

**COMPLIANCE TO ENVIRONMENT CLEARANACE CONDITIONS**  
**( Kasarsada Bauxite Mines Environment clearance No J-11015/247/2005-IA-II (M)**  
**Dt. 01/03/2007 )**

S.NO	CONDITIONS :	PRESENT COMPLIANCE STATUS
	<b>A. SPECIFIC CONDITIONS</b>	
1	Top soil shall be stacked properly with proper slope and with adequate safeguards and shall be backfilled for reclamation and rehabilitation of mined out area.	Mine plateau top does not have any top soil. The top soil stacked during mine development is rehandled and used for mine restoration. There is no top soil on the mine plateau at present.
2	Overburden shall be stacked at earmarked dump site(s) only and shall not be active for long period. The maximum height of dump shall not exceed 30m; each stage shall preferably be 10m and over all slope of the dump shall not exceed 28 degree. The mine pit area shall be reclaimed by back filling by back filling O.B in a phased manner. The O.B dump shall be scientifically vegetated with suitable native species to prevent erosion and surface run off.	Overburden generated during development stage has been back filled into the mind out pits for reclamation. There will be no overburden dumps created in future.  During past six months there was no mining activity carried out for want of forest clearance.
3	Garland drains shall be constructed to arrest silt and sediment flows from soil, and mineral dumps. The water so collected shall be utilized for watering the mine area, roads, green belt development etc. The drains shall be regularly desilted particularly after monsoon and maintained properly. Garland drain (size, gradient and length) shall be constructed for both mine pit and for waste dump.	The drains have been developed to channelise the run-off water to silt check dams.
4	Drilling and blasting shall be using extractors/wet drilling.	During the past six months there was no mining activity carried out for want of forest clearance.
5	Plantation shall be raised in an area of 92.6 ha including green belt of adequate width by planting the native species around the ML area, roads, OB dump sites etc. in consultation with local DFO/Agriculture Department. The density of the trees shall be around 2000 plants per ha.	Scientific plantation activities have been carried out with the help of reputed forestry experts & local forest department on the mined out areas. The indigenous species are being planted.

6	The project authority shall implement suitable conservation measures to augment ground water resources in the area in consultation with the Regional Director, central Ground Water Board.	Water harvesting ponds are developed in the mined out areas. Establishing a network of existing wells for water level is in progress.
7	Regular monitoring of ground water level and quality shall be carried out by establishing a network of existing wells and constructing new piezometers during the mining operation.	The ground water quality is monitored on quarterly basis. The mining is carried out to a depth of 7 to 10 mts from the surface. There is no interaction with the ground water and hence there is no disturbance to the ground water table.
8	Prior permission from the competent authority shall be obtained for drawal of ground water, if any.	There will be no fresh drawl of water from the ground source.
9	Vehicular emission shall be kept under control and regularly monitored; Measures shall be taken for maintenance of vehicle used in mining operations and in transportation of minerals. The vehicle shall be covered with tarpaulin and shall not be overloaded	There is a system to monitor vehicular emission and monitoring has been carried out periodically. All the vehicle carrying mineral are covered with tarpaulin covers and loading is carried out as per the permissible limits. For last six months there is no mining activity carried out in the mines.
10	A Final Mine Closure plan, along with the details of the Corpus fund, shall be submitted to the ministry of Environment and Forests 5 years in advance of final mine closure in advance.	The progressive mine closure plan is approved by IBM The final closure plan will be submitted 5 years in advance.
11	The Company shall limit production to 0.25 million TPA of bauxite and shall not operate with 0.45 million TPA till the IBM has granted approval.	There is no production for last six months. The mines is stopped for want of forest clearance.
	<b>B. GENERAL CONDITIONS</b>	
1	No change in mining technology and scope of working shall be made without prior approval of the Ministry of Environment & Forests.	There is no change in the mining technology and in the scope of working.
2	No change in the calendar plan including excavation, quantum of minerals bauxite and waste shall be made.	There is no production for last six months. The mines is stopped for want of forest clearance.
3	Conservation measure for protection of flora and fauna in the core & buffer zone shall be drawn up in consultation with the local forest and wildlife department.	The core area flora is protected and the fresh plantation is carried out scientifically. The mining activities are restricted to daylight working only.

4	Four ambient air quality-monitoring stations shall be established in the core zone as well as in the buffer zone for RPM,SPM,SO <sub>2</sub> ,Nox,	Ambient air quality monitoring station has been established in the core zone as well as buffer zone as per requirement.
5	Data on the ambient air quality (RPM,SPM,SO <sub>2</sub> , Nox) should be regularly submitted to the Ministry including its Regional offices located at Bangalore and State Pollution Control Board / Central Pollution Control Board once in six months.	The air quality monitoring is carried out as per schedule.
6	Fugitive dust emission from all the sources shall be controlled regularly water spraying arrangement on haul roads, loading and unloading and at transfer points shall be provided and properly maintained.	For last six months there is no mining activity carried out for want of forest clearance. Water tankers are used for watering the plants.
7	Measures shall be taken for control of noise level below 85 dBA in the work environment. Workers engaged in operations of HEMM etc shall be provided with ear plugs/muffs.	All the workers use ear plugs/ muffs during HEMM operation.
8	Industrial waste water (workshop and waste water 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 .	There is no industrial waste water as no processing is carried out.
9	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.	All the workers use dust mask during mining operation & training has been imparted regarding safety and health aspect to all the workers.
10	Occupational health surveillance program of the workers shall be undertaken periodically to observe any contractions due to exposure to dust and take corrective measures, if needed	The health surveillance is carried out once in a year for all employees and there is no case of any occupational health hazard.
11	A separate environmental management cell with suitable qualified personnel shall be setup under the control of a Senior Executive, who will report directly to the Head of the organization.	A qualified person has been employed at the unit level. A full fledged Environment cell operates at the corporate level.
12	The funds earmarked for Environment protection shall be kept in separate account and should not be diverted for any other purpose.	A budget is allocated every year for environment protection and accounting is done separately.

