



**OFFICE OF THE  
STATE POLLUTION CONTROL BOARD, ORISSA**  
Parivesh Bhawan, A/118, Nilakantha Nagar, Unit-VIII,  
Bhubaneswar - 751 012

**BY REGD POST**

No. 11268 /

Ind-II-NOC- 5127

Date 08-07-11

**OFFICE MEMORANDUM**

In consideration of the application for obtaining Consent to Establish for **Basundhara (West) Open Cast Project of Mahanadi Coal Fields Limited(Expansion)** the State Pollution Control Board has been pleased to convey its Consent to Establish under section 25 of Water (Prevention & Control of Pollution) Act, 1974 and section 21 of Air (Prevention & Control of Pollution) Act, 1981 for **increase in production of Coal from 2.4 Million Ton/Annum to 7.0 Million Ton/Annum (i.e. capacity as approved in mining plan)Over mine lease hold area of 437.10 Ha at – Basundhara, in the district of Sundargarh with the following conditions.**

**GENERAL CONDITIONS.**

1. This Consent to establish is valid for the ROM, product, method of mining and capacity mentioned in the application form. This order is valid for five years, which means the proponent shall commence mining activities for the proposal within a period of five years from the date of issue of this order. If the proponent fails to commence mining activities for the proposal within five years then a renewal of this consent to establish shall be sought by the proponent.
2. Adequate effluent treatment facilities are to be provided such that the quality of sewage and trade effluent satisfies the standards as prescribed under Environment Protection Rule, 1986 or as prescribed by the Central Pollution Control Board and/or State Pollution Control Board or otherwise stipulated in the special conditions.
3. All emission from the mining activities as well as the ambient air quality and noise shall conform to the standards as laid down under Environment (Protection) Act, 1986 or as prescribed by Central Pollution Control Board/State Pollution Control Board or otherwise stipulated in the special conditions.
4. Appropriate method of disposal of solid waste is to be adopted to avoid environmental pollution.
5. The mine shall comply to the provisions of Environment Protection Act, 1986 and the rules made there under with their amendments from time to time such as the Hazardous Waste (Management & Handling) Rules 1989, Hazardous Chemical Rules, /Manufacture, Storage and Import of Hazardous Chemical Rules, 1989 etc. and amendments there under. The mine shall also comply to the provisions of Public Liability Insurance Act, 1991, if applicable.

6. The mine shall apply for grant of Consent to operate under section 25/26 of Water(Prevention & Control of Pollution)Act, 1974 & Air (Prevention & Control of Pollution)Act, 1981 at least 3 (three) months before the commencement of production and obtain Consent to Operate from this Board.
7. This consent to establish is subject to statutory and other clearances from Govt. of Orissa and/or Govt. of India, as and when applicable.

**SPECIAL CONDITIONS :-**

1. The Proponent has to seek environmental clearance as per EIA notification -2006 and mining activity for the expansion proposal shall commence after obtaining environmental clearance. This consent to establish is subject to grant of environmental clearance by MoEF, Govt. of India.
2. The enhancement of production capacity up to 8.0 MTPA shall be considered after submission of approved mining plan for the proposed production capacity.
3. A bank guarantee commensurate with the production level will be taken by the Board for continuous satisfactory environmental compliance of the mining during the period for which consent to operate is granted as and where required.
4. The mine shall obtain forest clearance under Forest (Conservation) Act, 1980 if there is involvement of forest land in the mining lease area.
5. The mine shall obtain permission for drawl of water from Basundhara river for potable use from Water Resource Deptt., Govt. of Orissa before implementation of this mining project.
6. No change in mining technology and scope of working shall be made without prior approval of the Board.
7. Top soil should be stacked properly with proper slope at earmarked site (s) with adequate measures and shall be used for reclamation and rehabilitation of mined out areas.
8. Concurrent back-filling should be started from the fourth year of operation. Monitoring and management of rehabilitated areas should continue until the vegetation becomes self-sustaining. Compliance status in this regard shall be submitted to the Ministry of Environment & Forests with a copy to the Board on yearly basis.
9. Dimension of the retaining wall at the toe of dumps and OB benches within the mine to check run-off and siltation shall be based on the rainfall data. The detail specification shall be worked out and submitted to the Board within one month.
10. At stockpile and loading plant area, a network of drains shall be constructed at a depth of 1.5 meter below the lowest level on the sites parallel to the stockpile area with interconnected box culverts. The sloping of surface shall be given inward to the stockpiles so that surface water will only infiltrate in to the drain.
11. Surface run-off from OB dump area, mineral stock yard, top soil storage area and rain water to be pumped from quarry shall be routed through adequate settling ponds (designed maximum hourly rain fall basis) to meet prescribed standard of  $100 \text{ mg/l}$  and Oil & Grease-5 mg/l before discharge into natural stream/water source during monsoon.

12. Regular monitoring of ground water level and quality should be carried out by establishing a network of existing wells. The monitoring should be done four times a year in pre-monsoon (April/May), monsoon (August), Post – monsoon (November) and winter (January) seasons. Data thus collected should be submitted to the Board quarterly.
13. Domestic effluent generated from the colony and mines shall be treated in STP so as to meet the prescribed standard such as pH = 6.5-8, SS = 50mg/l, BOD= 30 mg/l & O&G = 5 mg/l and shall be reused for greenbelt development.
14. Wastewater (Workshop ) shall be properly collected, treated in ETP consists of primary settling tank, O&G trap, flash mixer with chemical dosing and secondary settling tank so as to conform the prescribed standard pH = 5.5-9, SS = 50mg/l, O&G = 05 mg/l or as amended from time to time and reused for washing with make-up water.
15. Mine drainage water shall be stored in abandoned mined out pit as proposed. The mine shall explore to reuse it for dust suppression, fire fighting, green belt and vehicle washing. Excess mine drainage water if any discharged to near by surface water bodies shall meet the standard prescribed by the Board i.e. pH =6.5 to 8.0, total SS = 50mg/l, O&G = 05mg/l and other parameters conforming to standards for discharge to inland surface water as prescribed under EP Act, 1986.
16. Rain water harvesting practice shall be followed by utilizing the rain water collected from the roof of the buildings for recharging of ground water within the premises and other large structures as per the concept and practices prescribed by CPCB, New Delhi and details of which is available in the web site.
17. Dust extraction system and dry fog system shall be provided in coal handling plant. Crusher house shall be enclosed. Transfer points shall be provided with dry fog system. Belt conveyor shall be enclosed.
18. Spillage shall be prevented by avoiding overloading.
19. Water sprinkling shall be carried out on unplanted surface of OB dump to control fugitive emission.
20. The mine shall take adequate preventive measures for spontaneous fire in the coal seam as well as stock yard.
21. Drill should be wet operated or with dust extractors and controlled blasting should be practiced.

22. The mine shall provide water or water mixed chemicals for dust suppression at all strategic points such as coal stack yards, loading and unloading points, all transfer points, conveyors etc. to suppress dust fine atomizer nozzles arrangement shall be provided on the coal heaps and on land around the crusher / pulverizes. As far as possible conveyors and transfer points etc. shall be provided with enclosures.
23. Six ambient air quality monitoring stations for 24 hours operation should be established in the core zone as well as in the buffer zone for PM<sub>10</sub>, PM<sub>2.5</sub>, SO<sub>2</sub>, NO<sub>x</sub>, and CO monitoring. Location of the stations should be decided based on the metrological data, topographical features and environmentally and ecologically sensitive targets in consultation with the State Pollution Control Board.
24. Data on ambient air quality (PM<sub>10</sub>, PM<sub>2.5</sub>, SO<sub>2</sub>, NO<sub>x</sub> and CO) shall be regularly submitted to the State Pollution Control Board once in six months.
25. The haul roads and arterial roads shall be made black topped / concrete with avenue plantation.
26. **A green belt of adequate width and density preferably with local species along the periphery of the mine shall be raised so as to provide protection against particulates and noise. It must be ensured that at least 33% of the total land area shall be under permanent green cover. The proponent shall ensure the maintenance of green belt throughout the year and for all time to come. It is advised that they may engage professionals in this field for creation and maintenance of the green belt. An action plan for this purpose shall be prepared and shall be submitted accordingly.**
27. Adequate measures shall be taken for control of noise levels below 85 dB (A) in the work environment.
28. Environmental laboratory should be established with adequate number and type of pollution monitoring and analysis equipment in consultation with the State Pollution Control Board.
29. A separate environmental management cell with suitable qualified personnel should be set up under the control of a Senior Executive, who will report directly to the Head of the organization.
30. All efforts shall be taken to protect the existing water bodies in the surrounding. A definite plan in this regard shall be submitted to the Board within 06 months from the date of issue of this order.

31. The Board may impose further condition or modify the conditions stipulated in this order during installation, and / or at the time of obtaining consent to operate and may revoke this clearance in case the stipulated conditions are not implemented and / or any information suppressed in the application form.
32. 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.

  
**MEMBER SECRETARY**

To,  
The Project Officer,  
Basundhara(West) Open Cast Project  
Of Mahanadi Coal Fields Limited  
At/PO: Basundhara  
Dist: Sundargarh-770076 (Orissa)

Memo No. ....11269...../dtd. 08.07.11

Copy forwarded to:

1. The Secretary Steel & Mines, Govt. of Orissa, Bhubaneswar
2. Collector, Sundargarh
3. Regional Officer, SPC Board, Rourkela
4. Consent Cell
5. DFO, Sundargarh
6. Copy to Guard File / Consent Register

  
**SR. ENV. ENGINEER (N)**