

Letter No. OCPL/ 269 Date: 17/05/2021

Odisha Coal and Power Limited (A Government of Odisha Company) CIN: U10100OR2015SGC018623

Webstie: www.ocpl.org.in

To,

The Joint Director(s)
Regional Office, Eastern Region (ERO)
Ministry of Environment, Forest & 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.

Ref: (i) EC letter No. J-11015/139/2008-IA.II (M) dated 21.02.2014

- (ii) EC transfer order vide letter no. J-11015/139/2008-IA.II (M)Pt. file dt. 30.12.2015
- (iii) Amendment in EC vide letter no. J-11015/139/2008-IA.II (M)Pt. dt. 06.11.2019

Dear Sir,

In reference to the notification issued by MoEF&CC vide letter S.O. 5845 (E) dated 26.11.2018 and Environmental Clearance as referred above in respect of Manoharpur Open Cast Coal Mine (8.00 MTPA) of Odisha Coal & Power Limited located in IB valley, Dist. Sundargarh, Odisha, please find enclosed herewith Half Yearly Compliance Report in soft copy (by email) as well as hard copy for the period of October 2020 to March 2021.

As per MoEF&CC (ERO) letter dated 11.05.2020, the scanned copy of report is being submitted to their good office at the given email address (roez.bsr-mef@nic.in).

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

Yours Faithfully

Agent

(Manoharpur Coal Mine Project)

Copy to:

 The Scientist ('E' & Regional Directorate), Central Pollution Control Board, South end Conclave, Block 502, 5th & 6th Floors, 1582 Razidanga Main Road, Kolkata-700107.

 The Member Secretary, State Pollution Control Board, Odisha, Paribesh Bhawan, A/118, Nilkanthnagar, Unit VIII, Bhubaneswar 751012

HALF YEARLY COMPLIANCE REPORT For Environmental Conditions

October 2020 - March 2021

MANOHARPUR OPENCAST COAL MINE



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

ENVIRONMENTAL CLEARANCE(EC) COMPLIANCE REPORT

PROJECT NAME - MANOHARPUR OPENCAST COAL MINE PROJECT
EC letter No. J-11015/139/2008-IA.II (M) dated 21.02.2014 and

EC Transfer Order - EC-No. J-11015 / 139/2008-IA.II (M) Pt. file Dated 30TH December 2015 (EC Amendment letter No. EC-No. J-11015 / 139/2008-IA.II (M) Pt. file Dated 06TH November 2019) Period of Compliance Report – October 2020 to March 2021

Sr. No.	EC Letter Condition	Compliance
SPECIFIC	CONDITIONS	
i.	The maximum production from the mine at any given time shall not exceed the limit as prescribed in the EC.	The rated maximum production capace of the mine is 8.00MTPA as per to approved Mining Plan (Rev II). Hence the limit shall not exceed as prescribe in EC. Mine development work were start w.e.f. 01.11.2018 and coal production started from 10.10.2019. Thereafted due to evacuation constraints, coal dispatch started w.e.f. 14.12.2019 from mine end to Kanika Railway Siding MCL. The coal production during the late of the coal production during the
		Financial Year (FY) Coal Production
ii.	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	Not Applicable. The propose Manoharpur coal mine project does not fall within 10km of Nation park/sanctuary and as such clearant from National Board of Wildlife is not required for the said project. However, the Site Specific Wildlife Conservation Plan of this project however approved by Principal Child Conservator of Forests (PCCF-W & Chief Wildlife Warden (CWW), Odish which is under implementation.
111.	The OB should be kept in ML area and there should be no OB dumps at the end of mining.	As per the approved Mine Plan & Mine Closure Plan (Revision – II), total 3 not of OB dumps will be acquired in not coal bearing area by OCPL. Major portion of the overburden (86%) which be utilized in back filling and there where the notes external dump at the end of mining. Currently, the generated OB from the mining operation is being stored.



		External OB dump 1 (NW) and OB dump 3 (SE) as per approved Mining Plan.
iv.	The land for OB dumping should be made ready for original use after mine closure.	Noted
v.	All the sandstone taken out during mining should be utilized for house construction and given free of cost to locals.	OCPL will engage a reputed institute agency who will conduct the technical study for suitability of utilization of sandstone and identify the quantum of available sandstone from mining.
vi.	Since the mining area is total forest land, the sandstones should not be dumped as OB.	Efforts will be made to comply with the conditions.
vii.	Fly ash dumping is not permitted` in mine void.	Fly ash will not be dumped. If any situation arises which requires fly ash dumping then proper scientific studies will be done and permissions will be obtained from competent authorities prior to dumping.
viii.	The leachability study may be carried out for chromium, arsenic and mercury that may be present in fly ash.	The required leachability study shall be carried out by concerned authority and the test result of same will be submitted to MOEF & CC for obtaining necessary permission before commencement of fly ash disposal, if required, in Manoharpur Coal Mine Project.
ix.	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.	This is being complied. CSR / peripheral development activities already carried out in the vicinity of the project area. Total expenditure incurred on same till March 2021 is Rs. 5.04 Cr. The year wise expenditure is attached as Annexure 1 for your kind reference.
х.	The CSR activity, which had already been carried out by proponent, be audited by a 3 rd Party. The audit should be carried out by a reputed agency.	Noted. The CSR audit has already been conducted by reputed agency M/s GEOENVITECH (Research and Consultancy Services Pvt. Ltd.) which is empaneled with Govt. of Odisha.
xi.	The proponent shall come back to the Committee for its washery proposal for further consideration.	Noted & will be complied, if applicable.
xii.	Coal transportation from mine to railway siding by conveyor belt and from siding to TPP by MGR through SILO loading of the wagons	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 (Rapid Loading System). OCPL would like to mention that commissioning of MGR system is
		delayed due to land acquisition issue in MCL command area which has been



		resolved now. At present, due to pandemic COVID-19, the construction work of MGR system is slow and will be completed (tentatively) by 31 st July 2021. However, currently OCPI transporting the coal from mine end to Kanika railway siding of MCL through road as an interim arrangement and the same is being utilized under the provisions of Allotment Agreement (Clause – 8). An approval/amendment in the EC letter for transporting the coal by road from mine end to Kanika siding has been obtained from MoEF&CC vide letter no. J-11015/139/2008-IA-II(M) Pt. dated 06 th November 2019. The copy of same has already been submitted to your good office vide letter no. OCPL/16 dated 06.01.2020 (Refer Annexure 2).
xiii.	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.	project area. One seasonal nalla passes through the coal block which will be
xiv.	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.	As mentioned above, there is no river in the vicinity of project site except seasonal Garia Nalla. There is no overflow of OB into agricultural fields & Nalla. Plantation of approx. 4737 nos. comprises local native species i.e. Mango, Amla, Neem, Jamun etc. has been carried out by protecting the existing trees inside the project area. The area covered under plantation is about 16.735 Hac. The list of plantation carried out during the FY 2019-20 and 2020-21 has already been submitted to your good office along with post EC six monthly compliance report vide letter dated 26.11.2020. In addition to above also, approx. 18008 nos. of native plant species have been planted in surrounding areas i.e. R&R Colony (Phase 1 & 2) developed by OCPL covering an area of about 4 Hac.
XV.	OB shall be stacked at two earmarked external OB dumpsite(s) only. The ultimate slope of the dump	The overburden from the mine is being stored at their earmarked location and



	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.	approved Mining Plan (Revision II) and slope stability report. Currently, the dumps are active and
xvi.	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.	Siltation pond followed by garland / catch drain around the mine area, external OB dump and coal stock yard etc. has been provided to arrest the
xvii.	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.	Presently, OB dumps are in the active stage. The provision of retaining wall will be complied once the OB dumps reach to its final stage.
xviii.	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.	Currently, the construction of CHP is also on full swing. Hence, the compliance will be done when CHP becomes operational.
xix.	Drills shall be wet operated.	is being complied.
XX.	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.	Continuous efforts are being made on regular basis to comply with the conditions.
xxi.	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.	Services of CSIR-CIMFR has been taken for scientific design of Blast parameter to reduce ground vibration. The recommendations of competent authority are being implemented during blasting.



xxii.	A progressive afforestation plan shall be	Areas will be afforested including
	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.	reclaimed areas etc. and native species of plantation will be decided in consultation with DFO/Agriculture department. Technical and Biological reclamation plan as per approved Mine Plan (Rev II) has already been submitted to your good office. The plantation has been carried out in vacant spaces within the project area i.e. Safety zone, bank of Garia nalla, CHP
xxiii.	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.	As per the approved Mine Plan & Mine Closure Plan (Revision – II), total 3 nos. of OB dumps will be acquired in non-coal bearing area by OCPL out of which 2 nos. OB dumps are in active stage. Complied Compliance & Status report will be submitted to MoEF &CC and its Regional office on yearly basis along with the six monthly post EC compliance report. Also, kindly refer the point no. xv as mentioned above.
xxiv.	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	Back filled area will be reclaimed with plantation as per the Approved Mine Closure Plan (Rev II). Density of trees will be 2500/ha. Water body (reservoir) will be gently sloped. Plantation of native species will be done with consultation of DFO/Agriculture department.
XXV.	The proponent should prepare restoration and reclamation plan for the degraded area. The land be used in a productive and sustainable manner.	Will be complied as specified in approved Mining Plan (Rev II).
xxvi.	Compensatory Ecological & Restoration of waste land, other degraded land and OB dumps in lieu of breaking open the land be carried out	Will be complied as specified in approved Mining Plan (Rev II).



xxvii.	The mining should be phased out in sustainable manner. No extra over burden dumps are permitted.	
xxviii.	No groundwater shall be used for mining operations	Being complied.
xxix.	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.	quality has been carried out by establishing a network of existing dug wells and construction of new piezometers. The monitoring of ground water level and quality analysis were carried out during the year 2019-20 for the core zone and buffer zone of the project area. The monitoring analysis
XXX.	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	Sump of sufficient capacity has been provided as artificial ground water recharge measures within the mine to recharge the ground water table of the adjoining areas. The siltation pond followed by Garland drains will also help in retaining the rain water and recharge of ground water table.
xxxi.	Sewage treatment plant shall be installed in the existing colony. ETP shall also be provided for workshop and CHP wastewater.	Sewage Treatment Plant (STP) will be installed to treat the generated domestic waste water at required places i.e. mine colony and the STP treated water will be reused in horticulture development within the colony. ETP shall also be installed as specified.
xxxii.	Besides carried out regular periodic health checkup of their workers, 10% of the workers identified from workforce engaged in active	Being complied with as per applicable guidelines of The Mines Rules, 1955.



xxxiii.	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 There are 370 PDFs and 385 PAFs. Land oustees shall be compensated as per the norms laid out	Complied as per the provisions of Odisha R&R Policy, 2006.
	R&R Policy of CIL or the National R&R Policy or R&R Policy of the State Government whichever is higher	
xxxiv.	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.	The land use / land cover study for core zone & buffer zone of Manoharpur Coa Mine Project has been carried out during the year 2018 and the report has also been prepared by M/s Geosys Enterprise Solutions Private Limited Hyderabad, Telangana. The copy of report showing the detailed land use / land cover study using the Remote Sensing Technique and GIS has been submitted to your good office along with post EC compliance report vide letter dated 26.11.2020 (Refer Annexure 4). Further, the due study for 2021 will be carried out and report of the same will be submitted to your good office.
xxxv.	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	The approved Mine Plan and Mine Closure Plan (Rev II) has been submitted to MoEF&CC on dated 08.05.2018. Further, the Mining Plan & Mine Closure Plan (Rev-III), has been approved on 26-09-2019 by MoC for 16 MTPA which includes the expansion of Manoharpur Coal Mine towards its Dipside. The environmental clearance (EC) application for the proposed expansion from 8 to 16 MTPA has already been submitted to MoEF&CC as per the approved Mining Plan (Rev-III). Also, MoEF&CC has approved the Terms of Reference (ToR) vide letter dt. 29.04.2020 for further EIA/EMP study. Accordingly, the draft EIA/EMP study report was prepared & submitted to Odisha State Pollution Control Board (OSPCB) for public hearing which has been conducted successfully on 23.03.2021.
xxvi.		As mentioned above in Point no. (ix), CSR activities is being carried out in



	welfare measures under CSR to be carried out over the balance life of the mine	consultation with concerned Panchayat / local administration.
oxvii.	The proponent should implement the assurances given during the Public Hearing	Assurance given during the Public Hearing is being implemented in the vicinity of project area.
xxviii.	Corporate Environment Responsibility: The Company shall have a well laid down Environment Policy approved by the Board of Directors. The Environment Policy shall prescribe for	Environment policy has been approved by Board and it is in place. Will be complied with.
	standard operating process/procedures to bring into focus any infringements/deviation/violation of the environmental or forest norms/conditions. 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 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	There is an environment management cell comprises of technical qualified persons who is taking care of all environmental compliances of clearances and monitoring. The cell is headed by Head of Company through Mine Agent. 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 is responsible for monitoring of the implementation of the environment issues.
GENERAL	CONDITIONS	
i.	No change in mining technology and scope of working shall be made without prior approval of the Ministry of Environment and Forests.	Prior approval will be obtained, if applicable.
i.	No change in calendar plan of production for quantum of mineral coal shall be made.	Agreed and if there is any change in calendar plan of production of coal, due permission/approval shall be obtained from competent authority complying the MoEF&CC guidelines in this regard.
i.	Four ambient air quality monitoring stations shall be established in the core zone as well as in the buffer zone for PM10, PM2.5, so2 and NOx 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	The monthly environmental monitoring including ambient air quality is being carried out regularly in the core zone (4 locations) as well as in the buffer zone (4locations)by MoEF&CC/NABL/OSCPB accredited laboratory M/s Visiontek Consultancy Services Pvt. Ltd. for PM ₁₀ , PM _{2.5} , SO _x , and NO _x and the copy of



	heavy metals such as Hg, As, Ni, Cd, Cr, etc carried out at least once in six months.	same is being submitted regularly to Odisha State Pollution Control Board (OSPCB). Also, the monitoring of heavy metals such as Hg, As, Ni, Cd, Cr etc. has been carried out on six monthly basis in January month 2021 for core zone and buffer zone. The test results show that parameters are within the permissible limits as prescribed by MoEF&CC and test report in this regard is attached as Annexure 3. The monitoring report showing the results of pollutants (PM ₁₀ , PM _{2.5} , SO _x , and NO _x) for the 3 rd & 4 th quarter of FY 2020-21 (October to December 2020 and January 2021 to March 2021) is attached as Annexure 4 for ready reference.
v.	Data on ambient air quality (PM10, PM2.5, SO2 and NOx) 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.	Kindly refer the Point no. iii (General Condition) as mentioned above.
v.	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	Complied
∕i.	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	Will be complied with.
ii.	Vehicular emissions shall be kept under control and regularly monitored. Vehicles used for transporting the mineral shall be covered with tarpaulins and optimally loaded.	Is being Complied
ii.	Monitoring of environmental quality parameters shall be carried out through a laboratory recognized under EPA Rules, 1986	The environmental monitoring is being carried out as mentioned above in Point no. iii (General Condition).
x.	Personnel working in dusty areas shall wear protective respiratory devices and they shall also	Agreed and is being complied with.



	be provided with adequate training and information on safety and health aspects.	
x.	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.	applicable norms of Coal Mine Rules.
xi.	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.	comprising of technical qualified
ii.	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.	Year-wise expenditure incurred on environmental protection measures has already been submitted for the period of FY 2018-19, 2019-20 & 2020-21 along with post EC compliance report vide letter dated 06.11.2020.
ii.	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	Complied.
v.	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	Complied.
٧.	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	Complied
i.	The clearance letter, shall be uploaded on the company's website. The compliance status of the stipulated environmental clearance conditions	The environmental clearance letter along with compliance status of stipulated conditions has been uploaded



	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, PM2.5, SO2 and Nox (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	on company website which can be seen at the following link: http://ocpl.org.in/Environment.asp
ii.	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.	Being Complied in confirmation to notification issued by MOEF&CC vide letter no. S.O. 5845 (E) dated 26.11.2018 and MoEF&CC (ERO) vide letter no. File No: 106-12/EPE dated 11.05.2020.
ii.	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.	Project authorities will extend full cooperation to the Ministry Regional Office.
х.	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.	Being Complied.



ENVIRONMENTAL CLEARANCE(EC) COMPLIANCE REPORT

MANOHARPUR OPENCAST COAL MINE PROJECT

(Amendment vide letter No. EC-No. J-11015 / 139/2008-IA.II (M) Pt. file Dated 06TH November 2019)

Sr. No.	EC Letter Condition	Compliance
c. cond	DITIONS	
i.	High rated tippers i.e. 25 to 30 tonne capacity coal carrying tippers for same quantity shall be used to reduce number of trips.	
ii.	Accordingly, 9200 TPD of coal from Manoharpur Coal Mine to Kanika siding / ACB siding / any other Indian railway siding in the near vicinity of mine (23 km) by road and from there to Ib TPP of OPGC by Indian rail.	end to Kanika Railway Siding of MCL b
III.	Further, 3000 TPD of coal from Manoharpur Coal Mine to Ib TPP directly by road (i.e. 117 km road) only if Route 1 is not available. The stretch of 1.2 km having width of ~ 5.5 mts (single lane) shall be widened to 7mts width and made double lane before commencement of transportation.	
iv.	All necessary environment mitigation such as tree plantation, mechanized road sweeping should be taken to prevent increase in air pollution level in villages/settlements lying within 100 m (23 km till Kanika Railway siding) along the Route 1 and villages/settlements (117 km road) lying along the Route 2.	Necessary mitigation measures i.e water sprinkling, manual road sweeping, proper covering of coa carrying tippers etc. are being carried out at site to prevent increase in air pollution level in nearby villages.
٧.	The state pollution control board, while considering consent to operate for project, shall ensure that with the proposed coal transportation by road, air quality would remain within the national ambient air quality standards.	Noted & agreed. An intimation letter has already been submitted to Odisha State Pollution Control Board (OSPCB) regarding the obtaining of EC from MoEF&CC for transportation of coal from Manoharpur coal mine to Kanika siding of MCL through road.



		Further, the renewal of consent to operate has been obtained from OSPCB vide letter dated
vi.	Implementation of MGR shall be expedited.	At present, due to pandemic COVID- 19, the construction work of MGR system is slow and will be completed (tentatively) by 31 st July 2021.
vii.	All the recommendations given in study on Traffic Impact Assessment Report shall be complied.	Is being complied.



Manoharpur Coal Mine Project, Tehsil Hemgir, Dist. Sundergarh, Odisha

ANNEXURE 1

Year wise Expenditure Detail on CSR / Peripheral I	Dovolonment	
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SI.No	Sectors	OPGC		expenditure		Total Expenditure on CSR /			
		2008-2015	2015-2016	2016-2017	2017-2018	2018-19	2019-20	2020-21	Peripheral Development
1	Health	16922646	95000	225900	414000	412309	243562	279352	
2	Education		1290000	1244300	1326500	912000	300000	0	
3	Skill Development			2151263	1854000	1925170	2143354	1338985	
4	Socio-Culture		168000	100560	305000	565000	150000	25000	
5	Sports		226000		117800	140000	95000	40000	
6	Rural Infrastructure			3114404	3791751	2340609	1969011	3188081	
7	Livelihood		0	0	0		0	0	
8	Water Sanitation		0	0	330000	440000	169000	0	
9	Public Relation		0	0	0	64000	0	0	
	Total	1,69,22,646	17,79,000	68,36,427	81,39,051	67,99,088	50,69,927	48,71,418	5,04,17,55

Note: Rs. 16922646 expenditure submitted by OPGC to OCPL



Kamal Kant Ujinwal



From:

MINES

Sent:

22 February 2021 06:09 PM

To:

roez.bsr-mef@nic.in; zokolkatta.cpcb@nic.in

Cc:

Saroj Kar, 'Ramachandra Reddy'; MINES; Kamal Kant Ujinwal

Subject:

Submission of Ground Water Quality Monitoring Report in respect of Manoharpur

Coal Mine Project of Odisha Coal and Power Limited.

Attachments:

CL with Ground Water Quality Reports.pdf

Sir

In reference to the Environmental Clearance granted by MoEF&CC in respect of Manoharpur Coal Mine (8.00 MTPA) of Odisha Coal & Power Limited located in IB valley, Dist. Sundargarh, Odisha, we are hereby submitting the Ground Water Quality Report for core zone (1 location) and buffer zone (2 locations) in compliance to point no. xxix (Point no. 3, Part A, Specific Conditions) for the month of January 2021 (winter season).

This is for your kind perusal.

Regards,

Manoharpur Coal Mine Team, OCPL





e Water Resource Management

@ Environmental & Social Study

Visiontek Consultancy Services Pvt. Ltd.

(Committed For Better Environment)

Certified for: ISO 9801:2015, ISO 14001:2015, ISO 45001:2018 (OH&S), ISO/IEC 17025:2017 Accredited by: NABET-A Grade, MOEF & CC/CPCB & SPCB-A Grade

Surface & Sub-Surface Investigation

Quality Control & Project Management

· Renewable Energy

Agricultural Development
 Information Technology
 Public Health Engineering

Mine Planning & Design
 Mineral/Sub-Soil Exploration

Waste Management Services

Laboratory Services
Faviroument Lab
Food Lab
Material Lab
Soil Lab
Mineral Lab
Microbiology Lab

Dute: 05.02.2021

Ref: Envlab/20/R-8080

AAO MONITORING REPORT FOR JANUARY-2021 (CORE ZONE)

Name of Project

Name of Industry

2. Name of Industry

Monitoring Instruments
 Sample collected by

: Manoharpur Open Cast Coal Mine Project

: Odisha Coal and Power Limited (OCPL), Sundargarh

: RDS (APM 460 BL), FPS (APM 550)

: VCSPL representative in presence of OCPL representative

Monitoring Location	Date	Hg (mg/m³)	As (ng/m³)	Ni (ng/m³)	. Cd (mg/m ³)	Cr (mg/m³)
AAQMS-1:BGR Office Camp	04.01.2021	BDL	BDL	BDL	BDL	BDL
AAQMS-2: BGR New Workshop Area	05.01.2021	BDL	BDL	BDL	BDL	BDL
AAQMS-3: CHP OCPL Office	04.01.2021	BDL	BDL	BDL	BDL	BDL
AAQMS-4: OCPL Mines Area	05.01.2021	BDL	BDL	BDL	BDL	BDL
CPCB, New Delhi AAQ S	standard		6	20		-
Testing Method			15.5	AAS Method 5182(Part -22);3	2004	

BDL Yalues: Ni<0.01 ng/m³, As < 0.001 ng/m³, Hg < 0.0001 mg/m³, Cd < 0.002 mg/m³, Cr < 0.006 mg/m³ and M_{\odot}







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· Infrastructure Enginering

w Water Resource Management

Environmental & Social Study

Visiontek Consultancy Services Pvt. Ltd.

(Committed For Better Environment)

Certified for: ISO 9001:2015, ISO 14001:2015, ISO 45001:2018 (OH&S), ISO/IEC 17025:2017 Accredited by: NABET-A Grade, MOEF & CC/CPCB & SPCB-A Grade

Surface & Sub-Surface Investigation

Quality Control & Project Management.

e Renewable Energy

Agricultural Development

 Information Technology Public Health Engineering

· Mine Planning & Design

· Mineral/Sub-Soil Exploration Waste Management Services

Laboratory Services
Environment Lab
Food Lab Material Lab Sell Lab Mineral Lub

& Microbiology Lab

Ref: Envlab/20/R-8085

Date: 05.02.2021

AAO MONITORING REPORT FOR JANUARY-2021 (CORE ZONE)

1. Name of Project : Manoharpur Open Cast Coal Mine Project

2. Name of Industry : Odisha Coal and Power Limited (OCPL), Sundargarh

3. Monitoring Instruments : RDS (APM 460 BL), FPS (APM 550)

4. Sample collected by : VCSPL representative in presence of OCPL representative

Monitoring Location	Date	Hg (mg/m³)	As (ng/m³)	Ni (ng/m³)	+ Cd (mg/m³)	Cr (mg/m³)
AAQMS-1: Dulanga Village	08.01.2021	BDL	BDL	BDL	BDL	BDL
AAQMS-2: Kalamegha Village	06.01.2021	BDL	BDL	BDL	BDL	BDL
AAQMS-3: Paramanandpur Village	06.01.2021	BDL	BDL	BDL	BDL	BDL
AAQMS-4: Kiripsira Village	08.01.2021	BDL	BDL	BDL	BDL	BDL
CPCB, New Delhi AAQ ·S	tandard		6	20	-	
Testing Method			IS S	AAS Method 5182(Part -22);	2004	

BDL Values: Ni=0.01 ng/m3, As < 0.001 ng/m3, Hg < 0.0001 mg/m3, Cd < 0.002 mg/m3, Cr < 0.006 mg/m3







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AMBEINT AIR QUALITY DATA

PROJECT - MANOHARPUR COAL MINE PROJECT, SUNDERGARH, ODISHA

CONCENTRATION IN µg/m3

MONITORING				COR	E ZONE (3	QUART	ER OF F	Y 2020-21	- OCTO	BER 2020	TO DEC	EMBER 2	2020)			
STATION /		BGR OFF	ICE CAN	1P	VOCAT		CHP OC	PL OFFIC	Œ	OCPL MINES AREA (AAQMS 4)						
DATE	PM ₁₀	PM _{2.5}	SO ₂	NOx	PM ₁₀	PM _{2.5}	SO ₂	NOx	PM ₁₀	PM _{2.5}	SO ₂	NOx	PM ₁₀	PM _{2.5}	SO ₂	NO _x
09.10.2020	69.0	37.5	19.0	27.2	-		-	-	78.0	42.0	23.8	29.5	-	-	-	-
24.10.2020	65.0	35.2	17.6	26.1	-	-	-	-	71.0	38.1	26.1	32.2	-	-	-	-
08.10.2020	-	-	-	-	62.0	33.4	13.8	18.8	-	-	-	-	74.0	40.3	25.2	33.3
22.10.2020	-	-	-	-	67.0	35.0	15.1	20.5	-	-	-	-	82.0	44.7	26.7	35.2
03.11.2020	67.0	34.6	17.4	27.5	71.0	38.6	15.7	22.3	-	-	-	-	-	-	-	-
21.11.2020	74.0	39.3	18.6	29.4	65.0	34.2	14.3	19.6	-	-	-	-	-	-	-	-
04.11.2020	-	-	-	-	-	-	-	-	75.0	39.7	27.4	34.7	86.0	46.3	25.2	37.1
24.11.2020	-	-	-	-	-	-	-	-	83.0	43.4	23.3	32.0	79.0	42.7	26.7	33.4
07.12.2020	76.0	40.4	18.1	30.4	69.0	34.7	14.0	21.5	-	-	-	-	-	_	-	-
18.12.2020	71.0	37.6	15.7	28.2	73.0	38.5	16.2	23.8	-	~	-	-	-		-	-
08.12.2020	-	-	-	-	-	-	_	-	84.0	45.0	26.2	37.1	82.0	44.8	24.5	37.7
19.12.2020	-		-	-	_		-	-	80.0	41.8	25.8	33.7	88.0	47.5	28.3	39.2
NAAQ Standards (CPCB)	100	60	80	80	100	60	80	80	100	60	80	80	100	60	80	80

MONITORING					C	ORE ZO	NE (4 TH	QUART	TER OF	FY 2020	-21 - JA	NUARY	2021 7	O MAI	RCH 202	1)					
LOCATION / STATION			AQMS			BGR NEW WORKSHOP AREA (AAQMS 2)					CHP OCPL OFFICE (AAQMS 3)					OCPL MINES AREA (AAQMS 4)					
DATE	PM ₁₀	PM _{2.5}	SO ₂	NOx	CO (mg/m³)	PM ₁₀	PM _{2.5}	SO ₂	NOx	CO (mg/m³)	PM ₁₀	PM _{2.5}	SO ₂	NOx	CO (mg/m³)	PM ₁₀	PM _{2.5}	SO ₂	NOx	CO (mg/m	
04.01.2021	68.0	36.4	15.0	27.8	0.29	-	-	-	-		78.0	42.4	24.5	33.0	0.43	-	-	-	-	-	
21.01.2021	74.0	38.8	16.3	29.4	0.33	-	-	-	-	-	81.0	43.7	26.1	35.8	0.36	-	_	-	-	-	
05.01.2021	-	-	-	-	-	77.0	41.8	17.7	28.1	0.41	-	-	-	_	-	86.0	45.8	25.7	38.8	0.45	
25.01.2021	-	-	-	-		72.0	38.2	15.3	24.6	0.37	-	-	-	-	-	80.0	42.5	27.4	35.6	0.48	
05.02.2021	70.0	38.8	17.1	30.7	0.34	-	-	-	-	-	-	-	-	-	-	78.0	41.7	22.6	34.7	0.42	
16.02.2021	65.0	34.6	15.4	27.4	0.28	-	-	-	+ 0	-	-	-	-	-	-	84.0	45.3	26.3	39.2	0.50	
06.02.2021	-		-	-	-	69.0	36.7	14.8	25.3	0.39	86.0	46.6	25.2	34.2	0.47	-	-	-	-	-	
17.02.2021		-	-	-	-	73.0	39.4	16.6	28.7	0.35	79.0	42.5	22.5	31.7	0.44	-	-	-	-	-	
01.03.2021	63.0	34.3	19.2	28.3	0.41	70.0	38.3	15.7	26.1	0.44	-	-	-	-	-	-	-	-	-	-	
19.03.2021	68.0	37.5	16.4	29.6	0.37	66.0	35.8	13.4	23.5	0.47	-	-	-	-	-	-	-	-	-	_	
02.03.2021	-	-	-	-	-	-	-	-	-	-	82.0	44.7	23.4	30.6	0.48	73.0	39.5	21.8	32.7	0.46	
20.03.2021	-	-	-	-	-	-	-	-	-	-	76.0	41.0	19.8	32.0	0.51	79.0	43.2	24.6	35.3	0.41	
NAAQ																75.0	73.2	2.4.0	55.5	0.41	
Standards (CPCB)	100	60	80	80	4.0	100	60	80	80	4.0	100	60	80	80	4.0	100	60	80	80	4.0	



LOCATION /		DULANG	A \//// A	ee .	V			1000	_	TOBER 20								
000000000000000000000000000000000000000				3E	K	ALAMEG	HA VILL	AGE	PAR	MANAN	DPUR VI	LLAGE	KIRIPSIRA VILLAGE					
STATION		(AAC	(MS 1)		(AAQMS 2)					(AAC	QMS 3)		(AAQMS 4)					
DATE	PM ₁₀	PM _{2.5}	SO ₂	NOx	PM ₁₀	PM _{2.5}	SO ₂	NOx	PM ₁₀	PM _{2.5}	SO ₂	NOx	PM ₁₀	PM _{2.5}	SO ₂	NO		
10.10.2020	53.0	28.4	10.7	17.7	-	-	-	-	-	-	-	-	51.0	27.4	10.6	16.		
28.10.2020	57.0	30.5	12.3	19.1	-	-	-	-	-	-	-	-	56.0	29.8	11.2	17.		
12.10.2020	-	-	-	-	48.0	25.7	8.6	14.5	49.0	26.2	10.3	16.7	-	-	-	-		
29.10.2020	-	-	-	-	52.0	27.8	10.1	15.8	53.0	28.6	10.8	16.2	-	-	-	-		
05.11.2020	63.0	33.1	11.8	18.5	55.0	28.2	11.4	17.6	-	-	-	_	-	-	-	-		
25.11.2020	59.0	31.4	14.0	21.4	51.0	25.7	9.8	16.5	_	-	-	-	-	-	-	-		
06.11.2020	-	-	-	-	-	-	-	-	56.0	29.7	11.3	18.0	57.0	29.1	13.4	19.		
27.11.2020	4	-	-	-	-	-	-	-	59.0	30.8	12.7	20.3	54.0	27.7	12.2	17.		
09.12.2020	61.0	32.7	13.7	22.0	58.0	29.8	12.3	18.4	-	-	-	-	_	-	-	-		
24.12.2020	65.0	34.1	12.5	20.3	54.0	28.3	11.2	16.2	-	-	-	_	_		-	-		
10.12.2020	-	-	-	-	-	-	-	-	55.0	30.1	13.3	20.7	63.0	33.7	15.1	23.7		
26.12.2020	-	-	-	-	-	*	-	-	62.0	33.0	12.6	19.5	59.0	31.6	13.5	21.8		
NAAQ Standards (CPCB)	100	60	80	80	100	60	80	80	100	60	80	80	100	60	80	80		

MONITORING					BU	IFFER Z	ONE (4T	QUAR	RTER O	F FY 202	0-21 - J	ANUAR'	2021	TO MA	RCH 20	21)				
STATION /		DULAN (A		(AAQMS 2)					PARMANANDPUR VILLAGE (AAQMS 3)					(AAQMS 4)						
DATE	PM ₁₀	PM _{2.5}	SO ₂	NOx	CO (mg/m³)	PM ₁₀	PM _{2.5}	SOz	NOx	CO (mg/m³)	PM ₁₀	PM _{2.5}	SO ₂	NOx	CO (mg/m³)	PM ₁₀	PM _{2.5}	SO ₂	NOx	CO (mg/m
08.01.2021	58.0	29.8	12.7	19.8	0.27	-		-	-	-	-	-	-	-	-	60.0	31.3	14.6	20.5	0.26
28.01.2021	62.0	31.6	14.1	23.3	0.24	-	-	-	-	-	-	-	-	-	-	65.0	33.8	16.2	24.2	0.21
06.01.2021	-	-	-	-	-	55.0	28.2	11.8	20.0	0.23	64.0	33.6	14.3	21.6	0.22	-	-	-	-	-
27.01.2021	-	-	-	-	-	59.0	30.4	13.2	22.3	0.26	56.0	29.8	13.0	22.8	0.26	-	-	-	-	-
09.02.2021	63.0	33.1	15.2	22.8	0.31	-	-	-	-	-	51.0	27.5	12.3	18.8	0.27	-	-	-	-	-
26.02.2021	56.0	29.8	12.8	20.5	0.26	-	-	-	-	-	59.0	31.6	13.6	23.2	0.32	-	-	-	-	-
08.02.2021	-	-	+	+		57.0	30.4	12.4	21.7	0.25	-	-	-	-	-	61.0	32.4	15.5	23.7	0.29
24.02.2021	-	-	-	-		53.0	28.6	11.6	19.6	0.28	-	-	-	-	-	55.0	29.8	14.2	21.4	0.26
04.03.2021	59.0	31.7	13.6	21.6	0.35	-	-	-	-	-	-	-	-	-	-	56.0	29.4	14.6	25.1	0.33
24.03.2021	52.0	27.3	11.2	22.3	0.28	-	-	-	-	-	+	-	-	-		51.0	26.3	13.4	23.4	0.36
03.03.2021	-	-	-	-	*	54.0	28.8	10.7	18.7	0.27	50.0	26.8	14.0	22.7	0.24	-	-	-	-	-
23.03.2021	-	-	-	-	-	58.0	30.1	12.5	20.4	0.31	46.0	24.4	12.4	20.5	0.29	-	-		-	-
NAAQ Standards (CPCB)	100	60	80	80	4.0	100	60	80	80	4.0	100	60	80	80	4.0	100	60	80	80	4.0

