



सत्यमेव जयते

File No.: J-11015/159/2015-IA-II(M)
Government of India
Ministry of Environment, Forest and Climate Change
IA Division



Dated 23/07/2025



To,

Sh. Niraj Baran Samal
M/s. Mahanadi Coalfields Limited
MCL Basundhara Area, Balinga, Sundargarh, Odisha, Basundhara Area - 770076
E-mail: cgm-basa.mcl@coalindia.in

Subject: Garjanbahal OCP Expansion (area: 653.83 Ha having production capacity of 18.2 MTPA) of M/s Mahanadi Coalfields Limited, located at Villages: Garjanbahal, Balinga, Karlikachhar, Bankibahal, Bangurkela, Tumulia; Tehsil: Hemgir; District: Sundargarh; State: Odisha - Amendment in Environment Clearance – regarding

Sir/Madam,

This is with reference to your online application vide proposal No. IA/OR/CMIN/540802/2025 dated 11.06.2025 along with written submission dated 10.07.2025 for seeking amendment in Environment Clearance accorded by the Ministry vide letter dated 14.02.2022 and its subsequent amendments, under the provisions of the EIA Notification, 2006 for the project mentioned above.

2. The particulars of the proposal are as below :

(i) EC Identification No.	EC25A0101OR5405039A
(ii) File No.	J-11015/159/2015-IA-II(M)
(iii) Clearance Type	Amendment in EC
(iv) Category	A
(v) Schedule No./ Project Activity	1(a) Mining of minerals
(vi) Sector	Coal Mining
(vii) Name of Project	Garjanbahal OCP Expansion
(viii) Location of Project (District, State)	Sundargarh, Odisha
(ix) Issuing Authority	MoEF&CC
(x) EC Date	14/02/2022
(xi) Applicability of General Conditions	NO
(xii) Status of implementation of the project	Implemented

3. M/s Mahanadi Coalfields Limited has made an online application vide proposal no. IA/OR/CMIN/540802/2025 dated

11.06.2025 seeking for amendment in Environment Clearance granted vide letter no. J-11015/159/2015-IA-II(M) dated 14.02.2022 and its subsequent amendments.

4. The instant proposal was considered in 28th EAC meeting held during 30th June, 2025. The MoM for the same may be seen using the web link: parivesh.nic.in.

5. The instant proposal is for seeking amendment in EC Specific Condition no. 4(iv) of EC dated 14.02.2022 and its subsequent amendments; para 4 of EC 08.03.2024 and additional specific condition no. 1.2 of EC dated 08.03.2024.

6. Details of previous approvals:

S. No.	Details of Letter No.	EC/ Expansion EC/ Amendment in EC/ Validity extension/ Transfer of EC	Capacity (MTPA)	Area (in Ha)	Date of issuance	Status of implementation
1	J-11015/159/2015-IA-II(M)	Environmental Clearance	13.00	653.83	09.11.2017	Implemented
2	J-11015/159/2015-IA-II(M)	Expansion EC (20%) (under OM dt. 15-09-17)	15.60	653.83	14.02.2022	Implemented
3	J-11015/159/2015-IA-II(M)	Amendment in EC	15.60	653.83	12.01.2023	Implemented
4	J-11015/159/2015-IA-II(M)	Expansion EC (40%) (under OM dt. 11-04-22)	18.20	653.83	09.03.2023	Being implemented
5	J-11015/159/2015-IA-II(M)	Amendment in EC	18.20	653.83	08.03.2024	Being implemented

W.r.t the previous approvals, PP submitted the actual production details of the concerned mine and submitted that the mine became operational from 2018-19 onwards. CTO renewal has been obtained from the SPCB and is valid up to 31.07.25. Details of the same are as follows:

Year	Planned Coal production in MTPA as per Environmental Clearance	Actual Coal Production in MTPA	Excess Production
2018-19	13.00	2.81	Nil
2019-20	13.00	7.59	Nil
2020-21	13.00	11.77	Nil
2021-22	15.60	13.55	Nil
2022-23	18.20	17.29	Nil
2023-24	18.20	18.20	Nil
2024-25	18.20	18.20	Nil

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

Specific/General Condition No	Details of Conditions as per EC	Amendment Sought	Justification
Specific Condition no. 4 (iv) of EC date 14.02.2022 Amended vide EC letter dated 12.01.2023 [specific condition no. 4 (ii)]; Further amended vide EC letter 08.03.2024 at para 5.	As per the latest amended EC letter dated 08.03.2024, Para 5; it was stipulated as follows: “PP shall implement in-pit conveyor system with silo loading facility access upto railway siding in the outlined phases as proposed and committed by PP and no road transportation shall be allowed after July-2025. SPCB shall not grant CTO for road transportation after July 2025.”	PP shall implement in-pit conveyor system with silo loading facility till railway siding and no road transportation shall be allowed after September, 2028 till completion of pipe conveyor and SILOs of Barpalli loop.	In proposed project all the coal has been planned to be dispatched through belt and further loading through SILO. For implementation of the same the dispatch arrangement is divided into three phases. The details of the same along with timeline is given below: Phase I;

Specific/General Condition No	Details of Conditions as per EC	Amendment Sought	Justification
			<p>Commissioning of Sardega RLS (20.0 MTPA with 2.0 km Conveyor Belt) already commissioned.</p> <p>Phase II: Commissioning of additional 4.245 Km belt to above RLS by Dec 2026 as it is an integrated arrangement for both Kulda & Garjanbahal OCP</p> <p>Phase III: Commissioning of Barpalli Bulb loop (90 MTPA with conveyor arrangement) by September 2028</p> <p>The reason for delay in the implementation of in-pit conveyor to Barpalli loop is as follows:</p> <p>The original tender floated on 04.07.2023 had to be cancelled on 13.06.2024 due to the need for alignment revision to accommodate the proposed upcoming Basundhara Washery & modification in design specifications.</p>
<p>Para 4 of the EC letter dated 09.03.2023 amended at para 5 of the EC letter dtd 08.03.2024</p>	<p>As per the para 4 of EC letter dated 09.03.2023: The Expert Appraisal Committee in its 40th EAC meeting held during 16-17 Feb 2023 through physical mode has recommended the project for grant of Environment Clearance (EC). Based on recommendations of the EAC, Ministry of Environment, Forest and Climate Change hereby accords approval for Environment Clearance for 1 year to Expansion of Garjanbahal OCP mine for increase in production capacity from 15.6 MTPA to 18.2 MTPA (peak) in land area of 653.83 ha of Mahanadi Coalfields Ltd located at Sundargarh district of Odisha... ” subject to compliance of the additional specific</p>	<p><i>EC should be valid till life of the mine.</i></p>	<p>The validity provision for the mine shall be as per the provisions contained under the EIA Notification, 2006 and its amendment.</p>

Specific/General Condition No	Details of Conditions as per EC	Amendment Sought	Justification
	conditions as listed in the EC letter. Further the above para amended at para 5 of the EC letter dated 08.03.24 stating- “The EC is valid for the project life as laid down in the mining plan approved and renewed by competent authority, from time to time, subject to a maximum of thirty years, whichever is earlier subject to completion of in pit belt conveyor system by July 2025. PP shall submit the revised mining plan to concerned RO, in case life of mine increases/decreases from 11 years due to change in reserve or production level. ”		
Additional specific condition no. 1.2 of EC amendment dated 08.03.2024	As per the amended EC letter dated 08.03.2024, additional specific condition no. 1.2 stipulated as follows: “The EC is valid for the project life as laid down in the mining plan approved and renewed by competent authority, from time to time, subject to a maximum of thirty years, whichever is earlier subject to completion of in pit belt conveyor system by July 2025. PP shall submit the revised mining plan to concerned RO, in case life of mine increases/decreases from 11 years due to change in reserve or production level. PP shall ensure that no mining operation shall be carried out without a valid EC.”	EC should be valid till life of the mine.	The validity provision for the mine shall be as per the provisions contained under the EIA Notification, 2006 and its amendment.

8. Transportation Route:

Mine pit to surface: By trucks and tippers

A. Interim transport arrangement (present dispatch arrangement):

Name of the mine	Capacity of the mine in MTPA	Production target for FY 2024-25 MTPA	Coal evacuation rail arrangements from Coal stock yard			Road sale (From dedicated concrete coal corridor to end users)
			Sardega Siding to end users	Kanika Siding to end users	Laikera Siding to end users	
			40 MTPA	8 MTPA	6.67 MTPA	
Garjanbahal OCP Expansion	18.20	18.20	12 MTPA	2 MTPA	2.2 MTPA	2 MTPA
	Through Railway sidings: 18.20 MTPA		Towards Sardega siding through internal road (4.1 km) and belt conveyor (2 km)	Through dedicated concrete coal corridor of 25.5 km	Through dedicated concrete coal corridor of 10.3 Km	Through 2 lane dedicated concrete corridor towards Raigarh & Sundargarh

Name of the mine	Capacity of the mine in MTPA	Production target for FY 2024-25 MTPA	Coal evacuation rail arrangements from Coal stock yard			Road sale (From dedicated concrete coal corridor to end users)
			Sardega Siding to end users	Kanika Siding to end users	Laikera Siding to end users	
			40 MTPA	8 MTPA	6.67 MTPA	--
					joining the State & National Highways	

B. Transportation arrangement after Barpalli loop completion

Name of the mine	Capacity of the mine in MTPA		Coal evacuation rail arrangements with capacities existing	
			Barpalli Loop Siding (Capacity: 90 MTPA)	Sardega Siding (Capacity: 40 MTPA)
Garjanbahal OCP Expansion	18.20	18.20	--	
	Through Railway sidings: 18.20 MTPA		Through 2.5 km closed conveyor only from surface to Barpalli Bulb siding.	Through 6.245 km closed conveyor only from coal surface to Sardega siding Standby arrangement if Barpalli bulb is put on stall due to maintenance.

9. **Traffic Impact Assessment Report:** PP submitted the Traffic Impact Assessment Report for Garjanbahal OCP Expansion. Findings of the same are as follows:

Transportation of Coal and Traffic Load:

Currently out of 18.20 MTPA, 16.20 MTPA of coal is being dispatched by different railway sidings by roads.

Traffic Impact Assessment: Sardega Siding

1. Currently, 12.0 MTPA of coal from Garjanbahal OCP is being transported to Sardega Siding. Additionally, 8.0 MTPA of coal from the nearby Kulda OCP is also dispatched via Sardega CHP/Silo, until the commissioning of the Barpalli Loop. A cumulative assessment of the coal transportation through Sardega route has therefore been carried out, considering this total dispatch volume of 20.0 MTPA. The CT road towards Sardega Siding is a Pavement Quality Concrete (PQC) Road of 6.0 km length having width of 10.5 m. This CT road is only for coal transportation and no other vehicle ply on this road. Coal to Sardega Siding is being dispatched through 40T transportation trucks. This coal is discharged to a truck receiving hopper and further transported to Sardega Siding through belt (2.0 km) and RLS (20.0 MTPA).

2. The PCU/hr for this road was found to be 632.70, while the V/C ratio was 0.44 which categorises LoS in 'good' category.

Traffic Impact Assessment: Laikera Siding

1. Currently, 2.2 MTPA of coal from Garjanbahal OCP and 4.0 MTPA coal from nearby mine Kulda OCP are being transported through Laikera Siding. Accordingly, a cumulative assessment of the coal transportation through Laikera siding road has been carried out, considering a total dispatch of 6.20 MTPA. The CT road towards Laikera Siding is a bituminous road of 10.30 km length having width of 9.0 m. Coal to Laikera Siding is being dispatched through 40T transportation trucks.

2. The PCU/hr for this road was found to be 221.50, while the V/C ratio was 0.25 which categorises LoS in 'very good' category.

1. Currently, 2.0 MTPA of coal from Garjanbahal OCP and 4.0 MTPA coal from nearby mine Kulda OCP are being transported to Kanika Siding. Accordingly, a cumulative assessment of the coal transportation through Kanika Siding Road has been carried out, considering a total dispatch of 6.0 MTPA. The CT road towards Kanika Siding is a Bituminous Road of 25.50 km length, having a width of 12.0 m. Coal to Kanika Siding is being dispatched through 40T transportation trucks.

2. The PCU/hr for this road was found to be 205.15, while the V/C ratio was 0.14 which categorises LoS in 'excellent' category.

Ambient Air Quality Monitoring:

To assess the impact of road transportation towards different sidings i.e. Sardega Siding, Kanika Siding & Laikera siding regular environmental monitoring is being done all around the CT road. Total 12 air monitoring station data (2 CAAQMS and 10 Routine Environment monitoring station) has been incorporated and details of the same are given below. Air Quality Impact Prediction (AQIP) has also been done for road transportation to understand its contribution in ambient air quality. In present study to assess the impact of road transportation site specific micrometeorological data has been taken for winter period i.e. Dec'24 to Feb'25. The model has been run to understand the contribution of road transportation over different receptors.

Contribution of Road transportation for PM10 (Unit in g/m3)

S. No.	Name of monitoring station	Distance from road in km	Observed Maximum PM10	Contribution of road transportation	%age contribution
1	Karlikachar	1.500	158	6.16	3.90
2	Garjanbahal	0.250	163	27.74	17.02
3	Laikera	0.085	188	53.77	28.60
4	Sardega	0.147	174	50.65	29.11
5	Kutabaga	0.200	94	20.62	21.93
6	Bihaimunda	3.000	96	2.47	2.58
7	Teleimal	2.100	95	7.88	8.29
8	Chakarpur	2.100	95	1.75	1.84
9	Ratansara	0.250	94	3.14	3.34
10	Kanika	0.300	186	9.38	5.04

Contribution of Road transportation for PM2.5 (Unit in g/m3)

S. No.	Name of monitoring station	Distance from road in km	Observed Maximum PM2.5	Contribution of road transportation	%age contribution
1	Karlikachar	1.500	66	0.94	1.42
2	Garjanbahal	0.250	65	4.20	6.47
3	Laikera	0.085	75	8.07	10.75
4	Sardega	0.147	72	25.67	35.65
5	Kutabaga	0.200	53	5.52	10.42
6	Bihaimunda	3.000	56	0.35	0.63
7	Teleimal	2.100	57	1.19	2.08
8	Chakarpur	2.100	57	0.27	0.47
9	Ratansara	0.250	55	0.48	0.86
10	Kanika	0.300	73	2.89	3.96

Contribution of Road transportation for NOx (Unit in g/m3)

S. No.	Name of monitoring station	Distance from road in km	Observed Maximum NOx	Contribution of road transportation	%age contribution
--------	----------------------------	--------------------------	----------------------	-------------------------------------	-------------------

1	Karlikachar	1.500	34.49	1.82	5.27
2	Garjanbahal	0.250	39.69	6.53	16.45
3	Laikera	0.085	38.91	2.56	6.57
4	Sardega	0.147	41.23	15.31	37.13
5	Kutabaga	0.200	40.79	3.38	8.28
6	Bihaimunda	3.000	40.39	2.42	5.99
7	Teleimal	2.100	39.28	5.45	13.87
8	Chakarpur	2.100	40.78	1.13	2.78
9	Ratansara	0.250	35.34	0.61	1.73
10	Kanika	0.300	34.49	3.89	11.27

Contribution of Road transportation for SO₂ (Unit in g/m³)

S. No.	Name of monitoring station	Distance from road in km	Observed Maximum SO ₂	Contribution of road transportation	%age contribution
1	Karlikachhar	1.500	14.34	1.08	7.55
2	Garjanbahal	0.250	19.68	4.23	21.48
3	Laikera	0.085	20.09	1.88	9.34
4	Sardega	0.147	18.72	7.73	41.31
5	Kutabaga	0.200	20.87	1.75	8.40
6	Bihaimunda	3.000	18.85	1.25	6.63
7	Teleimal	2.100	22.23	3.36	15.11
8	Chakarpur	2.100	19.61	0.59	2.99
9	Ratansara	0.250	19.75	0.46	2.35
10	Kanika	0.300	16.45	2.39	14.56

Details of existing control measures in Garjanbahal OCP

S. No.	Control measures adopted along CT roads & railway sidings	Nos./ units	Coverage	Total cost incurred in lakhs	Year of commissioning
Garjanbahal OCP					
1	Mist type fixed sprinklers	46	20 m	42	2019-21
2	Mobile water tankers (28 kl)	5	5-10 m	1200	2018-2023
3	Truck mounted fog cannon	3	40 m	450	2022-23
4	Trolley mounted fog cannon	3	100 m	26	2019-20
5	Mechanical road sweepers	4	10 m	600	2022-23
6	Instant shower systems	3	10 m	4	2020
7	Wheel washing units	1	Truck/tipper washing 6 m	70	2023
Kanika Siding					
1	Fixed Sprinklers at Kanika Siding	16	20 m	15	2022-23
2	Fixed Fog Cannon	3	100 m	26	2021
3	Truck-mounted Fog cannon	1	40 m	150	2021, 2024
4	Contractual manpower deployed for road cleaning	10	15 Km	20	2024
Laikera Siding					
1	Truck-Mounted Fog Cannon	2	40 m	300	2025
Sardega Siding					
1	Truck-mounted Fog cannon	5	40 m	350	2020-22
2	Mist-type fixed sprinklers	195	20 m	178	2019
3	Mobile water tankers (4 kl-28 kl)	10	5-10 m	266	2019
4	Trolley-mounted fog cannon	8	100 m	70	2020

S. No.	Control measures adopted along CT roads & railway sidings	Nos./ units	Coverage	Total cost incurred in lakhs	Year of commissioning
5	Mechanical road sweepers	2	10 m	320	2021
6	Instant shower systems	3	10 m	4	2020
7	Wheel washing units	3	Both side of the coal trucks	160	2023
8	Contractual manpower deployed for road cleaning	10	10 km	20	2023
Total				4271	

Details of additional control measures proposed to further reduce pollution in villages where the parameters are found towards higher side:

S. No.	Control measures to be adopted on CT roads	Nos. /units	Coverage	Budget in Rs. lakhs	Year of commissioning
1	High Pressurised Mist type mobile Sprinklers	5	30 m	1000	May 2026
2	Mechanical road sweeper	2	10 m	400	Mar 2026
3	Vertical Green Barriers/Wind Barriers	As per requirement	Between villages and mine	500	Oct 2026
Total				1900	

Ambient Noise Quality:

To assess the ambient noise quality 6 stations (4 in industrial area and 2 in residential area) have been selected. The data of the same is given in following table:

Day time noise data (in dB (A))

S. No.	Location Name	Min Day (Leq)	Max Day (Leq)	Standard
1	Garjahanbahal	55.30	64.80	75
2	Karlikachar	56.40	59.20	75
3	Near Sardega Siding	60.80	62.70	75
4	Near Laikera Siding	58.00	60.70	75
5	Sarangijharia Village	49.80	53.60	55
6	Ratansara Village	49.20	54.00	55

Night time noise data (in dB (A))

S. No.	Location Name	Min Day (Leq)	Max Day (Leq)	Standard
1	Garjahanbahal	44.50	59.30	70
2	Karlikachar	43.40	57.40	70
3	Near Sardega Siding	53.30	58.40	70
4	Near Laikera Siding	53.00	58.30	70
5	Sarangijharia Village	38.60	43.80	45
6	Ratansara Village	36.60	43.00	45

From above table it can be observed that day time and night time data at all the locations are well within permissible limit.

10. Reasons for delay in installation of in-pit belt conveyor and Silo:

The reason for delay in the implementation of in-pit conveyor to Barpalli loop is as follows:

The original tender floated on 04.07.2023 had to be cancelled on 13.06.2024 due to the need for alignment revision to accommodate the proposed upcoming Basundhara Washery & modification in design specifications.

Proposed timeline for construction of in-pit conveyor belt system:

The timeline for construction and completion of in-pit conveyor belt system is July'28 as submitted by the project proponent as per the suggestions of the EAC during the meeting.

Implementation schedule and timeline for the proposed Barpalli Loop part 2

43 MTPA (Silo + Conveyor Arrangement + PWTLS)				
1	Floating of tender	--	31.07.2025	
2	Award of work	--	31.12.2025	
3	Completion of Construction	--	31.07.2028	Considering possession of tenancy, Govt non forest land of villages Bankibahal, Balinga and Kushara and forestry clearances of 10.55 ha
4	Trial run & commissioning	--	30.09.2028	
Silo-Barpalli bulb rail connectivity has been taken up by South Eastern Railways which is likely to be completed by Dec'2026. Land acquisition is under progress by Railways under Railway Act 1989.				

11. **Details of Court Cases:** There are no court cases pending on the project as per the submitted affidavit by the project.

12. **Written Submission:** PP submitted the following information during the meeting:

Point No. 1: As per traffic assessment study V/C ratio towards Sardega Siding was observed 0.44 under “Good” Category. PP is instructed to provide mitigative plan to improve V/C ratio.

Reply: PP acknowledged the current V/C ratio of 0.44 towards Sardega Siding. To further enhance traffic flow and reduce congestion, a proposal for the widening of the road towards Sardega Siding is already in process. The proposed widening will help in reducing traffic density and improving overall traffic conditions. The estimated budget for this intervention is approximately 20.00 Crores for widening of 10.5m for a length of 2000 metres, with an expected completion timeline of 18 months.

Point No. 2: Lung check-up should be taken up for the villagers where particulate matters are on higher side.

Reply: In response, PP propose to initiate comprehensive lung health check-up camps in the said villages. These camps will be organized in collaboration with reputed medical institutions, utilizing medical camps and the nearby Central Hospital for data collection and treatment.

The work is scheduled to be awarded and completed by December 2025. PP will ensure that the programme is executed efficiently and will share detailed progress reports and health intervention strategies.

Point No. 3: Please provide details of additional control measures shall be taken at village and habitation area.

Reply: Project has formulated a comprehensive plan for implementing additional dust control measures in villages and habitation areas, as detailed below:

S. No.	Control measures to be adopted on CT roads	Nos. / units	Coverage	Budget in lakhs	Year of commissioning
1	High Pressurised Mist type mobile Sprinklers	5	30 m	1000	May 2026
2	Mechanical road sweeper	2	10 m	400	Mar 2026
3	Vertical Green Barriers/Wind Barriers	3	1000 m	500	Oct 2026
Total				1900	

In addition to these measures, we will increase the frequency of water spraying and road sweeping, along with enhancing avenue plantation to ensure immediate dust suppression.

Point No. 4: PP is instructed to reduce the timeline for commissioning of in-pit conveyor.

Reply: As per the directive of EAC, the timeline for commissioning of the in-pit conveyor, including commissioning, shall be done by July 2028. Project is committed to adhering to this timeline and will ensure that all preparatory and construction activities are aligned accordingly.

Point No. 5: Steps being taken for carbon sequestration along with budget and timeline.

Reply: As per EC letter dtd. 08-03-24 Additional Specific Condition 1.4 which is quoted below:

The Committee observed that “Audit of Plantation Green Cover Mapping and Assessment of above Ground Biomass and Carbon Sequestration in the Plantation site of Garjanbahal OCP” shall be conducted by recognized institute such as ICFRE for the same. The recommendation of the same shall be submitted to the Ministry along with action plan and budgetary requirement for completion of the same.

The above study is already under progress and final report considering existing and future plantation along with other renewable and energy efficient measures will be submitted by December-2025.

Observations and deliberation of the Committee:

13. The EAC noted the following:

i. MoEF&CC has originally granted EC to M/s Mahanadi Coalfields Ltd for Garjanbahal OCP located at Villages: Garjanbahal, Balinga, Karlikachhar, Bankibahal, Bangurkela, Tumulia; Tehsil: Hemgir; District: Sundargarh: State: Odisha on 09.11.2017, for 653.83 Ha having the production capacity of 13 MTPA. Later granted another EC for 20% expansion vide letter dated 14.02.2022 having production capacity of 15.60 MTPA within the same ML area. The same was amended vide letter dated 12.01.2023. Another EC was granted for the production capacity of 18.20 MTPA within the same ML area vide letter dated 09.03.2023 and amendment for the same was granted vide letter dated 08.03.2024. The amendment granted was pertaining to extension in timeline for implementation of belt conveyor and SILO.

ii. The instant proposal is submitted by the PP for seeking amendment in EC Specific Condition no. 4(iv) of EC dated 14.02.2022 and its subsequent amendments; para 4 of EC 08.03.2024 and additional specific condition no. 1.2 of EC dated 08.03.2024.

iii. The above project is implemented and under operation.

iv. EC Specific Condition no. 4(iv) of EC dated 14.02.2022 stipulated that “PP shall implement in-pit conveyor system with silo loading facility till railway siding and No road transportation shall be allowed after December, 2022 and accordingly, SPCB shall not grant CTO for road transportation after December, 2022.”

The same was given time extension till July 2025 by giving EC amendment vide letter dated 12.01.2023 and 08.03.2024.

Now, the PP has sought further extension for the same till September 2028. EAC sought the justification for the continuous delay being caused in the implementation of the in-pit conveyor belt and the SILO and observed that due revised alignment to accommodate the proposed upcoming Basundhara Washery & modification in design specifications, this delay had took place. Committee also observed that the original tender floated by the PP on 04.07.2023 had to be cancelled for the above mentioned reason and another tender is yet to be floated.

v. Committee opined that the PP shall reduce the timeline for commissioning of in-pit conveyor belt and during the meeting PP agreed to commission the same by July 2028.

vi. Another amendment sought by the PP is in the Para 4 of the EC letter dated 09.03.2023 amended at para 5 of the EC letter dated 08.03.2024. As per the para 4 of EC letter dated 09.03.2023, it was stipulated that, “The Expert Appraisal Committee in its 40th EAC meeting held during 16-17 Feb 2023 through physical mode has recommended the project for grant of Environment Clearance (EC). Based on recommendations of the EAC, Ministry of Environment, Forest and Climate Change hereby accords approval for Environment Clearance for 1 year to Expansion of Garjanbahal OCP mine for increase in production capacity from 15.6 MTPA to 18.2 MTPA (peak) in land area of 653.83 ha of Mahanadi Coalfields Ltd located at Sundargarh district of Odisha... ” Further the above para amended at para 5 of the EC letter

dated 08.03.2024 stating- “The EC is valid for the project life as laid down in the mining plan approved and renewed by competent authority, from time to time, subject to a maximum of thirty years, whichever is earlier subject to completion of in pit belt conveyor system by July 2025. PP shall submit the revised mining plan to concerned RO, in case life of mine increases/ decreases from 11 years due to change in reserve or production level.”

Committee deliberated on the same and opined that, the condition stipulated by the EAC at that time was linked with the completion of in – pit belt conveyor, due to consistent non-compliance in this regard by the PP. Committee opined that the same shall continue, and the EC is valid for the project life as laid down in the mining plan approved and renewed by competent authority, from time to time, subject to a maximum of thirty years, whichever is earlier subject to completion of in pit belt conveyor system by July 2028.

vii. Another amendment sought by the PP is for additional specific condition no. 1.2 of EC amendment dated 08.03.2024, which is same as above mentioned amendment, i.e for delinking the life of mine with the implementation of belt conveyor.

viii. Committee deliberated on the present and proposed coal evacuation system and observed that, currently the coal from the mine is being transported through road to the 3 nos. of railway siding and then to the final consumer. Details of the same are mentioned above in para 28.2.4. Out of the total production 2 MTPA is being transported by road.

ix. Proposed coal evacuation system observed during the deliberation by the EAC is 100% of the coal production through pipe conveyor to Barpalli loop siding and then to the final consumer by rail.

x. Committee deliberated on the air quality parameters of the transportation road and observed that, all the parameters are within the permissible limits. EAC opined that PP shall take adequate measures to keep the AAQ parameters low. Further, Committee opined that, road side plantation with native species shall be done on the entire transportation route with the consent of highway authorities. Along with that, PP shall also carryout community plantation in villages on the coal transportation road with the fruit bearing species. Continuous dust suppression shall be done on the coal transportation road.

xi. Committee also opined that the PP shall submit a plan to introduce additional control measures in the village and habitation area. PP submitted the following measures along with the budget:

S. No.	Control measures to be adopted on CT roads	Nos. / units	Coverage	Budget in lakhs	Year of commissioning
1	High Pressurised Mist type mobile Sprinklers	5	30 m	1000	May 2026
2	Mechanical road sweeper	2	10 m	400	Mar 2026
3	Vertical Green Barriers/Wind Barriers	3	1000 m	500	Oct 2026
	Total			1900	

EAC opined that the same shall be implemented in a time bound manner.

xii. Committee further opined that the PP shall carryout lungs check-up for the villagers where the particulate matter is on the higher side. PP submitted that the camps will be organized in collaboration with reputed medical institutions, utilizing medical camps and the nearby Central Hospital for data collection and treatment. The work is scheduled to be awarded and completed by December 2025.

xiii. Committee further deliberated on the carbon sequestration activities proposed by the PP in order to mitigate the carbon emission being done due to the mining activities and observed that, as per the additional condition no. 1.4 of EC amendment dated 08.03.2024, Audit of Plantation Green Cover Mapping and Assessment of Above Ground Biomass and Carbon Sequestration in the Plantation site of Garjanbahal OCP” is under process and final report considering existing and future plantation along with other renewable and energy efficient measures will be submitted by December-2025. Committee opined that all the recommendations of the same shall be implemented.

xiv. Committee also observed that the nos. of trucks on the coal transportation road are high and accordingly PP shall increase the width of the transportation roads. PP submitted that the work for the same will be undertaken and will be completed in approximately 18 months. Budget proposed for the same is approximately Rs. 20 crores.

xv. Committee further deliberated on the protection measures being undertaken by the PP during coal transportation of coal and observed that, PP is complying with all the protection measures as previously stipulated. Committee opined that PP shall continue with the same and shall increase the protection measures as and when required.

Recommendations of the Committee:

14. After deliberations, the Committee **recommended** the proposal for amendment in EC granted vide file no. J-11015/159/2015-IA-II(M) dated 14.02.2022, 09.03.2023 and its subsequent amendments as detailed below subject to stipulation of some additional specific conditions (**Annexure-I**). Other terms and conditions prescribed in EC dated 14.02.2022, 09.03.2023 and its subsequent amendments shall remain unchanged:

Details of the amendment	Description as per approved EC	Amendment sought in EC	Recommendation of EAC
Specific Condition no. 4 (iv) of EC date 14.02.2022 Amended vide EC letter dated 12.01.2023 [specific condition no. 4 (ii)]; Further amended vide EC letter 08.03.2024 at para 5.	As per the latest amended EC letter dated 08.03.2024, Para 5; it was stipulated as follows: “PP shall implement in-pit conveyor system with silo loading facility access up to railway siding in the outlined phases as proposed and committed by PP and no road transportation shall be allowed after July-2025. SPCB shall not grant CTO for road transportation after July 2025.”	PP shall implement in-pit conveyor system with silo loading facility till railway siding and no road transportation shall be allowed after Sept’28 till completion of pipe conveyor and SILOs of Barpalli loop.	Partially agreed. With regard to the changes in the said condition, Committee is of the opinion to amend it as below: “ Project proponent shall implement in-pit conveyor system with silo loading facility till railway siding and no road transportation of coal shall be allowed after July 2028. ”
Para 4 of the EC letter dated 09.03.2023 amended at para 5 of the EC letter dated 08.03.2024	As per the para 4 of EC letter dated 09.03.2023: The Expert Appraisal Committee in its 40th EAC meeting held during 16-17 Feb 2023 through physical mode has recommended the project for grant of Environment Clearance (EC). Based on recommendations of the EAC, Ministry of Environment, Forest and Climate Change hereby accords approval for Environment Clearance for 1 year to Expansion of Garjanbahal OCP mine for increase in production capacity from 15.6 MTPA to 18.2 MTPA (peak) in land area of 653.83 ha of Mahanadi Coalfields Ltd located at Sundargarh district of Odisha... ” subject to compliance of the additional specific conditions as listed in the EC letter. Further the above para amended at para 5 of the EC letter dated 08.03.24 stating- “The EC is valid for the project life as laid down in the mining plan approved and renewed by competent authority, from time to time, subject to a maximum of thirty years, whichever is earlier subject to completion of in pit belt conveyor system by July 2025. PP shall submit the revised mining plan to	EC should be valid till <i>life of the mine.</i>	Partially agreed. With regard to the changes in the said para, Committee is of the opinion to amend it as below: “ The EC is valid for the project life as laid down in the mining plan approved and renewed by competent authority, from time to time, subject to a maximum of thirty years, whichever is earlier subject to completion of in pit belt conveyor system by July 2028. PP shall submit the revised mining plan to concerned RO, in case life of mine increases/decreases from 8 years (as on 01.04.2025) due to change in reserve or production level. ”

Details of the amendment	Description as per approved EC	Amendment sought in EC	Recommendation of EAC
	concerned RO, in case life of mine increases/decreases from 11 years due to change in reserve or production level.”		
Additional specific condition no. 1.2 of EC amendment dated 08.03.2024	As per the amended EC letter dated 08.03.2024, additional specific condition no. 1.2 stipulated as follows: <i>“The EC is valid for the project life as laid down in the mining plan approved and renewed by competent authority, from time to time, subject to a maximum of thirty years, whichever is earlier subject to completion of in pit belt conveyor system by July 2025. PP shall submit the revised mining plan to concerned RO, in case life of mine increases/decreases from 11 years due to change in reserve or production level. PP shall ensure that no mining operation shall be carried out without a valid EC.”</i>	<i>EC should be valid till life of the mine.</i>	Disagreed. With regard to the changes in the said condition, Committee is of the opinion to amend it as below: <i>“The EC is valid for the project life as laid down in the mining plan approved and renewed by competent authority, from time to time, subject to a maximum of thirty years, whichever is earlier subject to completion of in pit belt conveyor system by July 2028. PP shall submit the revised mining plan to concerned RO, in case life of mine increases/decreases from 8 years (as on 01.04.2025) due to change in reserve or production level.”</i>

Decision of MoEF&CC:

15. The undersigned is directed to inform that Ministry of Environment, Forest and Climate Change has examined the proposal in accordance with the Environment Impact Assessment (EIA) Notification, 2006 & further amendments thereto and after accepting the recommendations of the Expert Appraisal Committee (Coal) hereby decided for grant of amendment in the EC dated 14.02.2022 and its subsequent amendments as mentioned in table of above Para 14, under the provisions of Environmental Impact Assessment Notification, 2006 and its amendments subject to stipulation of additional specific conditions (**Annexure-I**).

16. All other terms and conditions prescribed in EC letter dated 14.02.2022 shall remain unchanged.

17. The project proponent shall obtain fresh Environment Clearance in case of change in scope of the project, if any.

18. This issues with the approval of the Competent Authority.

Yours faithfully,
(Sundar Ramanathan)
Scientist 'F'
Tel: 011- 20819378
Email- r.sundar@nic.in

Copy To

1. The Secretary, Ministry of Coal, Shastri Bhawan, New Delhi.
2. The Deputy Director General of Forests, Regional office (EZ), Ministry of Environment & Forests, A-31, Chandershekharpur, Bhubaneswar- 751023 (Odisha).
3. The Secretary, Department of Environment & Forests, Government of Orissa, Secretariat, Bhubaneswar (Odisha).
4. The Member Secretary, Central Pollution Control Board, CBD-cum-Office Complex, East Arjun Nagar, Delhi – 32.
5. The Chairman, Orissa State Pollution Control Board, Parivesh Bhawan, A/118, Nilkanthanagar, Unit VIII, Bhubaneshwar - 751012 (Odisha).

Specific EC Conditions for (Mining Of Minerals)

1. Additional Specific Conditions

S. No	EC Conditions																														
1.1	Project proponent shall carryout the plantation with the saplings of native species of not less than 2 meter height, on both the sides of the coal transportation route in consent with the highway authorities (wherever required). Along with this, PP shall also carry out the community plantation within the villages and habitation area on the transportation road with fruit bearing species and ensure the survival of the same. This plantation shall be carried out in Monsoon 2025 itself and compliance of the same shall be submitted to the Ministry's RO along with the six – monthly compliance report.																														
1.2	Project proponent shall carryout regular maintenance of the potholes on roads, repair and maintenance of roads, scrapping of material fallen on roads, and removal of scraps from mining areas. Along with this, PP shall make sure that all the pollution control equipments are in good working condition and maintenance of those equipments is regularly carried out.																														
1.3	<p>Project proponent shall introduce the following additional control measures in the village and habitation area where particulate matter is on the higher side in a time bound manner:</p> <table border="1"> <thead> <tr> <th>S. No.</th> <th>Control measures to be adopted on CT roads</th> <th>Nos. / units</th> <th>Coverage</th> <th>Budget in lakhs</th> <th>Year of commissioning</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>High Pressurised Mist type mobile Sprinklers</td> <td>5</td> <td>30 m</td> <td>1000</td> <td>May 2026</td> </tr> <tr> <td>2</td> <td>Mechanical road sweeper</td> <td>2</td> <td>10 m</td> <td>400</td> <td>Mar 2026</td> </tr> <tr> <td>3</td> <td>Vertical Green Barriers/Wind Barriers</td> <td>3</td> <td>1000 m</td> <td>500</td> <td>Oct 2026</td> </tr> <tr> <td colspan="4">Total</td> <td>1900</td> <td></td> </tr> </tbody> </table>	S. No.	Control measures to be adopted on CT roads	Nos. / units	Coverage	Budget in lakhs	Year of commissioning	1	High Pressurised Mist type mobile Sprinklers	5	30 m	1000	May 2026	2	Mechanical road sweeper	2	10 m	400	Mar 2026	3	Vertical Green Barriers/Wind Barriers	3	1000 m	500	Oct 2026	Total				1900	
S. No.	Control measures to be adopted on CT roads	Nos. / units	Coverage	Budget in lakhs	Year of commissioning																										
1	High Pressurised Mist type mobile Sprinklers	5	30 m	1000	May 2026																										
2	Mechanical road sweeper	2	10 m	400	Mar 2026																										
3	Vertical Green Barriers/Wind Barriers	3	1000 m	500	Oct 2026																										
Total				1900																											
1.4	Project proponent shall organize medical camps in collaboration with reputed medical institutions, utilizing medical camps and the nearby Central Hospital for data collection and treatment and shall provide the lungs check – up facility to the villagers in the close vicinity of the ML area. The same shall be done within 1 year from the date of grant of EC.																														
1.5	Project proponent shall submit the final report on Audit of Plantation Green Cover Mapping and Assessment of above Ground Biomass and Carbon Sequestration in the Plantation site of Garjanbahal OCP” to MoEF&CC and the Ministry's RO by January 2026 along with the time bound action plan with the budget for implementation of the recommendations of the same.																														
1.6	Project proponent shall explore the possibility to install solar power panels of atleast 2.0 MW to illuminate haul roads, workshop area, settling pond, site office, laboratories, residential area, shopping complex area, school, hospital, administrative buildings etc. and the same shall be implemented within 1 year from the date of grant of EC amendment.																														
1.7	As committed, project proponent shall complete the work to increase the width of the coal																														

S. No	EC Conditions				
	transportation route, as committed as follows:				
Name of the road	Type of road	Existing width	Proposed width	Budget in Rs.	Timeline
CT road towards Sardega Siding	Pavement Quality Concrete (PQC) -2 lane	10.5 m	21 m 4-lane	20 Crs.	18 Months (by Jan 2027 the road shall become operational)

