**Compliance Report on Conditions Issued by MOEF on Periathirukonam Limestone Mines (ML – II) vide Lr. No. J.11015/366/2005-IA-II(M) dated 25.01.06**

| S.No | Conditions | Compliance |
|---|---|---|
| **A** | **Specific Conditions** | |
| (i) | The Project proponent should obtain Prior approval of the Central Ground Water Authority (CGWA) for mining below water table. | Approval from CGWA is obtained. |
| (ii) | Topsoil should be stacked properly with proper slope at ear-marked site(s) with adequate measures and should be used for reclamation and rehabilitation of mined out areas. | Topsoil mined is being used over the backfilled area above which plantations are being developed. |
| (iii) | OB should be stacked at earmarked dumpsite(s) only and should not kept active for long period. Proper terracing of OB dump should be carried out so that the overall slope shall not exceed 28 degree. Backfilling should start from 2nd year onwards. Monitoring and management of rehabilitated areas should continue until the vegetation becomes self-sustaining. Compliance status should be submitted to the Ministry of Environment & Forests on six monthly basis. | OB / Sub grade Limestone is stacked separately. Proper terracing of OB dump is carried out so that the overall slope is not exceeding 28 degree.<br><br>Backfilling of the mined out area is in progress and till date about 2 Ha of the land is being backfilled.<br><br>Monitoring and management of rehabilitated areas will continue until the vegetation becomes self-sustaining.<br><br>Compliance status shall be submitted to the Ministry of Environment & Forests on six monthly basis. |
| (iv) | Catch drains and siltation ponds of appropriate size should be constructed to arrest silt and sediment flows from soil, OB and mineral dumps. The water so collected should be utilized for watering the mine area, roads, green belt development etc. The drains should be regularly desilted and maintained properly. | Garland Drains are formed around the dumps to arrest the silt. All the water collected inside the pit is channelized to the sump. The sump is designed in such a way that safety margin over the previous rainfall data. The rainwater & seepage water collected in the mine sump is |

| | | |
|---|---|---|
| | Garland drain (size, gradient & length) and sump capacity should 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 should also provide adequate retention period to allow proper settling of silt material. Sedimentation pits should be constructed at the corners of the garland drains. | allowed to settle in the sump. Hence the mine sump acts as a settling tank.<br>The water collected inside the pit is used for haul roads/greenbelt development |
| (v) | Dimension of the retaining wall at the toe of dumps and OB benches within the mine to check run-off and siltation should be based on the rain fall data. | Garland drainage to check run off water is formed. |
| (vi) | Drills should be wet operated or with dust extractors. | Wagon drill fitted with water mist system is deployed |
| (vii) | Blasting operation should be carried out only during daytime. Controlled blasting should be practiced. The mitigative measures for control of ground vibrations and to arrest fly rocks and boulders should be implemented. | Blasting is carried out with Milli – Second Delay Detonators to reduce the noise and ground vibrations. Blasting will not be carried out during the night time. |
| (viii) | Crusher should be operated with high efficiency bag filters. Water sprinkling system should be provided to check fugitive emissions from crushing operations, haulage roads, transfer points, etc. | Crusher is situated at the plant site located at 32 Kms away from the mines. The crusher is operated with bag filters to arrest the fugitive dust emissions from crushing operations, haulage roads, transfer points etc., |
| (ix) | Water sprinkling arrangements to control the fugitive dust generation from the haulage roads and to the crusher should be provided. | Water sprinkling on haul roads is done regularly to suppress the dust. |
| (x) | Measures shall be taken for maintenance of vehicles used in mining operations and in transportation of mineral ore. The vehicles should be covered with tarpaulin and should not be | Proper periodical maintenance practice is being followed for equipments and tippers used in mining operations The transportation vehicles are loaded upto the body level and |

| | | |
|---|---|---|
| | overloaded. | covered with tarpaulin during the transport. |
| (xi) | Progressive Mine Closure Plan shall be implemented to backfill and reclaim an area of 14.69 ha. The higher benches of the balance excavated void/mine pit comprising an area of 17.56 ha, which will be converted into a water reservoir, shall be terraced and plantation done to stabilize the slopes. Peripheral fencing shall be done along the excavated area. | The mined out area is backfilled in a phased manner as per the approved mining plan. Till date about 2 ha is backfilled and plantations are developed over that. Backfilling will be carried out as per approved mining plan.<br><br>At the end of mine life, the remaining portion of the mined out area will be converted into a water storage reservoir. Fencing will be around the excavated area |
| (xii) | Plantation should be developed in an area of 24.505 ha. by planting the native species around the ML boundary, OB dumps, roads and undisturbed area etc., in consultation with the local DFO/Agriculture department. The density of the trees should be around 2000 plants per hectare. | Plantation is developed all along the ML boundary and roads. |
| (xiii) | A final mine closure Plan along with details of Corpus Fund should be submitted to the Ministry of Environment & Forests 5 years prior to closure of mine for approval of the ministry. | Not applicable at this stage |
| (xiv) | Consent to operate should be obtained from State Pollution Control Board expanding mining activities. | Consent to Operate obtained from State Pollution Control Board. |
| **B** | **General Conditions** | |
| (i) | No change in technology and scope of working should be made without prior approval of the Ministry of Environment & Forests. | Mechanised method of Mining is followed and there is no change in mining technology. |
| (ii) | No change in the calendar plan including excavation, quantum of limestone, waste / OB dumps should be made. | The quantity of limestone is restricted as per the plan. |

| | | |
|---|---|---|
| (iii) | Conservation measures for protection of flora and fauna in the core & buffer zone should be drawn up in consultation with the local forest department and experts. | The flora & fauna study was conducted and the conservation measures is carried out. |
| (iv) | Ambient air quality-monitoring stations should be established in the core zone as well as buffer zone for SPM and RPM monitoring. Location of the ambient air quality stations should be decided based on the meteorological data, topographical features and environmentally and ecologically sensitive targets and the frequency of monitoring should be undertaken in consultation with the State Pollution Control Board. | Ambient Air quality readings are taken from the stations already established in the core zone and buffer zone as per our REIA/EMP approved by your office. |
| (v) | Data on air quality should be regularly submitted to the Ministry including its Regional Office at Bangalore and the State Pollution Control Board / Central Pollution Control Board once in six months. | The season wise data on ambient air quality collected are submitted to the MoEF, Regional Office at Bangalore and the State Pollution Control Board once in six months |
| (vi) | Adequate measures for control of fugitive emissions should be undertaken such as water spraying arrangements on haul roads, loading and unloading points and transportation of minerals, etc. Fugitive dust emissions from all sources should be regularly monitored and data recorded properly. | Drills are operated with water mist system for dust suppression.<br><br>Water sprinkling is being done on haul roads regularly. Dust emission is monitored every fortnightly and data maintained.<br><br>Vehicles carrying Limestone were covered with tarpaulin to prevent the dust from being airborne. |
| (vii) | Adequate measures should be taken for control of noise levels below 85 dBA in the work environment. Workers engaged in blasting and drilling operations, | Noise level is maintained well below 85 dBA. TNPCB monitoring periodically. Periodical monitoring is carried out by TNPCB on |

| | | |
|---|---|---|
| | operations of HEMM etc., should be provided with ear plugs/muffs. | yearly basis. Persons are provided with PPE. |
| (viii) | Industrial waste water (workshop and wastewater from the mine) should 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. Oil and grease trap should be installed before discharge of effluents from the Workshop. | The workshop water is properly collected in the up flow filters before discharge, in order to trap the oil and grease in the effluent. The water is then used for afforestation purposes. |
| (ix) | Personnel working in dusty areas should wear protective respiratory devices and they should also be provided with adequate training and information on safety and health aspects.<br>Occupational health surveillance programme of the workers should be undertaken periodically and corrective measures taken, if required. | All our mine employees are provided with protective equipments such as dust mask, earplugs, shoes, helmets etc.<br>Periodical Medical Examination is done for all our Mine employees regularly.<br><br>Training on Safety and Health aspects is given at regular intervals for all our Mine Employees as per Mines Vocational training Rules 1966. |
| (x) | The funds earmarked for environmental protection measures should be kept in separate account and not diverted for other purpose. Year wise expenditure should be reported to the Ministry of Environment & Forests. | The fund earmarked from the Company will be spent for the Environmental Protection measures only. |
| (xi) | The project authorities should inform to the Regional Office located at Bangalore regarding date of financial closures and final approval of the project by the concerned authorities and the date of start of land development work. | The final approval of the project was informed to the MoEF, Regional Office at Bangalore.<br><br>The fund required for the project was managed from the resources internally from the company. Hence the date of Financial Closure is not |

| | | |
|---|---|---|
| | | applicable. |
| (xii) | The Regional Office of this Ministry located at Bangalore shall monitor compliance of the stipulated environmental conditions. The project authorities should extend full co-operation to the officer(s) of the Regional Office by furnishing the requisite data/ information/monitoring reports. | – |
| (xiii) | A copy of the clearance letter should be marked to concerned Panchayat/local NGO, if any, from whom any suggestion/representation has been received while processing the proposal. | A copy of the clearance letter was given to Panchayat as advised. |
| (xiv) | The State Pollution Control Board should display a copy of the clearance letter at the Regional office, District Industry Centre and the Collector's/Tahsildar's office for 30 days. | – |
| (xv) | The Project authorities should 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 7 days of issuance 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 web site of the Ministry of Environment & Forests at http://envfor.nic.in. | The Advertisement was given in two local newspapers as advised by you and the copy of the same was submitted to your Regional office. |