

No.J-11015/304/2007-IA.II(M)
Government of India
Ministry of Environment & Forests

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

Dated: 24th October 2008

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

Sub: Ravindra Khani-6 (RK-6) Incline Underground Coal Mine Expansion Project (0.50 MTPA peak) of M/s Singareni Collieries Company Ltd., located in villages Singapur & Thallapalli (in Mancherial) and Kankur & Ramaraopet in Jaipur Mandal, District Adilabad, Andhra Pradesh- environmental clearance - reg.

Sir,

This is with reference to letter No. CRP/ENV/A/534/176 dated 05.03.2007 for Terms of Reference, which was granted vide MOEF letter dated 25.10.2007 and with reference to application for environmental clearance based on the prescribed Terms of Reference vide letter No. CRP/ENV/A/519/361 dated 27.05.2008 on the above-mentioned subject. The Ministry of Environment & Forests has considered the application. It has been noted that the project is for expansion in production of the existing Ravindra Khani-6 (RK-6) Incline Underground Coal Mine Expansion Project from 0.407 million tonnes per annum (MTPA) to 0.50 MTPA (peak production). Of the total ML area of 306 ha, 275.10 ha is forestland which forms a part of Indaram RF, 1.545 ha is water bodies, and 29.355 ha is SCCL land including infrastructures. Forestry clearance has been obtained on 29.05.2001 for 140 ha and 13.85 ha for surface rights. The ML falls within a Reserve Forest (RF) and is surrounded by a number of RF (Indaram, Raidandi RF and Bellampalli RF) in the buffer zone. River Godavari flows at a distance of 8km from the lease boundary and along with its tributaries forms the main drainage of the area.

Mining is by underground method and is semi-mechanised. Mineral transportation of 1667 TPD of coal from the mine to RKP CHP is by 35-T tippers covering a road length of 9.10 km and to SRP CHP at a distance of 4.80 km and from there by rail. Ultimate working depth of the mine is 280m below ground level (bgl). Water table of the study area is in the range of 2.15-10.90m bgl during the pre-monsoon and in the range of 1.24m - 7.13m bgl during post-monsoon period. Peak water requirement of 2873 m3/d is met from mine pit water. No R&R is involved. Balance life of the mine is 11 years. Public Hearing was held on 12.03.2008. Mining Plan has been approved by Ministry of Coal on 17.09.2007. Capital cost of the project is Rs. 16.99 crores.

2. The Ministry of Environment & Forests hereby accords environmental clearance for the above-mentioned Ravindra Khani-6 (RK-6) Incline Underground Coal Mine Project of M/s Singareni Collieries Company Ltd. for a peak production of coal at 0.50 MTPA within a lease area of 306 ha 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:

CRP PP	
I.W.No.	2153
Date	6/11/08

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6/11/08

General Manager
Srirampur Area
The S.C. Company Ltd.,
Po, Srirampur Colony
Dist: Adilabad-504 303.



A. Specific Conditions

- (i) Mining shall not be carried in forestland for which forestry clearance has not been obtained under the provisions of FC Act, 1980.
- (ii) Sufficient coal pillars shall be left unextracted around the airshaft (within the subsidence influence area) to protect from any damage from subsidence, if any.
- (iii) Solid barriers shall be left below the roads falling within the blocks to avoid any damage to the roads.
- (iv) Depression due to subsidence resulting in water accumulating within the low lying areas shall be filled up or drained out by cutting drains.
- (v) While extracting panels in the lower seam, all water bodies in the subsidence area shall be drained. Dewatering of the old goaves of the upper seam shall be continued as long as the lower seam is worked to prevent accumulation of large water bodies over working area.
- (vi) Regular monitoring of subsidence movement on the surface over and around the working area and impact on natural drainage pattern, water bodies, vegetation, structure, roads, and surroundings should be continued till movement ceases completely. In case of observation of any high rate of subsidence movement, appropriate effective corrective measures should be taken to avoid loss of life and material. Cracks should be effectively plugged with ballast and clayey soil/suitable material.
- (vii) Garland/surface drains (size, gradient and length) around the safety areas such as mine shaft and low lying areas and sump capacity should be designed keeping 50% safety margin over an above the peak sudden rainfall and maximum discharge in the area adjoining the mine sites. Sump capacity should also provided adequate retention period to allow proper settling of silt material. Sufficient number of pumps of adequate capacity shall be deployed to pump out mine water during peak rainfall.
- (viii) Crushers at the CHP should be operated with high efficiency bag filters, water sprinkling system should be provided to check fugitive emissions from crushing operations, conveyor system, haulage roads, transfer points, etc.
- (ix) Drills should be wet operated
- (xi) A progressive afforestation plan shall be prepared and implanted for the undisturbed area and shall include area brought under green belt development, areas along roads, infrastructure, over surface where mining is being done below, along ML boundary an township outside the lease areas, etc, by planting native species in consultation with the local DFO/ Agriculture Department. The density of the trees should be around 2500 plants per ha.
- (xii) Conservation Plan for endangered species found in and around the project area shall be formulated in consultation with the State Forest and Wildlife Departments.
- (xiii) Regular monitoring of groundwater level and quality should be carried out by establishing a network of exiting wells and construction of new peizometers. The monitoring for quantity should 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 should be

General Manager
Srirampur Area
The S.C. Company Ltd.,
Po, Srirampur Colony
Dist: Adilabad-504 303.

submitted to the Ministry of Environment & Forests and to the Central Pollution Control Board quarterly within one month of monitoring.

- (xiv) The Company shall put up artificial groundwater recharge measures for augmentation of groundwater resource. The project authorities should meet water requirement of nearby village(s) in case the village wells go dry due to dewatering of mine.
- (xv) The company shall obtain approval of CGWA/CGWB Regional Office for use of groundwater if any, for mining operations.
- (xvi) Sewage treatment plant should be installed in the existing colony. ETP should also be provided for workshop and CHP wastewater.
- (xvii) For monitoring land use pattern and for post mining land use, a time series of land use 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 Bangalore.
- (xviii) A Final Mine Closure Plan along with details of Corpus Fund should be submitted to the Ministry of Environment & Forests 5 years in advance of final mine closure for approval.

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 monitoring SPM, RPM, SO₂, NO_x, Hg and other heavy metals such as Pb, Cr, As, 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, Hg and other heavy metals) 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 NO_x, Hg and other heavy metals) 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 HPM, 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


General Manager
 Srirampur Area
 The S. C. Company Ltd.,
 P.O. Srirampur Colony
 Dist. Adilabad-504 303.

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 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 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

General Manager
Srirampur Area
The S.C. Company Ltd.,
Po, Srirampur Colony
Dist: Adilabad-504 303.

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, Adilabad, Government of Andhra Pradesh.
8. Monitoring File 9. Guard File 10. Record File


General Manager
 Srirampur Area
 The S.C. Company Ltd.,
 Po. Srirampur Colony
 Dist. Adilabad-504 303.

तार :

Telegram : PARYAVARAN,
NEW DELHI

दूरभाष :

Telephone No. 4360467

टेलिक्स :

Telex : W-68185 DOE IN

Fax : 4360678

भारत सरकार

पर्यावरण एवं वन मंत्रालय

GOVERNMENT OF INDIA

MINISTRY OF ENVIRONMENT & FORESTS

पर्यावरण भवन, सी.जी.ओ. कॉम्प्लेक्स

PARYAVARAN BHAWAN, C.G.O. COMPLEX

लोदी रोड, नई दिल्ली-110003

LODI ROAD, NEW DELHI-110003

Dated 4th Feb., 1994.

No.J-11015/16/88-1A.II(M).

OFFICE MEMORANDUM

Sub: Ravindra Khani - New Tech Undergrond Project of Singareni Collieries Co. Ltd., - Environmental Clearance regarding.

This has reference to Ministry of Coal's letter No. 45011/1/87-CPA dated 25th February, 1991 forwarding Revised Environmental Management Plan and subsequent letter dated 1st October, 1992. The project had earlier been rejected from environmental angle for non-furnishing of information in December, 1988.

The Environmental Management Plan, Supplementary Note and other documents submitted by Ministry of Coal and SCCI in respect of above mentioned project have been examined and this Ministry hereby grants environmental clearance for this project subject to effective implementation of following conditions:-

1. The levels of SPM and other noxious gases within the mine lease hold area should be regularly monitored to conform to the prescribed limits.

2. The quality of effluent discharged into the receiving water body shall conform to the standards prescribed under Notification No. GSR 422 (E) dated 19.5.1993. Adequate Treatment facilities should be installed to prevent water pollution by mine discharge water due to suspended solids, hardness and TDS, Zinc, Iron & Coliforms, as dealt in the EMP.

3. The subsidence control measures as per the EMP and supplementary note should be implemented. The likely subsided area should be restored to the maximum extent. The reclamation of subsided area and subsequent plantation should be carried out.



General Manager

Srirampur Area

The S.C. Company Ltd.

Po. Srirampur Colony

Dist. Adilabad-504303

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4. The CHP, belts and Fan house etc. should be designed to minimise noise level and control measures including development of green belts around potential noise sources, mine-colony interface etc. should be implemented to reduce the noise level below the standards prescribed by competent authority.
5. Regular monitoring of environmental parameters should be done and recorded data furnished to Ministry and its Regional Office once in six months.
6. No change in methodology of working and scope of working should be made without approval of Ministry.
7. The green belt around the mine and associated industrial units and township should be provided as per the EMP. The afforestation scheme should lay special emphasis on mixed culture rather than mono-culture.
8. The project proponent should submit a detailed note on the socio-economic measures taken up in adopted villages in the Buffer Zone. The Company should upgrade the welfare measures in the Buffer Zone of the project.
9. An Environmental Management Cell has to be established to carry out functions relating to environmental management action plans. The head of the cell should directly report to Chief Executive.
10. Adequate fund provision (capital and recurring) should be made for implementation of all safeguard measures. as per the Cost Estimates based on 1992 figures, Rs. 199.68 lac have been provided for EMP measures. The fund not be diverted and should be upgraded along with project cost revisions, if any.
11. The Ministry reserves the right to stipulate any other conditions as may be required in the interest of environmental protection. Failure to comply with environmental stipulations as above, would result in withdrawal of clearance granted.
12. Environmental compliance status report vis-a-vis project progress should be submitted for scrutiny of this Ministry and Regional Office once in six months regularly.

The above conditions would be enforced inter-alia under the Water (Prevention and Control of Pollution) Act, 1974, Air (Prevention and Control of Pollution) Act, 1981, Environment (Protection) Act, 1986.

The Secretary,
Ministry of Coal,
Shastri Bhavan,
New Delhi-110001.

(Dr. N.H. Hosabettu)
Joint Director (S)


(Attn: Shri R.K. Sachdevy Ltd. Adviser).


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Srirampur Area
The S.C. Colony
20, Srirampur Colony
Dist. Adilabad-504 303

-: 3 :-

Copy to:

- ✓ 1. Chairman-cum-Managing Director, The Singareni Collieries Company Ltd. Kothagudem Collieries - 507101, District Khammam, Andhra Pradesh.
2. Chief Conservator of Forests (Central), Regional Office, (South Zone), No. 463, 1st Main III Stage, III Block, Basaveswara Nagar, Bangalore.
3. Andhra Pradesh Pollution Control Board, IInd Floor Huda Complex, Malitriivanam, Ameerpet, Hyderabad-38.
4. Secretary (Environment), Government of Andhra Pradesh, Secretariat Building, Hyderabad - 500020 (A.P.).


General Manager
Srirampur Area
The S.C. Company Ltd.,
Po, Srirampur Colony
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(Dr. N.H. Hosabettu)
Joint Director (S)

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- (viii) Crushers at the CHP should be operated with high efficiency bag filters, water sprinkling system should be provided to check fugitive emissions from crushing operations, conveyor system, haulage roads, transfer points, etc.
- (ix) Drills should be wet operated.
- (x) A progressive afforestation plan shall be prepared and implanted for the undisturbed area and shall include area brought under green belt development, areas along roads, infrastructure, over surface where mining is being done below, along ML boundary and township outside the lease areas, etc, by planting native species in consultation with the local DFO/Agriculture Department. The density of the trees should be around 2500 plants per ha.
- (xi) Conservation Plan for endangered species found in and around the project area shall be formulated in consultation with the State Forest and Wildlife Departments.
- (xii) Regular monitoring of groundwater level and quality should be carried out by establishing a network of existing wells and construction of new piezometers. The monitoring for quantity should 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 should be submitted to the Ministry of Environment & Forests and to the Central Pollution Control Board quarterly within one month of monitoring.


General Manager
Srinampur Area
The S.C. Company Ltd.,
Srinampur Colony
Adilabad-504 303

- ### B. General Conditions

- General Manager
Srirampur Area
The S.C. Company Ltd.,
Po. Srirampur Colony
Dist. Adilabad-504 303.

- (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 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 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.

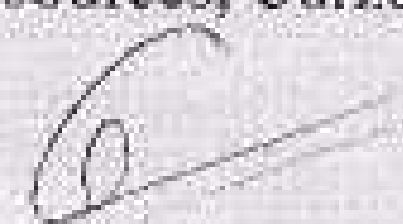
(Dr.T.Chandini)
Director

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.

General Manager
Srirampur Area
The S.C. Company Ltd.,
50, Srirampur Colony
Dist. Adilabad-504303

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, Adilabad, Government of Andhra Pradesh.
8. Monitoring File 9. Guard File 10. Record File




General Manager
 Srirampur Area
 The S.C. Company Ltd.,
 Po, Srirampur Colony
 Dist: Adilabad-504 303.

22/12/07
29/7/08

No.J-11015/212/2007-IA.II(M)
Government of India
Ministry of Environment & Forests

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

Dated: 11th July 2008

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

Sub: Srirampur Opencast-II Coal Mine Project (2.5 MTPA) of M/s Singareni Collieries Company Ltd., located in village Srirampur, Mandal Mancherla, District Adilabad, Andhra Pradesh- environmental clearance - reg.

Sir,

29/7/08
29/7/08

29/7/08

This is with reference to your letter No. CRP/ENV/A/524/845 dated 30.12.2006 with application for Terms of Reference which was granted vide MOEF letter dated 05.10.2007 and with reference to your application for environmental clearance based on the prescribed Terms of Reference vide letter No. CRP/ENV/A/524/222 dated 29.03.2008 and your subsequent letter dated 29.05.2008, 21.06.2008, 23.06.2008 and E-mail dated 27.06.2008 on the above-mentioned subject. The Ministry of Environment & Forests has considered your application. It has been noted that the proposal is for opening a new Srirampur Opencast-II Coal Mine Project in a total lease area of 707.63 ha. Of the lease area, 575.75 ha is agricultural land, 113.93 ha is forestland, 0.56 ha is wasteland, and 12.02 ha is surface water bodies and 5.37 ha is villages. Forestry clearance has been applied for. The project involves R&R of 540 PAFs from two villages - Thallapalli (460) and Gutterdpalli (80), which has two villages/hamlets - Ramarao Pet village (50) and Singapur village (30). Of the total lease area, area for excavation is 372.07 ha, 246.42 ha is for external OB dumps, and 37.98 ha is for safety barrier and drainage along ext. OB dump. There are no National Parks, Wildlife Sanctuary, Biosphere Reserves found within the 10 km buffer zone. RF is found in the core and buffer zone. River Godavari flows at a distance of 0.5 km in the southern boundary. More than half of the lease is below the HFL of the river. In addition, the lease is traversed by a number of streams and nallahs. It is not proposed to modify the existing drainage through construction of an embankment. However, garland drains shall be provided all along the quarry for channelising the surface water run off and a bund would also be constructed around the quarry. Mining will be opencast by mechanised method using shovel-dumper and involves controlled blasting. Rated capacity of the mine is 2.5 million tonnes per annum (MTPA) of coal production. Mineral transportation of 7575.75 TPD of coal is by road. Ultimate working depth of the mine is 230 m below ground level (bgl). Water table in the core zone is in the range of 3.18m - 10.05 m bgl during the pre-monsoon and in the range of 1.31 - 6.90m bgl during post monsoon period. Peak water requirement is 1508 m³/d, which will be met from minepit water. Clearance from the State Ground Water Department has been obtained on 07.03.2007. Average mine discharge is 5000 m³/d. The total OB generation from this project is estimated to be 475.82 Mm³ which includes 7.431 Mm³ of topsoil. About 55 % of the OB would be backfilled and the balance stored in one external OB dumps of a maxim. height of 120m covering an area of 246.42 ha on

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General Manager
SRIRAMPUR



the western side of the mine. Slope stability study has been undertaken which includes modelling. Backfilling will begin from 4th year onwards till end of mine life. A void of 230.26 ha will be left at the end of mine life which will be converted into a water reservoir of a max. depth of 35m. Life of the mine is 25 years. Public Hearing was held on 12.03.2008. Mining Plan has been approved by Ministry of Coal on 29.06.2007. Capital cost of the project is Rs. 8847 lakhs.

2. The Ministry of Environment & Forests hereby accords environmental clearance for the above-mentioned **Srirampur Opencast-II Coal Mine Project of M/s Singareni Collieries Company Ltd.** for production of coal at 2.50 MTPA in a total lease area of 707.63 ha 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) 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.
- (ii) 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 during 4th 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.
- (iii) 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.
- (iv) An Area Drainage Study shall be conducted and protective measures shall be taken to prevent mine inundation.
- (v) 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.
- (vi) Crushers at the existing CHP and that to be constructed 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, and transfer points.
- (vii) Drills shall be wet operated only. Mechanical sweeping of the main haul roads shall be regularly undertaken.


General Manager
Srirampur Area
The S.C. Company Ltd.,
No. Srirampur Colony
Dist. Adilabad-504 303

- (viii) 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.
- (ix) Afforestation shall cover a total area of not less than 510.76 ha which includes reclaimed external OB dump (246.42 ha), reclaimed topsoil dump, backfilled area (141.81 ha), along ML boundary, along drains and along main approach roads, major haul roads, near CHP, parking area and service buildings, undisturbed/vacant area (37.17 ha) within the lease and in the existing SRP OC-I mine (85.36 ha) by planting native species in consultation with the local DFO/Agriculture Department. The density of the trees shall be around 2500 plants per ha.
- (x) A Progressive Mine Closure Plan shall be implemented by reclamation of quarry area of 246.42 ha which shall be backfilled and the balance area left as void of 230.26 ha at the end of mine life. The backfilled area shall be 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 decoaled void being converted into a water reservoir shall be gently sloped, and the upper benches of which shall be stabilised and reclaimed with plantation and the reservoir peripherally fenced.
- (xi) The conditions stipulated by the State Ground Water Department shall be effectively implemented. The company shall obtain prior approval of CGWA/CGWB Regional Office for use of groundwater if any, for mining operations.
- (xii) Regular monitoring of groundwater level and quality shall be carried out by establishing a network of existing 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 to the Central Pollution Control Board quarterly within one month of monitoring.
- (xiii) 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.
- (xiv) 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.
- (xv) 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.
- (xvi) The sewage treatment plant installed in the township shall meet the requirements of the expansion project.


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- (xvi) 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 Bangalore.
- (xvii) 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.
- (xviii) R&R involving 540 PAFs from two villages - Thallapalli (460) and Gutterdpalli (80), which has two villages/hamlets - Ramarao Pet village (50) and Singapur village (30) shall be implemented within a specified time frame and shall be higher than that evolved for the National R&R Policy and provide for at least 13.29 crores. .

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, RSPM, SO₂ and NO_x 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 NO_x) 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.


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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)

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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, Adilabad, Government of Andhra Pradesh.
8. Monitoring File 9. Guard File 10. Record File



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