

ADITYA BIRLA



UTKAL ALUMINA

UAIL /ENV/2013-14/63

23rd November 2013

Director (S)
MoEF, Govt. of India
Eastern Regional Office
A/3, Chandrasekhar
Bhubaneswar 751023.

Subject: Six monthly compliance status of conditions imposed in Environment Clearance for 8.5 MTPA Bauxite mines, 1 MTPA Refinery & 50 MW Co-Generation Power Plant and Expansion of Alumina Refinery (1 MPTA to 3 MTPA) along with Co-Generation Power Plant (50 MW to 90 MW).

Dear Sir,

We are enclosing herewith six monthly compliance status of the conditions imposed in the Environmental Clearance for the period 1st April' 2013 to 30th September' 2013 with respect to our following projects.

1. 1.0 MTPA Refinery & 50 MW Co- generation power plant vide Ministry's letter no. J-11011/76/94-IA.II (I) dated 27.09.95 & Expansion of Alumina Refinery (1 to 3 MTPA) and Co- Generation Power Plant (50MW to 90 MW) vide Ministry's letter no. J-11011/753/2007-IA II (I) dated 29.01.2008.
2. 8.5 MTPA Bauxite mines vide Ministry's letter no. J-11015/650/2007-IA.II(M) dated 19.02.09.

This is for your kind information please.

Thanking you,
Yours faithfully,

For Utkal Alumina International Ltd.

(M. RAMESH KUMAR)
SR. VP (HR, ADMN & CSR)

Encl: As above.

CC: Member Secretary, OSPCB, Bhubaneswar
CC: Regional Office, CPCB, Kolkata
CC: Regional Officer, OSPCB, Rayagada

Received
26/11/13



Recd.
26.11.13
PS to APCCF (Central)
GOI, M/o Envt. & Forests
Eastern Regional Office
Bhubaneswar-751023

UTKAL ALUMINA INTERNATIONAL LIMITED

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**COMPLIANCE STATUS OF CONDITIONS IMPOSED IN ENVIRONMENTAL CLEARANCE FOR
8.5 MTPA BAUXITE MINING VIDE LETTER NO J-11015/650/2007-IA.II (M), DTD.19.02.09.
PROJECT NAME: UTKAL ALUMINA INTERNATIONAL LIMITED.
Period: From 1st April, 2013 to 30th September, 2013.**

Sl. No.	Imposed Condition	Compliance Status
Specific Condition		
i	All the conditions stipulated by the State Pollution Control Board, Orissa in their consent to establish shall be effectively implemented.	All the conditions stipulated by the State Pollution Control Board, Orissa are being effectively implemented.
ii	The project proponent shall effectively address the concerns raised by the locals in the public hearing as well as during consideration of the project while implementing the project.	All the concerns raised in the public hearing are being implemented such as:- a) Health care by appointing doctors, paramedical staff with Medical Health Unit b) Supply of drinking water by repairing and constructing tube wells, Promoting education by constructing new school building and renovation of old school building, c) Improving the livelihood by employing local people directly/ indirectly d) Improvement in infrastructures like Devt. & repair of village roads, irrigation channels, bridges/culverts, avenue plantations etc.
iii	The project proponent shall develop fodder plots in the non-mineralized area in lieu of use of grazing land.	Bauxite Mining and reclamation of the mined out will be concurrently carried out from 4th year onwards followed by tree plantation. Further, a portion of the mined out area will be developed as fodder plots at the mine closure stage.
iv	The mining operations shall be restricted to above ground water table and it should not intersect groundwater table. In case of working below ground water table, prior approval of the Ministry of Environment and Forests and the Central Ground Water Authority shall be obtained, for which a detailed hydro-geological study shall be carried out.	The surface level of ML area is 990-1094m AMSL and the ultimate depth of the proposed mine will be within 960-1054m AMSL i.e. 30-40m BGL and ground water table is detected at 100-150m BGL. Therefore, for the life of the mine, there is no probability of any GW Intersection or exploitation of GW thereby.
v	The project proponent shall ensure that no natural watercourse and/or water resources are obstructed due to any mining operations. Adequate measures shall be taken while diverting seasonal channels emanating from the mine lease, during the course of mining operation.	Adequate measures are being taken at the mining areas such as drainage system to catch precipitated water with adequate no. of check dams. Retaining walls with gully plugs are developed to restrict the flow of silts/sediments. With these arrangements it has been ensured that no natural water course and/or water resources are obstructed due to mining operation.
vi	The project proponent shall take adequate environmental safeguard measures for control of rolling down of silt and sediments and protection	In addition to as stated in Sl. No. 5, more check dams/siltation ponds will be constructed during the course of running of the mines.

	of the catchment area of upper Indravati Reservoir during the course of mining operation.	<ol style="list-style-type: none"> 1. Details of Check Dams and garland drains. Refer annexure-I 2. All the protective structures are made up of hard Khondallite/laterite & cement punned over its surface & walls. 3. Encompassed drainage area controlled by these structures. <p>The garland drains & Check dams of above dimensions are adequate to catch the run-offs & hold the siltation within the stipulated norms of surface water run-off discharge. The test reports at the outlet of the check dams are being carried out & the TSS levels are always within 100 mg/l. After this the water confluence with the nearby seasonal nallah & ultimately to River Indrāvati after moving a distance of 7 to 8 Kms & will have hardly any bearing on the water quality of Indrāvati.</p>
vii	A 3 km stretch on the upstream and 3 Km in the downstream of the river passing through the project area should be taken up by the project authorities for plantation to arrest river bank erosion and sediment flow into the river.	To arrest bank erosion and sediment flow into the nallah/river, plantation is being carried out since 2005 over the hill slopes and will be continued in the future also. As on date, around 4, 24,000 nos. of saplings have been planted in an area of 165 ha with survival rate 70% in and around the ML area.
viii	The top soil shall temporarily be stored at earmarked site(s) only and it should not be kept unutilized for long. The topsoil shall be used for land reclamation and plantation.	<p>Top soil layer over the laterite mantle is very thin. We are maintaining the top soil storage yard within the mining lease area, which will be utilized for afforestation at the mined out pit during mine reclamation period.</p> <p>Height: - 7.00 meter.</p> <p>Area: - 0.77 Hectare.</p> <p>During 2013-14, We have utilized 1000 Mt (approx.) quantity of top soil towards development of the green belt at 15 meter - Safety zone, as a result 3000 Nos. of tree planted.</p>
ix	The over burden (OB) generated during the initial years of the mining operation shall be temporarily stacked at the earmarked dump site(s) only for backfilling. Backfilling shall start from the 4 th year onwards of the mining operation and the entire quantity of the waste to be generated shall be backfilled. There shall be no external over burden dumps after the 8 th year of the mining operation. The entire backfilled area shall be afforested. Monitoring and management of rehabilitated areas should continue until the vegetation becomes self-sustaining. Compliance status shall be submitted to the Ministry of Environment & Forests and its Regional Office located at Bhubaneswar on six monthly basis.	<p>The OB waste is being stacked at ear marked site and the same will be continued up to the initial three years and used after 4th year onwards as back filling material in the voids of mined out area followed by plantation. Monitoring and management of rehabilitated areas will be continued until the vegetation become self-sustaining. Compliance status will be submitted to the Ministry of Environment & Forests and its Regional Office located at Bhubaneswar on six monthly basis.</p> <p>At present the dimensions of the present dump yard is as follows:-</p> <p>Height:-7mts</p> <p>Area: - 3.50Hectare.</p> <p>Procedure :- Retreat method</p>

x	<p>Catch drains and siltation ponds of appropriate size shall be constructed around the mine working, mineral and temporary OB dumps to prevent run off of water and flow of sediments directly into the Kandabindhya Nallah, the San River, the Indravati River and other water bodies. 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 the monsoon, and maintained properly.</p> <p>Garland drains, settling tanks and check dams of appropriate size, gradient and length shall be constructed around the mine pit, topsoil dump, temporary over burden dumps and mineral dumps to prevent run off of water and flow of sediments directly into the Kandabindhya Nallah, the San River, the Indravati River and other water bodies and sump capacity shall be designed keeping 50% safety margin over and above peak sudden rainfall (based on 50 years data) and maximum discharge in the area adjoining the mine site. Sump capacity shall also provide adequate retention period to allow proper settling of silt material. Sedimentation pits shall be constructed at the corners of the garland drains and desilted at regular intervals.</p>	<p>In addition to as stated in Sl. No. 5 & 6, catch drains and garland drains are constructed around the quarry, ore handling area during initial operational period of the mines. However, about 40 numbers of check dams were already constructed on the plateau top to check any sediment flow.</p> <p>At present the dimensions of the garland drains & siltation ponds which are developed around the temporary OB dump yard, mineral storage yard are as follows:-</p> <ol style="list-style-type: none"> 1. Length - 290mts 2. Width - 2.8mts 3. Depth - 1mts 4. Gradient - 1:75
xi	<p>Dimension of the retaining wall at the toe of temporary OB dump(s) and the over burden benches within the mine to check run-off and siltation shall be based on the rain fall data</p>	<p>Retaining walls are constructed around the toe of temporary OB dump yard and the over burden benches within the mine to check run-off and siltation. At present the dimensions of the retaining walls are as follows:-</p> <ol style="list-style-type: none"> 1. Height:- 1mts 2. Width :- 0.8mts <p>All the retaining walls are made up of hard Khondalite/laterite & cement punned over its surface & walls.</p>
xii	<p>Plantation shall be raised in an area of 680ha including a 7.5m wide green belt in the safety zone around the mining lease, backfilled and reclaimed area, around void, roads etc. by planting the native species in consultation with the local DFO/Agriculture Department. The density of the trees should be around 2500 plants per ha.</p>	<p>Plantation is being carried since 2005-06 and as on date an area of 164.0 ha. (Inside ML area- 49.05 ha. & outside ML area- 114.95 ha) has been afforested by planting around 4, 24,000 saplings in consultation with DFO, Rayagada with 70% survival rate. Plantation activities will be continued in coming years also.</p> <p>Plantation program Chart 2013-14 :- 3000 No's already Planted 2014-15 to 2016-17 :- 3750 per year</p>
xiii	<p>The void left unfilled in an area of 250ha shall be converted into the water body. The higher benches of the excavated void/mine pit shall be terraced and plantation done to stabilize the slopes. The slopes of higher benches shall be</p>	<p>The void to be left unfilled after exhaust of ore in an area of 250ha, which will be converted into water body. The higher benches of the excavated void pit will be terraced / planted with Trees in consultation with the local</p>

	made gentler for easy accessibility by the local people to use the water body. Peripheral fencing shall be carried out all along the excavated area.	DFO/Agriculture Department to stabilize the slopes. Provision will be made for easy accessibility by the local people to use the water body. Peripheral fencing shall be carried out all along the excavated area in due course incase required.																		
xiv	Regular water sprinkling shall be carried out in critical areas prone to air pollution and having high levels of SPM and RSPM such as around crushing and screening plant, loading and unloading point and all transfer points. Extensive water sprinkling shall be carried out on haul roads. It shall be ensured that the Ambient Air Quality parameters conform to the norms prescribed by the Central Pollution Control Board in this regard.	<ul style="list-style-type: none"> ❖ Provision is made to deploy 4 nos. of 10 KL capacity tankers to spray water at dust generating points such as haul roads, loading & unloading areas and material transfer points. Commissioning of dry fog system at crushing unit is underway. Presently regular water sprinkling is being carried out by deploying two dedicated water tankers. ❖ Regular ambient air quality monitoring is being done in six locations i.e. Mining Pit, Near Crusher, Near Belt Conveyor-4, Near Weigh Bridge, Near Dump Yard, and Near Office. The result of the monitored data shows that: <table border="1" style="margin-left: 40px;"> <thead> <tr> <th>Parameter</th> <th>Max.</th> <th>Min.</th> </tr> </thead> <tbody> <tr> <td>PM10 (µg/m3)</td> <td>48.62</td> <td>29.82</td> </tr> <tr> <td>PM 2.5 (µg/m3)</td> <td>28.4</td> <td>18.11</td> </tr> <tr> <td>SO2 (µg/m3)</td> <td>4.53</td> <td>3.68</td> </tr> <tr> <td>NOx (µg/m3)</td> <td>11.86</td> <td>9.89</td> </tr> <tr> <td>CO (mg/m3)</td> <td>0.16</td> <td>0.1</td> </tr> </tbody> </table> <p>This is below the prescribed limit. The result of monitored data. For the period of April to June is enclosed in ANNEXURE – II.</p>	Parameter	Max.	Min.	PM10 (µg/m3)	48.62	29.82	PM 2.5 (µg/m3)	28.4	18.11	SO2 (µg/m3)	4.53	3.68	NOx (µg/m3)	11.86	9.89	CO (mg/m3)	0.16	0.1
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xv	Regular monitoring of the flow rate of the springs and perennial nallahs flowing in and around the mine lease shall be carried out and records maintained.	The flow rate of the small perennial nallah, which is flowing near the Baphlimali hill lock close to the lease boundary, is being monitored regularly and the records are maintained. However the readings of the flow rate are mentioned below:- 1. Paikupakhala Nala :- 1050 m3/hr 2. Near Dandabad Nala :- 6623 m3/hr 3. Chandragiri Nala :- 4410 m3/hr 4. Mishripada :- 1188 m3/hr																		
xvi	Regular monitoring of water quality upstream and downstream of the Kandabindha Nallah shall be carried out and record of monitored data should be maintained and submitted to the Ministry of Environment and Forests, its Regional Office, Bhubneswar, the Central Groundwater Authority, the Regional Director, Central Ground Water Board, the State Pollution Control Board and the Central Pollution Control Board.	The same is being carried out and recorded. The results of surface water quality are enclosed in Annexure-III . The same is also being submitted to the Central Groundwater Authority, the Regional Director, Central Ground Water Board, the State Pollution Control Board and the Central Pollution Control Board.																		
xvii	The project authority shall implement suitable	A proposal has been submitted to Member																		

	conservation measures to augment ground water resources in the area in consultation with the Regional Director, Central Ground Water Board.	Secretary, Central Ground Water authority New Delhi through Regional Director Central Ground Water Board, Bhubaneswar vide their letter no. 5-22/SER/CGWA/2011 – 1150, dated. 19.08.2011. The same will be implemented after approval from the concerned authority. Rainwater harvesting proposition are as follows:- <ol style="list-style-type: none"> 1. Preservation of storm water within mining lease area by erecting structures at the lowest contours. 2. Water storage at the mined out pits.
xviii	Regular monitoring of ground water level and quality shall be carried out in and around the mine lease by establishing a network of existing wells and constructing new piezometers during the mining operation. The monitoring shall be carried out four times in a year, pre- monsoon (April-May), monsoon (August), post-monsoon (November) and winter (January) and the data thus collected may be sent regularly to the Ministry of Environment and Forests and its Regional Office, Bhubaneswar, the Central Ground Water Authority and the Regional Director, Central Ground Water Board. If at any stage, it is observed that the ground water is depleted due to mining activity, necessary corrective measures shall be carried out.	Ground water level is below 100 to 150 meter from the surface of plateau (ML area) top and mining activity will be confined up to 30-40 meter below plateau surface level. However, monitoring of ground water table & its quality in existing wells of buffer zone of mine lease area is being carried out. The monitored data of post-monsoon and monsoon season is enclosed in ANNEXURE-IV . Copies of the same are being submitted to Central Ground Water Authority & Regional Director, Central Ground Water Board, State Pollution Control Board Orissa & Regional Officer SPCB, Rayagada.
xix	Appropriate mitigative measures shall be taken to prevent pollution of the San River and the Indravati River in consultation with the State Pollution Control Board.	The following measures are being implemented and will be implemented in course of time also. <ol style="list-style-type: none"> 1. Deep garland drains are under construction to check erratic flow of precipitated water. 2. Check dams are constructed around the slopes of valley to arrest silts and sediments if any. 3. Retaining wall of height 1.5 meter has been constructed at the edge of the valley. 4. The naked areas of the valley slopes have been covered by mass afforestation and the same will be continued till full cover. <p>San River & Indrāvati are flowing at a distant location 12 Kms & 9 Kms respectively. The above protection measures written SI No. 1 to 4 shall never create any untoward situation to affect the water quality of the above 2 rivers due to our contribution.</p>
xx	The project proponent shall obtain necessary	There is no proposal to with draw ground water

	prior permission of the competent authorities for drawl of requisite quantity of water (surface water and ground water, if any) required for the project.	for the project and surface water is being used for mining purpose. To this effect, an agreement was made between M/s Utkal Alumina Int. Ltd & Water Resource Dept. Govt. of Odisha for drawl of 9.0 cusec or 7776000 cft/day of water from Govt. water source/ from San River upstream of Indravati River. A copy of the same agreement is enclosed in ANNEXURE- V .
xxi	Suitable rainwater harvesting measures on long term basis shall be planned and implemented in consultation with the Regional Director, Central Ground Water Board.	A proposal has been submitted to Member Secretary, Central Ground Water authority New Delhi through Regional Director Central Ground Water, Bhubaneswar vide their letter no. 5-22/SER/CGWA/2011 – 1150, dated. 19.08.2011. The approval from the authority is still awaited.
xxii	Vehicular emissions shall be kept under control and regularly monitored. Measures shall be taken for maintenance of vehicles used in mining operations and in transportation of mineral within the mine lease. The mineral transportation within the mine lease shall be carried out through the covered trucks only and the vehicles carrying the mineral shall not be overloaded.	Pollution testing certificate of all machinery is being verified regularly to check vehicular emission. Further emission level is kept under control by rigorous maintenance of all engines and changing of lubricants as per the recommendation of the manufacturer. All the transporting vehicles are being covered with tarpaulin and over loading are strictly avoided.
xxiii	No blasting shall be carried out after the sunset. Blasting operation shall be carried out only during the daytime. Controlled blasting shall be practiced. The mitigative measures for control of ground vibrations and to arrest fly rocks and boulders should be implemented.	Blasting operation is carried out only during the day time following controlled blasting practices to check ground vibration and fly rocks.
xxiv	Drills shall either be operated with dust extractors or equipped with water injection system.	Drilling machine with in-built vacuum cyclone dust collector & equipped with water spraying system.
xxv	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.	Installation of highly efficient dry fog dust suppression system is under commissioning at mineral handling area and water spraying arrangements at loading, unloading and transfer points.
xxvi	Consent to operate shall be obtained from the State Pollution Control Board, Orissa prior to start of production from the mine.	Consent to Operate has been obtained from the State Pollution Control Board, Odisha vide letter No. 10769/IND-I-CON- 5450 dated 28.05.2012 & renewed up to 31.03.2014 vide letter no. 6597 dated 10.04.2013.
xxvii	Sewage treatment plant shall be installed for the colony. ETP shall also be provided for the workshop and wastewater generated during the mining operation.	No residential colony is proposed within ML area and it is proposed at a distance of 25 KM from mines, where the sewage treatment plant will be installed. Provision of ETP is not envisaged as no scope of generation of mine drainage water and deployment of mine machinery on contract basis.
xxviii	The project authorities shall undertake sample survey to generate data on pre-project community health status within a radius of 1 km from proposed mine.	Already complied.

xxix	Pre-placement medical examination and periodical medical examination of the workers engaged in the project shall be carried out and records maintained. For the purpose, schedule of health examination of the workers should be drawn and followed accordingly.	Occupational health surveillance programme of all categories of employees are being conducted during pre-placement & periodically shall be done as per rules. As per the medical reports, no variation is found. <table border="1" data-bbox="890 360 1543 517"> <tr> <td>Type of Medical Examination</td> <td>Target in Nos.</td> <td>Nos. covered in 2013-14</td> </tr> <tr> <td>Initial Medical Examination (IME)</td> <td>64</td> <td>64</td> </tr> </table>	Type of Medical Examination	Target in Nos.	Nos. covered in 2013-14	Initial Medical Examination (IME)	64	64
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xxx	Provision shall be made for the housing of construction labour 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 the completion of the project.	Work shed have been provided to the workers at the mine site having all facilities such as fuel for cooking, permanent toilets followed with safety tanks & soak pits safe drinking water, medical health care. Since the mining operation already had been commenced, the regular employees & executives are coming from the integrated town ship adjacent to the alumina refinery. Hence the separate facilities are not required at the site except the toilets at the administrative block. To treat the effluents generated from the canteen a full-fledged small ETP is proposed to be constructed for the treatment of the effluent & use of sediments shall be done for the manures.						
xxxii	The project proponent shall take all precautionary measures during mining operation for conservation and protection of endangered fauna namely; python, panther, sloth bear, wild dog etc. spotted in the study area. Action plan for conservation of flora and fauna shall be prepared and implemented in consultation with the State Forest and Wildlife Department. Necessary allocation of funds for implementation of the conservation plan shall be made and the funds so allocated shall be included in the project cost. All the safeguard measures brought out in the Wildlife Conservation Plan so prepared specific to the project site shall be effectively implemented. A copy of action plan shall be submitted to the Ministry of Environment and Forests and its Regional Office, Bhubaneswar.	The site specific conservation plan for construction of conveyor corridor and formation of mines access road has been approved by PCCF (WL) & Chief wildlife Warden, Odisha vide letter No. 8183/1 WL(C)SSP- 398/2013 dated 11.10.2013. This area is a part of the study area proposed for implementation of conservation plan.						
xxxiii	Digital processing of the entire lease area using remote sensing technique shall be carried out regularly once in three years for monitoring land use pattern and report submitted to Ministry of Environment and Forests and its Regional Office, Bhubaneswar.	Digital processing of the Baphimali mining lease area using remote sensing technique for monitoring of land use pattern has been carried out by Orissa Remote Space Application Center (ORSAC), Bhubaneswar and report has been submitted to Ministry with a copy to its regional office at Bhubanshwer vide our letter no UAIL – Mines /MOEF/008/2010.						
xxxiii	A final mine closure plan along with details of Corpus Fund shall be submitted to the Ministry	The same will be submitted to the Ministry of Environment & Forests 5 years in advance of						

	of Environment & Forests 5 years in advance of final closure for approval.	final closure for approval.								
B. General conditions										
i	No change in mining technology and scope of working should be made without prior approval of the Ministry of Environment & Forests.	No change in mining technology and scope of working will be made without prior approval of the Ministry of Environment & Forests.								
ii	No change in the calendar plan including excavation, quantum of mineral bauxite and waste should be made.	No change in the calendar plan including excavation, quantum of mineral bauxite and waste is made, so far:- Data furnished up to Oct'2013:- <table border="1"> <thead> <tr> <th rowspan="2">Year</th> <th>Ore in BCM</th> <th>Overburden in BCM</th> </tr> <tr> <th>Target / Actual</th> <th>Target / Actual</th> </tr> </thead> <tbody> <tr> <td>2013-14</td> <td>13,46,454/305732</td> <td>12,51,053/571642</td> </tr> </tbody> </table> BCM- Bank Cubic Meter	Year	Ore in BCM	Overburden in BCM	Target / Actual	Target / Actual	2013-14	13,46,454/305732	12,51,053/571642
Year	Ore in BCM	Overburden in BCM								
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iii	At least four ambient air quality-monitoring stations should be established in the core zone as well as in the buffer zone for RSPM, SPM, SO ₂ & NO _x monitoring. Location of the stations should be decided based on the meteorological data, topographical features and environmentally and ecologically sensitive targets and frequency of monitoring should be undertaken in consultation with the State Pollution Control Board.	Six ambient monitoring stations have been established in consultation with the State Pollution Control Board, Odisha. Monitoring reports are attached in ANNEXURE –II .								
iv	Data on ambient air quality (RSPM, SPM, SO ₂ & NO _x) should be regularly submitted to the Ministry of Environment and Forests including its Regional office located at Bhubaneswar and the State Pollution Control Board / Central Pollution Control Board once in six months.	The monitored AAQ data is being submitted to the concerned authorities along with the half yearly compliance report once in six month.								
v	Fugitive dust emissions from all the sources should be controlled regularly. Water spraying arrangement on haul roads, loading and unloading and at transfer points should be provided and properly maintained.	Provision is made to deploy 4 nos. of 10 KL capacity tankers to spray water at dust generating points such as haul roads, loading & unloading, material transfer points and commissioning of dry fog system at crushing unit. Presently regular water sprinkling is being carried out by deploying two dedicated water tanker.								
vi	Measures should be taken for control of noise levels below 85 dB (A) in the work environment. Workers engaged in operations of HEMM, etc. should be provided with ear plugs / muffs.	The following measures are taken to control noise levels below 85 dB (A) in the work environment. <ul style="list-style-type: none"> • Maintenance of all machines including checking of silencers regularly, • Controlled blasting using delay detonators, installing immovable machinery on foundations and in closed rooms, provision of earplugs/muffs to workers engaged in noise prone areas. • Regular vehicular checkup for pollution control certificates The HEMM operators are provided with AC								

		close cabinets which itself is acoustic in nature.
vii	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. Oil and grease trap should be installed before discharge of workshop effluents.	The HEMM are scheduled for washing at a platform adjacent to the oil separation system, where oils & suspended solids are subject to be separated by the system & water shall be recycled for vehicle washing. Only make-up water at the storage tank shall be supplemented thru' fresh water. The recovered oil will be supplied to the authorized processor.
viii	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. Occupational health surveillance program of the workers should be undertaken periodically to observe any contractions due to exposure to dust and take corrective measures, if needed.	In addition to water spraying to suppress dust generation, workers engaged in dusty are provided with nose masks as a precautionary measure. Training & information on safety, a health hazard is given to all categories of deserved workers. Occupational health surveillance program of all categories of workers and employees is conducted periodically and corrective measure will be taken, if any contraction observed.
ix	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.	Environmental management cell has been established with qualified personnel under the control of a senior executive.
x	The funds earmarked for environmental protection measures should be kept in separate account and should not be diverted for other purpose. Year wise expenditure should be reported to the Ministry of Environment and Forests and its Regional Office located at Bhubaneswar.	The funds earmarked for environmental protection measures are kept in separate account and is utilized for environmental protection measures only without diverting for other purpose. The year wise expenditure details will be submitted after full fledge operation of the project.
xi	The project authorities should inform to the Regional Office located at Bhubaneswar regarding date of financial closures and final approval of the project by the concerned authorities and the date of start of land development work.	Complied.
xii	The Regional Office of this Ministry located at Bhubaneswar shall monitor compliance of the stipulated conditions. The project authorities should extend full cooperation to the officer (s) of the Regional Office by furnishing the requisite data / information / monitoring reports.	Full cooperation to the officer (s) of the Regional Office will be extended by furnishing the requisite data / information / monitoring reports on priority basis whenever sought for.
xiii	The project proponent shall submit six monthly report on the status of the implementation of the stipulated environmental safeguards to the Ministry of Environment and Forests, its Regional Office, Bhubaneswar, Central Pollution Control Board and State Pollution Control Board. The proponent shall upload the status of compliance on their website and shall update the same periodically.	Six monthly compliance status report of stipulated conditions is being submitted to the concerned authorities and the same is displayed on the company's Web-Site.
xiv	A copy of clearance letter shall be marked to concerned Panchayat / local NGO, if any, from whom suggestion / representation has been	Already complied No complain has been received so far.

	received while processing the proposal.	
xv	The State Pollution Control Board should display a copy of the clearance letter at the Regional office, District Industry Centre and the Collector`s office/ Tehsildar`s Office for 30 days.	Already complied.
xvi	The project authorities should advertise at least in two local newspapers widely circulated, one of which shall be in the vernacular language of the locality concerned, within 7days of the issue 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 also at web site of the Ministry of Environment and Forests at http://envfor.nic.in and a copy of the same should be forwarded to the Regional Office of this Ministry located at Bhubaneswar.	Already complied.