

No. J-11015/76/2010-IA.II (M)
Government of India
Ministry of Environment & Forests

Paryavaran Bhawan,
CGO Complex, Lodhi Road,
New Delhi-110003
Dated: 10th June, 2013

To,

The General Manager
M/S Jayaswal Neco Industries
F-8, MIDC Industrial area
Hingana Road
Nagpur-440016

Sub. : Pit head captive wet washery (1.8 MTPA in an area of 10.336 ha) located in Gare Pelma IV/8 Coal Mine of M/s Jayaswal Neco Ltd., Tehsil Garghora (now Tehsil – Tamnar), dist. Raigarh, Chhattisgarh - Environment Clearance –reg.

Sir:

This is with reference to letter no. JNIL/MoEF/03 dated 25.2.2010 with the application for Terms of Reference (TOR) and this Ministry's letter dated 08.04.2010 granting TOR. Reference is also invited to the letter Nos JNIL/ENV/MoEF/Gare/2012 dated 31.08.2012, JNIL/ENV/MoEF/Coalwashery/2013/263 dated 13.03.2013, JNIL/ENV/MoEF/Coalwashery/2013/ 227(A) and JNIL/ENV/ MoEF/ Coalwashery/ 2013/269 dated 15.03.2013 and JNIL/ENV/MoEF/78 Dated 01.03.2013, 21.03.2013 and 15th April, 2013 for environmental clearance on the above-mentioned subject.

2. The Ministry of Environment & Forests has considered the application. It is noted that the proposal is for grant of Environmental Clearance for **Pit head captive wet washery (1.8 MTPA in an area of 10.336 ha) located in Gare Pelma IV/8 Coal Mine of M/s Jayaswal Neco Ltd., Tehsil Garghora dist. Raigarh, Chhattisgarh.** The proponent has informed that:

- i) The proposal is for establishment of a captive coal washery of 1.8 million tonnes per annum (MTPA) capacity of raw coal by wet process and in a total area of 10.336 hectares near village Khamaria, district Raigarh, Chhattisgarh. M/s Jayaswal Neco Industries Limited, to whom a coal block has been allotted.
- ii) The 1.8 MTPA Coal Washery shall be established on 10.336 ha land inside ML area of Gare-Pelma Captive Coal Block IV/8 Captive coal mines of JNIL IV/4 Coal Block M/s Jayaswal Neco Industries Limited.
- iii) The mining capacity of IV/8 block is 1.2 MTPA. The mining capacity of IV/4 block is 0.48 MTPA, expansion to 1.0 MTPA.
- iv) Total ROM coal available with JNIL is 2.2 MTPA. 5500 T/Day ROM with 40 - 45 % Ash will be washed. Washed coal of 1650 T/Day with 28 to 30% ash and S – 0.5% .1650 TPD washed coal will be taken to Steel Plant at Siltara, Raipur (operational). Middling plus Fines 3850 TPD with 45 - 48% ash taken to 600 MW TPP at Hamirpur, Raigarh.

- v) It is a closed circuit washery with no discharge. Water Requirement is 240 kl/day. Source of Water accumulated in mine pits will be used for coal washing. Wastewater shall be treated and reused for coal washing.
- vi) Coal washing shall be operated in closed water circuit. Water after coal washing shall be taken to treatment plant. After separating the coal fines from the water shall be reused for coal washing. No waste water will be discharge from the coal washery premises. Thus Kelo river and Sajara nala will not get polluted.
- vii) Fresh water make to washing circuit 215 m³/day (100% re-circulated). Dust Suppression & Gardening 20 m³/day, Domestic uses is 5 m³/day. The wastewater from the coal washing process will be treated and 100% recycled for coal washing. The domestic wastewater will be treated in septic tanks and disposed in soak pits. Garland drains with sedimentation pond will be provided to desilt the storm water before flowing into stream. Spent oil and lubricants will be collected in drums and sold to CECB / CPCB authorized re-processors. No wastewater will be discharged into natural streams.
- viii) The coal transportation will be by road. JNIL developed dedicated road from Gare IV/4 (Banjikhola) to Milupara (2 km). JNIL developed 2.2 km dedicated road from Gare IV/4 (Bankheta) to Dongamouha 1 JNIL along with Monnet developed dedicated road from Millupara to Hukradipa passing through Gare IV/8 (8.8 km). Thereafter BOOT road is used till Raigarh (approx. 50 km). Coal movement done by 35 T dumpers. Trained drivers used. Greenbelt shall be developed all around the plant boundary. 33% of the land area shall be developed as greenbelt (3.4 ha). The capital cost investment for the environment management has been estimated approximately 150 lakhs. 10% of the capital cost has been earmarked as annual recurring expenses.
- ix) **Public Hearing:** The public hearing for the proposed 1.8 MTPA Coal Washery was held on 8th June 2012. Issues raised were Road accidents during heavy vehicle movement, Employment of tribal girls / ladies of the affected area, Discharge of mine water in Kelo river and Sajara Nala, source of water for coal washery, area under PESA , no diversion of land for 10 years and no Gram Shabha has been conducted, elephant affected area, work proposed under CSR, Plantations,
- x) **Cost of Project:** The total capital cost is Rs. 45.0 Crores. The CSR cost will be Rs. 45 Lacs. There is no R & R Cost. Environmental Management cost would be Rs. 1.50 Crore
- xi) The no. of PAFs would be 8 (Eight land losers).
- xii) Details of transportation of coal will be from surface to siding by Covered Trucks to Coal Washery head and from siding to loading would be by Covered Trucks.
- xiii) The Proponent, vide its letter no. JNIL/ENV/MoEF/Coal Washery/2013/269 dated 15.03.2013 has submitted and undertaking that they will carry out the transportation of coal from the coalmine/washery till Bhupdeopur railway siding by road until the railway siding comes in that area. Once the railway siding is established the entire transportation of coal will be done through railways from the mine head/washery.
- xiv) The Proponent, vide its letter no. stated that the present washery is located within the area of Gare Palma IV/8 coal Block for which the FC has been granted vide MoEF letter no. 8/2007-FC dated 27.02.2009 and Stage –II FC vide letter no. 8-75-2007-FC dated 01.01.2013 for division of 224.22 ha of forest land.
- xv) **Forestry issues:** No forest land involved in the project.
- xvi) **Wild life issues:** There are no National Parks, Wildlife Sanctuary, Biosphere Reserves found in the 15 km buffer zone.
- xvii) **Legal Issues:** The proponent has informed that this is a new project and there are no court cases pending and no violation cases are pending.

3. The proposal was considered in the Expert Appraisal Committee (EAC) (Thermal & Coal Mining) and recommended in its 63rd Expert Appraisal Committee (EAC) 17th -18th December,

2012 for granting Environmental Clearance and appropriate correction in the washery area was made in the 71st Expert Appraisal Committee (EAC) (Thermal & Coal Mining) meeting held during 8th - 9th April, 2013 for granting Environmental Clearance. The Ministry of Environment & Forests has examined the application in accordance with the EIA Notification 2006 and under the provisions thereof, hereby accords environmental clearance for the above-mentioned **Pit head captive wet washery (1.8 MTPA in an area of 10.336 ha) located in Gare Pelma IV/8 Coal Mine of M/s Jayaswal Neco Ltd., Tehsil Garghora (now Tehsil-Tamnar), dist. Raigarh, Chhattisgarh** under the provisions of the Environmental Impact Assessment Notification, 2006 and amendments thereto and Circulars issued thereon and subject to the compliance of the following specific conditions, in addition to the general conditions:

A. Specific conditions:

- i. As large numbers of existing and proposed neighbouring mines and industries in the area, the Cumulative Impact Assessment study of entire coal mining area should be carried out by proponent.
- ii. The entire water of the area is acidic due to presence of Pyrites. People use carbonate to increase alkalinity. Proponent shall take measures to reduce the acid in water.
- iii. Recharging of groundwater is required.
- iv. Schedule-1 Fauna- Peacock, Sloth bear and Elephant reported in area. Proponent should contribute on proportionate basis in Wild Life Conservation Plan prepared by state Govt. for conservation of flora and fauna.
- v. Thick green belt of 50 mt should be provided all around the plant area with native species as watery is polluting the area.
- vi. The coal washery plant and area should be completely covered.
- vii. One season (non-monsoon) primary base-line data on Environment quality (PM10 & PM2.5) should be done.
- viii. All the internal roads within washery should be made of concrete.
- ix. Electrical equipment should be dust proof and properly protected.
- x. Transportation of Coal to Bhupdeopur (60km) by road should be by mechanically covered trucks and later on by rail upto Raipur.
- xi. The transportation of coal from the coalmine/washery till Bhupdeopur railway siding will be by road until the railway siding comes in that area. Once the railway siding is established the entire transportation of coal will be done through railways from the mine head/washery.
- xii. CSR 1% of the cost of project i.e. Rs. 44.50 lakhs for upliftment of surrounding villages be provided by the proponent.
- xiii. Coal washing shall be operated in closed water circuit. Water after coal washing shall be taken to treatment plant. After separating the coal fines from the water shall be reused for coal washing. No waste water will be discharge from the coal washery premises. Thus, Kelo river and Sajara nala will not get polluted.
- xiv. The raw coal, washed coal and coal wastes (rejects) shall be stacked properly at earmarked site(s) within stockyards fitted with wind breakers/shields. Adequate measures shall be taken to ensure that the stored minerals do not catch fire.
- xv. 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.
- xvi. The report titled 'Flora and fauna and conservation plan for endangered species of Gare IV/8 coal B block' approved by the PCCF (wildlife) of Chhattisgarh dated 22.11.2011

states that there is no national park, tiger reserve eco-sensitive zones within 15 km radius. It was informed that this area is neither affected by elephant nor any elephant corridor exists. However, there are occasional presence of elephants and other wild lives.

- xvii. A Wildlife Conservation Plan for conservation and protection of wildlife in the study area has been approved at a cost of Rs 1 crore and shall be implemented by the proponent in consultation with Departments of Forest and Wildlife, Govt. of Chhattisgarh. The WLCP shall comprise of components of habitat improvement and conservation of biodiversity, provision of water holes, and augmenting water bodies, nursery and plantation of species of natural food and fodder found in the natural habitat, salt licks, measures for protection against forest fires and poaching, awareness campaign of villagers in the study area and compensation in case of man-animal conflicts. The status of implementation of the WL Conservation Plan including budgetary provisions of various activities and status of expenditure shall be regularly uploaded on the website of the Forest and Wildlife Departments of Govt. of Chhattisgarh and of the project proponent and the status shall be regularly reported to this Ministry and the MoEF Regional Office, as part of the compliance report.
- xviii. As per the approved plan of the 'Flora and fauna and conservation plan for endangered species of Gare IV/4 coal Block' and recommended by the PCCF (Wild Life), Rs One crore be deposited, at one time, with the Department of Forest and Wildlife, Govt. of Chhattisgarh for implementation of the plan.
- xix. The project authorities shall also participate in a Regional Action Plan of the State Government for conservation of flora and fauna found within the study area, in addition to the above funds shall also contribute financially for implementation of the RWLCP. Habitat development such as grasslands/conservation measures along the migratory route/habitats of elephants found/visiting the area shall form a part of the Regional Action Plan.
- xx. It will be used for growing plants along the fringes of the site roads and reclamation of external dump and backfilled area. The top soil stockpiles will be low height not exceeding 6 m and will be made use for concurrent filling without keeping the topsoil for a long period.
- xxi. The coal transportation will be by road. JNIL developed dedicated road from Gare IV/4 (Banjikhola) to Milupara (2 km). JNIL developed 2.2 km dedicated road from Gare IV/4 (Bankheta) to Dongamouha JNIL along with Monnet developed dedicated road from Millupara to Hukradipa passing through Gare IV/8 (8.8 km). Thereafter BOOT road is used till Raigarh (approx. 50 km). Coal movement done by 35 T dumpers. Trained drivers used.
- xxii. All approach roads shall be black topped and internal roads shall be concreted. The roads shall be regularly cleaned with 8 mechanical sweepers.
- xxiii. Coal rejects with an ash content of 76% or less shall be fully utilised for power generation in linked TPP.
- xxiv. The proponent shall maintain proper records of the ash content of raw (ROM) coal, clean coal, middling and coal rejects along with quantum of raw coal obtained and washed and dispatched every month and the same shall be uploaded on the company website every month.
- xxv. Green belt shall be developed all along the periphery of the site, along the areas such as the washery unit, crushing unit, and stockyard. A 3-tier avenue plantation would be developed along vacant areas, near washery, storage yards, loading points and transfer points and along internal roads and main approach roads and on the 2-km road upto the railway siding and at the siding.
- xxvi. Trucks engaged for mineral transportation outside the washery upto the railway siding covering a distance of 2km shall be optimally loaded and covered with tarpaulin with no

- spillage en route. The trucks shall be properly maintained and emissions shall be below notified limits. Facilities for parking of trucks carrying raw coal from the linked coalmines shall be created within the Unit.
- xxvii. The 16580 TPD wash coal from the washery will be taken to steel plant at Siltara, Raipur. 3850 TPD middling will be taken to 600 MW TPD at Hamirpur, Raigarh.
 - xxviii. All internal roads shall be concreted or black topped and the approach roads and roads used for transportation/nearby roads not owned by the company but used for the project shall be blacked topped. Facilities for parking of trucks carrying raw coal from the linked coalmines shall be created within the Unit.
 - xxix. The roads (internal/approach/and roads used for the project) shall be regularly cleaned with mechanical sweepers and with water sprinklers. A 3-tier avenue plantation using native species shall be developed along the roads.
 - xxx. Hoppers of the coal crushing unit at the crushing shed and washery unit shall be fitted with high efficiency bag filters/Dust extractors 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 belt conveyor systems which shall be closed and from transportation roads.
 - xxxi. Proper housekeeping practices shall be followed and all the raw materials including sludge and waste oil shall be stored separately in designated places only.
 - xxxii. Industrial wastewater (workshop and wastewater from the washery-cum Re-Rolling Unit) shall be properly collected, treated in an ETP so as to conform to the standards prescribed under GSR 422 (E) dated 19th May 1993 and 31st December 1993 or as amended from time to time. Oil and grease trap shall be installed for treatment of workshop effluents. No wastewater shall be discharged from the washery into the drains/natural watercourses. Storm water shall be let out through separate storm water drains and shall be tested for pH, TDS, etc and the water shall be treated to prescribe limits before discharge from the premises.
 - xxxiii. Socio-economic and welfare measures for the local communities for the village Bhelatand and other adjoining villages shall be implemented under CSR and shall be not less than Rs. 1 crore per annum. Details of village-wise activities under CSR and the status of its implementation along with expenditure thereon shall be uploaded on the company website.
 - xxxiv. 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.
 - xxxv. The Washery unit shall be a zero-discharge facility and no wastewater shall be discharged from the washery into the drains/natural watercourses. Recycled water shall be used for development and no additional 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.
 - xxxvi. 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.
 - xxxvii. Heavy metal content in raw coal, and washed coal shall be analysed once in a year and records maintained thereof.

B. General Conditions

- i. No change in process technology and scope of working including quantum of mineral coal washed shall be made without prior approval of the Ministry of Environment and Forests.
- ii. 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 and NO_x. 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, in SPM and RSPM etc. shall be carried out at least one in six months.
- iii. Data on ambient air quality (PM₁₀, PM_{2.5}, SO₂ and NO_x and heavy metals such as Hg, As, Ni, Cr, etc) shall be regularly submitted to the Ministry including its Regional Office at Bhopal 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 EP Rules, 1986 shall be furnished as part of the compliance report.
- iv. 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.
- v. 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 EP Rules, 1986.
- vi. 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 the workers shall be undertaken periodically to observe any contractions due to exposure to dust and to take corrective measures, if needed.
- vii. 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. 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 Regional Office at Bhopal.
- viii. 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>.
- ix. A copy of the environmental clearance letter shall be marked to concerned Panchayat/ Zila Parishad/Municipal Corporation or Urban Local Body/ 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 the company's website.

- x. A copy of the clearance letter shall 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 Centre and Collector's Office/Tehsildar's Office for 30 days.
 - xi. The project proponent shall submit six monthly reports on the status of compliance of the stipulated environmental clearance conditions (both in hard copy and in e-mail) to the respective Regional Office of the MOEF, the respective Zonal offices of CPCB and the SPCB. The compliance status of the stipulated EC 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 the public domain. The monitoring data of environmental quality parameters (air, water, noise and soil) shall also be displayed at the entrance of the project premises and mines office and in corporate office and on the company's website.
 - xii. The Regional Office of this Ministry located at Bhopal 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.
 - xiii. The environmental statement for each financial year ending 31st March in Form-V is mandated to be submitted by the project proponent to 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.
4. The Ministry or any other competent authority may stipulate any further condition for environmental protection.
5. 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.
6. 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 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.

(Dr. Manoranjan Hota)
Director

Copy to:

1. Secretary, Ministry of Coal, New Delhi.
2. Secretary, Department of Environment & Forests, Government of Chhattisgarh, Secretariat, Raipur.
3. Chief Conservator of Forests, Regional office (EZ), Ministry of Environment & Forests, E-2/240 Arera Colony, Bhopal 462016.

4. Chairman, Chhattisgarh State Environment Conservation Board, 1-Tilak Nagar, Shiv Mandir Chowk, Main Road, Avanti Vihar, RAIPUR-Chhattisgarh- 492001.
5. Chairman, Central Pollution Control Board, CBD-cum-Office Complex, East Arjun Nagar, New Delhi -110032.
6. Member-Secretary, Central Ground Water Authority, Ministry of Water Resources, Curzon Road Barracks, A-2, W-3 Kasturba Gandhi Marg, New Delhi.
7. District Collector, Raigarh, Government of Chhattisgarh, New Delhi.
8. Monitoring File 9. Guard File 10. Record File. 11. Notice Board

(Dr. Manoranjan Hota)
Director