



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

Speed Post

B-190198/NGRBA(RG)/CPCB/Distillery/39/2016-17

6039

03/09/2020

To,
M/s Riga Sugar Co. Ltd., (Distillery Division)
Dhanuka Gram Riga, P.O. Riga,
District-Sitamarhi,
Bihar - 843327

REVOCATION 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, M/s Riga Sugar Co. Ltd., (Distillery Division), Dhanuka Gram, Riga, P.O Riga, Sitamarhi, Bihar (hereinafter referred as 'the Unit') is involved in the production of extra neutral alcohol and rectified spirit using molasses as raw material; and

WHEREAS, CPCB issued directions dated 24.02.2015, 23.04.2015 and 07.12.2015 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 directions; and

WHEREAS, the unit was inspected by the officials of Central Pollution Control Board (CPCB), dated 06.03.2018 and following observations were made:

1. The unit has adopted continuous fermentation process with consent capacity of 50 KLPD.
2. The unit has installed Bio-digester, MEE, followed by Bio-composting for the management of spent wash.
3. The unit has not installed piezometers.
4. The unit has not installed Condensate Polishing Unit for further treatment of condensate.
5. Analysis of sample collected from MEE Condensate, showed pH-4.0, TSS 20 mg/l, TDS 1343 mg/l, BOD-9684 mg/l, & COD 14960 mg/l. The unit discharges MEE condensate directly in cooling tower, floor washing and gardening.
6. Disposal of condensate having high BOD-9684 mg/l, & COD 14960 mg/l on land application /gardening by the unit is in violation of ZLD condition as speculated under the consent order and poses threat to the surface water/ ground water pollution.

AND WHEREAS, CPCB issued direction dated 18.05.2018 under Section 5 of the Environment (Protection) Act, 1986, to the Unit to close down all manufacturing operations with immediate effect and not restart its manufacturing operations till the compliance of following directions:

1. To immediately discontinue the practice of utilising its MEE condensate effluent in gardening.
2. To install Condensate Polishing Unit (CPU) for the treatment of evaporation condensate and spent lees from distillation plant.
3. To install piezometers at requisite locations.
4. To submit the analysis report of the identified recipient drains on monthly basis (by 10th of every month) to CPCB/SPCB.
5. To submit revalidated adequacy assessment report prepared by the same technical institute which had previously conducted adequacy assessment; reports shall be submitted within 10 days from the date of issue of the direction.
6. The unit shall seek permission of CPCB before restart of manufacturing operations

AND WHEREAS, unit's reply vide letters dated 13.06.18, 03.09.2018 and 21.09.2018, were examined and following observations are made:

1. The unit has closed down its manufacturing operations and has discontinued the practise of utilizing the MEE condensate in gardening.
2. The unit has submitted a detailed action plan on installation of CPU and has placed order for installation and commissioning of CPU by March 2019.
3. The unit currently has in-house condensate treatment facility consisting of pH correction by alkali dozing, followed by ozonation/sand filtration and finally RO treatment.
4. The unit has informed that treated permeate having COD and BOD in the range of 600-800 PPM and 200-300 PPM respectively, will be reused in cooling tower and fermentation process.
5. The unit has procured two piezometers and their installation is underway.
6. The unit is submitting the analysis report of identified recipient drains on monthly basis.
7. The unit is yet to submit revalidated adequacy report since it has been non-operational since April, 2018.

AND WHEREAS, the unit was inspected by CPCB officials on 27.09.2018 and the following observations were made:

1. Treatment facility adopted by the unit for treating MEE condensate comprises of degradation of MEE condensate, followed by ozonation, sand filtration and RO treatment. The efficiency of the treatment facility could not be validated since the unit was not in operation during inspection.
2. The utilization of treated condensate in cooling tower and fermentation process could not be validated since the unit was not in operation during the inspection.
3. The unit has installed a new bio-digester for increased efficiency of biomethanation.
4. The unit has installed two piezometers.
5. The unit has placed an order for a condensate polishing unit (CPU) of 700 m³/day capacity. However, the same is yet to be installed and commissioned.

AND WHEREAS, CPCB issued directions dated 22.10.2018 under Section 5 of Environment (Protection) Act, 1986 to the Unit to comply with the following:

1. The unit shall operate for a period of 45 days following which they shall close down the manufacturing operations, intimate the same to CPCB and seek permission from CPCB to resume its operations.

(Contd..3/-)

2. The unit shall submit analysis result of the treated condensate for the parameters like pH, COD, BOD, VFA and TDS on weekly basis through environmental laboratory recognized under the Environment (Protection) Act, 1986.
3. The unit shall submit revalidated adequacy assessment report along with the performance audit report within the stipulated 45 days of operation.
4. The unit shall treat the condensate in the existing interim condensate treatment facility and shall utilize the treated condensate in process activities; the same shall be verified within 45 days of operation by a technical institute.
5. The unit shall not discharge any liquid outside the factory premise.

AND WHEREAS, Unit's replies dated 04.12.2018, 22.12.2018 and 29.12.2018 were examined and following observations were made:

1. The Unit has completed the stipulated 45 days of operation on 31.12.2018.
2. The Unit has submitted analysis report of treated and untreated condensate, on weekly basis for the month of November and December, 2018.
3. The Unit has submitted revalidated adequacy assessment report along with performance audit report, within the stipulated 45 days of operation, vide letter dated 22.12.2018.
4. The Unit is treating the evaporation condensate and spent lees in multi sand grade filter, activated carbon filter followed by R.O. treatment. The R.O. permeate (treated condensate) is used as cooling tower make-up and R.O. reject is used as SMEE feed.
5. Officials of VSI, Pune has verified the interim condensate treatment facility.
6. The unit assured that there is no discharge of any liquid outside the factory premise.

AND WHEREAS, CPCB issued direction dated 08.03.2019 under Section 5 of Environment (Protection) Act, 1986 to the Unit to comply with the following:

1. The Unit shall ensure the installation and commissioning of the Condensate Polishing Unit (CPU) as well as intimate the same to CPCB by 31.03.2019, failing which the Unit will stop its production.
2. The Unit shall not discharge effluent outside the premise.
3. The Unit shall deposit an Environmental Compensation amount of Rs 21,00,000/- for the period starting from 31.12.2018, i.e., the date of completion of the stipulated 45 days of manufacturing operations as per CPCB direction dated 22.10.2018, in accordance with the Environmental Compensation policy framed in compliance with NGT order dated 31.08.2018 in O.A. No. 593/2017.

AND WHEREAS, Unit's replies dated 01.04.2019, 15.04.2019 and 17.04.2019 were examined and following observations were made:

1. As per Unit's reply dated 01.04.2019, installation of CPU will be completed by 15.04.2019.
2. Since the commissioning of CPU was not completed within 31.03.2019, in compliance to CPCB direction dated 08.03.2019, Unit has stopped its production on 31.03.2019.
3. The Unit claimed that it is not discharging any type of effluent outside the premise and strictly adhering to CPCB norms as has been confirmed by VSI, Pune.
4. The Unit requested waiver of 21 lakhs since they are strictly maintaining ZLD condition and their bank account has been declared Non-Performing Asset, due to which no funds are available with them.
5. The Unit vide email dated 15.04.2019 and 17.04.2019, requested grant of permission to restart ethanol production due to shortage in storage space for the molasses generated in their sugar unit.

AND WHEREAS, CPCB issued letter dated 22.04.2019 to the Unit to comply with the following for further processing of the Unit's request to allow resumption of manufacturing operations;

1. Deposition of Environmental Compensation amount of Rs. 21,00,000/- in compliance to CPCB direction dated 08.03.2019.
2. Expedite the installation and commissioning of Condensate Polishing Unit (CPU).

(Contd..4/-)

AND WHEREAS, Member Secretary, Bihar State Pollution Control Board (BSPCB) vide letter dated 24.04.19, requested CPCB to grant permission to the Unit to resume operations as closure of the distillery since 01.04.19, has led to storage problem of molasses in their sugar mill. BSPCB also reiterated that the installation of CPU is underway and likely to be completed soon; and that the Unit is maintaining ZLD norms; and

WHEREAS, the Unit's reply vide email dated 25.04.2019, was examined and following observations were made:

1. The installation of CPU has been delayed due to delay at supplier end.
2. The installation of CPU will be completed by 15.05.2019.
3. The Unit requested the reduction in the Environmental Compensation amount of 21 lakhs since the Company has become Non-Performing Asset from 30.09.2019 due to continuous loss and serious financial crisis.

AND WHEREAS, the unit has informed vide letter dated 30.04.2019 that payment of Rs 10,50,000/- (50%) has been made from Bank of India to Union Bank of India A/c no. 532702050000164 through RTGS having UTR no. BKIDH19120798232; and

WHEREAS; CPCB issued letter dated 06.05.2019 to the Unit to submit the remaining amount (i.e. Rs-10,50,000/-) to CPCB within 3 weeks from the date of issuance of the letter; and

WHEREAS, the unit deposited Rs 10,50,000/- (remaining 50% of compensation amount) from Bank of India to Union Bank of India A/c no. 532702050000164 through RTGS having UTR no. BKIDH1941182747; and

WHEREAS, CPCB issued conditional revocation direction dated 25.06.2019 under Section 5 of Environment (Protection) Act, 1986, to comply with the following:

1. The Unit may resume its manufacturing operation and shall ensure installation and commissioning of Condensate Polishing Unit (CPU) within 60 days from the date of receipt of the direction, failing which the Unit shall stop its manufacturing operations.
2. No further request will be considered for extending the period of completion of CPU installation and commissioning.
3. The Unit shall submit a performance audit report duly validated by a technical institution like VSI, Pune, NSI, Kanpur and IITs within 60 days.

AND WHEREAS, unit's reply vide letter dated 10.07.19 was examined and following observations were made:

1. The unit will start its manufacturing operations from 15.09.19 and assured that commissioning of CPU will be completed within stipulated period of 60 days.
2. The unit will submit a performance audit report duly validated by VSI Pune within the given time frame after resumption of operations in September-2019.

AND WHEREAS, a newspaper article published in Hindi daily 'Prabhat Khabar' dated 26.06.2019 reported that farmers are suffering due to polluted river water on account of effluent discharge from sugar and distillery unit located in Sitamarhi district, Bihar; and

WHEREAS, Unit vide letter dated 10.10.2019 informed it has resumed manufacturing process on 10.10.2019 in the post monsoon season. Again, vide letter dated 16.11.2019, the unit informed that they have stopped production on 15.11.2019 due to boiler maintenance work and the Unit through letter dated 16.12.2019 informed that it again resumed operation on 15.12.2019; and

WHEREAS, the Unit was inspected by CPCB officials on 20.11.2019 and following observations were made:

(Contd..5/-)

1. The Unit was non-operational at the time of inspection but it had operated for a period of 35 days from 10.10.2019 to 15.11.2019. As per logbook data, 1376.69 KL of alcohol is produced during the period from 10.10.2019 to 15.11.2019.
2. Spent wash generation per KL of alcohol is 12.6 KL. Therefore, total spent wash generated during the period from 10.10.2019 to 15.11.2019 is $12.6 * 1376.69 = 17346$ KL.
3. The Unit has installed 700 m³ CPU based on UASB technology. However, it is yet to be commissioned. Hence the MEE condensate generated during the period from 10.10.2019 to 15.11.2019 was untreated and stored in two sump pits of capacity 430 m³ and 297 m³ i.e., 727 m³ against the total condensate generation of approx. 10,407.6 KL during the period.
4. The analysis report of MEE condensate indicate pH 8.7, BOD 2370 mg/l, COD 3157 mg/l and TDS 238 mg/l.
5. The Unit has not provided any information regarding utilization of cooling tower and boiler blowdowns.
6. The Unit's existing lagoon capacity for storage of concentrated spent wash is 28,350 m³ and as per information provided by industry individuals, the lagoon capacity has been restricted to 17952 m³ by red marking. Thus, Unit's lagoon capacity is almost 3.5 times more than the required capacity of 7560 m³
7. The Unit uses biocomposting to achieve ZLD and the existing active area is 7.5 acres as against required active area of 10.42 acres.
8. Spent wash deposition was noticed around the factory surroundings. Also, traces of spent wash deposition were found around the lagoon.
9. The Unit's lagoon of capacity 28,350 m³ is immediately adjacent (50-60 m) to the Manusmara river and it was informed by local villagers that the Unit discharges spent wash into the river at night. However, analysis report of samples collected from upstream and downstream locations of Manusmara river indicates pH-8, COD-12 mg/l BOD <2.5 mg/l and TDS-259 mg/l at upstream location and pH-7.8, COD-14 mg/l BOD <2.5 mg/l and TDS-257 mg/l at downstream location.
10. The lagoon for storage of conc. spent wash (capacity 28,350 m³) was more than 60 % filled at the time of inspection having solid content 16.6%. Thus, the possibility of bypass of MEE cannot be ruled out.

It was evident that the Unit failed to commission the CPU against its own commitment to complete the process by extended time limit of 15.05.2019. Moreover, it stored untreated MEE condensate having high BOD and COD (**BOD 2370 mg/l, COD 3157 mg/l**) in sump pits which is a violation of ZLD; also, huge volume of concentrated spentwash stored in lagoon having low solid content (**16.6%**) indicate bypass of MEE.

AND WHEREAS, CPCB issued closure direction dated 11.02.2020 under Section 5 of the Environment (Protection) Act, 1986 to the Unit to comply with the following directions:

1. The Unit shall not resume production until commissioning of the CPU is completed and CPU is made fully operational.
2. The Unit shall treat the existing untreated, stored MEE condensate through CPU and reuse in process. The Unit shall submit documentary and photographic evidence.
3. The Unit shall submit a performance audit report of CPU duly validated by a technical institutes like VSI, Pune, NSI, Kanpur or IITs within 60 days.
4. The Unit shall submit time bound action plan for levelling/dismantling of excess lagoon capacity scientifically and shall dispose the stored spentwash as per consent condition after concentration through MEE to achieve solid content of 30% as per CPCB direction dated 07.12.2015.

(Contd..6/-)

AND WHEREAS, the Unit submitted request for revocation vide letter dated 12.05.2020 (received on 01.06.2020) which was examined and it was found to be partially complying to CPCB direction dated 11.02.2020. Therefore, CPCB issued letter dated to the Unit on 24.06.2020 to comply with the following:

1. The Unit shall submit detailed documentary and photographic evidence regarding the following:
 - a. Amount of untreated MEE condensate stored in sump pits with dimensions of sump pits.
 - b. Number of days taken to treat the entire volume of stored condensate and logbook of the CPU operation for the same.
 - c. Photographic evidence of the process which was undertaken to treat the stored condensate.
2. The Unit shall submit a time bound action plan for construction of a partition wall to restrict lagoon capacity to approx. 8000 m³ which is equivalent to 30 days' storage of conc. spentwash.
3. The Unit shall submit an action plan on implementation of the recommendations of validation report prepared by VSI, Pune in March,2020.

AND WHEREAS, Unit submitted reply vide letter dated 24.07.2020 which was examined and following observations are made:

1. The unit has submitted the dimensions of sump pit (17m*10m*2.1m) which is having total holding capacity of 285m³ and untreated MEE condensate of 285m³ was stored in the tank.
2. The unit has informed that all the stored MEE condensate was treated in CPU in a single day with flow rate of 13m³/hr. Log book showing quality of condensate at inlet and outlet presented.
3. The unit has submitted photographs of CPU.
4. The Unit did not submit time bound action plan for construction of a partition wall to restrict lagoon capacity. However, it assured to provide time bound action plan and make partition wall in the lagoon after completion of rainy season.
5. The unit has also submitted action plan to implement the recommendations made by VSI in its report dated March, 2020 (annex. 5) which includes the following;
 - The unit will analyze all the parameters of CPU inlet evaporation process, spent lees for parameters pH, COD, BOD, TDS and TSS after rainy season.
 - The unit has planned to plant additional 150 no. of trees in the surrounding of lagoon area by 31.08.2020.
6. As per the VSI report, production capacity of the Unit is 50 KLPD and based on the data provided, the required active area for biocompost is 10.94 acres whereas existing active area is 7.5 acres. The inadequacy of active biocompost area was highlighted in the CPCB inspection of 20.11.2019 as well.

AND WHEREAS, CPCB constituted Four-member committee vide office order dated 24.02.2020 having representative from NMCG & MoEF&CC to examine the representations for revocation of closure directions issued under section 5 of the Environment (Protection) Act, 1986. The committee examined the unit's replies as well as the performance audit report of CPU submitted by the unit and recommended for conditional revocation of the closure directions dated 11.02.2020.

NOW THEREFORE, in view of the above observations and in exercise of the powers delegated to the Chairman, CPCB under section 5 of the Environment (Protection) Act, 1986, the Unit, M/s Riga Sugar Co. Ltd. (Distillery Division) is hereby directed to comply with the following:

1. The Unit shall resume its operation only after the rainy season.
2. The unit shall restrict its manufacturing operations up to 35 KLD according to its available biocompost area.
3. The unit shall submit a time bound action plan within 15 days for construction of a partition wall to restrict lagoon capacity to approx. 8000 m³ which is equivalent to 30 days' storage of conc. spent wash and implement the same by 31st October, 2020.
4. The unit shall submit monthly analysis report of CPU condensate for the parameters pH, COD, BOD, TDS and TSS to CPCB.

(Contd..7/-)

In case of default in compliance with the above directions by the Unit (**M/s Riga Sugar Co. Ltd.**), CPCB shall be constrained to initiate appropriate action against the Unit, in accordance with the provisions of the Environment (Protection) Act, 1986.


(**SHIV DAS MEENA**)
CHAIRMAN

Copy to:

1. **The Member Secretary**
Bihar State Pollution Control Board,
Beltron Bhawan, Shastri Nagar,
Patna – 800 023
: i. BSPCB shall ensure compliance of
the Unit to the CPCB directions.
2. **Joint Secretary (CP Division)**
Ministry of Environment, Forest & C.C
Prithvi Block, Indira Paryavaran Bhawan,
Jorbagh Road, New Delhi – 110 00
: For kind information, please
3. **Regional Director, East**
Regional Directorate
Central Pollution Control Board
Southernd Conclave, Block 502,
5th & 6th Floors 1582 Rajdanga Main Road
Kolkata – 700 107(W.B.)
: For follow up and ensuring
compliance
4. **The District Magistrate**
Office of the Collector & District Magistrate,
At & PO : Dumra, Sitamarhi
District : Sitamarhi
Bihar-843301
: With request to ensure compliance of
revocation direction
5. **The Chief Engineer**
North Bihar Power Distribution Company Ltd.
Second Floor, Vidyut Bhawan
Bailey Road, Patna-800001
: With request to reconnect the power
supply for industrial operations after
15.09.2020.
6. The In-charge, IT Division, CPCB
7. Master file/Guard file, WQM II, CPCB, Delhi


(**PRASHANT GARGAVA**)
MEMBER SECRETARY

