

Ref: GCEL/Talabira-1/04-2019/ 469

Dated: 05.04.2019

15/05/19

To,
The Addl. PCCF (Central)
Ministry of Environment, Forest & Climate Change
Bhubaneswar – 751012, Odisha.

Subject: Half yearly EC compliance status of Talabira-1, coal mine of M/s GMR Chhattisgarh Energy Ltd.

Dear Sir,

We are submitting the half yearly EC compliance for the duration October'2018 – March'2019 for your kind perusal. All required compliances are being maintained at site.

Requesting you to consider please.

Thanking you,

Yours truly,



(Rajesh Tiwari)

MINE AGENT
TALABIRA COAL MINE

GMR Talabira-1 Coal Mine
GMR Chhattisgarh Energy Limited
Phone: 0-9599700896.



M. Tanaji
Private Secretary
Govt. of India
Ministry of Env., Forests & CC
ERO, Bhubaneswar-751023

CC:

1. Regional Officer, Sambalpur – For your kind information please.
2. DFO, Sambalpur – For your kind information please.

GMR Chhattisgarh Energy Limited (GCEL)
Talabira -1 Coal Mine Project

Status of Half Yearly Compliance w.r.t Environmental Clearance
No. J-11015/58/2009-IA.II (M) dated 16th April 2015

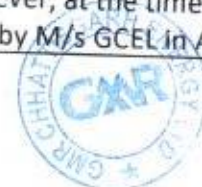
For the period October 2018 - March 2019

A. Specific conditions:

Sl. No.	Conditions	Compliance status
(i)	Production of coal shall not exceed 3.0 MTPA. The project proponent shall obtain prior EC for expansion in production beyond 3.0 MTPA.	Talabira-1 is allotted to GMR from 1/4/2015 by Ministry of Coal, Govt. of India. Half yearly coal production from October 2018 to March 2019 is Nil as the mining operations are temporarily suspended. Thus, Complied.
(ii)	No coal washery shall be established without prior EC from this MOEF.	No washery has been established at Mine site till date. Thus, Complied.
(iii)	No fly ash shall be dumped into the de-coaled voids without prior approval of the MOEF.	No fly ash is dumped into the de-coaled voids till date. No fly ash will be dumped without prior approval from MoEF & CC. Thus, Complied.
(iv)	The embankment shall be stabilised with stone pitching on the reservoir side and compacted and plantation using a mix of native species shall be developed. Additional safety and protection measures including continued operation of high capacity pumps shall be in operation to prevent mine inundation. Prior approval of disaster management plan shall be obtained.	As per initial EC dated 08/11/2011 originally issued to M/s Hindalco Industries Ltd, embankment related activities have already been executed by the prior Mine Allottee (M/s Hindalco) under the guidance of DoWR, Odisha. The embankment is of 1.92 KM length and 1.5 m height and 10 m wide at the top and 3 m above the HFL of Hirakud Reservoir. The embankment has been stabilised with side-sloping on either side and has also been stone pitched. Thus, Complied.
(v)	Top soil, if generated, should be properly stacked with proper slope at earmarked dump site (S) with adequate measures and shall be used for reclamation and development of green belt and for reclamation of back filled quarry should be used for reclamation and rehabilitation of mined out areas within a year of generation.	After taking over by GMR, Topsoil of 8000 Cu M had been spread over the external dump slope to facilitate Bio-reclamation and 12000 Cu M has been conserved in external Top soil dump and 8925 Cu M has been preserved in



		internal top soil dump upto 31 st March 2018. No generation of top soil for the period from October'2018 to March'2019.
(vi)	The entire OB generated in the expansion project shall be back filled and reclaimed and stabilized with plantation using a mix of species found in the reserve forests in the buffer zone. Monitoring and management of the existing reclaimed dump site shall continue until the vegetation becomes self-sustaining and no dumping of OB on reclaimed dumps shall be permitted. Compliance status shall be submitted to the Ministry of Environment & Forests and its Regional Office located at Bhubaneswar on yearly basis.	External dump 1, 2 and 3 were used by M/s Hindalco, the prior Mine Allottee before taking over by M/s GCEL in the month of April, 2015. A Scheme has been approved by RCCF, Sambalpur in this regard and the Project has been adhering to the same for stability of overburden. Mine is temporarily suspended, so no OB was excavated. Thus, Complied.
(vii)	Catch drains and siltation ponds of appropriate size shall be constructed to arrest silt and sediment flows from soil, OB and mineral dumps. The water so collected shall be utilized for watering the mine area, roads, green belt development etc. The drains shall be regularly de - silted and maintained properly. Garland drains (Size, Gradient & Length) and sump capacity shall be designed keeping 50% safety margin over & above the peak sudden rain fall and maximum discharge in the area adjoining the mine site. Sump capacity also provide adequate retention period to allow proper settling of silt material.	Catch drains of average width 2.5 m and length 2.9 Km had been constructed and maintained along the toe of OB dumps. Water is collected in mine sump which is being utilized for water spraying in mine area, roads, green belt development etc. Garland drains & sump capacity are designed by taking factor of safety 2.0 to deal with the sudden rain fall. There are no adjoining mines. Thus, Complied.
(viii)	Dimension of the retaining wall at the toe of the dumps and OB benches within the mine to check the run-off and siltation shall be based on the rain fall data.	Maintenance & periodic repair of retaining wall has been undertaken at Mines. Thus, Complied.
(ix)	Mist type water sprinkling system shall be provided to check fugitive emissions from conveyor system, haulage roads, transfer points etc. Water sprinkling (Fixed & Mist type, mobile) shall be regularly carried out along the main haul roads.	Mine is temporarily suspended, so no requirement of water sprinkling in haul road e.t.c Thus, Complied.
(x)	No blasting shall be carried out.	No drilling & blasting practice is adopted in mine operation. Thus, Complied.
(xi)	A feasibility plan for transportation of coal to the railway siding by closed overhead conveyors shall be prepared and furnished to the MOEF within 6 months.	The feasibility plan should have been submitted by prior Allottee (M/s Hindalco). However, at the time of taking over by M/s GCEL in April 2015,



		<p>this was not made available to us by M/s Hindalco. As the remaining life of this coal mine is less than 3 years and balance reserve as on 1st April' 19 is 6.487 Million Tonne. Hence it is not feasible to develop conveyor system till railway siding for this project at the fag end of mine life</p> <p>Thus, Complied.</p>
(xii)	<p>Area brought under afforestation shall not be less than 137.905 Ha which includes reclaimed external OB dump area (45 Ha), backfilled area (60 Ha), along ML boundary, green belt (28.905 Ha) and top soil dump area (6.0 Ha) by using a mix of species found in the natural forests in the buffer zone in consultation with the local DFO / Agricultural department. The density of the trees shall be around 2500 plants per Ha.</p>	<p>12040 No's of saplings were planted by GCEL and 8185 saplings were distributed during this FY 2017- 2018 (April 2017 - March 2018). Total 33.89 Ha within mining lease area is covered with plantation.</p> <p>Thus, Complied.</p>
(xiii)	<p>A progressive mine closure plan shall be implemented and OB generated during the balance life of the mine shall be concurrently back filled and the area reclaimed with a mix of native species and at the end of mine life the balance area 24.4 Ha of de-coaled void shall also be reclaimed with the OB and the entire worked out area shall be back filled up to ground level. There shall be no water bod created at the post - mining stage.</p>	<p>Revised mine closure plan was submitted to the Coal Ministry and waiting for approval. Conditions in the approved mine closure plan will be implemented after receiving the revised approved mine closure plan.</p> <p>Thus, Complied.</p>
(xiv)	<p>A conservation plan comprising for in-situ and ex-situ conservation of schedule I and II, Fauna found within the core & buffer zone shall be implemented in consultation with the State Govt. for the balance life of the project and include a plan for habitat restoration at the post mining stage and which also includes a plan for development of 150 Ha of grass lands for the elephants visiting the area. The activities there under along with status of implementation (including expenditure) shall be regularly reported as part of the compliance reports furnished to MOEF RO, Bhubaneswar and also uploaded on the company website.</p>	<p>Top soil is being preserved in a separate dump for reclamation. Seed germination along the slope of overburden dump has been developed. The detailed conservation plan was submitted to MOEF, RO and also uploaded on our website. Web-link: http://www.gmrgroup.in/energy-gmr-domestic-coal-blocks.aspx</p> <p>Thus, Complied.</p>
(xv)	<p>Regular monitoring of ground water level on the quality shall be carried out by establishing a network of existing wells and construction of new piezometers. The monitoring for quantity shall be done four times in a year pre-monsoon (May), monsoon (August), Post- Monsoon (November) and winter (January) seasons and for quality in May.</p>	<p>A NABL accredited testing agency has been appointed for <i>monthly monitoring</i> the ground water. It is being collected from the existing wells at the nearby villages and analysed by NABL certified</p>



	Monitoring of heavy metals including mercury shall be carried out and data furnished as part of the compliance report. Data, thus collected shall be submitted to the Ministry of Environment & Forests and to the central Pollution Control board quarterly and regularly uploaded on the company website.	agency (External). Analysis report of ground water is being submitted every month to the office. Thus Complied.
(xvi)	The extent of use of water in the mining operations shall be reduced by recycling and reuse. The company shall put up artificial ground water recharge measures for augmentation of water resource if the water table shows a declining trend. The project authorities shall meet water requirement of nearby village(s) in case the village wells go dry due to dewatering of mine. Mine water to be discharged into the Hirakud reservoir shall be treated to prescribed standards before discharge.	No water from mine is being discharged to Reservoir. Water is contained in the pits within ML, which facilitates recharging the ground water. Water table seems not showing any declining trend. However, we'll consider your suggestion and explore the possibility of using an abandoned bore well within ML area for recharging of ground water. Thus, Complied.
(xvii)	Besides carrying out regular periodic health check-up of their workers, 10% of the workers identified from workforce engaged in active mining operations shall be subjected to health check-up for occupational diseases and hearing impairment, if any through any local/regional health institutions and the results reported to the this ministry and to DGMS.	As per Rule 29(b) of Mines Rules 1955, every employee should undergo for periodical medical examination (PME) once in 5 years, and 1/5 of total manpower shall undergo the Periodical Medical Examination, each year. After taking over the mine by GCEL, PME of 140 no of employees were completed. Thus, Complied.
(xviii)	For monitoring land use pattern and for post mining land use, time series of land use maps, based on satellite imagery (on a scale of 1:5000) of the core zone and buffer zone, from the start of the project, until the end of the mine life shall be prepared once in three years (for any one particular season which is consistent in the time series), and the report submitted to MOEF and its regional office at Bhubaneswar.	As per earlier EC dated 8th November 2011, this should have been submitted to your regional office by the prior Mine Allottee (M/s Hindalco). No such records have been made available to us, while handing over the Mine in April 2015. EC was transferred to GCEL by MoEF & CC vide its letter on 16th April 2015 in lieu of Mine allocation to GCEL w.e.f. 01/04/2015 vide vesting Order dated 23.03.2015. Requested ORSAC, Bhubaneswar for preparation of satellite imagery of Talabira-1 vide letter no: GMR/ Talabira-1/10-2016/115 dated: 19.10.2016. However, satellite imagery (on a scale of 1:5000) of core zone and buffer zone will be completed and



		report will be submitted to MOEF & CC, Bhubaneswar. Thus, Complied.
(xix)	A detailed Final Mine Closure Plan along with details of corpus fund submitted to the Ministry of Environment & Forest which shall be implemented from 2017-18. The time period for reclamation shall be completed within a year of completion of project. The plan for habitat restoration plan for a minimum period of five years (under the MMDR Act) shall be under taken after completion of reclamation in consultation with and a joint inspection carried with the state forest department.	Revised mine plan and mine closure plan were submitted to Ministry of coal for approval. All the provisions of mine closure plan will be implemented after approval. Thus, Complied.
(xx)	CSR would be implemented in 8 villages – Talabira, Nua Khinda, Purana Khinda, Lapanga, Bhudiapalli, Matul Camp, Behara Munda and Mundapara. Budgetary provisions at @ Rs. 10 per tonne of Coal should be made for CSR activities. The socio-economic development of the villages shall be monitored over the life of the project using UNDP. Human development indices and reported as part of the report submitted to MOEF RO, Bhubaneswar.	Expenditure made for CSR activities is Rs 9,33,915.00 from October 2018 to March' 2019. Mine operations are Temporarily suspended from April 2018. Thus, Complied.
B.	General Conditions	
(i)	No change in mining technology and scope of working shall be made without prior approval of the Ministry of Environment and Forest.	There is no change in mining technology in mines. Thus, Complied.
(ii)	No change in the calendar plan including excavation, quantum of mineral coal and waste shall be made.	Adhered to the mine plan. Thus, Complied.
(iii)	Four ambient air quality monitoring stations shall be established in the core zone as well as in the buffer zone for monitoring PM10, PM 2.5, SO2, NOx and heavy metals such as Hg, Pb, Cr, As etc. Location of the stations shall be decided based on Meteorological data, topographical features and environmentally and ecologically sensitive targets in consultation with the state pollution control board.	5 numbers Ambient air quality monitoring stations are established and is air quality being monitored by external agency (Approved by MoEFC) engaged for this purpose. Thus, Complied.
(iv)	Data on ambient air quality (PM10, PM 2.5, SO2, NOx and heavy metals such as Hg, Pb, Cr, As etc.) shall be regularly submitted to the ministry including its regional office at Bhubaneswar and to the State Pollution Control Board and Central pollution Control Board once in Six Months.	Ambient air quality is being monitored every month by external agency (Approved by MoEFC) engaged for this purpose and reports are being submitted to the concerned authorities. Thus, Complied.
(v)	Fugitive dust emissions quality (PM10, PM 2.5 and heavy metals such as Hg, Pb, Cr, As etc.) from all the sources shall be controlled regularly monitored and data recorded properly. Water spraying arrangement on haul road, wagon loading and dump trucks (Loading & un loading) points shall be provided and properly maintained.	Fugitive dust emissions quality is being monitored and recorded. Thus, Complied.



(vi)	Adequate measures shall be taken for control of noise levels below 85 dBA in the work environment. Workers engaged in blasting and drilling operations, operation of HEMM, etc. shall be provided with ear plugs/muffs.	Noise within ML is well below the stipulated norms. Ear plugs/muffs are also issued to HEMM operators. No drilling & blasting is practiced in mine. Thus, Complied.
(vii)	Industrial waste water (workshop and wastewater from the mine) shall be properly collected, treated so as to conform to the standards prescribed under GSR 422 (E) dated 19 th May 1993 and 31 st December 1993 or as amended from time to time before discharge. Oil and grease trap shall be installed before discharge of workshop effluents.	Grease and Oil Trap has been provided in the workshop to treat the waste water. The treated water is being stored and reused for water spraying and cleaning of vehicles in the wash bay. Thus, Complied.
(viii)	Vehicular emissions shall be kept under control and regularly monitored.	Regular maintenance of vehicles is being done to control the vehicular emissions. Thus, Complied.
(ix)	Environmental laboratory shall be established with adequate number and type of pollution monitoring and analysis equipment in consultation with the State Pollution Control Board.	Pollution monitoring and analysis is being done regularly by external agency (approved by MoEF) engaged for this purpose. Thus, Complied.
(x)	Personnel working in dusty areas shall wear protective respiratory devices and they shall also be provided with adequate training and information on safety and health aspects. Occupational health surveillance programme of worker shall be undertaken periodically to observe any contractions due to exposure to dust and to take corrective measures, if needed. A separate environmental management cell with suitable qualified personnel shall be set up under the control of senior executive, who will report directly to the Head of the company.	Dust masks are issued to all employees working in dusty environment. Initial & refresher training is imparted to contractual employees as per Mines Vocational Rules 1966, Environmental management cell has been set up & qualified person has been appointed. Thus, Complied.
(xi)	The funds earmarked for environmental protection measures shall be kept in separate account and shall not be diverted to other purpose. Year-wise expenditure shall be reported to this Ministry and its Regional Office at Bhubaneswar.	The expenditure incurred towards Environment protection measures during FY 2018-19 is Rs. 20 Lacs. Thus, Complied.
(xii)	A copy of the environmental clearance shall be marked to concerned Panchayat / local NGO, if any, from whom any suggestion/representation has been received while processing the proposal.	Copy of the Environmental Clearance (EC) and Public Notice Advertisements in Newspapers related to EC have been displayed in Panchayat Office, Khinda and Sambalpur. Thus, Complied.
(xiii)	Sate Pollution Control Board shall display a copy of clearance letter at the Regional Office, District Industry Centre and Collectors Office/ Tehsil Office for 30 days.	-----



(xiv)	The project authorities shall advertise at least in two local newspapers widely circulated around the projects, one of which shall be in the vernacular language of the locality concerned within seven days of the clearance letter informing that the project has been accorded environmental clearance and a copy of clearance letter is available with State Pollution Control Board and may also be seen at the website of the Ministry of Environment & Forrest at http://envfor.nic.in . The compliance status including data on monitoring of environmental quality (air, water and noise) shall also be uploaded by the project authorities in their website and also at their main gate of project premises and office so as to bring the same in the public domain.	Advertisements have been published in two local newspapers of Odisha state namely Dainik Jagaran and Samay . Data on monitoring of environmental quality (air, water & noise) and status of compliance have been uploaded in the company's website. Web-link : http://www.gmrgroup.in/energy-gmr-domestic-coal-blocks.aspx
(3)	The Ministry or any other competent authority may stipulate any further condition for environmental protection.	Thus, Complied. ----
(4)	Failure to comply with any of the conditions mentioned above may result in withdrawal of this clearance and attract the provisions of the Environment (Protection) Act, 1986.	-----
(5)	The above conditions will 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 and the Public Liability Insurance Act, 1991 along with their amendments and Rules. The proponent shall ensure to undertake and provide for costs incurred for taking up remedial measures in case of soil contamination, contamination of groundwater and surface water and occupation and other diseases due to the mining operations.	----



Production data submitted to MOEFC

Sl. No	Period	Production (tonnes)
1	For the financial year 2015-16	5,60,335.00
2	April-2016 to September-2016	1,50,615.00
3	October-2016 to March-2017	Nil
4	April-2017 to September-2017	1,77,640.00
5	October-2017 to March-2018	92,360.00
6	April-2018 to September-2018	Nil
Total production since commencement of mine		9,80,950.00

