

Letter No: OCPL/330

Date: 16-05-2017

To

The Joint Director(s)

Regional Office, Eastern Region

Ministry of Environment, Forest and Climate Change

A-3, Chandrasekharpur, Bhubaneswar-751023

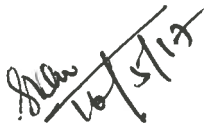
Sub: Submission of Half Yearly Compliance Report of the Environmental Clearance conditions of Manoharpur Open Cast Coal Mine Project (8.00 MTPA) of Odisha Coal & Power Limited located in IB valley, Dist. Sundargarh, Odisha.

Sir,

Please find enclosed, herewith the Half Yearly Compliance Report for Environmental Condition stipulated in the Environment Clearance vide Letter No. J-11015/139/2008-IA.II(M)Pt. file, dated 30th December, 2015 in respect of Manoharpur Open Cast Coal Mine Project (8.00 MTPA) of Odisha Coal & Power Limited located in IB valley, Dist. Sundargarh, for the period October'2016 - March'2017.

This is for kind information and needful action at your end.

Yours Faithfully



Dy. General Manager (Mechanical)

Copy to: 1. The Scientist (E & In-charge), Central Pollution Control Board, Southern Conclave, Block 502, 5th & 6th Floors, 1582 Rajdanga Main Road, Kolkata - 700107.

2. The Member Secretary, State Pollution Control Board, Odisha, Paribesh Bhawan, A/118, Nilakantha Nagar, Unit – VIII, Bhubaneswar – 751012.

HALF YEARLY COMPLIANCE REPORT

For

Environmental Conditions

October 2016 - March 2017

MANOHARPUR OPENCAST COAL MINE PROJECT



Odisha Coal & Power Limited,
Zone-A, Ground Floor,
Fortune Tower, Bhubaneswar-751023, Odisha
Web: www.ocpl.org.in

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ENVIRONMENTAL CLEARANCE (EC) COMPLIANCE REPORT

MANOHARPUR OPENCAST COAL MINE PROJECT

EC-No. J-11015/139/2008-IA.II (M) Pt. file Dated 30th December 2015

A. SPECIFIC CONDITIONS

- i. **Condition:** The maximum production from the mine at any given time shall not exceed the limit as prescribed in the EC.

Compliance: Maximum production 8.00 MTPA shall not exceed as prescribed in EC.

- ii. **Condition:** Environmental clearance to the proposal is subject to obtaining clearance under the Wildlife (Protection) Act, 1972 from the Standing Committee of National Board for Wildlife, as applicable.

Compliance: As per the Guidelines issued by MoEF vide letter no. 5-3/2007-FC dated 19.08.2010, projects requiring Environment Clearance under EIA notification, 2006 falling within 10km of National Park/Sanctuary will have to be placed before the Standing Committee of National Board for Wildlife. Manoharpur coal mine project does not fall within 10km of National park/sanctuary and as such clearance from National Board of Wildlife is not applicable to Manoharpur coal mine. However, the Site Specific Wildlife Conservation Plan of this project has been approved by CWLW, Odisha.

- iii. **Condition:** The OB should be kept in ML area and there should be no OB dumps at the end of mining.

Compliance: As per the approved Mine Plan & Mine Closure Plan total 3nos. dumps will be in the non-coal bearing area acquired by OCPL. Major portion of the overburden (86%) will be utilized in back filling. It is planned not to have any OB dumps at the end of mining.

- iv. **Condition:** The land for OB dumping should be made ready for original use after mine closure.

Compliance: It is planned to keep OB dumping ready for original use after mine closure.

- v. **Condition:** All the sandstone taken out during mining should be utilized for house construction and given free of cost to locals.

Compliance: Efforts will be made to comply the requirement when mine operation starts.

- vi. **Condition:** Since the mining area is total forest land, the sandstones should not be dumped as OB.

Compliance: Efforts will be made to not dump sand stone in forest area.

- vii. **Condition:** Fly ash dumping is not permitted` in mine void.

Compliance: Fly ash will not be dumped till studies done and permissions obtained.

- viii. **Condition:** The leachability study may be carried out for chromium, arsenic and mercury that may be present in fly ash.

Compliance: Study will be undertaken after the generation of fly ash from the end use plant.

- ix. **Condition:** The CSR amount should be Rs.4 crores in initial 3 years, and thereafter it should be Rs 5/T of coal/annum till the end of the life of project with the escalation factor every year coal production.

Compliance: This is being complied. CSR activities already carried out in the vicinity of the project area.

- x. **Condition:** The CSR activity, which had already been carried out by proponent, be audited by a 3rd Party. The audit should be carried out by a reputed agency.

Compliance: CSR activities which have already been carried out will be audited by 3rd party / reputed agency.

- xi. **Condition:** The proponent shall come back to the Committee for its washery proposal for further consideration.

Compliance: Washery proposal if any, will be submitted for further consideration.

- xii. **Condition:** Coal transportation from mine to railway siding by conveyor belt and from siding to TPP by MGR through SILO loading of the wagons.

Compliance: Coal transportation from mine to railway siding will be done by conveyor belt and from siding to TPP by MGR through SILO loading of the wagons.

- xiii. **Condition:** The embankment constructed along the river boundary shall be of suitable dimensions and critical patches shall be strengthened by stone pitching on the river front side and stabilized with plantation so as to withstand the peak water flow and prevent mine inundation.

Compliance: Will be complied.

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xiv. Condition: There shall be no overflow of OB into the river and into the agricultural fields and massive plantation of native species shall be taken up in the area between the river and the project.

Compliance: Will be complied as mine becomes operational.

xv. Condition: OB shall be stacked at two earmarked external OB dumpsite(s) only. The ultimate slope of the dump shall not exceed 28°. Monitoring & management of existing reclaimed dumpsites shall continue until the vegetation becomes self-sustaining. Compliance status shall be submitted to the Ministry of Environment & Forests and its Regional office located at Bhopal on yearly basis.

Compliance: Will be complied as mine becomes operational.

xvi. Condition: 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 and length) and sump capacity shall be designed keeping 50% safety margin over and above the peak sudden rainfall and maximum discharge in the area adjoining the mine site. Sump capacity shall also provide adequate retention period to allow proper settling of silt material.

Compliance: Will be complied as mine becomes operational.

xvii. Condition: Dimension of the retaining wall at the toe of the dumps and OB benches within the mine to check run-off and siltation shall be based on the rainfall data.

Compliance: Will be complied as mine becomes operational.

xviii. Condition : Crushers at the CHP of adequate capacity for the expansion project shall be operated with high efficiency bag filters, water sprinkling system shall be provided to check fugitive emissions from crushing operations, conveyor system, haulage roads, transfer points, etc..

Compliance: Will be complied.

xix. Condition: Drills shall be wet operated.

Compliance: Will be complied.

xx. Condition: The project authorities shall undertake regular repairing and tarring of roads used for mineral transportation. A 3-tier green belt comprising of a mix of native species shall be developed all along the major approach roads.

Compliance: Will be complied.

- xxi. **Condition:** Controlled blasting shall be practiced with use of delay detonators and only during daytime. The mitigative measures for control of ground vibrations and to arrest the fly rocks and boulders shall be implemented.

Compliance: Will be properly taken care during the said operation.

- xxii. **Condition:** A progressive afforestation plan shall be implemented covering an area of 512.584 ha at the end of mining, which includes reclaimed external OB dump (193.478 ha), internal dump (257.11 ha), and green belt (61.996 ha) and in township located outside the lease by planting native species in consultation with the local DFO/Agriculture Department. The density of the trees shall be around 2500 plants per ha. Massive plantation shall be carried out in open spaces in and around the mine and a 3-tier avenue plantation along the main approach roads to the mine.

Compliance: Areas will be afforested including reclaimed areas etc. and native species of plantation will be decided in consultation with DFO/Agriculture department.

- xxiii. **Condition:** An estimated 61.73 M Cum of OB will be generated during the entire life of the mine. Out of which 29.23 Mm³ of OB will be dumped in four external OB dump in non-coal bearing area. The maximum height of external OB dump for hard OB will not exceed 30 m each. The maximum slope of the dump shall not exceed 28°. Monitoring and management of reclaimed dump sites shall continue till the vegetation becomes self-sustaining and compliance status shall be submitted to MOEF and its Regional Office on yearly basis.

Compliance: Maximum height of dump will be maintained as per the approved Mine Plan & Mine Closure Plan. Compliance & Status report will be submitted to MoEF &CC and its Regional office on yearly basis.

- xxiv. **Condition:** Of the total quarry area of ha, the backfilled quarry area of 489 ha shall be reclaimed with plantation and a void of 162 ha which is proposed to be converted into a water body shall be gently sloped and the upper benches shall be terraced and stabilized with plantation/afforestation by planting native plant species in consultation with the local DFO/Agriculture Department. The density of the trees shall be around 2500 plants per ha

Compliance: Back filled area 489 ha will be reclaimed with plantation. Density of trees will be 2500/ha. Water body (reservoir) will be gently sloped. Plantation with native species will be done with consultation of DFO/Agriculture department.

- xxv. **Condition:** The proponent should prepare restoration and reclamation plan for the degraded area. The land be used in a productive and sustainable manner.

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Compliance: Will be complied as specified.
xxvi. Condition: Compensatory Ecological & Restoration of waste land, other degraded land and OB dumps in lieu of breaking open the land be carried out.

Compliance: Will be complied as specified.

xxvii. Condition: The mining should be phased out in sustainable manner. No extra over burden dumps are permitted.

Compliance: Will be complied as specified.

xxviii. Condition: No Ground water shall be used for mining operations.

Compliance: Ground water can only be used after obtaining permissions from the competent Government Authority.

xxix. Condition: Regular monitoring of groundwater level and 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 a year in pre-monsoon (May), monsoon (August), post-monsoon (November) and winter (January) seasons and for quality in May. Data thus collected shall be submitted to the Ministry of Environment & Forests and to the Central Pollution Control Board quarterly within one month of monitoring.

Compliance: Will be complied as specified.

xxx. Condition: The Company shall put up artificial groundwater recharge measures for augmentation of groundwater resource in case monitoring indicates a decline in water table. The project authorities shall meet water requirement of nearby village(s) in case the village wells go dry due to dewatering of mine.

Compliance: Will be complied as specified.

xxxi. Condition: Sewage treatment plant shall be installed in the existing colony. ETP shall also be provided for workshop and CHP wastewater.

Compliance: Will be complied as specified.

xxxii. Condition: Besides carried out regular periodic health checkup of their workers, 10% of the workers identified from workforce engaged in active mining operations shall be subjected to health checkup for occupational diseases and hearing impairment, if any, through an specialized agency/institution within the District/State and the results reported to this Ministry and to DGMS.

Compliance: Will be complied as specified.



xxxiii. Condition: There are 370 PDFs and 385 PAFs. Land oustees shall be compensated as per the norms laid out R&R Policy of CIL or the National R&R Policy or R&R Policy of the State Government whichever is higher

Compliance: Complied. R&R Policy of the Odisha State Government is being followed.

xxxiv. Condition : For monitoring land use pattern and for post mining land use, a time series of land use maps, based on satellite imagery (on scale of 1:5000) of the core zone and buffer zone, from the start of the project until end of mine life shall be prepared once in 3 years (for any one particular season which is consistent in the time series), and the report submitted to MOEF and its concerned Regional Office

Compliance: Land use maps based on satellite imagery will be prepared once in three years and submitted to MoEF &CC and its concerned Regional Office.

xxxv. Condition: A detail final Mine Closure Plan along with details of Corpus Fund shall be submitted to the Ministry of Environment & Forests within 6 months of grant of Environmental Clearance.

Compliance: Mine Plan and Mine Closure Plan has been submitted.

xxxvi. Condition: The project authorities shall in consultation with the Panchayats of the local villages and administration identify socio-economic and welfare measures under CSR to be carried out over the balance life of the mine.

Compliance: CSR activities will be carried out in consultation with concerned Panchayat / local administration.

xxxvii. Condition: The proponent should implement the assurances given during the Public Hearing.

Compliance: Assurance given during the Public Hearing will be implemented.

xxxviii. Condition : Corporate Environment Responsibility:

a) The Company shall have a well laid down Environment Policy approved by the Board of Directors.

Compliance: OCPL being a new company, preparation and approval of Environment Policy for Board of Directors is under process.

b) The Environment Policy shall prescribe for standard operating process/procedures to bring into focus any infringements/deviation/violation of the environmental or forest norms/conditions.

Compliance: It will be complied.

- c) The hierarchical system or Administrative Order of the company to deal with environmental issues and for ensuring compliance with the environmental clearance conditions shall be furnished.

Compliance: There will be environment management cell that will look after all compliances clearances and monitoring. The cell will be headed by C.E.O (OCPL). Environmental engineers will implement the clearance conditions report to C.E.O (OCPL).

- d) To have proper checks and balances, the company shall have a well laid down system of reporting of non-compliances/violations of environmental norms to the Board of Directors of the company and/or shareholders or stakeholders at large.

Compliance: Organizational Structure for Environmental Management & System of Reporting of Non-compliance:

The Environmental Management Cell (EMC) has important role for coordination of the actions required for environmental management, mitigation, and for monitoring the progress of the proposed management plans and actions to be taken. The cell will be under the overall supervision of the Environment Engineer and responsible for monitoring of the implementation of the environment issues.

B: General Conditions:

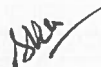
- i. **Condition:** No change in mining technology and scope of working shall be made without prior approval of the Ministry of Environment and Forests.

Compliance: Any new mining technology planned will be placed to the MoC through a revision of Mining Plan. Subsequent to the approval of MoC, the same will be intimated to MoEF.

- ii. **Condition:** No change in calendar plan of production for quantum of mineral coal shall be made.

Compliance: The schedule of calendar plan as approved in the Mining Plan will be followed.

- iii. Four ambient air quality monitoring stations shall be established in the core zone as well as in the buffer zone for PM₁₀, PM_{2.5}, SO₂ and NO_x monitoring. 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. Monitoring of heavy metals such as Hg, As, Ni, Cd, Cr, etc carried out at least once in six months.



Compliance: In consultation with State Pollution Control Board, ambient air quality monitoring station will be fixed. Heavy metals will be monitored in every six months.

- iv. **Condition:** Data on ambient air quality (PM₁₀, PM_{2.5}, SO₂ and NO_x) and heavy metals such as Hg, As, Ni, Cd, Cr and other monitoring data shall be regularly submitted to the Ministry including its concerned Regional Office and to the State Pollution Control Board and the Central Pollution Control Board once in six months. Random verification of samples through analysis from independent laboratories recognized under the EPA rules, 1986 shall be furnished as part of compliance report.

Compliance: Will be complied as advised.

- v. **Condition:** 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.

Compliance: Adequate measures will be adopted for controlling noise level. Ear plugs/muffs will be provided for the persons working in blasters etc.

- vi. **Condition:** Industrial Wastewater (workshop and wastewater from the mine) shall 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 before discharge. Oil and grease trap shall be installed before discharge of workshop effluents.

Compliance: Waste water from workshop & mine will be properly treated and reused as per standard prescribed under GSR 422(E).

- vii. **Condition:** Vehicular emissions shall be kept under control and regularly monitored. Vehicles used for transporting the mineral shall be covered with tarpaulins and optimally loaded.

Compliance: Will be complied taking care of the requirement of the statutory provisions.

- viii. **Condition:** Monitoring of environmental quality parameters shall be carried out through a laboratory recognized under EPA Rules, 1986.

Compliance: Will be complied as per the condition above.

- ix. **Condition:** 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.

Compliance: Will be complied.

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- x. **Condition :** Occupational health surveillance programme of the workers shall be undertaken periodically to observe any contractions due to exposure to dust and to take corrective measures, if needed and records maintained thereof. The quality of environment due to outsourcing and the health and safety issues of the outsourced manpower should be addressed by company while outsourcing.

Compliance: Will be complied as advised.

- xi. **Condition:** A separate environmental management cell with suitable qualified personnel shall be set up under the control of a Senior Executive, who will report directly to the Head of the company.

Compliance: Will be set up as advised.

- xii. **Condition:** The funds earmarked for environmental protection measures shall be kept in separate account and shall not be diverted for other purpose. Year-wise expenditure shall be reported to this Ministry and its concerned Regional Office.

Compliance: Will be complied as advised..

- xiii. **Condition :** The Project authorities shall 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 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 the website of the Ministry of Environment & Forests at <http://envfor.nic.in>.

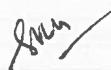
Compliance: Complied.

- xiv. **Condition:** A copy of the environmental clearance letter shall be marked to concern Panchayat/ZilaParishad, Municipal Corporation or Urban local body and local NGO, if any, from whom any suggestion/representation has been received while processing the proposal. A copy of the clearance letter shall also be displayed on company's website.

Compliance: Complied.

- xv. **Condition:** A copy of environmental clearance letter shall also be displayed on the website of the concerned State Pollution Control Board. The EC letter shall also be displayed at the Regional Office, District Industry Sector and Collector's Office/Tehsildar's Office for 30 days.

Compliance: Complied.



- xvi. **Condition:** The clearance letter, shall be uploaded on the company's website. The compliance status of the stipulated environmental clearance conditions shall also be uploaded by the project authorities on their website and updated at least once every six months so as to bring the same in public domain. The monitoring data of environmental quality parameter (air, water, noise and soil) and critical pollutant such as PM₁₀, PM_{2.5}, SO₂ and NO_x (ambient) and critical sectoral parameters shall also be displayed at the entrance of project premises and mine office and in corporate office and on company's website.

Compliance: Complied.

- xvii. **Condition:** The project proponent shall submit six monthly compliance reports on status of compliance of the stipulated environmental clearance conditions (both in hard copy and in e-mail) to the respective Regional Office of the Ministry, respective Zonal Offices of CPCB and the SPCB.

Compliance: Half yearly compliance reports will be submitted as mentioned.

- xviii. **Condition:** The Regional Office of this Ministry located in the Region shall monitor compliance of the stipulated conditions. The Project authorities shall extend full cooperation to the office(s) of the Regional Office by furnishing the requisite data/information/monitoring reports.

Compliance: Full cooperation will be extended to the Regional Office of the Ministry.

- xix. **Condition:** The environmental statement for each financial year ending 31 March in Form V is mandated to be submitted by the project proponent for the concerned State Pollution Control Board as prescribed under the Environment (Protection) Rules, 1986, as amended subsequently, shall also be uploaded on the company's website along with the status of compliance of EC conditions and shall be sent to the respective Regional Offices of the MoEF by e-mail.

Compliance: Environment Statement Report in Form V is being submitted. It is also being uploaded in company's website.

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