

Speed Post

B-190198/NGRBA(RG)/CPCB/Distillery/46/2016-17

November 30, 2017

To,

**M/s HPCL Biofuels Ltd.,
Lauriya, West Champaran
Bihar-845453**

DIRECTION UNDER SECTION 5 OF THE ENVIRONMENT (PROTECTION) ACT, 1986

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; and

WHEREAS, the Ministry of Environment & Forests, Govt. of India, vide notification S.O.157(E) of 27.02.1996 has delegated powers vested under Section 5 of the Environment (Protection) Act, 1986 (29 of 1986) to the Chairman, Central Pollution Control Board (CPCB), to issue direction to any industry, Municipal Corporation, Municipal Council, Cantonment Board to any local or other Authority for the violation of emission and effluent standards notified under the Environment (Protection) Rules, 1986; and

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

WHEREAS, CPCB had issued direction on 24.02.2015 and a follow up direction on 23.04.2015, under section 18(1)(b) of Water Act, 1974 to Bihar State Pollution Control Board for ensuring that the molasses based distilleries including yeast manufacturing units in the state of Bihar shall achieve zero liquid discharge, as per the options specified in the direction; and

WHEREAS, CPCB had issued direction on 11.8.2016 to Bihar State Pollution Control Board regarding failure in installation of on-line monitoring systems; and

WHEREAS, M/s. HPCL Biofuels Ltd., Lauriya, Bihar (Distillery Division), West Bengal (hereinafter referred as 'the Unit') is involved in the production of extra neutral alcohol and rectified spirit using molasses as raw material and;

WHEREAS, the unit was inspected by the officials of Central Pollution Control Board (CPCB), on 7.01.2017 for the verification of compliance by the unit and following observations were made based on inspection;

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- ❖ The unit is a molasses based distillery having installed capacity of 60 KLD. During the visit the unit was in operation.
- ❖ The unit has installed Bio-digester, followed by MEE and bio composting plant for the management of spent wash.
- ❖ The Bio- digester and MEE was found to be in non –operational stage.
- ❖ During the inspection live discharge was observed. The unit was discharging the untreated effluent into open kachha drain outside the boundary wall.
- ❖ The unit have installed web cameras and flow meter.
- ❖ The unit is violating the consent conditions and the direction issued by CPCB earlier in this regard and is supposed to utilise the entire effluent in bio composting.

AND WHEREAS, CPCB issued closure direction dated 08.03.2017 under Section 5 of the Environment (Protection) Act, 1986, to comply with the following directions;

1. To immediately discontinue the practice of discharging of treated/untreated effluent and shall utilize spent wash in bio-compost as per norms.
2. To implement the Zero Liquid Discharge (ZLD) action plan, as per the direction of CPCB.
3. The unit shall submit adequacy assessment report of the ETP system/upgradation plan prepared by reputed institution like Vasantdada Sugar Institute, Pune, Nagpur Sugar Institute, Kanpur, IITs etc to CPCB.

AND WHEREAS, the members of NSI, Kanpur, inspected the unit on 07.06.2017 and as per the adequacy assessment report, the basic plant and machinery except for bio-compost area, is adequate to cope up with the requirements of ZLD in molasses based distillery. Following are the observations made by NSI, Kanpur:

1. The unit, M/s HPCL Biofuels Ltd., Lauriya (Distillery Division) has installed capacity of 60 KLPD but present production is carried out at 53.5 KLPD.
2. The unit has adopted Fed batch fermentation along with MPR distillation and raw spent wash generation is estimated to be around 9.0 litre/litre of ethanol.
3. The effluent treatment adopted by the unit is Biomethanation followed by Multi Effect Evaporation where the spent wash is concentrated to 28-30% solids and the condensate is sent to CPU for further treatment. Concentrated spent wash is taken for bio-composting through lagoon.
4. The yeast sludge and CPU reject has been utilized in bio-composting.
5. The condensates of MEE and part of spent lees after treatment through CPU are sent for dilution during fermentation process. Cooling tower blow down is recycled through CPU again for use in the similar manner.

WHEREAS, CPCB constituted a Three –member committee vide office order dated 27.09.2017 having representative from CPCB, MoEF & CC and NMCG for examination and recommendation for revocation of the closure direction issued by CPCB; and

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WHEREAS, The Three member committee in its meeting held on 22.11.2017 examined the adequacy report of the unit and recommended that the unit may be allowed to resume operation along with following recommendations:

1. The unit shall carry out its operation at the restricted capacity of 35 KLD.
2. The unit shall increase the biocompost yard area to meet the desired requirement for operation at 60 KLD capacity.
3. The unit shall get verified the recommendation of the adequacy report implementation and compost area from the same institution which carried out adequacy assessment and submit to CPCB within 45 days.

NOW THEREFORE, in view of above and in exercise of powers delegated under Section 5 of the Environment (Protection) Act, 1986, the unit, **M/s HPCL Biofuels Ltd., Lauriya, Bihar** is directed to comply with the following directions;

1. The plant capacity shall be restricted to 35 KLPD to ensure desired quality of bio-compost since presently the distillery has only 5 acres of bio-compost yard which is inadequate when plant is operating at its rated capacity
2. The unit shall install mass flow meters at outlet of MEE and to make arrangement for continuous online transmission of spent wash flow measurements (namely Weak Spent Wash, Strong Spent Wash)/web camera data of Spent Wash generation, concentration & MEE operation by providing linkage to CPCB & BSPCB servers within 45 days.
3. The unit shall install separate flow meters to ascertain use of raw/fresh water at various unit operations so as to take measures for reducing its water consumption further.
4. The unit shall create Analytical facilities along with trained staff of Environmental background. The analysis of bio-compost should be carried out from recognized laboratory/organization.
5. The Unit should upgrade facilities to record generation of effluent from various sources including chemical cleaning of MEE & other washings etc. The unit should also keep a data on its treatment and utilization subsequently.
6. The Unit has to develop and facilitate continuous monitoring of operating parameters and analysis of spent wash at various stages so as to derive a correct picture.
7. The unit shall identify recipient drains/rivulets and their u/s & d/s locations in consultant with Bihar SPCB and shall carry out monthly monitoring of the identified recipient drains at u/s & d/s location through lab recognised under Environment (Protection) Act, 1986 and shall submit the analysis report on monthly basis by 10th of every month) to CPCB/Bihar SPCB in the prescribed format.
8. The unit shall restrict the storage capacity to 30 days of spent wash generation.
9. The unit shall provide copy of records of alcohol/rectified spirit production, spent wash generation (namely weak spent, strong spent wash) details of MEE operations, mass flow meter readings connected with CPCB server etc. on monthly basis (by 10th of every month) to CPCB/Bihar SPCB in the enclosed prescribed format.
10. The unit shall use concentrated spent wash: press mud ratio of 1:1.6 and shall provide

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documentation support for procurement/ availability of press mud, sell of compost and compost quality on monthly basis (by 10th of every month) to CPCB/Bihar SPCB in the enclosed prescribed format.

11. The unit shall submit the implementation status report of action taken against the recommendation of adequacy report within 15 days and shall submit the revalidated adequacy assessment report carried out by the institute which has conducted adequacy of assessment and submit the reports within 45 days after resumption of operation.

In case of default in compliance with the above directions or any other exigencies, CPCB will be constrained to initiate further stringent action against the Unit -**M/s HPCL Biofuels Ltd., Lauriya (Distillery Division)**, in accordance with the provisions of the Environment (Protection) Act, 1986, without any further notice.


(S. P. SINGH PARIHAR)
CHAIRMAN

Copy to:

1. **The Member Secretary** : With request to ensure that the unit
Bihar State Pollution Control Board, compliance with the directions.
Beltron Bhawan, Shastri Nagar,
Patna – 800 023
2. **The Advisor (CP Division)** : For kind information, please
Ministry of Environment, Forest & C.C
Prithvi Block, Indira Paryavaran Bhawan,
Jorbagh Road, New Delhi – 110 003
3. **The Regional Director, East** : For follow up and ensuring compliance
Regional Directorate
Central Pollution Control Board
Southernd Conclave, Block 502,
5th & 6th Floors 1582 Rajdanga Main Road
Kolkata – 700 107(W.B.)
4. **The District Magistrate,** : With request to ensure compliance of
West Champaran -Bihar direction
5. **The Chief Engineer,** : With request to re-connect the power
North Bihar Power Distribution Company Ltd. supply for industrial operations.
Second Floor, Vidyut Bhawan, **(Contd.5/-)**
Bailey Road, Patna-800001

6. The In-charge, IPC-III, CPCB

7. The In-charge, IT Division, CPCB



(A. SUDHAKAR)
MEMBER SERETARY

Central Pollution Control Board Format for evaluation of Distillery ETP performance

Format For Distillery

Name of the distillery:

Address:

Capacity of the distillery: _____ KLPD, _____ Lac lit/annum

Date	Raw Spent wash generation as per online mass flow meter		Raw Spent wash Total Solids	Cumulative Raw Spent wash generation as per online mass flow meter totaliser		Conc. Spent wash generation as per online mass flow meter		Conc. Spent wash Total Solids	Cumulative Conc. Spent wash generation as per online mass flow meter totaliser	Condensate quantity generated	Press Mud Cake (PMC) consumption		Concentrated Spent wash consumption		Concentrated spent wash to PMC ratio achieved	Bio-compost Produced	Quality of Bio-compost				Bio-compost Sold
	MT/Hr	MT/Day	%	MT		MT/Hr	MT/day	%	MT	MT/Day	MT/Windrow	MT/Month	MT/Windrow	MT/Month		MT/Annum	N (%)	P (%)	K (%)	Moisture (%)	MT/Annum

Note- Where per day data is not available, distillery can provide per month or per two months data