

STATUS OF IMPLEMENTATION OF CONDITIONS STIPULATED IN ENVIRONMENTAL CLEARANCE FOR 2,60,000 TPA ALUMINIUM SMELTER FOR ADITYA ALUMINIUM BY M/S HINDALCO INDUSTRIES AT LAPANGA, SAMBALPUR ORISSA.

REF: Environmental Clearance Letter No: J-11011/142/2004-IA.II (1), Dated 27TH January 2006 From MOEF, GOI.

Sr. No.	Specific Conditions	Compliance
i)	The gaseous emissions from various process units should conform to the standards prescribed by the concerned authorities from time to time. 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 should go beyond the prescribed standards in the event of failure of any pollution control system adopted by the unit, the respective unit should not be restarted until the control measures are rectified to achieve the desired efficiency.	We have Noted & Accepted to all the prescribed standards. The standards prescribed by OSPCB will be strictly followed.
ii)	Particulate fluoride emissions should not be more than 0.65 mg/Nm ³ and fugitive particulate fluoride emissions from pot room should not be more than 1.85 mg/Nm ³ .	Yes, fluoride emissions will be within the limit prescribed herewith.
iii)	<p>In plant, control measures for checking fugitive emissions from spillage/raw materials handling should be provided.</p> <p>Fluoride emissions should be monitored from the pot room and in the forrage around the smelter complex and the data submitted regularly to the Ministry Regional Office at Bhubaneswar and OSPCB.</p> <p>Further dry scrubbing system to control the emissions from the pot lines should be provided.</p> <p>Total fluoride emissions shall not exceed 0.8 kg/ton of Aluminium produced.</p> <p>Further, the pot emissions through fume</p>	<p>Monitoring will be carried out at different location for fugitive monitoring after commissioning of the plant.</p> <p>Online continuous monitoring equipments is being installed and forage fluoride will be measured manually and data will be submitted after commissioning of the plant.</p> <p>Advanced Dry scrubbing system is being installed in smelter to control fugitive emission.</p> <p>Advanced AP36S technology is used for the smelter and the fluoride emission will be restricted to 0.74 kg/ton of aluminium produced.</p> <p>The GTC is designed to restrict the pot room</p>

	<p>treatment plant should not exceed 0.30 kg/ton of Aluminum produced.</p> <p>Fugitive fluoride emissions from the pot room should be monitored and report submitted regularly to the Ministry/Regional office at Bhubaneswar and OSPCB.</p> <p>The particulate emissions from the bake oven plant should not exceed 50 mg/Nm³.</p>	<p>emission below 0.3 kg/ton of aluminium produced.</p> <p>Monitoring will be done and report will be submitted to the concerned offices after commissioning of the plant.</p> <p>It is designed to restrict the particulate emissions from the bake oven plant to 50 mg/Nm³</p>
iv)	<p>The company should install fume extraction system and bag filters to control the emissions from all melting and casting units.</p> <p>The emissions shall conform to the standards prescribed by the Ministry / CPCB/SPCB whichever is more stringent.</p>	<p>We will install the right kind of technology to control the emission from all melting and casting units.</p> <p>The standards prescribed by the Ministry / CPCB/ SPCB will be strictly followed.</p>
v)	<p>The poly aromatic hydrocarbons (PAH) from the carbon plant (anode bake oven) should not exceed 2 mg/Nm³. The data on PAH should be monitored quarterly and report submitted regularly to the Ministry/Regional Office at Bhubaneswar and OSPCB.</p>	<p>We have noted the limit prescribed for PAH, will monitor quarterly and submit the report to the Ministry's Regional Office at Bhubaneswar and OSPCB regularly after commissioning of the plant.</p>
vi)	<p>Fluoride consumption shall be less than 10 kg/ton of Aluminium produced as specified by the CREP. Accordingly, Fluoride emission load shall be reduced.</p>	<p>The fluoride (as F) consumption will not exceed 10 kg/ton of Aluminium produced.</p>
vii)	<p>The spent pot lining generated from the smelter should be properly treated by setting up of spent pot lining treatment plant to remove fluoride and cyanide and disposed off in a secured landfill site.</p> <p>The location and design of the landfill site should be approved by the OSPCB as per Hazardous Wastes (Management and Handling) Rules, 2003.</p> <p>The ground water quality around the landfill site should be monitored and data submitted to the Ministry / OSPCB.</p> <p>All the used oil and batteries shall be sold to the authorized recyclers / preprocessors.</p>	<p>The Spent Pot Lining will be properly treated and will be disposed off in secured landfill site.</p> <p>We have identified the Secured Landfill site inside our Project area and a scheme for design of secured landfill is submitted to OSPCB for approval.</p> <p>The ground water quality around the landfill site will be monitored and data submitted to the Ministry / OSPCB.</p> <p>All the used oil and batteries will be sold to the authorized recyclers / preprocessors only.</p>
viii)	<p>Total water requirement will be 4,436 m³/d (60% for domestic and 40% for process). As reflected in the EIA / EMP, high TDS process effluent will be treated in Reverse Osmosis (RO) plant and ETP and RO permeate will be recycled back. RO plant shall be installed for</p>	<p>Waste water from the Smelter containing high fluoride will be chemically treated initially and finally through double-stage RO. There will be '0' discharge from the Smelter. Rejects will be suitably handled.</p>

	<p>treatment of surplus effluent for reuse in the process to achieve 'zero' discharge. The rejects from the RO plant shall be disposed of in the HDPE lined secured landfill (SLF) within smelter premises. Domestic effluent shall be treated in STP.</p>	<p>A common sewage treatment plant is being installed for both smelter and CPP. And another STP will be installed in township.</p>
ix)	<p>Green belt of adequate width and density around the project site shall be developed in consultation with the DFO in 53 ha. of area. Additional plantation shall be done in 32 ha open area and along the road side as proposed as per the CPCB guidelines having density of 2000 trees/ha. Treated waste water shall be used for green belt development.</p>	<p>The scheme for development of Greenbelt around the Aluminium Smelter & CPP area at Lapanga has been recommended by the DFO, Sambalpur south Division and approved by the PCCF, Odisha.</p> <p>Aditya Aluminium has already started implementation of the Scheme inside the Core plant & Township areas. Around 75,000 saplings planted and a Central Nursery established at the site having 1, 40,000 plants ready for plantation.</p> <p>The treated water from Sewage treatment plant shall be used for greenbelt development.</p>
x)	<p>The project also involves 260 acres forest land and proposal for forest land diversion has been submitted to the Ministry through State Government on 21.12.2000 and forest clearance is yet to be accorded by the Ministry. Further, as per the guidelines issued by the Ministry for implementation of the Forest (Conservation) Act, 1980, no work on the forest land pending a decision about non-forestry use of forest land shall be undertaken. Therefore, no project work either construction or operation shall be undertaken on the forest land or non-forest land without obtaining prior approval under the provisions of Forest (Conservation) Act, 1980 and subsequent amendments.</p>	<p>The proposal for diversion of forest lands in the Smelter area and the diversion of forest lands in CPP area have been combined as one proposal as both the Units are adjacent & contiguous. The proposal for diversion of 119.264 hectares of forest land for establishment of Aluminium Smelter & Captive Power Plant at Lapanga, Sambalpur District has been approved and stage-I clearance accorded by the Ministry of Environment & Forests, Govt. of India vide letter No. 8-27/2009-FC, dated 10th November 2009 subject to certain conditions. The Stage-II forest clearance has been accorded vide letter No.F.No.-8-27/2009-FC,dated 10.02.2011.</p>
xi)	<p>Rehabilitation and Resettlement Action Plan as prepared and submitted to the State Govt. shall be implemented as per the R & R Policy of the State Government. Suitable employment to all the oustees of Hirakud dam will be provided.</p>	<p>Rehabilitation and Resettlement Plan for both Smelter & CPP at Lapanga has been prepared in line with modified R & R Policy, 2006 of Govt. of Orissa and recommended by the Revenue Divisional Commissioner, Sambalpur for approval of State Government.</p> <p>The Rehabilitation and Peripheral Development Advisory Committee (RPDAC) meetings are conducted periodically in the</p>

		District to address the issues related to R & R. Construction of R & R colony is in progress in village Ludhapali where 175 houses have been completed out of 183 and in village Panduloi 100 houses have been completed out of 172.
xii)	All the environmental conditions stipulated by the Ministry for the 5 x 130 MW Captive Power Plant vide letter No.J-13011/7/2005 IA.II (I) dated 22 nd November, 2005 shall be implemented.	We have noted the environmental conditions stipulated for Captive Power Plant and compliance is being submitted to the Regional Office of MoE&F at Bhubaneswar regularly.
xiii)	Occupational Health Surveillance of the workers should be done on a regular basis and records maintained as per the Factories Act.	Occupational Health Surveillance of the workers is being done on a regular basis and maintained records as per the Factories Act.
xiv)	The company shall develop rain water structures to harvest the runoff water for recharge of ground water in consultation with the Central Ground Water Authority/Board.	The Directorate of Ground Water Survey and Investigation (GWS&I), Govt. of Orissa has submitted a Scheme on Rain water harvesting structures in Smelter & CPP areas. The report has been submitted to the Regional Office, MoEF, Bhubaneswar vide letter No.IR/AAP/Proj/7159, dated 06.08.2009 & letter No. AAP/E&F/7523, dated 18/10/2011. We have also carried out another study on rain water harvesting through the experts of Andhra university and their reports with conclusions have been presented before the members of EAC at MoEF during consideration of our expansion proposal. Ministry of E&F has accorded environmental clearance for our expansion proposal after due consideration of the scheme on rain water harvesting.
xv)	All the recommendations made in the Charter on Corporate Responsibility for Environment Protection (CREP) for the Aluminium sector shall be strictly implemented.	We have noted all the points and accepted the same and will strictly implement the same.
B.	GENERAL CONDITIONS :	
i)	The project authorities must strictly adhere to the stipulations made by the Orissa State Pollution Control Board and the State Government.	Noted & Accepted, will strictly adhere to stipulations of SPCB
ii)	No expansion or modification in the plant should be carried out without prior approval of the Ministry of Environment and Forests.	The environmental clearance for expansion of Smelter to 7, 20,000 TPA capacity has been obtained from the Ministry vide letter No. J-11011/136/2009 - IA II (I), dated 29th November 2012.

iii)	Adequate number of ambient air quality monitoring stations should be established in the downward direction as well as where maximum ground level concentration of SPM, SO ₂ and NO _x are anticipated in consultation with the OSPCB. Data on ambient air quality and stack emission should be regularly submitted to this Ministry including its Regional Office at Bhubaneswar and Orissa State Pollution Control Board once in six months.	We have started ambient air quality monitoring at four locations inside our plant premises, two in upstream and another two at downstream. Besides ambient air Noise, soil & meteorological parameters also measured.
iv)	Industrial waste water should be properly collected, treated so as to conform to the standards prescribed under GSR 422 (E) dated 19 th May, 1993 and 31 st December, 1993 or as amended from time to time. The treated wastewater should be recycled in the plant as well as utilization for plantation purposes.	Waste water will be treated, recycled and the Smelter will run at '0' water discharge.
v)	The project authorities must strictly comply with the rules and regulations with 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.	We will strictly comply to the rules & regulations with regard to handling and disposal of Hazardous Wastes and will obtain authorization from OSPCB for collection, storage, treatment and disposal of hazardous wastes. Already we have prepared a scheme and submitted to SPCB for approval.
vi)	The overall noise levels in and around the plant area should be kept well within the standards (85 dBA) by providing noise control measures including acoustic hoods, silencers, enclosures etc. on all sources of noise generation. The ambient noise levels should conform to the standards prescribed under EPA Rules, 1989 viz 75 dBA (daytime) and 70 dBA (nighttime).	All measures for control of noise in and around the plant area will be taken.
vii)	The project proponent shall also comply with all the environmental protection measures and safeguards recommended in the EIA/EMP / risk analysis and DMP report.	All the environment protection measures & safeguards in line with the EIA/EMP/risk analysis and DMP report will be complied.
viii)	The project authorities will provide adequate funds both recurring and non-recurring to implement the conditions stipulated by the Ministry of Environment and Forests as well as the State Government along with the implementation schedule for all the conditions stipulated herein. The funds so provided should not be diverted for any other purposes.	Sufficient funds have been allocated for the purpose.

ix)	The Regional Office of this Ministry at Bhubaneswar/Central Pollution Control Board / OSPCB will monitor the stipulated conditions. A six monthly compliance report and the monitored data along with statistical interpretation should be submitted to them regularly.	Six monthly compliance reports are being submitted to the Regional office of the Ministry at Bhubaneswar and statistical interpretation of the monitored data will be submitted.
x)	The Project Proponent should inform the public that the project has been accorded environmental clearance by the Ministry and copies of the clearances letter are available with the 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 lease 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 advertisement regarding grant of Environmental Clearance has been published in two leading Newspapers and copies of the above advertisements have already been submitted to the Regional office of the Ministry at Bhubaneswar.
xi)	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 data of commissioning the land development work.	Financial closure of the Project is completed on 17 th September 2012. Company has already invested more than Rs 8852.43 crores and has committed more than Rs 10,000 crores for both the Smelter and CPP Project. The Project construction activities are in full swing. More than 80% of the Civil construction work is complete. The first metal production will be out in the 1 st quarter of 2013-14.

(Authorized Signatory)