



File No.: J-11015/435/2006-IA.II(M)
Government of India
Ministry of Environment, Forest and Climate Change
IA Division



Dated 13/09/2023



To,

Kaushik Chakraborty
Western Coalfields Limited
Coal Estate Civil lines, Nagpur-440001 Coal Estate Civil lines, Nagpur-440001, NAGPUR,
MAHARASHTRA, Civil Lines, Nagpur, 440001
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Subject: Expansion of Sasti OCP for increase in ML area from 919.69 ha to 1120.48 ha with production capacity of 2.50 MTPA by M/s Western Coalfields Limited located in Village Sasti & Mathra, Tehsil Rajura, District Chandrapur (Maharashtra) – For Environmental Clearance - reg.

Sir/Madam,

This is in reference to your application submitted to MoEF&CC vide proposal number IA/MH/CMIN/435209/2023 dated 01/07/2023 for grant of prior Environmental Clearance (EC) to the project under the provision of the EIA Notification 2006-and as amended thereof.

2. The particulars of the proposal are as below :

(i) EC Identification No.	EC23A0101MH5120135N
(ii) File No.	J-11015/435/2006-IA.II(M)
(iii) Clearance Type	Fresh EC
(iv) Category	A
(v) Project/Activity Included Schedule No.	1(a) Mining of minerals
(vi) Sector	Coal Mining
(vii) Name of Project	Sasti Expansion OCP for increase in ML area from 919.69 ha to 1120.48 ha keeping the existing production capacity of 2.50 MTPA located in Sasti & Mathra village, teh Rajura, Dist Chandrapur, Maharashtra
(ix) Location of Project (District, State)	CHANDRAPUR, MAHARASHTRA
(x) Issuing Authority	MoEF&CC
(xii) Applicability of General Conditions	No

2. The Ministry of Environment, Forest and Climate Change has considered the application. It is noted that

the proposal is for grant of Environmental Clearance to Expansion of Sasti OCP for increase in ML area from 919.69 ha to 1120.48 ha with production capacity of 2.50 MTPA by M/s Western Coalfields Limited located in Village Sasti & Mathra, Tehsil Rajura, District Chandrapur (Maharashtra).

The project/activity is covered under category 'A' of item1 (a) 'Mining of Minerals' the Schedule to the EIA Notification, 2006

3. The proposal was considered by the sectoral Expert Appraisal Committee (EAC) in its 47th EAC meeting held on 21 to 22 July, 2023 through Video Conferencing The details of the proposal, as ascertained from the proposal documents and as revealed from the discussions held during the meetings, are given as under:

1. The project area is covered under Survey of India Topo Sheet No 56 M/5 and is bounded by the latitudes from N 19° 47' 18.24" to 19° 49' 59.41" and longitudes E 79° 17' 50.89" to 79° 20' 1.17".
2. Coal linkage of the project is proposed for thermal use for MAHAGENCO & miscellaneous consumers.
3. There is no Joint venture.
4. Project does not fall in the Critically Polluted Area (CPA), where the MoEF&CC's vide its OM dated 13 January 2010 has imposed moratorium on grant of environment clearance.
5. Employment generation, Permanent employment to 710 persons will be provided from the project. In addition, approximately 200 Nos. of employment shall be provided by contractual HEMM operators.
6. The project is reported to be beneficial to bridge the gap (to the extent of the peak production capacity of the project) between demand & supply of non – coking coal for power plants & other consumers from Western as well as Southern part of the country. The domestic production of additional coal will reduce the impact of coal and save valuable foreign exchange. The CSR activities will provide development in the nearby villages.
7. The existing Sasti OC mine has been granted environment clearance by MoEF& CC vide ref no. J-11015/435/2006-IA.II (M) Dt. 17.05.2007 for production capacity of 2.50 MTPA within land area of 919.69 ha
8. Earlier, the ToR was issued by MoEF & CC vide its letter no. J-11015/537/2008-IA.II (M) dated: 02.01.2021 pertaining to Expansion of Sasti OC with a production capacity of 2.5MTPA with increase in mine lease area from 919.69 ha to 1120.48 ha. The said proposal is for grant of EC with a production capacity of 2.5MTPA with increase in mine lease area from 919.69 ha to 1120.48 ha.
9. Project has been applied for EC under EIA Notification, 2006.
10. Total mining lease area as per block allotment is 1120.48 ha. The present proposal is for EC with production capacity of 2.5MTPA with increase in land area 919.69 ha to 1120.48 ha. The Mining Plan along with mine closure plan for Sasti OC was approved by competent authority (i.e. WCL Board) for production capacity of 2.5MTPA with increase in mine lease area from 919.69 ha to 1120.48 ha area in its 345th meeting held on 19.09.2022 and communicated vide resolution no. WCL/Office of CS/BM-345/2022-23/499 dated 27.09.2022.
11. Total geological reserve reported in the mine lease area is 117.31 MT with 25.39 MT mineable reserve. Out of total mineable reserve of 25.39 MT, 24.12 MT are available for extraction. Percent of extraction is 95%.
12. One composite seams with thickness ranging from 6.34m to 19.05m are workable. Declared Grade of coal is G9 stripping ratio 1:9.47 m³/t, while gradient is 1 in 7.4 to 1 in 18.
13. Method of mining operations envisages by opencast with surface miner- an ecofriendly technology.
14. Life of mine is 11 years.
15. The project has 7 external OB dumps in an area of 202.52 ha with 60 m max. height and 46.85 Mm³ of OB. 1 internal OB in an area of 275.89 ha with 90m height and 171.54 Mm³ of OB is envisaged in the project.
16. Total quarry area is 544.79 ha out of which backfilling will be done in 275.89 ha while final mine void will

be created in an area of 268.90 ha with a depth of 200 m. Backfilled quarry area of shall be reclaimed with plantation after completion of entire mining operation. Total plantation at post mining would be 686.41 ha. Final mine void will be converted to water body.

17. Transportation of coal has been proposed by dumpers in mine pithead, from surface to siding by trucks and at sidings by railways. Proposed change in transportation means are as follows: New railway siding will be constructed within existing ML area. About 2.5 km of new railway track will be required to lay upto new siding from main line. Trucks will dump coal on the elevated platform to create stock along the railway siding. Coal from the stock will be loaded into railway wagons with the help of pay loaders/front end loaders.
18. It was noted that in the interim period till construction of railway siding within ML area of Sasti OC, a railway siding at Gauri Deep OC (Distance – 6.2 kms) is proposed to be constructed. This railway siding is likely to be operationalized by August, 2023. It is proposed to install wind barrier system and rain guns for pollution control mitigation measures at Gauri Deep Railway siding with capital of 282.0 Lakhs. New railway siding will be constructed in western side of the proposed quarry beyond fault F8-F8 within existing ML area. The New Railway Siding within ML area of Sasti OC will be operationalized by March, 2026
19. Reclamation Plan in an area of 686.41 ha, comprising of 202.52 ha of external dump, and 275.89ha in internal dump. In addition to this, an area of 36 ha, included in the undisturbed area/ built up area/ township/embankment area, and also 172.0 ha has been proposed for green belt development. Plantation on External dump will be carried out when the dump reaches the stipulated height as per Mining Plan and physical reclamation is completed.
20. There is no forestland has been reported to be involved in the project.
21. No National Parks, Wildlife Sanctuaries and Eco-Sensitive Zones fall within 10 km boundary of the project.
22. There are Four Schedule-I species recorded in the study area namely Tiger, Sloth Bear, Leopard and wild dog. The conservation plan with capital outlay of 1.59 Crore is proposed on conservation measures.
23. The ground water level (m) varying in core and buffer zone : Pre-Monsoon : Core zone: 6.60m to 8.60 m; Buffer zone : 2.32 to 12.50 m; Post-Monsoon : Core zone : 3.90m to 6.48m; Buffer zone : 0.98 m to 9.83 m
24. Total water requirement for industrial purposes is 620 KLD and 474 KLD for residential requirement.
25. The project has been granted NOC for ground water abstraction by CGWA vide NOC no CGWA/NOC/MIN/ORIG/2021/12462 dated 03.08.2021 and valid upto 02.08.2023.
26. In compliance with the ToR condition 40 regarding Public Hearing: Date and Venue of Public Hearing: Public Hearing has been successfully conducted on 16.03.2023 by Maharashtra Pollution Control Board at at Manoranjan Kendra, WCL, Sasti Colony, Village Dhoptala, Tehsil – Rajura, District Chandrapur, Maharashtra.
27. Major issues raised in the public hearing include Employment, CSR, land acquisition, Environment Pollution etc.
28. A total provision of Rs.113.33 lakhs has been envisaged in the capital expenditure for compliance of issue raised during Public Hearing etc and will be implemented as per the assurances given by PP during Public hearing.
29. Consent to Operate for the existing capacity of 2.5 MTPA was obtained from the State PCB on 27.02.2023 valid upto 31.12.2023.
30. Gauri Nallah and Sasti (Shivnal) Nallah flows through the project area and Sakhari nallah flows along the mine boundary of the project. In the coal conservation point of view, 2.60 km and 2.70 km diversion of Gauri nallah and Sasti (Shivnal) nalla is proposed in the proposal respectively. There is also proposal for widening of sakhari nallah for 1.50 km.
31. Baseline Data monitoring has been carried out from 1 October to 31 December 2020. 12 nos. of sampling

location monitored during the Baseline Study. All the parameters have been found to be within the permissible limits. Regular monitoring of ambient air quality is being carried out on fortnightly basis. The documented report is submitted to MPCB and also to MoEF&CC along with half yearly EC compliance report.

32. No court cases, violation cases are pending against the project of the PP.
33. The project does not involve violation of the EIA Notification, 2006 and amendment issued thereunder. The coal production from the mine was started from the year 1985-86 onwards. Excess production from the mine was realized from 1994-95 to 2004-05 w.r.t. the EC granted on 3rd April, 1989 for production capacity of 1.0 MTPA. Subsequently, the application under post facto clearance for expansion in production capacity from 1.00 MTPA to 1.60 MTPA was submitted to MoEF&CC in 2004. The Environment clearance was issued on 19th May 2005 for production capacity of 1.60 MTPA after deliberation in EAC meetings. No excess production of coal from the sanctioned capacity has been realized since grant of EC in 2005-06. The project was subsequently submitted again for expansion in production capacity from 1.60 MTPA to 2.50 MTPA and EC for expansion capacity was granted on 17 May 2007.
34. Project does not involve resettlement of the any villages.
35. Total cost of the project is Rs. 37159.29 Lakhs. Cost of production is Rs.1544.06 per tonne., CSR cost is Rs. 2 per tonne, and no R&R cost as no village rehabilitation is proposed. Environment Management Cost - Capital Rs.1250.06 Lakh & Recurring cost is 6/tonne of coal production
36. Consent to Operate for the existing capacity of 2.5 MTPA was obtained from the State PCB on 27.02.2023 valid upto 31.12.2023.
37. The additional details of project is produced at Annexure-2 & Annexure-3.
4. The Expert Appraisal Committee in its 47th EAC meeting held during 21-22 July, 2023 through Video Conferencing 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(EC) to **Expansion of Sasti OCP for increase in ML area from 919.69 ha to 1120.48 ha with production capacity of 2.50 MTPA by M/s Western Coalfields Limited located in Village Sasti & Mathra, Tehsil Rajura, District Chandrapur (Maharashtra)**, under the provisions of the Environment Impact Assessment Notification, 2006 and subsequent amendments/circulars thereto subject to the compliance of the terms & conditions / specific conditions at Annexure-I in addition to the standard environmental conditions notified by the Ministry.
5. This issue with an approval of the Competent Authority.

Copy To

1. The Secretary, Ministry of Coal, Shastri Bhawan, New Delhi
2. The Principal Secretary, Department of Environment, Government of Maharashtra, 15th Floor, New Admn. Bldg, Madam Cama Road, Mantralaya, Mumbai - 32 (Maharashtra)
3. The Chairman, Maharashtra State Pollution Control Board, Kalapataru Point, 3rd & 4thFloors, Sion, Matunga Scheme Road No. 8, Opp. Cine Planet Cinema, Near Sion Circle, Sion (E), Mumbai - 2
4. The District Collector, **Chandrapur**. Government of (**Maharashtra**)
5. Deputy Director General of Forests (C), Ministry of Env., Forest and Climate Change, Integrated Regional Office, Ground Floor, East Wing, New Secretariat Building, Civil Lines, Nagpur- 440001 (Maharashtra)
6. The Chairman, Central Ground Water Authority, Ministry of Jal Shakti, Jamnagar House, 18/11, Man Singh Road Area, New Delhi, Delhi 110001

Specific EC Conditions for (Mining of minerals)

1. Additional specific Condition

S. No	EC Conditions
1.1	PP shall conduct comprehensive hydraulic and drainage study of catchment area to assess the impact on the wardha river within a year and submit the report to IRO.
1.2	PP shall submit the proof of submission of Wildlife Conservation Plan for schedule I species to IRO and further deposit the allocated amount within six months.
1.3	PP shall carry out the mining activity at a safe distance of 100m from Gauri Nallah/ Wardha River flowing through mine lease area or adjacent to the lease area. In any circumstances, PP shall not divert any streams flowing within/adjacent to the mine lease area till no comprehensive study as stated above is done.
1.4	PP needs to extract the seepage ground water from the mine and treat it through ETP so that the water can be further utilize in the Mine as well for the local villagers.
1.5	PP shall implement dedicated inpit conveyor belt with silo loading system till railway siding on or before December, 2025. Accordingly, SPCB may grant CTO to strictly comply this condition.
1.6	The truck size of 40 tonne (payload) for the transportation of coal shall be deployed through dedicated road till commissioning of SILO with rapid loading system on or before December, 2025 accordingly SPCB may issue the CTO.
1.7	PP has to resolve suggestions/objections raised during the public hearing along with implement activities-wise proposed budget of Rs. 113.33 Lakhs (as Public Hearing Budget), Rs. 1250 Lakhs (as EMP cost) in time bound manner as per s.no. (xvi) & (xvii) of para 47.1.3 of MoM of the EAC meeting. The details of annual expenditure shall be part of report submitted to IRO, MoEF&CC. PP needs to include the audited figures against the expenditure and activities to be monitored by through dedicated online monitoring mechanism. The maintenance of all activities shall be covered through recurring cost of Public Hearing, which will be part of CSR budget.
1.8	PP has to implement capital budget upto Rs. 1341.37 lakh for implementing additional air pollution control measures, Rs. 125 lakhs for mitigation of water pollution in time bound manner as per s.no. (xiii) & (xix) of para 47.1.3 of MoM. It shall be monitored by IRO, MoEF&CC.
1.9	Install dust barrier (made up of natural fibre) with automatic fixed type sprinkling system across the village area/sensitive area.
1.10	PP shall increase number of fixed type sprinkling system (near to haul road, stockyard, transportation route etc.) across the mine lease area in order to arrest the dust coming out from the mining activities.
1.11	Implement the integrated transportation system with Dhuptala OC mine locating near to the existing

S. No	EC Conditions
	mine owned by M/s Western Coalfields limited.
1.12	PP shall install additional Continuous air quality system at different locations near to village area and share online data with SPCB as well as with CPCB.
1.13	Afforestation activity shall cover area not less than 600 ha, including reclaimed external OB dump, backfilled area, along ML boundary, along roads & infrastructure, township area. The density of the trees should be around 2500 plants per ha.
1.14	PP shall conduct special drive for villages such as Sasti, Gauri, Pauni and other nearby villages for air pollution mitigation measures and no coal storage yard, OB dump shall be dumped near to the villages.
1.15	Water storage ponds shall be constructed of appropriate depth in nearby village in collaboration with Gram Panchayat
1.16	PP shall increase the bed capacity of the existing Hospital from 25 to 50 bedded at Sasti Township and allow local villager to avail the hospital facility. Quarterly health check- up campaign shall be conducted in all the villages located in 10 km buffer area.
1.17	PP shall construct 25-sitter digital library in each village including the daily newspaper facility.
1.18	PP shall create a “Public Grievance Redressal and Monitoring System” for resolving any issues related to the pollution of mines and complaint has to resolve as soon as possible not beyond 30 days. In this regard, adequate awareness to be spread among the public to address their grievance to company with simple and easy manner and for which company needs to devise the mechanism. The same shall be reported to IRO within 3 months. A logbook to be maintained by PP on “Public Grievance Redressal and Monitoring System.”
1.19	PP shall conduct third party audit of compliance of EC condition at an interval six months and its report shall be submitted to IRO, MoEF&CC.
1.20	The status of mine closure activities must be included in every six months compliance report submitted to the state pollution control board and IRO.
1.21	PP to maintain the topped haul road properly to minimized the dust emission. PP to also develop pucca roads by seeking consent from the panchayat with widening of roads especially roads inter linking the villages within the study area of 10 km radius buffer zone.
1.22	PP to install solar lights along the road used for transportation of minerals to avoid the accidents at night and also seek its maintenance. PP is asked to also identify the rural areas for installation of solar light with its maintenance within the study area of 10 km radius buffer zone within one year.
1.23	PP to provide bio toilets to the villages located within the study areas within 1 year from the grant of this EC.
1.24	PP shall conduct feasibility studies for assessment of voids for backfilling of ash and mixing of ash with overburden, taking up backfilling ash and OB mixing activities during operations as well as post closure of mines in line with the Fly Ash Utilization Notification, 2021

S. No	EC Conditions
1.25	PP shall pay to farmers of agricultural land if there is any loss due to pollution found by concerned District Commissioner as per extent rules or norms
1.26	PP shall deploy atleast 20% of overall fleet of dumpers/trucks/other vehicles as electrical or CNG/LNG based for transportation of coal/OB etc.

Annexure 2

Details of the Project

S. No.	Particulars	Details	
a.	Details of the Project	Sasti Expansion OCP for increase in ML area from 919.69 ha to 1120.48 ha keeping the existing production capacity of 2.50 MTPA located in Sasti & Mathra village, teh Rajura, Dist Chandrapur, Maharashtra	
b.	Latitude and Longitude of the project site	19.788672850469, 79.2977166466971 19.8330341537081, 79.3335429628642	
c.	Land Requirement (in Ha) of the project or activity	Nature of Land involved	Area in Ha
		Non-Forest Land (A)	1120.48
		Forest Land (B)	Nil
		Total Land (A+B)	1120.48
d.	Date of Public Consultation	Public consultation for the project was held on 2023-03-16	
e.	Rehabilitation and Resettlement (R&R) involvement	NO	
f.	Project Cost	37159.29	
g.	EMP Cost	1250.6	
h.	Employment Details	710	

Annexure

The land usage pattern of the project is as follows:

Pre-Mining

Sl. No.	Type of Land	Area (in Ha)
1	Tenancy land	1085.98
2	Forest land	0.00
3	Govt. land	34.50
	Total	1120.48

Post Mining

Sl. No.	Land use during mining	Land use (ha)				
		Plantation	Water Body	Public use	Undisturbed	Total
1	External OB Dump	149.54	-	-	-	149.54
2	Top Soil Dump	52.98	-	-	-	52.98
3	Excavation	275.89	268.90	-	-	544.79
4	Roads	5.00	-	15.00	-	20.00
5	Built up area (Infrastructure)	20.00	-	39.52	-	59.52
6	Undisturbed Area	172.00	-	-	67.25	239.25
7	Embankment around quarry	10.00	-	27.80	-	37.80
8	Outside ML Area	1.00	-	15.60	-	16.60
	Total	686.41	268.90	97.92	67.25	1120.48

Revised budget of Rs. 1341.37 Lakh for implementing the additional mitigation measures such as:

Particular/Location	Existing Mitigation Measures	Mitigation Measures proposed and presented in 47 EAC	Capital Provision made (in Lakhs)	Modification in Mitigation Measures as directed in 47 EAC	Modified Capital Provision made (in Lakhs)
Mobile Water Sprinklers along Haul road, Coal stockyard, Weigh bridge, Coal transportation road	Presently 05 Nos. of Mobile Water Tankers are provided for dust suppression	Provision for 2 Nos of 28 KL Mobile Water Sprinklers is made (Replacement) Hiring of mobile water sprinklers will be continued in future also.	408.26	a) 3 Nos- 28 KL: In the mine for controlling dust in and around the project. b) 2 Nos- 16 KL : From Sasti mine to Mathra village turning (i.e 3 km road patch of coal transportation route)	608.26
Fixed Water Sprinklers along Haul road, Coal stockyard, Weigh bridge, Coal transportation road	35 Nos of Fixed Sprinklers Provided	Provision made for Additional Fixed Sprinklers and Fogging Machine	80.00	Provision made for Additional Fixed Sprinklers a) covering remaining 3 kms of coal transportation route from mine to Gouri deep siding – 75 nos with 15 meters of throw b) Covering coal stock yard of Sasti Expansion OCM with 20	150

				sprinklers c) Installation of Rain guns at Gauri Deep railway siding - 16 nos.	
Road Sweeping Machine	To be provided	It is proposed to introduce road sweeping machine for removal of dust from coal transportation route	43.11	a) 1 no proposed for Sasti Expansion OC Project.	43.11
				b) Additional 4 nos in neighboring mines. One no. bromming machine in Gauri deep, Pauni II, Gauri Pauni, Ballarpur OC	80.00
Fogging Machine	To be provided	For suppression of dust, fogging machine is proposed in the mine	60.00	7 no's of trolley mounted fogger with 100 m throw.	70.00
Greenbelt	Area not less than 500 ha and around 2500 plants per ha	The greenbelt in the dip side along the area of expansion will be developed.	70.00	Covering 6 kms of coal transportation route from mine to Gouri deep siding – approx. 5000 no's bamboo plantation and also inside mine lease area along the embankment, OB dumps etc	70.00

Continuous Ambient Air Quality Monitoring Station	1 nos of CAAQMS has been installed in nearby mine Pauni-II Expansion OC.	1 nos of CAAQMS is proposed to be installed for Sas2 Expansion OC Mine.	75.00	1 no of CAAQMS is proposed to be installed for Sasti Expansion OC Mine.	75.00
Dust Barrier				Dust Barrier along the coal transportation road to protect Goyegaon village of 12 feet height for 750 m patch on initial basis.	75.00
				Wind barrier is under final stage of completion of height aprox. 18 feet. Along the railway track (1km length) to control dust pollution.	170.00
Total Capital Provision made in Project Report			736.37		1341.37

Rs. 125 Lakhs has been proposed for mitigation of water pollution are as follows:

Particular	Existing Control Measure	Proposed Control Measure	Capital provision made in approved Expansion Project Report (in Lakhs)
Workshop Effluent waste-water	A ETP of 150 KL is in operations at existing Sasti OC.	Capital provision of 25.0 Lakhs has been made for repair/upgradation of ETP in the approved Project Report.	25.00
Mine Water	A sedimentation	Capital provision of 25.00	25.00

	tank is in operation in existing Sasti OC.	Lakhs has been made for the additional sedimentation tank.	
Sewage Treatment Plant	1 MLD Sewage Treatment Plan is in operation at Sasti Township.	Provision of 75 Lakhs has been made for repair/upgradation of existing 1 MLD STP.	75.00
Total Capital Provision Made (Additional)			125.00

Rs. 1250 Lakhs proposed w.r.t. Environmental Management as follows:

Sl. No.	Particulars	Amount (Rs. Lakhs)	Timeline
1	Sedimentation Pond upgradation for Treatment of Mine Waste water	25	2023-24
2	Effluent Treatment Plant upgradation for treatment of Workshop Effluent	25	2023-24
3	Base Line Environment Data Generation	15	Generated
4	Fogging machines for Dust control measures.	60	2023-24
5	Digital Mapping for Land Use Plan	15	Completed
6	Continuous Ambient Air Quality Monitoring Station (CAAQMS)	75	2023-24
7	Sewerage Treatment Plant	75	2024-25
8	Installation of fixed type sprinklers on haul roads, transportation of coal route, CHP loading & unloading points and other dust generation sources etc.	80	2022-24
9	10-30m of three tier plantations for green belt along mine boundary for approx 14.00 km to control air pollution	70	2022-25
10	Health check-up for Occupational diseases as per EC Condition	30	Continued
11	Scientific Studies	15	2023-24
12	Installation of Piezometers with telemetry	25	2022-23
13	Fund for Wild Life Conservation	100	2023-24
14	Provision for Compliance of issue raised during Public Hearing etc	100	2022-25

15	Misc. Provisions for fulfillment of statutory requirements under environment clearance, CTE, CTO, ground water clearance or as per directives of SPCB/MoEF&CC.	67.51	2022-26
Appendix – A.3.1 of Project Report			
16	2 nos of 28 KL Mobile Water Sprinklers with mist spray (Replacement)	408.26	2024-25
17	Road Sweeping Machine	43.11	2023-24
Appendix – A.3.2 of Project Report			
18	Energy Conservation	21.18	Continued
	Total	1250.06	

Budget of Rs.113.33 lakhs proposed as capital expenditure for compliance of issue raised during Public Hearing and their action plan has been mentioned below:

Sl. No.	Particulars	Location (Name of School /Village/Area)	FY 2022-23	FY 2023-24
			(In Lakhs)	(In Lakhs)
1	Infrastructure creation for Drinking Water supply	Goyegaon		3
		Rampur	5.32	
		Mathra	5.99	
		Dhidsi	5.99	
2	Sanitation	Ballarpur Area	1.5	
		Nearby Villages		6
3	Education	Manoli	0.58	
		Chincholi		7
		Gauri		5
		Chunala		30
4	Skill Development	Ballarpur Area		
12	Avenue plantation			2
14	Infrastructure	Chincholi		
		Mathra		20
		Gouri	0.68	
15	Health	Ballarpur area	2	
		Sasti	0.17	5
		Sakhari		
		Mathra		4
		Gauri		4
		Nearby Villages		2
16	Art, Culture & Sports	Ballarpur Area	3	
	Total		25.23	88

The grant of Environmental Clearance is further subject to compliance of the Standard EC conditions as under:

(a) Statutory compliance

- (i) The project proponent shall obtain forest clearance under the provisions of Forest (Conservation) Act, 1986, in case of the diversion of forest land for non-forest purpose involved in the project.
- (ii) The project proponent shall obtain clearance from the National Board for Wildlife, if applicable.
- (iii) The project proponent shall prepare a Site-Specific Conservation Plan / Wildlife Management Plan and approved by the Chief Wildlife Warden. The recommendations of the approved Site-Specific Conservation Plan/Wildlife Management Plan shall be implemented in consultation with the State Forest Department. The implementation report shall be furnished along with the six-monthly compliance report (in case of the presence of schedule-I species in the study area).
- (iv) The project proponent shall obtain Consent to Establish/Operate under the provisions of Air (Prevention & Control of Pollution) Act, 1981 and the Water (Prevention & Control of Pollution) Act, 1974 from the concerned State pollution Control Board/ Committee.
- (v) The project proponent shall obtain the necessary permission from the Central Ground Water Authority.
- (vi) Solid/hazardous waste generated in the mines needs to be addressed in accordance to the Solid Waste Management Rules, 2016/Hazardous & Other Waste Management Rules, 2016.

(b) Air quality monitoring and preservation

- (i) Continuous ambient air quality monitoring stations as prescribed in the statute be established in the core zone as well as in the buffer zone for monitoring of pollutants, namely PM₁₀, PM_{2.5}, SO₂ and NO_x. Location of the stations shall be decided based on the meteorological data, topographical features and environmentally and ecologically sensitive targets in consultation with the State Pollution Control Board. Online ambient air quality monitoring stations may also be installed in addition to the regular monitoring stations as per the requirement and/or in consultation with the SPCB. Monitoring of heavy metals such as Hg, As, Ni, Cd, Cr, etc to be carried out at least once in six months.
- (ii) The Ambient Air Quality monitoring in the core zone shall be carried out to ensure the Coal Industry Standards notified vide GSR 742 (E) dated 25th September, 2000 and as amended from time to time by the Central Pollution Control Board. Data on ambient air quality and heavy metals such as Hg, As, Ni, Cd, Cr and other monitoring data shall be regularly reported to the Ministry/Regional Office and to the CPCB/SPCB.
- (iii) Transportation of coal, to the extent permitted by road, shall be carried out by covered trucks/conveyors. Effective control measures such as regular water/mist sprinkling/rain gun etc shall be carried out in critical areas prone to air pollution (with higher values of PM₁₀/PM_{2.5}) such as haul road, loading/unloading and transfer points. Fugitive dust emissions from all sources shall be controlled regularly. It shall be ensured that the Ambient Air Quality parameters conform to the norms prescribed by the Central/State Pollution Control Board.

(iv) The transportation of coal shall be carried out as per the provisions and route envisaged in the approved Mining Plan or environment monitoring plan. Transportation of the coal through the existing road passing through any village shall be avoided. In case, it is proposed to construct a 'bypass' road, it should be so constructed so that the impact of sound, dust and accidents could be appropriately mitigated.

(v) Vehicular emissions shall be kept under control and regularly monitored. All the vehicles engaged in mining and allied activities shall operate only after obtaining 'PUC' certificate from the authorized pollution testing centres.

(vi) Coal stock pile/crusher/feeder and breaker material transfer points shall invariably be provided with dust suppression system. Belt-conveyors shall be fully covered to avoid air borne dust. Side cladding all along the conveyor gantry should be made to avoid air borne dust. Drills shall be wet operated or fitted with dust extractors.

(vii) Coal handling plant shall be operated with effective control measures w.r.t. various environmental parameters. Environmental friendly sustainable technology should be implemented for mitigating such parameters.

(c) Water quality monitoring and preservation

(i) The effluent discharge (mine waste water, workshop effluent) shall be monitored in terms of the parameters notified under the Water Act, 1974 Coal Industry Standards vide GSR 742 (E) dated 25th September, 2000 and as amended from time to time by the Central Pollution Control Board.

(ii) The monitoring data shall be uploaded on the company's website and displayed at the project site at a suitable location. The circular No.J-20012/1/2006-IA.11 (M) dated 27th May, 2009 issued by Ministry of Environment, Forest and Climate Change shall also be referred in this regard for its compliance.

(iii) Regular monitoring of ground water level and quality shall be carried out in and around the mine lease area by establishing a network of existing wells and constructing new piezometers during the mining operations. The monitoring of ground water levels shall be carried out four times a year i.e. pre-monsoon, monsoon, post-monsoon and winter. The ground water quality shall be monitored once a year, and the data thus collected shall be sent regularly to MOEFCC/RO.

(iv) Monitoring of water quality upstream and downstream of water bodies shall be carried out once in six months and record of monitoring data shall be maintained and submitted to the Ministry of Environment, Forest and Climate Change/Regional Office.

(v) Ground water, excluding mine water, shall not be used for mining operations. Rainwater harvesting shall be implemented for conservation and augmentation of ground water resources.

(vi) Catch and/or garland drains and siltation ponds in adequate numbers and appropriate size shall be constructed around the mine working, coal heaps & OB dumps to prevent run off of water and flow of sediments directly into the river and water bodies. Further, dump material shall be properly consolidated/ compacted and accumulation of water over dumps shall be

avoided by providing adequate channels for flow of silt into the drains. The drains/ ponds so constructed shall be regularly de-silted particularly before onset of monsoon and maintained properly. Sump capacity should provide adequate retention period to allow proper settling of silt material. The water so collected in the sump shall be utilised for dust suppression and green belt development and other industrial use. Dimension of the retaining wall constructed, if any, at the toe of the OB dumps within the mine to check run-off and siltation should be based on the rainfall data. The plantation of native species to be made between toe of the dump and adjacent field/habitation/water bodies.

(vii) Adequate groundwater recharge measures shall be taken up for augmentation of ground water. The project authorities shall meet water requirement of nearby village(s) after due treatment conforming to the specific requirement (standards).

(viii) Industrial waste water generated from CHP, workshop and other waste water, shall be properly collected and treated so as to conform to the standards prescribed under the standards prescribed under Water Act 1974 and Environment (Protection) Act, 1986 and the Rules made there under, and as amended from time to time. Adequate ETP /STP needs to be provided.

(ix) The water pumped out from the mine, after siltation, shall be utilized for industrial purpose viz. watering the mine area, roads, green belt development etc. The drains shall be regularly desilted particularly after monsoon and maintained properly.

(x) The surface drainage plan including surface water conservation plan for the area of influence affected by the said mining operations, considering the presence of river/rivulet/pond/lake etc, shall be prepared and implemented by the project proponent. The surface drainage plan and/or any diversion of natural water courses shall be as per the approved Mining Plan/EIA/EMP report and with due approval of the concerned State/GoI Authority. The construction of embankment to prevent any danger against inrush of surface water into the mine should be as per the approved Mining Plan and as per the permission of DGMS or any other authority as prescribed by the law.

(xi) The project proponent shall take all precautionary measures to ensure riverine/riparian ecosystem in and around the coal mine up to a distance of 5 km. A riverine/riparian ecosystem conservation and management plan should be prepared and implemented in consultation with the irrigation / water resource department in the state government.

(d) Noise and Vibration monitoring and prevention

(i) Adequate measures shall be taken for control of noise levels as per Noise Pollution Rules, 2016 in the work environment. Workers engaged in blasting and drilling operations, operation of HEMM, etc shall be provided with personal protective equipments (PPE) like ear plugs/muffs in conformity with the prescribed norms and guidelines in this regard. Adequate awareness programme for users to be conducted. Progress in usage of such accessories to be monitored.

(ii) Controlled blasting techniques shall be practiced in order to mitigate ground vibrations, fly rocks, noise and air blast etc., as per the guidelines prescribed by the DGMS.

(iii) The noise level survey shall be carried out as per the prescribed guidelines to assess noise exposure of the workmen at vulnerable points in the mine premises, and report in this regard shall be submitted to the Ministry/RO on six-monthly basis.

(e) Mining Plan

(i) Mining shall be carried out under strict adherence to provisions of the Mines Act 1952 and subordinate legislations made there-under as applicable.

(ii) Mining shall be carried out as per the approved mining plan (including Mine Closure Plan) abiding by mining laws related to coal mining and the relevant circulars issued by Directorate General Mines Safety (DGMS).

(iii) No mining shall be carried out in forest land without obtaining Forestry Clearance as per Forest (Conservation) Act, 1980.

(iv) Efforts should be made to reduce energy and fuel consumption by conservation, efficiency improvements and use of renewable energy.

(f) Land reclamation

(i) Digital Survey of entire lease hold area/core zone using Satellite Remote Sensing survey shall be carried out at least once in three years for monitoring land use pattern and report in 1:50,000 scale or as notified by Ministry of Environment, Forest and Climate Change(MOEFCC) from time to time shall be submitted to MOEFCC/Regional Office (RO).

(ii) The final mine void depth should preferably be as per the approved Mine Closure Plan, and in case it exceeds 40 m, adequate engineering interventions shall be provided for sustenance of aquatic life therein. The remaining area shall be backfilled and covered with thick and alive top soil. Post-mining land be rendered usable for agricultural/forestry purposes and shall be diverted. Further action will be treated as specified in the guidelines for Preparation of Mine Closure Plan issued by the Ministry of Coal dated 27th August, 2009 and subsequent amendments.

(iii) The entire excavated area, backfilling, external OB dumping (including top soil) and afforestation plan shall be in conformity with the “during mining”/”post mining” land-use pattern, which is an integral part of the approved Mining Plan and the EIA/EMP submitted to this Ministry. Progressive compliance status vis-a-vis the post mining land use pattern shall be submitted to the MOEFCC/RO.

(iv) Fly ash shall be used for external dump of overburden, backfilling or stowing of mine as per provisions contained in clause (i) and (ii) of subparagraph (8) of fly ash notification issued vide SO 2804 (E) dated 3rd November, 2009 as amended from time to time. Efforts shall be made to utilize gypsum generated from Flue Gas Desulfurization (FGD), if any, along with fly ash for external dump of overburden, backfilling of mines. Compliance report shall be submitted to Regional Office of MoEF&CC, CPCB and SPCB.

(v) Further, it may be ensured that as per the time schedule specified in mine closure plan it should remain live till the point of utilization. The topsoil shall temporarily be stored at earmarked site(s) only and shall not be kept unutilized. The top soil shall be used for land

reclamation and plantation purposes. Active OB dumps shall be stabilised with native grass species to prevent erosion and surface run off. The other overburden dumps shall be vegetated with native flora species. The excavated area shall be backfilled and afforested in line with the approved Mine Closure Plan. Monitoring and management of rehabilitated areas shall continue until the vegetation becomes self-sustaining. Compliance status shall be submitted to the Ministry of Environment, Forest and Climate Change/ Regional Office.

(vi) The project proponent shall make necessary alternative arrangements, if grazing land is involved in core zone, in consultation with the State government to provide alternate areas for livestock grazing, if any. In this context, the project proponent shall implement the directions of Hon'ble Supreme Court with regard to acquiring grazing land.

(g) Green Belt

(i) The project proponent shall take all precautionary measures during mining operation for conservation and protection of endangered/endemic flora/fauna, if any, spotted/reported in the study area. The Action plan in this regard, if any, shall be prepared and implemented in consultation with the State Forest and Wildlife Department.

(ii) Greenbelt consisting of 3-tier plantation of width not less than 7.5 m shall be developed all along the mine lease area as soon as possible. The green belt comprising a mix of native species (endemic species should be given priority) shall be developed all along the major approach/ coal transportation roads.

(h) Public hearing and Human health issues

(i) Adequate illumination shall be ensured in all mine locations (as per DGMS standards) and monitored weekly. The report on the same shall be submitted to this ministry & it's RO on six-monthly basis.

(ii) The project proponent shall undertake occupational health survey for initial and periodical medical examination of the personnel engaged in the project and maintain records accordingly as per the provisions of the Mines Rules, 1955 and DGMS circulars. Besides regular periodic health check-up, 20% of the personnel identified from workforce engaged in active mining operations shall be subjected to health check-up for occupational diseases and hearing impairment, if any, as amended time to time.

(iii) Personnel (including outsourced employees) working in core zone shall wear protective respiratory devices and shall also be provided with adequate training and information on safety and health aspects.

(iv) Implementation of the action plan on the issues raised during the public hearing shall be ensured. The project proponent shall undertake all the tasks/measures as per the action plan submitted with budgetary provisions during the public hearing. Land oustees shall be compensated as per the norms laid down in the R&R policy of the company/State Government/Central Government, as applicable.

(v) The project proponent shall follow the mitigation measures provided in this Ministry's OM No.Z-11013/5712014-IA.II (M) dated 29th October, 2014, titled 'Impact of mining activities on habitations-issues related to the mining projects wherein habitations and villages

are the part of mine lease areas or habitations and villages are surrounded by the mine lease area’.

(i) Corporate Environment Responsibility

(i) The company shall have a well laid down environmental policy duly approve by the Board of Directors. The environmental policy should prescribe for standard operating procedures to have proper checks and balances and to bring into focus any infringements/deviation/violation of the environmental/forest/wildlife norms/conditions. The company shall have defined system of reporting infringements/deviation/violation of the environmental/forest/wildlife norms/conditions and/or shareholders/stake holders.

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

(iii) Action plan for implementing EMP and environmental conditions along with responsibility matrix of the company shall be prepared and shall be duly approved by competent authority. The year wise funds earmarked for environmental protection measures shall be kept in separate account and not to be diverted for any other purpose. Year wise progress of implementation of action plan shall be reported to the Ministry/Regional Office along with the Six Monthly Compliance Report.

(iv) Self environmental audit shall be conducted annually. Every three years third party environmental audit shall be carried out.

(j) Miscellaneous

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

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

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

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

- (v) The project proponent shall submit six-monthly reports on the status of the compliance of the stipulated environmental conditions on the website of the ministry of Environment, Forest and Climate Change at environment clearance portal.
- (vi) The project proponent shall follow the mitigation measures provided in this Ministry's OM No.Z-11013/5712014-IA.II (M) dated 29th October, 2014, titled 'Impact of mining activities on habitations-issues related to the mining projects wherein habitations and villages are the part of mine lease areas or habitations and villages are surrounded by the mine lease area'.
- (vii) The project proponent shall submit the environmental statement for each financial year in Form-V to the concerned State Pollution Control Board as prescribed under the Environment (Protection) Rules, 1986, as amended subsequently and put on the website of the company.
- (viii) The project authorities shall inform to the Regional Office of the MOEFCC regarding commencement of mining operations.
- (ix) The project authorities must strictly adhere to the stipulations made by the State Pollution Control Board and the State Government.
- (x) The project proponent shall abide by all the commitments and recommendations made in the EIA/EMP report, commitment made during Public Hearing and also that during their presentation to the Expert Appraisal Committee.
- (xi) No further expansion or modifications in the plant shall be carried out without prior approval of the Ministry of Environment, Forests and Climate Change.
- (xii) Concealing factual data or submission of false/fabricated data may result in revocation of this environmental clearance and attract action under the provisions of Environment (Protection) Act, 1986.
- (xiii) The Ministry may revoke or suspend the clearance, if implementation of any of the above conditions is not satisfactory.
- (xiv) The Ministry reserves the right to stipulate additional conditions if found necessary. The Company in a time bound manner shall implement these conditions.
- (xv) The Regional Office of this Ministry shall monitor compliance of the stipulated conditions. The project authorities should extend full cooperation to the officer (s) of the Regional Office by furnishing the requisite data / information/monitoring reports.
- (xvi) The above conditions shall be enforced, inter-alia under the provisions of the Water (Prevention & Control of Pollution) Act, 1974, the Air (Prevention & Control of Pollution) Act, 1981, the Environment (Protection) Act, 1986, Hazardous and Other Wastes (Management and Trans-boundary Movement) Rules, 2016 and the Public Liability Insurance Act, 1991 along with their amendments and Rules and any other orders passed by the Hon'ble Supreme Court of India / High Courts and any other Court of Law relating to the subject matter.

5. The proponent shall abide by all the commitments and recommendations made in the EIA/EMP report and also that during presentation to the EAC. All the commitments made on

the issues raised during public hearing shall also be implemented in letter and spirit.

6. The proponent shall obtain all necessary clearances/approvals that may be required before the start of the project. The Ministry or any other competent authority may stipulate any further condition for environmental protection. The Ministry or any other competent authority may stipulate any further condition for environmental protection.

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

8. The coal company/project proponent shall be liable to pay the compensation against the illegal mining, if any, and as raised by the respective State Governments at any point of time, in terms of the orders dated 2nd August, 2017 of Hon'ble Supreme Court in WP (Civil) No.114/2014 in the matter of 'Common Cause Vs Union of India & others.

9. The concerned State Government shall ensure no mining operations to commence till the entire compensation for illegal mining, if any, is paid by the project proponent through their respective Department of Mining & Geology, in strict compliance of the judgment of Hon'ble Supreme Court.

10. This environmental clearance shall not be operational till such time the project proponent complies with the above said judgment of Hon'ble Supreme Court, as applicable, and other statutory requirements.

11. All other conditions stipulated in the EC vide its letter J-11015/435/2006-IA.II (M) dated 17.05.2007, shall remain unchanged.