

E.M.P. COMPLIANCE REPORT

AS ON 01.04.2023

BHATADI OPENCAST EXPANSION PROJECT



WESTERN COALFIELDS LIMITED
CHANDRAPUR AREA

PART-IV

Project:- BHATADI OPENCAST EXPANSION PROJECT

Environmental Clearance:-No.J-11015/151/2014-IA-II(M) dt.13th March, 2020

Six Monthly Compliance Report:- 01.10.2022 to 31.03.2023

COMPLIANCE REPORT AGAINST ENVIRONMENTAL CLEARANCE

S.N.	EC CONDITIONS	COMPLIANCE STATUS
(i)	Distance from the mine and OB Dumps shall be 150 m away from river.	The nearest boundary of mine lease is 330 mtr. away from the river.
(ii)	All additional mitigation measures proposed shall be implemented in 1 year of issue of this letter.	Mechanical Road Sweeping Machine has already been procured and deployed as and when required. Pipe conveyor system has been commissioned and is operational. Mist fogger cannon is likely to be commissioned in FY 2023-24
(iii)	Project proponent to plant 1,00,000 nos. of native trees with broad leaves along the periphery of the mine to prevent the effect of air pollution in 3 years of the issue of this letter. After completion of tree plantation number of trees shall be duly endorsed from District Forest Officer.	Due to lack of availability of space, 69500 plants have been planted in the mine periphery. 22000 plants have been planted along periphery of mine in 2020-21& 37500 saplings have been planted in 2021-22. Balance plantation shall be carried out in FY 2023-24 depending on the availability of land over stabilized OB Dumps.
(iv)	Validity of EC is life of the mine or 30 years whichever is earlier as per EIA Notification, 2006.	Noted
(v)	The project proponent shall obtain Consent to Establish from the State Pollution Control Boards for the proposed peak capacity of 1.465 MTPA prior to commencement of the increased production.	Consent to Establish was applied to State Pollution Control Board, MPCB vide UAN no. MPCB-CONSENT-0000088185 dtd: 02.02.2020 after the receipt of MoM of 52nd EAC. CTE approved in 25 th meeting of 2019-20 dtd: 03.03.2020 & 04.03.2020. CTO has been obtained upto 31.03.2023 and application for renewal of the same for further one year is under process at MPCB(Annexure-B)
(vi)	Transportation of coal from Coal Handling Plant shall be through covered trucks.	Transportation of Coal from CHP is currently being carried out with tarpaulin covered trucks. Pipe conveyor has been commissioned and road transportation of coal shall be gradually reduced.
(vii)	To control the production of dust at source, the crusher and in-pit belt conveyors shall be provided with mist type sprinklers.	Mist spray arrangement already provided at Crusher and in belt conveyor. 30 no. of mist spray nozzles provided under such arrangement. (Annexure-D)

(viii)	Mitigating measures shall be undertaken to control dust and other fugitive emissions all along the roads by providing sufficient water sprinklers. Adequate corrective measures shall be undertaken to control dust emissions, which would include mechanized sweeping, water sprinkling/mist spraying on haul roads and loading sites, long range misting/fogging arrangement, wind barrier wall and vertical greenery system, green belt, dust suppression arrangement at loading and unloading points, etc.	2 No. of 12 KL & 8 KL water tankers are provided for Coal transportation roads. 3 No. of 28KL water tankers are provided for sprinkling water on Haul Road. 13 no of sprinklers are provided along Coal transport road. 3 no high efficiency rainguns provided in CHP area. 30 nos of mist spray nozzles provided in CHP and Conveyor at Bhatadi OCM. Avenue Plantation has been done along the Coal Transportation Road. Mist fogger cannon is likely to be commissioned in FY 2023-24.																
(ix)	Continuous monitoring of occupational safety and other health hazards, and the corrective actions need to be ensured.	20% of the workforce is subjected to PME every year for monitoring of occupational health hazard. data are as follows; <table><tr><th>Year</th><th>PME</th></tr><tr><td>2016-17</td><td>163</td></tr><tr><td>2017-18</td><td>178</td></tr><tr><td>2018-19</td><td>209</td></tr><tr><td>2019-20</td><td>287</td></tr><tr><td>2020-21</td><td>254</td></tr><tr><td>2021-22</td><td>179</td></tr><tr><td>2022-23</td><td></td></tr></table>	Year	PME	2016-17	163	2017-18	178	2018-19	209	2019-20	287	2020-21	254	2021-22	179	2022-23	
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(x)	Persons of nearby villages shall be given training on livelihood and skill development to make them employable.	Persons of nearby villages are given training under CSR for livelihood and skill development. During 2015-18, 520 nos. of persons were given training at CIPET at an approximate cost of Rs. 1.20 Crores.																
(xi)	Thick green belt of adequate width at the final boundary in the down wind direction of the project site shall be developed to mitigate/check the dust pollution.	22000 nos. of saplings have been planted in FY 2020-21 and 37,500 plants have been planted along periphery of mine in 2021-22to mitigate dust pollution. Avenue plantation along the coal transportation road has also been carried out.																
(xii)	Efforts shall be made for utilizing alternate sources of surface water, abandoned mines or else whatsoever and thus minimizing the dependability on a single source.	Mine water is utilized for domestic and dust suppression purposes after treatment. Availability of mine discharge is in sufficient amount to cater the need.																
(xiii)	The company shall obtain approval of CGWA for use of groundwater for mining operations at its enhanced capacity of 1.465 MTPA.	NOC has been approved. NOC No. CGWA/NOC/MIN/ORIG/2020/7631 dtd: 13.03.2020 which is valid upto 12.03.2022. Applied for 1 st Renewal dtd: 29.09.2022(Annexure-E)and the same has been approved by CGWA, formal copy of NOC Renewal is awaited.																
(xiv)	Continuous monitoring of occupational safety and other health hazards, and the corrective actions need to be ensured.	20% of the workforce is subjected to PME every year for monitoring of occupational health hazard. data are as follows; <table><tr><th>Year</th><th>PME</th></tr><tr><td>2016-17</td><td>163</td></tr><tr><td>2017-18</td><td>178</td></tr></table>	Year	PME	2016-17	163	2017-18	178										
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(xv)	A third party assessment of EC compliance shall be undertaken once in three years through agency like ICFRI/NEERI/IIT or any other expert agency identified by the Ministry.	Work has been awarded to CSIR-NEERI , Copy of the Report is attached for kind perusal.								
(xvi)	Active OB Dump should not be kept barren/ open and should be covered by temporary grass to avoid air born of particles.	<p>Noted</p> <p>Bhatadi OC presently has two External OB dumps D1 and D2. D2 Dump has become inactive and has been stabilized through thick Plantation. D1 Dump is active dump which has achieved the height of 64 m out of total 90 m. OB dump get compacted due to continuous movement of heavy HEMM such as Dumpers and dozers and thus avoid air born particles. However possibility of grassing shall be explored in near future.</p>								
(xvii)	The activities and fund provisions for CER shall be made as per the guidelines issued by the ministry regarding CER on 1 st May, 2018.	<p>Noted</p> <p>Activities are carried out under CSR as per Companies Act, 2013. Activities carried out under CSR during last 5 years are enclosed as Annexure-F</p>								
(xviii)	Project Proponent shall obtain blasting permission from DGMS for conducting mining operation near villages and also explore deployment of rock breakers of suitable capacity in the project to avoid blasting very near to villages. There shall be no damages caused to habitation/structures due to blasting activity.	Controlled Blasting is carried out using shock tubes as per DGMS guidelines to control ground vibrations and arrest fly rocks.								
(xix)	The Project Proponent shall complies with all the statutory requirements and judgment of Hon'ble Supreme Court dated the 2 nd August 2017 in Writ Petition (Civil) No. 114 of 2014 in the matter of Common Cause versus Union of India and Ors. State Government shall ensure that the entire compensation levied, if any, for illegal mining paid by the Project Proponent through their respective Department in strict compliance of judgment of Hon'ble Supreme Court dated the 2 nd August 2017 in Writ Petition (Civil) No. 114 of 2014 in the matter of Common Cause versus Union Of India and Ors.	<p>Noted</p> <p>No illegal Mining is carried out at the Bhatadi Opencast.</p>								
(xx)	Project Proponent shall obtain the necessary prior permission from the Central Ground Water Authority (CGWA) in case of intersecting the Ground Water table. The intersecting	NOC has been approved. NOC No. CGWA/NOC/MIN/ORIG/2020/7631 dtd: 13.03.2020 which is valid upto 12.03.2022. Applied for 1 st Renewal dtd: 29.09.2022 (Annexure-E)and the same has been approved by CGWA, formal copy of NOC Renewal is								

	ground water table can only be commenced after conducting detailed hydrogeological study and necessary permission from the CGWA. The Report on six monthly basis on changes in Ground water level and quality shall be submitted to the Regional Office of the Ministry, CGWA and State Pollution Control Board.	awaited.
(xxi)	Proponent shall appoint an Occupational Health Specialist for Regular and Periodical medical examination of the workers engaged in the Project and maintain records accordingly; also , Occupational health check-ups for workers having some ailments like BP, Diabetes, Habitual smoking, etc. shall be undertaken once in six months and necessary remedial/preventive measures taken accordingly. The Recommendations of National Institute for ensuring good occupational environment for mine workers shall be implemented; The prevention measure for burns, malaria and provision of antsnake venom including all other paramedical safeguards may be ensured before initiating the mining activities.	50 bedded area hospital with specialist doctors and 6 nos. of dispensaries have been provided. 20% of the workforce is subjected to PME every year for monitoring of occupational health hazard.
(xxii)	Project Proponent shall follow the mitigation measures provided in Office Memorandum No. Z-11013/57/2014-IA.II (M), dated 29 th October, 2014 titled “Impact of mining activities on Habitation-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”.	Noted
(xxiii)	The illumination and sound at night at project sites disturb the villages in respect of both human and animal population. Consequent sleeping disorders and stress may affect the health in the villages located close to mining operations. Habitations have a right for darkness and minimal noise levels at night. PPs must ensure that the biological clock of the villages is not disturbed; by orienting the floodlights/ masks away from the villagers and keeping the noise levels well within the prescribed limits for day light/night hours.	Noted Illumination at the mine site is provided as per statute(DGMS). The levels are also monitored. No undue light or sound is thrown on the nearby villages. Ambient noise level is monitored fortnightly and results are enclosed as Annexure-C
(xxiv)	The Project proponent shall take all	A detailed 2 year study is being undertaken for

	<p>precautionary measures during mining operation for conservation and protection of endangered fauna, if any, spotted in the study area. Action plan for conservation of flora and fauna shall be prepared and implemented in consultation with State Forest and Wildlife Department. A copy of action plan shall be submitted to the Ministry of Environment, Forest and Climate Change and its Regional Office.</p>	<p>conservation of wildlife in the project area in association with reputed Institute NEERI, Nagpur and Wildlife Institute of India. Recommendations of this study shall be implemented on receipt of the same.</p>
(xxv)	<p>Hon'ble Supreme Court in an Writ Petition(s) Civil No. 114/2014, Common Cause vs Union of India & Ors vide its judgment dated 8th January, 2020 has directed the Union of India to impose a condition in the mining lease and a similar condition in the environmental clearance and the mining plan to the effect that the mining lease holders shall, after ceasing mining operations, undertake re-grassing the mining area and any other area which may have been disturbed due to their mining activities and restore the land to a condition which is fit for growth of fodder, flora, fauna etc. Compliance of this condition after the mining activity is over at the cost of the mining lease holders/Project Proponent". The implementation report of the above said condition shall be sent to the Regional Office of the Ministry.</p>	<p style="text-align: center;">Noted</p> <p>To be complied with after ceasing of mining operations</p>
(xxvi)	<p>CTE/CTO for the project shall be obtained from the SPCB as required under the Air (Prevention and Control of Pollution) Act, 1981 and the Water (Prevention and Control of Pollution) Act, 1974 and the SPCB shall follow the mechanism/ protocol issued by the Ministry vide letter no. Q-16017/38/2018-CPA dated 24th October, 2019 while issuing the CTE/CTO for the project, for improvement of environmental quality in the area.</p>	<p>Consent to Establish was applied to State Pollution Control Board, MPCB vide UAN no. MPCB-CONSENT-0000088185 dtd: 02.02.2020 after the receipt of MoM of 52nd EAC.</p> <p>CTE approved in 25th meeting of 2019-20 dtd: 03.03.2020 & 04.03.2020.</p> <p>CTO has been obtained upto 31.03.2023 and application for renewal of the same for further one year is under process at MPCB (Annexure-B)</p>
(xxvii)	<p>The green belt of at least 5-10 m width shall be developed in more that 40% of the total project area, mainly along the periphery of mine boundary, in downward wind direction, and along road sides etc. Selection of plant species shall be as per the CPCB guidelines in consultation with the State Forest</p>	<p>Till date plantation of 242175nos. of trees has been done in 80.27 ha. of land.</p> <p>22000 saplings have been planted in 2020-21 & 37500 saplings have been planted in 2021-22 along the mine periphery.</p>

	Department.	
(xxviii)	In addition, the project proponent shall develop greenbelt outside the plant premises such as avenue plantation, plantation in vacant areas, social forestry etc.	Outside mine lease plantation is taken up CSR only. Outside mine area plantation has already been developed by WCL Chandrapur Area in degraded forest land with FDCM for 150 ha. Similarly Chandrapur area has contributed 5 crores for development of a APJ Abdul Kalam Ecopark.
(xxix)	Monitoring of compliance of EC conditions may be submitted with third party audit every year.	Work has been awarded to CSIR-NEERI , Copy of the Report is attached for kind perusal.
(xxx)	The percentage the CER may be atleast 2 times the amount given in the OM dated 1 st May, 2018 recommended by the EAC and item-wise details along with time bound action plan shall be prepared and submitted to the Ministry's Regional Office.	Noted Present expansion is without any capacity investment so CER question does not arise.
(xxxi)	Effective fugitive emission control measures should be imposed in the process, transportation, packing etc.	Mist. spray system & Side Cladding provided at CHP for control of fugitive emissions. Mobile tankers are deployed for coal transportation road and haul road. Sprinklers and rainguns are provided for coal stock yard. Transportation is made with Tarpaulin covered trucks and is likely to be replaced through Pipe Conveyor System to eliminate emissions during transportation.
(xxxii)	Transportation of materials by rail/ conveyor belt, wherever feasible.	Pipe conveyor has already been commissioned at the mine and would account for the majority of coal transport from the mine.
(xxxiii)	A detailed water harvesting plan may be submitted by the project proponent.	Rain Water Harvesting Structure at Bhatadi OCP has already been installed at an approximate cost of Rs. 2.63 lakhs during 2020-21 Photograph as (Annexure-D)
(xxxiv)	In case domestic waste water generation is more than 10 KLD, the industry may install STP.	STP of 50 KLD provided.
(xxxv)	Monitoring of compliance of EC conditions may be submitted with third party audit every year.	Noted Work has been awarded to CSIR-NEERI vide letter वेकोलि/ मुख्यालय/ पर्यावरण/ 16-J / दिनांक: 24.11.2020
(xxxvi)	PP shall comply all the conditions of earlier EC dated 19 th March, 2015 in 3 years from the issue of this letter and submit a copy of compliance to Ministry's Regional Office.	Noted All the conditions of earlier EC dtd: 19th March 2015 are already complied or in compliance and has been certified by Regional Office of MoEF&CC during its inspection on 22.01.2018(Annexure-H)
(xxxvii)	All the recommendation of comprehensive study being conducted by NEERI shall be implemented by project proponent within certain timeline and necessary timeline shall be	Noted

	submitted to Ministry's Regional Office.	
4.1	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.	Proposal for Stage-I FC for 0.20 Ha. forest land is currently pending with State Government. No mining shall be carried out without FC.
(ii)	The project proponent shall obtain clearance from the National Board for Wildlife, if applicable.	Not 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).	Noted A detailed 2 year study is being undertaken for conservation of wildlife in the project area in association with reputed Institute NEERI, Nagpur and Wildlife Institute of India, Dehradun. Recommendations of this study shall be implemented on receipt of the same.
(iv)	The project proponent shall obtain Consent to Establish/Operate under the provision 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.	Consent to Establish was applied to State Pollution Control Board, MPCB vide UAN no. MPCB-CONSENT-0000088185 dtd: 02.02.2020 after the receipt of MoM of 52nd EAC. CTE approved in 25 th meeting of 2019-20 dtd: 03.03.2020 & 04.03.2020. CTO has been obtained upto 31.03.2023 and application for renewal of the same for further one year is under process at MPCB (Annexure-B)
(v)	The project proponent shall obtain the necessary permission from the Central Ground Water Authority.	NOC has been approved. NOC No. CGWA/NOC/MIN/ORIG/2020/7631 dtd: 13.03.2020 which is valid upto 12.03.2022, Re-applied for 1 st Renewal dtd: 29.09.2022
(vi)	Solid/hazardous waste generated in the mines needs to addressed in accordance to the Solid Waste Management Rules, 2016/Hazardous & Other Waste Management Rules, 2016.	Solid/hazardous waste generated in the Bhatadi OC is disposed via MPCB authorized agency to CHWTSDF.
(b)	Air quality monitoring and preservation	
(i)	Continuous ambient air quality monitoring stations as prescribed in the statue be established in the core zone as	Ambient air quality monitoring is done fortnightly for pollutants namely PM ₁₀ , PM _{2.5} , SO ₂ and NO _x by Central Mine Planning & Design Institute Limited

	<p>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.</p>	<p>(CMPDIL) in the core zone as well as in the buffer zone. Reports are regularly submitted to MPCB & MoEF&CC (Annexure-C)</p> <p>One CAAQMS has been commissioned in adjoining mine of Durgapur OCP on 11.10.2020 and data is submitted to MPCB on regular basis. One dedicated CAAQMS for Bhatadi OC Mine is under procurement and likely to be commissioned in FY 2023-24</p> <p>Mist fogger cannon is likely to be commissioned in FY 2023-24. Monitoring of Heavy Metals is also carried out every six monthly and reports are submitted to RO, MoEF&CC vide Email (Annexure-J)</p>
(ii)	<p>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.</p>	<p>Monitoring is done by CMPDIL as per GSR 742 (E) dated 25th September, 2000 and reports are submitted to Ministry/Regional Office and to the CPCB/MPCB. Monitoring of Heavy Metals is also carried out every six monthly and reports are submitted to RO, MoEF&CC vide Email. Last such report on Heavy metals submitted is enclosed as Annexure-J</p>
(iii)	<p>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.</p>	<p>Currently transportation is done through tarpaulin covered trucks however transportation of material will be done through pipe conveyor system which is under advance stages of completion, in near future. Mist. spray system & Side Cladding provided at CHP for control of fugitive emissions. Mobile tankers are deployed for coal transportation road and haul road. Sprinklers and rainguns are provided for coal stock yard. It is proposed to use MgCl₂ as an additive to water for dust suppression. It is proposed to acquire one mobile mist fogger cannon for CHP/Coal Stock area for fugitive dust control during 2023-24</p>
(iv)	<p>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,</p>	<p>Coal transportation is now predominantly through pipe conveyor. Road transport if any shall be through covered trucks. Coal transport roads are regularly wetted by spraying water through mobile tankers.</p>

	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.	Vehicles complying to RTO rules which includes owing PUC certificate, are only engaged in coal transportation. Sample copy of Work Order indicating compliance of various Laws including imposed by RTO and few valid PUC of vehicles engaged for reference (Annexure-K)
(vi)	Coal stock pile/crusher/feeder and breaker material transfer points shall invariably be provided with dust suppression system. Belt-conveyor 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.	Mist. spray system & Side Cladding provided at crusher for dust suppression. Sprinklers and rain-guns are provided around coal stock yard & crusher. Drills are fitted with dust extractor.
(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.	Mist. spray system & Side Cladding provided at CHP for control of fugitive emissions. Mobile fogger has been proposed for Bhatadi CHP area for conservation of water.
(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 25 th September, 2000 and as amended from time to time by the Central Pollution Control Board.	Monitoring is done by CMPDIL as per GSR 742 (E) dated 25 th September, 2000 and reports are submitted to Ministry/Regional Office and to the CPCB/SPCB vide Email. (Annexure-C)
(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-20012/1/2006-1A.11 (M) dated 27 th May, 2009 issued by Ministry of Environment, Forest & Climate Change shall also be referred in this regard for its compliance.	The Monitoring data is uploaded regularly on company website www.westerncoal.in and at Sub Area Manager Office.
(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 monitoring is being done four times every year (May to January) and report is submitted to MoEFCC& CGWA vide email in 6 monthly EC Compliance. Monitoring Report enclosed as Annexure-G 02 nos. Piezometers have been installed in the mine for monitoring of ground water levels.

	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.	Monitoring of water quality upstream and downstream of water bodies is carried out once in six months and reports are submitted to RO, MoEF&CC vide email. Copy enclosed as Annexure-L
(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.	No ground water is used for mining. Rain Water Harvesting at SAM Office, Bhatadi OCP has been constructed at an approximate cost of Rs. 2.63 lakhs.
(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 dump shall be avoided by providing adequate channels for flow of silt into 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.	For existing Bhatadi OCP garland drain/catch drain of size 2.5 mtrs x 2.5 mtrs is constructed around periphery of mine for total length of 4.00 km so as to arrest silt & sediment flow from the OB dumps & mine. Water pumped out from the mine is discharged onto the surface & made to pass thorough a sedimentation pond. The clear water from the sedimentation tank is used for activities like dust suppression on hail roads & in & around CHP. Green belt development as expansion project shall commence the catch drain shall be extended suitably. At Bhatadi OCP one retaining wall exists inside mine of length 80 mtr. below view point. Catch drains are provided to collect runoff and siltation from OB Dumps as expansion project commences additional toe wall shall be constructed as and when required.
(vii)	Adequate ground water 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).	Rain Water Harvesting at SAM Office, Bhatadi OCP has been constructed at an approximate cost of Rs. 2.63 lakhs. Artificial ground water recharge is being done through one no. of rain harvesting pond (size 110 x 60 m). There is no shortage of water in the nearby villages. Their ponds remain full round year.
(viii)	Industrial waste water generated from CHP, workshop and other waste water ,	Industrial waste water is being collected properly for mine discharge. 02 nos. of Sedimentation tanks have

	shall be properly collected and treated so as to conform to the standards prescribed under the standards prescribed under Water Act 1974 and Environmental (Protection) Act, 1986 and the Rules made there under, and as amended from time to time, Adequate ETP/STP needs to be provided.	been provided in series & ETP of capacity 75 KLD is provided and fitted with oil & grease trap. Treated water is reused for washing of HEMM STP of Capacity 50KLD provided for Colony.
(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.	Pumped out water is used for dust suppression, gardening and drinking purpose after suitable treatment. Drains are regularly desilted before the onset of monsoon.
(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.	Noted. As embankment of suitable dimension (20m on top x 3m height above HFL) has been constructed along river boundary with hard material & river front side has been stabilized with plantation.
(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.	Noted for compliance
(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	Workers engaged in drilling and blasting operations, operation of HEMM are provided with personal protective equipments like earplug/ear muffs. Awareness program for the users is periodically conducted by the safety department of unit and the progress of such progress in use of such accessories is being monitored

	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.	Controlled blasting is being done with the help of shock tube. Blasting hours are fixed and blasting is carried out with due precautions. Vibrations are recorded using Vibrometer and results are within limit.
(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.	Noise Monitoring is done by CMPDIL on fortnightly basis at CHP and near colony Monitoring results are within permissible limits and reports are regularly submitted to regional office of MoEFCC vide email at ecompliance-mh@gov.in and uploaded on Parivesh Portal.
(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.	Already being done & will continue to be done
(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).	Already being done & will continue to be done
(iii)	No mining shall be carried out in forest land without obtaining Forestry Clearance as per Forest (Conservation) Act, 1980.	No forest land is involved in the lease area of 847.37 Ha
(iv)	Efforts should be made to reduce energy and fuel consumption by conservation, efficiency improvements and use of renewable energy.	Already being done. A solar power plant of capacity 140 kWh/day has been installed at Bhatadi OC. In future also such endeavours will be perused.
(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 & Climate Change (MOEFCC) from time to time shall be submitted to MOEFCC/regional Office (RO).	Mapping of the project is done once in 3 years and the same is uploaded on WCL website. Report is submitted to MoEFCC, RO office in every 6-month. Land Reclamation report of Bhatadi OC for the year 2022 is enclosed as Annexure-M
(ii)	The final mine void depth should preferably be as per the approved Mine	Currently life of mine is 8 years and backfilling is in progress.

	<p>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 agriculture/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.</p>	<p>Till 31.03.2023, 4.50 Mm³ of overburden has been backfilled in the quarry and the same is being continued. As a part of progressive mine closure plan till date 80.27 Ha of land has been covered with plantation (242175 No.s). Plantation of 37500 nos. have been planted in 2021-22 and 22000 nos. along periphery for green belt development.</p>
(iii)	<p>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.</p>	<p>Noted</p> <p>Present status as on date: Excavated Area 162.096 Ha, backfilling done with 3.909 Mm³ for making Haul roads etc. external OB dumping (including top soil) = 71.363 Mm³(174.788 Ha), Infrastructure = 14.45 Ha, green belt(Afforestation) = 56.47 Ha, Colony = 16.55 Ha. Post mining Land use pattern will be adhered as per EIA/EMP submitted to the MoEF&CC.</p>
(iv)	<p>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 Flues 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 MoEFCC, CPCB and SPCB.</p>	<p>Regarding this, it is submitted that the subject mine is an operational mine & dumping of fly ash in such mine involves severe environmental & safety issues. CIL so far as directed for fly ash filling in abandoned mines only. Moreover, MOC & MoEF&CC has jointly agreed for a detailed scientific study on this issue. As such, till an informed decision is arrived, the condition may be kept on hold.</p>
(v)	<p>Further, it may be ensure 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</p>	<p>Noted.</p>

	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.	Noted										
(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 & Wildlife Department.	A detailed 2 year study is being undertaken for conservation of wildlife in the project area in association with reputed Institute NEERI, Nagpur and Wildlife Institute of India, Dehradun. Recommendations of this study shall be implemented on receipt of the same.										
(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.	22000 plants are being planted in 2020-21 along mine boundary. 37500 nos. of plants have been planted in 2021-22 along periphery covering an area of 15.00 ha.										
(h)	Pub 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 and it's RO on 6 monthly basis.	Noted Illumination at the mine site is provided as per statute. Monitoring is done on monthly basis. Report shall be submitted to Ministry and it's RO along with 6 monthly EC Compliance. Copy of last 6 months enclosed for your reference as Annexure-N										
(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 Mines Rules, 1955 and DGMS circulars. Besides regular periodic health check-up, 20% of the	Noted Periodical medical examination of 20% of the workforce is being done annually. Data is as follows <table><tr><th>Year</th><th>PME</th></tr><tr><td>2016-17</td><td>163</td></tr><tr><td>2017-18</td><td>178</td></tr><tr><td>2018-19</td><td>209</td></tr><tr><td>2019-20</td><td>287</td></tr></table>	Year	PME	2016-17	163	2017-18	178	2018-19	209	2019-20	287
Year	PME											
2016-17	163											
2017-18	178											
2018-19	209											
2019-20	287											

	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.	<table><tr><td>2020-21</td><td>254</td></tr><tr><td>2021-22</td><td>179</td></tr></table>	2020-21	254	2021-22	179
2020-21	254					
2021-22	179					
(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.	<p>Noted</p> <p>Masks are provided as protective gear.</p> <p>Training and informative sessions are kept for the Personnel (including outsourced employees) working in core zone at Vocational Training Centre (VTC), Chandrapur</p>				
(iv)	Implementation of 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.	<p>Noted</p>				
(v)	The project proponent shall follow the mitigation measures provided in this Ministry's OM No. Z-11013/5712014-1A.II(M) dated 29th October, 2014, titled 'impact of mining activities on habitations- issues related to the mining projects where in habitations and villages are the part of smileys areas or habitations and villages are surrounded by the mine lease area'.	<p>Noted</p>				
(i)	Corporate Environment Responsibility					
(i)	The project proponent shall comply with the provisions contained in this Ministry's OM vide F.No. 22-65/2017-IA.III dated 1st May 2018, as applicable, regarding Corporate Environment Responsibility	This is an existing mine with expansion without capital investment so CER is not applicable.				
(ii)	The company shall have a well laid down environmental policy duly approved by the Board of Directors. The environmental policy should prescribe for standard operating procedures to have proper checks and balances and to bring into focus any infringements/deviation/violation of the environmental/forest/wildlife	Company has a well laid down Corporate Environment Policy which is already available on the WCL website. (Annexure-O)				

	norms/conditions. The company shall have a defined system of reporting infringements/deviation/violation of the environmental/forest/wildlife norms /conditions and/or shareholders/stakeholders	
(iii)	Separate environmental cell both at the project and company headquarter level with qualified personnel shall be set up under the control of senior executive who will directly to the head of the organisation.	At corporate level the Environmental issues are dealt by Director(Tech) P&P and GM(Env.). At area level it is headed by General Manager (Opr) & Area Nodal Officer. At project level, by Sub Area Manager through Nodal officer of the project.
(iv)	Action plan for implementing EMP and environmental conditions along with responsibility matrix of the company shall be prepared and shall be duly approved by the competent authority. The year wise funds earmarked for the environmental protection measures shall be kept in separate account and not to be diverted for any other purpose. Yearwise progress of implementation of action plan shall be reported to the ministry/Regional office along with the six monthly compliance report.	Noted Annual Fund is allocated to Environment Department under Capital and Revenue Budget which is used solely for implementation of Environmental Activities under EMP.
(v)	Self environmental audit shall be conducted annually. Every 3 years third party environmental audit shall be carried out.	Third party audit every year is being 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 in at least two local newspapers of the district or state, of which one shall be in vernacular language within 7 days and in addition this shall also be displayed in the project proponent's website permanently	Published in 1. Chandrapur Mahasagar (Marathi) dtd: 17.03.2020 2. Mahavidarbha (Marathi) dtd: 17.03.2020 However same has been uploaded on the WCL website (Annexure-P)
(ii)	The copies of the environmental clearance shall be submitted by the project proponents to the heads of the local bodies Panchayats and Municipal Bodies in addition to the relevant offices of the government who inturn has to display the same for 30 days from the date of receipt.	Copy of EC has been submitted to Local bodies, Panchayats and Municipal Bodies in addition to all relevant offices of the government vide letter WCL/CHA/AGM/ENV/1229 dtd: 15.03.2020 (Annexure-Q)
(iii)	The project proponent shall upload the status of compliance of the stipulated	Noted Compliance of EC Conditions along with monitored

	environment Clearance conditions, including results of the monitored data on their website and update the same on half yearly basis.	data is being submitted to MoEFCC Regional office vide email and the same is being uploaded on Parivesh Portal.
(iv)	The project proponent shall monitor the criteria pollutants level namely; PM10, SO2 and NOx (ambient levels) or critical sectoral parameters, indicated for the projects and display the same at convenient location for disclosure to the public and put on the website of the company	Monitoring is done by Central Mine Planning and Design Institute (CMPDI) for the SPM, PM10, SO2 and NOx and reports are submitted to MoEFCC Regional office, Nagpur vide email and are uploaded on WCL website for general public along with putting on Board.
(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.	Six monthly reports are submitted to MoEFCC office vide email and is uploaded on Parivesh 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'.	Noted.
(vii)	The project proponent shall submit 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.	Environment Statement is submitted online annually as per EPA, 1986 and the same is uploaded on the WCL website. Environment Statement for 2021-22 was submitted online on MPCB portal vide UAN No. MPCB-ENVIRONMENT_STATEMENT-0000046337 dtd: 20.09.2022 (Annexure-R)
(viii)	The project authorities shall inform to the Regional office of the MoEFCC regarding commencement of mining operations.	Informed the Regional office of the MoEFCC regarding commencement of mining operations vide email. (Annexure-S)
(ix)	The project authorities must strictly adhere to the stipulations made by the State Pollution Control Board and the State Government.	Conditions stipulated by State Pollution Control Board, here MPCB via its Consent to Establish/Operate are adhered.
(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	Noted

	Committee.	
(xi)	No further expansion or modification in the plant shall be carried out without prior approval of the ministry of Environment, Forests and Climate Change.	Noted
(xii)	Concealing factual data or submission of false/fabricated data may result in revocation of this environmental clearance and attract action under provisions of Environment (Protection) Act, 1986	Noted
(xiii)	The ministry may revoke or suspend the clearance, if implementation of any of the above conditions is not satisfactory.	Noted
(xiv)	The ministry reserves the right to stipulate additional conditions if found necessary. The company in a time bound manner shall implement these conditions	Noted
(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.	Noted Full cooperation will be extended to the officer(s) of MoEFCC Regional office, Nagpur regarding monitoring of compliance of conditions stipulated in the EC.
(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 Honorable Supreme Court of India/ High Courts and any other Court of Law relating to the subject matter	Noted
5	The project proponent shall abide by all the commitments and recommendations made in EIA/EMP report and also that during the presentation to EAC. All the commitments made on the issues raised during public hearing shall also be implemented in the letter and spirit.	Noted
6	The proponent shall obtain all necessary	Noted

	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.	
7	Any appeal against this environmental clearance Shall lie with the National Green Tribunal, if preferred, with in a period of 30 days as prescribed under section 16 of the National Green Tribunal Act, 2010.	Noted
8	The Coal company/project proponent shall be liable to pay the compensation against 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'.	Noted However, production of the mine is done within EC limits. No illegal mining activities are carried out at the Bhatadi Opencast mine.
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 there respective Department of Mining and Geology, in strict compliance of judgement of Hon'ble Supreme Court.	Noted Mining is done in compliance of all the laws as applicable. No compensation has been imposed by the State Government.
10	This Environment Clearance shall not be operational till such time the project proponent complies with the above said judgement of Hon'ble Supreme Court, as applicable, and other statutory requirements.	Noted
11	This issues in suppression of the earlier EC granted vide letter dated 19 th March, 2015.	Noted

for [Signature]
31/5/23
Manager (Civil)
Padmapur Sub Area

[Signature]
31/5/23
Mine Manager
Bhatadi OCM

[Signature]
Sub Area Manager
Padmapur Sub Area

[Signature]
01/06/23
Area Nodal Officer (Env)
WCL-Chandrapur Area