



**STATE ENVIRONMENT IMPACT ASSESSMENT AUTHORITY,
(SEIAA), ORISSA.**

(Constituted vide order No. S.O. 2674 (E) Date 17th Nov. 2008 of Ministry of Environment & Forest, Govt. of India, Under Environment Protection Act, 1986.) Qr. No. 5RF-2/1, Unit-IX, Bhubaneswar-751022
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Ref. No. _____

Dt. _____

SEIAA – 27/11

From

Bhagirathi Behera, IFS
Director, Environment-cum-
Spl. Secretary to Government
& Member Secretary, SEIAA, Odisha.

To

Shri Ram Avtar Jalan
M/s JDL Lime Stone &
Dolomite Mines.
At/Po-Rajgangpur
Sundargarh-770017
Phone – 09437044254, 06624-220619
[E-mail-jdmines@gmail.com](mailto:jdmines@gmail.com)

Sub: Environmental Clearance for production of lime stone 0.0115 MTPA Dolomite 0.0382 MTPA crushing (200 TPD) at village Dharaura Lanjiberna in the district of Sundargarh of M/s JDL Dharaura Mines.

Sir,

This has reference to your letter no. nil dated 20.04.2009 along with application for Terms of Reference (ToR) and subsequent application vide letter no. nil dated 29.07.2011 on the above mentioned subject I am directed to say that the State Environment Impact Assessment Authority, Odisha. have considered the application for the proposal for production of 0.0115 MTPA limestone, 0.0382 MTPA dolomite with crushing plant of capacity 200 TPD by M/s JDL Mines at Dharaura village, Lanjiberna in the district of Sundargarh over mining lease area of 39.42 ha. The mining lease was granted on 21.02.1974 for a period of 20 years which expired on 20.02.1994. The project proponent had applied for RML on dated 16.02.1993 and is under process. Mining plan was approved by IBM vide letter number CAL/SG/Lst & Dolo/MP-409.Dt 06.06.1996. Subsequently, mining scheme has been approved by IBM vide lt. no. MS/MAN/29-ORI/BHU/2009-10 on dated 15.02.10 for the scheme period 2008-09 to 2012-13. Total lease area is non forest land. The surface rights were originally in favour of M/s OCL Rajgangpur and it was leased out to M/s JDL Mines for mining. The method of mine will be opencast manual mining. ToR was issued by SEAC on 11.09.2009 for EIA study; Public hearing was conducted on 07.05.2011. There is no National

Parks/Sanctuaries, Biosphere Reserves, Wildlife Corridors (Tiger/Elephant) present within 10 km radius of the project area. Total water requirement is 16 m³/day. Source of water is nearby perennial Naktijor Nall at a distance of 3.5 km. The consultant M/s Visiontek Consultancy Services Pvt. Ltd. Bhubaneswar made a detail presentation on the proposal on behalf of the project proponent.

Based on the information / documents and clarifications furnished by the proponent and on recommendation of SEAC, Orissa, the State Environment Impact Assessment Authority, Orissa hereby accords Environmental Clearance in favour of the project for a period of 5 (five) years under the provisions of the Environment Impact Assessment Notification, 2006 and 2009 and subsequent amendment thereto under various MoEF, Govt. of India circulars thereunder and subject to the following stipulated conditions.

Stipulated Conditions:-

1. The applicant (Project proponent) will take necessary measures for prevention, control and mitigation of Air Pollution, Water Pollution, Noise Pollution and Land Pollution including solid waste management as mentioned by him in Form-1, Final EIA reports and Environment Management Plan (EMP) in compliance with the prescribed statutory norms and standards.
2. The applicant will take necessary steps for socio-economic development of the people of the area on need based assessment for providing employment, education, health care, drinking water and sanitation, road and communication facilities etc. after a detailed primary socio-economic survey.
3. The applicant will comply to the points, concerns and issues raised by the people during public hearing on 07.05.2011 in accordance with the commitments made by him thereon.
4. The applicant will take statutory clearance /approval /permissions from the concerned authorities in respect of his project as and when required.
5. For post environmental clearance monitoring, the applicant will submit half-yearly compliance report in respect of the stipulated terms and conditions of Environmental Clearance to the State Environmental Impact Assessment Authority (SEIAA), Orissa on 1st June and 1st December of each calendar year.
6. The core zone should be monitored intensively with no. of stations as prescribed by CPCB, Delhi and unit of pollutant level should be expressed as NAAQ of CPCB, Delhi. The detailed methodology adopted for analysis of samples shall be clearly indicated.
7. The proponent shall submit baseline data on flora & fauna and CSR activities already carried out within three months to the SEIAA.
8. Adequate buffer zone shall be maintained between two consecutive mineral bearing deposits.
9. The following shall be implemented viz. (a) dump run-off should be diverted into setting ponds (b) adequate rain water harvesting and ground water recharging facilities should be developed in the core zone; (c) attempt should be made to achieve zero water balance.
10. Maintenance of roads through which transportation of ores are undertaken shall be carried out by the project proponent regularly at its own cost.

11. Fugitive dust generation shall be controlled. Fugitive dust emission shall be regularly monitored at locations of nearest human habitation (including schools and other public amenities located nearest to sources of dust generation as applicable) and records shall be submitted to the SEIAA, Orissa.
12. Mineral handling area shall be provided with adequate number of high efficiency dust extraction system. Loading and unloading areas including all the transfer points should also have efficient dust control arrangements. These should be properly maintained and operated.
13. Transportation of ore shall be done by covering the trucks with tarpaulin or other suitable mechanism so that no spillage of ore/ dust takes place.
14. Rain water harvesting shall be undertaken to recharge the ground water source.
15. Monitoring of ground and surface water quality shall be regularly conducted and records should be maintained and data shall be submitted regularly to the SEIAA, Orissa.
16. A natural seasonal nala passes through the ML area. The mine pit and OB dump are in close proximity to the water body as per surface plan. It raises concern that some of the runoffs are likely to pollute it although there is supposed to be 50m of untouched surface on both the banks. Sufficient and durable measures like protection walls, plantation and garland drains shall be provided to protect the nala.
17. The pit present area 2.34 ha. [237.5(l) X 77.71(b) X 15.8m(d)] is likely to go up to 7.48 ha. To an estimated depth of 36m, i.e., -3 times during next few years. The OB would proportionately go up to >20.000m³ in next 5 (five) years and dump would spread over 4,674m² to a height of 226.3 msl. Their management accordingly has to be stringent with necessary containment of wash offs and stability with vegetative cover.
18. The site specific meteorological data submitted shows most of the air pollutants to remain unaltered at all the 8 AAQ stations. Non-monsoon quarterly meteorological data should have been collected following the latest CPCB guidelines and submitted to SEIAA. The mine should include at least two AAQ stations in the core zone instead of one.
19. Details of 200 TPD crusher unit with pollution control measures like dry fog system and specification of a bag filter must submitted to SEIAA before commencement of operations.
20. The total water consumption (16m³/day) is proposed met from a surface water body Natkti jor about 3.5 km away. Water for dust suppression alone is stated to be 13m³/day, which is essential, permission is pending for it and should be obtained before restart of the mine.
21. The measures proposed to harvest rain water or surface runoffs during monsoon is through a recharge pond. These should be used in dust suppression and plantation.
22. Reclamation and rehabilitation of the mine pit during the next 5 years of operation through a progressive mine closure plan approved by IBM should be strictly implemented. Temporary and half-hearted efforts on the part of mine owners/operators in the region have made the area barren and soil highly degraded. Care should be taken to protect the OB dump and untouched land by vegetating to prevent soil erosion and land degradation. A suitable land management plan may be prepared keeping this aspect in view and submitted to the SEIAA within three months.

23. Under the occupational health check-up through a social organization is welcome. But only 18 workers have been examined so far and their health records said to be under Appendix-I is missing. The limestone and dolomite dusts are fine and highly alkaline and therefore may cause silicosis and pulmonary disorders if proper health care and preventive measures are not taken. So the proponent may undertake at least quarterly health check-up of the mine workers and nearby villagers through a pulmonary specialist hired from outside.
24. The proponent shall ensure that no silt originating due to mining activity is transported in the surface water course. Measures for prevention and control of soil erosion and management of silt shall be undertaken. Protection of dumps against erosion shall be carried out with geo textile matting or other suitable material, and thick plantations of native trees and shrubs shall be carried out at the dump slopes. Dumps shall be protected by retaining walls.
25. Trenches /garland drains shall be constructed at foot of dumps to arrest silt from being carried to water bodies. Adequate number of Check Dams shall be constructed across seasonal/ perennial nallahs (if any) flowing through the ML area and silts be arrested. De-silting at regular intervals shall be carried out.
26. Provision shall be made for the housing of the labourers within the site with all necessary infrastructure and facilities such as fuel for cooking, mobile toilets, mobile STP, safe drinking water, medical health care, crèche etc. The housing may be in the form of temporary structures to be removed after completion of the project.
27. Occupational health and safety measures for the workers including identification of work related health hazards, training on malaria eradication, HIV, and health effects on exposure to mineral dust etc. shall be carried out. The proponent shall engage a full time qualified doctor who is trained in occupational health. Periodic monitoring for exposure to respirable mineral dust on workers shall be conducted and records maintained including health records of the workers. Awareness programme for workers on impact of mining on their health and precautionary measures like use of personal equipments etc. shall be carried out periodically. Review of impact of various health measures undertaken (at interval of five years or less) shall be conducted followed by follow up of action where ever required. Occupational health centre shall be established near the mine site itself.
28. Shelter belt i.e. Wind Break of 15 m width and consisting of at least 5 tiers around lease facing the human habitation, school / agricultural fields etc. (if any in the vicinity), in the safety zone / back- field & reclaimed areas, around voids & roads shall be raised. Green belt development and selection of plant species shall be as per CPCB guidelines. Density of the trees has to be around 2500 plants per hectare. Herbs and shrubs shall also form a part of afforestation programme besides tree plantation. Help & guidance of local DFO may be sought in the matter. Details of year wise afforestation programme including rehabilitation of mined out area shall be submitted to the SEIAA, Orissa within six months.
29. The mining operations shall be restricted to above ground water table and it should not intersect the groundwater table.

30. The top soil shall temporarily be stored at earmarked site (s) only and it should not be kept unutilized for long (not more than 3 years). The top soil shall be used for land reclamation and plantation.
31. The over burden (OB) generated during the mining operation shall be stacked at earmarked dump site(s) only and it should not be kept active for a long period of time and its phase –wise stabilization shall be carried out . Proper terracing of OB dump shall be carried out so that the overall slope shall not exceed 28^o Backfilling shall be done as per approved mining plan .Back-filling to start from 3rd year onwards of the mining operation & the entire quantity of waste generated shall be back filled & liquidated within five years .There shall be no external over-burden dumps after the 6th year of the mining operation. The back filled area should be afforested .Back-filling has to be done in a manner that it is restored to the normal ground level. Monitoring & management of rehabilitated areas should continue till the vegetation is established and become self generative. Compliance status to be reported to the appropriate authorities.
32. The funds earmarked for the environment protection measures shall be judiciously utilized. Under no circumstances this funds shall be diverted for other purposes. Year wise expenditure for this fund should be reported to the SEIAA, Orissa.
33. The critical parameters in the ambient air within the impact zone peak particle velocity at 300m distance or within the nearest habitation, whichever is closer shall be monitored periodically. Further quality of discharged water shall also be monitored [(TDS, DO ,Ph and Total Suspended Solids (TSS)].The monitored data shall be uploaded on the website of the company as well as displayed on a display board at a suitable location near the main gate of the company in public domain. The circular No. J-20012/1/2006-IA.II(M) dated 27.05.2009 issued by Ministry of Environment & Forests, which is available on the website of the ministry www.envfor.nic.in shall also be referred in this regards for its compliance.
34. A final Mine closure plan along with details of Corpus Fund shall be submitted to the SEIAA 5 years in advance of final mine closure for approval.
35. The project proponent shall obtain necessary prior permission of the competent authorities for drawal of requisite quantity of water (surface water and ground water) required for the project.
36. The above mentioned stipulated conditions shall be complied in time bound manner. Failure to comply with any of the conditions mentioned above may result in withdrawal of this environmental clearance and attract action under the provisions of Environmental Protection (EP) Act, 1986.

Member Secretary

Memo No _____/Dt. _____

Copy to

1. Ministry of Environment & Forests, Govt. of India, Paryavaran Bhawan, C.G.O Complex, Lodhi Road, New Delhi for kind information.
2. Principal Secretary, Forests & Environment Dept., Government of Orissa for kind information.

3. Chairman, State Pollution Control Board, Paribesh Bhawan, A/118, Nilakantha Nagar, Unit-8, Bhubaneswar for kind information.
4. Chief Conservator of Forests, Regional Office (EZ), Ministry of Environment & Forests, A-31, Chandrasekharapur, Bhubaneswar for kind information.
5. Chairman, Central Pollution Control Board, CBD-cum-office Complex, East Arjun Nagar, New Delhi-110032 for kind information.
6. Collector & District Magistrate, Sundargarh for kind information and necessary action.
7. Chairman/Member/Member Secretary, SEIAA for kind information.
8. Chairman, SEAC/Secretary, SEAC, Paribesh Bhawan, A/118, Nilakantha Nagar, Unit-VIII, Bhubaneswar for kind information.
9. Guard file for record.

Member Secretary