

**NORTH EASTERN COALFIELDS
COAL INDIA LIMITED
MARGHERITA:ASSAM**

**SUBMISSION OF SIX MONTHLY STATUS REPORT ON ENVIRONMENTAL PROTECTION
MEASURES ADOPTED AT TIKAK OPEN CAST PROJECT**

(PERIOD: JANUARY 2008 TO JUNE 2008)

Ref:-Ministry's letter No. Z-11011/3/88-1A(M)

Dated: 15.09.1995.

Condition	Status Report
i) The production from Tikak OCP must be limited to a maximum of 2 lakh tonnes per annum only in order to facilitate sustainable mining in the area.	: The production from Tikak OCP has been restricted to facilitate sustainable mining in the area. However, we have applied for increase in production from Tikak Colliery from 2.00 LMT to 4.50LMT to the Ministry of Environment and Forest considering the demand of coal. The EMP and EIA of the project is under preparation and will be submitted to the Ministry shortly for obtaining necessary permission.
ii) No O.B or their waste should be dumped on hill slopes. All existing O.B dump-slopes should be flattened to not more than 28 ⁰ to the horizontal at any point .An advance planning is to be made by the management in this regard.	: No overburden is being dumped along the hill slope. All the O.B materials generated due to mining operation are used for backfilling of voids only. Old O.B dump slopes have been flattened to 28 ⁰ to the horizontal wherever possible. All the mining activities are being carried out as per the plan and programmed to have sustainability of the project.
iii) All slope dumping should be restored with growing shrubs/bushes and tree. Species selection for vegetation cover would be local such as to ensure sustainable easy slopes.	: After completion of back filling, the filled up area is properly graded and plantation work is carried out after spreading topsoil over the area. Initially shrubs plantation is done to stabilize the soil and to retain moisture content and after that plantation is done in phase manner. Efforts are also being made for stabilization of slopes by using indigenous shrubs/plants to the extent possible and the results are found satisfactory. Old check dams and all gully plugs have been repaired time to time to retain silt flow along the slope for stability of dumps.
iv) Backfilling of de-coaled area will be so carried out as to cover the exposed coal on the terminal high _wall and provide easy slopes.	: OB materials generated due to mining operation are used for backfilling of voids only.16.66lakh cum. OB have been used for filling of voids during the period. In course of backfilling, care has been taken to dump carbonaceous materials at the centre of the OB void area which is covered with other OB materials from all sides followed by compaction to reduce oxidation and to prevent spontaneous heating. Due care has also been taken to cover exposed coal upto the

terminal high- walls providing easy slopes. An area of about 3.00 Hact. Is kept ready by spreading topsoil for plantation this year.

v) The project authority should adhere to the environmental management plan so that time bound measures and action plan could be implemented. It is suggested that the project authority may also develop a few green belts on the reclaimed area in addition to the EMP measures.

Proper environmental protection measures are being strictly implemented as per the Annual Action Plan in a time bound programmed.

Special emphasis has been given for plantation in the slopes as well as in the dump area to stabilize the dumps. Plantation is a regular process and is being undertaken in every monsoon period. Local bushes and shrubs are also transplanted on the slopes of OB dumps to stabilize the soil and to retain moisture content for plantation. 10,000 Nos. of tree saplings have been planted and 1.0 Hact. of shrubs transplantation has been carried out during that period departmentally.

As regard development of green belt, it is to state that the mining operation is being carried out in hill top region. Green belt is developed in existing places depending on the availability of space.

WATER MANAGEMENT:-

vi) The project authorities should take adequate pollution control measures for maintaining air quality, water quality and noise level within the standards prescribed by the State Pollution Control Board and 6 monthly report should be submitted to the Ministry (Regional Office) and State Pollution Control Board.

Tikak OCP is located at hill-top and such no water is naturally flowing out of the mine working during rain. Whatever, rainwater collected at the pit during rain percolates down to the Underground workings of Baragolai Colliery. The coal stock yard is maintained at plain area parallel to the Tikak Railway siding which is about 5 KM from the OCP area. The water flowing out from the coal dump area during monsoon is canalized through settling tanks and neutralization pits where necessary treatments are carried out by adding suitable quantity of Hydrated Lime and Soda ash to neutralize the acidity of effluent before disposal to the stream. Bamboo barricades are also erected all along the coal dumps and along the siding to reduce flow of coal fines from dump yard. These tanks are cleaned in dry season to make room for sedimentation of coal/silt etc. for the next monsoon season.

The analysis report of treated water is enclosed for ready reference as Annexure-I

AIR MANAGEMENT:-

Regular water spraying are being carried out all along the haul road to stop dust production due to movement of vehicles in the mine area. Regular rainfall in this region also helps in managing suppression of dust production in mining as well as residential area. The detail of air monitoring report carried out at mine and residential area are enclosed for ready reference (Annexure-II)

NOISE MONITORING:-

Machines are maintained and regular checks are carried out to minimize noise production. Controlled blasting with delay detonator and less charge per hole is being done in proper sequence to reduce noise and ground vibration. Noise monitoring conducted in Tikak Weigh Bridge and Residential area and ambient noise level results are within the prescribed limit. The result of the analysis report are enclosed as Annexure-III

vii) A proper mine abandoned plan should be prepared and submitted to the Ministry to clearly indicate the nature of the reclaimed (mine damaged) land along with the post mining land use envisaged within one year.

An environmental management cell should be created for time bound implementation of the EMP measures and other actions as above. 6 monthly environmental status report should sent to the Ministry and Regional office. Adequate fund should be provided for implementation of the measures and should not be diverted for other purpose.

Mine abandoned plan of Tikak Open cast Project had been prepared and submitted to the Regional Office, Shillong for perusal.

: An environmental management cell has been created on NEC incorporating executives of different discipline to plan, monitor and overseeing time bound implementation of EMP measures at different projects including Tikak colliery. Six monthly status report of the colliery is being regularly submitted to Regional office, Shillong for perusal. Required fund for implementation of the environmental control measures has been provided as per the action plan.

The following expenditure has been incurred for implementation of various control measures during the last six months i.e. January 2008 to June'2008.

Sl.No	Items	Quantity	Cost (Rs. in Lakhs)
1	Filling of Voids, grading, leveling of active area, topsoil spreading	16.66 Cu m	52.51
2	Water Spraying at the Haul roads	Approx. 14-16 tanker per day (av.)	12.00
3	Chemical for treatment of effluent		0.60
4	Environmental protection measures such as gully plugging, bamboo fencing, collection of silt/coal particles, cleaning of sedimentation tanks, cleaning of drains, etc.		3.31
5	Tree Plantation	10,000 Nos.	0.00
6	Shrubs transplantation	1.00 Hec.	0.00
		Total	Rs. 68.42

Agent,
Tikak Colliery.