

STATUS OF IMPLEMENTATION OF CONDITIONS STIPULATED IN ENVIRONMENTAL CLEARANCE FOR 5X130 MW CAPTIVE POWER PLANT FOR ADITYA ALUMINIUM PROJECT BY M/S HINDALCO INDUSTRIES AT LAPANGA, SAMBALPUR ORISSA.

REF: Environmental Clearance Letter No: J-13011/7/2005-IA.II (T), Dated- 22ND November, 2005 from MOEF, GOI.

Sr. No.	Conditions	Compliance
i	The conditions stipulated by Orissa Pollution Control Board vide their letter no.16472 dated 08.12.1998 and revalidated consent no. 17817 dated 27.05.2004 shall be strictly implemented.	We have noted all the stipulations and have accepted the same. We have been following the conditions during construction stage also.
ii	Necessary prior clearance under the Forest (Conservation) Act, 1980 for diversion of forest land for this project shall be obtained.	The proposal for diversion of forest lands in the CPP area and the diversion of forest lands in Smelter 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 granted Stage-II clearance by the Ministry of Environment & Forests, Govt. of India. The Divisional Forest Officer, Sambalpur South Division has requested the Tehsildar, Rengali to hand over possession of forest lands to Aditya Aluminium. The process of alienation of revenue forest lands by the Tehsildar is partly completed and some are under progress. The felling of trees is in progress.
iii	Coal to be used as fuel will have sulphur content not exceeding 0.4% and ash content not exceeding 42%	Coal will be sourced from the Talabira-II & III block. The Sulphur and Ash content will be limited to 0.4% and 42% respectively.
iv	Two multi flue stacks of 275 m height each shall be provided with continuous online monitoring system. Exit velocity of 25.3 m/sec shall be maintained.	Tri-flue stacks of 275-m height are being installed at site. Continuous online monitoring system will be installed to the stacks. Exit velocity of 25.3 m/sec will be ensured & maintained.
v	Electrostatic Precipitator (ESPs) having high efficiency of not less than 99.9% shall be installed to limit emission of particulate matter within 100mg/Nm ³ . Bag filters shall be installed in the coal handling area.	High efficiency ESPs are being installed by BHEL, India. The particulate emission will be less than 100 mg/Nm ³ . Bag filters will be installed in the coal handling areas.
vi	Fly ash shall be utilized in a phased manner as per provisions of the notification on fly ash utilization issued by the Ministry of Environment & Forests	Fly-ash utilisation is being judiciously worked out and will adhere to the Notifications of MoE&F.

	in September, 1999 and its amendment. By the end of 9 th year fully fly ash utilization should be ensured. Borough earth should not be taken from ash pond area for construction of ash dyke etc.	
vii	Closed circuit cooling with induced draft cooling towers should be provided. COC of minimum of 4 shall be maintained.	Cooling towers will be provided as mentioned and CoC of 4 will be maintained.
viii	It shall be ensured that the power plant and its associated facilities will be at least 500 m away from the railway line.	The Captive Power Plant is already planned at a distance more than 500 m from the Railway Line.
ix	The ash pond area will be provided with impervious clay lining to avoid leaching of heavy metals into ground water. Regular monitoring of ground water quality including heavy metals shall be carried out around the ash pond area and records maintained.	The ash pond area is being designed as per the Standards prescribed by the Ministry in the clearance order and due monitoring will be carried out from time to time.
x	The water for the plant shall be drawn from Hirakud Reservoir. No bund will be constructed within the Hirakud Reservoir for the purpose of storing water for meeting the lean season requirement of the power plant. Copy of the confirmed water allocation may be submitted within the three months of this clearance.	We have noted and Accepted, The Water allocation letter by the Department of Water Resources, Govt. of Orissa vide letter No. 32492, dated 01.10.2008 has been submitted to the Regional Office of the Ministry at Bhubaneswar.
xi	The proponent shall work out the details regarding re-use of treated effluents indicating the quantity of effluents to be reused and to be discharged.	We will not discharge any hazardous effluent from the plant premises and have already worked out the reuse of treated effluents.
xii	Rain water harvesting should be adopted. Central Ground Water Authority/Board shall be consulted for finalization of appropriate rain harvesting structures within a period of three months from the date of clearance.	The Directorate of Ground Water Survey and Investigation (GWS & I), Govt. of Orissa has submitted the report on Rain water harvesting in both the 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. 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.
xiii	Intercepting drains in plant area for collecting storm water shall be constructed and waste water shall be discharged through pipe line into the nala joining Bheedan river.	We have noted this stipulation of MoEF and the drainage network in our project area is being designed accordingly.

xiv	Leq of Noise level should be limited to 75 dBA. People working in the high noise area should be provided with personal protection equipments like earplugs etc.	We will implement all methodology to control noise and limit within the standard. All necessary PPEs are provided to the workers.
xv	A green belt of 100 m width along the plant boundary, 10 m width along the road side and 50 m around the ash dyke should be developed covering a total land area of 87 ha.	The scheme for development of Greenbelt in the Smelter & CPP area at Lapanga has been recommended by the DFO, Sambalpur south Division and approved by the PCCF, Odisha. The scheme is being implemented in consultation with the DFO, Sambalpur South; around 75,000 saplings have already been planted. A Central Nursery is established near the site, which is having 1,40,000 plants ready for Plantation, however we have planned to take up further plantations in next season.
xvi	For controlling fugitive dust, regular sprinkling of water in vulnerable areas of the plant should be ensured.	We will do regular water sprinkling to control fugitive dusts and the same is being done during construction stages also.
xvii	Regular monitoring of the air quality should be carried out in and around the power plant and records be maintained. Six monthly reports shall be submitted to this Ministry and its Regional Office located at Bhubaneswar.	We have already started ambient air quality monitoring at four locations inside our plant premises, two nos. of station at upstream and another two nos. at downstream. Beside ambient noise, soil & meteorological parameters also measured during construction stage.
xviii	The project proponent should advertise in at least two local news papers widely circulated in the region around the project, one of which should be in the vernacular language of the locality concerned, informing that the project has been accorded environmental clearances and copies of clearance letters 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	The advertisement regarding grant of Environmental Clearance for 5x130 MW Captive Power Plant 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.
xix	A separate environmental monitoring cell with qualified staff should be set up for implementation of the stipulated environmental safeguards.	A separate environmental monitoring cell will be established. There is already a team of environmentalists working at present.

xx	The project affected people should be rehabilitated as per the National Policy on Resettlement and Rehabilitation of project affected families (NPRR, 2003). A copy of the approved Rehabilitation & Resettlement plan should be submitted to the ministry within three months of the issue of this clearance letter. The funds earmarked for the R&R Plan should not be diverted for any other purpose.	Rehabilitation and Resettlement Plan for both Smelter & CPP at Lapanga, prepared in line with R & R Policy, 2006 of Govt. of Orissa, and has been approved by the Revenue Divisional Commissioner, Sambalpur. The Rehabilitation and Peripheral Development Advisory Committee (RPDAC) meetings are conducted periodically in the District to address the issues related to R & R. The 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.
xxi	Year-wise funds should be allocated for implementation of environmental protection measures. These costs should be included as part of the project cost. The funds earmarked for the environment protection measures should not be diverted for any other purpose and year-wise expenditure should be reported to the Ministry.	The said guideline will be strictly followed.
xxii	Half yearly report on the status of the implementation of the stipulated conditions and environmental safeguards should be submitted to this Ministry and its regional office at Bhubaneswar.	Noted and as instructed, the status on the implementation of the stipulated conditions is being submitted Half yearly to the Ministry at its regional office at Bhubaneswar.
xxiii	Regional office of the Ministry of environment & Forest located at Bhubaneswar will monitor the implementation of the stipulated conditions. A complete set of documents including Environmental Impact Assessment report and Management plan etc. should be forwarded to the regional Office.	The Environmental Impact Assessment report and Management Plan have been submitted to the Regional Office of the Ministry at Bhubaneswar for monitoring the implementation of the stipulated conditions.
xxiv	Full cooperation should be extended to the Scientists/Officers from the Ministry/ Regional office of the Ministry at Bhubaneswar /the CPCB/The SPCB who would be monitoring the compliance of environmental status.	Full cooperation will be extended to the Scientists/Officers from the Ministry/ Regional office of the Ministry at Bhubaneswar /the CPCB/The SPCB who would be monitoring the compliance of environmental status.

(Authorized Signatory)