

WESTERN COALFIELDS LIMITED

SIX MONTHLY

EC COMPLIANCE REPORTS

FOR PERIOD OF

1st October 2022 to 31st March 2023



GHUGUS OPENCAST PROJECT

WCL WANI AREA

STATUS OF COMPLIANCE OF EC CONDITIONS OF GHUGUS OC EXPANSION
MOEF CLEARANCE LETTER NOS. J-11015/78/2005-IA-II(M) DTD 24.5.2005.
PERIOD: 01/10/2022 to 31/03/2023

SR. NO.	CONDITION	STATUS OF COOMPLIANCE (As on 31/03/2023)																																																												
A	SPECIFIC CONDITIONS																																																													
(i)	No mining operations shall be undertaken in forestland until forestry clearance has been obtained.	Letter to Deputy conservator of forest, Chandrapur forest Dept. vide letter no. WCL: WA: CGM: PROJS: 11: 8273 dtd. 06/07.08.2011 regarding scrutiny of the documents related to proposal of diversion of 104.05 Ha of forest land at Ghugus OCP (copy enclosed). Again letter vide no. WCL/ WA/ Ghugus/ 13/ 300 dtd. 27/28.01.2013 for exempting compensatory afforestation was submitted to Deputy Conservator of Forest, Chandrapur (copy enclosed)																																																												
(ii)	The Embankment constructed for the part of mine lease boundary, which is located below the Wardha river should be sufficient height over the HFL and width to protect the mine from inundation from peak flow from river.	The embankment constructed is having maximum RL – 212m and min RL 195m which is at considerable height as compared to HFL i.e. 185.165m. Embankment is having min top width of 50m.																																																												
(iii)	Top soil should be stacked properly with proper slope at earmarked site(s) and should not be kept active & shall be used for reclamation and development of greenbelt.	During earlier excavations top soil has been used concurrently for carpeting over the external OB dumps and backfilled areas which have been subsequently biologically reclaimed.																																																												
(iv)	OB should be stacked at earmarked external OB dump sites only and shall be a maximum height of 60 m only and consist of two benches of 30m each. The ultimate slope of the dump shall not exceed 28 deg. The re-handling of the OB for backfilling will begin at the end of de-coaling. Monitoring and management of rehabilitated dump sites should continue until the vegetation becomes self-sustaining. Compliance status should be submitted to the Ministry of Environment and forests and its Regional Office located at Bhopal on early basis.	<div>The details of the external OB dumps along with technical details and status of biological reclamation are as follows -<table><tr><th>Sr.No</th><th>Dump No</th><th>Height (m)</th><th>Area in (Ha)</th></tr><tr><td>1</td><td>EM - 1</td><td>20.00</td><td>70.40</td></tr><tr><td>2</td><td>E – 2</td><td>18.00</td><td>19.35</td></tr><tr><td>3</td><td>E – 3</td><td>17.00</td><td>10.80</td></tr><tr><td>4</td><td>E – 4</td><td>10.00</td><td>2.52</td></tr><tr><td>5</td><td>E – 5</td><td>10.00</td><td>2.86</td></tr><tr><td>6</td><td>E – 6</td><td>14.00</td><td>2.68</td></tr><tr><td>7</td><td>E – 7</td><td>5.00</td><td>2.5</td></tr><tr><td>8</td><td>E – 8</td><td>18.00</td><td>5.00</td></tr><tr><td>9</td><td>E – 9</td><td>8.00</td><td>2.24</td></tr><tr><td>10</td><td>E – 10</td><td>6.00</td><td>7.94</td></tr><tr><td>11</td><td>E – 11</td><td>13.00</td><td>1.57</td></tr><tr><td>12</td><td>E – 12</td><td>3.00</td><td>12.00</td></tr><tr><td>13</td><td>E – 13</td><td>25.00</td><td>2.00</td></tr><tr><td colspan="2">Total : -</td><td></td><td>141.86</td></tr></table></div>	Sr.No	Dump No	Height (m)	Area in (Ha)	1	EM - 1	20.00	70.40	2	E – 2	18.00	19.35	3	E – 3	17.00	10.80	4	E – 4	10.00	2.52	5	E – 5	10.00	2.86	6	E – 6	14.00	2.68	7	E – 7	5.00	2.5	8	E – 8	18.00	5.00	9	E – 9	8.00	2.24	10	E – 10	6.00	7.94	11	E – 11	13.00	1.57	12	E – 12	3.00	12.00	13	E – 13	25.00	2.00	Total : -			141.86
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		The height of the dumps as seen from the above table are well within the maximum limit of 60 m.
(v)	Catch drains and de-silted ponds of appropriate site should be constructed to arrest silt and sedimentation flows from soil OB and mineral dumps. The water so collected should be utilized for watering the mine area, roads, green belt development, etc. the drains should be regularly de-silted and maintained properly.	RCC Catch drain along internal dump from Kargil Chowk to Bhairam Baba stretching a length of 400m of dimension 1.2m x 0.9m is provided. Catch drain of 550m length and dimension 2m x 2.5m is provided from MSEB tower to Tilak Nagar.
	Garland drains (size, gradient & length) and sump capacity should be designed keeping 50% safety over and above the peak sudden rainfall and maximum discharge in the area adjoining the mines site.	Garland drains of size 2.00 M x 1.00 M have been provided around the periphery of excavated area of mine, which carries surface run off and is adequate to deal with peak sudden rain fall. The mine sump of this mine is old under ground galleries which is more than sufficient to deal with any sudden peak rain fall.
(vi)	Pumps of adequate number and capacity should be provided which drain the mine water even during maximum rainfall.	Coal exhausted and no mining activity is going on thus no pumping is required.
(vii)	Dimension of the retaining wall at the toe of dumps and OB benches within the mine to check run off and siltation should be based on the rainfall data.	Embankment of 20m height and 70.40 Ha area runs along the periphery of mine which has been biologically reclaimed. For the dumps, which are yet to be biologically reclaimed, drains of size 2Mx1M have been constructed around the dumps to arrest the run off and silt. These drains are regularly being cleaned before onset of monsoon.
(viii)	Drills should be wet operated or with dust extractors and operated only during daytime.	Coal exhausted and no mining activity is going on.
(ix)	Controlled blasting should be practiced with the use of delay detonators and only during daytime. The mitigation measures for control of ground vibrations and to arrest the fly rocks and boulders should be implemented.	Coal exhausted and no mining activity is going on.

	<p>Green belt development shall cover external OB dump of 90 ha. Along ML boundary covering an area of 40 ha. Made, and in township outside the lease area by planting native plant spades in consultation with the local DFO/Agriculture Department. The density of the trees should be around 2500 plants per ha.</p>	<p>It is being developed on regular basis in mine lease area covering various infrastructures along haul road, coal transportation road, embankment, external OB dumps and back filled areas with various native species through state forest department. The density of the trees is 2000-2500 plants / Ha. The details of plantations are given as below –</p> <table><tr><th>Sr. No.</th><th>Location of Plants</th><th>Area (Ha)</th><th>No. of Plants</th></tr><tr><td>1.</td><td>In OB Dumps and Embankment</td><td>84.11</td><td>285787</td></tr><tr><td>2.</td><td>Backfilled Area</td><td>42.47</td><td>106172</td></tr><tr><td>3.</td><td>Others (incl. plain land, coal transportation road, avenue etc)</td><td>17.90</td><td>71607</td></tr><tr><td></td><td></td><td>144.48</td><td>463566</td></tr></table> <p>Further plantation of 81130 Nos. of plants have been done in Nakoda OC with an area 32.45 Ha.</p>	Sr. No.	Location of Plants	Area (Ha)	No. of Plants	1.	In OB Dumps and Embankment	84.11	285787	2.	Backfilled Area	42.47	106172	3.	Others (incl. plain land, coal transportation road, avenue etc)	17.90	71607			144.48	463566
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(xi)	<p>A progressive Mine closure plan shall be implemented. Backfilling will start after the coal has been mined out and except for a void for future expansion, the higher benches of the void shall be terraced and plantation done to stabilize the slopes. Peripheral fencing shall be done along the excavated area.</p>	<p>Progressive Mine Closure plan is being implemented. The mine closure claim for period 2011-12 to 2015-16 for Rs. 736227000.00 has been claimed from Escrow account no. 08973161002805 vide order No. CC/MCP/Ghugus OC/WCL/18-19/449 dtd. 28th March 2019.</p>																				
(xii)	<p>Regular monitoring of groundwater level and quality should be carried out by establishing a network of existing wells and construction of new piezo-meters. The monitoring for quantity should be done four times a year in pre-monsoon (May), monsoon (August), post-monsoon (November) and winter(January) seasons and for quantity in May. Data thus collected should be submitted to the Ministry of Environment and Forests and the Central Ground Water Board, Regional Office quarterly within one month of monitoring.</p>	<p>Regular monitoring of ground water level from existing wells at 21 locations of Buffer zone is being done four times a year i.e. during pre-monsoon (May), monsoon (August), post-monsoon (November), and winter (January) seasons. Quality of groundwater as per IS: 10500 : 2012 is being analyzed for 5 nearby affected villages located in Buffer zone namely Bellora, Abai, Ghugus, Nakoda & Usegaon. The monitoring report is regularly sent to Regional Officer, CGWB Nagpur with a copy to MoEF&CC & CPCB.</p>																				


(xii)	The company shall put up artificial groundwater recharge measures for augmentation of groundwater resource. The project authorities should meet water requirement of nearby village(s) case the village wells go dry due to de-watering of the mine.	The dip section of mine is always filled with water where under galleries exists. Nakoda OC mine pit which is partly reclaimed and partly filled with water having dimension 260m x 200m x 48 m acts as a source of groundwater recharge. Water is supplied to the nearby village through water tankers, as & when required. Coal has exhausted and no mining activity is going on thus no dewatering is under process.
(xiv)	Sewage treatment plant should be installed in the existing colony.	All the residential units are provided with individual septic tank and soak pit.
(xv)	Digital processing of the entire lease area using remote sensing techniques should be done regularly once in 3 years monitoring land use pattern and report submitted to MOEF and its Regional Office at Bhopal.	Restoration/Reclamation Monitoring of all mine of WCL having less than 5 million cum. (Coal+OB) capacity is being done by Satellite and the data is available in the website of WCL. The satellite data for Ghugus OC mine for year 2022 is enclosed.
(xvi)	A Final Mine Closure plan along with details of corpus fund should be submitted to the Ministry of Environment and Forests 5 years in advance of final mine closure for approval.	Being followed as per Approved Mine closure plan.
(xvii)	Consent to operate should be obtained from the SPCB before expansion in production.	The consent to operate has been granted for coal production up to 1.90 MTPA upto 31.3.2017 vide Consent No. BO/CAC-Cell/EIC No.CH-1641-14/CAC/12216 dtd 19.9.2015. Renewal of Consent for operation of Railway siding and CHP is approved vide Format1.0/ CAC/ UAN No. 0000022317/CR-2006001038 dtd. 24.06.2020 valid till 31/03/2022 (copy enclosed). Further CTO renewal for operation of Railway siding and CHP has been granted for validity till 31/03/2024.(copy enclosed)
B	GENERAL CONDITIONS.	
(i)	No change in mining technology and scope of working should be made without prior approval of the Ministry of Environment and forests.	Not applicable (Coal reserve exhausted).
(ii)	No change in the calendar plan including excavation, quantum of mineral coal and waste should be made.	Not applicable (Coal reserve exhausted).

(iii)	<p>Four ambient air quantity monitoring stations should be established in the core zone as well as in the buffer zone for RPM, SPM, SO₂, NO monitoring. Location of the stations should be decided based on the meteorological data, topographical features and environmentally and ecologically sensitive targets in consultation with the State Pollution Control Board.</p>	<p>In the present network, there are four stations established for monitoring of Air quality :</p> <p>A) Air Quantity Monitoring Stations.</p> <ol style="list-style-type: none"> 1. ACC patch / Manager Office-CoreZone. 2. Ram Nagar Colony – Buffer Zone 3. Sub Area Manager, GSA Office 4. Ghugus village. <p>B) Fugitive Emission Monitoring Station.</p> <ol style="list-style-type: none"> i. CHP ii. Railway Siding. <p>The above locations have been fixed considering the meteorological data, topographical features and activity area.</p>																								
(iv)	<p>Data on ambient air quality (RPM, SPM, SO₂, NO) should be regularly submitted to the Ministry including its Regional office at Bhopal and the State Pollution Control Board and the Central Pollution Control Board once in six months.</p>	<p>Data on ambient air quantity SPM, RPM, SO₂ and NO_x are sent regularly to Email Id of Maharashtra Pollution Control Board and Regional office of MoEF&CC from email id waniarea.environddept@gmail.com.</p>																								
(v)	<p>Fugitive dust emissions from all the sources should be controlled regularly monitored and data recorded properly. Water spraying arrangement on haul roads, wagon loading, dump trucks (loading & unloading) points should be provided and properly maintained.</p>	<p>Fugitive dust emission from OB dumps has been controlled significantly by developing thick green belt/vegetation cover over OB dumps. Similarly dust emission from other sources is being controlled by regular water spraying through fixed type rain guns and mobile water tankers.</p> <table border="1"> <thead> <tr> <th>Sr. No.</th><th>Location</th><th>Nos.</th></tr> </thead> <tbody> <tr> <td>1.</td><td>Old Railway Siding</td><td>14 No. Raingun</td></tr> <tr> <td>2.</td><td>Coal Transportation road</td><td>22 sprinklers</td></tr> <tr> <td>3.</td><td>Near Coal Handling plant</td><td>8 Sprinklers</td></tr> <tr> <td>4.</td><td>Inside Coal Handling plant</td><td>173 old sprinkling nozzles. 180 Nos. new mist spray nozzles (60 at each CHP)</td></tr> <tr> <td>5.</td><td>Hired mobile tanker</td><td>3 Nos.</td></tr> <tr> <td>6.</td><td>Departmental mobile tanker</td><td>2 Nos.</td></tr> <tr> <td>7.</td><td>Truck mounted mist spray system</td><td>1 No</td></tr> </tbody> </table>	Sr. No.	Location	Nos.	1.	Old Railway Siding	14 No. Raingun	2.	Coal Transportation road	22 sprinklers	3.	Near Coal Handling plant	8 Sprinklers	4.	Inside Coal Handling plant	173 old sprinkling nozzles. 180 Nos. new mist spray nozzles (60 at each CHP)	5.	Hired mobile tanker	3 Nos.	6.	Departmental mobile tanker	2 Nos.	7.	Truck mounted mist spray system	1 No
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(vi)	Adequate measures should be taken for control of noise levels below 85 –DB in the work environment. Workers engaged in blasting and drilling operations, operations of HEMM, etc. should be provided with ear plugs/muffs.	Not applicable as mining activities are not going on due to exhaustion of coal.
(vii)	Industrial wastewater (workshop and wastewater from the mine) should be properly collected, treated so as to conform to the standards prescribed under GSR 422 (E) dated 19th May 1993 and 31st December 1993 or as amended from time to time. Oil and grease trap should be installed before discharge of workshop effluents.	Not applicable as mining activities are not going on due to exhaustion of coal and thus no generation of waste water from workshop and mine.
(viii)	Vehicular emissions should be kept under control and regularly monitored. Vehicles used for transporting the mineral should be covered with tarpaulins and optimally loaded.	Vehicular emission is kept under control by routine maintenance of vehicles used in operation. The company vehicles namely Jeeps, School buses, Ambulances etc. are having valid PUC certificate from RTO authorized agencies. At present coal movement to CHP and siding is due to Ghugus OC mine due to exhaustion of coal. But vehicular emissions from other tippers coming to siding and CHP from other mines of Wani Area are kept under control by routine maintenance.
(ix)	Environmental laboratory should be established with adequate number and type of pollution monitoring and analysis equipment in consultation with the State Pollution Control Board.	A full fledged environmental laboratory is already exists at CMPDIL, Nagpur with qualified Engineers along with adequate number of field Staff for carrying out all the environmental monitoring of all WCL Projects including this project.
(x)	Personnel working in dusty areas should wear protective respiratory devises and they should also be provided with adequate training and information on safety and health aspects. Occupational health surveillance programme of the workers should be undertaken periodically to observe any contractions due to exposure to dust and take corrective measures, if needed.	Protective health and safety wears are provided to workmen exposed to dust namely dust mask, Helmets, safety boots, Goggles, Hand gloves etc as per DGMS specification. The workers are regularly given training on safety and health aspect (statutory requirement under Mines Act.). Periodical Medical Examination is carried out for each employee once in 5 years to monitor their health, so that appropriate action can be taken.

(xi)	A separate environmental management cell with suitable qualified personnel should be set up under the control of a Senior Executive, who will report directly to the Head of the Company.	To deal with environmental issues and for ensuring compliance with environmental clearance conditions at project level Environmental management cell is headed by Sub Area Manager and is assisted by Project Nodal officer (Env). At area level, Area General Manager, Heads the environment cell and is assisted by General Manager (Op) and Nodal officer (Env). At corporate level at HQ, there is full-fledged Environment Department which is headed by General Manager (Env) with a multi-disciplinary team of qualified and experienced engineers. The head of Corporate Environment department reports directly the Director (Tech), who is nominated owner of the company.
(xii)	The funds earmarked for environmental protection measures should be kept in separate account and should not be diverted for other purpose. Your wise expenditure should be reported to the Ministry and its Regional Office located at Bhopal.	Funds earmarked for environmental protection measures are kept in separate account and it is not used for any other purpose.
(xiii)	The Regional Officer of this ministry located at Bhopal shall monitor compliance of the stipulated conditions. The project authorities should ended full cooperation to the office(s) of the Regional Officer furnishing the requisite data/information/monitoring reports.	Noted.
(xiv)	A copy of the clearance letter will be marked to concerned Panchayat/local NGO, if any, from whom and suggested/representation has been received while processing the proposal.	A copy of the environmental clearance letter has already been marked to concerned Sarpanch of the village Panchayat vide out letter No.WCL/WA/SAM/GSA/Civil/05-06/785.
(xv)	State Pollution Control Board should display a copy of the clearance letter at the Regional office, District Industry Centre and Collector's office/Tehsilar's office for 30 days.	Not applicable.

(xvi)	The project authorities should advertise at least in two local newspapers widely circulated around the project one of which shall be in the vernacular language of the locality concerned within seven days of issue of the clearance letter informing that the project has been accorded environmental clearance and a copy of the clearance letter is available with the State Pollution Control Board and may also be seen at web site of the Ministry of Environment and Forest at Http://environ.nic.in .	The advertisement has been published in the new paper (English – Lokmat Times, Hindi – Lokmat Samachar and Marathi – Lokmat).
3	The Ministry or any other competent authority may alter/modify the above conditions or stipulate any further condition in the interest of environment protection.	Noted
4	Failure to comply with any of the conditions mentioned above may result withdrawal of this clearance and attract action under the provisions of Environment (protection) Act-1986.	Noted
5	The above conditions will be enforced inter-alia, under the provisions of the Water (Prevention& control of Pollution) Act.1974, the Air (Prevention and Control of Pollution) Act 1981, the Environmental (Protection) Act 1986 and the Public Liability Insurance Act 1991 along with their amendments and rules.	Noted


 31/5/23
 Sub Area Manager
 Ghugus Sub Area

