


EC Conditions Six Monthly Compliance Report

(by Project Proponent)



Proposal No : IA/OR/IND/236646/2017

1. Name of the Entity / Corporate Office :

File No. :	J-11011/29/2007-IA II(I)	Proposal Name :	Proposed Expansion of Aluminium Smelter Production Capacity from 16 LTPA to 18 LTPA, CPP 1215 MW
Date Of EC. :	05 May 2022	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 :	21 Nov 2022 09:26:13:943
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 :	66		
Complied :	60	Being Complied :	4
Not Complied :	0	Partially Complied :	0
Agreed to Comply :	2		

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 T
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	Dust Suppression measures such as water sprinkling through mobile tankers is being carried out especially during the dry season. Ash laden trucks are covered with tarpaulin to avoid spillage.	Complied	Water sprinkling is being done for dust suppression through mobile tankers and mobile mist canon has also been deployed to arrest fugitive emissions. Tarpaulin covering is being ensured for ash truck	N/A	
2	Particulate fluoride emissions shall not be more than 0.65 mg/Nm3 and fugitive particulate fluoride emissions from pot room shall not be more than 1.85 mg/Nm3.	Complied	The particulate fluoride emission and fugitive particulate fluoride emission monitored were within 0.65 mg/ NM3 and 1.85 mg/NM3 respectively.	N/A	
3	PM levels shall be less than 30 mg/Nm3 for all units under expansion. In case of older units, PP shall initiate retrofitting/modification action to achieve the PM emission level of 30 mg/Nm3 by October, 2024.	Complied	PM levels are within the stipulated standards.	N/A	
4	Present stock of SPL carbon (36320 T) and legacy SPL stock shall be liquidated by Sep, 2023 as committed.	Complied	Around 11383 MT of SPL Carbon has been disposed till Sept 2022.	N/A	
5	Regular monitoring of Air, Water & Soil quality shall be carried out in the Ash Pond area.	Complied	The monitoring of Air , water and soil quality is being carried out regularly in the Ash Pond Areas.		
6	PP shall utilize 100% ash as per Fly Ash Notification 2021 and its subsequent amendments. Further, legacy ash shall be utilized completely by 31/05/2027 as committed by PP.	Complied	As per Fly ash notification, more than 100 % ash utilized along with legacy ash till Sep'22.	N/A	
7	Performance monitoring of pollution control equipment	Complied	Study is in progress by NIT	N/A	

	shall be taken up yearly and compliance status in this regard shall be reported to RO.		Rourekela and report will be submitted within the timeline.		
8	The major emissions are from the pot room roof. The sampling frequency should be increased, and sampling is done at multiple locations. The laser-based advance technology shall be adopted to continuously monitor gaseous fluoride emissions from pot rooms on real time basis by March, 2023.	Complied	Laser Based continuous online monitoring system has been installed and commissioned at all the potrooms to monitor gaseous fluoride emissions.	N/A	
9	The area of sampling and analysis of fluoride in soil and forage should extend up to 10 kilometers radius of plant premises covering upwind and downwind directions. Further, fluoride sampling and analysis should be taken quarterly at the nearest irrigated lands growing crops, vegetables, and other products of human consumption.	Complied	Sampling and analysis of fluoride in soil and forage has been extended up to 10 Kilometers radius covering upwind and downwind directions. Reports are regularly being submitted to the statutory bodies.	N/A	
10	Three tier Green Belt shall be developed in a time frame of one year covering 33% of total area with native species all along the periphery of the project site of adequate width and tree density shall not be less than 2500 per ha. Survival rate of green belt developed shall be monitored on periodic basis to ensure that damaged plants are replaced with new plants in the subsequent years. This shall include development of green belt of 50 width from the project site towards the Jharsuguda village	Complied	Study is in progress by IIT, Bhubaneswar and reclaiming and plantation will be carried out based on the recommendation of the report. We have communicated DFO , Jharsuguda for the allocation of land.	N/A	
11	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 shall be submitted regularly to the Ministry/Regional Office at Bhubaneswar and Odisha Pollution Control Board.	Complied	PAH is being monitored in the stack of Bake Oven and is found in the range of 0.13 to 0.22 mg/Nm ³ . The same is monitored and report is submitted to the Regional office of the Ministry and OSPCB.	N/A	
12	Wastes shall be sent to RAMKY TSDF located at Sukinda. Further, waste disposed in this SLF shall be evacuated and disposed to authorized agency for detoxification as committed by PP.	Complied	H.wastes such as SBD, drain cleaning Sludge, H.k waste , ETP Sludge etc. are being sent to RAMKY TSDF. SPL disposed in the SLF has been evacuated and disposed to	N/A	

			authorized agency for detoxification.		
13	PP shall use Roof Top Rainwater Harvesting systems with a total capacity of around 10000 m3 of rainwater and re-use the water in the plant.	Complied	Roof top Rainwater Harvesting systems has been installed with capacity more than 10000 m3 and the same is being recycled back into the system.	N/A	
14	Refractory SPL stock (40000 T) stored in covered shed on concrete floors shall be disposed of Dec, 2025 as committed.	Complied	SPL refractory is being stored on concrete floors in covered shed till an approved disposal mechanism is in place.	N/A	
15	The project proponent shall abide by all orders and judicial pronouncements, made from time to time in OA No. 10/2021/EZ pending before the National Green Tribunal (NGT), Eastern Zone, Kolkata	Complied	ll the orders and judicial pronouncements by NGT in the OA No. 10/2021/EZ has been complied with.	N/A	
16	A nallah is passing through the project site, PP shall maintain the nallah in its natural form and provide the green buffer zone of 10 m on both side of the nallah.	Complied	Nallah is maintained in its natural form however we have engaged third party to conduct study which is under progress.	N/A	
17	Wheel Washing mechanism shall be provided in entry and exit gates with complete water recirculation system.	Complied	Wheel washing system has been provided at the main entry and exit gate with water recirculation system.	N/A	
18	Greening and Paving shall be implemented in the plant area to arrest soil erosion and dust pollution from exposed soil surface.	Complied	Greening and Paving has been implemented in the plant area to arrest soil erosion and dust pollution from exposed soil surface.	N/A	
19	The recommendations of the approved Site-Specific Conservation Plan / Wildlife Management Plan shall be implemented in consultation with the State Forest Department. The implementation report shall be furnished along with the six-monthly compliance report to the concerned Regional Office of the MoEF&CC.	Being Complied	Recommendation of Wild Life Conservation Plan has been implemented at site however few recommendations which has to be implemented by DFO is in progress. Implementation report from DFO is awaited.	N/A	
20	Project proponent shall	Being Complied	Efforts are being	N/A	

	maintain the Fluoride consumption less than 10 kg/tone of Aluminium production by April, 2022 and reduce further at 8.0 kg/t by April, 2023 as committed by PP.		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.		
21	All the recommendations made in the Charter on Corporate Responsibility for Environment Protection (CREP) for the Aluminium sector shall be strictly implemented.	Being Complied	The recommendations made in the Charter on Corporate Responsibility for Environment Protection (CREP) for the Aluminium sector is being implemented at site.		


7. General Conditions (Proponent):

S.No	Condition	Self Declaration	Remarks / Reason	Supporting Documents	Observation of IRO
1	Project proponent shall submit a study report on De-carbonization program, which would essentially consist of company's carbon emissions, carbon budgeting/ balancing, carbon sequestration activities and carbon capture, use and storage and offsetting strategies. Further, the report shall also contain time bound action plan to reduce its carbon intensity of its operations and supply chains, energy transition pathway from fossil fuels to Renewable energy etc. All these activities/ assessments should	Complied	Study is in progress and the report will be submitted to authority.	N/A	
2	The Regional Office of this Ministry shall monitor compliance of the stipulated conditions. The project authorities should extend full cooperation to the officer (s) of the Regional Office by furnishing the requisite data / information/monitoring reports.	Agreed to Comply	Agreed. Full cooperation will be extended to the Regional Office by furnishing with the requisite data/information/ reports from time to time.	N/A	
3	The project proponent shall provide wind shelter fence and chemical spraying on the raw material stock piles;	Complied	We have installed mist canon and fixed rain guns at Coal Handling Plant to arrest fugitive emissions.	N/A	
4	Any appeal against this EC shall lie with the National Green Tribunal, if preferred, within a period of 30 days as	Complied	No such appeal against this EC with the NGT within a period	N/A	

	prescribed under Section 16 of the National Green Tribunal Act, 2010.		of 30 days as prescribed.		
5	Ventilation system shall be designed for adequate air changes as per the prevailing norms for all tunnels, motor houses, and cement bagging plants.	Complied	The plant has been designed with proper ventilation systems.	N/A	
6	No further expansion or modifications in the plant shall be carried out without prior approval of the Ministry of Environment, Forests and Climate Change (MoEF&CC).	Complied	No expansion or modification will be carried out without prior approval of MoEF&CC.	N/A	
7	Garland drains and collection pits shall be provided for each stock pile to arrest the runoff in the event of heavy rains and to check the water pollution due to surface run off.	Complied	A detailed Surface run off management study has been conducted and will be implemented in phases.	N/A	
8	The project proponent shall monitor fugitive emissions in the plant premises at least once in every quarter through labs recognized under Environment (Protection) Act, 1986.	Complied	Fugitive emissions in the plant premises are being monitored every quarter through recognized labs.	N/A	
9	The project proponent shall inform the Regional Office as well as the Ministry, the date of financial closure and final approval of the project by the concerned authorities, commencing the land development work and start of production operation by the project.	Complied	The Regional Office has been informed about the final approval of the project.	N/A	
10	The project proponent shall provide leakage detection and mechanized bag cleaning facilities for better maintenance of bags.	Complied	Leakage Detection and Mechanized bag cleaning facilities have been provided for maintenance of bags.	N/A	
11	Make efforts to increase the life of pot lining through better construction and operating techniques.	Complied	Efforts are being taken to increase the pot life with better operational practices.	N/A	
12	The project proponent shall ensure covered transportation and conveying of ore, coal and other raw material to prevent spillage and dust generation; Use closed bulkers for carrying fly ash;	Complied	Coal, other raw material and fly ash are being transported and conveyed in covered trucks and railway rakes.	N/A	
13	The project proponent shall provide waste heat recovery system (pre-heating of combustion air) at the flue gases.	Complied	Waste Heat recovery systems such as rotary APH (air preheater) for flue gas heat recovery already incorporated in	N/A	

			Captive Power Plant.		
14	Provide solar power generation on roof tops of buildings, for solar light system for all common areas, streetlights, parking around project area and maintain the same regularly;	Complied	One Rooftop Solar project of 10 KWH implemented in plant premises. Further, Solar projects implementation is under progress.	N/A	
15	Water meters shall be provided at the inlet to all unit processes in the cement plant.	Complied	Water meters has been provided at the inlet of the unit processes.	N/A	
16	Practice use of low-Sulphur tars for baking anodes.	Complied	Low Sulphur tar is being used for making anodes.	N/A	
17	Sewage Treatment Plant shall be provided for treatment of domestic wastewater to meet the prescribed standards.	Complied	Sewage Treatment Plant is in place for the treatment of domestic wastewater.	N/A	
18	Sufficient number of mobile or stationery vacuum cleaners shall be provided to clean plant roads, shop floors, roofs, regularly.	Complied	Vacuum Cleaners (both mobile and stationery) have been provided to clean plant roads, shop floors etc.	N/A	
19	Design the pot roofs with louvers and roof ventilators	Complied	Louvers with roof ventilators have been provided in the potrooms.	N/A	
20	The project proponent shall make efforts to minimize water consumption in the cement plant complex by segregation of used water, practicing cascade use and by recycling treated water.	Complied	The water consumption of the Smelter and power plants are being monitored on a regular basis and treated water is being recycled back into the system to the maximum extent possible.	N/A	
21	The project proponent shall monitor regularly ground water quality at least twice a year (pre and post monsoon) at sufficient numbers of piezometers/sampling wells in the plant and adjacent areas through labs recognised under Environment (Protection) Act, 1986 and NABL accredited laboratories.	Complied	Regular ground water monitoring is being carried out all around the secured landfill site and the data is being submitted to OSPCB and Regional Office of the Ministry.	N/A	
22	The copies of the environmental clearance shall be submitted by the project proponents to the Heads of local bodies, Panchayats and Municipal Bodies in addition to the relevant offices of the Government who in turn has to display the same for 30 days from the date of receipt.	Complied	The copies of the environmental clearance has been submitted to the Heads of local bodies, Panchayats, Municipal Bodies and relevant Govt. Offices vide Letter No. VL/PH/007/2022-	N/A	

			001 dated 14.05.2022.		
23	The project proponent shall prepare GHG emissions inventory for the plant and shall submit the Programme for reduction of the same including carbon sequestration including plantation.	Complied	Study is in progress and the report will be submitted to authority.	N/A	
24	A separate Environmental Cell both at the project and company head quarter level, with qualified personnel shall be set up under the control of senior Executive, who will directly to the head of the organization.	Complied	Separate Environmental Cell with required qualified personnel is in place reporting directly to the Unit Head.	N/A	
25	Used refractories shall be recycled.	Agreed to Comply	Noted	N/A	
26	Provide LED lights in their offices and residential areas.	Complied	LED lights have been provided in the offices as well as residential areas.	N/A	
27	Oily scum and metallic sludge recovered from ETP shall be mixed, dried, and briquetted and reused.	Complied	ETP sludge is being disposed off to Common Hazardous Waste TSDF at Sukinda, Dist - Jajpur.	N/A	
28	Emergency preparedness plan based on the Hazard identification and Risk Assessment (HIRA) and Disaster Management Plan shall be implemented.	Complied	Emergency Preparedness Plan based on the HIRA is being implemented at site. Mock Drills are being conducted on regular basis.	N/A	
29	Adopt measures to recover fluoride gas from electrolytic cells and recycle the same in the process.	Complied	Fluoride gas from electrolytic cells are being captured through Fume Treatment Plants installed in Smelter Plants and recycled back into the system.	N/A	
30	The project proponent shall make public the environmental clearance granted for their project along with the environmental conditions and safeguards at their cost by prominently advertising it at least in two local newspapers of the District or State, of which one shall be in the vernacular language within seven days and in addition this shall also be displayed in the project proponent's website permanently.	Complied	The grant of EC of the expansion project has been published in two widely circulated newspaper. The Samaja- 11th May 2022 (Odia) Orissa Post - 11th May 2022 (English)	N/A	
31	The company shall have a well laid down environmental policy duly approve by the Board of Directors. The	Complied	Environmental Policy is in place. We have a defined system	N/A	

	<p>environmental policy should prescribe for standard operating procedures to have proper checks and balances and to bring into focus any infringements/deviation/violation of the environmental / forest / wildlife norms / conditions.</p> <p>The company shall have defined system of reporting infringements / deviation / violation of the environmental / forest / wildlife norms / conditions and /or sharehol</p>		of reporting the deviations if any.		
32	The project proponent shall upload the status of compliance of the stipulated environment clearance conditions, including results of monitored data on their website and update the same on half-yearly basis.	Complied	Compliance to the stipulated EC conditions including results of monitored data are being uploaded on half yearly basis.		
33	The project proponent shall submit six-monthly reports on the status of the compliance of the stipulated environmental conditions on the website of the ministry of Environment, Forest and Climate Change at environment clearance portal.	Complied	Six monthly compliance reports are being uploaded on portal.	N/A	
34	The Ministry reserves the right to stipulate additional conditions if found necessary. The Company in a time bound manner shall implement these conditions.	Complied	Agreed.	N/A	
35	Concealing factual data or submission of false/fabricated data may result in revocation of this environmental clearance and attract action under the provisions of Environment (Protection) Act, 1986.	Complied	Agreed	N/A	
36	The project proponent shall submit the environmental statement for each financial year in Form-V to the concerned State Pollution Control Board as prescribed under the Environment (Protection) Rules, 1986, as amended subsequently and put on the website of the company.	Complied	Environment Statement has been submitted on 26.09.2022 and uploaded on website.	N/A	
37	The Ministry may revoke or suspend the clearance, if implementation of any of the above conditions is not satisfactory	Complied	Agreed.	N/A	
38	The project proponent shall abide by all the commitments and recommendations made in the EIA/EMP report, commitment made during Public Hearing and also that during their presentation to the Expert Appraisal Committee.	Complied	Agreed.	N/A	

39	The Environment Clearance (EC) granted to the project/ activity is strictly under the provisions of the EIA Notification, 2006 and its amendments issued from time to time. It does not tantamount/ construe to approvals/ consent/ permissions etc., required to be obtained or standards/conditions to be followed under any other Acts/Rules/Subordinate legislations, etc., as may be applicable to the project.	Complied	Agreed.	N/A	
40	The project proponent shall monitor the criteria pollutants level namely; PM10, SO2, NOx (ambient levels as well as stack emissions) or critical sectoral parameters, indicated for the projects and display the same at a convenient location for disclosure to the public and put on the website of the company.	Complied	Agreed.	N/A	
41	Occupational health surveillance of the workers shall be done on a regular basis and records maintained.	Complied	Occupational Health Surveillance of the workers is being done on a regular basis and records are being maintained.	N/A	
42	The project proponent shall carry out heat stress analysis for the workmen who work in high temperature work zone and provide Personal Protection Equipment (PPE) as per the norms.	Complied	Heat stress analysis is being carried out as per the expert advice.	N/A	
43	The project proponent shall comply with the provisions contained in this Ministry's OM vide F.No. 22-65/2017-IA.III dated 30/09/2020. As part of Corporate Environment Responsibility (CER) activity, company shall adopt nearby villages based on the socio-economic survey and undertake community developmental activities in consultation with the village Panchayat and the District Administration as committed.	Being Complied	CSR activities are under full swing and we had a word with local authorities to make model villages.	N/A	
44	The project proponent shall install 24x7 continuous effluent monitoring system with respect to standards prescribed in Environment (Protection) Rules 1986 (G.S.R 742 (E) dated 30th August 1990 and further amended vide G.S.R 46 (E) dated 3rd February 2006 (Aluminium); S.O. 3305 (E) dated 7th December 2015 (Thermal Power Plants) as amended from time to time and connected to SPCB and CPCB	Complied	Continuous effluent monitoring systems has already been installed and connected to SPCB and CPCB servers.	N/A	

	online servers and calibrate these system from time to time according to equipment supplier specification through				
45	The project proponent shall install 24x7 Continuous Emission Monitoring System (CEMS) at process stacks to monitor stack emission as well as 4 Nos. Continuous Ambient Air Quality Station (CAAQS) for monitoring AAQ parameters with respect to standards prescribed in Environment (Protection) Rules 1986 as amended from time to time. The CEMS and CAAQMS shall be connected to SPCB and CPCB online servers and calibrate these systems from time to time according to equipment supplier specification through	Complied	Continuous Emission Monitoring System has been installed and connected to SPCB and CPCB servers.	N/A	
<input checked="" type="checkbox"/> I ' VEDANTA LIMITED ' hereby give undertaking that the specific / general condition is entered by me is correct.					

E-Sign**VEDANTA LIMITED****Date : 21 Nov 2022 09:26:13:943******Note : N/A - Not Available****PRINT**

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