

No. J-11015/67/2013 -IA-II (M)  
Government of India  
Ministry of Environment, Forest & Climate Change  
IA-II (Coal Mining) Division

Indira Paryavaran Bhawan,  
Jorbagh Road, N Delhi-3

Dated: 28<sup>th</sup> October, 2015

To,

The Chief General Manager (CP&P)  
**M/s Mahanadi Coalfields Limited**  
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Phone: 0663-2542084

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**Sub: Hingula Washery of 10 MTPA capacity in an area of 27 ha of M/s Mahanadi Coalfields Limited District Angul (Odisha) - Environmental Clearance reg.**

Sir,

This is with reference to the online proposal No. IA/OR/CMIN/18276/2013 dated 30.07.2015 and subsequent letters dated 17.08.2015; 25.08.2015; 01.09.2015 and 09.09.2015 for environmental clearance on the above-mentioned subject.

2. The Ministry of Environment, Forest & Climate Change has considered the application. It is noted that the proposal is for grant of Environmental Clearance to **Hingula Washery of 10 MTPA in an area of 27 ha; latitude 20° 56' 02" N to 20° 58' 28" N and longitude 85° 02' 52" E to 85° 06' 57" E) of M/s Mahanadi Coalfields Limited District Angul (Odisha).**

3. The proposal was considered by the Expert Appraisal Committee (EAC) in the Ministry for Thermal & Coal Mining Projects, in its 42<sup>nd</sup> EAC meeting held on 31<sup>st</sup> August - 1<sup>st</sup> September, 2015. The details of the project, as per the documents submitted by the project proponent (PP), and also as informed during the above said EAC meetings, are reported to be as under:-

- i. It is a two stage washery having close circuit technology.
- ii. Equipment will be imported from South Africa.
- iii. Hingula Washery will be located in the mine leasehold of Balram OCP in Hingula Area of Talcher Coalfield in Angul District, Odisha. The total raw coal requirement of 10.0 Mty for the proposed washery will be met from Hingula-II OC Expn. Project (Phase-III) (15 MTPA) (EC under consideration of MoEF) of Talcher area. Hingula Washery has been proposed to be set up on BOM basis for beneficiation of raw coal (non-coking coal of grade-G-11 & ash content ranging between (34.5-42.5%) of Hingula-II Expansion OCP.
- iv. The project was accorded ToR vide letter no. J-11015/67/2013-IA.II(M) dated 31.01.2014.
- v. The latitude and longitude of the project are 20° 56' 02" N to 20° 58' 28" N and 85° 02' 52" E to 85° 06' 57" E respectively.
- vi. Joint Venture: No joint venture.



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- vii. Coal Linkage: Hingula-II OC Expn. Project (Phase-III) (15 MTPA) (EC under consideration of MoEF & CC)
- viii. Employment generated / to be generated: Washery will be constructed on BOM concept; hence employment will be generated by BOM operator. Around 173 (for operation of Washery).
- ix. Benefits of the project: The beneficiation/washing of coal will lead to improvement in performance of power plant, reduction in particulate emission, reduction in load on Railway Network and reduction in handling and transportation cost of coal and solid waste.
- x. The land usage of the project will be as follows: 17 Ha land is required for proposed Hingula Washery. 10 Ha land is required for temporary storage of Reject. 17 + 10 =27 Ha land required for Washery & Reject storage has already been acquired and is in possession of MCL. All the 27 Ha land falls within the mine leasehold of Balram OCP which is a running mine. The entire land for washery is non-forest, barren/scrubland and is non coal bearing
- xi. The coal grade is G11.
- xii. The total estimated water requirement is 1273 m<sup>3</sup>/hr at 0.09 m<sup>3</sup>/tonne of Raw Coal.
- xiii. The seasonal data for ambient air quality has been documented and all results at all stations are within prescribed limits.
- xiv. Method of Washing: Washing technology is based on Heavy Media Separation (HM Cyclone) and the washing circuit is a closed circuit with zero water discharge.
- xv. Transportation: Mode of Washed Coal transportation will be by Rail.
- xvi. The life of Washery is 30 years.
- xvii. There is no R & R involved. There are no PAFs.
- xviii. Cost: Total capital cost of the project is Rs. 321.96 Crores. R&R Cost: Nil. Environmental Management Cost (capital cost Rs 948.38 Lakhs and Operational Cost Rs. 654.60 Lakhs.
- xix. Water body: Bangaru Jhor flows at a distance of 2.5 km and Singhara Jhor flows at a distance of 5 km.
- xx. Approvals: Board's approval obtained on 13.01.2011. Mining plan has been approved on 13.01.2011. Mine closure plan is an integral part of mining plan.
- xxi. Wildlife issues: There are no national Parks, wildlife sanctuary, biosphere reserves found in the 10 km buffer zone.
- xxii. Forestry issues: No forest area involved.**
- xxiii. Green Belt over an area of Approx.3 Ha. Around washery premises. Density of tree plantation 1600 trees/ ha of plants.
- xxiv. There are no court cases/violation pending with the project proponent.
- xxv. Public Hearing was held on 28.04.2015 at Jagannath Kalakendra, at Jagannath Colony, Post-South Balanda, Talcher, District Angul. The issues raised during the public hearing includes Control & mitigation measures of Air/water pollution in Talcher Area; wastewater treatment plant; construction of coal transportation road.; blasting causing crack of houses and dust emission; noise pollution due to drilling and blasting and control measures; ground water depletion by deep bore well; Frequent water sprinkling on roads etc.,

3. The EAC, after detailed deliberations on the proposal in its 42<sup>nd</sup> EAC meeting held on 31<sup>st</sup> August - 1<sup>st</sup> September, 2015 recommended the project for grant of Environmental Clearance. The Ministry of Environment, Forest and Climate Change hereby accords Environmental Clearance to the **Hingula Washery of 10 MTPA in an area of 27 ha; latitude 20° 56' 02" N to 20° 58' 28" N and longitude 85° 02' 52" E to 85° 06' 57" E) of M/s Mahanadi Coalfields Limited District Angul (Odisha)** under the provisions of the Environment Impact Assessment Notification, 2006 and subsequent amendments/circulars thereto subject to the compliance of the following terms & conditions and environmental safeguards mentioned below:

**A. Specific Conditions:**

- i. **Proponent should adopt zero liquid discharge.**
- ii. **Transportation of raw coal transportation to be done through pipe conveyor 3.76 km long and clean coal through silo into railway wagon from the start of the 1<sup>st</sup> day, for which advance action is already in tendering stage.**
- iii. **Detailed note to be provided on utilization of rejects if it is more than 80 % ash content.**
- iv. **Thick green belt 45 m width to be provided around the washery. Plantation should be started from this monsoon.**
- v. **Minimum 20 m. three tier plantation should be developed around the villages too.**
- vi. Waste Water shall be effectively treated and recycled completely either for washery or maintenance of green belt around the plant.
- vii. The assurances given during the Public Hearing and as per the Action Plan developed by the proponent should be implemented
- viii. Three-tier green belt should be developed along the washery boundary and along transfer and loading points and railway siding to mitigate/check dust pollution. A 3-tier avenue plantation should also be developed along vacant areas, near washery, storage yards, loading points and transfer points and along internal roads and main approach roads.
- ix. Hoppers of the coal crushing unit and washery unit shall be fitted with high efficiency bag filters and mist spray water sprinkling system shall be installed and operated effectively at all times of operation to check fugitive emissions from crushing operations, transfer points of closed belt conveyor systems and from transportation roads.
- x. All approach roads shall be black topped and internal roads shall be concreted. The roads shall be regularly cleaned with mechanical sweepers.
- xi. Records of quantum and ash content of raw coal being washed, and clean coal and coal rejects produced from every batch of washing shall be maintained and details thereof uploaded on the company website.
- xii. No groundwater shall be used for the Plant Operations. Any additional water requirement envisaged shall be obtained by recycle/reuse to the maximum extent and from rainwater harvesting measures.
- xiii. Socio-economic and welfare measures for the local communities for the adjoining villages shall be implemented under CSR. Activities under CSR activities to be undertaken for the adjoining villages shall be identified in consultation with the local authorities, the details of status of implementation of CSR and expenditure thereon which should be annually updated on the company website.
- xiv. Heavy metal content in raw coal, and washed coal shall be analysed once in a year and records maintained thereof.
- xv. 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.
- xvi. The commitment made by the Proponent to the issue raised during Public Hearing shall be implemented by the Proponent.
- xvii. Corporate Environment Responsibility:
  - a) The Company shall have a well laid down Environment Policy approved by the Board of Directors.
  - 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.



- 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.
- 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.

## B. General Conditions

- i. No change in mining technology and scope of working shall be made without prior approval of the Ministry of Environment, Forests & Climate Change.
- ii. No change in the calendar plan of production for quantum of mineral coal shall be made.
- iii. Four ambient air quality monitoring stations shall be established in the core zone as well as in the buffer zone for PM<sub>10</sub>, PM<sub>2.5</sub>, SO<sub>2</sub> and NO<sub>x</sub> 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.
- iv. Data on ambient air quality (PM<sub>10</sub>, PM<sub>2.5</sub>, SO<sub>2</sub> and NO<sub>x</sub>) 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 recognised under the EPA rules, 1986 shall be furnished as part of compliance report.
- 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.
- vi. 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 19<sup>th</sup> May 1993 and 31<sup>st</sup> December 1993 or as amended from time to time before discharge. Oil and grease trap shall be installed before discharge of workshop effluents.
- vii. Vehicular emissions shall be kept under control and regularly monitored. Vehicles used for transporting the mineral shall be covered with tarpaulins and optimally loaded.
- viii. Monitoring of environmental quality parameters shall be carried out through establishment of adequate number and type of pollution monitoring and analysis equipment in consultation with the State Pollution Control Board and data got analysed through a laboratory recognised under EPA Rules, 1986.
- ix. 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.
- 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 the company while outsourcing.
- 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.
- xii. 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.



- xiii. 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 & Climate Change at <http://envfor.nic.in>.
- xiv. A copy of the environmental clearance letter shall be marked to concern Panchayat/Zila Parishad, 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.
- xv. A copy of the environmental clearance letter shall be 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.
- xvi. 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 PM<sub>10</sub>, PM<sub>2.5</sub>, SO<sub>2</sub> and NO<sub>x</sub> (ambient) and critical sectoral parameters shall also be displayed at the entrance of the project premises and mine office and in corporate office and on company's website.
- xvii. 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 Office s of CPCB and the SPCB.
- xviii. 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.
- xix. The Environmental statement for each financial year ending 31 March in For -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&CC by e-mail.

4. The proponent shall abide by all the commitments and recommendations made in the EIA/EMP report so also during their presentation to the EAC.

5. The commitment made by the Proponent to the issues raised during Public Hearing shall be implemented by the Proponent.

6. The proponent is required to obtain all necessary clearances/approvals that may be required before the start of the project. The Ministry or any other competent authority may stipulate any further condition for environmental protection. The Ministry or any other competent authority may stipulate any further condition for environmental protection.

7. The Proponent shall setup an Environment Audit cell with responsibility and accountability to ensure implementation of all the EC Conditions.

8. Concealing factual data or submission of false/fabricated data and failure to comply with any of the conditions mentioned above may result in withdrawal of this clearance and attract action under the



provisions of Environment (Protection) Act, 1986.


09. 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 and any other orders passed by the Hon'ble Supreme Court of India/High Courts and any other Court of Law relating to the subject matter. The proponent shall ensure to undertake and provide for the costs incurred for taking up remedial measures in case of soil contamination, contamination of groundwater and surface water, and occupational and other diseases due to the mining operations.

10. Any appeal against this environmental clearance shall lie with the National Green Tribunal, if preferred, within a period of 30 days as prescribed under Section 16 of the National Green Tribunal Act, 2010.

  
(P R Sakhare)  
Scientist C

**Copy to:**

1. The Secretary, Ministry of Coal, Shastri Bhawan, New Delhi.
2. The Secretary, Department of Environment & Forests, Government of Orissa, Secretariat, Bhubaneswar, Orissa.
3. The Chief Conservator of Forests, Regional office (EZ), Ministry of Environment & Forests, A-31, Chandrashekarapur, Bhubaneswar – 751023, Orissa.
4. The Member Secretary, Orissa State Pollution Control Board, Parivesh Bhawan, A/118, Nilkanthanagar, Unit VIII, Bhubaneswar – 751012, Orissa.
5. The Member Secretary, Central Pollution Control Board, CBD-cum-Office Complex, East Arjun Nagar, Delhi -110 032.
6. The Member-Secretary, Central Ground Water Authority, Ministry of Water Resources, Curzon Road Barracks, A-2, W-3 Kasturba Gandhi Marg, New Delhi.
7. The Advisor, Coal India Limited, SCOPE Minar, Core-I, 4t Floor, Vikas Marg, Laxmi nagar, New Delhi.
8. The District Collector, **Angul**, Government of Odisha.
9. Monitoring File    10. Guard File    11. Record File    12. Notice Board.

  
(P R Sakhare)  
Scientist C