

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

REF: ENVIRONMENTAL CLEARANCE LETTER NO: J-11011/142/2004-IA.II(1),DATED 27TH JANUARY 2006 FROM MINISTRY OF ENVIRONMENT & FORESTS, GOVERNMENT OF INDIA.

COMPLIANCE REPORT

| A. | SPECIFIC CONDITIONS : | |
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| 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. | Noted & Accepted. The standards prescribed by OSPCB from time to time 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 . | Noted & Accepted. |
| iii) | In plant, control measures for checking fugitive emissions from spillage/raw materials handling should be provided. Fluoride emissions should be monitored from the pot room and is the forage around the smelter complex and the data submitted regularly to the Ministry Regional Office at Bhubaneswar and should be provided Total fluoride emissions shall not exceed 0.8 kg/ton of Aluminium produced. Further, the pot emissions through fume treatment plant should not exceed 0.30 kg/ton of Aluminum produced. Fugitive fluoride emissions from the pot room should be monitored and report submitted regularly to the Ministry/Regional office at Bhubaneswar and OSPCB. The particulate emissions from the bake oven plant should not exceed 50 mg/Nm ³ . | Noted & Accepted. The technology provider, Rio-Tinto Alcan(Aluminium Pechiney) and the EPCM Contractor, M/s Engineers India Ltd are taking all design precautions to control & check fugitive emissions at all source locations of the Smelter. |

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| iv) | The company should install fume extraction system and bag filters to control the emissions from all melting and casting units. The emissions shall conform to the standards prescribed by the Ministry / CPCB/SPCB whichever is more stringent. | Noted & Accepted. The standards prescribed by the Ministry / CPCB/SPCB will be strictly followed |
| v) | The poly aromatic hydrocarbons (PAH) from the carbon plant (anode bake oven) should not exceed 2 mg/Nm ³ . The data on PAH should be monitored quarterly and report submitted regularly to the Ministry/Regional Office at Bhubaneswar and OSPCB. | Noted & Accepted |
| vi) | Fluoride consumption shall be less than 10 kg/ton of Aluminium produced as specified by the CREP. Accordingly, Fluoride emission load shall be reduced. | Noted & Accepted |
| vii) | 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. The location and design of the landfill site should be approved by the OSPCB as per Hazardous Wastes (Management and Handling) Rules, 2003. The ground water quality around the landfill site should be monitored and data submitted to the Ministry / OSPCB. All the used oil and batteries shall be sold to the authorized recyclers / reprocessors. | Noted & Accepted. |
| viii) | Total water requirement will be 4,436 m ³ /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 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. | Noted & Accepted. The Smelter plant will be operated with installation of ETP & STP so as to achieve 'zero' discharge. |
| ix) | 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 | The scheme for development of Greenbelt in the Smelter & CPP area at Lapanga has been approved by PCCF, Odisha during recommendation of the Stage-II forest clearance |

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| | 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. | for the Project. The scheme is being implemented in consultation with the DFO, Sambalpur South. 5740 nos. of saplings have been planted in the Township area. More number of trees is to be planted in this season. It has already started along the approach roads and in the Core plant area and will be done in full scale as soon as the land acquisition / alienation are completed. |
| x) | 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. | 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 lands for establishment of Aluminium Smelter & Captive Power Plant at Lapanga, Sambalpur District has been approved and stage-II clearance granted by the Ministry of Environment & Forests, Govt. of India. The Divisional Forest Officer, Sambalpur South Division has already requested the Tehsildar, Rengali to hand over possession of forest lands to the Project Proponent. The felling of trees in non-forest lands have already started by the OFDC Ltd. |
| xi) | 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. | 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 has been submitted to the Revenue Divisional Commissioner, Sambalpur for approval of Govt. of Orissa. The Rehabilitation and Peripheral Development Advisory Committee (RPDAC) meetings are being conducted periodically in the District to address the issues related to R & R. The construction of R & R colonies at Panduloi & Ludhapali villages will be completed soon. The displacement of people to the R & R colonies will start very soon. Various CSR activities are being carried out in & around the Project area and the details are enclosed as Annexure – I . |
| 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 | Noted & Accepted |

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| | implemented. | |
| xiii) | Occupational Health Surveillance of the workers should be done on a regular basis and records maintained as per the Factories Act. | Noted & Accepted |
| 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 the report on rain water structures to harvest the runoff water for recharge of ground water. The report has been submitted to the Regional Office, MoEF, Bhubaneswar vide letter No. IR/AAP/Proj/7159, dated 06.08.2009. |
| xv) | All the recommendations made in the Charter on Corporate Responsibility for Environment Protection (CREP) for the Aluminium sector shall be strictly implemented. | Noted & Accepted. |
| 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. |
| ii) | No expansion or modification in the plant should be carried out without prior approval of the Ministry of Environment and Forests. | The ToR for expansion of Smelter to 7,20,000 TPA and CPP to 1650 MW capacities has been obtained from the Ministry vide letter No. J-11011/136/2009 – IA II (I), dated 4 th September, 2009 and application for Public Hearing has been submitted to OSPCB along with the draft EIA/EMP report. The OSPCB has requested the District Magistrate & Collector, Sambalpur vide letter No.8591 IND-II-PH-520, dated 18.05.2011 to suggest a suitable date, location & other details for conducting Public Hearing at the Site. |
| 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. | Noted & Will be followed as soon as the Smelter plant comes into operation. |
| iv) | Industrial waste water should be properly collected, treated so as to conform to the standards prescribed under GSR 422 (E) dated | Noted & Will be followed. However, Aditya Aluminium is planning for an integrated water management scheme combining Smelter & CPP |

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| | 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 waters and will endeavour to recycle the maximum quantity possible in the RO system of ETP and STPs. |
| 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. | Noted & Will be followed. |
| 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). | Noted & the specified standards has been incorporated during package ordering for the Packages and will be ensured during project implementation. |
| 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. | Noted & Will be followed. |
| 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. | Noted & Will be followed. |
| 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 after monitoring is carried out during operation of the Smelter plant. |
| x) | The Project Proponent should inform the public that the project has been accorded environmental clearance by the Ministry and | The advertisement regarding grant of Environmental Clearance has been published in two leading Newspapers and copies of the above |

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| | <p>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 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.</p> | <p>advertisements have already been submitted to the Regional office of the Ministry at Bhubaneswar</p> |
| <p>xi)</p> | <p>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.</p> | <p>Financial closure of the Project is under verge of completion and the Company has spent approximately Rs 3234 crores for the Smelter & CPP Project and has already committed to the tune of Rs 8222 crores. Land acquisition is at an advanced stage and survey; soil testing, Land leveling/grading, construction of Boundary wall, Civil construction activities etc have already started. Various equipment packages are being delivered at Site.</p> |