केन्द्रीय प्रदूषण नियंत्रण बोर्ड
CENTRAL POLLUTION CONTROL BOARD
पर्यावरण, वन एवं जलवायु परिवर्तन मंत्रालय भारत सरकार
MINISTRY OF ENVIRONMENT, FOREST & CLIMATE CHANGE, GOVT. OF INDIA

CPCB-B 33014/62 (iron&steel)/2017/IPC-II/ 8168

SPEED POST
August 16, 2017

To

M/s Steel Authority of India Ltd.
Durgapur Steel Plant
P.O. Durgapur, Dist. Burdwan
West Bengal 713203

Sub.: Directions under Section 5 of the Environment (Protection) Act, 1986.

WHEREAS, integrated iron and steel plants and sponge iron units are identified as one of the 17 categories of highly polluting industries which have been discharging environmental pollutants directly or indirectly into the ambient air and water, having potential threat to cause adverse effect on the water and air quality;

WHEREAS, the Central Government has notified the standards for discharge of environmental pollutants from various categories of industries under the Environment (Protection) Act, 1986 and the rules framed there under;

WHEREAS, there is need to inculcate habit of self-monitoring within the industries for complying with the prescribed standards and this can be achieved by the methods like installing online effluent and emission monitoring devices;

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

WHEREAS, a direction under section 18 (1) (b) of the Water (Prevention & Control of Pollution) Act, 1974 and the Air (Prevention & Control of Pollution) Act, 1981 was issued on February 05, 2014 to all the State Pollution Control Boards (SPCBs)/ Pollution Control Committees (PCCs) for installation of online emission monitoring system w.r.t. PM and SO_2 parameters & online effluent monitoring system w.r.t. pH, flow, BOD, COD and TSS in iron & steel industries;

WHEREAS, considering the requests/ representations received from industries/ industrial associations/ SPCBs / PCCs, an extension of time up to June 30, 2015 for installation of online monitoring systems was granted vide directions dated March 02, 2015 under section 18 (1) (b) of the Water (Prevention & Control of Pollution) Act, 1974 and the Air (Prevention & Control of Pollution) Act, 1981;

WHEREAS, concerned SPCB/ PCC issued directions under section 33A of the Water (Prevention & Control of Pollution) Act, 1974 and section 31A of the Air (Prevention & Control of Pollution) Act, 1981 to install the online monitoring system by June 30, 2015 and submit bank guarantee of 100% of the cost of online emission & effluent monitoring system;

WHEREAS, during monthly verifications of Online Continuous Emission & Effluent Monitoring System (OCEMS) data by the CPCB IT Division it was observed that the unit remains non-

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complying with respect to exceedance SMS alerts/Offline status during December' 2016 to January' 2017;

WHEREAS, the 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;

WHEREAS, the unit M/s Steel Authority of India Ltd. Durgapur Steel Plant, P.O. Durgapur, Dist. Burdwan, West Bengal was inspected by CPCB - Regional Directorate (Kolkata) on 20.04.2017 and made the following observations:

(i) Products manufactured are Crude steel – 1.867 MTPA, Hot metal - 2.017 MTPA and Sinter – 2.728 MTPA with iron ore as the main raw material. The consent is valid up to 31.12.2018 and the HW authorization is valid up to 28.2.2021.

(ii) The industry was running with all the units (Blast furnace, Sinter plant, casting mill, rolling mill, refractories and captive power plant) during inspection. The unit has 6 coke oven batteries (2x39 batteries), out of which 3 are presently in use, 2 are under repair and 1 is dismantled.

(iii) Fresh Water consumption is about 67000 m^3/day and the water and energy consumption are about 3.5 m^3 and 6.493 G. Cal per Ton of Product (crude steel) respectively.

(iv) Effluent generated from the units like blast furnace, sinter plant, casting mill, rolling mill, refractories and CPP are treated in ETP mainly for neutralizing and sedimentation. In Coke oven by-product plant, ETP (capacity – 180 m^3/hr) with two-stage aeration followed by clarification is provided for treatment of effluent. The cyanide containing effluent is treated with H_2O_2 for oxidation of cyanide and then mixed with 'Ammonia still' effluent in a mixing tank before taking to tilted plate interceptor (TPI) and dissolved air floatation unit and then to aeration system. Part of effluent is recycled for coke quenching.

(v) There are 5 outlets from the plant, i.e. (i) Outlet 1 carried effluent from steel melting shop and foundry areas and the flow was 116.08 m^3/hr, (ii) Outlet 2 carried effluent from Blast furnace, sinter plant and CPP and the flow was 334.8 m^3/hr, (iii) Outlet 3 carried effluent from Rolling mill (occasionally), (iv) Outlet 4 from coal handling and raw material handling area is completely dry and no discharge and (v) Outlet 5 carried effluent from coke oven and the flow was 103.58 m^3/hr.

(vi) Wastewater samples collected from Outlet 1, 2 & 5 were analysed and the results were within the stipulated norms for pH, TSS, COD, BOD, O & G, Phenol, Cyanide and NH3-N except for phenol at Outlet 2 and TSS at Outlet 1.

(vii) The air pollution control devices such as dust suppression system, dust collectors, bag filters, multi-cyclones, and electrostatic precipitators are provided in different process units. There are 45 major stacks (total 55 nos.). Two stacks were monitored and the results showed lab result exceeding the limits (100 mg/Nm^3) of PM for Coke oven battery 5.

(viii) Online data of 11 stacks checked and found with the stipulated standards. Installation/connection of online monitoring system at all the required stacks are not yet completed and the work is expected to be completed by the end of 2017.

(vi) Solid wastes are generated from Blast furnace, Basic Oxygen Furance, Steel Melting shop, Coke oven and Lime plants. They are either reused in the processed or stored in dump yard and sold. ETP sludge is used as manure in the plant area. About 95% of the total solid waste generated in the unit is recycled or reused.

(vii) HW generated from the process include Acid Sludge, Tar Sludge, Waste/spent oil and waste lead acid batteries. Acid sludge is disposed to common HW disposal facility at Haldia, tar sludge reused in coal bed for charging into the coke oven batteries, waste/spent oil and waste batteries to registered recyclers.

(viii) As the unit failed to submit copy of CTO, the unit was requested to submit the CTO and details of stacks and its online connectivity status as per the CPCB guidelines through email dated 6.7.2017 but failed to respond to the same.

NOW, THEREFORE, in exercise of powers vested under Section 5 of the Environment (Protection) Act, 1986 you are directed to show cause as to why the unit should not be closed till compliance of the following directions are achieved:

(i) To install/connect all the remaining stacks/ ETP outlets with the online effluent and emission monitoring system as presently only 11 stacks are connected.

(ii) To submit copy of valid CTO under Water and Air Acts and HW authorization received from SPCB.

(iii) To operate and maintain ETP properly to meet the prescribed norms as the phenol (Outlet 2) and TSS (Outlet 1) values are exceeding the prescribed norms/standards.

(iv) To operate and maintain the air pollution control systems attached to various stacks properly to control PM emission as the same in coke oven battery 5 exceeded the prescribed limit.

(v) To calibrate the online monitoring system regularly and make efforts to bring the difference between manual and online monitoring values to an acceptable level.

(vi) To take necessary steps for 100 % reuse of treated effluent so as to achieve zero liquid discharge.

The unit M/s Steel Authority of India Ltd. Durgapur Steel Plant, Durgapur, Burdwan, West Bengal shall submit the action plan for ensuring compliance within 15 days from the date of issue of these directions. Failure to comply with the above directions will attract action in accordance with the provision of the Environment (Protection) Act, 1986.

(S.P. Singh Parihar)
Chairman
18/08/17

Copy to:

1. **The Chairman**
   West Bengal Pollution Control Board
   Paribesh Bhavan,
   10A, Block-L.A., Sector III,
   Salt Lake City, Calcutta - 700 098
   : With request to ensure compliance of this direction & to submit action taken report

2. **The Additional Secretary (AKM) CP Division**
   Ministry of Environment, Forests &
   Climate Change,
   Prithvi Wing, 2nd Floor, Room No. 216
   Indira Paryavaran Bhawan
   Aliganj, Jor Bagh Road, New Delhi – 110003
   : For information please.

3. **The Regional Director (East)**
   CPCB, Southend Conclave, Block 502,
   5th & 6th Floors, 1582
   Rajdanga Main Road, Kolkata-700107.
   : For information please.

4. **The Divisional Head**
   IT Division, CPCB, Delhi

5. **The Divisional Head**
   IPC-VI, CPCB, Delhi

(A.B. Akolkar)
Member Secretary