><td></td></tr>
</table>

S. No.	Particulars	Details	Remarks
		nt 5 Coal Handling System 35 Water System 15 SwitchYard 15 Green belt 105 Roads 10 Ash pond 45 Water supply pipeline 15 Others Administrative Building & Utilities, Storage & Miscellaneous 57.47 Total 297.47	
3	Land acquisition details as per MoEF&CC O.M. dated 7/10/2014 & 19/02/2025		Land documents are not attached with application form
4	Existence of habitation & involvement of R&R, if any	**Project site:** Name of village (if any) **Study Area: NA**	
5	Existence of school and hospitals if any.	**A. School** **Project site:** No **Study Area:**	

S. No.	Particulars	Details	Remarks

School	Distance	Direction
Durgapur Projects Boys High School	1.20 km	S
Naba Waria Primary School	700 m	NW
Durgapur	1.72 km	N

S. No.	Particulars	Details	Remarks
		Vidyasagar Model High School NIT of Durgapur 2.45 km NW Palashdiha High School 1.52 km W St. Xavier High S 1.52 km W	

S. No.	Particulars	Details	Remarks

chool		

B. Hospital

Project site: No
Study Area:

Hospital	Distance	Direction
Durgapur City Private Hospital & Clinic	1.12 km	NW
TSP Main Hos	5 km	N

S. No.	Particulars	Details	Remarks
		pital Durgapur Sub Divisional Hospital: 3.2 km, E Citizen Hospital: 4.3 km, E The Mission Hospital: 4.5 km, E Vi: 3, E	

<table>
<tr><th>S. No.</th><th>Particulars</th><th>Details</th><th>Remarks</th></tr>
<tr><td></td><td></td><td><table><tr><td>vekananda Hospital</td><td>km</td><td></td></tr></table></td><td></td></tr>
<tr><td>6</td><td>Latitude and Longitude of all corners of the project site.</td><td>A. Plant site
Unit 7 - 23°31'9.74"N, 87°18'5.63"E
Unit 8- 23°31'15.00"N, 87°18'4.88"E
B. Ash pond<table><tr><th>Point</th><th>Latitude</th><th>Longitude</th></tr><tr><td>A</td><td>23°31'0.31"N</td><td>87°17'37.14"E</td></tr><tr><td>B</td><td>23°31'14.84"N</td><td>87°17'36.96"E</td></tr><tr><td>C</td><td>23°31'1</td><td>87°17'4</td></tr></table></td><td></td></tr>
</table>

<table>
<tr><th>S. No.</th><th>Particulars</th><th>Details</th><th>Remarks</th></tr>
<tr><td></td><td></td><td>
<table>
<tr><td></td><td>7.82" N</td><td>9.72" E</td></tr>
<tr><td>D</td><td>23° 31' 1.24" N</td><td>87° 17' 46.15" E</td></tr>
</table>
</td><td></td></tr>
<tr><td>7</td><td>Elevation of the project site</td><td>103 M above mean sea level</td><td></td></tr>
<tr><td>8</td><td>Involvement of Forest land if any.</td><td>Status of stage I Forest Clearance: NA
Area of the forest land involved: NA</td><td></td></tr>
<tr><td>9</td><td>Water body (Rivers, Lakes, Pond, Nala, Natural Drainage, C anal etc.) exists wit hin the project site as well as study area</td><td><u>Project site:</u> NIL
Study area
<table>
<tr><th>Waterbody</th><th>Distance</th><th>Direction</th></tr>
<tr><td>Damodar River</td><td>1.85 km</td><td>S</td></tr>
<tr><td>Pond</td><td>150 m</td><td>W</td></tr>
<tr><td>Drainage</td><td>500 m</td><td>W</td></tr>
</table>
</td><td></td></tr>
<tr><td>10</td><td>Existence of ESZ/ ESA/</td><td><u>Study area</u>
Name of the ESZ/ESA: NIL</td><td>There are no existence of ESZ/ ESA/</td></tr>
</table>

S. No.	Particulars	Details	Remarks
	national park/ wildlife sanctuary/ biosphere reserve/ tiger reserve/ elephant reserve etc. if any within the study area	**Status of Notification:NIL** **Distance of project from ESZ/ESA: NIL Authenticated map of ESZ projecting distance of ESZ from project site:** Status of NBWL approval: NIL **List of Reserved and protected forests: NIL**	national park/ wildlife sanctuary/ biosphere reserve/ tiger reserve/ elephant reserve etc., within the study area
11	Involvement of Critically Polluted Area/Severely Polluted area as per 2018 CEPI score	Involvement of SPA: Durgapur (having CEPI score 65.66) **Proximity to SPA: Within**	Proposed additional environmental safeguards as per MoEF&CC OM dated 31/10/2019 not submitted

42.4.4: The implementation status of the existing EC

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.	Unit 7	300 MW	30/07/2004	30/4/2008	300 MW	PM- 50 mg/Nm³ SO_2- 600 mg/Nm³ for units below 500 MW NO_x- 450 mg/Nm³
2.	Unit 8	250 MW	18/10/2007	01/10/2014	250 MW	PM- 50 mg/Nm³ SO_2- 600 mg/Nm³ for units below 500 MW NO_x- 450 mg/Nm³

Parameter	Details as per EC	Status as on May 2026	Remarks
Total Land Area (Ha)	297.47	294.47	No additional land acquired
Involvement of Forest Land	NA	Some part of Reserved Forest is coming inside the Project area.	
NBWL Clearance	NA	NA	Not applicable
CPA/SPA	NA	Durgapur SPA	Project is located within the Durgapur SPA having CEPI score 65.66

42.4.6 Background for amendment sought by the proponent

With respect to the instant EC amendment proposal, following was apprised to the members of the EAC during the meeting:

a. 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 NOx) 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 (NOx), 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 di-oxide (SO2) emission norms, 550 MW TPP of The Durgapur Projects Limited falls under Category B.
f. In pursuance to the MoEF&CC Notification dated 11/07/2025,The Durgapur Projects Limited has submitted their application for amendment in EC within the prescribed time frame seeking for review of Sulphur dioxide emission standards.

42.4.7: 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.

Month	Coal consumption in MT Unit wise		
	Unit-7	Unit-8	Total
Sep-25	3426.04	4047.50	7473.54
Oct-25	3292.70	3688.36	6981.06
Nov-25	3132.43	3176.87	6309.3
Domestic Coal is being used while maintaining Sulphur content < 0.60%.			

ii. Minimum, maximum and 98th percentile levels of ambient PM_{10}, $PM_{2.5}$, NOX, and SO_2 from secondary monitored AAQ data for last three months period.

S. No.	Name of location	Parameters being monitored	Remarks
1	PCBL More	PM_{10}, $PM_{2.5}$,SO_2, NO_2	Buffer Zone
2	Angadpur		
3	Benachiti		
4	Bidhannagar		
5	Mahishkapur Road		

S. No.	Name of location	Parameters being monitored	Remarks
6	DPL Colon0079		
7	Outside Plant (within 2 km)		
8	Power Station		Core Zone

Summary of AAQ Result for last three months period

S. No.	Name of location	Parameter	Concentration in µg/m3			NAAQS
			Min	Max	Average	
1	DPL Colony	PM_{10}	46.3	**116**	74.22	100
		$PM_{2.5}$	21.6	**73.7**	42.73	60
		NO_2	4.5	5.4	4.98	80
		SO_2	16	21.88	19.30	80
2	Outside Plant (within 2 km)	PM_{10}	42.5	**102.2**	69.16	100
		$PM_{2.5}$	28.3	49.2	39.48	60
		NO_2	5.14	5.7	5.43	80
		SO_2	17	23.06	20.10	80
3	Power Station	PM_{10}	44.7	**126.2**	80.18	100
		$PM_{2.5}$	29	**98.3**	53.43	60
		NO_2	4.67	5.9	5.46	80
		SO_2	16	25.67	21.46	80

iii. **Average stack emissions for PM, NOx, and SO_2 parameters for last three months, flue gas concentration in mg/Nm^3**

S. No.	Name of stack	Parameter	Concentration in (mg/Nm^3) Period		
			Max	Min	Avg.
1	Unit-7	PM	43.75	50.25	47.83
		NO_2	591.91	602.61	595.89
		SO_2	297.34	316.09	306.12

2	Unit-8	PM	28.5	29.5	29.00
		NO_2	581.2	610.7	593.13
		SO_2	296.3	318.9	307.73

Mass emission rate of pollutants in gram per second

S. No.	Parameters	Units	Unit 7	Unit 8
1	Stack Height	M	220	220
2	No. of flue	No.	1	1
3	Top diameter of flue	m	6.25	5.59
4	Flue gas velocity in each flue	m/s	18.07	18.07
5	Flue gas temperature	^oK	140	140
6	Volumetric Flow rate of gas in each flue	Nm^3/s	1778956.16	2992576.12
7	**Emission Rates**			
A	PM10	g/s	34	26.8
B	PM2.5	g/s	20.4	16.1
C	SO2	g/s	372.1	310.1
D	NOx	g/s	378.9	226.8

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 220 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 ($\mu g/m^3$)			
	PM_{10}	$PM_{2.5}$	SO_2	NO_x
AAQ1- DPL Guest House	94.6	57.5	6.0	32.3

AAQ2- B Zone Engi-neering college	64.9	35.7	6.0	35.9
AAQ3- Near Ram Mandir	73.9	40.7	6.0	25.8
AAQ4- Near DPL Waste Water Outlet	152.6	59.5	7.0	41.7
AAQ5- Near City Center	141.4	55.2	6.8	39.2
AAQ6- Dakshin Pally	70.1	32.2	6.0	24.3
AAQ7- DPL Colony	116.0	73.7	5.2	21.88
AAQ8- Outside Plant (Within 2 km)	102.2	49.2	5.7	23.06
AAQ9- Power Station	126.2	98.3	5.9	25.67

vi. Environment Management Plan (EMP):

Details	Information provided by Proponent
Environment Management Pl an (EMP) covering the follow ing:	**Existing Air Pollution Control Systems and SO_2 Management Measures at DPPS** **Electrostatic Precipitator (ESP):** Unit 7: 7-field ESP Unit 8: 8-field ESP *Achieves particulate matter (PM) removal efficiency of more than 99%* **Low-Sulphur Coal Usage:** Unit 7: Yes Unit 8: Yes *Use of ECL/BCCL coal with sulphur content in the range of 0.35–0.5 0%, which directly reduces SO_2 generation at source* **Combustion Control Measures:** Unit 7: Implemented Unit 8: Implemented *Optimization of combustion through controlled oxygen (O_2) levels, i mproved coal mill fineness, and stable load operation, res ulting in reduced sulphur oxidation* **High Stack Dispersion:** Unit 7: 220 m stack height Unit 8: 220 m stack height *Facilitates effective dispersion of emissions, thereby lowering ground-level SO_2 concentrations* **Ambient Air Quality Monitoring:** Unit 7: Continuous monitoring Unit 8: Continuous monitoring *Ensures compliance with National Ambient Air Quality Standards (NAA QS) for SO_2 and enables tracking of long-term air quality tr ends*

Air Pollution & Fugitive Emission Control Systems

Emission Source / Area	Control System / Measure Implemented
Particulate Matter (PM)	High-efficiency Electrostatic Precipitators (ESP) installed (7-field for Unit 7 and 8-field for Unit 8) achieving >99% PM removal efficiency; continuous m

	onitoring through CEMS
Nitrogen Oxides (NOx)	Combustion control measures including optimized burner operation, controlled excess air (O_2 levels), improved coal mill fineness, and stable load management to minimize NOx formation
Coal Transportation	Transportation primarily through covered systems (rail/road); dust suppression through water sprinkling along internal roads and unloading areas
Coal Handling & Storage	Water spraying systems and dust suppression measures at transfer points; proper stacking and handling to reduce windblown dust
Coal Bunkers	Enclosed handling systems with controlled feeding; minimal exposure reduces fugitive dust emissions
Fly Ash Handling	Dry ash handling system with pneumatic conveying in closed pipelines; minimizes dust leakage during transfer
Fly Ash Loading & Transport	Enclosed loading systems and transport through bulkers/covered trucks to prevent fugitive emissions
Fly Ash Disposal	Ash pond management with water cover and dyke stabilization to prevent dust dispersion
Fly Ash Utilization	Utilization in cement and brick manufacturing, and other construction activities as per Fly Ash Notification; reduces need for disposal and associated emissions

S. No.	Condition as per EC	Amendment Sought	Justification & Request for Amendment
1.	The project proponent shall install Flue Gas Desulphurization (FGD) system to control SO_2 emissions in compliance with MoEF&CC Notification dated 07.12.2015.	Exemption from installation of FGD system for Unit 7 (300 MW) and Unit 8 (250 MW).	Detailed technical assessment indicates that existing SO_2 control measures are adequate. The plant uses low-sulphur coal (0.35–0.50%), resulting in comparatively lower SO_2 generation. High stack height (220 m) ensures effective dispersion, and ambient SO_2 levels are within NAAQS limits. Air quality modelling confirms that ground-level concentrations remain well below prescribed standards even without FGD. Further, as per MoEF&CC Notification dated 11.07.2025, Category-B thermal power plants are eligible for case-by-case exemption based on technical justification. Installation of FGD would lead to significant economic burden and additional environmental impacts (increased auxiliary power consumption, reagent handling, and fly ash quality deterioration) without proportionate environmental benefit. Therefore, exemption from FGD installation is requeste

			d.

42.4.9: Summary of court cases: Nil

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

42.4.11: 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

Date of EAC 1 :20/03/2026

Deliberations of EAC 1 :

40.8.2: Deliberations by the EAC in current meetings

The EAC noted that the project proponent failed to submit the required documents and did not attend the meeting held on 20/03/2026. Besides, no communication has been sent neither by the proponent nor by the EIA consultant requesting for deferment of the proposal.

40.8.3: Recommendation of EAC

In view of the foregoing and after detailed deliberations, the Committee recommended to ***defer*** the proposal and shall be considered as and when requested by the proponent.

3.4.4. Deliberations by the EAC in current meetings

Observations and deliberation of the EAC

42.4.12: The Committee observed and noted the following:

xv. Project Proponent needs to submit the Additional environmental safeguards as per MoEF&CC OM dated 31/10/2019 as the project is coming inside the Durgapur Severely Polluted Area.

xvi. EAC suggested to clarify the number of power generation units within the premises, as the EC is accorded for unit 7 & 8. Details of unit 1-6 to be furnished along with the capacity and status of statutory permissions along with implementation status.

Recommendations of the Committee

42.4.13: 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:

3.4.5. Recommendation of EAC

Deferred for ADS

3.5. Agenda Item No 5:

3.5.1. Details of the proposal

NLC Tamil Nadu Power Limited by **NLC TAMILNADU POWER LIMITED** located at **TUTICORIN,TAMIL NADU**	
Proposal For	Amendment in EC

Proposal No	File No	Submission Date	Activity Sub-Activity (Schedule Item)
IA/TN/THE/564830/2026	J-13012/68/2006-IA-II(T)	16/04/2026	Thermal Power Plants Coal/Lignite based plants (1(d))

3.5.2. Project Salient Features

Agenda Item no.- 42.5

42.5: 2x500 MW Tuticorin Thermal Power Project by **M/s. NLC Tamil Nadu Power Limited** at Tuticorin, 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/564830/2026, F.No. J-13012/68/2006-IA-II(T)]

42.5.1: M/s. NLC Tamil Nadu Power Limited (NTPL) has made an online application vide proposal no. IA/TN/THE/564830/2026 dated 08.01.2026 along with Form 4 & addendum EIA report prepared through QCI/NABET accredited consultant and sought for amendment in the Environmental Clearance accorded by the Ministry vide letter no. J-13012/68/2006-IA-II(T) dated 13.06.2007 for the 2 × 500MW Coal-Based Thermal Power Project located at Tuticorin District, Tamil Nadu, under the provisions of the EIA Notification, 2006.

Name of EIA Consultant: M/s. MITCON Consultancy and Engineering Services Ltd.; Certificate No.: NABET/EIA/24-27/RA 0343; Validity: 05.02.2027.

Written submission

42.5.2: Project proponent submitted the following with respect to FGD installation:

Status of Flue Gas Desulphurization (Fgd) Project at NTPL (2x500 Mw), Tuticorin
Flue Gas De-Sulphurization (FGD) Project - Unit 1&2

3.5.3. Deliberations by the committee in previous meetings

N/A

3.5.4. Deliberations by the EAC in current meetings

Observations and deliberation of the EAC

42.5.3: The Committee observed and noted the following:

Recommendations of the Committee

42.5.4: In view of the foregoing and after the detailed deliberations, the ***Committee recommended to return the proposal in present form*** as the proponent has already in the process of FGD installation and likely to be operationalize for Unit #1- & Unit #2 by August 2026 and September 2026, respectively.

3.5.5. Recommendation of EAC

Returned in present form

3.6. Agenda Item No 6:

3.6.1. Details of the proposal

Amendment in EC of 4X600 MW Thermal Power Plant of M/s Jindal Power Ltd. at Village Tamnar, Taluk Gharghoda, District Raigarh (Chhattisgarh) by **JINDAL 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/472414/2024	J-13012/117/2008-IA.II(T)	14/06/2024	Thermal Power Plants Coal/Lignite based plants (1(d))

3.6.2. Project Salient Features

Agenda Item No. 42.6:

42.6: 4x600 MW Thermal Power Plant by **M/s. Jindal Power Limited (JPL)** at Villages Tamnar, Taluk Gharghoda, District Raigarh, Chhattisgarh – **Reconsideration for Amendment in Environmental Clearance based on ADS reply – reg.**

[Proposal No. IA/CG/THE/472414/2024; F. No. J-13012/117/2008-IA. II (T)]

42.6.1: M/s. Jindal Power Limited has made an online application vide proposal no. IA/CG/THE/472414/2024 dated 10/05/2024 seeking for amendment in Environmental Clearance dated 18.03.2011 and its subsequent amendment granted therein for the project namely ***"4x600 MW unit Coal based Thermal Power Plant located at Village Tamnar, Taluk Gharghoda, District Raigarh, Chhattisgarh"*** by M/s Jindal Power Limited (JPL) for ***utilization of existing ash dyke of 4x250 MW situated in an area of 198 Ha for 4x600 MW TPP. Due to this proposed amendment, there will be no ash pond for 4x600 MW TPP and area of 236 Ha meant for ash pond will be used for other purposes.***

The above proposal was earlier considered by the EAC – Thermal in its 11th meeting held on 27-28th June, 2024 and recommended for amendment in EC subject to stipulation of additional environmental safeguards. Subsequently, the proposal was again referred back to the EAC with an observation that whether EAC has taken into consideration scheduled action plan and asked for any inspection. Accordingly, the proposal was again considered by the EAC in its meeting held on 1/10/2024 wherein EAC deferred the proposal for want of additional information and also recommended for a site visit by the sub-committee of EAC – Thermal. The site visit by the sub-committee was completed during 3-4th January, 2025 and the proponent submitted the reply to the additional information through Parivesh on 06/02/2025. The said proposal was further placed before the 20th EAC meeting held on 24/02/2025, wherein the committee partially recommended for amendment in EC to use existing ash dyke of 4x250 MW for 4x600 MW TPP for 2 year i.e. till 30.06.2026 subject to stipulation of additional environmental safeguards. The proposal was again referred back to the EAC by the Ministry for further examination regarding adequacy of existing ash dyke of 4x250 MW. Accordingly, the proposal was placed before the EAC in its meeting held on 20/06/2025 wherein the Committee deferred the proposal and sought for a closure report against the 31 non-compliances as reported in the certified compliance report dated 25/04/2025 including the non-compliance to the provisions contained under the ash utilization notification 2021 for the existing ash dyke of 4x250 MW. Further, proponent was requested to submit the circular slip analysis of the existing ash dyke of 4x250 MW to ensure the stability of the same as it has been proposed to be used for disposal of ash from 4x600 MW forever.

Proponent has uploaded the additional information on PARIVESH web portal on 14/10/2025 and

the same was considered by the EAC in its 32nd meeting held on 30/10/2025. The relevant extract of the minutes of the EAC meeting and recommendations are furnished as below:

42.6.2: Extracts of the EAC meeting held on 30/10/2025

Details of the EC for which amendment is sought:

S. No.	Units	EC date	COD	Status of implement ation
1.	2x250 MW (Phase I)	24.09.1997	08.12.2007 & 15.06.2007	Fully implemented and the units are under operation
2.	2x250 MW (Phase II)	08.06.2006	16.04.2008 & 05.09.2008	
3.	2x600 MW (Units#1&2)	18.03.2011	27.08.2014 & 09.11.2014	
4.	2x600 MW (Units#3&4)	04.11.2011		

SNo	Date of accord of EC amendment	Remarks
a.	10.01.2014	Amendment in EC w.r.t. transportation of coal, utilization of existing ash dyke of 4x250 MW for 4x600 MW TPP for 03 years.
b.	26.04.2017	Amendment in EC w.r.t. transportation of coal, utilization of existing ash dyke for 4x600 MW TPP for 02 more years till construction of new dyke & change in coal source from imported to domestic, change in location of proposed dyke from Rodappli to near Dolesara village
c.	28.08.2020	Amendment in EC for extension of permission for transportation of coal, utilization of existing ash dyke for 4x600 MW TPP till October, 2021.
d.	28.10.2021	Amendment in EC for extension of permission utilization of existing ash dyke for 4x600 MW TPP till December, 2022.
e.	24.02.2023	Amendment in EC for extension of permission utilization of existing ash dyke for 4x600 MW TPP till June 2024. However, formal EC amendment letter has not been accorded by the Ministry.

Specific/General Condition No	Details of Conditions as per EC	Amendment Sought	Justification
Condition no. 3, 4 & 5 of the EC amendment dated 24.02.2023.	MoEF&CC has granted permission to use existing ash dyke of 4x250 MW for disposal of unutilized ash of 4x600 MW till Jun	Permission to continue use of existing ash dyke of 4x250 MW for unutilized ash of 4x600 MW per	• To conserve the land and maximize ash utilization, the Company has planned to not construct the new ash dyke for 4X600 MW on an area of 236 hectares which was permitted by MoEF&CC. • As the Company is utilizing about 100% fly ash, the existing ash dyke volume is adequate to continue bottom ash disposal from 4x250

Specific/General Condition No	Details of Conditions as per EC	Amendment Sought	Justification
	e, 2024.	manently.	MW and 4x600 MW TPPs.

Adequacy of the existing ash dyke of 4x250 MW in 198 Hectares

The existing ash dyke is located in 198 ha. Area. The dyke has four lagoons namely 1A, 1B, 2A and 2B. The height of the existing ash dyke is 18 m from the Ground level. The height of the existing ash dyke will not be increased further.

Details of Annual Ash Generation, Utilisation and Disposal in Ash dyke (in lakh metric tons)

TPP	Total Ash Generation	Fly Ash Utilisation	Bottom Ash disposal in Ash dyke	Remarks
4x250 MW	23.1	18.48	4.62	Dried ash is excavated from the ash dyke and utilised in mine backfilling. Thus, 100% ash is being utilised
4x600 MW	61.81	49.45	12.36	
Total	84.91	67.93	16.98	

S No.	Details	Lagoon 1A	Lagoon 1B	Lagoon 2A	Lagoon 2B	Total
	Status of ash dyke (Active/ Exhausted- Yet to be reclaimed/ reclaimed)	Active with Ash excavation in progress	Active	Active	Capping is in progress	
	Area (ha)	52.6	68.8	42.7	33.9	198
	Dyke Height (m)	18 m				
	Volume (m^3)	6680000	8120000	4440000	2360000	21600000
	Quantity of ash stored (metric tons)	164.5 Lakh Metric tonnes till 29th Oct 2025				
	Available volume in percentage and quantity of ash that can be further disposed (Metric tons)	8.7% 544500	14.5% 1089000	24.67% 1030500	0% 0	13.2% 2664000 Metric tons (296000 m^3)
	Expected Life of ash pond (number of years and months)	119 days	239 days	226 days	0 days	584

The bottom ash (around 20% of the total ash generated) from the Power Plant has to be evacuated in slurry form and disposed to the ash dyke before the same can be dried and utilized. JPL is achieving the 100% ash utilization by utilizing the complete fly ash (which is 80% of the

total ash generated) which is collected and evacuated in dry form, and by excavating and subsequently using the dried ash (approx. 20% of the total ash generated) from the ash dyke. Thus the company has sufficient volume available in the ash dyke for disposal of bottom ash in the ash dyke.

Action plan for excavation and use of already stored ash in the ash dyke

Year	Ash planned to be excavated (Lakhs metric tons)	Lagoon	Use of excavated ash
	17.25	1A, 1B & 2A	For mine void backfilling
	17.25		
	17.25		
	17.25		
	17.25		
	17.25		
	17.25		
	17.25		
	17.25		
	17.25		
	172.5		

Thus, concurrent excavation and utilization of ash from the ash dyke will enhance the volume availability in the existing ash dyke. The expected life of ash dyke, basis the above mentioned excavation and utilization plan, will increase from 1.6 years till the life of the 4x250 MW & 4x600 MW TPP.

Study regarding Slope Stability of Ash dyke

The Department of Civil Engineering, National Institute of Technology (NIT) Raipur conducted the stability analysis. NIT Raipur submitted the Stability Analysis report on 01.01.2025. The slope stability analysis of ash dyke for both normal and Earthquake condition were done by circular slip analysis with the Geo-studio software.

The conclusion and recommendations of the report is:

"The ash dyke is analysed for steady seepage condition (normal) and steady seepage earthquake condition (seismic) for local and global stability analysis. Factor of Safety are obtained more than 1.5 to 1.0 for normal and seismic loading conditions, which fulfils the acceptance criteria for minimum factor of safety required as per IS 7894: 1975 (Reaffirmed 2002), "Code of practice for stability analysis of earth dams." Therefore, it can be concluded that:

a. Ash dyke with 4th stage raising is observed to be stable and safe with current existing (fly ash filling and water ponding) condition and expected to perform satisfactorily.

b. However, continuous inspection/ examination of the ash dyke is required periodically."

Measures taken by JPL for implementation of the recommendations of NIT Raipur are tabled below:

S No.	Recommendation of the NIT Raipur	Measures being taken by JPL
	Internal drainage system: for efficient functioning of th e existing and raised embankment, the internal drainag e system consists of rock toe, drains etc. should perfor m satisfactorily and shall be cleaned periodically.	Status : Complied.
	Soil cover: Ash embankment shall be covered with no n-erodible soil cover of at least 0.5 m thickness with n atural soil and compacted to maintain required dry den sity of 95% of Maximum Dry Density (MDD)	The embankment has been covered with 0.5 mtr. thick soil and 95% max imum dry density is being maintaine d. Status: Complied.
	Regular Survey of the site and monitoring the conditio n of the ash dykes, lagoon and surrounding soil is requi red to ascertain the safety of the ash dyke. Situations which are considered as undesirable i.e. formation of c racks, gulleys etc. in and around the ash dyke can be a voided by early detection.	An internal Dyke Committee ensures weekly visit and submit report to the Plant head to ascertain the safety of the dyke. Status: Complied.
	An effective groundwater control of the decantation of the ash dyke lagoon and surface water management d uring rainy seasons is utmost important. It shall be inst rumental for maintaining the static stability with permi ssible limits.	The toe drain, slope drain, cross drai n are directed to Ash water recovery system (AWRS). The decantation we ll is connected to AWRS through un derground of Hume pipe 1000 MM dia. Status: Complied.
	Good practices like instrumentation and monitoring of the ash pond should be implemented. Surface settlem ent and movement markers can be an important instru mentation to check the time wise deformations.	Instrumentation like Piezometer, set tlement marker are already installed and being monitoring on regular basi s. Status: Complied.
	All the slopes shall be properly maintained. Trees and l arge root plants shall not be allowed to grow on slope s.	Slope is well maintained and being monitored on regular basis. No trees or plant roots are there on the slope s. Status: Complied.
	All slopes must be clear properly so that any distress o ccur in these portion shall be identified immediately.	All slope are properly maintained an d being monitored on regular basis. Status: Complied.

NIT Raipur vide its letter dated 04.08.2025 has clarified that the factor of safety obtained from circular slip analysis are more than 1.5 – factor of safety obtained as 2.21 to 2.67 for normal conditions and 1.52 to 1.89 for earthquake loading conditions. It has been further clarified that the above obtained FOS meets the acceptance criteria as per IS 7894: 1975.

Compliance to the observations of EAC sub-committee site visit report: The Subcommittee of EAC – Thermal visited the project site on 03rd Jan to 04th Jan 2025. The recommendations of the Subcommittee of EAC – Thermal and its compliance status by the proponent are as below:

Sl. No	EAC sub-committee recommendation	Compliance status
1.	The PP should ensure that the back filling of mine voids in combination with over burden material is carried out under care of environmental safe guards in compliance with the guidelines of DGMS and CPCB.	**Being complied** All out efforts are being made to utilize ash in accordance with the Fly ash utilization notification. Currently, JPL is utilizing the fly ash in back filling of mine along with OB in Gare Palma IV/1 and Gare Palma IV/2&3 coal mines owned by JPL, Tamnar as per approved mine plan and guidelines of DGMS & CPCB guidelines.
2.	PP should carry out regular monitoring of the area around back filling site to ensure there is no leaching or deterioration of any environmental parameter particularly w.r.t. Ground Water and Surface water sources.	**Being complied** JPL has engaged IIT-Kharagpur and CIMFR, Dhanbad for monitoring of long-term impacts of dumping of fly ash and leaching of heavy metals on soil and water of study area. There is no sign of deterioration of any environmental parameter w.r.t Ground water or surface water sources due to the backfilling.
3.	M/s JPL should present the findings and recommendations of the studies carried out by IIT, Kharagpur, CIMFR, Dhanbad and NIT Raipur w.r.t. the impact analysis of back filling of mine voids and slope stability of Ash Dyke.	The Conclusion of the studies carried out by IIT, Kharagpur, CIMFR, Dhanbad and NIT Raipur w.r.t. the impact analysis of back filling of mine voids and slope stability of ash dyke are as below: **Conclusion of NIT Raipur Report on Slope Stability of Ash dyke:** The ash dyke is analysed for steady seepage condition (normal) and steady seepage earthquake condition (seismic) for local and global stability analysis. Factor of Safety are obtained more than 1.5 to 1.0 for normal and seismic loading conditions, which fulfils the acceptance criteria for minimum factor of safety required as per IS 7894: 1975 (Reaffirmed 2002), "Code of practice for stability analysis of earth dams." Therefore, it can be concluded that: · Ash dyke with 4^{th} stage raising is observed to be stable and safe with current existing (fly ash filling and water ponding) condition and expected to perform satisfactorily. · However, continuous inspection/ examination of the ash dyke is required periodically. **Conclusion of latest IIT Kharagpur study:** The following specific conclusions are derived: 1. The possibility of air quality degradation, due to the practice of fly ash-mixed dumping has not been observed, based on the air quality monitoring of the studied stations during the study period. 2. The heavy metal concentrations (in both surface and ground water samples) did not exceed the permissible limits, hence, heavy metal poisoning of surrounding flora, fauna and other aquatic lives are not seen to be imminent threats. 3. The geo-environmental contamination level due to current mining activities (including fly-ash mixed backfilling) has showed no significant evidence to impact the lives of flora, fauna and other aquatic lives in the surrounding areas. **<u>Conclusion of latest CIMFR Dhanbad study:</u>** No major impacts observed on the soil physicochemical parameters of the area due to mining activity. As per soil physical parameters reclaimed

Sl. No	EAC sub-committee recommendation	Compliance status
		site with fly ash is well managed to develop vegetation and ecosystem which may be similar to natural forest. Overall all the physicochemical parameters for all sampling sites are similar to the samples from forest area. Quality assessment of groundwater for drinking purposes suggest that concentration of most of the analyzed parameters are within the recommended drinking water limits of BIS (2012). All the analysed parameters of the surface water collected are well within the prescribed limits of surface water quality standards under class C of IS:2296 and can be used for drinking purposes after conventional treatment followed by disinfection. The analysis results of mine water collected from proposed mine voids shows that pH are within the recommended range of 5.5 - 9.0 for effluent discharge. Concentrations of F-, Cl-, SO42- and NO3- in the analysed mine water samples are below the specified limits for effluent discharge. All the measured metals like Fe, Mn, Pb, Zn, Cu, Cr, Cd, Ni, As and Hg are also observed below the recommended limits for effluent discharge in inland surface water. **3. <u>TCLP test:</u>** TCLP test and study of radioactivity of radionuclide in coal ash samples shows no major impacts on the water quality parameters of the area due to disposal of coal ash in mine voids. The data indicates that the air quality in these locations are within acceptable standards concerning heavy metal contamination, ensuring a safer environment for the residents. Regular monitoring is recommended to maintain these standards and to identify any potential changes in the concentrations of these metals over time.
4.	M/s JPL should also work to enhance the utilization of fly ash in areas such as Cement manufacturing, brick, and tiles and hollow block manufacturing and highways construction etc.	**Being complied** The Company is also supplying the ash to JSP cement plant and nearby brick plants as per their requirements. Further the company provides the ash for road/ highway construction as and when the requirement arises.
5.	For control of SO_2 emissions PP should install FGD systems at the earliest as per the provisions of OM of date 30/12/2024 as issued by MoEF&CC.	As per the MoEF&CC's Gazette Notification G.S.R.465 (E) dated 11.07.2025, the TPP at Tamnar is categorized as Category C and thus the condition to install FGD is not applicable on Category C TPPs.
6.	PP should make roadside plantation along the transport route of coal.	**Being complied** Avenue plantation along the route (both sides of the road) of coal transportation from is being done on continuous basis. The Company has already planted approx. 1 lakh sapling on the road side.
7.	Miyawaki plantation should also be done by PP in the plant ar	JPL has done Miyawaki plantation during monsoon season in the nearby area of plant.

Sl. No	EAC sub-committee recommendation	Compliance status
	ea.	

Recommendations of EAC as per the meeting held on 30/10/2025

EAC recommended the proposal for amendment in EC subject to stipulation of additional specific conditions as given below:

Paragraphs of EC amendment letter dated 24/02/2023	Details as per EC amendment dated 24/02/2023	Amendment sought by the project proponent	Recommendations of EAC as per MoM
Para no 3, 4 & 5 of EC amendment dated 24.02.2023	Permission to use existing ash dyke of 4x250 MW for unutilized ash/ bottom ash of 4x600 MW has been granted till June 2024.	Permission to continue use existing ash dyke of 4x250 MW for unutilized ash of 4x600 MW permanently	Permission to use existing ash dyke of 4x250 MW for 4x600 MW TPP permanently subject to stipulation of following additional specific conditions:

Additional specific conditions:

S. No	Location	Area	No of Saplings	Remark
1	From Plant Gate to Gare Mines	Approx. 09 KM length	10,000	On completion of road construction being done by PWD and as per availability of road side land
2	Near Ash dyke	Approx. 4 Acres	5000	Gap plantation. Replacement and strengthening of existing plantation
3	Miyawaki Planation	1.5 Acres	10,000	-
4	Plantation in nearby Villages	-	30,000	Through CSR
5	Distribution of fruit tree saplings	-	25,000	Through CSR
6	In and around the Plant	-	20,000	Replacement and strengthening of existing plantation
Total			1,00,000	

- Project proponent needs to comply with the recommendations covered in the Order dated 15/02/2022 of Hon'ble NGT in the Original Application No.104 of 2018 regarding coal transportation.
- Project proponent shall submit the relevant supporting documents regarding

implementation of Compensatory Afforestation and catchment area treatment plan, Third-party report on monitoring & evaluation of Green Belt / plantation, documents regarding 100 percent fly ash utilization, R&R plan & its implementation status, formation of monitoring committee, CSR activities undertaken, details of schemes being implemented for tribal families, periodic maintenance of the coal transportation road undertaken and details of coal characteristics to the Regional Office of MoEF&CC.

· Project Authority shall apply for amendment in the existing ECs for the conditions related to in-built continuous monitoring for radio activity and heavy metals in coal, annual social audit by govt institute.

42.6.3: It was apprised to the EAC during processing of the proposal. It has been observed in the Ministry that *"Be submitted with the closure report for the 31 non-compliances, as indicated by the EAC. Whether the permission for permanent use of the existing ash dyke conforms to the Fly Ash Utilisation Notification, 2021 and its subsequent amendments?"*. In view of this, proponent was requested to submit additional information. Accordingly, PP submitted the additional information on 09/03/2026 and the same was placed before the 40th EAC meeting held on 19-20 March 2026 wherein EAC asked the Project Proponent to submit the Closure report obtained from the Regional Office – Raipur for the 31 non-compliances. In view of this, proponent submitted the additional information on 30/03/2026 and the same was placed before the 41th EAC meeting held on 08th April 2026 wherein EAC **deferred** the proposal and sought for Action taken and current status on the 11 (non complied and partially complied conditions) as stated in the report of the Regional Office – Raipur dated 27/03/2026.

Proponent uploaded the additional information on 22/04/2026 and the same was placed before the EAC in its meeting held on 30/04/2026 for consideration:

A. Be submitted with the closure report for the 31 non-compliances, as indicated by the EAC

Proponent has obtained the report from Regional Office – Raipur on 27/03/2026 regarding updated status of compliance based on their action taken report. As per the report, out of 31 non-compliances, 11 conditions have been reported as non-complied and partially complied. The updated status on the same as presented by the proponent is given as below:

<table>
<tr><th>S. No.</th><th>EC Conditions</th><th>Updated status as per the latest Review Report of IRO dated 27.03.2026</th><th>Current status submitted by JPL</th></tr>
<tr><td></td><td>Observation of RO</td><td>· This Sub-Office is not accepting the reply submitted by the Project Authority on account of the following facts:
· Coal transportation for the above Thermal Power Plant is still being continued through trucks by road and partly through Cross Country Pipe Conveyor (CCPC). Further existing Cross Country Pipe Conveyor (CCPC) is not connected till their captive Coal Mines.
· Project Authority in their earlier reply relied upon the Ministry's gazette notification S.O. 1561 (E) dated 21/05/2020 and the judgment dated 08/11/2024 in the O.A. No. 70 of 2023. Th</td><td><table><tr><th>Coal Source</th><th>Quantity (MTPA)</th><th>Mode</th></tr><tr><td>GP Mines</td><td>14</td><td>CCPC</td></tr><tr><td>MCL</td><td>6</td><td>Road</td></tr><tr><td>Total</td><td>20</td><td></td></tr></table>· For transporting coal from MCL mine to TPP by rail, the shortest possible freight distance is of 275 kms.
· We are transporting coal as per the MoEF&CC's gazette notification dated 21.05.2020 using all safeguard measures.
· Pertinently this notification has not been stayed by any Court.
· It is again being reiterated that the proposed railway line from the nearest railway siding</td></tr>
</table>

S. No.	EC Conditions	Updated status as per the latest Review Report of IRO dated 27.03.2026	Current status submitted by JPL
		e said gazette notification S. O. 1561 (E) dated 21/05/2020 mandates compliance of several conditions referred therein. The order dated 15/02/2022 of Hon'ble NGT in the O. A. No.104 of 2018 in the matter of Shivpal Bhagat & Ors. Vs UOI has been passed after the above said Ministry's gazette notification S.O.1561(E) dated 21/05/2020. · Further, Project Authority in their previous reply referred another NGT Order dated 08/11/2024 and in the said Order also Hon'ble NGT(CZ) expressly directed that the railway route for this project must be completed by 01/04/2025. · Project Authority in their ATR dated 12/03/2026 Relied upon the contents of the Oversight committee, where as this Office relied upon the one of the directions in the Order dated 15/02/2022 based on the recommendations of in the Committee Report (November, 2019) under the long term measures is reproduced, "To reduce the pollution and other impacts caused by road transport of coal and other minerals directions may be issued that coal transport by road from coal mines or to thermal power plants in these two blocks will be permitted only for 1 year, after which transport must be done by rail of closed conveyor belt". · The said Order dated 15/02/2022 of Hon'ble NGT has not been strike down by any appellate Tribunal/Court. · Project Authority has not effectively complied with the recommendations covered in the Order dated 15/02/2022 of Hon'ble NGT in the Original Appl	at Bhalumuda to the Sardega Railway Siding (nearest to MCL Mines at Kulda) is the 37-km project connecting Sundargarh (Odisha) to Raigarh (Chhattisgarh), sanctioned in August 2024 by the Government of India. · The construction of this Railway line from MCL mines to the Tamnar area is being undertaken by Chhattisgarh East Railway Limited (CERL).

S. No.	EC Conditions	Updated status as per the latest Review Report of IRO dated 27.03.2026	Current status submitted by JPL
		ication No.104 of 2018. · In view of the above submissions, this Office has not accepted the reply of the Project Authority and the observation of this Office remains as it was communicated vide letter dated 28/04/2025. Ministry may take appropriate view based on the reply of the Project Authority and prevailing various Judicial Orders in consultation with the law officer.	
	EC letter J-13011/15/93-II(T) dated 24.09.1997 for 2x250 MW (Phase I)		
	Condition no. (xii) Provision shall be made for collection of fly ash in dry form. Close conveyor system with dust suppression mechanism shall be used for transport of coal from the mine and for carrying the ash to the disposal areas. Adequate provision should be made for sprinkling of water at strategic locations to ensure that fly ash does not get air borne.	· As per the condition No.(xii), Provision shall be made for collection of fly ash in dry form. Close conveyor system with dust suppression mechanism shall be used for transport of coal from the mine and for carrying the ash to the disposal areas. Adequate provision should be made for sprinkling of water at strategic locations to ensure that fly ash does not get air borne. · Coal from the captive mines (Gare Palma mines) is being transported partly by road and partly through Cross Country Pipe Conveyor (CCPC). Coal sourced from other mines/places are being transported through trucks by road. Though provision has been made for collection of fly ash in dry form, Ash slurry transportation system has also been installed for disposal of fly ash in the ash dyke. In case of utilization in mine void back filling and land filling, wet ash with moisture is being transported in covered trucks. · **In view of the above, the condition is partly complied.**	· Coal from the Gare Palma IV/1 and Gare Palma IV/2 & IV/3 coal mines is transported using existing Cross Country Pipe Conveyor (CCPC). During breakdown/ maintenance, it becomes necessary to use road. · Coal procured from MCL under Fuel Supply Agreement (FSA) has to be transported by road as there is no railway infrastructure available from the Kulda Mines of MCL to the Tamnar Power Plant. · As has been reported by the IRO, wet ash for backfilling is being transported in covered trucks. The Company is ensuring that the ash is not being transported in dry form to prevent the fugitive emissions.
	Condition no.	· As per the condition, Fly ash gen	· Through continuous efforts, the Company

<table>
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<tr>
<td></td>
<td><u>(xiv)</u>
Fly ash generated will be fully utilized within 10 years starting with 20% utilization from the year of operation of the project with the additional utilization of 10% every year.</td>
<td>erated will be fully utilized within 10 years starting with 20% utilization from the year of operation of the project with the additional utilization of 10% every year. Project Authority has not made available any document in support of 100 percent fly ash utilization achieved within 10 years from the year of operation of the Project rather height of the ash dyke has been reportedly raised 4 times, which is evident that the condition has not been complied with. If the condition was complied as claimed by the Project Authority, huge quantity of legacy ash would have not been accumulated in the ash pond.
· As per the records of the Project Authority, available in the public domain, 16.2 million metric tons of Fly ash Stock was available as on 31/03/2023.
· In the updated ATR, Project Authority claims that 100% ash utilization was achieved during the period 2025-2026 and the Fly ash Utilization Notification, 1999 and its subsequent amendments have been superseded by the latest Fly Ash Utilization Notification, 2021 and thus
· Project Authority claims that ash utilization by this Project may be evaluated in line with the latest Fly ash Utilization Notification, 2021.
· So far, the said existing EC condition has not been amended or superseded, based on the Fly ash Utilization Notification, 2021. <u>In such circumstances this Office has reported the factual status of compliance. Ministry may take appropriate view in consultation with Experts.</u></td>
<td>has been able to achieve 100% ash utilisation now.
· The Ash utilization (in percentage) during three previous years is given below:
<table>
<tr><th>Year</th><th>4x250 MW</th><th>4x600 MW</th></tr>
<tr><td>2023-24</td><td>100.3</td><td>101.9</td></tr>
<tr><td>2024-25</td><td>94.3</td><td>92.0</td></tr>
<tr><td>2025-26</td><td>107.9</td><td>108.1</td></tr>
</table>
· MoEF&CC has notified the latest Fly ash Utilization notification on 31.12.2021.
· The ash utilization of all the existing TPPs in the country is governed under the latest notification.
· The Company submits that currently we are utilizing 100% ash generated.</td>
</tr>
</table>

S. No.	EC Conditions	Updated status as per the latest Review Report of IRO dated 27.03.2026	Current status submitted by JPL
	Condition no. (xvi) Project affected people should be adequately compensated and rehabilitated as per the State Govt. norms in consultation with the State authorities. The final R&R Programme and package should be submitted within six months. The project colony should be located 6-8 kms away from the plant site to avoid direct impact of the project. Ministry may take appropriate view based on the compliance details available, if any, in the Ministry.	· Project Authority in their previous reply/ATR stated that no R&R issue is pending and thus claimed that the condition has been complied with. · In the previous review report this Office reported that Project Authority has not made available any documents regarding the awards passed by the District Administration, total no. of Project Affected Family, total no. of Project Affected People, No. of persons paid compensation, total compensation assessed against land, Amount of compensation paid, Amount of compensation yet to be paid, No. of persons yet to be provided job, No. family yet to be rehabilitated. · In this regard, Project Authority submitted an updated action taken report dated 12/03/2026 and additional documents submitted vide e-mail communication dated 18/03/2026. · In the e-mail communication dated 18/03/2026, Project Authority reported that Project affected people should be adequately compensated and rehabilitated as per the State Govt. norms in consultation with the State authorities. The final R&R Programme and package should be submitted within six months. In the said e-mail communication, a copy of the letter dated 17/03/2026 issued by the Office of the Sub-Divisional Officer, Gharghoda, Raigarh District, Chhattisgarh regarding R&R compensation status towards land acquisition award passed. On perusal of the said communication/data, it has been observed that part of the award has already been disbursed and part of the awards yet to be disbursed and **t**	· It is submitted that the Company has deposited compensation amount of Rs.109,09,05,679 /- for 1125 affected families to the District Authorities. · As per the letter dated 17/03/2026 issued by the Office of the Sub-Divisional Officer, Gharghoda, Raigarh District, Chhattisgarh, 1028 families have already withdrawn the compensation amount. · Further, the Company has provided employment to 806 project affected people. · It is further submitted that some PAFs voluntarily choose one time compensation against the employment.

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<tr><td></td><td></td><td><u>hus the condition may be treated as partly complied.</u></td><td></td></tr>
<tr><td></td><td colspan="3"><u>EC Letter no. J-13011/8/2006-IA.II(T) dated 08.06.2006 for 2x250 MW (Phase II)</u></td></tr>
<tr><td></td><td><u>Condition no. (ii)</u>
100% fly ash utilization shall be achieved within 9 years in accordance with the notification on fly ash utilization SO 763 (E) dated 14th September, 1999 and the amendments made therein from time to time.</td><td>100% fly ash utilization has not been achieved within 9 years as stipulated in the EC condition. Detailed comments of this Office mentioned above at point No.6 may be referred.</td><td>· Through continuous efforts, the Company has been able to achieve 100% ash utilisation now.
· The Ash utilization (in percentage) during three previous years is given below:<table><tr><th>Year</th><th>4x250 MW</th><th>4x600 MW</th></tr><tr><td>2023-24</td><td>100.3</td><td>101.9</td></tr><tr><td>2024-25</td><td>94.3</td><td>92.0</td></tr><tr><td>2025-26</td><td>107.9</td><td>108.1</td></tr></table>· MoEF & CC has notified the latest Fly ash Utilization notification on 31.12.2021.
· The ash utilization of all the existing TPPs in the country is governed under the latest notification.
The Company submits that currently we are utilizing 100% ash generated.</td></tr>
<tr><td></td><td colspan="3"><u>EC Amendment letter no. J-13011/8/2006-IA.II(T) dated 13.08.2021 (4x250 MW)</u></td></tr>
<tr><td></td><td>Additional Condition no. 11(ii)
100% ash utilization shall be carried out throughout the year.</td><td>The condition has not been effectively complied with. Detailed comments of this Office mentioned above at point No.6 may be referred.</td><td>· Through continuous efforts, the Company has been able to achieve 100% ash utilisation now.
· The Ash utilization (in percentage) during three previous years is given below:<table><tr><th>Year</th><th>4x250 MW</th><th>4x600 MW</th></tr><tr><td>2023-24</td><td>100.3</td><td>101.9</td></tr><tr><td>2024-25</td><td>94.3</td><td>92.0</td></tr><tr><td>2025-26</td><td>107.9</td><td>108.1</td></tr></table>· MoEF&CC has notified the latest Fly ash Utilization notification on 31.12.2021.
· The ash utilization of all the existing TPPs in the country is governed under the latest notification.
The Company submits that currently we are utilizing 100% ash generated.</td></tr>
<tr><td></td><td colspan="3"><u>4x600 MW Thermal Power Plant - EC letter no. J-13012/117/2008-IA.II(T) dated 18.03.2011 for 2x600 MW (Unit#1 & Unit#2)</u></td></tr>
<tr><td></td><td>Specific Condition no. (xvi)
Utilisation of 100% Fly Ash g</td><td>As per the stipulated condition Utilization of 100% Fly Ash generated shall be made from 4th year of operation and status of implemen</td><td>· Through continuous efforts, the Company has been able to achieve 100% ash utilisation now.
· The Ash utilization (in percentage) during t</td></tr>
</table>

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<tr><th>S. No.</th><th>EC Conditions</th><th>Updated status as per the latest Review Report of IRO dated 27.03.2026</th><th>Current status submitted by JPL</th></tr>
<tr><td></td><td>enerated shall be made from 4 th year of operation. Status of implementation shall be reported to the Regional Office of the Ministry from time to time.</td><td>tation shall be reported to the Regional Office of the Ministry from time to time.
Project Authority has not made available any document in support of 100 percent fly ash utilization achieved from 4th year of operation. In the present updated ATR, Project Authority claims that 100% ash utilization was achieved during the period 2025-2026 and the Fly ash Utilization Notification, 1999 and its subsequent amendments have been superseded by the latest Fly Ash Utilization Notification, 2021 and thus Project Authority claims that ash utilization by this Project may be evaluated in line with the latest Fly ash Utilization Notification, 2021.
Detailed comments of this Office mentioned above at point No.6 may be referred.</td><td>hree previous years is given below:<table><tr><th>Year</th><th>4x250 MW</th><th>4x600 MW</th></tr><tr><td>2023-24</td><td>100.3</td><td>101.9</td></tr><tr><td>2024-25</td><td>94.3</td><td>92.0</td></tr><tr><td>2025-26</td><td>107.9</td><td>108.1</td></tr></table>· MoEF&CC has notified the latest Fly ash Utilization notification on 31.12.2021.
· The ash utilization of all the existing TPPs in the country is governed under the latest notification.
The Company submits that currently we are utilizing 100% ash generated.</td></tr>
<tr><td></td><td>Specific Condition no. (xvii)
Fly ash shall be collected in dry form and storage facility (silos) shall be provided. Unutil ized fly ash shall be disposed off in the ash pond in the form of slurry form. Mercury and other heavy metals (As, Hg, Cr, Pb etc.) will be monitored in the bottom ash as also in the effluents emanating from the existing ash pond. No ash shall be disposed of f in low lying a</td><td>As per the stipulated condition, no ash shall be disposed of in low lying area.
As informed by the Project Authority part of rehandling ash from the ash pond was partly used for levelling of low-lying areas, which was inconsistent with the stipulated EC condition and thus it was reported as partly complied.
In the present updated reply/ATR, Project Authority claims that Ash was utilized for low-lying area filling in the year 2023-2024, duly after obtaining necessary NOC from CECB and thereafter no ash has been utilised for low-lying area filling. Project Authority ought to have amended the said EC condition before the disposal in the low-lying areas. However, Project Authority declared that after the year 2023-2024, re-handling of ash from the ash dyke is being reportedly utilised for backfilling of mine voids at Gare Palma IV/1 and Gare Palma IV/2 & IV/3 coal mines of JPL.</td><td>● Ash for 4x250 MW TPP was utilized in low lying area filling only after obtaining permission from CECB.
● It is submitted that ash from the 4x600 MW TPP has not been disposed in low-lying area.</td></tr>
</table>

S. No.	EC Conditions	Updated status as per the latest Review Report of IRO dated 27.03.2026	Current status submitted by JPL
	rea.	In view of the above, Ministry may accept the reply of the Project Authority with the declaration that Ash will not be disposed in low-lying area in the absence of amendment in the said EC condition.	
	Specific Condition no. (xix) Disposal of Bottom Ash in abandoned mines (if proposed to be undertaken) shall be carried out only after obtaining permission from DGMS and it shall be ensured that the bottom and sides of the mined out areas are adequately lined with clay before Bottom Ash is filled up. The project proponent shall inform the State Pollution Control Board well in advance before undertaking the activity.	As per the stipulated condition, the project proponent shall inform the State Pollution Control Board well in advance before undertaking the activity (i.e. before disposal of ash in abandoned mines). During the visit, Project Authority has not made available any document in support of the said condition and thus it was reported as "**Details are not made available regarding the NOC obtained from the State Pollution Control Board for ash disposal in the mine voids and intimation submitted by the Project Authority to the CECB before undertaking the activity**". In the updated ATR also Project Authority has not submitted any details regarding the intimation submitted by the Project Authority to the CECB before undertaking the ash disposal in the mine voids rather Project Authority reported that CTO of their mines mandates to use fly ash from the Thermal Power Plant for backfilling. In the said reply, Project Authority submitted a clarification received from the Regional Office of Chhattisgarh State Environment Conservation Board vide letter dated 27/02/2026, wherein CECB has reported that filling of ash generated from the power plants in coal mines and mixing with OB dumps should be done in accordance with the guidelines issued by the CPCB and Fly Ash Notification, wherein no mention about obtaining permission from the State PCB. In the preceding point at Sl.15, Project Authority declares that ash disposal in the low-lying area was c	The CECB letter dated 27.02.2026 clearly mentions that in the Fly ash Utilisation notification, 2021, there is no mention of requirement of NOC for use of ash in coal mine for backfilling. Copy of the CECB letter has been submitted.

S. No.	EC Conditions	Updated status as per the latest Review Report of IRO dated 27.03.2026	Current status submitted by JPL
		arried out with the prior approval of CECB, whereas for filling at Mine voids, claims that no NOC is required. Since, Project Authority has not made available any supporting document regarding intimation submitted to the CECB before undertaking the ash disposal in the mine voids, the observation of this Office remains as communicated earlier. Further Ministry may examine the requirement of NOC from the CECB for the fly ash disposal in the Mines and take appropriate view.	
	Specific Condition no. (xxiii) While identifying CSR activities it shall be ensured that need based assessment for the nearby villages within study area shall be conducted to study economic measures with action plan which can help in upliftment of poor section of society. Income generating projects consistent with the traditional skills of the people shall be undertaken. Development of fodder farm, fruit bearing orchards, vocational training etc. can form a part of such programme. Compan	As per the condition, while identifying CSR activities it shall be ensured that need based assessment for the nearby villages within study area shall be conducted to study economic measures with action plan which can help in upliftment of poor section of society. Income generating projects consistent with the traditional skills of the people shall be undertaken. Project Authority submitted the details of CSR activities undertaken during the period 2024-2025. Project Authority claims that CSR plan is prepared and implemented based upon the need-based assessment, but no documents are made available in their reply. Ministry may take appropriate view.	· The activities under CSR are identified on the need based assessment carried out by the Department of CSR of the Company in consultation with the villagers and panchayats. · It is ensured that the activities align with the SDGs set by the United Nations. · Further, impact assessment study of the CSR programmes is regularly conducted by an institute of repute to assess the impacts of CSR programmes on the lives of communities. · The Company has now engaged NABCONS for carrying out the assessment of CSR programmes being implemented by JPL.

S. No.	EC Conditions	Updated status as per the latest Review Report of IRO dated 27.03.2026	Current status submitted by JPL
	y shall provide separate budget for community development activities and income generating programmes. Vocational training programme for possible self employment and jobs shall be imparted to identified villagers free of cost.		
	EC Amendment Letter no. J-13012/117/2008.IA.II(T) dated 10.01.2014		
	Additional Specific Condition no. 6 (A) (xxiii)- The existing ash dyke shall be utilized for the expansion for an interim period not exceeding three years subject to ash dyke having necessary capacity to handle additional ash on account of the expansion units. A new ash dyke shall be constructed within three years to meet the requirement of substantial quantity of ash that would be generated by the expansion plant.	As per the EC condition, the existing ash dyke shall be utilized for the expansion for an interim period not exceeding three years. A new ash dyke shall be constructed within three years to meet the requirement of substantial quantity of ash that would be generated by the expansion plant. Project Authority utilizing the same ash pond beyond three years without amending the EC condition and thus the condition has not been complied with. It appears that Project Authority applied for an amendment in the EC. Ministry may take appropriate view.	1. The permission for use of existing ash dyke has been granted by MoEF&CC from time to time. The chronology of permissions granted by MoEF&CC is as below: <table><tr><td></td><td></td><td></td></tr><tr><td></td><td></td><td></td></tr><tr><td></td><td></td><td></td></tr><tr><td></td><td></td><td></td></tr><tr><td></td><td></td><td></td></tr><tr><td></td><td></td><td></td></tr><tr><td></td><td></td><td></td></tr><tr><td></td><td></td><td></td></tr></table>

B. Whether the permission for permanent use of the existing ash dyke conforms to the Fly

Ash Utilisation Notification, 2021 and its subsequent amendments?

· In the instant proposal, the proponent has submitted its intent to utilize existing ash dyke of 4x250 MW TPP for the unutilized ash from 4x600 MW TPP, in lieu of constructing the new ash dyke for 4x600 MW TPP which was earlier permitted by MoEF&CC vide letter dated 26.04.2017.

· As per Ash Utilization Notification, 2021, and its subsequent amendments, TPPs can have emergency ash pond or dyke at 0.1 hectare (ha) per MW of installed capacity

· Proponent currently operates TPPs with capacity of 3,400 MW (comprising 4x250 MW and 4x600 MW units) and currently, the Company operates only a single ash dyke in an area of 198 hectares, which is significantly below the prescribed land as per the prevailing ash utilization notification (198/3400 = 0.058Ha/MW).

· 100% ash is being utilised

42.6.4: 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. Summary of violation: NIL

42.6.5: Proposed use of land in place of Ash dyke- It is submitted that Government of Chhattisgarh has issued an Invitation to Invest vide letter dated 30.06.2025 to JPL to develop a Thermal Power Plant. Thus the Company intends to utilize the land for the developing the thermal power plant.

3.6.3. Deliberations by the committee in previous meetings

Date of EAC 1 :27/06/2024

Deliberations of EAC 1 :

Date of EAC 2 :01/10/2024

Deliberations of EAC 2 :

Observations and deliberations of the Committee:

13.3.5: The EAC noted the following:

i. As per EC dated 18.03.2011, a separate ash dyke near Rodapali village was to be constructed for 4x 600 MW. However, the Ash dyke could not be constructed as the land for the proposed ash dyke area became part of a coal block. Based upon the request of JPL, MoEF&CC vide letter dated 26.04.2017 granted permission to construct the ash dyke on 236 ha land at an alternate location near village Dolesera. Consent to Establish (CTE) for the same was granted by Chhattisgarh Environment Conservation Board (CECB) vide letter dated 27.04.2022. The present proposal of project proponent is not to construct the ash dyke in the 236 Ha and use the existing ash dyke developed for 4 x250 MW.

ii. The Committee noted that proponent has obtained amendment in the existing EC with respect to use of existing ash dyke of 4x250 MW for unutilized ash of 4x600 MW on 10/01/2014, 26/04/2017, 28/08/2020, 28/10/2021 and 24/02/2023.

iii. With respect to ash utilization for the existing 3400 MW TPP, the Committee noted that the ash is being utilized for filling of low lying areas reportedly with prior permission from CECB. However, the quantity of ash disposal in low lying areas and compliance to the stipulated conditions have not made available by the project proponent.

iv. The committee opined that in order to take considered view in the matter, it is necessary ascertain the compliance status to the prescribed EC conditions inter-alia present generation, utilization and disposal of ash in accordance with the ash utilization notification dated 31/12/2021 and its subsequent amendments.

v. A court case is pending before the NGT, CZ Bhopal [No. Original Application No.70/2023(CZ)] arising out of News report published in the Newspaper named Indian Express, Daily News Paper dated 4th February, 2022, Kolkata, Late City Edition titled “Noncompliance of EC conditions by different units inter-alia Tamnar Thermal Plant of M/s. Jindal Power Limited, Chhattisgarh.

Recommendations of the Committee:

13.3.6: In view of the foregoing and after detailed deliberations, the Committee **deferred** the proposal for amendment in EC and sought for following additional information for further consideration:

i. Present status of 236 Ha land along with photographs and intended purpose of the said land in place of new ash dyke.

ii. Quantum of ash generation, disposal and utilization as per the ash utilization notification dated 31/12/2021 and its subsequent amendments shall be submitted. Further, the quantum of legacy ash utilization shall also be furnished.

iii. Action plan for reduction in existing ash pond area shall be submitted.

iv. Project proponent shall submit a certified compliance report from the concerned Regional Office of the Ministry regarding the compliance of all the stipulated conditions in the existing ECs and its subsequent amendments.

v. Compliance report from CECB regarding adherence to the terms and conditions by the proponent for disposal of ash in low lying area shall be submitted.

vi. Action plan for adopting dry bottom ash collection system shall be submitted.

vii. Detailed status of court case i.e., Original Application No.70/2023 pending before the NGT, CZ Bhopal regarding “Noncompliance of EC conditions by different units inter-alia Tamnar Thermal Plant of M/s. Jindal Power Limited, Chhattisgarh shall be submitted.

Date of EAC 3 :24/02/2025

Deliberations of EAC 3 :

Observations and deliberations of the Committee:

20.5.8: The EAC noted the following:

i. As per EC dated 18.03.2011, a separate ash dyke near Rodapali village was to be constructed for 4x 600 MW. However, the Ash dyke could not be constructed as the land for the proposed ash dyke area became part of a coal block. Based upon the request of JPL, MoEF&CC vide letter dated 26.04.2017 granted permission to construct the ash dyke on 236 ha land at an alternate location near village Dolesera. Consent to Establish (CTE) for the same was granted by Chhattisgarh Environment Conservation Board (CECB) vide letter dated 27.04.2022. The present proposal of project proponent is not to construct the ash dyke in the 236 Ha and use the existing ash dyke developed for 4 x250 MW.

iii. The Committee noted that proponent has obtained amendment in the existing EC with respect to use of existing ash dyke of 4x250 MW for unutilized ash of 4x600 MW on 10/01/2014, 26/04/2017, 28/08/2020, 28/10/2021 and 24/02/2023.

iv. With respect to ash utilization for the existing 3400 MW TPP, the Committee gone through the ash generation and utilization details.

v. The EAC also deliberated on the written submissions of the project proponent and found it satisfactory.

Recommendations of the Committee:

20.5.9: In view of the foregoing and after the detailed deliberations, the Committee ***partially recommended*** the instant proposal for grant of amendment in the ECs dated 18/03/2011 & 04/11/2011 and its subsequent amendment dated 24/02/2023 as detailed below **subject to stipulation of following additional specific conditions and uploading of written submissions on PARIVESH portal.** Other terms and conditions prescribed in EC dated 18/03/2011 & 04/11/2011 and its subsequent amendments shall remain unchanged:

Paragraphs of EC amendment letter dated 24/02/2023	Details as per EC amendment dated 24/02/2023	Amendment sought by the project proponent	Recommendations of EAC as per MoM
Para no 3, 4 & 5 of EC amendment dated 24.02.2023	Permission to use existing ash dyke of 4x250 MW for unutilized ash/ bottom ash of 4x600 MW has been granted till June 2024.	Permission to continue use existing ash dyke of 4x250 MW for unutilized ash of 4x600 MW permanently	Permission to use existing ash dyke of 4x250 MW for 4x600 MW TPP for 2 year i.e. till 30.06.2026 subject to stipulation of following additional specific conditions:

Date of EAC 4 :20/06/2025

Deliberations of EAC 4 :

Observations and deliberations of the Committee (during 26th EAC meeting):

26.5.10: The EAC noted the following:

i. As per EC dated 18.03.2011, a separate ash dyke near Rodapali village was to be constructed for 4x 600 MW. However, the Ash dyke could not be constructed as the land for the proposed ash dyke area became part of a coal block. Based upon the request of JPL, MoEF&CC vide letter dated 26.04.2017 granted permission to construct the ash dyke on 236 ha land at an alternate location near village Dolesera. Consent to Establish (CTE) for the same was granted by Chhattisgarh Environment Conservation Board (CECB) vide letter dated 27.04.2022. The present proposal of project proponent is not to construct the ash dyke in the 236 Ha and use the existing ash dyke developed for 4 x250 MW.

iii. The Committee noted that proponent has obtained amendment in the existing EC with respect to use of existing ash dyke of 4x250 MW for unutilized ash of 4x600 MW on 10/01/2014, 26/04/2017, 28/08/2020, 28/10/2021 and 24/02/2023.

iv. **The adequacy of the ash dyke for 4x250 MW have been examined by EAC in detail and noted that factor of safety is 1.0, which is pretty low. In view of this, PP was advised to take adequate measures to ensure that ash dyke is more stable. It was also advised that proponent shall go for circular slip analysis for the ash dyke.**

v. EAC opined that height of the ash dyke shall not be increased beyond 18 meter and preferably fly ash shall not be utilized for filling up of low lying areas.

vi. **EAC deliberated upon the certified compliance report dated 25/04/2025 and observed that 31 non-compliances have been reported by the Regional Office including the non-compliance to the provisions contained under the ash utilization notification 2021 for the existing ash dyke of 4x250 MW which is presently under consideration before the EAC for amendment purpose.** The committee felt that proponent should take immediate action to the comply with non-compliances reported by the RO and obtain closure report.

Recommendations of the Committee:

26.5.11: In view of the foregoing and after the detailed deliberations, the Committee ***deferred*** the instant proposal and sought for a closure report against the 31 non-compliances as reported in the certified compliance report dated 25/04/2025 including the non-compliance to the provisions contained under the ash utilization notification 2021 for the existing ash dyke of 4x250 MW. Further, proponent shall also submit the circular slip analysis of the existing ash dyke to ensure the stability of the same as it has been proposed to be used for disposal of ash from 4x600 MW forever. Thereafter, the proposal shall be placed before the EAC for consideration for taking considered view on the amendment request of the project proponent.

Date of EAC 5 :30/10/2025

Deliberations of EAC 5 :

Observations and deliberations of the Committee:

32.2.9: ***The EAC noted the following***:

i. As per EC dated 18.03.2011, a separate ash dyke near Rodapali village was to be constructed for 4x 600 MW. However, the Ash dyke could not be constructed as the land for the proposed ash dyke area became part of a coal block. Based upon the request of JPL, MoEF&CC vide letter dated 26.04.2017 granted permission to construct the ash dyke on 236 ha land at an alternate location near village Dolesera located at a distance of 4.6 km from the plant site. Consent to Establish (CTE) for the same was granted by Chhattisgarh Environment Conservation Board (CECB) vide letter dated 27.04.2022. The present proposal of project proponent is not to construct the ash dyke in the 236 Ha and use the existing ash dyke developed for 4 x250 MW permanently.

ii. The Company's management intends to use the 236 Ha of land acquired for ash dyke for setting up of the new power plant as per the Invitation to Invest of Government of Chhattisgarh dated 30.06.2025.

iii. The Committee noted that proponent has obtained amendment in the existing EC with respect to use of existing ash dyke of 4x250 MW for unutilized ash of 4x600 MW on 10/01/2014, 26/04/2017, 28/08/2020, 28/10/2021 and 24/02/2023.

iv. Adequacy of the existing ash dyke of 4x250 MW for disposal of ash from 4x600 MW on permanent basis was deliberated upon by the EAC in detail. The committee deliberated on the existing ash dyke volume availability, Action plan for excavation and use of already stored ash in the ash dyke, Slope Stability study of Ash dyke by NIT Raipur. After deliberations, the Committee opined that recommendations of NIT Raipur shall be complied with.

v. The expected life of existing ash dyke will increase from 1.6 years till the life of the 4x250 MW & 4x600 MW TPP due to the concurrent excavation and utilization plan.

vi. Committee deliberated on the sub-committee site inspection report and reply submitted by the proponent.

vii. Committee deliberated on the report of Regional Office dated 23/09/2025 and observed the following:

- Project proponent needs to comply with the recommendations covered in the Order dated 15/02/2022 of Hon'ble NGT in the Original Application No.104 of 2018.
- Project proponent shall submit the relevant supporting documents regarding implementation of Compensatory Afforestation and catchment area treatment plan, Third-party report on monitoring & evaluation of Green Belt / plantation, documents regarding 100 percent fly ash utilization, R&R plan & its implementation status, formation of monitoring committee, CSR activities undertaken, details of schemes being implemented for tribal families, periodic maintenance of the coal transportation road undertaken and details of coal characteristics to the Regional Office of MoEF&CC.
- Project Authority needs to apply for amendment in the existing ECs for the conditions related to in-built continuous monitoring for radio activity and heavy metals in coal, annual social audit by govt institute.

After deliberations, the Committee opined project proponent to take corrective action on the above and compliance status to be submitted to the Ministry and Regional Office within 30 days from the date of grant of EC amendment.

viii. The EAC also deliberated on the additional information submitted by the project proponent and found it satisfactory.

Recommendations of the Committee:

32.2.10: In view of the foregoing and after the detailed deliberations, the Committee ***partially recommended*** the instant proposal for grant of amendment in the ECs dated 18/03/2011 & 04/11/2011 and its subsequent amendment dated 24/02/2023 as detailed below **subject to stipulation of following additional specific conditions.** Other terms and conditions prescribed in EC dated 18/03/2011 & 04/11/2011 and its subsequent amendments shall remain unchanged:

Paragraphs of EC amendment letter dated 24/02/2023	Details as per EC amendment dated 24/02/2023	Amendment sought by the project proponent	Recommendations of EAC as per MoM
Para no 3,	Permission to	Permission	Permission to use existing ash dyke of 4x250 M

Paragraphs of EC amendment letter dated 24/02/2023	Details as per EC amendment dated 24/02/2023	Amendment sought by the project proponent	Recommendations of EAC as per MoM
4 & 5 of EC amendment dated 24.02.2023	use existing ash dyke of 4x250 MW for unutilized ash/ bottom ash of 4x600 MW has been granted till June 2024.	to continue use existing ash dyke of 4x250 MW for unutilized ash of 4x600 MW permanently	W for 4x600 MW TPP permanently subject to stipulation of following additional specific conditions:

Date of EAC 6 :20/03/2026

Deliberations of EAC 6 :

40.10.3: Deliberations by EAC – Thermal

i. The EAC noted significant progress have been made by the proponent to comply with the prescribed EC conditions as per the presentation made by the proponent. However, the same has not been uploaded against the additional information submitted on 09/03/2026.

ii. Proponent informed that the updated action taken report has already been submitted to the Regional Office and closure report on the observed non-conformities are expected by 23/03/2026.

iii. In view of the above, EAC opined that closure report shall be deliberated upon by the EAC in its next meeting in order to duly address the observations of the Ministry.

40.10.4: Recommendations of EAC

In view of the foregoing and after detailed deliberations, the EAC recommended to defer the proposal and sought for following additional information:

ed Action Taken report submitted to the Regional Office – Raipur along with its relevant enclosures.

re report obtained from the Regional Office – Raipur.

Date of EAC 7 :08/04/2026

Deliberations of EAC 7 :

41.6.2: It was apprised to the EAC during processing of the proposal. It has been observed in the Ministry that *"Be submitted with the closure report for the 31 non-compliances, as indicated by the EAC. Whether the permission for permanent use of the existing ash dyke conforms to the Fly Ash Utilisation Notification, 2021 and its subsequent amendments?"*. In view of this, proponent was requested to submit additional information. Accordingly, PP submitted the additional information on 09/03/2026 and the same was placed before the 40th EAC meeting held on 19-20 March 2026 wherein EAC asked the Project Proponent to submit the Closure report obtained from the Regional Office – Raipur for the 31 non-compliances.

In view of this, proponent submitted the additional information on 30/03/2026 and the same was placed before the 41th EAC meeting held on 08th April 2026 for consideration.

41.6.3: Closure report obtained from the Regional Office – Raipur was deliberated and EAC observed that still there are following conditions which are Non complied or Partially Complied-

Sl. No.	EC Condition No.	ATR submitted by the PP	IRO Closure report dated 27/03/2026
1		· Cross Country Pipe Conveyor (CCPC) is connecting the TPP with the Gare Palma IV/2 & IV/3 coal mine and Gare Palma IV/1 coal mine and thus the coal from these mines is transported through CCPC. · In the matter of Shivpal Bhagat & ors. Versus Union of India & ors., the Hon'ble NGT had formulated an oversight committee under the chairmanship of Justice V.K. Shrivastava, former Judge of Chhattisgarh High Court and had directed the committee to submit the compliance status report as on 30.11.2021. The report dated 16.01.2022 of the Oversight committee was heard by the NGT on 15.02.2022. Paragraph 8 of the NGT order dated 15.02.2022 categorically mentions the final compliance status as on 30.11.2021 and the recommendations of the committee wherein the Committee has outlined the major recommendations to meet out the problem of pollution due to transportation and fly ash disposal. The operative part of the report of the committee as included in the NGT order dated 15.02.2022 is reproduced below: FOLLOWING ARE THE MAJOR RECOMMENDATION TO MEET OUT THE PROBLEM OF POLLUTION DUE TO TRANSPORTATION AND FLY ASH DISPOSAL:- *"1. Coal brought from outside CG to Tamnar and Gharghoda area by TPP should be carried by train upto nearest Railway siding,*	· This Sub-Office is not accepting the reply submitted by the Project Authority on account of the following facts: · Coal transportation for the above Thermal Power Plant is still being continued through trucks by road and partly through Cross Country Pipe Conveyor (CCPC). Further existing Cross Country Pipe Conveyor (CCPC) is not connected till their captive Coal Mines. · Project Authority in their earlier reply relied upon the Ministry's gazette notification S.O. 1561 (E) dated 21/05/2020 and the judgment dated 08/11/2024 in the O.A. No. 70 of 2023. The said gazette notification S.O. 1561 (E) dated 21/05/2020 mandates compliance of several conditions referred therein. The order dated 15/02/2022 of Hon'ble NGT in the O.A. No.104 of 2018 in the matter of Shivpal Bhagat & Ors. Vs UOI has been passed after the above said Ministry's gazette notification S.O.1561(E) dated 21/05/2020. · Further, Project Authority in their previous reply referred another NGT Order dated 08/11/2024 and in the said Order also Hon'ble NGT(CZ) expressly directed that the railway route for this project must be completed by 01/04/2025. · Project Authority in their ATR dated 12/03/2026 Relied upon the content

Sl. No.	EC Condition No.	ATR submitted by the PP	IRO Closure report dated 27/03/2026
		may it be booked from any Rly station. From Rly siding to TPP coal may be carried through mechanically operated closed Goods Vehicle or through manual operated Tarpoline covered Goods vehicle. If any exigency arises State PCB may for limited period relax this condition. *2. Coal bought from inside CG to Tamnar and Gharghoda area by TPP should be carried by train upto nearest Railway siding if train connectivity is available. From Rly siding to TPP coal may be carried through mechanically operated closed Goods Vehicle or through manual operated Tarpoline covered Goods vehicle. If train connectivity is not available coal may be carried through mechanically operated closed Goods Vehicle or through manual operated."* · Furthermore, Paragraph 17 of the NGT order 15.02.2022 clearly directs that the recommendations of the committee need to be complied with. · Furthermore, the coal transportation by road from MCL mines to TPP at Tamnar was specifically deliberated in detail by the Hon'ble NGT in another matter O.A. no. 70/2023 and through its judgment dated 08.11.2024, the NGT has again held that in absence of Railway infrastructure, the transportation of coal for the Power Plant is required to run the plant. In light of the above facts, it is submitted that the coal transportation in the area is permitted through tarpaulin covered trucks if train connectivity is not available. Copy of the NGT Order dated 08.11.2024 · Thus the coal being sourced under Fuel Supply Agreement (FSA) from MCL mines under compulsion has to be transported by road by JPL Tamnar because the rail line is still not been completed. It is further submitted that the construction of Railway line is being undertaken by Chhattisgarh East Railway Limited (CERL).	s of the Oversight committee, where as this Office relied upon the one of the directions in the Order dated 15/02/2022 based on the recommendations of in the Committee Report (November, 2019) under the long term measures is reproduced, "To reduce the pollution and other impacts caused by road transport of coal and other minerals directions may be issued that coal transport by road from coal mines or to thermal power plants in these two blocks will be permitted only for 1 year, after which transport must be done by rail of closed conveyor belt". · The said Order dated 15/02/2022 of Hon'ble NGT has not been strike down by any appellate Tribunal/Court. · Project Authority has not effectively complied with the recommendations covered in the Order dated 15/02/2022 of Hon'ble NGT in the Original Application No.104 of 2018. **In view of the above submissions, this Office has not accepted the reply of the Project Authority and the observation of this Office remains as it was communicated vide letter dated 28/04/2025. Ministry may take appropriate view based on the reply of the Project Authority and prevailing various Judicial Orders in consultation with the law officer.**
	EC letter J-13011/15/93-II(T) dated 24.09.1997 for 2x250 MW (Phase I)		

<table>
<tr><th>Sl. No.</th><th>EC Condition No.</th><th>ATR submitted by the PP</th><th>IRO Closure report dated 27/03/2026</th></tr>
<tr><td>2</td><td><u>Condition no. (xiii)</u></td><td>· Coal from Gare Palma IV/1 and Gare Palma IV/2 & IV/3 coal mines is transported using existing Cross Country Pipe Conveyor (CCPC).
· Coal procured from MCL under Fuel Supply Agreement (FSA) has to be transported by road as there is no railway infrastructure available from the Kulda Mines of MCL to the Tamnar Power Plant.
· As has been reported by the IRO, wet ash for backfilling is being transported in covered trucks. The Company is ensuring that the ash is not being transported in dry form to prevent the fugitive emissions.</td><td>· As per the condition No.(xii), Provision shall be made for collection of fly ash in dry form. Close conveyor system with dust suppression mechanism shall be used for transport of coal from the mine and for carrying the ash to the disposal areas. Adequate provision should be made for sprinkling of water at strategic locations to ensure that fly ash does not get air borne.
· Coal from the captive mines (Gare Palma mines) is being transported partly by road and partly through Cross Country Pipe Conveyor (CCPC). Coal sourced from other mines/places are being transported through trucks by road. Though provision has been made for collection of fly ash in dry form, Ash slurry transportation system has also been installed for disposal of fly ash in the ash dyke. In case of utilization in mine void back filling and land filling, wet ash with moisture is being transported in covered trucks.
<u>In view of the above, the condition is partly complied.</u></td></tr>
<tr><td>3</td><td><u>Condition no. (xiv)</u></td><td>· Through continuous efforts, the Company has been able to achieve 100% ash utilisation now.
· The Ash utilization (in percentage) during the previous years is given below:
<table>
<tr><th>Year</th><th>4x250 MW</th><th>4x600 MW</th></tr>
<tr><td>2022-23</td><td>98.9</td><td>98.8</td></tr>
<tr><td>2023-24</td><td>100.3</td><td>101.9</td></tr>
<tr><td>2024-25</td><td>94.3</td><td>92.0</td></tr>
<tr><td>2025-26</td><td>107.9</td><td>108.1</td></tr>
</table>
· It is submitted that Fly ash Utilization notification of 1999 and its subsequent amendments has been superseded by the latest Fly ash Utilization Notification, 2021.
· Thus in view of the above, it is requested that the ash utilisation by the TPP may be evaluated in line with the latest Fly ash Utilization Notificatio</td><td>· As per the condition, Fly ash generated will be fully utilized within 10 years starting with 20% utilization from the year of operation of the project with the additional utilization of 10% every year. Project Authority has not made available any document in support of 100 percent fly ash utilization achieved within 10 years from the year of operation of the Project rather height of the ash dyke has been reportedly raised 4 times, which is evident that the condition has not been complied with. If the condition was complied as claimed by the Project Authority, huge quantity of legacy ash would have not been accumulated in the ash pond.
· As per the records of the Project Authority, available in the public domain, 16.2 million metric tons of Fly ash Stock was available as on 31/03/202</td></tr>
</table>

Sl. No.	EC Condition No.	ATR submitted by the PP	IRO Closure report dated 27/03/2026
		n, 2021 and its amendment-. **In light of the above, the condition may please be reported as complied with.**	3. · In the updated ATR, Project Authority claims that 100% ash utilization was achieved during the period 2025-2026 and the Fly ash Utilization Notification, 1999 and its subsequent amendments have been superseded by the latest Fly Ash Utilization Notification, 2021 and thus · Project Authority claims that ash utilization by this Project may be evaluated in line with the latest Fly ash Utilization Notification, 2021. · **So far, the said existing EC condition has not been amended or superseded, based on the Fly ash Utilization Notification, 2021. <u>In such circumstances this Office has reported the factual status of compliance. Ministry may take appropriate view in consultation with Experts.</u>**
	<u>Condition no. (xvi)</u>	· It is submitted that compensation for 1125 affected families have been deposited by the Company to the District Authorities. · Status of compensation dispersed by the Authorities has been provided by the SDM (Revenue), Gharghoda-Raigarh vide letter dated 17.03.2026. · Further, the Company has provided employment to 806 project affected people. Thus it is requested that the condition may be considered to be complied with.	· Project Authority in their previous reply/ATR stated that no R&R issue is pending and thus claimed that the condition has been complied with. · In the previous review report this Office reported that Project Authority has not made available any documents regarding the awards passed by the District Administration, total no. of Project Affected Family, total no. of Project Affected People, No. of persons paid compensation, total compensation assessed against land, Amount of compensation paid, Amount of compensation yet to be paid, No. of persons yet to be provided job, No. family yet to be rehabilitated. · In this regard, Project Authority submitted an updated action taken report dated 12/03/2026 and additional documents submitted vide e-mail communication dated 18/03/2026. In the e-mail communication dated 18/03/2026, Project Authority reported that Project affected people should be adequately compensated and rehabilitated as per the State Govt. norms in consultation with the State authorities. The final

<table>
<tr><th>Sl. No.</th><th>EC Condition No.</th><th>ATR submitted by the PP</th><th>IRO Closure report dated 27/03/2026</th></tr>
<tr><td></td><td></td><td></td><td>R&R Programme and package should be submitted within six months. In the said e-mail communication, a copy of the letter dated 17/03/2026 issued by the Office of the Sub-Divisional Officer, Gharghoda, Raigarh District, Chhattisgarh regarding R&R compensation status towards land acquisition award passed. On perusal of the said communication/data, it has been observed that part of the award has already been disbursed and part of the awards yet to be disbursed and <u>thus the condition may be treated as partly complied.</u></td></tr>
<tr><td></td><td colspan="3"><u>EC Letter no. J-13011/8/2006-IA.II(T) dated 08.06.2006 for 2x250 MW (Phase II)</u></td></tr>
<tr><td></td><td><u>Condition no. (ii)</u></td><td>· Through continuous efforts, the Company has been able to achieve 100% ash utilisation now.
· The Ash utilization (in percentage) during the previous years is given below:
<table><tr><th>Year</th><th>4x250 MW</th><th>4x600 MW</th></tr><tr><td>2022-23</td><td>98.9</td><td>98.8</td></tr><tr><td>2023-24</td><td>100.3</td><td>101.9</td></tr><tr><td>2024-25</td><td>94.3</td><td>92.0</td></tr><tr><td>2025-26</td><td>107.9</td><td>108.1</td></tr></table>· It is submitted that Fly ash Utilization notification of 1999 and its subsequent amendments has been superseded by the latest Fly ash Utilization Notification, 2021.
· Thus in view of the above, it is requested that the ash utilisation by the TPP may be evaluated in line with the latest Fly ash Utilization Notification, 2021 and its amendment-.
In light of the above, the condition may please be reported as complied with.</td><td>100% fly ash utilization has not been achieved within 9 years as stipulated in the EC condition</td></tr>
<tr><td></td><td colspan="3"><u>EC Amendment letter no. J-13011/8/2006-IA.II(T) dated 13.08.2021 (4x250 MW)</u></td></tr>
<tr><td></td><td><u>Additional Condition no. 11(ii)</u></td><td>· Through continuous efforts, the Company has been able to achieve 100% ash utilisation now.
· The Ash utilization (in percentage) during the previous years is given belo</td><td>The condition has not been effectively complied with.</td></tr>
</table>

<table>
<tr><th>Sl. No.</th><th>EC Condition No.</th><th>ATR submitted by the PP</th><th>IRO Closure report dated 27/03/2026</th></tr>
<tr><td></td><td></td><td>w:<table><tr><th>Year</th><th>4x250 MW</th><th>4x600 MW</th></tr><tr><td>2022-23</td><td>98.9</td><td>98.8</td></tr><tr><td>2023-24</td><td>100.3</td><td>101.9</td></tr><tr><td>2024-25</td><td>94.3</td><td>92.0</td></tr><tr><td>2025-26</td><td>107.9</td><td>108.1</td></tr></table>· It is submitted that Fly ash Utilization notification of 1999 and its subsequent amendments has been superseded by the latest Fly ash Utilization Notification, 2021.
· Thus in view of the above, it is requested that the ash utilisation by the TPP may be evaluated in line with the latest Fly ash Utilization Notification, 2021 and its amendment-.
In light of the above, the condition may please be reported as complied with.</td><td></td></tr>
<tr><td></td><td colspan="3"><u>4x600 MW Thermal Power Plant - EC letter no. J-13012/117/2008-IA.II(T) dated 18.03.2011 for 2x600 MW (Unit#1 & Unit#2)</u></td></tr>
<tr><td></td><td><u>Specific Condition no. (xvi)</u></td><td>· Through continuous efforts, the Company has been able to achieve 100% ash utilisation now.
· The Ash utilization (in percentage) during the previous years is given below:<table><tr><th>Year</th><th>4x250 MW</th><th>4x600 MW</th></tr><tr><td>2022-23</td><td>98.9</td><td>98.8</td></tr><tr><td>2023-24</td><td>100.3</td><td>101.9</td></tr><tr><td>2024-25</td><td>94.3</td><td>92.0</td></tr><tr><td>2025-26</td><td>107.9</td><td>108.1</td></tr></table>· It is submitted that Fly ash Utilization notification of 1999 and its subsequent amendments has been superseded by the latest Fly ash Utilization Notification, 2021.
· Thus in view of the above, it is requested that the ash utilisation by the TPP may be evaluated in line with the latest Fly ash Utilization Notification, 2021 and its amendment-.</td><td>As per the stipulated condition Utilization of 100% Fly Ash generated shall be made from 4th year of operation and status of implementation shall be reported to the Regional Office of the Ministry from time to time.
Project Authority has not made available any document in support of 100 percent fly ash utilization achieved from 4th year of operation. In the present updated ATR, Project Authority claims that 100% ash utilization was achieved during the period 2025-2026 and the Fly ash Utilization Notification, 1999 and its subsequent amendments have been superseded by the latest Fly Ash Utilization Notification, 2021 and thus Project Authority claims that ash utilization by this Project may be evaluated in line with the latest Fly ash Utilization Notification, 2021.
The condition has not been effectively complied with.</td></tr>
<tr><td></td><td><u>Specific Condition no. (xvii)</u></td><td>· Ash was utilised for low-lying area filling in the year 2023-24 after obtaining necessary NOC from CECB.</td><td>As per the stipulated condition, no ash shall be disposed of in low lying area.
As informed by the Project Authority pa</td></tr>
</table>

Sl. No.	EC Condition No.	ATR submitted by the PP	IRO Closure report dated 27/03/2026
		· Subsequently, CECB vide letter dated 26.11.2024 has confirmed the compliance to the permissions granted for low lying area filling. · Copy of the CECB letter dated 26.11.2024 is attached as **Annexure-8.** · Since then no ash has been utilized for low-lying area filling.	rt of rehandling ash from the ash pond was partly used for levelling of low-lying areas, which was inconsistent with the stipulated EC condition and thus it was reported as partly complied. In the present updated reply/ATR, Project Authority claims that Ash was utilized for low-lying area filling in the year 2023-2024, duly after obtaining necessary NOC from CECB and thereafter no ash has been utilised for low-lying area filling. Project Authority ought to have amended the said EC condition before the disposal in the low-lying areas. However, Project Authority declared that after the year 2023-2024, re-handling of ash from the ash dyke is being reportedly utilised for backfilling of mine voids at Gare Palma IV/1 and Gare Palma IV/2 & IV/3 coal mines of JPL.
	<u>Specific Condition no. (xix)</u> Disposal of Bottom Ash in abandoned mines (if proposed to be undertaken) shall be carried out only after obtaining permission from DGMS and it shall be ensured that the bottom and sides of the mined out areas are adequately lined with clay before Bottom Ash is filled up. The project proponent shall inform the State Pollution Control Board well in advance before undertaking the activity.	· Fly ash is being utilized in backfilling of mine voids as per the mandate under the provisions of the Fly ash Utilization Notification dated 31.12.2021 and amendments thereof. · As per the notification or fly ash utilisation guidelines, separate NoC from State PCB is not required for utilizing the fly ash in backfilling of the mine voids. · CECB vide its letter dated 27.02.2026 has clarified that there is no requirement of NOC from CECB for utilizing fly ash in backfilling of mine voids.	As per the stipulated condition, the project proponent shall inform the State Pollution Control Board well in advance before undertaking the activity (i.e. before disposal of ash in abandoned mines). During the visit, Project Authority has not made available any document in support of the said condition and thus it was reported as "**Details are not made available regarding the NOC obtained from the State Pollution Control Board for ash disposal in the mine voids and intimation submitted by the Project Authority to the CECB before undertaking the activity**". In the updated ATR also Project Authority has not submitted any details regarding the intimation submitted by the Project Authority to the CECB before undertaking the ash disposal in the mine voids rather Project Authority reported that CTO of their mines mandates to use fly ash from the Thermal Power Plant for backfilling. In the said reply, Project Authority submitted a clarification received from the Regional Office of Chhattisgarh State Environment Conservation Board vide letter dated 27/02/2026, wherein CECB has reported that filling of ash generated from the power plants in coal mine

Sl. No.	EC Condition No.	ATR submitted by the PP	IRO Closure report dated 27/03/2026
			s and mixing with OB dumps should be done in accordance with the guidelines issued by the CPCB and Fly Ash Notification, wherein no mention about obtaining permission from the State PCB. In the preceding point at Sl.15, Project Authority declares that ash disposal in the low-lying area was carried out with the prior approval of CECB, whereas for filling at Mine voids, claims that no NOC is required. Since, Project Authority has not made available any supporting document regarding intimation submitted to the CECB before undertaking the ash disposal in the mine voids, the observation of this Office remains as communicated earlier. Further Ministry may examine the requirement of NOC from the CECB for the fly ash disposal in the Mines and take appropriate view.
	Specific Condition no. (xxiii) While identifying CSR activities it shall be ensured that need based assessment for the nearby villages within study area shall be conducted to study economic measures with action plan which can help in upliftment of poor section of society. Income generating projects consistent with the traditional skills of the people shall be undertaken. Development of fodder farm, fruit bearing orchards, vocational training etc. can form a part of su	· The CSR plan for every year is prepared based upon the need- assessment survey being carried out by our field team.	As per the condition, while identifying CSR activities it shall be ensured that need based assessment for the nearby villages within study area shall be conducted to study economic measures with action plan which can help in upliftment of poor section of society. Income generating projects consistent with the traditional skills of the people shall be undertaken. Project Authority submitted the details of CSR activities undertaken during the period 2024-2025. Project Authority claims that CSR plan is prepared and implemented based upon the need-based assessment, but no documents are made available in their reply. Ministry may take appropriate view.

Sl. No.	EC Condition No.	ATR submitted by the PP	IRO Closure report dated 27/03/2026
	ch programme. Company shall provide separate budget for community development activities and income generating programmes. Vocational training programme for possible self employment and jobs shall be imparted to identified villagers free of cost.		
	EC Amendment Letter no. J-13012/117/2008.IA.II(T) dated 10.01.2014		
	Additional Specific Condition no. 6 (A) (xxxiii)- The existing ash dyke shall be utilized for the expansion for an interim period not exceeding three years subject to ash dyke having necessary capacity to handle additional ash on account of the expansion units. A new ash dyke shall be constructed within three years to meet the requirement of substantial quantity of ash that would be generated by the expansion plant.	JPL has already submitted EC Amendment Proposal to seek permanent permission to continue use of existing ash dyke of 4x250 MW to dispose un-utilized ash of 4x600 MW and is under appraisal of the Ministry.	As per the EC condition, the existing ash dyke shall be utilized for the expansion for an interim period not exceeding three years. A new ash dyke shall be constructed within three years to meet the requirement of substantial quantity of ash that would be generated by the expansion plant. Project Authority utilizing the same ash pond beyond three years without amending the EC condition and thus the condition has not been complied with. It appears that Project Authority applied for an amendment in the EC. Ministry may take appropriate view.

In view of the above, EAC opined that Project Proponent may be asked to submit the current status on the Non complied and partially complied conditions as stated in the above report of the Regional Office – Raipur dated 27/03/2026.

41.6.4: Recommendations of EAC

In view of the foregoing and after detailed deliberations, the EAC recommended to **defer** the

proposal and sought for following additional information for further consideration of the proposal:

3.6.4. Deliberations by the EAC in current meetings

Observations and deliberations of the Committee:

42.6.6: ***The EAC noted the following***:

i. As per EC dated 18.03.2011, a separate ash dyke near Rodapali village was to be constructed for 4x 600 MW. However, the Ash dyke could not be constructed as the land for the proposed ash dyke area became part of a coal block. Based upon the request of JPL, MoEF&CC vide letter dated 26.04.2017 granted permission to construct the ash dyke on 236 ha land at an alternate location near village Dolesera located at a distance of 4.6 km from the plant site. Consent to Establish (CTE) for the same was granted by Chhattisgarh Environment Conservation Board (CECB) vide letter dated 27.04.2022. The present proposal of project proponent is not to construct the ash dyke in the 236 Ha and use the existing ash dyke developed for 4 x250 MW permanently.

ii. The Company's management intends to use the 236 Ha of land acquired for ash dyke for setting up of the new power plant as per the Invitation to Invest of Government of Chhattisgarh dated 30.06.2025.

iii. The Committee noted that proponent has obtained amendment in the existing EC with respect to use of existing ash dyke of 4x250 MW for unutilized ash of 4x600 MW on 10/01/2014, 26/04/2017, 28/08/2020, 28/10/2021 and 24/02/2023.

iv. Adequacy of the existing ash dyke of 4x250 MW for disposal of ash from 4x600 MW on permanent basis was deliberated upon by the EAC in detail. The committee deliberated on the existing ash dyke volume availability, Action plan for excavation and use of already stored ash in the ash dyke, Slope Stability study of Ash dyke by NIT Raipur. After deliberations, the Committee opined that recommendations of NIT Raipur shall be complied with.

v. The expected life of existing ash dyke will increase from 1.6 years till the life of the 4x250 MW & 4x600 MW TPP due to the concurrent excavation and utilization plan.

vi. Committee deliberated on the sub-committee site inspection report and reply submitted by the proponent.

vii. Committee deliberated on the report of Regional Office dated 27/3/2026 and observed the following:

- Project proponent shall comply with the conditions prescribed in the notification dated 21/05/2020 regarding coal transportation.
- Project proponent shall submit the relevant supporting documents regarding implementation of Compensatory Afforestation and catchment area treatment plan, Third-party report on monitoring & evaluation of Green Belt / plantation, documents regarding 100 percent fly ash utilization, R&R plan & its implementation status, formation of monitoring committee, CSR activities undertaken, details of schemes being implemented for tribal families, periodic maintenance of the coal transportation road undertaken and details of coal characteristics to the Regional Office of MoEF&CC.
- Project Authority needs to apply for amendment in the existing ECs for the conditions related to in-built continuous monitoring for radio activity and heavy metals in coal, annual social audit by govt institute.

After deliberations, the Committee opined project proponent to take corrective action on the above and compliance status to be submitted to the Ministry and Regional Office within 30 days from the date of grant of EC amendment.

viii. The EAC also deliberated on the additional information submitted by the project proponent and found it satisfactory.

Recommendations of the Committee:

42.6.7: In view of the foregoing and after the detailed deliberations, the Committee ***partially recommended*** the instant proposal for grant of amendment in the ECs dated 18/03/2011 & 04/11/2011 and its subsequent amendment dated 24/02/2023 as detailed below **subject to stipulation of following additional specific conditions.** Other terms and conditions prescribed in EC dated 18/03/2011 & 04/11/2011 and its subsequent amendments shall remain unchanged:

Paragraphs of EC amendment letter dated 24/02/2023	Details as per EC amendment dated 24/02/2023	Amendment sought by the project proponent	Recommendations of EAC as per MoM
Para no 3, 4 & 5 of EC amendment dated 24.02.2023	Permission to use existing ash dyke of 4x250 MW for unutilized ash/ bottom ash of 4x600 MW has been granted till June 2024.	Permission to continue use existing ash dyke of 4x250 MW for unutilized ash of 4x600 MW permanently	Permission to use existing ash dyke of 4x250 MW for 4x600 MW TPP permanently subject to stipulation of following additional specific conditions:

3.6.5. Recommendation of EAC

Recommended

3.6.6. Details of Environment Conditions

3.6.6.1. Specific

Additional specific conditions	
1.	236 Ha of additional land acquired for ash dyke for 4x600 MW shall be utilized only for developing the thermal power plant as per Government of Chhattisgarh Invitation to Invest letter dated 30.06.2025. No other activity is permitted in the said land. Compliance status in this regard shall be submitted to the Regional Office in this regard along with the six monthly compliance report
2.	Ash dyke stability study for the 4x250 MW situated in an area of 198 Ha shall be conducted through reputed government organisation once in six months and the recommendations of the study report shall be duly complied with
3.	All the recommendations of the stability analysis report of NIT Raipur shall be complied with
4.	PP shall expedite the planation activities and plantation shall be done in this financial year (2026-27) as per the action plan given below:

Sl. No	Location	Area	No of Saplings	Remark
1	From Plant Gate to Gare	Approx. 09 KM length	10,000	On completion of road construction being done by

	<table><tr><th>Sl. No</th><th>Location</th><th>Area</th><th>No of Saplings</th><th>Remark</th></tr><tr><td></td><td>Mines</td><td></td><td></td><td>PWD and as per availability of road side land</td></tr><tr><td>2</td><td>Near Ash dyke</td><td>Approx. 4 Acres</td><td>5000</td><td>Gap plantation. Replacement and strengthening of existing plantation</td></tr><tr><td>3</td><td>Miyawaki Planation</td><td>1.5 Acres</td><td>10,000</td><td>-</td></tr><tr><td>4</td><td>Plantation in nearby Villages</td><td>-</td><td>30,000</td><td>Through CSR</td></tr><tr><td>5</td><td>Distribution of fruit tree saplings</td><td>-</td><td>25,000</td><td>Through CSR</td></tr><tr><td>6</td><td>In and around the Plant</td><td>-</td><td>20,000</td><td>Replacement and strengthening of existing plantation</td></tr><tr><td colspan="3">Total</td><td>1,00,000</td><td></td></tr></table>
5.	PP shall expedite to start construction of nearby roads, geotagged pictures of before and after construction of the road shall be submitted to the Regional office.
6.	PP shall deploy vacuum based vehicle for everyday cleaning of the road in and around plant site at least for 5 KM. Sprinkling on the road side shall be carried out regularly (twice in a day) and data shall be maintained mentioning about its functionality
7.	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 to concern RO
8.	Project proponent shall comply with the following non-conformities as reported in the report of the Regional Office dated 27/03/2026 within 30 days from the date of issue of EC amendment letter: ● Project proponent shall comply with the conditions prescribed in the notification dated 21/05/2020 regarding coal transportation. ● Project proponent shall submit the relevant supporting documents regarding implementation of Compensatory Afforestation and catchment area treatment plan, Third-party report on monitoring & evaluation of Green Belt / plantation, documents regarding 100 percent fly ash utilization, R&R plan & its implementation status, formation of monitoring committee, CSR activities undertaken, details of schemes being implemented for tribal families, periodic maintenance of the coal transportation road undertaken and details of coal characteristics to the Regional Office of MoEF&CC. ● Project Authority needs to apply for amendment in the existing ECs for the conditions related to in-built continuous monitoring for radio activity and heavy metals in coal, annual social audit by govt institute.

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 Sahaney	Member (EAC)	har************@imd.gov.in	Absent
9	Prof R M Bhattacharjee	Member (EAC)	rmb************@iitism.ac.in	Present
10	Dr Santoshkumar Hampannavar	Member (EAC)	san************@yahoo.com	Present
11	Sundar Ramanathan	Scientist - F	r.s*****@nic.in	Present
12	Shri Prasoon Gargava	Scientist – F	pra*********@nic.in	Present
13	Dr. Umesh Jagannathrao Kahalekar	Member, EAC	uka*******@rediffmail.com	Present

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

Date of zero draft MoM sent to Chairman: 08/05/2026
Approval by Chairman: 11/05/2026
Uploading on PARIVESH: 11/05/2026

SUMMARY RECORD OF THE FORTY SECOND (42nd) MEETING OF EXPERT APPRAISAL COMMITTEE (EAC) HELD DURING 30th APRIL 2026 FOR ENVIRONMENT APPRAISAL OF THERMAL SECTOR PROJECTS THROUGH PHYSICAL MODE.

30th APRIL, 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 41st Meeting of the EAC (Thermal): The minutes of the 41st Meeting of the EAC (Thermal) held on 8th April, 2026, has been confirmed by the EAC as uploaded on PARIVESH.

Agenda Item No. 42.1

42.1: Expansion of Existing Capacity of thermal power plant from 600 MW to 1400 MW by addition of 1x800 MW coal based Ultra supercritical thermal power plant (phase-II) in the existing premises of **M/s. Jhabua Power Limited** at village-Barela & Gorakhpur, Tehsil – Ghansore, Dist.-Seoni, Madhya Pradesh – **Terms of Reference-Regarding**.

[Proposal no. IA/MP/THE/569574/2026, F.No. J-13012/105/2008-IA.II(T)]

42.1.1: M/s. Jhabua Power Limited has made an online application vide proposal no. IA/MP/THE/569574/2026 dated 07/04/2026 along with application in prescribed format CAF, Form – I (Part A and Part B), copy of PFR and proposed TORs for 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 appraised at Central Level. The project does not attract the provisions of general condition of the EIA Notification, 2006.

Name of the EIA consultant: M/s MITCON Consultancy & Engineering Services Ltd., Pune, Maharashtra. Certificate No. NABET/EIA/24-27/RA 0343. Valid up to 05.02.2027.

Observation and deliberation of the EAC

42.1.2: The Committee observed and noted the following

i. The instant proposal is for Proposed Expansion of the Existing Capacity of thermal

power plant from 600 MW to 1400 MW by addition of 1x800 MW coal based Ultra supercritical thermal power plant (phase-II) in the existing premises of M/s. Jhabua Power Limited at village-Barela & Gorakhpur, Tehsil – Ghansore, Dist.-Seoni, Madhya Pradesh.

ii. As per existing Environmental Clearance the Ash Pond area is 36.4 Ha, while during the discussion, EAC observed that Project Proponent has developed a temporary ash storage area inside the main plant. Besides, some quantum of ash is also being disposed of outside the plant premises. In this regard, neither the PP nor the consultant has shown any statutory permissions obtained from the State Pollution Control Board.

iii. Project Proponent was unable to describe the salient features of the proposed expansion project including the proposed environmental safeguards.

iv. The baseline data for the proposed expansion was taken for the period of January to March 2026, but Project Proponent was unable to explain the data in the EAC.

v. EAC noted that the total build-up area for township was greater than 20,000 sqm. However, Project Proponent was unable to provide the status of statuary clearance for the same.

vi. EAC noted that Ministry is in receipt of a Public Representation against this proposal and asked the Project Proponent to submit the point wise reply of the representation received.

Recommendations of the Committee

42.1.3: In view of the foregoing and after detailed deliberations, the ***Committee recommended to return the proposal in its present form.***

Agenda Item No. 42.2

42.2: Expansion of Raipur Thermal Power Plant from 2970 MW [Phase I (2x685)MW + Phase II (2x800)MW] to 4570 MW by adding 2x800 MW (Under Phase III) Ultra Super Critical TPP by **M/s. Adani Power Limited**, at Villages Raikheda, Gaitara & Chicholi, Tilda Block, Raipur **District, Chhattisgarh – Prescribing of Terms of Reference- regarding.**

[Proposal no. IA/CG/THE/574628/2026, F.No. J-13012/62/2008-IA. II(T)]

42.2.1: M/s Adani Power Limited (APL), Raipur has made an application online vide proposal no.: IA/CG/THE/574628/2026 dated 13.04.2026 in the prescribed format (CAF, Form – I Part A & B) along with the copy of Pre-Feasibility Report and proposed Terms of References 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 appraised at Central Level. The project does not attract the provisions of general condition of the EIA Notification, 2006.

Name of the EIA consultant: M/s Gaurang Environmental Solutions Pvt. Ltd. [S. No. 98, List of ACOs with their Certificate No. NABET/EIA /23-26/RA 0338 dated 16.07.2024 valid upto 07.12.2026].

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

42.2.2: The existing project of 1370 (2x685) MW was accorded Environmental Clearance vide letter no. J-13012/62/2008-IA. II (T) dated 09.05.2011 and subsequent amendments in the EC dated 13.06.2013, 18.11.2014, 04.02.2015, 09.12.2015, 20.01.2026 and EC transferred dated 05.11.2019 & 24.04.2023 for 1370 (2x685) MW (Phase- I). EC for 1600 (2x800) MW (Phase-II) accorded on dated 01.11.2024. Consent to Operate for the Phase I was accorded by Chhattisgarh Environment Conservation Board(CECB) vide lr. No. 11738 /TS/CECB/2025 dated 11.03.2025. The validity of CTO is up to 31.03.2028.

42.2.3: Implementation status of the existing EC:

S. No.	Configu -ration	Capacity (MW)	As per EC dated:	Implementation Status as on 17.04.2026	Production as per CTO
1	Phase I: 2x685 MW	1370 MW	09.05.2011 and subsequent EC amendments dated 13.06.2013,18.11.2014, 04.02.2015, 09.12.2015, 20.01.2026 & EC transfer dated 05.11.2019 & 24.04.2023	Both the units are operational: Unit 1: 01.06.2015 Unit 2: 01.04.2016	1370 MW
2	Phase II: 2x800 MW	1600 MW	01.11.2024	Units are Under Construction	

42.2.4: Compliance to MoEF&CC Notification dated 11/07/2025 regarding SO_2 emission norms: The status of compliance to the SO_2 emission norms shall be furnished as per the MoEF&CC Notification dated 11/07/2025:

i. Categorization details of TPP: "C" (of existing units)
ii. Sulfur content of the coal to be fired in the boiler: **<0.50 (%)**
iii. Status of SO_2 emission control facility for the existing unit:
   Phase I (Operational): 275 m Chimney as per MoEFCC notification dated 11.07.2025.
   Phase II (Under Construction): 120 m Chimney with FGD.
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 (bi-flue) is proposed, MoEF&CC Notification dated 11.07.2025 shall be followed.

42.2.5: Environmental site settings:

S. No.	Particulars	Details	Remarks
1.	Total Land	578.84 Ha (Existing: 358.15 Ha, Proposed: 220.69 Ha) (Private land: 578.84 Ha)	Land use: Industrial

<table>
<tr><th>S. No.</th><th>Particulars</th><th>Details</th><th>Remarks</th></tr>
<tr><td>2.</td><td>Land use break up</td><td>
<table>
<tr><th rowspan="2">Description</th><th colspan="3">Land Breakup (Ha)</th></tr>
<tr><th>2x685MW Ph I</th><th>2x800MW Ph II</th><th>2x800MW Ph III</th></tr>
<tr><td>Main Plant</td><td>14.16</td><td>20.23</td><td>23.00</td></tr>
<tr><td>Coal Handling System</td><td>23.48</td><td>10.11</td><td>31.00</td></tr>
<tr><td>Water System</td><td>34.4</td><td>32.37</td><td>32.0</td></tr>
<tr><td>Switch Yard</td><td colspan="3">Included in main Plant area</td></tr>
<tr><td>Green belt</td><td colspan="2">142.85</td><td>55.17</td></tr>
<tr><td>Roads</td><td colspan="3">Included in main Plant area</td></tr>
<tr><td>Ash pond</td><td colspan="2">60.70</td><td>26.00</td></tr>
<tr><td>Railway Siding</td><td colspan="3">Outside Plant Boundary</td></tr>
<tr><td>Water supply pipeline (inside plant boundary)</td><td colspan="3">Included in water system</td></tr>
<tr><td>Ash transport pipeline</td><td colspan="3">Included in main Plant area</td></tr>
<tr><td>Others: (Plant road, Township & Misc Building etc)</td><td>13.76</td><td>6.09</td><td>53.52</td></tr>
<tr><td>Sub Total</td><td colspan="2">358.15</td><td>220.69</td></tr>
<tr><td>Total (Phase I, II & III)</td><td colspan="3">578.84</td></tr>
</table>
</td><td>--</td></tr>
<tr><td>3.</td><td>Land acquisition details as per MoEF&CC O.M. dated 7/10/2014</td><td>358.15 Ha land is already in possession with APL for Phase I & II.
An Additional 220.69 Ha land required for Phase III is under process of acquisition.</td><td>Land Documents for the existing plant are submitted along with ToR application.</td></tr>
<tr><td>4.</td><td>Existence of habitation & involvement of R&R, if any.</td><td>Project site: Nil
Name of villages - Raikheda, Gaitra & Chicoli- No R&R
Study area:
<table>
<tr><th>S. No.</th><th>Habitation</th><th>Distance (km)</th><th>Direction</th></tr>
<tr><td>1</td><td>Gaitara</td><td>0.19</td><td>N</td></tr>
<tr><td>2</td><td>Bhatapara</td><td>0.2</td><td>SE</td></tr>
<tr><td>3</td><td>Raikhera</td><td>0.42</td><td>SSE</td></tr>
<tr><td>4.</td><td>Khapri</td><td>0.6</td><td>WNW</td></tr>
<tr><td>5.</td><td>Gaurkhera</td><td>1.40</td><td>NE</td></tr>
<tr><td>6.</td><td>Sontara</td><td>1.42</td><td>SW</td></tr>
<tr><td>7.</td><td>Murra</td><td>1.96</td><td>SE</td></tr>
</table>
</td><td>Status of R&R. - Not applicable as R&R not involved.
There are 84 Villages in study area of 10 km radius.</td></tr>
</table>

<table>
<tr><th>S. No.</th><th>Particulars</th><th>Details</th><th>Remarks</th></tr>
<tr><td></td><td></td><td>
<table>
<tr><td>8</td><td>Chicholi</td><td>2.3</td><td>NE</td></tr>
<tr><td>9</td><td>Marhi</td><td>2.45</td><td>WSW</td></tr>
<tr><td>10</td><td>Tarashiv</td><td>2.71</td><td>N</td></tr>
<tr><td>11</td><td>Dhansuli</td><td>3.10</td><td>S</td></tr>
<tr><td>12</td><td>Khamaria</td><td>3.20</td><td>NW</td></tr>
<tr><td>13</td><td>Deogaon</td><td>3.57</td><td>SW</td></tr>
<tr><td>14</td><td>Amliralav</td><td>3.60</td><td>SW</td></tr>
<tr><td>15</td><td>Mohrenga</td><td>3.70</td><td>ESE</td></tr>
<tr><td>16</td><td>Nakti Khapri</td><td>3.75</td><td>NW</td></tr>
<tr><td>17</td><td>Janjgira</td><td>4.00</td><td>W</td></tr>
<tr><td>18</td><td>Konari</td><td>4.20</td><td>NW</td></tr>
<tr><td>19</td><td>Bangoli</td><td>4.4</td><td>S</td></tr>
<tr><td>20</td><td>Chataud</td><td>4.40</td><td>NNE</td></tr>
<tr><td>21</td><td>Khaulidabri</td><td>4.66</td><td>E</td></tr>
<tr><td>22</td><td>Kurra</td><td>4.7</td><td>SSW</td></tr>
</table>
</td><td></td></tr>
<tr><td>5.</td><td>Existence of school and hospital if any</td><td>
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 colspan="4">Schools/Educational Institutions</td></tr>
<tr><td>1</td><td>Swami Atmanand High School, Sontara,</td><td>1.0</td><td>South</td></tr>
<tr><td>2</td><td>Govt. Primary School Mura</td><td>1.0</td><td>ESE</td></tr>
<tr><td>3</td><td>Middle School, Mura</td><td>1.0</td><td>ESE</td></tr>
<tr><td>4</td><td>Govt. Primary School Khapri</td><td>1.28</td><td>W</td></tr>
<tr><td>5</td><td>PVT Shiran Public School Kumhari</td><td>1.39</td><td>SE</td></tr>
<tr><td>6</td><td>Uday Canvent School</td><td>1.5</td><td>SE</td></tr>
<tr><td>7</td><td>Govt Primary School Gourkheda</td><td>1.56</td><td>NE</td></tr>
<tr><td>8</td><td>Govt. High School Tarashiv</td><td>1.85</td><td>North</td></tr>
<tr><td>9</td><td>Govt. Higher Secondary School, Mohrenga</td><td>1.9</td><td>ESE</td></tr>
<tr><td>10</td><td>Govt. Primary School Madhi</td><td>2.0</td><td>West</td></tr>
<tr><td>11</td><td>Govt Primary school chicholi</td><td>2.3</td><td>ENE</td></tr>
<tr><td>12</td><td>Elementary school, Chicholi</td><td>2.3</td><td>ENE</td></tr>
<tr><td>13.</td><td>Govt New Primary School Mohrenga</td><td>2.5</td><td>SE</td></tr>
<tr><td>14.</td><td>Govt Primary School Khaulidabri</td><td>2.5</td><td>ESE</td></tr>
<tr><td>15.</td><td>Primary School, Dhansuli</td><td>3.15</td><td>South</td></tr>
<tr><td>16.</td><td>Government High School Kundru</td><td>4.7</td><td>NW</td></tr>
</table>
B. Hospital
Project site:- None
Study Area:
</td><td></td></tr>
</table>

<table>
<tr><th>S. No.</th><th>Particulars</th><th>Details</th><th>Remarks</th></tr>
<tr><td></td><td></td><td>
<table>
<tr><th>S. No.</th><th>Hospital</th><th>Distance (km)</th><th>Direction</th></tr>
<tr><td colspan="4">Hospitals/Health care facilities</td></tr>
<tr><td>1</td><td>SHC Murra</td><td>1.0</td><td>SE</td></tr>
<tr><td>2</td><td>SHC Mohrenga</td><td>2.23</td><td>East</td></tr>
<tr><td>3</td><td>Praathmik Swaasthya Kendra, Bangoli</td><td>3.8</td><td>South</td></tr>
<tr><td>4</td><td>Govt. Ayurvedic Hospital Khauna</td><td>5.76</td><td>SW</td></tr>
<tr><td>5</td><td>Kanti Devi Memorial Hospital</td><td>6.7</td><td>SE</td></tr>
<tr><td>6</td><td>Anand Hospital, Kharora</td><td>8.0</td><td>SE</td></tr>
<tr><td>7</td><td>MRM Multispecialty Hospital, Kharora,</td><td>8.49</td><td>SE</td></tr>
</table>
</td><td></td></tr>
<tr><td>6.</td><td>Latitude and Longitude of all corners of the project site.</td><td>
A. Plant Site
<table>
<tr><th>S.NO.</th><th>LATITUDE</th><th>LONGITUDE</th></tr>
<tr><td colspan="3">Phase I & II Coordinates</td></tr>
<tr><td>1</td><td>21°27'16.93"N</td><td>81°52'5.32"E</td></tr>
<tr><td>2</td><td>21°27'5.66"N</td><td>81°52'11.12"E</td></tr>
<tr><td>3</td><td>21°27'2.23"N</td><td>81°52'6.66"E</td></tr>
<tr><td>4</td><td>21°26'53.45"N</td><td>81°52'5.59"E</td></tr>
<tr><td>5</td><td>21°26'39.41"N</td><td>81°51'53.99"E</td></tr>
<tr><td>6</td><td>21°26'35.53"N</td><td>81°51'50.97"E</td></tr>
<tr><td>7</td><td>21°26'27.93"N</td><td>81°51'45.99"E</td></tr>
<tr><td>8</td><td>21°26'22.65"N</td><td>81°51'32.72"E</td></tr>
<tr><td>9</td><td>21°26'38.64"N</td><td>81°51'24.60"E</td></tr>
<tr><td>10</td><td>21°26'37.05"N</td><td>81°51'9.59"E</td></tr>
<tr><td>11</td><td>21°26'34.69"N</td><td>81°50'58.19"E</td></tr>
<tr><td>12</td><td>21°26'25.62"N</td><td>81°50'48.16"E</td></tr>
<tr><td>13</td><td>21°26'45.32"N</td><td>81°50'48.42"E</td></tr>
<tr><td>14</td><td>21°26'49.55"N</td><td>81°50'53.63"E</td></tr>
<tr><td>15</td><td>21°26'52.42"N</td><td>81°50'44.48"E</td></tr>
<tr><td>16</td><td>21°26'58.32"N</td><td>81°50'49.59"E</td></tr>
<tr><td>17</td><td>21°27'0.07"N</td><td>81°50'41.39"E</td></tr>
<tr><td>18</td><td>21°27'3.98"N</td><td>81°50'39.90"E</td></tr>
<tr><td>19</td><td>21°27'5.50"N</td><td>81°50'42.05"E</td></tr>
<tr><td>20</td><td>21°27'17.06"N</td><td>81°50'40.90"E</td></tr>
<tr><td>21</td><td>21°27'15.28"N</td><td>81°50'35.33"E</td></tr>
<tr><td>22</td><td>21°27'18.24"N</td><td>81°50'33.10"E</td></tr>
<tr><td>23</td><td>21°27'21.92"N</td><td>81°50'31.90"E</td></tr>
<tr><td>24</td><td>21°27'23.03"N</td><td>81°50'34.26"E</td></tr>
<tr><td>25</td><td>21°27'21.16"N</td><td>81°50'38.28"E</td></tr>
<tr><td>26</td><td>21°27'27.07"N</td><td>81°50'36.24"E</td></tr>
</table>
</td><td></td></tr>
</table>

S. No.	Particulars	Details			Remarks
		27	21°27'26.95"N	81°50'39.03"E	
		28	21°27'19.29"N	81°50'49.49"E	
		29	21°27'17.33"N	81°51'0.22"E	
		30	21°27'14.74"N	81°51'6.38"E	
		31	21°27'21.92"N	81°51'8.22"E	
		32	21°27'25.57"N	81°51'9.49"E	
		33	21°27'27.95"N	81°51'10.09"E	
		34	21°27'27.85"N	81°51'5.37"E	
		35	21°27'23.29"N	81°50'59.62"E	
		36	21°27'21.39"N	81°51'0.25"E	
		37	21°27'21.35"N	81°50'57.96"E	
		38	21°27'26.86"N	81°50'56.62"E	
		39	21°27'28.19"N	81°50'57.76"E	
		40	21°27'31.61"N	81°51'3.27"E	
		41	21°27'35.06"N	81°51'0.11"E	
		42	21°27'36.97"N	81°50'58.77"E	
		43	21°27'39.89"N	81°51'0.07"E	
		44	21°27'41.30"N	81°51'1.21"E	
		45	21°27'41.42"N	81°51'4.19"E	
		46	21°27'40.28"N	81°51'5.18"E	
		47	21°27'39.32"N	81°51'7.44"E	
		48	21°27'39.57"N	81°51'8.66"E	
		49	21°27'37.79"N	81°51'13.86"E	
		50	21°27'33.76"N	81°51'17.53"E	
		51	21°27'35.36"N	81°51'20.67"E	
		52	21°27'37.60"N	81°51'17.76"E	
		53	21°27'41.49"N	81°51'19.66"E	
		54	21°27'41.95"N	81°51'21.77"E	
		55	21°27'41.49"N	81°51'26.43"E	
		56	21°27'42.82"N	81°51'30.80"E	
		57	21°27'42.33"N	81°51'34.72"E	
		58	21°27'40.43"N	81°51'37.59"E	
		59	21°27'45.22"N	81°51'37.78"E	
		60	21°27'43.75"N	81°51'44.16"E	
		61	21°27'46.01"N	81°51'45.01"E	
		62	21°27'45.96"N	81°51'51.76"E	
		63	21°27'44.64"N	81°51'53.49"E	
		64	21°27'41.09"N	81°51'52.27"E	
		65	21°27'38.17"N	81°51'57.16"E	
		66	21°27'35.82"N	81°51'57.20"E	
		67	21°27'31.84"N	81°51'52.50"E	
		68	21°27'28.95"N	81°51'50.42"E	
		69	21°27'26.69"N	81°51'44.88"E	

S. No.	Particulars	Details			Remarks
		70	21°27'23.75"N	81°51'41.59"E	
		71	21°27'21.98"N	81°51'44.88"E	
		72	21°27'19.90"N	81°51'36.66"E	
		73	21°27'18.02"N	81°51'33.26"E	
		74	21°27'18.19"N	81°51'28.34"E	
		75	21°27'20.50"N	81°51'24.01"E	
		76	21°27'26.23"N	81°51'18.13"E	
		77	21°27'15.35"N	81°51'20.82"E	
		78	21°27'1.81"N	81°51'20.26"E	
		79	21°27'0.76"N	81°51'33.41"E	
		80	21°27'8.98"N	81°51'44.09"E	
		81	21°27'10.68"N	81°51'34.93"E	
		82	21°27'10.88"N	81°51'30.33"E	
		83	21°27'13.26"N	81°51'30.50"E	
		84	21°27'12.16"N	81°51'56.93"E	
		85	21°27'16.86"N	81°51'57.80"E	
		Phase III Coordinates			
		86	21°26'44.90"N	81°50'42.05"E	
		87	21°26'32.15"N	81°50'42.76"E	
		88	21°26'23.77"N	81°50'46.44"E	
		89	21°26'19.41"N	81°50'40.29"E	
		90	21°26'21.17"N	81°50'35.97"E	
		91	21°26'30.38"N	81°50'32.72"E	
		92	21°26'36.68"N	81°50'35.84"E	
		93	21°26'38.17"N	81°50'31.43"E	
		94	21°26'30.72"N	81°50'25.64"E	
		95	21°26'33.23"N	81°50'17.87"E	
		96	21°26'38.42"N	81°50'14.96"E	
		97	21°26'42.49"N	81°50'14.56"E	
		98	21°26'47.27"N	81°50'14.25"E	
		99	21°26'54.99"N	81°50'14.23"E	
		100	21°26'51.93"N	81°50'9.20"E	
		101	21°26'50.80"N	81°50'4.93"E	
		102	21°26'48.34"N	81°49'52.41"E	
		103	21°26'51.71"N	81°49'45.86"E	
		104	21°26'44.37"N	81°49'38.36"E	
		105	21°26'47.09"N	81°49'37.03"E	
		106	21°26'49.22"N	81°49'33.28"E	
		107	21°26'55.31"N	81°49'32.37"E	
		108	21°27'2.97"N	81°49'34.48"E	
		109	21°27'2.12"N	81°49'40.48"E	
		110	21°27'15.54"N	81°49'48.97"E	
		111	21°27'15.90"N	81°49'54.97"E	

<table>
<tr><th>S. No.</th><th>Particulars</th><th>Details</th><th>Remarks</th></tr>
<tr><td></td><td></td><td>
<table>
<tr><td>112</td><td>21°27'13.21"N</td><td>81°49'56.14"E</td></tr>
<tr><td>113</td><td>21°27'13.31"N</td><td>81°49'59.06"E</td></tr>
<tr><td>114</td><td>21°27'18.82"N</td><td>81°49'55.62"E</td></tr>
<tr><td>115</td><td>21°27'23.49"N</td><td>81°50'2.01"E</td></tr>
<tr><td>116</td><td>21°27'17.46"N</td><td>81°50'15.06"E</td></tr>
<tr><td>117</td><td>21°27'27.76"N</td><td>81°50'21.36"E</td></tr>
<tr><td>118</td><td>21°27'29.05"N</td><td>81°50'34.57"E</td></tr>
</table>
B. Ash Pond
<table>
<tr><th>S.no.</th><th>Latitude</th><th>Longitude</th></tr>
<tr><td>1</td><td>21°27'11.33"N</td><td>81°49'54.41"E</td></tr>
<tr><td>2</td><td>21°27'11.39"N</td><td>81°50'0.42"E</td></tr>
<tr><td>3</td><td>21°27'17.84"N</td><td>81°49'59.48"E</td></tr>
<tr><td>4</td><td>21°27'18.95"N</td><td>81°49'58.41"E</td></tr>
<tr><td>5</td><td>21°27'21.47"N</td><td>81°50'1.75"E</td></tr>
<tr><td>6</td><td>21°27'18.30"N</td><td>81°50'10.15"E</td></tr>
<tr><td>7</td><td>21°27'15.20"N</td><td>81°50'15.63"E</td></tr>
<tr><td>8</td><td>21°27'4.82"N</td><td>81°50'15.41"E</td></tr>
<tr><td>9</td><td>21°27'4.74"N</td><td>81°49'54.44"E</td></tr>
</table>
</td><td></td></tr>
<tr><td>7.</td><td>Elevation of the project site</td><td>• Minimum site elevation is 287 m AMSL
• Maximum site elevation is 317 m AMSL</td><td></td></tr>
<tr><td>8.</td><td>Involvement of Forest land, if any.</td><td>No forest land is involved in the project.</td><td></td></tr>
<tr><td>9.</td><td>Water body (Rivers, Lakes, Pond, Nala, Natural Drainage, Canal etc.) exists within the project site as well as study area</td><td>Project site :- None
Study area:
<table>
<tr><th colspan="4">Water bodies</th></tr>
<tr><th>S. No.</th><th>Particulars</th><th>Distance (km)</th><th>Direction</th></tr>
<tr><td>1</td><td>Bhatapara Branch distributary</td><td>1.1</td><td>WSW</td></tr>
<tr><td>2</td><td>Jamuniya Nadi</td><td>2.15</td><td>NE</td></tr>
<tr><td>3.</td><td>Pindraon Tank</td><td>2.5</td><td>SSE</td></tr>
<tr><td>4.</td><td>Khauna Minor</td><td>3.4</td><td>SW</td></tr>
<tr><td>5.</td><td>Kirna Tank</td><td>3.6</td><td>WNW</td></tr>
<tr><td>6</td><td>Sillari Distributary</td><td>4.0</td><td>WSW</td></tr>
<tr><td>7</td><td>Kumhari Tank</td><td>4.35</td><td>NE</td></tr>
<tr><td>8</td><td>DhumnaNala</td><td>5.9</td><td>WNW</td></tr>
<tr><td>9</td><td>Patthra Nala</td><td>6.8</td><td>SW</td></tr>
<tr><td>10</td><td>Banjari Nala</td><td>8.0</td><td>NE</td></tr>
<tr><td>11</td><td>Pikndih Minor</td><td>8.2</td><td>S</td></tr>
</table>
</td><td></td></tr>
<tr><td>10.</td><td>Archaeological sites monuments/ historical temples etc.</td><td>None in 10 km radius study area.</td><td>Not Applicable</td></tr>
</table>

<table>
<tr><th>S. No.</th><th>Particulars</th><th>Details</th><th>Remarks</th></tr>
<tr><td>11.</td><td>Existence of ESZ/ ESA/ national park/wildlife sanctuary/biosphere reserve/ tiger reserve/elephant reserve etc. if any within the study area</td><td>No wildlife sanctuary, ESZ, Biosphere reserve, National Park in 10 km radius area. Hence NBWL clearance is 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>Khaulidabri P.F.</td><td>2.9</td><td>ESE</td></tr>
</table></td><td>--</td></tr>
<tr><td>12.</td><td>Facility envisaged in CRZ area (Only for coastal power plant)</td><td>Name of the facility in CRZ area NA
Recommendations of CZMA – NA
Status of CRZ clearance - NA</td><td>Not Applicable</td></tr>
<tr><td>13.</td><td>Involvement of Critically Polluted Area/Severely Polluted area as per 2018 CEPI score</td><td>• 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 Siltara ~ 24.5 km SW from project site.</td><td></td></tr>
</table>

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

<table>
<tr><th>S. No.</th><th>Existing power plant configuration and capacity</th><th>Proposed power Plant configuration and capacity</th><th>Total</th><th>Technology adopted</th></tr>
<tr><td>1.</td><td>1370 MW (2x685) MW</td><td rowspan="2">1600 (2x800) MW</td><td rowspan="2">4570 MW
(1385+1600+1600)</td><td rowspan="2">Super & Ultra Super-Critical</td></tr>
<tr><td>2</td><td>1600 MW (2x800) MW-Under Construction</td></tr>
</table>

42.2.7: The details of the fuel (coal/gas/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
Coal :						
Existing TPP (Phase- I)	6.77	Gondulpara Coal Mines in Hazaribagh District of	670 km	By Rail	Ash- <42 (%) Sulphur- <0.5 (%) Moisture- 17 (%) GCV – 3200 Kcal/Kg	Fuel Supply Agreement (FSA) & e-auction.

Details	Fuel requirement (MTPA)	Source	Distance from site (Kms)	Mode of Transportation	Coal characteristics (Worst case scenario)	Linkage document
Existing TPP (Phase- II) Under Construction	6.6	Jharkhand through e-auction			Ash- <40(%) Sulphur- <0.5 (%) Moisture- 17 (%) GCV – 3200 -4300 Kcal/Kg	Fuel Supply Agreement (FSA) & e-auction.
Proposed TPP (Phae- III)	6.5					
LDO/HSD:						
LDO/HSD (Operational Phase- I)	2500 KL/Annum	Local Market/ Vendor	50 – 100 KM	Road	Low Sulphur (3-5% mass)	Local Market/ Vendor
LDO/HSD (Under Construction Phase- II)	8000 KL/Annum	Local Market/Vendor	50 – 100 KM	Road	Low Sulphur (3-5% mass)	Local Market/ Vendor
LDO/HSD (Proposed Phase- III)	8000 KL/Annum	Local Market/Vendor	50 – 100 KM	Road	Low Sulphur (3-5% mass)	Local Market/ Vendor

42.2.8: Water requirement: Existing Water requirement is 1,67,123 m^3/day, sourced from Samoda Dam at Mahanadi River approx. at 35 km from Plant Site and the same has been obtained from Rajya Nivesh Prothsahan Board (Chhattisgarh Govt.) vide letter no. 354/SIPB/2021/238 dated 15.03.2024. The water requirement for the proposed project is estimated as 87,671 m^3/day, will be sourced from Kodar reservoir at 44 km from project site and application has been submitted to WRD, Raipur on 20.03.2026. The total water requirement for the proposed project is estimated as 32 MCM. The water will be transported to the plant site through dedicated pipelines. The specific water consumption for the power plant will be <2.5 m^3/MWhr.

42.2.9: Power Requirement: Existing power requirement of ~178 MW is obtained from existing plant. The power requirement for the proposed project is estimated as 96 MW, which will be obtained from the existing plant.

42.2.10: 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.	Type of Waste	Source	Quantity generated (TPA)	Mode of Treatment	Disposal
1	Municipal Solid Waste	Plant Canteen	50	Collected; segregated using color coded waste bin, Organic waste converters	Inorganic will be disposed via local municipal authorized vendor & Organic/Biodegradable waste by OWC.

S. No.	Type of Waste	Source	Quantity generated (TPA)	Mode of Treatment	Disposal
				(OWC)	
2	E-waste	IT & Telecom Equipment	~3 TPA	Collected; segregated	CPCB/SPCB Authorized Recycler
3	Battery waste from UPS	Automotive & Industrial	~6 TPA	Collected; segregated	CPCB/SPCB Authorized Recycler
4	Bio medical waste	First aid center	0.1 TPA	Collected; segregated	Authorized CBWTF&/or hospital having BMW disposal agreement with CBWTF
5	Ash	Plant Operation	Fly ash-2080000 TPA & Bottom ash-5,20,000 TPA		Cement plants, brick/block manufacturing industries, Mine Voids, Highway Construction, Export.
6	Hazardous waste				
a.	Used / Spent Oil (Cat.5.1)	Plant Operation	60 TPA	Collected; segregated	CPCB/SPCB Authorized Recycler
b.	Waste or residues Containing oil (Cat.5.2)	Plant Operation	5 TPA	Collected; segregated	CPCB/SPCB Authorized Recycler
c.	Empty Barrels/ containers/liners Contaminated with Hazardous chemicals/ wastes (Cat.33.1)	Plant Operation	12 TPA	Collected; segregated	CPCB/SPCB Authorized Recycler

42.2.11: Project Cost: Existing capital cost of project was 21,890 Cr. The capital cost of the proposed project is Rs. 15,740 Crores and the capital cost for environmental protection measures is proposed as Rs 1521 Crores. The annual recurring cost towards the environmental protection measures is proposed as Rs. 15.21 Crores The employment generation from the proposed expansion project is 276.

42.2.12: Greenbelt development: Existing green belt has been developed in 142.85 ha area which is about 39.88% of the total project area 358.15 ha with total sapling of 3,57,125 Trees (under development for Phase II: 24.85 Ha, 62,125 nos.of trees). Proposed greenbelt will be developed in 55.17 ha which is about 25 % of the total project area. Thus, total of 198.02 ha area (34.21 % of total project area 578.84 Ha) 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 1,37,925 saplings will be planted and nurtured in 55.17 hectares in 5 years.

42.2.13: Ash Management: Ash management for last three years:

Year	Quantity Generated (MT)	Quantity Utilized (MT)	% of utilization	Balance Quantity (MTP)	No of storage silos with capacity
2023-24	2316683	2318767	100.09	-	Existing 1200 MT x 3 No's Proposed 2500 MT x 3 No's
2024-25	2687915	2688431	100.02	-	
2025-26	2398140	2407025	100.37	-	

A. Fly ash Details for last three years: 592479 TPA

S. No.	Activity (as applicable)	Quantity	Percentage	Remarks (Prior approval of SPCB details to be mentioned)
1	Fly ash based products (bricks or blocks or tiles or fiber cement sheets or pipes or boards or panels)	60430	1.01	-
2	Cement manufacturing	2797373	47.21	-
3	Construction of roads, road and fly over embankment	23767	0.40	-
4	Filling up of low lying area	2345222	39.58	NOC Obtained
5	Filling of mine voids:	697999	11.78	NOC Obtained
	Total	5924791	100	-

B. Bottom ash generation for last three years: 1489433 TPA

S. No.	Activity (as applicable)	Quantity	Percentage	Remarks (Prior approval of SPCB details to be mentioned)
1.	Filling of mine voids:	1489433	100	NOC Obtained
	Total	1489433	100	

C. Legacy ash details: Nil

D. Ash Pond details: -

S. No.	Details of Ash pond	Ash pond 1	Total
1.	Status of ash pond (Active / Exhausted (yet to be reclaimed)/ Reclaimed)	Active	Active
2.	Area (Ha)	60.70	60.70
3.	Dyke height (m)	7.5	7.5
4.	Volume (m^3)	4552500	4552500
5.	Quantity of ash disposed (Metric Tons)	154406	154406
6.	Available volume in percentage (per cent) and quantity of ash can be further disposed (Metric Tons)	4853344	4853344
7.	Expected life of ash pond (number of years and months)	15 years	15 years
8.	Type lining carried in ash pond: HDPE lining of LDPE lining or clay lining or No lining	HDPE	HDPE
9.	Mode of disposal: Dry disposal or wet slurry (in case of wet slurry please specify whether HCSD or MCSD or LCSD)	HCSD	HCSD
10.	Ratio of ash: water in slurry mix (1:_____):	65:35	65:35
11.	Ash water recycling system (AWRS) installed and	Yes	Yes

S. No.	Details of Ash pond	Ash pond 1	Total
	functioning : Yes or No		
12.	Quantity of wastewater from ash pond discharged into land or water body (m^3)	Nil	Nil
13.	Last date when the dyke stability study was conducted and name of the organization who conducted the study:	25.02.2026, NIT Delhi	25.02.2026, NIT Delhi
14.	Last date when the audit was conducted and name of the organization who conducted the audit:	30.09.2025 NIT, Delhi	30.09.2025 NIT, Delhi

E. Proposed ash utilization plan for expansion project.

Details	Existing Generated (MTPA)	Proposed Generated (MTPA)	Total	Utilized (MTPA)	% of utilization	Balance Quantity (LMTPA)	No of storage silos with capacity
Ash (Fly & Bottom)	Phase I 2.84	Phase II: 2.64 Phase III: 2.60	8.08	8.08	100%	-	Existing 1200 MT x 3 Nos. Proposed 2500 MT x 4 Nos.

F. Ash pond details:

S. No.	Details of Ash pond	Ash pond
1.	Area (Ha)	26
2.	Dyke height (m)	15
3.	Volume (m^3)	39 Lac m^3
4.	Quantity of ash to be disposed (Metric Tons)	42.9 Lakh MT
5.	Expected life of ash pond (number of years and months)	Life of ash dyke is calculated as 20 years
6.	Type lining carried in ash pond: HDPE lining of LDPE lining or clay lining or No lining	HDPE
7.	Mode of disposal: Dry disposal or wet slurry (in case of wet slurry please specify whether HCSD or MCSD or LCSD)	HCSD/MCSD
8.	Ratio of ash: water in slurry mix (1:___):	65:35
9.	Ash water recycling system (AWRS): Yes or No	Yes
10.	Quantity of wastewater from ash pond to be discharged into land or water body (m^3)	0

42.2.14: Summary of violation under EIA, 2006/court case/show cause/direction if any, related to the project under consideration: There are 14 cases related to civil & other arbitrations. None of them are pertaining to Environment & Forest.

Summary of court cases

S. No.	Case no.	Court Details	Brief Summary of the Case	Last date of hearing	Next date/ Order Passed	Action taken by PP
1	W.P.PIL 87/2016	Chhattisgarh High	In the light of the Judgement passed by Hon'ble Supreme Court on 31st January 2014, with	06.02.2026	27.04.26	PP is diligently

S. No.	Case no.	Court Details	Brief Summary of the Case	Last date of hearing	Next date/ Order Passed	Action taken by PP
	Court on its own motion vs State of CG and Ors.	Court (Bilaspur Bench)	reference the Writ Petition No 79/2005 between Occupational Health and Safety Association and Union of India and other. Hon'ble Supreme Court of India has directed to all the High Courts of various State to examine whether CFTPPs are complying with safety standards and the rules and regulations relating to the health of the employees working in various CFTPPs throughout the country. The High Court should examine whether there is adequate and effective health delivery in place and whether there is any evaluation of occupational health status of workers and examine whether any effective medical treatment is provided to them. It is also appropriate to relegate it to the various High Courts to examine these issues with the assistance of the State Government after calling for necessary Reports from the CFTPPS situated in their respective States			pursuing this matter.
2	47/2013 Dy. Director-Industrial Health & Safety / Factory Inspector vs Rajkumar & Anr.	Labor Court, Raipur	There was a fatal accident at site where an employee of Simplex Sri Manoj Baraik died. On 07.10.2013 appearance of manager acknowledged. Bail obtained. Case against the Factory Manager has been disposed of on 06.05.2015, while against the occupier it is still pending.	06.05.2015	Awaited	The Occupier will contest the matter.
3	LPA 338/2015 Union of India Vs Gmr Chhattisgarh Energy Limited	Delhi High Court	Appellant Ministry of Railway aggrieved by the order of High Court dated 06.02.2015 passed in WP(C) No. 3047 of 2014 had filed this Letter of Patent Appeal Rules, High Court of Delhi assailing the legality and correctness of the Order of the single judge wherein the court allowed writ petition of GCEL by	15.10.2015	Awaited	PP is diligently pursuing this matter.

S. No.	Case no.	Court Details	Brief Summary of the Case	Last date of hearing	Next date/ Order Passed	Action taken by PP
			the invoking the doctrine of promissory estoppel that the Railway could not be permitted to contend subsequently that the permission which was granted to the GMR on 04.07.2011 was subject to the condition of logistics plan and passed the order on 06.02.2015.s			
4	WP(C) 1801/2017 M/S.GMR, Chhattisgarh Energy LTD.GCEL vs. Regional Commissioner	Orissa High Court	Regional Commissioner of the Regional Coal Mines Office, Sambalpur vide letter dated 15.09.2016 directed for payment towards the coal Mines Provident Fund as per the CMPF & MP Act, 1948. The said demand is being challenged in this petition on the premise that the employees are under the EPF Act and as such it would not be in the interest of such employees to shift to the CMPF. The High Court vide order dt. 22.02.2017 has stayed the operation of the demand from the Regional Commissioner.	22.02.2017	Awaited	PP is diligently pursuing this matter.
5	SLP (Civil) 13112/ 2019-- Converted to C.A. No. 13826/2025 GMR Chhattisgarh Energy Limited Vs Union of India	Supreme Court	SLP filed by GCEL against the order of Delhi High court wherein the Delhi High court has dismissed the petition of GCEL on the grounds of Delay and Latches. GCEL in its petition before Delhi High Court prayed for surrender of Ganeshpur Coal mine due to subsequent notification of Ministry of power to impose cap/ upper ceiling on the fixed charge/capacity charge. Performance Security BG = Rs. 159.34 Crores Paid 50% of Upfront Payment = Rs. 12.52 Crores Paid Fixed Charges = Rs. 5.72 Crores Total = 177.58 Crores Plus Incidental expenses towards Mining Lease & Coal Block Development Activities	12.02.2026	17.04.2026 (Tentative)	PP is diligently pursuing this matter.
6	SLP (Civil) 13151/ 2019- Converted to	Supreme Court	SLP filed by GCEL against the order of Delhi High court wherein the Delhi High court has dismissed the petition of GCEL	12.02.2026	Awaited	PP is diligently pursuin

S. No.	Case no.	Court Details	Brief Summary of the Case	Last date of hearing	Next date/ Order Passed	Action taken by PP
	C.A. No. 13827/2025 GMR Chhattisgarh Energy Limited Vs Union of India		on the grounds of Delay and Latches. GCEL in its petition before Delhi High Court prayed for surrender of Talabira Coal mine due to subsequent notification of Ministry of power to impose cap/ upper ceiling on the fixed charge/capacity charge. Performance Security BG = Rs. 294.95 Crores Paid 50% of Upfront Payment = Rs. 43.89 Crores Paid Fixed Charges = Rs. 11.68 Crores Total = Rs. 350.52 Crores Plus Incidental expenses towards Mining Lease & Coal Block Development Activities			g this matter.
7	W.A. No. 1377 of 2022 M/s. Adani Power Limited (Raipur Enenrgen Limited) Vs M/s. Hindalco. Industries Ltd.	Orissa High Court	Appeal preferred against the dismissal order of the High Courtin the Writ Petition filed by GMR against the order dated 18.04.2018 passed by Collector, Sambalpur whereby the collector has made the GCEL liable for the acts done by Hindalco and asked to pay 80% of the total compensation awarded which ought to have been the liability of Hindalco as per pervious orders. The total compensation to be paid is around Rs.12,50,000	04.08. 2023	Awaited	PP is diligently pursuing this matter.
8	WPC No. 1284/2023 Adani Power Limited Vs South East Central Railway	Chhattisgarh High Court	APL challenged the imposition and recovery of Engine Hire Charges by SECR under the EOL Scheme, which Adani Power claims is arbitrary and contrary to the agreement and policy, as they do not use the railway engine for shunting during loading/unloading. Amount involved: ₹7.14 crores (excluding GST) in EHC invoices, plus ₹2.2 crores already recovered through other charges, totaling over ₹9 crores in dispute	28.10. 2025	Awaited	PP is diligently pursuing this matter.
9	W.P.(C) 12296/2022 Raipur Energen Limited	Delhi High Court	Petition filed seeking to restrain the Mahanadi Coalfields Limited (MCL) from arbitrarily terminating the FSA dated 12.09.2020 between REL and MCL executed under Shakti	20.02. 2026	11.08.2026 (Tentative)	PP is diligently pursuing this matter.

S. No.	Case no.	Court Details	Brief Summary of the Case	Last date of hearing	Next date/ Order Passed	Action taken by PP
	Vs Union Of India & Ors.		Scheme. To further restrain MCL from forfeiting/appropriating the amount of INR 19,47,00,000 deposited by REL as Bid Security and that no coercive action until the disposal of this Petition.			
10	752/2015 (Case not yet registered as the issue of payment of Court fees still pending) Rakesh Kr. Agrawal vs GCEL & Ors.	District Court Raipur	Claim for damage due to leak in water pipeline to the tune of Rs. 6.02 Cr. by the applicant. National Insurance Co. has assessed the alleged loss to the tune of Rs. 13.37 lacs. Court dismissed the matter on account of deficient Court fees. Applicant went to High Court - matter disposed of by High Court saying that the Court fees issue be decided by Trial Court afresh between Applicant and State. Matter pending in the Trial Court.	07.10.2025	Awaited	PP is diligently pursuing this matter.
11	MSME online Application No.: UDYAM-TN-02-0161824/M/00001 M/s Valtech Technical Services Vs M/s Raipur Energen Limited	MSEFC Chennai	Contractor/Petitioner had claimed Rs. 51,72,492/- (Rs. 24,37,212/- towards principal amount and Rs. 27,35,280/- towards the 24% monthly interest) for delay in payments allegedly made under SO No. 4800149371 dated 27.02.2019 & 480014969 dated 27.02.2019	12.02.2026	Awaited	PP is diligently pursuing this matter.
12	WPC No. 2328/2019 Girdhar V/s State Chhattisgarh & 3 Ors. (APL is Respondent. No. 4)	Chhattisgarh High Court	One Girdhar from village Chaprid (falling under Samoda barrage land submergence) has claimed compensation for land acquired @ 4 times the award rate as barrage has been constructed for industrial purpose. He has appealed to the High Court against the order dated 12.04.2019 of the Lower Court dealing in LA matters at Raipur wherein the learned Lower Court has deleted respondent no. 4 (M/s GMR	Disposed on 27.04.2022		

S. No.	Case no.	Court Details	Brief Summary of the Case	Last date of hearing	Next date/ Order Passed	Action taken by PP
			Energy Ltd.) from the array of parties.			
13	Case no. 400A/2024 Adani Power Ltd., Raipur Vs. Johar CG Party & Anr.	Chief Judicial Magistrate, Raipur	Workers under the banner of Johar CG Party agitated and stopped those, willing to attend regular duties. They created unrest amongst the workers, instigated them to go for indefinite strike to fulfil their unjustified demands from the company	Disposed on 24.6.2025		
14	Appeal No 448 of 2019	APTEL	Appeal against CERC Order dated 08.03.2019 in Petition no 92/MP/2015 regarding determination of Stranded Transmission Capacity and computation of Relinquishment charges. LTA relinquished- 816 MW.	17/10/2025	Awaited	Motion Hearing.

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

Observation and deliberation of the EAC

42.2.15: The Committee observed and noted the following:

i. The instant proposal is for Expansion of Raipur Thermal Power Plant from 2970 MW [Phase I (2x685) MW + Phase II (2x800) MW] to 4570 MW by adding 2x800 MW (Under Phase III) Ultra Super Critical TPP by M/s. Adani Power Limited, at Villages Raikheda, Gaitara & Chicholi, Tilda Block, Raipur District, Chhattisgarh Raipur.

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 578.84 ha (Private: 578.84 ha). No R & R is involved in the proposed project.

iii. There is no involvement of forest land in the proposed project.

iv. The project site is not located within any Critically Polluted Area/ Severaly Polluted area as per 2018 CEPI score.

v. The committee noted that Jamuniya Nadi, Bhatapara Branch distributary and Pindraon Tank are located at 1.1 (WSW), 2.15 (NE) and 2.5 (SSE) Km, respectively, from the project boundary. The committee observed that Khaulidabri P.F is located within the study area.

vi. Coal requirement for the proposed project is about 6.5 MTPA that will be sourced from Nearby Commercial Coal Mines and transported through railway wagons. LDO (8000KL/ Annum) will be transported by Road.

vii. Existing Water requirement is 1,67,123 m3/day, that will be sourced from Samoda Dam at Mahanadi River approx. at 35 km from Plant Site and permission for the same has been obtained from Rajya Nivesh Prothsahan Board (Chhattisgarh Govt.) vide letter no. 354/SIPB/2021/238 dated 15.03.2024. The water requirement for the proposed project is estimated as 87,671 m3/day, will be obtain/sourced from Kodar reservoir at 44 km from project site and application has been submitted to WRD, Raipur on 20.03.2026. The total water requirement for the proposed project is estimated as 32 MCM. The water will be transported to the plant site through dedicated pipelines. The specific water consumption for the power plant will be <2.5 m3/MWhr.

viii. Existing power requirement of ~178 MW is obtained from self-generation. The power requirement for the proposed project is estimated as 96 MW, which will be obtained from the self-generation.

ix. Existing capital cost of project was 21,890 Cr. The capital cost of the proposed project is Rs. 15,740 Crores and the capital cost for environmental protection measures is proposed as Rs 1521 Crores. The annual recurring cost towards the environmental protection measures is proposed as Rs. 15.21 Crores. The employment generation from the proposed expansion project is 276.

x. Existing green belt has been developed in 142.85 ha area which is about 39.88% of the total project area 358.15 ha with total sapling of 3,57,125 Trees (under development for Phase II: 24.85 Ha, 62,125 nos.of trees). Proposed greenbelt will be developed in 55.17 ha which is about 25 % of the total project area. Thus total of 198.02 ha area (34.21 % of total project area 578.84 Ha) 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 1,37,925 saplings will be planted and nurtured in 55.17 hectares in 5 years.

xi. Ash pond will be developed in 26 ha area (i.e., 0.01 Ha/MW) with 15m ash dyke height. About 2.60 MTPA ash 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.

xii. The proposed units (2x800 MW) will incorporate high-efficiency Electrostatic Precipitators (ESP) to control particulate matter and selective catalytic reduction system (SCR) to control the NOx emission. For SO_2 emission, 275m high Chimney is proposed. EAC suggested to incorporate detailed SO_2 emission norms and their control facility/technology in the EIA/EMP reports.

xiii. The waste water generated (Domestic 60 KLD + Industrial 6000 KLD) in the proposed project shall be treated by STP (80 KLD) and ETP (7940 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.

xiv. EAC observed that the Phase III is coming adjacent to the existing Phase I&II, hence EAC suggested to carry out a Risk Assessment Study. EAC also suggested to carry out cumulative impact assessment study for Phase I, II & III.

xv. EAC suggested the PP to increase the solar capacity up to 2 MW.

xvi. EAC suggested the Project Proponent to develop Greenbelt around the Ash Pond area and also do the fencing along the Ash Dyke.

xvii. EAC observed that there is agricultural land around the thermal power plant, hence EAC suggested the PP to get the impact analysis of Power Plant on the nearby agricultural land.

xviii. EAC asked the Project Proponent to run the Air modelling for Phase III considering the cumulative emission impact of the existing Phase I and upcoming Phase II.

xix. EAC observed that the Power Plant is about 40km away from the Raipur city, hence it is suggested to study the feasibility of using Raipur STP water in the Power Plant.

xx. EAC asked the Project Proponent to get the CCR report from the MoEF&CC IRO office for the existing plant.

Recommendations of the Committee:

42.2.16: 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 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 carry out the project specific Risk Assessment Study for the existing and proposed project by duly taking in to consideration all hazards including quantum of coal storage which shall be part of the EIA/EMP study.

ii. Project Proponent shall carry out the Air quality modelling for Phase III considering the cumulative emission impact of the existing Phase I and upcoming Phase II.

iii. Project Proponent shall explore the feasibility of using treated sewage from Sewage Treatment Plants located within 50 km radius of the proposed project as an alternative to the fresh water source to minimize the freshwater drawl from surface water bodies. Action plan in this regard shall be submitted.

iv. Project proponent shall explore the feasibility of using air cooled condenser in place of water-cooled condenser and details shall be incorporated in the final EIA/EMP report.

v. Project Proponent to get the CCR report from the MoEF&CC IRO office for the existing ECs as per MoEF&CC OM dated 08/06/2022.

vi. Certificate from concerned District Magistrate/Executive Engineer from the State Water Resources department (or) any officer authorized by the State Government shall be submitted stating that project site is not located within flood plain of Mahanadi River and corresponding to one in 25 years of flood as per Ministry's O.M. dated 14/02/2022.

vii. PP needs to submit NOC/permission from the State Water resource Department/Irrigation Dept. in case of diversion of any Nala/Stream/water bodies.

viii. All the parameters as mentioned in the National Ambient Air Quality Standards (NAAQS) shall be monitored by the project proponent at the proposed locations.

ix. Project proponent shall also obtain recommendations from the State Forest department regarding the impact of project on the nearby Reserved Forests, if any, along with the mitigation measures to be followed.

x. 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.

xi. 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 Samoda Dam at Mahanadi River and action plan for complying with the recommendations of the study report shall be submitted.

xii. Project proponent shall submit a study on site specific hydrological studies for area drainage for existing and proposed 4570 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.

xiii. Project proponent shall prepare an integrated water shed management plan 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.

xiv. 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.

xv. 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 198.02 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 should 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 should 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. In addition to this, Project Proponent can submit the detailed action plan for greenbelt development around the ash dyke area along with the fencing.

xvi. 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.

xvii. 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.

xviii. 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.

xix. Action plan for dry ash collection system (Bottom ash and Fly ash) shall be submitted.

xx. Action plan for disposal of ash through High Concentration Slurry Disposal (only in emergency conditions) shall be submitted.

xxi. 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.

xxii. 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.

xxiii. Details pertaining to water source, treatment and discharge should be provided.

xxiv. PP shall provide the details of wastewater treatment facilities to be installed within its capacity, timeline and budget.

xxv. Project Proponent to conduct Environmental Cost Benefit Analysis for the project in EIA/EMP Report.

xxvi. 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.

xxvii. 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.

xxviii. 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.

xxix. 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.

xxx. Details on renewable energy (solar plant) proposed to be installed as energy conservation measures shall be submitted.

xxxi. 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.

xxxii. 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.

xxxiii. Details of air pollution control devices to be installed in the proposed 2x800 MW TPP along with its maintenance schedule shall be incorporated in EIA/EMP report.

xxxiv. Carbon emission due to proposed TPP and allied carbon sequestration/ carbon offsetting plan be submitted.

xxxv. 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. Project proponent shall carry out study on site specific design earthquake parameters for proposed power project through reputed institute.

iii. 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 modeling.

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 analyze 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. 42.3

42.3: 3x350 MW project by **M/s. GMR Kamalanga Energy Limited** located at village Kamalanga, Taluk Odapada, District Dhenkanal, Odisha – **Amendment in Environment Clearance with respect to Sulphur dioxide emission standards as per MoEF&CC Notification dated 11/07/2025 – regarding.**

[Proposal No: IA/OR/THE/561475/2026; F. No. J-13012/73/2011-IA. II (T)]

42.3.1: M/s GMR Kamalanga Energy Ltd. (GKEL) has made online application vide proposal no. IA/OR/THE/561475/2026 dated 29.12.2025 along with copy of Form 4 & Addendum EIA report prepared through QCI/NABET accredited consultant and sought for amendment in the Environmental Clearances accorded by the Ministry vide letter no. J-13011/ 64/2007-IA.II (T) dated 05/02/2008 for the project mentioned above and its subsequent amendments 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 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:

42.3.2 The existing project of M/s GMR Kamalanga Energy Ltd. (GKEL) was granted Environmental Clearance for 3 x 350 MW Thermal Power Plant (Phase-I) by MoEF&CC vide letter No. J-13011/ 64/2007-IA.II (T) dated 05.02.2008. Thereafter, another Environmental Clearance for 1 x 350 MW Thermal Power Plant (Phase-II) was granted by MoEF&CC vide letter No. J-13012/73/2011-IA.II (T). The said EC was amended on 05.12.2011, 11.01.2019 folowed by validity extension on 11.04.2019. Out of 4x350 MW, proponent has commissioned only the 3x350 MW TPP and the remaining 1x350 MW could not be commissioned within the prescribed validity period. In view of this, proponent obtained fresh EC for 1x350 MW on 23/07/2025 under the provisions of S.O. 1247 (E) dated 18/03/2021.

42.3.3: Environmental Site settings:

<table>
<tr><th>S. No.</th><th>Particulars</th><th>Details</th><th>Remarks</th></tr>
<tr><td>1</td><td>Total land</td><td>468.85 ha [Private: 383.64 ha; Govt.: 53.63 ha; Forest land: 32.092 ha;]</td><td>Land use: Industrial</td></tr>
<tr><td>2</td><td>Land use break up</td><td><table><tr><th>Description</th><th>Total Area (Ha.)</th><th>Green Belt out of total area of different facility of</th></tr></table></td><td></td></tr>
</table>

				plant (Ha.)	
		Steam Turbine Generator & accessories, TG Building	14.97		
		Switch Yard	4.05		
		Cooling towers & CW pump house	9.71		
		River water pump house & pipeline	2.43		
		Water Treatment Plant & Accessories	7.28		
		Ash Disposal Area	117.24		
		Ground mounted Solar PV Plant over existing Ash pond	10		
		Additional Greenbelt over existing Ash Pond	31.82	31.82	
		Coal Handling Plant	55.45		
		Fuel Handling System	1.62		
		Fire Fighting System	0.40		
		Ash Handling System & Silos	2.02	-	
		Misc. Non-Plant Building	3.24	-	
		Reservoir & pump house	20.64	-	
		Green Belt around periphery of the plant	129.50	129.50	
		Left-Out Plots inside Plant Boundary	12.63	12.63	
		Green belt developed on both side of Direct Approach Road to the plant	9.87	2.68	
		Others plant area	12.55	9.91	
		Merry Go Round Railway Line connectivity outside plant boundary	12.46	-	
		Permissive Possession of Govt. Land inside the Plant Boundary	7.99	-	
		Periphery Development at Outside of the Plant boundary	2.97	-	
		Total Land	**468.86**	**186.54**	
3	Land acquisition details as per MoEF&CC O.M. dated 7/10/2014 & 19/02/2025	The project site is now industrial land as proposed unit shall be located in vicinity of already operation units and construction of 4th unit has already been reached to approximately 63.7 %.			Land requirement for ultimate capacity – 468.86 Ha. Land is already in possession of the project developer.
4	Existence of habitation & involvement of R&R, if any	Project site: Name of village (if any) Study Area: NA			No R&R required

Habitation	**Distance**	**Direction**
Mangalpur	3.13	SE
Kamalanga	1.52	NE
Budhapanka	2.8	WSW
Maniabeda	0.75	NE
Bhogamunda	0.85	E

Hatatota	9.5	NW
Achalapur	6.44	WNW
Banarpal	6.1	SW
Kharagaprasad	7.3	SE

5 Existence of school and hospitals if any.

A. School

Project site: No

Study Area:

School	Distance	Direction
DAV, Ekamra Nagar	1.0 Km	EES
Kurunti U.P School c	3.66 km	SE
Govt. High School, Kusupanga	2.54 km	SE
Anganwadi Kendra Manpur	0.48 km	SE
Mangalpur High School	0.80 km	SE
Kamalang High School	1.71 km	N
Lingarakata Primary School	3.22 km	NW
Delhi public school banarpal	3.15 km	W
Chitipada Primary School	7.91 km	S

B. Hospital

Project site: No

Study Area:

Hospital	Distance	Direction
Samal Care Multispeciality Hospital Angul	3.82 km	SW

6 Latitude and Longitude of all corners of the project site.

A. Plant site

S.No.	Latitude	Longitude
1	20°52'34.14"N	85°15'32.20"E
2	20°52'32.48"N	85°16'10.12"E
3	20°52'20.81"N	85°16'14.57"E
4	20°52'18.16"N	85°16'23.31"E
5	20°51'50.53"N	85°16'28.51"E
6	20°51'21.25"N	85°16'9.39"E
7	20°51'20.81"N	85°16'5.88"E
8	20°51'13.10"N	85°15'59.57"E
9	20°51'12.76"N	85°15'48.41"E
10	20°51'33.93"N	85°15'22.98"E
11	20°51'40.78"N	85°15'23.40"E
12	20°51'45.88"N	85°15'22.01"E
13	20°51'50.99"N	85°15'29.28"E
14	20°51'53.21"N	85°15'23.21"E
15	20°52'26.59"N	85°15'25.86"E

B. Ash pond

S.No.	Latitude	Longitude
1	20°52'10.41"N	85°15'36.34"E
2	20°51'46.03"N	85°15'48.59"E
3	20°51'21.97"N	85°15'47.98"E
4	20°51'32.02"N	85°15'29.63"E
5	20°51'46.78"N	85°15'27.23"E
6	20°51'50.56"N	85°15'31.26"E
7	20°51'59.29"N	85°15'30.44"E

7 Elevation of the project site — 79m – 97m AMSL

<table>
<tr><td>8</td><td>Involvement of Forest land if any.</td><td>The forest land was involved in phase I project and Stage- II forest clearance for 32.092 ha land vide letter No.- 5-ORC083/2008/FCE 07.01.2011 has been accorded</td><td></td></tr>
<tr><td>9</td><td>Water body (Rivers, Lakes, Pond, Nala, Natural Drainage, Canal etc.) exists within the project site as well as study area</td><td><u>Project site:</u> NIL

Study area<table><tr><th>Water body</th><th>Distance</th><th>Direction</th></tr><tr><td>Brahmani River</td><td>2.6 km</td><td>E</td></tr><tr><td>Balarama Prasad Branch Canal</td><td>10.1 km</td><td>WSW</td></tr><tr><td>Nandira Jor</td><td>1.9 km</td><td>WNW</td></tr><tr><td>Talcher Left Main Canal</td><td>9.1 km</td><td>NE</td></tr><tr><td>Ghorhadian Nala</td><td>4.1 km</td><td>NE</td></tr><tr><td>Baularnala Jharana</td><td>7.1 km</td><td>ESE</td></tr><tr><td>Ria Jor</td><td>8.7 km</td><td>ESE</td></tr><tr><td>Rengali Right Main Canal</td><td>2.7 km</td><td>SSE</td></tr><tr><td>Kisinda Jor</td><td>4.8 km</td><td>SSE</td></tr><tr><td>Lingara Nadi</td><td>8.8 km</td><td>S</td></tr></table></td><td>HFL of nearest water body Brahmani River- 2.6 Km East from the Plant) is 58.24 m.</td></tr>
<tr><td>10</td><td>Existence of ESZ/ ESA/ national park/ wildlife sanctuary/ biosphere reserve / tiger reserve / elephant reserve etc. if any within the study area</td><td>There are no National parks, Wildlife Sanctuary, Biospheres reserves, ESA/ESZ and corridors within 10 km radius.</td><td>-</td></tr>
<tr><td>11</td><td>Archaeological sites monuments/ historical temples etc.</td><td>NA</td><td>No such sites present in Study Area</td></tr>
<tr><td>11</td><td>Involvement of Critically Polluted Area/ Severely Polluted area as per 2018 CEPI score</td><td>No such sites present in Study Area</td><td>No such sites present in Study Area</td></tr>
</table>

42.3.4: The implementation status of the existing EC dated 05/02/2008 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.	Phase-I 3 X 350 MW	1050 MW	05/02/2008	April 2013 (Unit-1), Nov 2013 (Unit-2) and March 2014 (Unit-3)	3 X 350 MW (1050 MW)	PM: 50 mg/Nm^3 SO_2: 200 mg/Nm^3 NOx: 450 mg/Nm^3

Note: Further, MoEF&CC has accorded another expansion EC for expansion of existing 1050 MW to 1400 MW by addition of 1 x 350 MW Unit at village Kamalanga, Taluk Odapada, District Dhenkanal, Odisha. The said TPP is yet to be categorized by the CPCB and in the instant amendment proposal only 3x350 MW is considered. Proponent assured to apply for amendment in EC for review of SO2 emission norm based on the categorization to be issued by the Task Force of CPCB.

42.3.5 Details of Thermal Power Plant

Parameter	Details as per EC	Status as on May 2026	Remarks
Total Land Area (Ha)	468.85	468.85	No additional land acquired
Involvement of Forest Land	32.092	FC Stage II is accorded vide letter dated 07.01.2011	FC accorded
NBWL Clearance	NA	NA	NA
CPA/SPA	Nil	Nil	Nil

42.3.6 Background for amendment sought by the proponent

With respect to the instant EC amendment proposal, following was apprised to the members of the EAC during the meeting:

a. 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 NOx) 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 (NOx), 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 di oxide (SO_2) emission norms, 3 x 350 MW TPP of GMR Kamalanga Energy Ltd. (GKEL) falls under Category B at Sl. No. 100,101 &102.

f. In pursuance to the MoEF&CC Notification dated 11/07/2025, M/s GMR Kamalanga Energy Ltd. (GKEL) has submitted their application for amendment in EC within the prescribed time frame seeking for review of Sulphur dioxide emission standards.

42.3.7: 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.

Month	Coal consumption in MT for 3 x 350 MW TPP
September - 2025	532,342
October - 2025	579,032
November - 2025	401,265
Domestic Coal is being used while maintaining Sulphur content < 0.45 %.	

ii. Minimum, maximum and 98th percentile levels of ambient PM_{10}, $PM_{2.5}$, NOX, and SO_2 from secondary monitored AAQ data for last three month period.

S. No.	Name of location	Parameters being monitored	Remarks
Manual Monitoring Location (NABL Accredited Lab)			
1	Near Rain Water pump House Pit	PM_{10}, $PM_{2.5}$, SO_2 and NO_x	Core Zone
2	Near Security Watch Tower - 3		
3	Near Budhapanka Material		Buffer Zone
4	Mangalpur		
5	Kamalanga		
6	Budhapanka		
7	Maniabeda		
8	Bhogamunda		
9	Hatatota		
10	Achalapur		
11	Banarpal		
12	Kharagaprasad		

Summary of AAQ Result for September to November 2025:

S. No.	Name of location	Parameter	Concentration in µg/m³			NAAQS
			Min	Max	Average	
1	Near Rain Water pump House Pit	PM_{10}	36.1	52.8	44.7	100
		$PM_{2.5}$	15.1	25.5	20.07	60
		SO_2	9.2	15.3	12.27	80
		NO_x	19.88	27.05	22.99	80
2	Near Security Watch Tower - 3	PM_{10}	37.5	54	44.37	100
		$PM_{2.5}$	14.5	27.6	20.26	60
		SO_2	9.8	15.9	13.07	80
		NO_x	16.8	25.66	21.26	80
3	Near Budhapanka Material	PM_{10}	36.6	54.8	44.26	100
		$PM_{2.5}$	14.7	28.8	20.42	60
		SO_2	9.5	14	11.67	80
		NO_x	16.8	23.35	20.28	80
4	Mangalpur	PM_{10}	36.2	56.5	42.72	100
		$PM_{2.5}$	11.7	31.5	19.65	60
		SO_2	9.5	14.3	11.51	80
		NO_x	16.1	24.25	19.74	80
5	Kamalanga	PM_{10}	46	66.8	57.20	100

S. No.	Name of location	Parameter	Concentration in µg/m³			NAAQS
			Min	Max	Average	
		$PM_{2.5}$	20.3	29.1	24.60	60
		SO_2	10.5	20.5	17.1	80
		NO_x	25.5	38.3	33.37	80
6	Budhapanka	PM_{10}	40.4	64.4	54.07	100
		$PM_{2.5}$	19.4	29.1	24.13	60
		SO_2	10.5	20.4	17.23	80
		NO_x	27.3	36.7	32.75	80
7.	Maniabeda	PM_{10}	36.2	56.5	42.72	100
		$PM_{2.5}$	11.7	31.5	19.65	60
		SO_2	9.5	14.3	11.51	80
		NO_x	16.1	24.3	19.76	80
8	Bhogamunda	PM_{10}	49.1	66	57.61	100
		$PM_{2.5}$	19.6	28.8	24.37	60
		SO_2	11	20.1	37.2	80
		NO_x	28.9	37.2	33.32	80
9	Hatatota	PM_{10}	42	54.5	49.4	100
		$PM_{2.5}$	21.6	29.1	26.0	60
		SO_2	10.2	15.8	12.7	80
		NO_x	15.5	28.6	21.4	80
10	Achalapur	PM_{10}	44.0	54.2	49.3	100
		$PM_{2.5}$	23.7	29.1	26.1	60
		SO_2	10.2	16.2	14.0	80
		NO_x	17.5	26.1	22.3	80
11	Banarpal	PM_{10}	37.2	54.4	45.28	100
		$PM_{2.5}$	14.7	29.4	21.26	60
		SO_2	9.2	12.8	11.35	80
		NO_x	16.8	22.4	19.10	80
12	Kharagaprasad	PM_{10}	38	56.5	50.0	100
		$PM_{2.5}$	17.3	30.0	26.2	60
		SO_2	7.8	13.6	11.5	80
		NO_x	15.4	28.6	19.7	80

iii. Average stack emissions for PM, NOx, and SO_2 parameters for last three months, flue gas concentration in mg/Nm³

Stack emissions data from August 2025 - October 2025, monitored by NABL accredited laboratory-

S. No.	Name of stack	Parameter	Concentration in (mg/Nm³)		
			Max	Min	Avg.
1	ST- 1: Stack attached to ESP outlet of Unit-1	PM	37	35.4	36.3
		SO_2	1223	1165	1200.6
		NO_x	305	287	296.6
2	ST- 2: Stack attached to ESP outlet of Unit-2	PM	28.5	26.5	27.5

		SO_2	1254	1192	1230.6
		NO_x	346	324	335
3	ST- 3: Stack attached to ESP outlet of Unit-3	PM	27.7	25.3	26.5
		SO_2	1285	1225	1254.6
		NO_x	367	345	356

Mass emission rate of pollutants in gram per second

Sl. No	Particulars	Values (3X350) MW
1	Coal Consumption	5.520 MTPA
2	Source	Boilers (3 nos.)
3	Power Generation Capacity(MW)	3X350
4	Max. Coal consumption (MTPA) at MCR	6.42
5	Sulphur Content (%)	0.5
6	Number of stacks	Two
7	Stack Height (m)	275
8	Internal Stack Diameter (m)	5.8
9	Stack Gas Temperature (0K)	413
10	Velocity (m/s)	25
11	Volumetric Flow Rate (Nm^3/hr)	3102338.108
12	Particulate Matter (PM_{10}) g/sec	12.36545555
13	Particulate matter ($PM_{2.5}$) g/sec	7.419273333
14	Sulphur Dioxide (SO_2) g/sec	1067.549847
15	NO_2 g/sec	281.402769

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 two stacks each of 275 m height (bi-flue and one single flue) 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.

The predicted maximum Ground Level Concentration (GLCs) of PM_{10}, $PM_{2.5}$, NO_X, and SO_2 pollutants 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.
- SO_2 emissions based on fuel consumption with control measures or prescribed limits.
- NOx 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 Nov'25).

GLCs are obtained in µg/m^3 for pollutants. Output of modeling gives concentration at uniform Cartesian receptors to get the resultant concentration with reference to baseline data.

Resultant GLC of pollutants (µg/m^3) at sampling location: Maximum SO_2 GLC was 10.8 ug/m^3

Incremental GLC (µg/m^3) in Downwind Direction					
Distance (Km)	Direction	PM_{10}	$PM_{2.5}$	SO_2	NO_x
1.0	EES	1.8	0.7	10.8	1.4
2.7	SSE	0.4	0.2	3.6	0.5
3.66	SE	0.2	0.1	1.8	0.2
2.54	SE	0.2	0.1	1.8	0.2
0.48	SE	0.5	0.3	5.4	0.7
0.80	SE	0.4	0.2	3.6	0.5
2.00	SSE	0.4	0.2	3.6	0.5
7.1	ESE	0.2	0.1	1.8	0.2
8.7	ESE	0.2	0.1	1.8	0.2

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:** • The list of pollution control equipment and measures for fugitive and stack emission in power plant are summarised in section 4.3.2. • The resultant air quality will conform to the stipulated standards. • Electrostatic precipitators (ESPs) and bag filters for controlling particulate emissions from the power plant have been installed for Phase-I (3 × 350 MW). • The Company has already constructed two stacks each of 275 m height (bi-flue and one single flue). Particulate emission from stacks is expected to be below 30 mg/Nm^3 • Transport of raw material will be by road through covered trucks initially and then through covered conveyor. • Green belt/ green cover development programs will be undertaken around the plant in the available area. **EMP for Water Resources Management:** • DM Plant regeneration waste water after passing through neutralization pit shall be used for irrigation of green belt and horticulture. • Treated waste water from sewage treatment systems will be used for irrigation of green belt in plant area. • Waste water from blow downs of various cooling systems will be collected in common basin, neutralised if required and reused in sprinkling, watering, irrigation of green belt and horticulture, etc. **EMP for Noise Management:** • Equipment will be designed to conform to noise levels prescribed by regulatory agencies where necessary, high noise generating

Details as prescribed by MoEF&CC	Information provided by Proponent
	equipment shall be acoustically treated or housed. • Provision of green belt and plantation would further help in attenuating noise. Acoustic system for machines, turbines, etc. will be provided. Noise attenuation measures are likely to keep noise level to 85 dB (A) at 1 m distance. • Employees working in high noise areas will be provided with ear plugs/ear muffs as protective device. • Maintenance of all equipment as per schedule **EMP for Solid Waste Management:** • Fly ash generated from power plant will be used as raw material in brick, cement, road making, low lying area leveling, backfilling mines, etc. • Any unutilized ash and bottom ash will be sent to the ash dyke in slurry form and the water level will be maintained in the dyke to avoid fugitive emission. • Organic component of municipal solid waste due to everyday sweeping, canteen and worker activities will be composed and used as manure. **EMP for Thermal pollution:** • Since a re-circulating cooling system with cooling tower shall be adopted, low thermal pollution is anticipated. "Common Monitoring Basin" shall be there to receive and cool the water prior to use in horticulture, etc. **EMP for Fire & Safety:** • Prepare and implement Onsite Emergency Plan. • A well-laid firefighting system and fire extinguishers will be installed as per fire safety norms. • Regular fire safety training and mock drills will be conducted. **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)	Use of high efficiency electrostatic precipitators in power plant. The boiler/ steam generating unit would be provided with four (4) nos. of electrostatic precipitators

Nitrogen Oxides (NOx)	To reduce the NOx emission from the boiler/ steam generator necessary provisions in the Steam Generator design and fuel firing system, will be made
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 handling system will consist of fly ash pressure conveying system, Intermediate silo, dry unloading of ash in terminal silo, fuidizing air system and compressed air system Complete dry extraction up to silos shall take place through pressurized and pneumatic conveying from hoppers up to Fly Ash intermediate surge hopper and pressurized conveying of Fly Ash to terminal ash silo. Ash from the silos will be evacuated by closed trucks to ash disposal area through lean phase slurry disposal system. Company has earmarked 85.79 Ha as ash pond area and 154. 72 Ha as green belt (Total – 240.51 Ha). When disposal will be slurry form, the ash will be laid layer by layer in pre designated parts of the ash pond sequentially. The layering of ash shall be done uniformly in planned manner so that the height gained by the stack is uniform in the designated area. Insides and bottom surface of ash pond area shall be lined with impermeable High Density Poly Ethylene (HDPE) lining.
Fly Ash Loading & Transport	The transportation of ash shall take place through bulkers/ trucks to re-users in dry form. The main points that will be kept in mind for transportation shall be as follows: a. Provision of plain, wide & hard surfaces access roads to the loading point within the thermal power plant b. Automated ash loading system at point of generation/ storage point. c. Water sprinkling arrangement - to minimize flying /spillage of particulate matter. d. Periodical transport road cleaning - to avoid air pollution problem due to fugitive dust e. Maintaining the transport vehicles (tippers)- to avoid break downs & road blockages. f. Maintenance of road and strengthening the stability of slope road at the deposition point.
Fly Ash Disposal	Fly ash will be reused as per the Ash Utilization Notification 2021. Bottom ash will be in slurry form and conveyed through pipelines to Ash Disposal Area.
Fly Ash Utilization	Fly ash will be 100% reused as per Ash Utilization Notification 2021. It will be used in cement making, brick making, block making, aggregate making, road making, mine backfilling, low lying area filling

Cost of Existing EMP and Additional Proposed EMP

Sl No.	Breakup of EMP Activities	Existing Annual in Cr	Additional Commitment in Cr	Physical target and time line
1	APCD O&M Cost	13.70	-	-
2	Solid Waste Management facilities: Fly Ash - Utilization	6.00	-	-
3	Env Monitoring	0.35	-	-
4	Environment Education and Awareness	0.15	-	-
5	Third Party Monitoring Cost (cover GLC Location)	0.30	-	-
6	ISO Certifications & External Env. Audit	0.50	-	-
7	Green Belt upkeep (cover GLC Location)	2.00	-	-
8	ESG and EHS Dashboard	0.30	-	-
9	Implementation of Rainwater Harvesting	2.25	-	-
10	Additional Green Belt Development (cover GLC Location)	-	2.50	
11	ESP retrofit by installing Ultra Frequency Transformer	-	10.00	Under Technical evaluation. shall be executed within next 2 to 3 years.
12	Roof-top Solar Plants in GKEL.	-	5.00	The project shall be executed over an area of 10000 SqM. over the existing Non-plant buildings and residential facilities. The same shall be executed by FY 2026-2027. Capacity: 1000kWp
13	Use of EV for internal movement of men and material	-	0.50	GMR shall procure 5 numbers of EV by the end of FY- 2026-2027.
14	Solar PV within GKEL premises by GMR	-	38.00	10 MWp capacity to be executed over an area of 10.00 ha. by the end of FY 2026-2027. This land shall be used over the existing unutilized ash pond area.
15	Forestation on 31.82 Ha area of ash pond	-	4.25	• 10 Ha in FY 2026-27. • 10 Ha in FY 2027-28. • Remaining 11.82 Ha in FY-28-29.
16	Miyawaki plantation on 3 Ha area of ash pond	-	0.60	1 Ha within FY 2026-27 and remaining 2 Ha in FY 2027-28.
17	Biomass Availability Mapping Study and Feasibility		0.25	In FY-27-28

Sl No.	Breakup of EMP Activities	Existing Annual in Cr	Additional Commitment in Cr	Physical target and time line
18	Assessment Carbon footprint for existing green belt plantation		0.03	FY 2026-27
	Total	**25.80**	**61.08**	

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

As per EC dated 05.02.2008				
S. No	**Condition No**	**Details of Conditions as per EC**	**Amendment Sought**	**Justification**
1	Condition No. (vii)	Approximate mitigation measures shall be adopted to reduce the emissions of SO_2. It shall be ensured that at no point of time the ground level concentration of SO_2 in the impact zone exceeds the prescribed limit. The proponent shall now itself also provide space for installation of FGD or other suitable measures, if required at a later stage.	Approximate mitigation measures shall be adopted to reduce the emissions of SO_2. It shall be ensured that at no point of time the ground level concentration of SO2 in the impact zone exceeds the prescribed limit. The proponent shall now itself also provide other suitable measures, if required at a later stage.	The project of GMR Kamalanga Energy Ltd. (GKEL) 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 ambient air SO_2 levels within a 10 km radius are significantly lower than the prescribed National Ambient Air Quality (NAAQ) standards. Furthermore, as per the 11, July 2025 notification issued by the Ministry of Environment, Forest and Climate Change (MoEFCC), the plant is eligible for exemption from the installation of a Flue Gas Desulphurization (FGD) system, subject to compliance with the stipulated conditions. Current Stack height (275 M) is adequate enough as per G.S.R 742 (E) dated 30th August 1990.

42.3.9: Summary of court cases: Nil

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

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

42.3.12: Written submissions:

The proponent vide letter dated 30th April 2026 has submitted the following written submission as suggested by the EAC during the meeting.

I. Details of Revised Land utilization including present & proposed plantation
Reply: Details of Land utilization including present & proposed plantation.
Revised Land Breakup

Description	Total Area (Ha)	Existing Area of Green Belt (Ha)
Steam Turbine Generator & accessories, TG Building	14.97	-
Switch Yard	4.05	-
Cooling towers & CW pump house	9.71	-
River water pump house & pipeline	2.43	-
Water Treatment Plant & Accessories	7.28	-
Ash Disposal Area	117.24	-
Ground mounted Solar PV Plant over existing Ashpond	10.00	-
Additional Green Belt over existing Ashpond	31.82	31.82
Coal Handling Plant	55.44	-
Fuel Handling System	1.62	-
Fire Fighting System	0.40	-
Ash Handling System & Silos	2.02	-
Misc. Non-Plant Building	3.24	-
Reservoir & pump house	20.64	-
Green Belt around periphery of the plant	129.50	129.50
Left-Out Plots inside Plant Boundary	12.62	12.62
Green belt developed on both side of Direct Approach Road to the plant	9.92	2.68
Others plant area	12.55	9.92
Merry Go Round Railway Line connectivity outside plant boundary	12.46	-
Permissive Possession of Govt. Land inside the Plant Boundary	7.99	-
Periphery Development at outside of the Plant boundary	2.97	-
Total Land	**468.87**	**186.54**

The existing land allocated for ash pond is 159.06 ha for the purpose of ash disposal. However, looking towards ash utilization by 100% for last 5 years, the land requirement for ash pond is now reduced by 20% which shall be 117.4 ha. In the remaining land of 41.82 (159.06 – 117.4), 31.82 ha will be brought under green belt and the remaining 10 ha will be utilized for solar power generation.

II. Existing and Proposed EMP including Physical and Financial target
Reply: **Recurring expenditure towards EMP**

Sl No.	Breakup of EMP Activities	Existing Annual in Cr	Additional Commitment in Cr	Physical target and time line
1	APCD O&M Cost	13.70	-	-
2	Solid Waste Management facilities: Fly Ash - Utilization	6.00	-	-
3	Env Monitoring	0.35	-	-
4	Environment Education and Awareness	0.15	-	-
5	Third Party Monitoring Cost (cover GLC Location)	0.30	-	-
6	ISO Certifications & External Env. Audit	0.50	-	-
7	Green Belt upkeep (cover GLC Location)	2.00	-	-
8	ESG and EHS Dashboard	0.30	-	-
9	Implementation of Rainwater Harvesting	2.25	-	-
10	Additional Green Belt Development (cover GLC Location)	-	2.50	
11	ESP retrofit by installing Ultra Frequency Transformer	-	10.00	Under Technical evaluation. shall be executed within next 2 to 3 years.
12	Roof-top Solar Plants in GKEL.	-	5.00	The project shall be executed over an area of 10000 SqM. over the existing Non-plant buildings and residential facilities. The same shall be executed by FY 2026-2027. Capacity: 1000kWp
13	Use of EV for internal movement of men and material	-	0.50	GMR shall procure 5 numbers of EV by the end of FY- 2026-2027.
14	Solar PV within GKEL premises by GMR	-	38.00	10 MWp capacity to be executed over an area of 10.00 ha. by the end of FY 2026-2027. This land shall be used over the existing unutilized ash pond area.
15	Forestation on 31.82 Ha area of ash pond	-	4.25	• 10 Ha in FY 2026-27. • 10 Ha in FY 2027-28. • Remaining 11.82 Ha in FY-28-29.
16	Miyawaki plantation on 3 Ha area of ash pond	-	0.60	1 Ha within FY 2026-27 and remaining 2 Ha in FY 2027-28.

Sl No.	Breakup of EMP Activities	Existing Annual in Cr	Additional Commitment in Cr	Physical target and time line
17	Biomass Availability Mapping Study and Feasibility		0.25	In FY-27-28
18	Assessment Carbon footprint for existing green belt plantation		0.03	FY 2026-27
	Total	25.80	61.08	

Apart from above,

- GKEL shall also be spending INR 14.50 Cr over wildlife management plan over a period of next five years.
- An amount of INR 68 Cr is being spent on flyash transportation

III. Mode of Coal Transportation:

Reply: The coal required for plant operation shall be transported from mine end in a proportion of 70%~75%: 30% ~25% through rail and road respectively.

Observations and deliberation of the EAC

42.3.13: The Committee observed and noted the following:

i. The instant proposal is for seeking amendment in the EC dated 05/02/2008 with respect to Sulphur dioxide emission standards for the 3x350 MW TPP as per MoEF&CC Notification dated 11/07/2025 under the provisions of the EIA Notification, 2006. Another expansion EC for 1x350 MW obtained during 2011.

ii. Out of 4x350 MW, proponent has commissioned only the 3x350 MW TPP and for remaining 1x350 MW proponent has obtained fresh EC on 23/07/2025 under the provisions of S.O. 1246 (E) dated 18/03/2021. The said TPP is yet to be categorized by the CPCB and in the instant amendment proposal only 3x350 MW is considered.

iii. The Stage–II Forest Clearance (FC) for diversion of 32.092 ha of forest land, located within the existing project site, was obtained by the project proponent on 07.01.2011.

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) and Severely Polluted Area (SPA).

vi. During the months of September-November 2025, the total coal requirement for Unit-1, Unit-2 and Unit-3 was 532342 MT, 579032 MT and 401,265 MT ,respectively,. Domestic Coal is being used while maintaining Sulphur content < 0.45 %.

vii. 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. The values for Ambient Air Quality are within the prescribed norms of NAAQMS 2009.

viii. The mass emission rate of pollutants including PM_{10}, $PM_{2.5}$, NOx, and SO_2 were estimated 12.36g/s, 7.41 g/s,281.40 g/s and 1067.54 g/s, respectively, for 3x350 MW.

ix. Project proponent has already constructed two stacks each 275 m height (bi-flue and one single flue) in terms of the notification number GSR 742 (E) dated 30th August'1990.

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 for PM_{10}, $PM_{2.5}$, NOx, and SO_2 is 1.8 µg/m³ , 0.7 µg/m³ 1.4 µg/m³ and 10.8 µg/m³ at 1 km distance in SE direction.

xi. With respect to coal transportation, 70-75% coal requirement for the TPP is being done through rail and 25 -30% coal requirement for the TPP is being done through road after adhering to the safeguards as mentioned in the notification dated 21/05/2020.

xii. The Committee noted that revised EMP comprises of development of additional green belt in an area of 31.82 Ha, ESP retrofit by installing Ultra Frequency Transformer, Solar PV within GKEL premises, Use of EV for internal movement, Miyawaki plantation on 3 Ha area of ash pond, Biomass Availability Mapping Study and Feasibility, Assessment Carbon footprint for existing green belt plantation for environmental protection.

xiii. EAC noted that the budget earmarked for the additional EMP is Rs. 61.08 Cr.

xiv. The EAC also deliberated on the written submission of the project proponent and found it satisfactory.

Recommendations of the Committee

42.3.14: 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-13011/64/2007-IA.II (T) dated 05/02/2008 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 05/02/2008 shall remain unchanged.

S. No.	Condition No	Details of Conditions as per EC	Recommendation of EAC
1	Condition No. (vii)	Approximate mitigation measures shall be adopted to reduce the emissions of SO2. It shall be ensured that at no point of time the ground level concentration of SO2 in the impact zone exceeds the prescribed limit. The proponent shall now itself also provide space for installation of FGD or other suitable measures, 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.*

Additional specific conditions

i. Project proponent shall apply for amendment in EC dated 23/07/2025 (1x350 MW) for review of SO_2 emission norm based on the categorization to be issued by the Task Force of CPCB.

ii. 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. 61.08 Cr 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.

S. No.	Breakup of EMP Activities	Additional Commitment in Cr	Physical target and time line
1	Additional Green Belt Development (cover GLC Location)	2.50	Within 3 years from the date of issue of the amendment in EC
2	ESP retrofit by installing Ultra Frequency Transformer	10.00	Under Technical evaluation. shall be executed within next 2 to 3 years.
3	Roof-top Solar Plants in GKEL.	5.00	The project shall be executed over an area of 10000 SqM. over the existing Non-plant buildings and residential facilities. The same shall be executed by FY 2026-2027. Capacity: 1000kWp
4	Use of EV for internal movement of men and material	0.50	GMR shall procure 5 numbers of EV by the end of FY- 2026-2027.
5	Solar PV within GKEL premises by GMR	38.00	10 MW capacity to be executed over an area of 10.00 ha. by the end of FY 2026-2027. This land shall be used over the existing unutilized ash pond area.
6	Forestation on 31.82 Ha area of ash pond	4.25	• 10 Ha in FY 2026-27. • 10 Ha in FY 2027-28. • Remaining 11.82 Ha in FY-28-29.
7	Miyawaki plantation on 3 Ha area of ash pond	0.60	1 Ha within FY 2026-27 and remaining 2 Ha in FY 2027-28.
8	Biomass Availability Mapping Study and Feasibility	0.25	In FY-27-28
9	Assessment Carbon footprint for existing green belt plantation	0.03	FY 2026-27
	Total	**61.08**	

iii. 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.

iv. Project Proponent shall restrict the Coal transportation by road to maximum 25% and environment mitigation measures as stated in the Notification issued vide S.O. 1561 (E) dated 21.05.2020 shall be complied with.

v. Project proponent shall monitor sulfate in particulate matters and Ammonia in ambient air in addition to the regular environmental monitoring parameters.

vi. In addition to this existing 3 CAAQMS, PP shall install one additional continuous ambient air quality monitoring station preferably nearby the maximum GLC location in consultation with OSPCB within 1 year from the date of grant of amendment in EC.

vii. Project proponent shall develop additional green belt in an area of 31.82 Ha, and Miyawaki plantation on 3 Ha area of ash pond.

viii. Project proponent shall retrofit ESP by installing Ultra Frequency Transformer as committed.

ix. Project proponent shall install 11 MW Solar PV within GKEL premises and use of EV for internal movement as committed.

x. Project proponent shall carry out Carbon footprint study for existing green belt plantation and Biomass Availability Mapping Study for its feasibility for using in the boilers.

Agenda Item no. 42.4:

42.4: 1x250 MW and 1x300 MW by **M/s. Durgapur Projects Limited** at Durgapur, District Burdwan, West Bengal **– Amendment in Environment Clearance with respect to Sulphur dioxide emission standards as per MoEF&CC Notification dated 11/07/2025 – regarding**.

[Proposal No: IA/WB/THE/565148/2026; F.No. J-13011/26/2007-IA.II(T)]

42.4.1: M/s The Durgapur Projects Limited has made online application vide proposal no. IA/WB/THE/565148/2026 dated 11/01/2026 along with Form 4 & addendum EIA report prepared through QCI/NABET accredited consultant and sought for amendment in the Environmental Clearance accorded by the Ministry vide letter no. G.S.R. 465(E dated 11/07/2025 for the project mentioned above 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: Ecogenesis Consultancy Pvt Ltd, QCI/NABET/ENV/ACO/25/3661 dated June 10, 2025, Valid upto May 20,2028

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

42.4.2: The existing project of The Durgapur Projects Limited was originally granted Environmental Clearance in favour of The Durgapur Projects Limited for setting up Unit 7 (300 MW) & Unit 8 (250 MW) Thermal Power Plant at Village Durgapur, District Paschim Bardhaman, West Bengal vide letter no No.J-13012/11/2004-IA.II(T) dated 30.07.2004 for Unit-7 and vide letter no.- No. J. 13011/26/2007-IA-I (T) for Unit 8 dated 18.10.2007 under EIA, 2006.

42.4.3: Environmental site settings

<table>
<tr><th>S. No.</th><th>Particulars</th><th>Details</th><th>Remarks</th></tr>
<tr><td>1</td><td>Total land</td><td>297.47 ha [Govt.: 297.47 ha]</td><td>Land use: Industrial Area</td></tr>
<tr><td>2</td><td>Land use break up</td><td>
<table>
<tr><th>Facilities</th><th>Existing Area (In Hectares)</th></tr>
<tr><td>Main Plant</td><td>15</td></tr>
<tr><td>Coal Handling System</td><td>35</td></tr>
<tr><td>Water System</td><td>15</td></tr>
<tr><td>SwitchYard</td><td>15</td></tr>
<tr><td>Green belt</td><td>105</td></tr>
<tr><td>Roads</td><td>10</td></tr>
<tr><td>Ash pond</td><td>45</td></tr>
<tr><td>Water supply pipeline</td><td>15</td></tr>
<tr><td>Others Administrative Building & Utilities, Storage & Miscellaneous</td><td>57.47</td></tr>
<tr><td>Total</td><td>297.47</td></tr>
</table>
</td><td></td></tr>
<tr><td>3</td><td>Land acquisition details as per MoEF&CC O.M. dated 7/10/2014 & 19/02/2025</td><td></td><td>Land documents are not attached with application form</td></tr>
<tr><td>4</td><td>Existence of habitation & involvement of R&R, if any</td><td><u>Project site</u>: Name of village (if any)
Study Area: NA</td><td></td></tr>
<tr><td>5</td><td>Existence of school and hospitals if any.</td><td><u>A. School</u>
<u>Project site</u>: No
Study Area:
<table>
<tr><th>School</th><th>Distance</th><th>Direction</th></tr>
<tr><td>Durgapur Projects Boys High School</td><td>1.20 km</td><td>S</td></tr>
<tr><td>Naba Waria Primary School</td><td>700m</td><td>NW</td></tr>
<tr><td>Durgapur Vidyasagar Model High School</td><td>1.72 km</td><td>N</td></tr>
<tr><td>NIT of Durgapur</td><td>2.45 km</td><td>NW</td></tr>
<tr><td>Palashdiha High School</td><td>1.52 km</td><td>W</td></tr>
<tr><td>St. Xavier High School</td><td>1.52 km</td><td>W</td></tr>
</table>
<u>B. Hospital</u>

<u>Project site</u>: No
Study Area:
<table>
<tr><th>Hospital</th><th>Distance</th><th>Direction</th></tr>
<tr><td>Durgapur City Private Hospital & Clinic</td><td>1.12 km</td><td>NW</td></tr>
</table>
</td><td></td></tr>
</table>

<table>
<tr><th>S. No.</th><th>Particulars</th><th>Details</th><th>Remarks</th></tr>
<tr><td></td><td></td><td>
<table>
<tr><td>TSP Main Hospital</td><td>5 km</td><td>N</td></tr>
<tr><td>Durgapur Sub Divisional Hospital</td><td>3.2 km</td><td>E</td></tr>
<tr><td>Citizen Hospital</td><td>4.3 km</td><td>E</td></tr>
<tr><td>The Mission Hospital</td><td>4.5 km</td><td>E</td></tr>
<tr><td>Vivekananda Hospital</td><td>3 km</td><td>E</td></tr>
</table>
</td><td></td></tr>
<tr><td>6</td><td>Latitude and Longitude of all corners of the project site.</td><td>A. Plant site
Unit 7 - 23°31'9.74"N, 87°18'5.63"E
Unit 8- 23°31'15.00"N, 87°18'4.88"E
B. Ash pond
<table>
<tr><th>Point</th><th>Latitude</th><th>Longitude</th></tr>
<tr><td>A</td><td>23°31'0.31"N</td><td>87°17'37.14"E</td></tr>
<tr><td>B</td><td>23°31'14.84"N</td><td>87°17'36.96"E</td></tr>
<tr><td>C</td><td>23°31'17.82"N</td><td>87°17'49.72"E</td></tr>
<tr><td>D</td><td>23°31'1.24"N</td><td>87°17'46.15"E</td></tr>
</table>
</td><td></td></tr>
<tr><td>7</td><td>Elevation of the project site</td><td>103 M above mean sea level</td><td></td></tr>
<tr><td>8</td><td>Involvement of Forest land if any.</td><td>Status of stage I Forest Clearance: NA
Area of the forest land involved: NA</td><td></td></tr>
<tr><td>9</td><td>Water body (Rivers, Lakes, Pond, Nala, Natural Drainage, Canal etc.) exists within the project site as well as study area</td><td><u>Project site:</u> NIL

Study area
<table>
<tr><th>Water body</th><th>Distance</th><th>Direction</th></tr>
<tr><td>Damodar River</td><td>1.85 km</td><td>S</td></tr>
<tr><td>Pond</td><td>150 m</td><td>W</td></tr>
<tr><td>Drainage</td><td>500 m</td><td>W</td></tr>
</table>
</td><td></td></tr>
<tr><td>10</td><td>Existence of ESZ/ ESA/ national park/ wildlife sanctuary/ biosphere reserve/ tiger reserve/ elephant reserve etc. if any within the study area</td><td><u>Study area</u>
Name of the ESZ/ESA: NIL
Status of Notification:NIL
Distance of project from ESZ/ESA: NIL
Authenticated map of ESZ projecting distance of ESZ from project site: Status of NBWL approval: NIL
List of Reserved and protected forests: NIL</td><td>There are no existence of ESZ/ ESA/ national park/ wildlife sanctuary/ biosphere reserve/ tiger reserve/ elephant reserve etc., within the study area</td></tr>
<tr><td>11</td><td>Involvement of Critically Polluted Area/Severely Polluted area as per 2018 CEPI score</td><td><u>Involvement of SPA: Durgapur (</u>having CEPI score 65.66<u>)</u>

<u>Proximity to SPA: Within</u></td><td>Proposed additional environmental safeguards as per MoEF&CC OM dated 31/10/2019 not submitted</td></tr>
</table>

42.4.4: **The implementation status of the existing EC**

S. No.	Confi -guration	Capacity (MW)	Date of accord of EC	Date of commiss -ioning of units	Production as per CTO	Applicable emission norms as per notification dated 7/12/2015 & its amendment
1.	Unit 7	300 MW	30/07/2004	30/4/2008	300 MW	PM- 50 mg/Nm³ SO_2- 600 mg/Nm³ for units below 500 MW NO_x- 450 mg/Nm³
2.	Unit 8	250 MW	18/10/2007	01/10/2014	250 MW	PM- 50 mg/Nm³ SO_2- 600 mg/Nm³ for units below 500 MW NO_x- 450 mg/Nm³

42.4.5: Details of Thermal Power Plant

Parameter	Details as per EC	Status as on May 2026	Remarks
Total Land Area (Ha)	297.47	294.47	No additional land acquired
Involvement of Forest Land	NA	Some part of Reserved Forest is coming inside the Project area.	
NBWL Clearance	NA	NA	Not applicable
CPA/SPA	NA	Durgapur SPA	Project is located within the Durgapur SPA having CEPI score 65.66

42.4.6 Background for amendment sought by the proponent

With respect to the instant EC amendment proposal, following was apprised to the members of the EAC during the meeting:

g. 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.

h. 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 NOx) through adequately large stacks.

i. 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 (NOx), and Mercury (Hg) parameters with timelines.

j. MoEF&CC vide notification dated 11/07/2025 amended the provisions related to sulphur dioxide emission standards for Category –B Thermal Power Plants (TPPs)

k. As per the CPCB categorization dated 23/06/2022 with the respect to Sulphur di-oxide (SO2) emission norms, 550 MW TPP of The Durgapur Projects Limited falls under Category B.

l. In pursuance to the MoEF&CC Notification dated 11/07/2025,The Durgapur Projects Limited has submitted their application for amendment in EC within the prescribed time frame seeking for review of Sulphur dioxide emission standards.

42.4.7: 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.

Month	Coal consumption in MT Unit wise		
	Unit-7	Unit-8	Total
Sep-25	3426.04	4047.50	7473.54
Oct-25	3292.70	3688.36	6981.06
Nov-25	3132.43	3176.87	6309.3
Domestic Coal is being used while maintaining Sulphur content < 0.60%.			

ii. Minimum, maximum and 98th percentile levels of ambient PM_{10}, $PM_{2.5}$, NOX, and SO_2 from secondary monitored AAQ data for last three months period.

S. No.	Name of location	Parameters being monitored	Remarks
1	PCBL More	PM_{10}, $PM_{2.5}$,SO_2, NO_2	Buffer Zone
2	Angadpur		
3	Benachiti		
4	Bidhannagar		
5	Mahishkapur Road		
6	DPL Colon0079		
7	Outside Plant (within 2 km)		
8	Power Station		Core Zone

Summary of AAQ Result for last three months period

S. No.	Name of location	Parameter	Concentration in µg/m3			NAAQS
			Min	Max	Average	
1	DPL Colony	PM_{10}	46.3	**116**	74.22	100
		$PM_{2.5}$	21.6	**73.7**	42.73	60
		NO_2	4.5	5.4	4.98	80
		SO_2	16	21.88	19.30	80
2	Outside Plant (within 2 km)	PM_{10}	42.5	**102.2**	69.16	100
		$PM_{2.5}$	28.3	49.2	39.48	60
		NO_2	5.14	5.7	5.43	80
		SO_2	17	23.06	20.10	80
3	Power Station	PM_{10}	44.7	**126.2**	80.18	100
		$PM_{2.5}$	29	**98.3**	53.43	60
		NO_2	4.67	5.9	5.46	80
		SO_2	16	25.67	21.46	80

iii. **Average stack emissions for PM, NOx, and SO_2 parameters for last three months, flue gas concentration in mg/Nm^3**

S. No.	Name of stack	Parameter	Concentration in (mg/Nm^3) Period		
			Max	Min	Avg.
1	Unit-7	PM	43.75	50.25	47.83
		NO_2	591.91	602.61	595.89
		SO_2	297.34	316.09	306.12
2	Unit-8	PM	28.5	29.5	29.00
		NO_2	581.2	610.7	593.13
		SO_2	296.3	318.9	307.73

Mass emission rate of pollutants in gram per second

S. No.	Parameters	Units	Unit 7	Unit 8
1	Stack Height	M	220	220
2	No. of flue	No.	1	1
3	Top diameter of flue	m	6.25	5.59
4	Flue gas velocity in each flue	m/s	18.07	18.07
5	Flue gas temperature	^oK	140	140
6	Volumetric Flow rate of gas in each flue	Nm^3/s	1778956.16	2992576.12
7	**Emission Rates**			
A	PM10	g/s	34	26.8
B	PM2.5	g/s	20.4	16.1
C	SO2	g/s	372.1	310.1
D	NOx	g/s	378.9	226.8

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 220 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.

The model selected for undertaking the impact assessment is the AERMOD air dispersion model. The modelling methodology follows established Air Dispersion Modelling Guidelines, often referenced in CPCB-approved protocols.

GLC of pollutants at sampling location:

Receptor Location	GLC at Monitoring Location ($\mu g/m^3$)			
	PM_{10}	$PM_{2.5}$	SO_2	NO_x
AAQ1- DPL Guest House	94.6	57.5	6.0	32.3
AAQ2- B Zone Engi-neering college	64.9	35.7	6.0	35.9
AAQ3- Near Ram Mandir	73.9	40.7	6.0	25.8

AAQ4- Near DPL Waste Water Outlet	152.6	59.5	7.0	41.7
AAQ5- Near City Center	141.4	55.2	6.8	39.2
AAQ6- Dakshin Pally	70.1	32.2	6.0	24.3
AAQ7- DPL Colony	116.0	73.7	5.2	21.88
AAQ8- Outside Plant (Within 2 km)	102.2	49.2	5.7	23.06
AAQ9- Power Station	126.2	98.3	5.9	25.67

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.	**Existing Air Pollution Control Systems and SO_2 Management Measures at DPPS** **Electrostatic Precipitator (ESP):** Unit 7: 7-field ESP Unit 8: 8-field ESP *Achieves particulate matter (PM) removal efficiency of more than 99%* **Low-Sulphur Coal Usage:** Unit 7: Yes Unit 8: Yes *Use of ECL/BCCL coal with sulphur content in the range of 0.35–0.50%, which directly reduces SO_2 generation at source* **Combustion Control Measures:** Unit 7: Implemented Unit 8: Implemented *Optimization of combustion through controlled oxygen (O_2) levels, improved coal mill fineness, and stable load operation, resulting in reduced sulphur oxidation* **High Stack Dispersion:** Unit 7: 220 m stack height Unit 8: 220 m stack height *Facilitates effective dispersion of emissions, thereby lowering ground-level SO_2 concentrations* **Ambient Air Quality Monitoring:** Unit 7: Continuous monitoring Unit 8: Continuous monitoring *Ensures compliance with National Ambient Air Quality Standards (NAAQS) for SO_2 and enables tracking of long-term air quality trends*

Air Pollution & Fugitive Emission Control Systems

Emission Source / Area	Control System / Measure Implemented
Particulate Matter (PM)	High-efficiency Electrostatic Precipitators (ESP) installed (7-field for Unit 7 and 8-field for Unit 8) achieving >99% PM removal efficiency; continuous monitoring through CEMS
Nitrogen Oxides (NOx)	Combustion control measures including optimized burner operation, controlled excess air (O_2 levels), improved coal mill fineness, and stable load management to minimize NOx formation
Coal Transportation	Transportation primarily through covered systems (rail/road); dust suppression through water sprinkling along internal roads and unloading areas

Coal Handling & Storage	Water spraying systems and dust suppression measures at transfer points; proper stacking and handling to reduce windblown dust
Coal Bunkers	Enclosed handling systems with controlled feeding; minimal exposure reduces fugitive dust emissions
Fly Ash Handling	Dry ash handling system with pneumatic conveying in closed pipelines; minimizes dust leakage during transfer
Fly Ash Loading & Transport	Enclosed loading systems and transport through bulkers/covered trucks to prevent fugitive emissions
Fly Ash Disposal	Ash pond management with water cover and dyke stabilization to prevent dust dispersion
Fly Ash Utilization	Utilization in cement and brick manufacturing, and other construction activities as per Fly Ash Notification; reduces need for disposal and associated emissions

42.4.8: 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	Amendment Sought	Justification & Request for Amendment
1.	The project proponent shall install Flue Gas Desulphurization (FGD) system to control SO_2 emissions in compliance with MoEF&CC Notification dated 07.12.2015.	Exemption from installation of FGD system for Unit 7 (300 MW) and Unit 8 (250 MW).	Detailed technical assessment indicates that existing SO_2 control measures are adequate. The plant uses low-sulphur coal (0.35–0.50%), resulting in comparatively lower SO_2 generation. High stack height (220 m) ensures effective dispersion, and ambient SO_2 levels are within NAAQS limits. Air quality modelling confirms that ground-level concentrations remain well below prescribed standards even without FGD. Further, as per MoEF&CC Notification dated 11.07.2025, Category-B thermal power plants are eligible for case-by-case exemption based on technical justification. Installation of FGD would lead to significant economic burden and additional environmental impacts (increased auxiliary power consumption, reagent handling, and fly ash quality deterioration) without proportionate environmental benefit. Therefore, exemption from FGD installation is requested.

42.4.9: Summary of court cases: Nil

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

42.4.11: 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

42.4.12: The Committee observed and noted the following:

i. The instant proposal is for seeking amendment in an EC conditions as per MoEF&CC Notification dated 11/07/2025 for Sulphur dioxide emission standards, prescribed in EC letter dated 19/04/2007 and 20/07/2009 resp. accorded for setting up 1x250 MW and 1x300 MW by M/s. Durgapur Projects Limited at Durgapur, District Burdwan, West Bengal.

ii. The existing project of The Durgapur Projects Limited was originally granted Environmental Clearance in favour of The Durgapur Projects Limited for setting up Unit 7 (300 MW) & Unit 8 (250 MW) Thermal Power Plant at Village Durgapur, District Paschim Bardhaman, West Bengal vide letter no No.J-13012/11/2004-IA.II(T) dated 30.07.2004 for Unit-7 and vide letter no.- No. J. 13011/26/2007-IA-I (T) for Unit 8 dated 18.10.2007 under EIA, 2006. CTO is valid up to 31.07.2028.

iii. 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.

iv. The project site is located within the Severely Polluted Area (SPA) of Durgapur having CEPI Score of 65.56.

v. During the months of September-November 2025, the total coal requirement for Unit-7, was 3426.04 MW, 3292.70 MW, 3132.43 MW and for Unit-8 was 4047.50 MT, 3688.36 MT and 3176.87 MT, respectively. Domestic Coal is being used while maintaining Sulphur content < 0.60 %.

vi. 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. The values for Ambient Air Quality are exceeding the prescribed norms of NAAQMS 2009.

vii. The mass emission rate of pollutants including PM_{10}, $PM_{2.5}$, NO_x, and SO_2 were estimated 34 g/s, 20.4 g/s,372.1 g/s and 378.9 g/s, respectively, for Unit 7 and 26.8 g/s, 16.1 g/s,310.1 g/s and 226.8 g/s, respectively, for Unit 8.

viii. Project proponent has installed a 220 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 152.6 µg/m³ $PM_{2.5}$ is 98.3 µg/m³, SO_2 is 7.0 µg/m³ and NO_x is 41.7 µg/m³.

x. EAC observed that the PM_{10} and $PM_{2.5}$ values are exceeding the NAAQS 2009 norms at all Ambient Air monitoring locations. PP needs to submit the time bound action plan for reduction of PM levels in ambient air.

xi. EAC observed that the NO_2 values are very low in the Ambient Air monitoring locations. Project Proponent needs to verify the same.

xii. Project Proponent needs to submit the Additional Environmental Mitigation measures to maintain the pollutant levels in the ambient air and stack emission well below the prevailing norms with physical and financial outlay and monitoring mechanism

xiii. EAC observed that the parts of Reserved forest ~~in~~ is coming inside the project area, PP needs to submit the certified copy from the State Forest Department regarding the same.

xiv. EAC observed that Project proponent has not submitted the addendum EIA/EMP report through NABET accredited consultant.

xv. Project Proponent needs to submit the Additional environmental safeguards as per MoEF&CC OM dated 31/10/2019 as the project is coming inside the Durgapur Severely Polluted Area.

xvi. EAC suggested to clarify the number of power generation units within the premises, as the EC is accorded for unit 7 & 8. Details of unit 1-6 to be furnished along with the capacity and status of statutory permissions along with implementation status.

Recommendations of the Committee

42.4.13: 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. 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.

ii. Revised EMP by taking in to consideration the Environment Protection measures suggested in the WBPCB action plan as the project site is situated within the Durgapur SPA. Further, additional environmental safeguards to be followed by the proponent in term of the MoEF&CC OM dated 31/10/2019 pertaining to consideration of proposals in CPA/SPA shall also be submitted

iii. Addendum EIA/EMP report through NABET accredited consultant.

iv. Analyse the sulphate concentration in ambient air and submit the report.

v. Details of the sensitive receptors at location of maximum GLC and control measures proposed in this regard needs to be submitted.

vi. 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.

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

viii. Performance Guarantee test report of ESP shall be submitted.

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

x. NOC from the State Forest Department regarding the forest area coming inside the Project site.

xi. Details of unit 1-6 to be furnished along with the capacity and status of statutory permissions along with implementation status shall be furnished.

Agenda Item no.- 42.5

42.5: 2x500 MW Tuticorin Thermal Power Project by **M/s. NLC Tamil Nadu Power Limited** at Tuticorin, 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/564830/2026, F.No. J-13012/68/2006-IA-II(T)]

42.5.1: M/s. NLC Tamil Nadu Power Limited (NTPL) has made an online application vide proposal no. IA/TN/THE/564830/2026 dated 08.01.2026 along with Form 4 & addendum EIA report prepared through QCI/NABET accredited consultant and sought for amendment in the Environmental Clearance accorded by the Ministry vide letter no. J-13012/68/2006-IA-II(T) dated 13.06.2007 for the 2 × 500MW Coal-Based Thermal Power Project located at Tuticorin District, Tamil Nadu, under the provisions of the EIA Notification, 2006.

Name of EIA Consultant: M/s. MITCON Consultancy and Engineering Services Ltd.; Certificate No.: NABET/EIA/24-27/RA 0343; Validity: 05.02.2027.

Written submission

42.5.2: Project proponent submitted the following with respect to FGD installation:

Status of Flue Gas Desulphurization (Fgd) Project at NTPL (2x500 Mw), Tuticorin
Flue Gas De-Sulphurization (FGD) Project - Unit 1&2

i. LOA issued to M/s BHEL on 18.04.2020 with a contractual timeline for completion of trial operation of FGDs within 27 months for Unit #1 & 33 months for Unit #2 from the date of LOA. Contract value : Rs 621.89 Cr.
ii. Engineering progress is about 99.04%.
iii. Physical progress is 90%.
iv. Financial progress is 90 %
v. Major components installation works completed.
    a. Absorber system completed.
    b. Gypsum handling system completed
    c. Ducting and equipment erection completed.
    d. CEA inspection of Electrical installation is completed and clearance received.
    e. Water fill test of all 8 tanks completed.
    f. Compressed Air System erection completed.
vi. Pending works
    a. All Equipment commissioning of Unit #1 & #2 – Booster Fan, RC Pump, Oxidation blower, Wet ball mill, Limestone handling and Gypsum handling system.
    b. Interconnecting piping works, Roads and Drain works are in progress.
    c. Waste water treatment plant and chemical storage plant works are in progress.
vii. Anticipated commissioning: Unit #1- August 2026 & Unit #2- September 2026.

viii. Scheduled timeline for compliance (As per MoEF&CC Gazette Notification dt 11.07.2025 for Category 'B' TPP) – December-2028.

Additional Chimney for FGD – Unit 1&2

i. LOA issued to M/s BHEL on 18.11.2021 for Rs 85 Cr with scheduled completion of 21 months from date of LoA.

ii. Engineering progress is 100% completed.

iii. Physical progress is 95.5%

iv. Financial progress is 92%

v. Major works completed.

   a. Flue can erection completed.

   b. Painting of External concrete Structure completed.

   c. Flue can erection completed.

   d. Borosilicate application work for Unit #1 & Unit #2 Flue can completed.

   e. Chimney Elevator installation completed.

vi. Pending works

   a. Borosilicate application works in Transition duct

   b. Condensate Liquid Collection system piping works

   c. Electrical works

vii. Anticipated completion timeline: 30.06.2026

Observations and deliberation of the EAC

42.5.3: The Committee observed and noted the following:

i. The instant proposal is for seeking amendment in an EC conditions as per MoEF&CC Notification dated 11/07/2025 for Sulphur dioxide emission standards, prescribed in EC letter dated 13/06/2007 accorded for setting up 2 × 500MW Coal-Based Thermal Power Project located at Tuticorin District, Tamil Nadu.

ii. EAC also reviewed the written submission submitted by the proponent and observed that the Project Proponent has already constructed approx. 90% of FGD and it will be commissioned in August and September 2026 within the stipulated time line for FGD installation as per MoEF&CC Gazette Notification dated 28/06/2018 and its amendment.

iii. Project Proponent has informed the EAC that FGD will be operationalised after its commissioning.

Recommendations of the Committee

42.5.4: In view of the foregoing and after the detailed deliberations, the ***Committee recommended to return the proposal in present form*** as the proponent has already in the process of FGD installation and likely to be operationalize for Unit #1- & Unit #2 by August 2026 and September 2026, respectively.

Agenda Item No. 42.6:

42.6: 4x600 MW Thermal Power Plant by **M/s. Jindal Power Limited (JPL)** at Villages Tamnar, Taluk Gharghoda, District Raigarh, Chhattisgarh – **Reconsideration for Amendment in Environmental Clearance based on ADS reply – reg.**

[Proposal No. IA/CG/THE/472414/2024; F. No. J-13012/117/2008-IA. II (T)]

42.6.1: M/s. Jindal Power Limited has made an online application vide proposal no. IA/CG/THE/472414/2024 dated 10/05/2024 seeking for amendment in Environmental Clearance dated 18.03.2011 and its subsequent amendment granted therein for the project namely ***"4x600 MW unit Coal based Thermal Power Plant located at Village Tamnar, Taluk Gharghoda, District Raigarh, Chhattisgarh"*** by M/s Jindal Power Limited (JPL) for ***utilization of existing ash dyke of 4x250 MW situated in an area of 198 Ha for 4x600 MW TPP. Due to this proposed amendment, there will be no ash pond for 4x600 MW TPP and area of 236 Ha meant for ash pond will be used for other purposes.***

The above proposal was earlier considered by the EAC – Thermal in its 11th meeting held on 27-28th June, 2024 and recommended for amendment in EC subject to stipulation of additional environmental safeguards. Subsequently, the proposal was again referred back to the EAC with an observation that whether EAC has taken into consideration scheduled action plan and asked for any inspection. Accordingly, the proposal was again considered by the EAC in its meeting held on 1/10/2024 wherein EAC deferred the proposal for want of additional information and also recommended for a site visit by the sub-committee of EAC – Thermal. The site visit by the sub-committee was completed during 3-4th January, 2025 and the proponent submitted the reply to the additional information through Parivesh on 06/02/2025. The said proposal was further placed before the 20th EAC meeting held on 24/02/2025, wherein the committee partially recommended for amendment in EC to use existing ash dyke of 4x250 MW for 4x600 MW TPP for 2 year i.e. till 30.06.2026 subject to stipulation of additional environmental safeguards. The proposal was again referred back to the EAC by the Ministry for further examination regarding adequacy of existing ash dyke of 4x250 MW. Accordingly, the proposal was placed before the EAC in its meeting held on 20/06/2025 wherein the Committee deferred the proposal and sought for a closure report against the 31 non-compliances as reported in the certified compliance report dated 25/04/2025 including the non-compliance to the provisions contained under the ash utilization notification 2021 for the existing ash dyke of 4x250 MW. Further, proponent was requested to submit the circular slip analysis of the existing ash dyke of 4x250 MW to ensure the stability of the same as it has been proposed to be used for disposal of ash from 4x600 MW forever.

Proponent has uploaded the additional information on PARIVESH web portal on 14/10/2025 and the same was considered by the EAC in its 32nd meeting held on 30/10/2025. The relevant extract of the minutes of the EAC meeting and recommendations are furnished as below:

42.6.2: Extracts of the EAC meeting held on 30/10/2025

Details of the EC for which amendment is sought:

i. Jindal Power Ltd. (JPL) is operating 1000 MW (4x250 MW) & 2400 MW (4x600 MW) thermal power plants located at village Tamnar, District Raigarh, Chhattisgarh. Details of the EC obtained and its implementation status is summarized as below:

S. No.	Units	EC date	COD	Status of implementation
1.	2x250 MW (Phase I)	24.09.1997	08.12.2007 & 15.06.2007	Fully implemented and the units are under operation
2.	2x250 MW (Phase II)	08.06.2006	16.04.2008 & 05.09.2008	
3.	2x600 MW (Units#1&2)	18.03.2011	27.08.2014 & 09.11.2014	
4.	2x600 MW (Units#3&4)	04.11.2011	15.01.2015 2.12.2016	

ii. The 1000 MW plant was constructed in two phases. Phase – I and Phase –II, each comprising of two units of 250 MW.

iii. Existing ash dyke for 4x250 MW has been constructed in an area of 198 Ha.

iv. The 4x600 MW (2400 MW) units were granted EC in two parts i.e. on 18.03.2011 (Unit # 1 &2) and on 04.11.2011 (Unit # 3 & 4). As per EC dated 18.03.2011, a separate ash dyke near Rodapali village was to be constructed for 4x600 MW TPP. However, the Ash dyke could not be constructed as the land for the proposed ash dyke area became part of a coal block area. Based upon the request of JPL, MoEF&CC vide letter dated 26.04.2017 granted permission to construct the ash dyke on 236 Ha land at an alternate location near village Dolesera which is located at a distance of 4.3 km from the TPP site. Consent to Establish (CTE) for the same was granted by Chhattisgarh Environment Conservation Board (CECB) vide letter dated 27.04.2022. However, JPL not constructed the new ash dyke for 4x600 MW in an area of 236 ha which was permitted by MoEF&CC. The earlier amendment obtained in this regard are summarized as below:

S No	Date of accord of EC amendment	Remarks
a.	10.01.2014	Amendment in EC w.r.t. transportation of coal, utilization of existing ash dyke of 4x250 MW for 4x600 MW TPP for 03 years.
b.	26.04.2017	Amendment in EC w.r.t. transportation of coal, utilization of existing ash dyke for 4x600 MW TPP for 02 more years till construction of new dyke & change in coal source from imported to domestic, change in location of proposed dyke from Rodappli to near Dolesara village
c.	28.08.2020	Amendment in EC for extension of permission for transportation of coal, utilization of existing ash dyke for 4x600 MW TPP till October, 2021.
d.	28.10.2021	Amendment in EC for extension of permission utilization of existing ash dyke for 4x600 MW TPP till December, 2022.
e.	24.02.2023	Amendment in EC for extension of permission utilization of existing ash dyke for 4x600 MW TPP till June 2024. However, formal EC amendment letter has not been accorded by the Ministry.

v. The instant proposal is for amendment in Environmental Clearance of 4x600 MW Thermal Power Plant for utilization of existing ash dyke of 4x250 MW for 4x600 MW TPP permanently and the same is summarized as below:

Specific/General Condition No	Details of Conditions as per EC	Amendment Sought	Justification
Condition no. 3, 4 & 5 of the EC amendment dated 24.02.2023.	MoEF&CC has granted permission to use existing ash dyke of 4x250 MW for disposal of unutilized ash of 4x600 MW till June, 2024.	Permission to continue use of existing ash dyke of 4x250 MW for unutilized ash of 4x600 MW permanently.	• To conserve the land and maximize ash utilization, the Company has planned to not construct the new ash dyke for 4X600 MW on an area of 236 hectares which was permitted by MoEF&CC. • As the Company is utilizing about 100% fly ash, the existing ash dyke volume is adequate to continue bottom ash disposal from 4x250 MW and 4x600 MW TPPs.

Adequacy of the existing ash dyke of 4x250 MW in 198 Hectares

The existing ash dyke is located in 198 ha. Area. The dyke has four lagoons namely 1A, 1B, 2A and 2B. The height of the existing ash dyke is 18 m from the Ground level. The height of the existing ash dyke will not be increased further.

Details of Annual Ash Generation, Utilisation and Disposal in Ash dyke (in lakh metric tons)

TPP	Total Ash Generation	Fly Ash Utilisation	Bottom Ash disposal in Ash dyke	Remarks
4x250 MW	23.1	18.48	4.62	Dried ash is excavated from the ash dyke and utilised in mine backfilling. Thus, 100% ash is being utilised
4x600 MW	61.81	49.45	12.36	
Total	84.91	67.93	16.98	

Presently, 164.5 Lakhs metric tons ash from 4x250 MW TPP & 4x600 MW TPP is stored in the 198 ha existing ash dyke. The Company plans to excavate and utilize 17.25 Lakh metric tons ash annually from the dyke which will ensure the volume availability in the dyke for the life of the 4x250 MW & 4x600 MW TPP.

Details of existing ash dyke regarding volume availability

S No.	Details	Lagoon 1A	Lagoon 1B	Lagoon 2A	Lagoon 2B	Total
1.	Status of ash dyke (Active/ Exhausted- Yet to be reclaimed/ reclaimed)	Active with Ash excavation in progress	Active	Active	Capping is in progress	
2.	Area (ha)	52.6	68.8	42.7	33.9	198
3.	Dyke Height (m)	18 m				
4.	Volume (m^3)	6680000	8120000	4440000	2360000	21600000

S No.	Details	Lagoon 1A	Lagoon 1B	Lagoon 2A	Lagoon 2B	Total
5.	Quantity of ash stored (metric tons)	164.5 Lakh Metric tonnes till 29th Oct 2025				
6.	Available volume in percentage and quantity of ash that can be further disposed (Metric tons)	8.7% 544500	14.5% 1089000	24.67% 1030500	0% 0	13.2% 2664000 Metric tons (296000 m^3)
7.	Expected Life of ash pond (number of years and months)	119 days	239 days	226 days	0 days	584 days

The bottom ash (around 20% of the total ash generated) from the Power Plant has to be evacuated in slurry form and disposed to the ash dyke before the same can be dried and utilized. JPL is achieving the 100% ash utilization by utilizing the complete fly ash (which is 80% of the total ash generated) which is collected and evacuated in dry form, and by excavating and subsequently using the dried ash (approx. 20% of the total ash generated) from the ash dyke. Thus the company has sufficient volume available in the ash dyke for disposal of bottom ash in the ash dyke.

Action plan for excavation and use of already stored ash in the ash dyke

Year	Ash planned to be excavated (Lakhs metric tons)	Lagoon	Use of excavated ash
2025-26	17.25	1A, 1B & 2A	For mine void backfilling
2026-27	17.25		
2027-28	17.25		
2028-29	17.25		
2029-30	17.25		
2030-31	17.25		
2031-32	17.25		
2032-33	17.25		
2033-34	17.25		
2034-35	17.25		
Total	172.5		

Thus, concurrent excavation and utilization of ash from the ash dyke will enhance the volume availability in the existing ash dyke. The expected life of ash dyke, basis the above mentioned excavation and utilization plan, will increase from 1.6 years till the life of the 4x250 MW & 4x600 MW TPP.

Study regarding Slope Stability of Ash dyke

The Department of Civil Engineering, National Institute of Technology (NIT) Raipur conducted the stability analysis. NIT Raipur submitted the Stability Analysis report on 01.01.2025. The slope stability analysis of ash dyke for both normal and Earthquake condition were done by circular slip analysis with the Geo-studio software.

The conclusion and recommendations of the report is:
"The ash dyke is analysed for steady seepage condition (normal) and steady seepage earthquake condition (seismic) for local and global stability analysis. Factor of Safety are obtained more than 1.5 to 1.0 for normal and seismic loading conditions, which fulfils the acceptance criteria for minimum factor of safety required as per IS 7894: 1975 (Reaffirmed 2002), "Code of practice for stability analysis of earth dams." Therefore, it can be concluded that:

a. Ash dyke with 4th stage raising is observed to be stable and safe with current existing (fly ash filling and water ponding) condition and expected to perform satisfactorily.

b. However, continuous inspection/ examination of the ash dyke is required periodically."

Measures taken by JPL for implementation of the recommendations of NIT Raipur are tabled below:

S No.	Recommendation of the NIT Raipur	Measures being taken by JPL
1	Internal drainage system: for efficient functioning of the existing and raised embankment, the internal drainage system consists of rock toe, drains etc. should perform satisfactorily and shall be cleaned periodically.	Rock toe and toe drains are cleaned on regular basis to maintain efficiency of the drainage system. Status : Complied.
2.	Soil cover: Ash embankment shall be covered with non-erodible soil cover of at least 0.5 m thickness with natural soil and compacted to maintain required dry density of 95% of Maximum Dry Density (MDD)	The embankment has been covered with 0.5 mtr. thick soil and 95% maximum dry density is being maintained. Status: Complied.
3.	Regular Survey of the site and monitoring the condition of the ash dykes, lagoon and surrounding soil is required to ascertain the safety of the ash dyke. Situations which are considered as undesirable i.e. formation of cracks, gulleys etc. in and around the ash dyke can be avoided by early detection.	An internal Dyke Committee ensures weekly visit and submit report to the Plant head to ascertain the safety of the dyke. Status: Complied.
4.	An effective groundwater control of the decantation of the ash dyke lagoon and surface water management during rainy seasons is utmost important. It shall be instrumental for maintaining the static stability with permissible limits.	The toe drain, slope drain, cross drain are directed to Ash water recovery system (AWRS). The decantation well is connected to AWRS through underground of Hume pipe 1000 MM dia. Status: Complied.
5.	Good practices like instrumentation and monitoring of the ash pond should be implemented. Surface settlement and movement markers can be an important instrumentation to check the time wise deformations.	Instrumentation like Piezometer, settlement marker are already installed and being monitoring on regular basis. Status: Complied.
6.	All the slopes shall be properly maintained. Trees and large root plants shall not be allowed to grow on slopes.	Slope is well maintained and being monitored on regular basis. No trees or plant roots are there on the slopes. Status: Complied.
7.	All slopes must be clear properly so that any distress occur in these portion shall be identified immediately.	All slope are properly maintained and being monitored on regular basis. Status: Complied.

NIT Raipur vide its letter dated 04.08.2025 has clarified that the factor of safety obtained from circular slip analysis are more than 1.5 – factor of safety obtained as 2.21 to 2.67 for normal conditions and 1.52 to 1.89 for earthquake loading conditions. It has been further clarified that the above obtained FOS meets the acceptance criteria as per IS 7894: 1975.

Compliance to the observations of EAC sub-committee site visit report: The Subcommittee of EAC – Thermal visited the project site on 03rd Jan to 04th Jan 2025. The recommendations of the Subcommittee of EAC – Thermal and its compliance status by the proponent are as below:

Sl. No	EAC sub-committee recommendation	Compliance status
1.	The PP should ensure that the back filling of mine voids in combination with over burden material is carried out under care of environmental safe guards in compliance with the guidelines of DGMS and CPCB.	**Being complied** All out efforts are being made to utilize ash in accordance with the Fly ash utilization notification. Currently, JPL is utilizing the fly ash in back filling of mine along with OB in Gare Palma IV/1 and Gare Palma IV/2&3 coal mines owned by JPL, Tamnar as per approved mine plan and guidelines of DGMS & CPCB guidelines.
2.	PP should carry out regular monitoring of the area around back filling site to ensure there is no leaching or deterioration of any environmental parameter particularly w.r.t. Ground Water and Surface water sources.	**Being complied** JPL has engaged IIT-Kharagpur and CIMFR, Dhanbad for monitoring of long-term impacts of dumping of fly ash and leaching of heavy metals on soil and water of study area. There is no sign of deterioration of any environmental parameter w.r.t Ground water or surface water sources due to the backfilling.
3.	M/s JPL should present the findings and recommendations of the studies carried out by IIT, Kharagpur, CIMFR, Dhanbad and NIT Raipur w.r.t. the impact analysis of back filling of mine voids and slope stability of Ash Dyke.	The Conclusion of the studies carried out by IIT, Kharagpur, CIMFR, Dhanbad and NIT Raipur w.r.t. the impact analysis of back filling of mine voids and slope stability of ash dyke are as below: **Conclusion of NIT Raipur Report on Slope Stability of Ash dyke:** The ash dyke is analysed for steady seepage condition (normal) and steady seepage earthquake condition (seismic) for local and global stability analysis. Factor of Safety are obtained more than 1.5 to 1.0 for normal and seismic loading conditions, which fulfils the acceptance criteria for minimum factor of safety required as per IS 7894: 1975 (Reaffirmed 2002), "Code of practice for stability analysis of earth dams." Therefore, it can be concluded that: • Ash dyke with 4th stage raising is observed to be stable and safe with current existing (fly ash filling and water ponding) condition and expected to perform satisfactorily. • However, continuous inspection/ examination of the ash dyke is required periodically. **Conclusion of latest IIT Kharagpur study:** The following specific conclusions are derived: 1. The possibility of air quality degradation, due to the practice of fly ash-mixed dumping has not been observed, based on the air quality monitoring of the studied stations during the study period. 2. The heavy metal concentrations (in both surface and ground water samples) did not exceed the permissible limits, hence, heavy metal

Sl. No	EAC sub-committee recommendation	Compliance status
		poisoning of surrounding flora, fauna and other aquatic lives are not seen to be imminent threats. 3. The geo-environmental contamination level due to current mining activities (including fly-ash mixed backfilling) has showed no significant evidence to impact the lives of flora, fauna and other aquatic lives in the surrounding areas. **Conclusion of latest CIMFR Dhanbad study:** **1. Soil Sampling and Physicochemical Parameter Analysis** No major impacts observed on the soil physicochemical parameters of the area due to mining activity. As per soil physical parameters reclaimed site with fly ash is well managed to develop vegetation and ecosystem which may be similar to natural forest. Overall all the physicochemical parameters for all sampling sites are similar to the samples from forest area. **2. Water and Fly Ash Sampling and Physicochemical Parameters-** Quality assessment of groundwater for drinking purposes suggest that concentration of most of the analyzed parameters are within the recommended drinking water limits of BIS (2012). All the analysed parameters of the surface water collected are well within the prescribed limits of surface water quality standards under class C of IS:2296 and can be used for drinking purposes after conventional treatment followed by disinfection. The analysis results of mine water collected from proposed mine voids shows that pH are within the recommended range of 5.5 - 9.0 for effluent discharge. Concentrations of F-, Cl-, SO42- and NO3- in the analysed mine water samples are below the specified limits for effluent discharge. All the measured metals like Fe, Mn, Pb, Zn, Cu, Cr, Cd, Ni, As and Hg are also observed below the recommended limits for effluent discharge in inland surface water. **3. TCLP test:** TCLP test and study of radioactivity of radionuclide in coal ash samples shows no major impacts on the water quality parameters of the area due to disposal of coal ash in mine voids. **4. Air Quality Monitoring** The data indicates that the air quality in these locations are within acceptable standards concerning heavy metal contamination, ensuring a safer environment for the residents. Regular monitoring is recommended to maintain these standards and to identify any potential changes in the concentrations of these metals over time.
4.	M/s JPL should also work to enhance the utilization of fly ash in areas such as Cement manufacturing, brick, and tiles and hollow block manufacturing and highways construction etc.	**Being complied** The Company is also supplying the ash to JSP cement plant and nearby brick plants as per their requirements. Further the company provides the ash for road/ highway construction as and when the requirement arises.

Sl. No	EAC sub-committee recommendation	Compliance status
5.	For control of SO_2 emissions PP should install FGD systems at the earliest as per the provisions of OM of date 30/12/2024 as issued by MoEF&CC.	As per the MoEF&CC's Gazette Notification G.S.R.465 (E) dated 11.07.2025, the TPP at Tamnar is categorized as Category C and thus the condition to install FGD is not applicable on Category C TPPs.
6.	PP should make roadside plantation along the transport route of coal.	**Being complied** Avenue plantation along the route (both sides of the road) of coal transportation from is being done on continuous basis. The Company has already planted approx. 1 lakh sapling on the road side.
7.	Miyawaki plantation should also be done by PP in the plant area.	JPL has done Miyawaki plantation during monsoon season in the nearby area of plant.

Recommendations of EAC as per the meeting held on 30/10/2025

EAC recommended the proposal for amendment in EC subject to stipulation of additional specific conditions as given below:

Paragraphs of EC amendment letter dated 24/02/2023	Details as per EC amendment dated 24/02/2023	Amendment sought by the project proponent	Recommendations of EAC as per MoM
Para no 3, 4 & 5 of EC amendment dated 24.02.2023	Permission to use existing ash dyke of 4x250 MW for unutilized ash/ bottom ash of 4x600 MW has been granted till June 2024.	Permission to continue use existing ash dyke of 4x250 MW for unutilized ash of 4x600 MW permanently	Permission to use existing ash dyke of 4x250 MW for 4x600 MW TPP permanently subject to stipulation of following additional specific conditions:

Additional specific conditions:

i. 236 Ha of additional land acquired for ash dyke for 4x600 MW shall be utilized only for developing the thermal power plant as per Government of Chhattisgarh Invitation to Invest letter dated 30.06.2025. No other activity is permitted in the said land. Compliance status in this regard shall be submitted to the Regional Office in this regard along with the six monthly compliance report.

ii. Ash dyke stability study for the 4x250 MW situated in an area of 198 Ha shall be conducted through reputed government organization once in six months and the recommendations of the study report shall be duly complied with.

iii. All the recommendations of the stability analysis report of NIT Raipur shall be complied with.

iv. PP shall expedite the planation activities and plantation shall be done in this financial year (2025-26) as per the action plan given below:

S. No	Location	Area	No of Saplings	Remark
1	From Plant Gate to Gare Mines	Approx. 09 KM length	10,000	On completion of road construction being done by PWD and as per availability of road side land
2	Near Ash dyke	Approx. 4 Acres	5000	Gap plantation. Replacement and strengthening of existing plantation
3	Miyawaki Planation	1.5 Acres	10,000	-
4	Plantation in nearby Villages	-	30,000	Through CSR
5	Distribution of fruit tree saplings	-	25,000	Through CSR
6	In and around the Plant	-	20,000	Replacement and strengthening of existing plantation
Total			1,00,000	

v. PP shall expedite to start construction of nearby roads, geotagged pictures of before and after construction of the road shall be submitted.

vi. PP shall deploy vacuum based vehicle for everyday cleaning of the road in and around plant site at least for 5 KM. Sprinkling on the road side shall be carried out regularly (twice in a day) and data shall be maintained mentioning about its functionality.

vii. 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 to concern RO.

viii. Project proponent shall comply with the following non-conformities as reported in the report of the Regional Office dated 23/09/2025 within 30 days from the date of issue of EC amendment letter:

- Project proponent needs to comply with the recommendations covered in the Order dated 15/02/2022 of Hon'ble NGT in the Original Application No.104 of 2018 regarding coal transportation.
- Project proponent shall submit the relevant supporting documents regarding implementation of Compensatory Afforestation and catchment area treatment plan, Third-party report on monitoring & evaluation of Green Belt / plantation, documents regarding 100 percent fly ash utilization, R&R plan & its implementation status, formation of monitoring committee, CSR activities undertaken, details of schemes being implemented for tribal families, periodic maintenance of the coal transportation road undertaken and details of coal characteristics to the Regional Office of MoEF&CC.
- Project Authority shall apply for amendment in the existing ECs for the conditions related to in-built continuous monitoring for radio activity and heavy metals in coal, annual social audit by govt institute.

42.6.3: It was apprised to the EAC during processing of the proposal. It has been observed in the Ministry that *"Be submitted with the closure report for the 31 non-compliances, as indicated by the EAC. Whether the permission for permanent use of the existing ash dyke*

conforms to the Fly Ash Utilisation Notification, 2021 and its subsequent amendments?". In view of this, proponent was requested to submit additional information. Accordingly, PP submitted the additional information on 09/03/2026 and the same was placed before the 40th EAC meeting held on 19-20 March 2026 wherein EAC asked the Project Proponent to submit the Closure report obtained from the Regional Office – Raipur for the 31 non-compliances. In view of this, proponent submitted the additional information on 30/03/2026 and the same was placed before the 41th EAC meeting held on 08th April 2026 wherein EAC **deferred** the proposal and sought for Action taken and current status on the 11 (non complied and partially complied conditions) as stated in the report of the Regional Office – Raipur dated 27/03/2026.

Proponent uploaded the additional information on 22/04/2026 and the same was placed before the EAC in its meeting held on 30/04/2026 for consideration:

A. Be submitted with the closure report for the 31 non-compliances, as indicated by the EAC

Proponent has obtained the report from Regional Office – Raipur on 27/03/2026 regarding updated status of compliance based on their action taken report. As per the report, out of 31 non-compliances, 11 conditions have been reported as non-complied and partially complied. The updated status on the same as presented by the proponent is given as below:

<table>
<tr><th>S.No.</th><th>EC Conditions</th><th>Updated status as per the latest Review Report of IRO dated 27.03.2026</th><th>Current status submitted by JPL</th></tr>
<tr><td>1.</td><td>Observation of RO</td><td>• This Sub-Office is not accepting the reply submitted by the Project Authority on account of the following facts:
• Coal transportation for the above Thermal Power Plant is still being continued through trucks by road and partly through Cross Country Pipe Conveyor (CCPC). Further existing Cross Country Pipe Conveyor (CCPC) is not connected till their captive Coal Mines.
• Project Authority in their earlier reply relied upon the Ministry's gazette notification S.O. 1561 (E) dated 21/05/2020 and the judgment dated 08/11/2024 in the O.A. No. 70 of 2023. The said gazette notification S.O. 1561 (E) dated 21/05/2020 mandates compliance of several conditions referred therein. The order dated 15/02/2022 of Hon'ble NGT in the O.A. No.104 of 2018 in the matter of Shivpal Bhagat & Ors. Vs UOI has been passed after the above said Ministry's gazette notification S.O.1561(E)</td><td>• Coal from Gare mines is transported by the existing CCPC. During breakdown/ maintenance, it becomes necessary to use road.
• Coal bought under the FSA from the MCL mines has to be compulsorily transported through trucks as there is no railway infrastructure available.
<table>
<tr><th>Coal Source</th><th>Quantity (MTPA)</th><th>Mode</th></tr>
<tr><td>GP Mines</td><td>14</td><td>CCPC</td></tr>
<tr><td>MCL</td><td>6</td><td>Road</td></tr>
<tr><td>Total</td><td>20</td><td></td></tr>
</table>
• For transporting coal from MCL mine to TPP by rail, the shortest possible freight distance is of 275 kms.
• We are transporting coal as per the MoEF&CC's gazette notification dated 21.05.2020 using all safeguard measures.
• Pertinently this notification has not been stayed by any Court.
• It is again being reiterated that the proposed railway line from the nearest railway siding at Bhalumuda to the Sardega Railway Siding (nearest to MCL Mines at Kulda) is the 37-km project connecting Sundargarh (Odisha) to Raigarh (Chhattisgarh), sanctioned in August 2024 by the Government of India.</td></tr>
</table>

S.No.	EC Conditions	Updated status as per the latest Review Report of IRO dated 27.03.2026	Current status submitted by JPL
		dated 21/05/2020. • Further, Project Authority in their previous reply referred another NGT Order dated 08/11/2024 and in the said Order also Hon'ble NGT(CZ) expressly directed that the railway route for this project must be completed by 01/04/2025. • Project Authority in their ATR dated 12/03/2026 Relied upon the contents of the Oversight committee, where as this Office relied upon the one of the directions in the Order dated 15/02/2022 based on the recommendations of in the Committee Report (November, 2019) under the long term measures is reproduced, "To reduce the pollution and other impacts caused by road transport of coal and other minerals directions may be issued that coal transport by road from coal mines or to thermal power plants in these two blocks will be permitted only for 1 year, after which transport must be done by rail of closed conveyor belt". • The said Order dated 15/02/2022 of Hon'ble NGT has not been strike down by any appellate Tribunal/Court. • Project Authority has not effectively complied with the recommendations covered in the Order dated 15/02/2022 of Hon'ble NGT in the Original Application No.104 of 2018. • In view of the above submissions, this Office has not accepted the reply of the Project Authority and the observation of this Office remains as it was communicated vide letter dated 28/04/2025. Ministry may take appropriate view based on the reply of the Project Authority and prevailing various Judicial	• The construction of this Railway line from MCL mines to the Tamnar area is being undertaken by Chhattisgarh East Railway Limited (CERL).

S.No.	EC Conditions	Updated status as per the latest Review Report of IRO dated 27.03.2026	Current status submitted by JPL
		Orders in consultation with the law officer.	
	EC letter J-13011/15/93-II(T) dated 24.09.1997 for 2x250 MW (Phase I)		
2.	**Condition no. (xii)** Provision shall be made for collection of fly ash in dry form. Close conveyor system with dust suppression mechanism shall be used for transport of coal from the mine and for carrying the ash to the disposal areas. Adequate provision should be made for sprinkling of water at strategic locations to ensure that fly ash does not get air borne.	• As per the condition No.(xii), Provision shall be made for collection of fly ash in dry form. Close conveyor system with dust suppression mechanism shall be used for transport of coal from the mine and for carrying the ash to the disposal areas. Adequate provision should be made for sprinkling of water at strategic locations to ensure that fly ash does not get air borne. • Coal from the captive mines (Gare Palma mines) is being transported partly by road and partly through Cross Country Pipe Conveyor (CCPC). Coal sourced from other mines/places are being transported through trucks by road. Though provision has been made for collection of fly ash in dry form, Ash slurry transportation system has also been installed for disposal of fly ash in the ash dyke. In case of utilization in mine void back filling and land filling, wet ash with moisture is being transported in covered trucks. • **In view of the above, the condition is partly complied.**	• Coal from the Gare Palma IV/1 and Gare Palma IV/2 & IV/3 coal mines is transported using existing Cross Country Pipe Conveyor (CCPC). During breakdown/ maintenance, it becomes necessary to use road. • Coal procured from MCL under Fuel Supply Agreement (FSA) has to be transported by road as there is no railway infrastructure available from the Kulda Mines of MCL to the Tamnar Power Plant. • As has been reported by the IRO, wet ash for backfilling is being transported in covered trucks. The Company is ensuring that the ash is not being transported in dry form to prevent the fugitive emissions.
3.	**Condition no. (xiv)** Fly ash generated will be fully utilized within 10 years starting with 20% utilization from the year of operation of the project with the additional utilization of 10% every year.	• As per the condition, Fly ash generated will be fully utilized within 10 years starting with 20% utilization from the year of operation of the project with the additional utilization of 10% every year. Project Authority has not made available any document in support of 100 percent fly ash utilization achieved within 10 years from the year of operation of the Project rather height of the ash dyke has been	• Through continuous efforts, the Company has been able to achieve 100% ash utilisation now. • The Ash utilization **(in percentage)** during three previous years is given below: **Year** | **4x250 MW** | **4x600 MW** 2023-24 | 100.3 | 101.9 2024-25 | 94.3 | 92.0 2025-26 | 107.9 | 108.1 • MoEF&CC has notified the latest Fly ash Utilization notification on 31.12.2021. • The ash utilization of all the existing TPPs in the country is governed under the

S.No.	EC Conditions	Updated status as per the latest Review Report of IRO dated 27.03.2026	Current status submitted by JPL
		reportedly raised 4 times, which is evident that the condition has not been complied with. If the condition was complied as claimed by the Project Authority, huge quantity of legacy ash would have not been accumulated in the ash pond. • As per the records of the Project Authority, available in the public domain, 16.2 million metric tons of Fly ash Stock was available as on 31/03/2023. • In the updated ATR, Project Authority claims that 100% ash utilization was achieved during the period 2025-2026 and the Fly ash Utilization Notification, 1999 and its subsequent amendments have been superseded by the latest Fly Ash Utilization Notification, 2021 and thus • Project Authority claims that ash utilization by this Project may be evaluated in line with the latest Fly ash Utilization Notification, 2021. • So far, the said existing EC condition has not been amended or superseded, based on the Fly ash Utilization Notification, 2021. **In such circumstances this Office has reported the factual status of compliance. Ministry may take appropriate view in consultation with Experts.**	latest notification. • The Company submits that currently we are utilizing 100% ash generated.
4.	**Condition no. (xvi)** Project affected people should be adequately compensated and rehabilitated as per the State Govt. norms in consultation with the State authorities. The	• Project Authority in their previous reply/ATR stated that no R&R issue is pending and thus claimed that the condition has been complied with. • In the previous review report this Office reported that Project Authority has not made available any documents regarding the awards passed by the District Administration, total no. of	• It is submitted that the Company has deposited compensation amount of Rs.109,09,05,679 /- for 1125 affected families to the District Authorities. • As per the letter dated 17/03/2026 issued by the Office of the Sub-Divisional Officer, Gharghoda, Raigarh District, Chhattisgarh, 1028 families have already withdrawn the compensation amount. • Further, the Company has provided employment to 806 project affected people. • It is further submitted that some PAFs

S.No.	EC Conditions	Updated status as per the latest Review Report of IRO dated 27.03.2026	Current status submitted by JPL
	final R&R Programme and package should be submitted within six months. The project colony should be located 6-8 kms away from the plant site to avoid direct impact of the project. Ministry may take appropriate view based on the compliance details available, if any, in the Ministry.	Project Affected Family, total no. of Project Affected People, No. of persons paid compensation, total compensation assessed against land, Amount of compensation paid, Amount of compensation yet to be paid, No. of persons yet to be provided job, No. family yet to be rehabilitated. • In this regard, Project Authority submitted an updated action taken report dated 12/03/2026 and additional documents submitted vide e-mail communication dated 18/03/2026. • In the e-mail communication dated 18/03/2026, Project Authority reported that Project affected people should be adequately compensated and rehabilitated as per the State Govt. norms in consultation with the State authorities. The final R&R Programme and package should be submitted within six months. In the said e-mail communication, a copy of the letter dated 17/03/2026 issued by the Office of the Sub-Divisional Officer, Gharghoda, Raigarh District, Chhattisgarh regarding R&R compensation status towards land acquisition award passed. On perusal of the said communication/data, it has been observed that part of the award has already been disbursed and part of the awards yet to be disbursed and **thus the condition may be treated as partly complied.**	voluntarily choose one time compensation against the employment.
	EC Letter no. J-13011/8/2006-IA.II(T) dated 08.06.2006 for 2x250 MW (Phase II)		
5.	**Condition no. (ii)** 100% fly ash utilization shall be achieved within 9 years	100% fly ash utilization has not been achieved within 9 years as stipulated in the EC condition. Detailed comments of this Office mentioned above at point No.6 may be referred.	• Through continuous efforts, the Company has been able to achieve 100% ash utilisation now. • The Ash utilization **(in percentage)** during three previous years is given below:

<table>
<tr><th>S.No.</th><th>EC Conditions</th><th>Updated status as per the latest Review Report of IRO dated 27.03.2026</th><th>Current status submitted by JPL</th></tr>
<tr><td></td><td>in accordance with the notification on fly ash utilization SO 763 (E) dated 14th September, 1999 and the amendments made therein from time to time.</td><td></td><td><table><tr><th>Year</th><th>4x250 MW</th><th>4x600 MW</th></tr><tr><td>2023-24</td><td>100.3</td><td>101.9</td></tr><tr><td>2024-25</td><td>94.3</td><td>92.0</td></tr><tr><td>2025-26</td><td>107.9</td><td>108.1</td></tr></table>• MoEF & CC has notified the latest Fly ash Utilization notification on 31.12.2021.
• The ash utilization of all the existing TPPs in the country is governed under the latest notification.
The Company submits that currently we are utilizing 100% ash generated.</td></tr>
<tr><td></td><td colspan="3"><u>EC Amendment letter no. J-13011/8/2006-IA.II(T) dated 13.08.2021 (4x250 MW)</u></td></tr>
<tr><td>6.</td><td>Additional Condition no. 11(ii)
100% ash utilization shall be carried out throughout the year.</td><td>The condition has not been effectively complied with. Detailed comments of this Office mentioned above at point No.6 may be referred.</td><td>• Through continuous efforts, the Company has been able to achieve 100% ash utilisation now.
• The Ash utilization (in percentage) during three previous years is given below:<table><tr><th>Year</th><th>4x250 MW</th><th>4x600 MW</th></tr><tr><td>2023-24</td><td>100.3</td><td>101.9</td></tr><tr><td>2024-25</td><td>94.3</td><td>92.0</td></tr><tr><td>2025-26</td><td>107.9</td><td>108.1</td></tr></table>• MoEF&CC has notified the latest Fly ash Utilization notification on 31.12.2021.
• The ash utilization of all the existing TPPs in the country is governed under the latest notification.
The Company submits that currently we are utilizing 100% ash generated.</td></tr>
<tr><td></td><td colspan="3"><u>4x600 MW Thermal Power Plant - EC letter no. J-13012/117/2008-IA.II(T) dated 18.03.2011 for 2x600 MW (Unit#1 & Unit#2)</u></td></tr>
<tr><td>7.</td><td>Specific Condition no. (xvi)
Utilisation of 100% Fly Ash generated shall be made from 4 th year of operation. Status of implementation shall be reported to the Regional Office of the Ministry from time to time.</td><td>As per the stipulated condition Utilization of 100% Fly Ash generated shall be made from 4th year of operation and status of implementation shall be reported to the Regional Office of the Ministry from time to time.
Project Authority has not made available any document in support of 100 percent fly ash utilization achieved from 4th year of operation. In the present updated ATR, Project Authority claims that 100% ash utilization was achieved during the period 2025-2026 and the Fly ash Utilization Notification, 1999 and its subsequent amendments have been superseded by the latest Fly Ash Utilization Notification, 2021 and thus Project Authority claims that ash utilization by this</td><td>• Through continuous efforts, the Company has been able to achieve 100% ash utilisation now.
• The Ash utilization (in percentage) during three previous years is given below:<table><tr><th>Year</th><th>4x250 MW</th><th>4x600 MW</th></tr><tr><td>2023-24</td><td>100.3</td><td>101.9</td></tr><tr><td>2024-25</td><td>94.3</td><td>92.0</td></tr><tr><td>2025-26</td><td>107.9</td><td>108.1</td></tr></table>• MoEF&CC has notified the latest Fly ash Utilization notification on 31.12.2021.
• The ash utilization of all the existing TPPs in the country is governed under the latest notification.
The Company submits that currently we are utilizing 100% ash generated.</td></tr>
</table>

S.No.	EC Conditions	Updated status as per the latest Review Report of IRO dated 27.03.2026	Current status submitted by JPL
		Project may be evaluated in line with the latest Fly ash Utilization Notification, 2021. Detailed comments of this Office mentioned above at point No.6 may be referred.	
8.	**Specific Condition no. (xvii)** Fly ash shall be collected in dry form and storage facility (silos) shall be provided. Unutil ized fly ash shall be disposed off in the ash pond in the form of slurry form. Mercury and other heavy metals (As,Hg, Cr, Pb etc.) will be monitored in the bottom ash as also in the effluents emanating from the existing ash pond. No ash shall be disposed off in low lying area.	As per the stipulated condition, no ash shall be disposed of in low lying area. As informed by the Project Authority part of rehandling ash from the ash pond was partly used for levelling of low-lying areas, which was inconsistent with the stipulated EC condition and thus it was reported as partly complied. In the present updated reply/ATR, Project Authority claims that Ash was utilized for low-lying area filling in the year 2023-2024, duly after obtaining necessary NOC from CECB and thereafter no ash has been utilised for low-lying area filling. Project Authority ought to have amended the said EC condition before the disposal in the low-lying areas. However, Project Authority declared that after the year 2023-2024, re-handling of ash from the ash dyke is being reportedly utilised for backfilling of mine voids at Gare Palma IV/1 and Gare Palma IV/2 & IV/3 coal mines of JPL. In view of the above, Ministry may accept the reply of the Project Authority with the declaration that Ash will not be disposed in low-lying area in the absence of amendment in the said EC condition.	• Ash for 4x250 MW TPP was utilized in low lying area filling only after obtaining permission from CECB. • It is submitted that ash from the 4x600 MW TPP has not been disposed in low-lying area.
9.	**Specific Condition no. (xix)** Disposal of Bottom Ash in abandoned mines (if proposed to be undertaken) shall be carried out only after obtaining permission from DGMS	As per the stipulated condition, the project proponent shall inform the State Pollution Control Board well in advance before undertaking the activity (i.e. before disposal of ash in abandoned mines). During the visit, Project Authority has not made available any document in support of the said condition and thus it was reported as **"Details are not made available regarding the NOC obtained from the State Pollution**	The CECB letter dated 27.02.2026 clearly mentions that in the Fly ash Utilisation notification, 2021, there is no mention of requirement of NOC for use of ash in coal mine for backfilling. Copy of the CECB letter has been submitted.

S.No.	EC Conditions	Updated status as per the latest Review Report of IRO dated 27.03.2026	Current status submitted by JPL
	and it shall be ensured that the bottom and sides of the mined out areas are adequately lined with clay before Bottom Ash is filled up. The project proponent shall inform the State Pollution Control Board well in advance before undertaking the activity.	**Control Board for ash disposal in the mine voids and intimation submitted by the Project Authority to the CECB before undertaking the activity".** In the updated ATR also Project Authority has not submitted any details regarding the intimation submitted by the Project Authority to the CECB before undertaking the ash disposal in the mine voids rather Project Authority reported that CTO of their mines mandates to use fly ash from the Thermal Power Plant for backfilling. In the said reply, Project Authority submitted a clarification received from the Regional Office of Chhattisgarh State Environment Conservation Board vide letter dated 27/02/2026, wherein CECB has reported that filling of ash generated from the power plants in coal mines and mixing with OB dumps should be done in accordance with the guidelines issued by the CPCB and Fly Ash Notification, wherein no mention about obtaining permission from the State PCB. In the preceding point at Sl.15, Project Authority declares that ash disposal in the low-lying area was carried out with the prior approval of CECB, whereas for filling at Mine voids, claims that no NOC is required. Since, Project Authority has not made available any supporting document regarding intimation submitted to the CECB before undertaking the ash disposal in the mine voids, the observation of this Office remains as communicated earlier. Further Ministry may examine the requirement of NOC from the CECB for the fly ash disposal in the Mines and take appropriate view.	
10	**Specific Condition no. (xxiii)**	As per the condition, while identifying CSR activities it shall be ensured that need based assessment for the nearby villages	• The activities under CSR are identified on the need based assessment carried out by the Department of CSR of the

S.No.	EC Conditions	Updated status as per the latest Review Report of IRO dated 27.03.2026	Current status submitted by JPL
	While identifying CSR activities it shall be ensured that need based assessment for the nearby villages within study area shall be conducted to study economic measures with action plan which can help in upliftment of poor section of society. Income generating projects consistent with the traditional skills of the people shall be undertaken. Development of fodder farm, fruit bearing orchards, vocational training etc. can form a part of such programme. Company shall provide separate budget for community development activities and income generating programmes. Vocational training programme for possible self employment and jobs shall be imparted to identified villagers free of cost.	within study area shall be conducted to study economic measures with action plan which can help in upliftment of poor section of society. Income generating projects consistent with the traditional skills of the people shall be undertaken. Project Authority submitted the details of CSR activities undertaken during the period 2024-2025. Project Authority claims that CSR plan is prepared and implemented based upon the need-based assessment, but no documents are made available in their reply. Ministry may take appropriate view.	Company in consultation with the villagers and panchayats. • It is ensured that the activities align with the SDGs set by the United Nations. • Further, impact assessment study of the CSR programmes is regularly conducted by an institute of repute to assess the impacts of CSR programmes on the lives of communities. • The Company has now engaged NABCONS for carrying out the assessment of CSR programmes being implemented by JPL.
	EC Amendment Letter no. J-13012/117/2008.IA.II(T) dated 10.01.2014		

<table>
<tr><th>S.No.</th><th>EC Conditions</th><th>Updated status as per the latest Review Report of IRO dated 27.03.2026</th><th>Current status submitted by JPL</th></tr>
<tr><td>11</td><td>Additional Specific Condition no. 6 (A) (xxxiii)- The existing ash dyke shall be utilized for the expansion for an interim period not exceeding three years subject to ash dyke having necessary capacity to handle additional ash on account of the expansion units. A new ash dyke shall be constructed within three years to meet the requirement of substantial quantity of ash that would be generated by the expansion plant.</td><td>As per the EC condition, the existing ash dyke shall be utilized for the expansion for an interim period not exceeding three years. A new ash dyke shall be constructed within three years to meet the requirement of substantial quantity of ash that would be generated by the expansion plant.
Project Authority utilizing the same ash pond beyond three years without amending the EC condition and thus the condition has not been complied with. It appears that Project Authority applied for an amendment in the EC. Ministry may take appropriate view.</td><td>1. The permission for use of existing ash dyke has been granted by MoEF&CC from time to time. The chronology of permissions granted by MoEF&CC is as below:
<table>
<tr><th>S No.</th><th>EC/EC amend -ment Date</th><th>Remarks</th></tr>
<tr><td>1.</td><td>18.03.2011</td><td>EC granted for 2x600 MW (Unit#1 & Unit#2)</td></tr>
<tr><td>2.</td><td>04.11.2011</td><td>EC granted for 2x600 MW (Unit#3 & Unit#4)</td></tr>
<tr><td>3.</td><td>10.01.2014</td><td>Amendment in EC inter alia including utilization of existing ash dyke of 4x250 MW for 4x600 MW TPP for 03 years.</td></tr>
<tr><td>4.</td><td>26.04.2017</td><td>Amendment in EC – inter alia including utilization of existing ash dyke for 4x600 MW TPP for 02 more years till construction of new dyke & change in coal source from imported to domestic, change in location of proposed dyke.</td></tr>
<tr><td>5.</td><td>28.08.2020</td><td>Amendment in EC for extension of permission for transportation of coal, utilization of existing ash dyke for 4x600 MW TPP till October, 2021.</td></tr>
<tr><td>6.</td><td>28.10.2021</td><td>Amendment in EC for extension of permission utilization of existing ash dyke for 4x600 MW TPP till December, 2022.</td></tr>
</table></td></tr>
</table>

S.No.	EC Conditions	Updated status as per the latest Review Report of IRO dated 27.03.2026	Current status submitted by JPL
			7. 24.02.2023 Amendment in EC for extension of permission utilization of existing ash dyke for 4x600 MW TPP till June 2024. The instant proposal of EC amendment has been submitted in May, 2024 for seeking the permanent use of existing dyke.

B. Whether the permission for permanent use of the existing ash dyke conforms to the Fly Ash Utilisation Notification, 2021 and its subsequent amendments?

- In the instant proposal, the proponent has submitted its intent to utilize existing ash dyke of 4x250 MW TPP for the unutilized ash from 4x600 MW TPP, in lieu of constructing the new ash dyke for 4x600 MW TPP which was earlier permitted by MoEF&CC vide letter dated 26.04.2017.
- As per Ash Utilization Notification, 2021, and its subsequent amendments, TPPs can have emergency ash pond or dyke at 0.1 hectare (ha) per MW of installed capacity
- Proponent currently operates TPPs with capacity of 3,400 MW (comprising 4x250 MW and 4x600 MW units) and currently, the Company operates only a single ash dyke in an area of 198 hectares, which is significantly below the prescribed land as per the prevailing ash utilization notification (198/3400 = 0.058Ha/MW).
- 100% ash is being utilised

42.6.4: 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. Summary of violation: NIL

42.6.5: Proposed use of land in place of Ash dyke- It is submitted that Government of Chhattisgarh has issued an Invitation to Invest vide letter dated 30.06.2025 to JPL to develop a Thermal Power Plant. Thus the Company intends to utilize the land for the developing the thermal power plant.

Observations and deliberations of the Committee:

42.6.6: The EAC noted the following:

i. As per EC dated 18.03.2011, a separate ash dyke near Rodapali village was to be constructed for 4x 600 MW. However, the Ash dyke could not be constructed as the

land for the proposed ash dyke area became part of a coal block. Based upon the request of JPL, MoEF&CC vide letter dated 26.04.2017 granted permission to construct the ash dyke on 236 ha land at an alternate location near village Dolesera located at a distance of 4.6 km from the plant site. Consent to Establish (CTE) for the same was granted by Chhattisgarh Environment Conservation Board (CECB) vide letter dated 27.04.2022. The present proposal of project proponent is not to construct the ash dyke in the 236 Ha and use the existing ash dyke developed for 4 x250 MW permanently.

ii. The Company's management intends to use the 236 Ha of land acquired for ash dyke for setting up of the new power plant as per the Invitation to Invest of Government of Chhattisgarh dated 30.06.2025.

iii. The Committee noted that proponent has obtained amendment in the existing EC with respect to use of existing ash dyke of 4x250 MW for unutilized ash of 4x600 MW on 10/01/2014, 26/04/2017, 28/08/2020, 28/10/2021 and 24/02/2023.

iv. Adequacy of the existing ash dyke of 4x250 MW for disposal of ash from 4x600 MW on permanent basis was deliberated upon by the EAC in detail. The committee deliberated on the existing ash dyke volume availability, Action plan for excavation and use of already stored ash in the ash dyke, Slope Stability study of Ash dyke by NIT Raipur. After deliberations, the Committee opined that recommendations of NIT Raipur shall be complied with.

v. The expected life of existing ash dyke will increase from 1.6 years till the life of the 4x250 MW & 4x600 MW TPP due to the concurrent excavation and utilization plan.

vi. Committee deliberated on the sub-committee site inspection report and reply submitted by the proponent.

vii. Committee deliberated on the report of Regional Office dated 27/3/2026 and observed the following:

- Project proponent shall comply with the conditions prescribed in the notification dated 21/05/2020 regarding coal transportation.
- Project proponent shall submit the relevant supporting documents regarding implementation of Compensatory Afforestation and catchment area treatment plan, Third-party report on monitoring & evaluation of Green Belt / plantation, documents regarding 100 percent fly ash utilization, R&R plan & its implementation status, formation of monitoring committee, CSR activities undertaken, details of schemes being implemented for tribal families, periodic maintenance of the coal transportation road undertaken and details of coal characteristics to the Regional Office of MoEF&CC.
- Project Authority needs to apply for amendment in the existing ECs for the conditions related to in-built continuous monitoring for radio activity and heavy metals in coal, annual social audit by govt institute.

  After deliberations, the Committee opined project proponent to take corrective action on the above and compliance status to be submitted to the Ministry and Regional Office within 30 days from the date of grant of EC amendment.

viii. The EAC also deliberated on the additional information submitted by the project proponent and found it satisfactory.

Recommendations of the Committee:

42.6.7: In view of the foregoing and after the detailed deliberations, the Committee ***partially recommended*** the instant proposal for grant of amendment in the ECs dated 18/03/2011 & 04/11/2011 and its subsequent amendment dated 24/02/2023 as detailed below **subject to stipulation of following additional specific conditions.** Other terms and conditions prescribed in EC dated 18/03/2011 & 04/11/2011 and its subsequent amendments shall remain unchanged:

Paragraphs of EC amendment letter dated 24/02/2023	Details as per EC amendment dated 24/02/2023	Amendment sought by the project proponent	Recommendations of EAC as per MoM
Para no 3, 4 & 5 of EC amendment dated 24.02.2023	Permission to use existing ash dyke of 4x250 MW for unutilized ash/ bottom ash of 4x600 MW has been granted till June 2024.	Permission to continue use existing ash dyke of 4x250 MW for unutilized ash of 4x600 MW permanently	Permission to use existing ash dyke of 4x250 MW for 4x600 MW TPP permanently subject to stipulation of following additional specific conditions:

Additional specific conditions:

i. 236 Ha of additional land acquired for ash dyke for 4x600 MW shall be utilized only for developing the thermal power plant as per Government of Chhattisgarh Invitation to Invest letter dated 30.06.2025. No other activity is permitted in the said land. Compliance status in this regard shall be submitted to the Regional Office in this regard along with the six monthly compliance report.

ii. Ash dyke stability study for the 4x250 MW situated in an area of 198 Ha shall be conducted through reputed government organisation once in six months and the recommendations of the study report shall be duly complied with.

iii. All the recommendations of the stability analysis report of NIT Raipur shall be complied with.

iv. PP shall expedite the planation activities and plantation shall be done in this financial year (2026-27) as per the action plan given below:

Sl. No	Location	Area	No of Saplings	Remark
1	From Plant Gate to Gare Mines	Approx. 09 KM length	10,000	On completion of road construction being done by PWD and as per availability of road side land
2	Near Ash dyke	Approx. 4 Acres	5000	Gap plantation. Replacement and strengthening of existing plantation
3	Miyawaki Planation	1.5 Acres	10,000	-

Sl. No	Location	Area	No of Saplings	Remark
4	Plantation in nearby Villages	-	30,000	Through CSR
5	Distribution of fruit tree saplings	-	25,000	Through CSR
6	In and around the Plant	-	20,000	Replacement and strengthening of existing plantation
Total			1,00,000	

v. PP shall expedite to start construction of nearby roads, geotagged pictures of before and after construction of the road shall be submitted to the Regional office.

vi. PP shall deploy vacuum based vehicle for everyday cleaning of the road in and around plant site at least for 5 KM. Sprinkling on the road side shall be carried out regularly (twice in a day) and data shall be maintained mentioning about its functionality.

vii. 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 to concern RO.

viii. Project proponent shall comply with the following non-conformities as reported in the report of the Regional Office dated 27/03/2026 within 30 days from the date of issue of EC amendment letter:

- Project proponent shall comply with the conditions prescribed in the notification dated 21/05/2020 regarding coal transportation.
- Project proponent shall submit the relevant supporting documents regarding implementation of Compensatory Afforestation and catchment area treatment plan, Third-party report on monitoring & evaluation of Green Belt / plantation, documents regarding 100 percent fly ash utilization, R&R plan & its implementation status, formation of monitoring committee, CSR activities undertaken, details of schemes being implemented for tribal families, periodic maintenance of the coal transportation road undertaken and details of coal characteristics to the Regional Office of MoEF&CC.
- Project Authority needs to apply for amendment in the existing ECs for the conditions related to in-built continuous monitoring for radio activity and heavy metals in coal, annual social audit by govt institute.

****

ANNEXURE-I

LIST OF PARTICIPANTS OF EAC (THERMAL) IN 42nd MEETING HELD DURING 30th APRIL, 2026 THROUGH PHYSICAL MODE

S. No.	Name & Address	Role	30.04.2026
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	Present
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
10.	Shri Mahi Pal Singh, Chief Engineer	Representative of Central Electricity Authority (CEA)	Present
11.	Shri Harmeet Sawhney, Scientist 'E'	Representative of Indian Meteorological Department (IMD)	Absent
12.	Prof. R M Bhattacharjee	Representative of IIT/ISM Dhanbad	Present
13.	Shri Prasoon Gargava, Scientist 'F'	Representative of Central Pollution Control Board	Present
14.	Shri B C Mallick, Principal Chief Engineer (only item no. 42.3, 42.4 & 42.5)	Special invitee as Representative of Central Electricity Authority (CEA)	Present
15.	Shri Sundar Ramanathan	Scientist 'F' & Member Secretary	Present
16.	Dr. Rajesh Prasad Rastogi	Scientist 'D'	Present

****

ANNEXURE-II

APPROVAL OF CHAIRMAN – EAC

5/11/26, 9:18 AM Re: Final MOM of 42 EAC - Thermal held on 30/04/2026

Re: Final MOM of 42 EAC - Thermal held on 30/04/2026

6 emails

rp.rastogi < rp.rastogi@gov.in >

Inderpal Singh Matharu < matharu0204@gmail.com >
Mon, 11 May 2026 8:01:15 AM +0530

To "Sundar Ramanathan"<r.sundar@nic.in>,"RAJESH PRASAD RASTOGI"<rp.rastogi@gov.in>

Dear Sundar ji,

Thanks for sharing the final MoM of the 42nd EAC Thermal meeting held on 30/04/2026.. 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 0f 41 EAC held on 30th April 2026.

Sincerely Yours
Inder Pal Singh Matharu
Chairman
EAC for Coal Mining and Thermal Power
MoEF&CC, GoI