

Speed Post

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22nd
18th July, 2019

To,

**M/s Bajaj Hindustan Sugar Ltd.,
Distillery Unit, Gola Gokaranath,
Lakhimpur Kheri, Uttar Pradesh-262802**

**Sub: CLOSURE DIRECTION UNDER SECTION 5 OF THE ENVIRONMENT
(PROTECTION) ACT, 1986 - Reg.**

WHEREAS, Distilleries 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; and

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

WHEREAS, it is obligatory on the part of industries to install effluent treatment plants (ETPs) and air pollution control devices (APCDs) to comply with the effluent discharge and emission standards as notified under the Environment (Protection) Act, 1986 and the Rules framed there under and also to meet the consent conditions granted by State Pollution Control Board (SPCBs) / Pollution Control Committees (PCCs); and

WHEREAS, for strengthening the monitoring and compliance through self regulatory mechanism and inculcating the habit of self monitoring within the industries for complying with the prescribed standards, CPCB has mandated installation and operation of online continuous emission and effluent monitoring systems (OCEMS) by the 17 category & Ganga GPI industries on 'polluter pays principle' ;and

WHEREAS, the sector specific requirement regarding installation of OCEMS for the 17 categories, including distilleries are already uploaded in the CPCB website and is available at <http://cpcb.nic.in/online-monitoring-clarification/> ; and

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, **M/s Bajaj Hindustan Sugar Ltd., Distillery Unit, Gola Gokaranath, Lakhimpur Kheri, Uttar Pradesh**, hereinafter referred to as 'the unit' was jointly inspected by RO UPPCB & RD, CPCB, Lucknow team on 23.10.2018 based on complaint received regarding discharge of coloured effluent into Sharda Sahayak Canal and based on the observations made during the inspection, CPCB had issued a show cause notice to the unit on 14.01.2019, under section 5 of the Environment (Protection) Act, 1986 as to why the unit should not be closed down; and

WHEREAS, the unit vide letter dated 30.01.2019 had provided its reply to the notice, indicating compliance to the direction and after examining the reply received, a team from RD, CPCB, Lucknow had again carried out an inspection of the unit on 24.04.2019 for verification of the compliance status of the unit to the show cause notice issued by CPCB and has made the following major observations:

1. At the time of inspection, the unit engaged in production of Absolute Alcohol/Ethanol was found operational. The unit has licensed capacity of distillery for 100 KLD; however it was reported operating only at 60 KLD.
2. The unit has valid consents under the Water and Air Acts, valid up to 31.12.2019.
3. It is reported that the unit is operational on Zero Liquid Discharge (ZLD) with systems available such as MEE of 02 effects, large storage lagoons and bio composting yards. During visit, the MEE of the unit was found non-operational, reportedly due to fault in power cable. The flow meters installed at MEE feed, MEE Concentrate, MEE condensate were not showing any reading. After 24 hrs of the visit by the team, the fault in power cable of MEE could not be rectified this makes the regular operation of existing MEE doubtful. Samples of MEE condensate and concentrate could not be collected by visiting team due to non-operation of MEE.
4. The unit has 4 large lagoons (made of brick lined) spread over in an area of approximately 39000 square meter which was filled with spent wash, bio-methanated spent wash and concentrate. Out of 4 lagoons, one was found under dismantling process by filling of fly-ash from sugar factory of the unit. The gauges installed in these lagoons for measurement of depth were not found calibrated. It is reported that half of the lagoons are containing settled sludge. As per large area of lagoons, unit is violating the direction regarding the capacity lagoon reduced to 30 days equivalent of concentrated spent wash generation. It is reported that unit is generating concentrated spent wash 520 m³/day at full capacity of production which itself is high.
5. Apart from these lagoons, a large katcha lagoon was also observed, containing a coloured effluent which was under the process of dismantling by filling fly-ash from its sugar factory of the unit. The process of dismantling of katcha lagoon was very slow which may take several months to dismantle completely.
6. Unit representatives reported that, the whole MEE condensate (approx. 454 kl/day) is totally consumed in cooling towers which is doubtful in case of non-functional of MEE.
7. The installation of new 05 stage MEE was found under progress to reduce the generation/ volume of concentrated spent wash.
8. During visit, the inspecting team collected the samples from various location/lagoons of the unit and analysis results are presented below.

Sample Code/Location	pH	Colour (Hz)	SS (mg/l)	TDS (mg/l)	BOD (mg/l)	COD (mg/l)
Spent Wash in	4.23	--	27130	88273	69000	127749

Lagoon (SP-02)						
Bio Gas Digester Overflow/MEE Inlet (SP-01)	8.22	80000	7520	28804	19100	42234
Katcha Lagoon under dismantling process (SP-03)	9.25	80000	2251	28799	9300	19028

9. The unit has 22.69 acre active area for bio composting, which is divided into three parts. Only three hand pumps were found installed in bio-compost area for monitoring purpose. Piezometer wells were not found in bio composting area. As per SOP of bio-composting dated 10-08-2018. Unit is required to install at least 7 to 8 piezometric well as per standard procedure and specifications.
10. During visit, the covered shed storage facility for ready compost was unsatisfactory. No sample bags of bio-compost were found stored for sale purpose. Therefore, bagging of bio-compost is still doubtful.
11. Three samples of groundwater from hand pumps installed in bio-composting area were also collected to assess the groundwater quality; the analysis result is presented below;

Sample Code/Location	pH	Colour (Hz)	Alkalinity (mg/l)	COD (mg/l)
Handpump-1 (SP-04)	6.69	50	522	32
Handpump-2 (SP-05)	6.75	100	478	10.1
Handpump-3 (SP-06)	6.79	150	424	35.7
DWS as per IS-10500 (2012) - Acceptable Limit	6.5 to 8.5	5	200	--

The analysis results of the groundwater samples reveal that the concentrations of Colour & Alkalinity in all three hand pumps are higher than the acceptable limits of drinking water standards. Presence of high colour and COD in groundwater is showing the impact of leaching of effluent into groundwater. The existing bio compost yards and lagoons may not be impermeable.

WHEREAS, it is evident from the above observations made by the inspection team, that the unit is still non-complying to the ZLD action plan of CPCB with respect to operation of MEE for achieving the stipulated volume reduction/concentration of spent wash, storage of coloured untreated effluent in Katcha lagoon, posing threat to ground water and not providing any ETP/CPU for the treatment & reuse of condensate/management of other effluent streams. The unit is also not complying with the bio-composting protocol of CPCB, with respect to restriction of storage lagoon capacity to max. 30 days generation of concentrated effluent, providing covered shed storage facility for ready compost and not providing the required ground water monitoring system. The contamination of colour, COD & alkalinity at all three locations of ground water samples collected from the bio composting yard premises indicates that the bio composting yard and storage lagoons might not be impermeable as per requirements; and

NOW, THEREFORE, in view of the above and exercising powers delegated to the Chairman, Central Pollution Control Board (CPCB) under section 5 of the Environment (Protection) Act, 1986, the unit is herewith **directed to close down all its manufacturing operations and not to restart its manufacturing operations** till the compliance of following directions and obtaining permission from CPCB:

1. The unit shall complete the ongoing installation and commissioning of the proposed 05 stage MEE for achieving the desired volume reduction and solid concentration of spent wash, as per the ZLD action plan implemented by CPCB.
2. The unit shall install ETP/Condensate Polishing Unit (CPU) for treatment of MEE condensate and other process effluent management and its resourceful reuse as per the ZLD condition specified in the Consent to Operate.
3. The unit should immediately transfer the coloured untreated effluent stored in the katcha lagoon to lined lagoons and dispose the same in an environmentally safe manner by giving proper treatment. The katcha lagoon containing colored effluent shall be dismantled in scientific manner, ensuring that it does not lead to soil and ground water contamination.
4. The unit should restrict the available lined storage lagoon capacity to max. 30 days equivalent of concentrated spent wash generation and excess storage capacity shall be dismantled/properly demarcated.
5. The unit shall carry out an adequacy assessment study of the pollution control measures by reputed Government institution like NSI, Kanpur, VSI Nagpur, NEERI or IITs. The adequacy assessment study with implementation completion report on the recommendations to ensure compliance of stipulated consented notified norms.
6. The unit should provide proper ground water monitoring net work with required number of piezo-meters/hand pumps at upstream & downstream locations as per bio-composting protocol and shall carry out regular monitoring of ground water quality.

In case of default in compliance with the above directions by the Unit, CPCB will be constrained to initiate appropriate action against the Unit, in accordance with the provisions of the Environment (Protection) Act, 1986.

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(S. P. Singh Parihar)
CHAIRMAN

Copy to:

- 1) **The Chairman,**
Uttar Pradesh Pollution Control Board
Building No. TC-12V, Vibhuthi Khand,
Gomti Nagar, Lucknow - 226 020

*: For ensuring compliance of the
directions please and provide action
taken report to CPCB*

- 2) **The Regional Director,**
CPCB Regional Directorate,
PICUP Bhawan, Ground Floor,
Vibhuti Khand, Gomti Nagar, Lucknow-10
: For follow up and ensuring compliance please.
- 3) **The District Magistrate,**
Lakhimpur Kheri, Uttar Pradesh
: For information and n.a please
- 4) **The Chief Engineer** (Lucknow Zone),
Madhyanchal Vidyut Vitran Nigam limited,
H.O, Gokhale Marg, Lucknow - 226001, U.P
: With a direction to disconnect the power supply to the industrial operations of the unit and provide Action Taken Report to CPCB please.
- 5) **The Joint Secretary,** (CP Division),
Ministry of Environment, Forests & CC,
Prithvi Block, Indira Paryavaran Bhawan,
Jorbagh Road, New Delhi - 110 003
: For information, pl.
- 6) The Div. Head, IT Division, CPCB Delhi
- 7) The Div. Head, IPC-III Division, CPCB Delhi


(B. Vinod Babu)
MEMBER SECRETARY