


EC Conditions Six Monthly Compliance Report

(by Project Proponent)



Proposal No : J-11011/29/2007-IA-II (I).

1. Name of the Entity / Corporate Office :

File No. :	J-11011/29/2007-IA-II (I)	Proposal Name :	Expansion of Aluminium Smelter (2.5 to 16 LTPA) and Captive Power Plant (675 MW to 1.350 MW) at Bhurkamunda/Brundamal , Jharsuguda, Orissa by M/s Vedanta Aluminium Ltd. - Environment Clearance reg.
Date Of EC. :	11 Jun 2008	EC Letter :	
Name of the Entity / Corporate Office :	VEDANTA LIMITED	Email Address :	meghna.ghosh@vedanta.co.in
Address :	Meghalahalli office Complex, Bheemasamudra post, Chitradurga	Mobile No :	9303134310

2. Proponent Details :

Proponent Name :	Sunil	Designation :	CEO
Telephone No :	6645-666634	Mobile No :	+91 9937535890
Fax No :	6645-6645666427	Email Address :	envvljsgsc@vedanta.co.in
Website :		Pin Code :	768202
State :	Orissa	District :	Jharsuguda
Village/Town :			

3. Compliance Letter/Report (Proponent):

Compliance Period :	2022 / 01 Dec (01 April - 30 Sep)	Compliance Submission Date :	19 Nov 2022 15:33:18:337
Remarks :			
Site Visit Report :	N/A	Site Visit Date :	N/A
ATR Report :	N/A	ATR Date :	N/A
Additional Attachment (If Any) :	N/A	Additional Remarks (If Any) :	

4. Summary Status of Compliance :

Total Condition :	31		
Complied :	28	Being Complied :	1
Not Complied :	0	Partially Complied :	2
Agreed to Comply :	0		


5. Details of Production and Project Area :


Date of Commencement of Project/Activity :		03 Jul 2008	Project Area as Per EC Granted (In Case of Mine Lease):		0
Actual Project Area(In Case of Mine Lease):		0			
PRODUCTION CAPACITY :					
S.No	Name of the Product	Units		As per EC granted	Production during last financial year
1	Aluminium Metal	Tons per Annum (TPA)		1800000	1686697.138
2	Power CPP - 1215 (9x135)	MW		1215	9398846 MWH

6. Specific Conditions (Proponent) :

S.No	Condition	Self Declaration	Remarks / Reason	Supporting Documents	Observation of IRO
1	Particulate fluoride emissions shall not be more than 0.65 mg/Nm ³ and fugitive particulate fluoride emissions from pot room shall not be more than 1.85 mg/Nm ³ .	Complied	The particulate fluoride emission and fugitive particulate fluoride emission monitored is within 0.65 mg/NM ³ and 1.85 mg/NM ³ respectively	N/A	
2	Occupational Health Surveillance of the workers should be done on a regular basis and records maintained as per the Factories Act.	Complied	Occupational health surveillance of the workers is being undertaken periodically and records maintained as per Factories Act.	N/A	
3	The poly-aromatic hydrocarbons (PAH) from the carbon plant (anode bake oven) shall not exceed 2 mg/Nm ³ . The data on PAH shall be monitored quarterly and report submitted regularly to the Ministry/Regional Office at Bhubaneswar and OSPCB.	Complied	PAH has been monitored in stacks of Bake Oven and is found in the range of 0.13 to 0.22 mg/Nm ³ . The same is being monitored periodically and report is submitted to the Regional office of the Ministry.	N/A	
4	In-plant control measures like fume extraction and dust extraction system for controlling fugitive emissions from all the material handling/transfer points shall be provided to control dust emissions. Fugitive Fluoride emissions from the pot room and in the forage around the smelter complex shall be monitored and data submitted regularly to the Ministry's Regional Office at Bhubaneswar and OSPCB.	Complied	We have provision of dry scrubbing system to maintain the total fluoride emissions below the standards. Monitoring is being undertaken and reports submitted to the Ministry's Regional Office and OSPCB	N/A	

	Further dry scrubbing system to control the emissions from the pot lines shall be provided.				
5	No effluent shall be discharged outside the premises during the non-monsoon period and shall be discharged during the monsoon period only after proper treatment and meeting the norms of the OSPCB/CPCB.	Complied	There is no discharge of wastewater from the plant in non-monsoon season. However, in case of exigency, treated wastewater post meeting the standards is being discharged during monsoon period.	N/A	
6	Green belt of adequate width and density around the project site shall be developed in 33 % area in consultation with the DFO as per the CPCB guidelines having density of 2,000 trees/ha.	Complied	Green belt/cover has been developed in 33% of the area (275 Ha) and density have been increased to 2500 trees/ha by doing gap filling.	N/A	
7	As proposed, spent pot lining waste shall also be provided to cement and steel industries for further utilization.	Partially Complied	SPL Carbon portion is being sent to authorized re-processors for detoxification and further utilization in steel and cement industries.	N/A	
8	The company shall develop rainwater structures to harvest the runoff water for recharge of ground water in consultation with the Central Ground Water Authority/Board.	Complied	Roof Top Rain water harvesting systems have been installed in plant buildings for harvesting of runoff water and reuse back in the plant as recharge not permitted in red category industry as per CGWA	N/A	
9	Integrated Ash Management Plan shall be prepared for the utilization of fly ash as per Fly Ash Notification, 1999 as amended in 2003 and implemented. A copy of the plan shall be submitted to the Ministry's Regional Office. Fly ash shall be collected pneumatically in silos and used by cement and brick manufacturers for further utilization. Bottom Ash shall be disposed off in ash pond using high concentrated slurry disposal method.	Complied	Fly Ash is being collected pneumatically in silos for further utilization in cement & brick manufacturing as per Fly Ash Notification Dec 2021. Balance ash is being sent to ash ponds by HCSD system.	N/A	
10	Total water requirement for the expansion from Hirakud Reservoir shall not exceed 2,580 m3/hr and prior permission for the existing and proposed expansion shall	Complied	Water drawl from Hirakud reservoir is within 2580 m3/hr. Treated Effluent post conforming to	N/A	

	be obtained from the concerned department before commissioning of the plant. All the effluent including from cooling tower and de-mineralization plant shall be treated in the effluent treatment plant and treated effluent shall be recycled / reutilized in the process in the smelter and CPP and also for fire protection, dust suppression,		standard is used for further recycling and reuse in the plant for dust suppression, green belt development.		
11	Ministry of Environment and Forests shall regularly be informed about the source and quantity of Alumina procured from captive/indigenous/imported sources.	Complied	The source and quantity of alumina procured during April 2022 to September 22 is as below: Captive - 881 Kmt Indigenous - 53.7 Kmt Imported - 807 Kmt	N/A	
12	Rehabilitation and Resettlement (R & R) Plan prepared and submitted to the State Govt. shall be implemented as per the R & R Policy of the State Government. All the recommendations mentioned in the R & R Plan shall be strictly followed including suitable employment and other facilities to all the oustees.	Complied	The R & R package as finalized by RPDAC based on Govt. R & R policy 2006 is being implemented fully under the supervision of District Administration.	N/A	
13	The gaseous emissions (PM, SO ₂ , NO _x , PAH, HC, VOCs and Fluoride) from various process units shall 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 emission levels shall go beyond the prescribed standards. In the event of failure of any pollution control system adopted by the unit, the respective unit sh	Complied	The gaseous emissions from various process units are confirming to the prescribed standards. The particulate matter emission from Bake Oven ranges between 3.7 to 5.7 mg/Nm ³ .		
14	Prior permission from the State Forest Department shall be obtained due to likely impact of transport of raw material and end product and gaseous emissions from the smelter on the surrounding reserve forests and wildlife. Recommendations regarding mitigative measures suggested by the State Forest Department and Chief Wildlife Warden, Govt. of Orissa shall be strictly followed.	Complied	Raw material and end products are transported through existing rail and road networks through wagons, bulkers and covered trucks. Recommendations as per approved wildlife plan is under implementation.	N/A	
15	All the environmental conditions stipulated by the Ministry vide letter no. J-	Complied	All the environmental conditions	N/A	

	11011/144/2006- IA II (I) dated 7th March, 2007 for the Aluminium Smelter Plant (2,50,000 TPA) at Village Bhurkamunda / Brundamal, District Jharsuguda, Orissa by M/s Vedanta Aluminium Ltd. shall be satisfactorily be complied and regular compliance report submitted to the Ministry's Regional Office at Bhubaneswar.		stipulated for the Aluminium Smelter Plant (2.5 LTPA) are being complied and half yearly compliance report is being submitted to the Ministry's Regional Office.		
16	Alumina shall be obtained only from those refineries, which have been accorded environmental clearance by the Ministry of Environment and Forests.	Complied	We ensure that alumina is being sourced from own refinery or from refineries in India which have been accorded Environmental Clearance by MoEF&CC. We also import alumina from other countries.	N/A	
17	All the recommendations made in the Charter on Corporate Responsibility for Environment Protection (CREP) for the Aluminium sector shall be strictly implemented.	Partially Complied	All recommendations as per CREP for Aluminium smelting is being strictly implemented (Annexure-A).		
18	Electrostatic precipitator (ESP) will be provided to Captive Power Plant (CPP) to control emissions below 100 mg/Nm3. The company shall provide bag-filters, dry scrubbing system and dust suppression system to control the all the emissions including fluoride emissions from all melting and casting units. Tar, dust and fluoride in the fumes shall be controlled in baking furnace by providing dry scrubber. The emissions shall conform to the standards prescribed by the Ministry/CPCB/SPCB whichever is	Complied	Hybrid ESP's comprising of bag filters have been installed to maintain emission level below 50 mg/Nm3 in CPP. Bag-filters, dry scrubbing system and dust suppression system has been provided.	N/A	
19	Anode butts generated from the pots shall be cleaned and recycled to the Anode Plant. The spent pot lining generated from the smelter shall be properly treated in spent pot lining treatment plant to remove fluoride and cyanide and disposed off in secured landfill. The location and design of the landfill site shall be approved by the OSPCB as per Hazardous Wastes (Management and Handling) Rules, 2003. Leachate collection facilities shall be provided to the secured landfill facility (SLF). The dro	Complied	Anode butts generated from the pots is being recycled in the Green Anode Plant. Used batteries and Used oil is being disposed to authorized recyclers/re-processors. STP sludge is utilized as manure.	N/A	
20	Regular ground water monitoring shall be carried	Complied	Regular ground water monitoring	N/A	

	out by installing Peizometers all around the secured landfill site in consultation with the Orissa Pollution Control Board, Central Ground Water Authority and State Ground Water Board and data submitted to the Ministry's Regional Office and OSPCB.		is being carried out all around the secured landfill site and the data is being submitted to OSPCB and Regional Office of the Ministry.		
21	Fluoride consumption shall be less than 10 kg/ton of Aluminium produced as specified in the CREP guidelines.	Being Complied	Efforts are being taken to reduce Fluoride consumption. Revamping of FTP is in full swing and procurement of low soda alumina has also been initiated. Till Sep'22 10.54 kg/t of Al. achieved.	N/A	

7. General Conditions (Proponent) :

S.No	Condition	Self Declaration	Remarks / Reason	Supporting Documents	Observation of IRO
1	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 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 sh	Complied	Necessary advertisement with information as advised by the Ministry has been released in two local newspapers one in vernacular and one in English.	N/A	
2	The project authorities must strictly adhere to the stipulations made by the Orissa State Pollution Control Board and the State Government.	Complied	The stipulations of OSPCB and the State Government is being adhered to.	N/A	
3	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.	Complied	Half yearly report on the status of implementation of the conditions is periodically being submitted to the Ministry's Regional Office and SPCB.	N/A	
4	No expansion or modification in the plant shall be carried out without prior approval of the Ministry of Environment and Forests.	Complied	No expansion or modernization will be undertaken without prior approval of the Ministry of	N/A	

			Environment and Forests.		
5	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.	Complied	AAQ stations have been fixed in consultation with OSPCB in the downwind direction for monitoring ground level concentration of SPM, SO ₂ and NO _x and report of the same is being submitted regularly.	N/A	
6	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.	Complied	Funds for the proposed project is from internal sources, therefore financial closure is not applicable in this case.	N/A	
7	The project proponent shall also comply with all the environmental protection measures and safeguards recommended in the EIA / EMP / risk analysis and DMP report.	Complied	All measures suggested in the EIA/ EMP/ risk analysis and DMP are being implemented.	N/A	
8	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.	Complied	The rules and regulations as prescribed under the HOWM Rules 2016, is being complied. Authorization for collection, storage, treatment and disposal of hazardous wastes has been obtained from OSPCB.	N/A	
9	As proposed in EIA/EMP, Rs. 505.00 Crores earmarked toward the capital cost and recurring the 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.	Complied	The budget earmarked for environmental protection measures have been utilized as proposed in EIA/EMP and has not been diverted for any other purposes.	N/A	
10	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 from time to time. The treated wastewater should be recycled in the plant as well as utilization for plantation purposes.	Complied	Industrial wastewater is collected, treated to conform to the standards as prescribed from time to time. Treated effluent is recycled back into the plant for	N/A	

			further utilization.		
<input checked="" type="checkbox"/> <i>I ' VEDANTA LIMITED ' hereby give undertaking that the specific / general condition is entered by me is correct.</i>					

E-Sign
VEDANTA LIMITED
Date : 19 Nov 2022 15:33:18:337

****Note : N/A - Not Available**

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