

September 14, 2017

To

The Plant Head  
M/s National Aluminium Company Ltd,  
Captive Power Plant,  
Angul, Odisha

**Sub: Directions under Section 5 of the Environment (Protection) Act, 1986 to M/s National Aluminium Company Ltd, Captive Power Plant, Angul, Odisha - Closure thereof.**

WHEREAS, Thermal Power Plants are identified as one of the 17 categories of highly polluting industries in the country and have been discharging environmental pollutants directly or indirectly into ambient air and water, which pose constant threat to cause adverse effect on air and water quality; and

WHEREAS, for strengthening monitoring and compliance through self-regulatory mechanism, online emission and effluent monitoring systems need to be installed and operated by the developers and the industries on 'polluter pays principle'; and

WHEREAS, directions under section 5 of the Environment (Protection) Act, were issued on July 21, 2015 to M/s National Aluminium Company Ltd (NALCO Ltd) for installation of online emission & effluent monitoring systems for parameters namely PM, SO<sub>2</sub>, NO<sub>x</sub> & pH, TSS, Temperature, flow and submission of the status; and

WHEREAS, a team from Regional Directorate (East), CPCB, Kolkata carried out an inspection of **M/s NALCO Ltd, CPP, Angul, Odisha** on 05.07.2017 to verify the compliance based on offline status of its OCEMS during the period of March 15 - April 15, 2017. The team made the following observations:

1. M/s NALCO Ltd has valid consents from SPCB under Air Act, 1981 & and Water Act, 1974 with validity up to 31.03.2018. Authorization under Hazardous & Other Wastes (M&TBM) Rules is valid up to 31.03.2021.
2. All the units of M/s NALCO Ltd are equipped with ESPs of adequate capacity for control of Particulate Matter (PM) emission.
3. Continuous Emission Monitoring Systems are installed in all of the units for the parameters namely PM, SO<sub>2</sub>, NO<sub>x</sub> and were found working in all operational units. However, only Unit-9 was found connected with CPCB server and remaining units are not connected.
4. The concentrations of PM during manual monitoring from Units-5 and Unit-7 were observed to be 123 mg/Nm<sup>3</sup> and 25 mg/Nm<sup>3</sup> respectively against the prescribed standard of 100 mg/Nm<sup>3</sup> whereas as per the online monitoring, the

concentrations of PM from these units were 80 mg/Nm<sup>3</sup> and 53.6 mg/Nm<sup>3</sup>. The deviation in concentrations of PM during manual and online monitoring were found to be 35% and 114%. Emission from Unit-7 was found as complying with the prescribed standards whereas, Unit-5 was found as non-complying with the prescribed standards.

5. M/s NALCO Ltd has 03 CAAQMS stations. All CAAQMS stations were found operating but CAAQMS-1 was not working for NO, NO<sub>2</sub> and NO<sub>x</sub> parameters.
6. For effluent monitoring EQMS is installed at the ETP outlet. The treated effluent sample was collected from the final outlet of ETP and tested. The results monitored were pH- 7.82, BOD- 03 mg/l, COD- 20 mg/l, TSS- 25 mg/l and O&G- less than 5 mg/l, whereas online monitoring values for BOD, COD and TSS parameters were 71, 106.4 and 14.8 respectively.
7. The pH analyser was found not working whereas, for BOD and COD parameters the deviation between manual and online monitored values found to be 2266% and 432% respectively. However, M/s NALCO Ltd is a zero discharge unit and treated effluent is completely being recycled and utilised within plant premises for dust suppression, fly ash slurry making etc. Hence, resulting into zero discharge but flow meter and web camera are not installed for ensuring zero discharge.

WHEREAS, Ministry of Environment & Forests, Government of India, vide Notifications No. S. O. 157 (E) of 27.02.1996 and S. O. 730 (E) dated 10.07.2002, has delegated the powers vested under Section 5 of the Environment (Protection) Act, 1986 (29 of 1986) to the Chairman, Central Pollution Control Board, to issue directions to any industry or any local body or any other authority for violations of the standards and rules notified under the Environment (Protection) Rules, 1986 and amendment thereof.

NOW, THEREFORE, in exercise of the powers vested under Section 5 of the Environment (Protection) Act, 1986, M/s National Aluminium Company Ltd, CPP, Angul, Odisha is hereby directed to ensure compliance of following directions:

1. That M/s NALCO Ltd, CPP, Angul, Odisha shall close down the operations of Unit -1 to 8 & 10 with immediate effect and shall remain closed till establishment of 24×7 online connectivity of Continuous Emission Monitoring System (CEMS) with CPCB server.
2. That M/s NALCO Ltd, CPP, Angul, Odisha shall augment the efficiency of ESP connected to Unit -5 so as to achieve new emission limits of PM as per the Notification dated December 07, 2015.
3. That M/s NALCO Ltd, CPP, Angul, Odisha shall ensure regular calibration of CEMS and continuous data transmission to CPCB server. The Plant shall also inform immediately whenever CEMS are not in operation for whatsoever the reason may be.

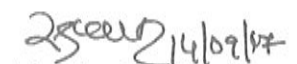
4. That M/s NALCO Ltd, CPP, Angul, Odisha shall ensure proper operation of its CAAQMS for all notified parameters as per protocol.
5. That M/s NALCO Ltd, CPP, Angul, Odisha shall not discharge effluent outside the premises and achieve zero liquid discharge as stipulated in the CTO.
6. That M/s NALCO Ltd, CPP, Angul, Odisha shall install and establish connectivity of web camera and flow meter to ensure zero discharge from ETP and STP.

M/s National Aluminium Company Ltd, Captive Power Plant, Angul, Odisha is hereby directed to comply the directions listed at Sr. No. 1-6. Action taken report shall be submitted within 15 days from the date of issue of these directions. In case of failure to comply with the said directions, the Board will be constrained to initiate action as may be deemed necessary and appropriate in the circumstance of the case under the Environment (Protection) Act, 1986 and the National Green Tribunal Act, 2010.

  
(S.P.S. Parkar)  
Chairman

**Copy to:**

1. The Chairman  
Odisha State Pollution Control Board  
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3. The Regional Director - East,  
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Kolkata - 700 107, West Bengal
4.  Divisional Head - IT, CPCB, Delhi
5. Divisional Head - IPC-VI, CPCB, Delhi

  
(A. Sudhakar)  
Member Secretary

