## No.1-11015/920/2007-IA.II(M) Government of India Ministry of Environment & Forests

Paryavaran Bhawan, C.G.O.Complex, New Delhi -110510.

Dated: 11th December 2008

M/s Spectrum Coal & Power Ltd., 202, Cyber Heights, Road # 2, Banjara Hills, HYDERABAD - 400033.

Expansion of Coal Washery by wet process (6.5 MTPA to 11 MTPA of raw coal) of M/s Spectrum Coal & Power Ltd., located in village Ratija, Tehsil Katghora, distcrit Korba, Chhattisgarh - Environmental Clearance based on Terms of Reference (TOR) - reg.

Sir.

This has reference to letter dated Nil along with application for Terms of Reference (TOR) and this Ministry's grant of TOR vide letter dated 22.10.2007 and subsequent application dated 30.05.2008 for environmental dearance and letters dated 04.08.2008 and 28.10.2008 on the abovementioned subject. The Ministry of Environment & Forests has considered the application. The proposal is for expansion of the existing linkage-based coal washery (stand-alone) of 6.5 million tonnes per annum (MTPA) capacity of raw coal to 11 MTPA raw coal capacity by wet process at the existing unit located within the leasehold of Dipka Opencast Coalmine of M/s South Easter Coalfields Ltd. (SECL), in district Korba, in a total area of 14.1 ha. There area no National Parks, Wildlife Sanctuary, Biosphere Reserves found in the 10 km buffer zone. Of the project area sub-leased by M/s SECL to M/s Spectrum Coal & Power Ltd., area for plant is 5.49 ha, storage area for coal (raw and clean) is 1.20 ha, storage area for rejects is 0.08 ha, approach roads is 1.20 ha, green belt is 4.0 ha, area for water storage and unutilised area is 1.4 ha. It is planned to install belt conveyors to transport raw coal from the coalmine and clean coal to railway siding located within the leasehold of Dipka mine at a distance of 2.5km from the Plant. Permission to install Belt Conveyor System is under discussion with Dipka Coal mine Project Authority of M/s SECL During the intervening period, the raw and clean (washed) coal would be transported by 20-T trucks. The Washery unit would consist of two processing units. The production of clean coal would expand from the existing 5 MTPA to 8 MTPA. The maximum generation of rejects would be 3 MTPA, which would be fully utilised after further processing and blending with raw coal in an FBC based 50x2 MW TPP which would be commissioned within 3 years and the balance sold to end users. Peak water requirement is 1124 m3/d, which would be met from borewells and by recycling. Public Hearing was conducted on 04.04.2008. Capital cost of the project is Rs. 134.80 crores.

The Ministry of Environment & forests hereby accords environmental clearance for the abovementioned expansion of the coal washery unit from 6.5 million tonnes per annum (MTPA) to 11 MTPA of raw coal under the provisions of the Environmental Impact Assessment Notification, 2006 and subsequent amendments thereto and under Para 2.1.1 of MOEF Circular dated 13.10.2006 and subject to conditions specified below:

## Specific Conditions A

The company shall prepare a Plan for transportation of raw coal/washed coal by rail mode (i) only integrating it with the plan of M/s South Eastern Coalfields Ltd. The internal transport of raw coal and clean coal from the washery shall be by belt conveyors. The Plan shall be in place within 3 years. Until such time, the mineral transportation by road within the leasehold



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- (ii) Coal rejects shall be used in FBC based TPP. Transport of coal rejects for use in FBC is to continue by road.
- (iii) 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 hall be taken to ensure that the stored minerals do not catch fire.
- (iii) Hoppers of the coal crushing unit 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.
- (iv) All internal roads shall be concretised. The roads shall be regularly cleaned with mechanical sweepers. Avenue plantation developed along the roads.
- (v) The company shall obtain prior approval of SGWB/CGWB Regional Office for use of groundwater for the washery operations.
- (vi) Industrial wastewater (workshop and wastewater from the washery) 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 for treatment of workshop effluents.
- (vii) The Washery unit shall be a zero-discharge facility and no wastewater shall be discharged from the washery into the drains/natural water courses. Recycled water shall be used for development and maintenance of green belt and in the Plant Operations.
- (viii) Green belt shall be developed along the areas such as the washery unit, crushing unit, and stockyard.
- (x) Socio-economic and welfare measures for the local communities around the Dipka coalmine housing the washery unit shall be implemented under CSR.
- (xi) Coal waste rejects of about 3 MTPA generated form the washery operations shall be fully utilised after further processing and blending with raw coal in an FBC based 50x2 MW TPP which would be commissioned within 3 years and the balance not usable in the TPP shall be sent to end users.

## B. General Conditions

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- (i) No change in technology and scope of working shall be made without prior approval of the Ministry of Environment and Forests.
- (ii) No change in the calendar plan for washing the quantum of mineral coal and waste produced 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 monitoring SPM, RSPM, SO2, NOx and heavy metals such as Hg, Pb, As, Cr, etc. 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.
- (iv) Fugitive dust emissions (SPM and RSPM and heavy metals such as Hg, Pb, As, Cr, etc) from all the sources shall be controlled regularly monitored and data recorded properly. Water spraying arrangement on roads, wagon loading, dump trucks (loading and unloading) points shall be provided and properly maintained.



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- (v) Periodic monitoring report with data on ambient air quality (SPM, RSPM, SO2, NOx and heavy metals such as Hg, Pb, As, 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
- (vi) Adequate measures shall be taken for control of noise levels below 85 dBA in the work environment. Workers engaged in blasting and drilling operations, operation of HEMM, etc
- (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) Environmental quality shall be regularly monitored and got analysed through an Environmental laboratory established under the Environment (Protection) Act, 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.

  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.
- (x) An 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.
- (xi) The funds earmarked for environmental protection measures shall e 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.
- (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) A copy of the will be marked to concerned Panchayat/ local NGO, if any, from whom any suggestion/representation has been received while processing the proposal.
- (xiv) State Pollution Control Board shall display a copy of the clearance letter at the Regional Office, District Industry Centre and Collector's Office/Tehsildar's Office for 30 days.
- (xv) 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 <a href="http://envfor.nic.in">http://envfor.nic.in</a>.
- The Ministry or any other competent authority may stipulate any further condition for environmental protection.
- Failure to comply with any of the conditions mentioned above may result in withdrawal of this clearance and attract the provisions of the Environment (Protection) Act, 1986.

5. The above conditions will be enforced inter-alia, under the provisions of the Water (Prevention & Control of Pollution) Act, 1974, the Air (Prevention & Control of Pollution) Act, 1981, the Environment (Protection) Act, 1986 and the Public Liability Insurance Act, 1991 along with their amendments and Rules.

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(Dr.T.Chandini) Director Copy to:

Secretary, Ministry of Coal, New Delhi.

2. Secretary, Department of Environment & Forests, Government of Chhattisgarh, Secretariat,

3. Chief Conservator of Forests, Regional office (EZ), Ministry of Environment & Forests, E-2/240 Arear 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

6. Member-Secretary, Central Ground Water Authority, Ministry of Water Resources, Curzon Road Barracks, A-2, W-3 Kasturba Gandhi Marg, New Delhi.

Director (Technical), M/s South Eastern Coalfields Ltd., Bilaspur, Chhattisgarh.

8. District Collector, Korba, Government of Chhattisgarh.

Record File. Guard File 11. Monitoring File 10.



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