No.J-11015/267/2007-IA.II(M)
Government of India
Ministry of Environment & Forests

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

Dated: 31st July 2008

To
M/s Singareni Collieries Company Ltd.,
Kothagudam Collieries – 507 101,
Bhadrachalam Road Railway Station,
Khammam District, A.P.

Ramagundam Opencast-III Expansion Coal Mine Project (4.3 MTPA with a peak production of 5 MTPA) of M/s Singareni Collieries Company Ltd., located in village and Mandal Ramagundam and Kamanpur, District Karimnagar, Andhra Pradesh- environmental clearance – reg.

Sir,

This is with reference to your letter No. CRP/ENV/A/459/190 dated 19.03.2007 for Terms of Reference which was granted vide MOEF letter dated 29.06.2007 and with reference to your application for environmental clearance based on the prescribed Terms of Reference vide letter No. CRP/ENV/A/459/233 dated 29.03.2008 and your subsequent E-Mail dated 22..07.2008 on the above-mentioned subject. The Ministry of Environment & Forests has considered your application. It has been noted that the proposal is for expansion of the existing Ramagundam OC-III Coalmine Project which was granted environmental clearance on 17.02.1998 for production of 2.75 MTPA of coal. The present proposal is for expansion of Ramagundam OC-III to 4.30 MTPA with a peak production of 5 MTPA. The total ML area is 1393.81ha, of which 477.78 ha is agricultural land, 812.58 ha is wasteland, 8 ha is water bodies and 95.45 ha is habitation. No forestland is involved. Of the total lease area, area for excavation is 756.71 319.85 ha is for external OB dumps, 56.78 ha is for infrastructure, 7.66 ha is for roads, 25.38 ha is water storage tank, 5.561 ha is protection bund, 8.01 ha is CHP, safety zone and drainage is 239.19 ha. There are no ecologically sensitive areas such as National Parks, Wildlife Sanctuaries, Tiger Reserves , etc within 15 km of the core zone. The main drainage of the lease is Jallaram Vagu, a tributary of River Godavari, which flows at a distance of 4.8 km from the lease boundary. The existing natural drainage would be modified by construction of a protective bund along the Jalalram Vagu.

The rated capacity of the project is 4.30 MTPA with a peak production of 5 MTPA to be achieved by year 4th year of start of mining operations. Mining is opencast by mechanised method using dragline and shovel-dumper combination with controlled blasting, and involving in-pit crushing and belt conveyor for transport of the coal to the surface. Mineral transportation of coal is by road to existing CHP of 5.5 MTPA capacity. An estimated 3000 TPD of coal would be transported by road using 35-T tippers involving 380 trips and 12,200 TPD of coal by rail. Ultimate working depth o the mine is 280m below ground level (bgl). Present working depth is 150m bgl. Water table in the core zone is in the range of 2.15 – 7.85m bgl during the pre-monsoon and in the range of 0.85 m – 11.40m bgl during post-monsoon period. Clearance from the State Ground Water Department has been obtained on 3.08.2007. Peak water requirement is 2060 m3/d, which will be met from mine pit water. Mine discharge water during lean period is 4700 m3/d and peak mine discharge is 14,650 m3/d, which would be let into the natural water course. An estimated 490.04 Mm3 of OB including 12.98 Mm3 of topsoil will be generated in the balance life of mine; of which about 77% of the OB will be concurrently backfilled from 1st year onwards and the balance 19% would be dumped in one external OB dump of a max. height of 120m in 4 benches of 30m each. The final void would be 371.61 ha of a max. depth of 45m which will be converted into a water reservoir. Life of the mine at a peak production of 5 MTPA is 21 years. Project involves R&R of 2 villages, namely Mangalpally (521), and Peddampet (403) involving 924 PAFs. Public Hearing was held on 15.02.2008. Mining Plan has been approved by Ministry of Coal on 08.04.2008. Capital cost of the project is Rs. 43.12 crores.

2. The Ministry of Environment & Forests hereby accords environmental clearance for the above-mentioned **Ramagundam Opencast-III Coal Mine Project of M/s Singareni Collieries Company Ltd. for production of coal at 4.30 MTPA with a peak production of 5 MTPA rated capacity within a lease area of 1393.81ha** under Section 12 of the Environmental Impact Assessment Notification, 2006 and subsequent amendments thereto and under Para 2.1.1 of MOEF Circular dated 13.10.2006 subject to the compliance of the terms and conditions mentioned below:

A. Specific Conditions

(i) Adequate safety distance/barrier shall be maintained from the drainage within the ML and from the habitations and from ext. OB dumps.

(ii) Topsoil shall be stacked properly with proper slope at earmarked site(s) and shall not be kept active and shall be used for reclamation and development of green belt.

(iii) OB shall be stacked at earmarked external OB dumpsite(s) within ML area and shall be a maximum height of 120m only consisting of 4 benches of 30m each. The ultimate slope of the dump shall not exceed 28°. Backfilling shall begin at the end of 1st year in the decoaled area. Monitoring and 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 Bangalore on an yearly basis.

(iv) Monitoring of the stability of the OB dumps vis-à-vis the Model and its validation and taking appropriate mitigative measures such as construction of gabions, further compaction of OB, use of different particle size to reduce the failures, greater stabilisation through geo-textile material, and plantation including species of grasses in areas in the dumps which are susceptive to slope stability failures.

(v) 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 utilised for watering the mine area, roads, green belt development, etc. The drains shall be regularly desilted and maintained properly.
Garland drains of suitable 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 provided for adequate retention period to allow proper settling of silt material.

(vi) 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.

(vii) Crushers at the existing CHP and that to be constructed shall be operated with high efficiency bag filters, water (mist type) sprinkling system shall be provided to check fugitive emissions from crushing operations, conveyor system, haulage roads, and transfer points.

(viii) Mechanical sweeping of the main haul roads shall be regularly undertaken. The main haul roads and approach roads shall be black topped and have avenue plantation. The road to CHP shall be black topped and avenue plantation developed on both sides.

(ix) Drills shall be wet operated only.

(x) Controlled blasting shall be practiced only during daytime with use of delay detonators. The mitigative measures for control of ground vibrations and to arrest the fly rocks and boulders shall be implemented. Blasting shall be carried out at a minimum safe distance of 100m form habitations.

(xi) Afforestation shall cover a total area of not less than 862.75 ha which includes reclaimed external OB dump (319.85 ha), reclaimed topsoil dump, backfilled area (385.10 ha), along ML boundary, along drains and along main approach roads, major haul roads, near CHP, parking area and service buildings, undisturbed/vacant area covering a total area of 157.80 ha within the lease and in the township 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.

(xiii) A Progressive Mine Closure Plan shall be implemented by reclamation of quarry area of 385.10 ha, which shall be backfilled and O from the proposed Ramagundam OC-V project and afforested 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. The balance final void of 371.61 ha left at the end of mine life being converted into a water reservoir shall be of a max. depth of 35m and shall be gently sloped, and the upper benches of which shall be stabilised and reclaimed with plantation and the reservoir peripherally fenced.

(xiv) The company shall obtain prior approval of CGWA/CGWB Regional Office for use of groundwater if any, for mining operations.

(xv) Regular monitoring of groundwater level and quality shall be carried out by establishing a network of exiting wells and construction of new peizometers. 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 tot eh Central Pollution Control Board quarterly within one month of monitoring.

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

(xvii) Besides carrying out regular periodic health check up of their workers, 10% of the workers identified from workforce engaged in active mining operations shall be subjected to health check up for occupational diseases and hearing impairment, if any, through an agency such as NIOH, Ahmedabad within a period of one year and the results reported to this Ministry and to DGMS.

ETP shall also be provided for workshop and CHP wastewater. Mine discharge water shall be treated to prescribed standards before discharge into any natural water course.

(xix) A sewage treatment plant shall be installed in the combined township to be established for the project.

(xx) For monitoring land use pattern and for post mining land use, a time series of landuse maps, based on satellite imagery (on a 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 Regional office at Bangalorel.

(xxi) A Final Mine Closure Plan along with details of Corpus Fund shall be submitted to the Ministry of Environment & Forests 5 years in advance of final mine closure for approval.

(xxii) R&R for 2 villages, namely Mangalpally (521), and Peddampet (403) involving 924 PAFs. shall be not less than that given in the National R&R Policy and the R&R Package and shall implement the R&R measures including specifically for the BPL and SC/ST communities within the shortest time-frame.

B. 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.

(ii) No change in the calendar plan including excavation, quantum of mineral coal and waste 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 SPM, RPM, 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.

(iv) Fugitive dust emissions (SPM and RSPM) from all the sources shall be controlled regularly monitored and data recorded properly. Water spraying arrangement on haul roads, wagon loading, dump trucks (loading and unloading) points shall be provided and properly maintained.

(v) Data on ambient air quality (SPM, RSPM, SO2 and NOx) shall be regularly submitted to the Ministry including its Regional Office at Bangalore and to the State Pollution Control Board and the Central Pollution Control Board once in six months.

(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 shall be provided with ear plugs/muffs.

(vii) 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.

(viii) Vehicular emissions shall be kept under control and regularly monitored. Vehicles used for transporting the mineral shall be covered with tarpaulins and optimally loaded.

(ix) Environmental laboratory shall be established with adequate number and type of pollution monitoring and analysis equipment in consultation with the State Pollution Control Board.

(x) 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.

(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 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 Bangalore.

(xiii) The Regional Office of this Ministry located at Bangalore 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.

(xiv) 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.

(xv) 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.

(xvi) 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.

3. The Ministry or any other competent authority may stipulate any further condition for environmental protection.

4. 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.

(Dr.T.Chandini)
Director

Copy to:
1. Secretary, Ministry of Coal, Shastri Bhawan, New Delhi.
2. Secretary, Department of Environment & Forests, Government of Andhra Pradesh, Secretariat, Hyderabad.
3. Chief Conservator of Forests, Regional office (SZ), Ministry of Environment & Forests, 4th Floor, F-Wing, Kenriya Sadan Block, Kormangala, Bangalore – 560034.
4. Chairman, Andhra Pradesh State Pollution Control Board, Paryavaran Bhawan, A-3 Industrial Estate, Sanatnagar,Hyderabad – 500038.
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, Karimnagar, Government of Andhra Pradesh.
8. Monitoring File 9. Guard File 10. Record File

(Dr.T.Chandini)
Director