STATUS OF CONDITIONS IMPOSED IN ENVIRONMENTAL CLEARANCE FOR 3 MTPA REFINERY & 3X30 MW CO-GENERATION POWER PLANT VIDE LETTER NO. J-11011/753/2007-IA II (I), DATED 29.01.2008.

PROJECT NAME: UTKAL ALUMINA INTERNATIONAL LTD.
PERIOD OF COMPLIANCE: OCTOBER, 2013 TO MARCH, 2014.

<table>
<tr><th>Sl. No.</th><th>Imposed Conditions</th><th>Compliance Status</th></tr>
<tr><td colspan="3">A.SPECIFIC CONDITIONS:</td></tr>
<tr><td>1</td><td>Adequate air pollution control measures shall be provided to control particulate matter Emissions within 50 mg/Nm^3. On-line monitoring of particulate matter shall be carried out and reports submitted to the Ministry's Regional Office at Bhubaneswar, CPCB and OSPCB. The height of the stacks shall be as per the CPCB guidelines.</td><td>The following air pollution control devices have been installed at suitable locations.
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<tr><th>Sl No.</th><th>Location</th><th>Control Device Details</th></tr>
<tr><td>1</td><td>Power plant (Boilers-1,2,3)</td><td>ESP attached to each boiler & connected to the 150 meter height multi-flue-stack.</td></tr>
<tr><td>2</td><td>Calcination plant(A & B)</td><td>ESP attached to each Calciner & connected to 136 meter height stack.</td></tr>
<tr><td>3</td><td>Bauxite handling area</td><td>Water sprinklers at bauxite stock pile area. Dry fog at transfer points and 02 nos. bag filters of capacity 1270 TPH each at crusher area.</td></tr>
<tr><td>4</td><td>Lime handling area</td><td>02 nos. Wet Scrubbers</td></tr>
<tr><td>5</td><td>Coal handling area</td><td>Water sprinklers at coal unloading & stock pile area. Bag filters at coal crusher house. Dry fog system & bag filters at transfer points.</td></tr>
<tr><td>6</td><td>Alumina handling area</td><td>Bag filters.</td></tr>
</table>
In addition to this, water sprinkling on roads is being done frequently to keep the emission level under control as per the norms of MoEF / CPCB/ SPCB.</td></tr>
<tr><td>2</td><td>The company shall install electrostatic precipitator (ESP) to power boilers to control emissions within 50 mg/Nm^3.The emissions shall conform to the standards prescribed by the Ministry/CPCB/OSPCB whichever is more stringent. Fugitive emission from red mud disposal area shall be controlled by mud stacking and water sprinkling. Bag filters with dust collectors shall be provided to Alumina loading area,</td><td>Electrostatic precipitator (ESPs) designed to control particulate matter emissions within 50 mg/Nm^3 and connected to boilers of CPP with online monitoring system.
The following provisions have been made to control fugitive emission:
a. Water spraying arrangement at mud disposal area.
b. Bag filters at alumina loading area, water spraying and dry fog system at</td></tr>
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	bauxite crushing area, coal & ash handling areas and lime handling area to control the particulate emissions. Dust suppression and dry fog system shall be provided in Bauxite and coal handling areas. Garland drain shall be created at red mud and fly ash disposal areas.	Bauxite/ coal crushing/ handling area and water spraying at ash handling area. c. Wet scrubber at lime handling area. Garland drains around red mud pond and fly ash disposal area have been provided.
3	The poly-aromatic hydrocarbons (PAH) shall be monitored quarterly & report is to be submitted regularly to the Ministry and its Regional Office at Bhubaneswar/CPCB/ OSPCB.	The same is under monitoring and the results will be submitted after monitoring is over.
4	Total water requirement from San River (Upstream of Indravati Reservoir) shall not exceed 22,330 m^3/day as per the permission accorded by the Department of Water Resources, Govt. of Orissa. The wastewater shall be treated in ETP and reused in the process. 'Zero' discharge shall be adopted. Multi-effect evaporators shall be installed to recover water and recycle for process consumption to reduce the fresh consumption. The domestic wastewater shall be treated in the Sewage Treatment Plant (STP) and treated wastewater conforming to the standards for land application shall be reused for green belt development.	Presently the water requirement has not exceeded 20,000 KLD. The supernatant water of red mud pond, wash out of caustic handling area is being collected and reused in the process. The scrubbed liquor of lime handling plant is being completely re- utilized in the same process. All provisions have been made to reuse the supernatant water of ash pond in the same ash slurry making process. Provision is there to treat domestic wastewater in STP and reuse for green belt development.
5	Red mud, sand scales and lime grit shall be disposed off in red mud disposal area. Red mud disposal shall be done as per the CPCB guidelines. HDPE lining shall be provided to avoid any leakage to the ground. Leachate collection facilities shall be provided to the secured landfill facility (SLF). Proper care shall be taken to ensure no run off or seepage from the red mud disposal site to natural drainage. The location and design of the landfill site shall be approved by the OSPCB as per Hazardous Wastes (Management and Handling) Rules, 2003. Efforts shall also be made to find out productive uses of red mud in brick and ceramic products etc. STP sludge shall be utilized as manure for green belt development. All the used oil and batteries shall be sold to the authorized recyclers/preprocessors.	Red mud is being disposed off in red mud pond as per the design and drawing approved by State Pollution Control Board vide their Letter No. 19306/IND-IV-HW-931 dated 30.08.2012. The red mud pond is lined with clay & 1.5 mm HDPE liner with sub-soil drainage collection & reuse system, run-off drainage network and leachate testing facility. STP sludge will be used as manure for plantation. All the used oil & batteries will be sold to MOEF/CPCB/SPCB authorized party only.
6	Regular ground water monitoring shall be carried out all around the fly ash and red mud disposal area by installing Peizometers in consultation with the OSPCB /SGWB /CGWB and data	Monitoring of ground water in existing wells around of refinery, red mud & ash pond area is being carried out in each season and the monitored data is enclosed in **ANNEXURE- II.**

	submitted to the Ministry' Regional Office and OSPCB.	
7	Fly ash shall be utilized as per Fly Ash Notification, 1999 and as amended in 2003. The industry shall also take steps to utilize ash to maximum extent by itself and shall provide all facilities to others potential users viz cement and brick manufacturers.	Presently fly ash is being used to fill low laying areas, brick manufacturing unit.
8	Green belt of adequate width and density around the project site shall be developed in 338 ha. out of total 1015.3 ha. (33 %) in consultation with the DFO as per the CPCB guidelines.	As on date, green belt has been developed by planting around 6, 19, 750 nos. of saplings over an area of 238 ha out of the targeted 338 ha, within plant premises, outside the plant, red mud pond area, ash pond area, railway corridor etc. The same program will be continued in the coming years also.
9	Prior permission and recommendations of the State Forest Department regarding impact of the proposed expansion of the Alumina Refinery on the Sirigurha R.F. (8.8 km. N), Balia Kharha R.F. (6.4 Km., ENE), Masimandi PF (2.5 km, S), Leliguma R.F. (9 km. ENE), Titigurha RF (10 Km, ESE) shall be obtained and recommendations suggested, if any, shall be implemented.	Forest clearance under F.C. Act for 102 ha of forest land has already been obtained vide letter (No.8-43/96-FC) dated 19 April 1999 and the conditions imposed has been effectively implemented.
10	All the environmental conditions stipulated for the existing Alumina Refinery Plant (1.0 MTPA) mentioned in the environment clearance letter accorded by the Ministry vide letter no. J-11011/76/94-IA-II(I) dated 27th September, 1995 shall be implemented satisfactorily in a time bound manner.	All the stipulations are being implemented for which the compliance status report of 1 MTPA alumina Refinery may kindly be referred to.
11	This environmental clearance is subject to the outcome of the Court Case in W.P. No. 5697 of 2007 (Prafulla Samantray vs. Union of India and Others) pending in the Hon'ble High Court of Orissa	The matter is sub-judice in Hon'able High Court of Orissa.
GENERAL CONDITION		
1	The project authorities must strictly adhere to the stipulations made by the Orissa State Pollution Control Board (OSPCB) and the State Government	All the conditions stipulated by the State Pollution Control Board, Orissa are being effectively implemented.
2	No expansion or modification in the plant shall be carried out without prior approval of the Ministry of Environment and Forests.	Environmental clearance has been accorded for expansion from 1 MTPA Refinery & 50 MW co-generation Power Plant to 3 MTPA Refinery & 3x30 MW Co-generation Power Plant vide letter no J-11011/753/2007-IA II (I),dtd.29.01.2008.
3	The gaseous emissions from various process units shall conform to the standards prescribed by the concerned authorities from time to time. The	As stated in sl. No. 1 & 2 of specific condition, pollution control devices of adequate capacity have been installed at different process units to keep the emission level under control as per the

	OSPCB may specify more stringent standards for the relevant parameters keeping in view the nature of the industry and its size and location. At no time the emissions level shall go beyond the prescribed standards. In the event of failure of any pollution control system adopted by the unit, the respective unit shall not be restarted until the control measures are rectified to achieve the desired efficiency.	norms of MoEF / CPCB/ SPCB. Further, scope of any emission beyond prescribed limit is ensured by designing the emission control devices for much lower values than the prescribed standards. However, in the event of failure of any pollution control system of any unit, the respective unit will not be restarted until the control measures are rectified to achieve the desired efficiency.
4	Adequate number of ambient air quality monitoring stations shall be established in the downward direction as well as where maximum ground level concentration of SPM, $S0_2$ and NO_X are anticipated in consultation with the OSPCB. Data on ambient air quality and stack emission shall be regularly submitted to this Ministry including its Regional Office at Bhubaneswar and OSPCB once in six months.	Ambient air quality is being monitored by establishing seven nos. of stations considering pre-dominant wind direction and maximum ground level concentration in consultation with SPCB. The monitored data are being submitted to Ministry including its Regional Office at Bhubaneswar and OSPCB once in six months. The results of the same are enclosed in **ANNEXURE- I.**
5	In-plant control measures for checking fugitive emissions from spillage/raw materials handling etc. shall be provided and particulate matter from Bauxite transport and crushing shall be provided with highly efficient bag filters and covered conveyers and adequate water sprinkling shall be done.	Provision is made to control fugitive emission at raw material crushing, handling area, alumina loading area by high capacity bag filters, dry fog system, covered conveyors and spillage collection/water spraying on roads and wet scrubber at lime handling area.
6	Industrial wastewater 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 form time to time. The treated wastewater shall be recycled in the plant as well as utilization for plantation purposes.	1. The supernatant water of red mud pond is being collected through decent wells and reused in process. 2. The wash out of caustic handling area is being collected in 65 nos. of sumps of capacity 3 m^3 each provided at different locations of the caustic area and pumped to caustic pond of capacity 25,905 m^3 for complete recirculation in the process. 3. The wash out of other than caustic area is being collected in guard pond of capacity 13, 234 m^3 and reused in the process. 4. The scrubbed liquor of lime handling plant is being completely re- utilized in the same process. 5. Provision is made to collect and reuse the discharge water of ash pond in the same process and reuse of the domestic waste water in gardening and afforestation purposes after treatment.
7	The project authorities must strictly comply with the rules and regulations with	Application has been submitted to SPCB to obtain Authorization under Hazardous Wastes

	regard to handling and disposal of hazardous wastes in accordance with the Hazardous Wastes (Management and Handling) Rules, 2003. Authorization from the OSPCB must be obtained for collection, storage, treatment and disposal of hazardous wastes.	(Management and Handling) Rules, 2008 vide our letter no. UAIL/ENV/2013-14/57/2013 dated 18.07.2013.
8	The overall noise levels in and around the plant area shall be kept well within the standards (85 dB A) by providing noise control measures including acoustic hoods, silencers, enclosures etc. on all sources of noise generation. The ambient noise levels shall conform to the standards prescribed under EPA Rules, 1989 viz. 75 dB A (daytime) and 70 dB A (nighttime).	The design of installed equipment includes the noise control devices like acoustic hoods, silencers, enclosures etc. The greenbelts after full growth will help in attenuation of noise levels in and around the plant area well within (85 dB A) and the ambient noise levels within 75 dB A (daytime) and 70 dB A (nighttime).
9	Occupational Health Surveillance of the workers should be done on a regular basis and records maintained as per the Factories Act.	Presently in addition to the running of our dispensary for OPD treatment, health camp is being conducted in nearby villages and data are being recorded. Occupational Health Surveillance of the workers will be carried out on a regular basis and records maintained as per the Factories Act after commissioning of plant.
10	The company shall develop rainwater structures to harvest the run-off water for recharge of ground water in consultation with the Central Ground Water Authority/Board.	Provision is made to harvest rain water through recharge wells and trenches for recharge ground water.
11	All the recommendations made in the Charter on Corporate Responsibility for Environment Protection (CREP) for the Aluminum sector shall be strictly implemented.	At UAIL, Corporate Responsibility for Environment Protection (CREP) recommendations is taken care of in the design of Refinery and Power Plant equipments.
12	The project proponent shall also comply with all the environmental protection measures and safeguards recommended in the EIA / EMP /risk analysis and DMP report.	Implementation of environmental protection measures and safe guards are being followed up as per the recommendation in EIA/EMP.
13	As proposed in EIA/EMP, Rs. 2.00 Crores and Rs. 43.00 Crores earmarked toward the capital cost and recurring expenditure/annum for environmental protection measures shall be used judiciously to implement the conditions stipulated by the Ministry of Environment and Forests as well as the State Government. The funds so provided shall not be diverted for any other purposes.	The fund, as proposed in EIA/EMP is being utilized in implementation of conditions laid down for protection of environment without diverting for any other purpose.
14	The Regional Office of this Ministry at Bhubaneswar / Central Pollution Control Board / OSPCB shall monitor the	Six monthly reports are being submitted regularly to Regional Office of the Ministry at Bhubaneswar / Central Pollution Control

	stipulated conditions. A six monthly compliance report and the monitored data along with statistical interpretation should be submitted to them regularly.	Board / SPCB, Odisha.
15	The Project Proponent should inform the public that the project has been accorded environmental clearance by the Ministry and copies of the clearance letter are available with the Orissa State Pollution Control Board / Committee and may also be seen at Website of the Ministry of Environment and Forests at http:://envfor.nic.in. This should be advertised within seven days from the date of issue of the clearance letter at least in two local newspapers that are widely circulated in the region of which one shall be in the vernacular language of the locality concerned and a copy of the same should be forwarded to the Regional office.	The same has been published in the local newspaper and informed to the State Pollution Control Board Bhubaneswar vide our letter no UAIL/SPCB/003/09 dated 20th January, 2009.
16	The Project Authorities should inform the Regional Office as well as the Ministry, the date of financial closure and final approval of the project by the concerned authorities and the date of commencing the land development work.	The date of financial closure is 28th July, 2010. The final approval of the project by Ministry of Commerce & Industry has been granted vide letter No. 4 (2007) /50 (2006) /PAB- IL dated 14th March, 2007. The date of land development work is August, 2000.