



Speed Post

B-190198/NGRBA(RG)/CPCB/Distillery/52/2018-19 8012

9th October, 2020
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To,
M/s Rana Sugars Ltd., (Distillery Division)
Khasra No. 318, 319, 320, Village: Belwara,
Post: Manpur,
Tehsil & District: Moradabad
Uttar Pradesh-244001

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 Rana Sugars Ltd., (Distillery Division), Belwara, Manpur, Moradabad, Uttar Pradesh (hereinafter referred as 'the Unit') is involved in the production of Ethanol using molasses (B heavy & C heavy molasses) as raw material; and

WHEREAS, CPCB issued directions dated 5th February, 2014 under section 18 (1) (b) of the Water (Prevention and Control of Pollution) Act, 1974 to all State Pollution Control Boards (SPCBs)/Pollution Control Committees (PCCs) for installation of Online effluent monitoring systems w.r.t. pH, BOD, TSS, COD and flow parameters in all industries falling under 17 categories of Highly Polluting Industries; and

WHEREAS, CPCB issued directions dated 2nd March, 2015 under section 18 (1) (b) of the Water (Prevention and Control of Pollution) Act, 1974 to all SPCBs/PCCs for granting extensions of time up to 30th June, 2015 for installation of online monitoring system; and

WHEREAS, CPCB issued letters dated 29th May, 2015 to all the SPCBs/PCCs to inform that no further extension of time will be given after June, 2015 and withdrawal of consent to operate along with forfeiture of bank guarantee of non-complying units will be the only option; and

WHEREAS, UPPCB issued show cause notice dated 07.08.2019 to the unit for disposal of colour effluent through tanker into Dhela river causing adverse impact on river water quality; and

WHEREAS, CPCB received a public complaint dated 22.08.2019 from Paper Unit Chapter of Kumaun Garhwal Chamber of Commerce and Industry regarding high colour observed in river Dhela at Bhojpur Bridge (a tributary of river Ramganga) due to discharge of spent wash (SW) through tankers from nearby distillery; and

WHEREAS, Water quality monitoring of entire stretch of River Dhela (12 locations), its two tributaries (02 locations) and three drains (04 locations) was carried out jointly by a team of CPCB, UPPCB and UEPPCB officials from its origin at Kanda Range, Nainital in Uttarakhand to confluence with river Ramganga at Moradabad, UP in September, 2019 and identified M/s Rana Sugars Ltd. (Distillery division), Belwara, Moradabad, UP as one of the Grossly Polluting Industries (GPIs) having potential to discharge its effluent into river Dhela and its drains; and

WHEREAS, during Magh Mela, 2020, monitoring of water quality of river Dhela was carried out by joint team of officials from CPCB, UPSPCB and UEPPCB, on fortnightly basis. Analysis of river water sample collected on 10.02.2020 from river Dhela at village Bhojpur showed Colour-8 Hazen, DO-zero, BOD-32 mg/l, COD-99 mg/l, which indicates high pollution in river Dhela; and

WHEREAS, to verify the compliance status of grossly polluting industrial units having potential to contribute pollution load into River Dhela, M/s Rana Sugars Ltd., (Distillery Division), Belwara, Moradabad, U.P was inspected by a team of CPCB & UPPCB officials on 19.02.2020 and made the following observations:

1. On the day of inspection, the distillery unit was found operational for production of Ethanol at 80 KLD capacity using B heavy molasses as raw material.
2. A tanker filled with effluent/spent wash was observed coming out from the plant. It was informed by the driver of the tanker that effluent filled in the tanker, would be disposed at village Lodhipur, which is about 35 kms from the unit. Sample was collected from the tanker to identify the source of effluent.
3. Analysis results of the samples collected during inspection from various points in the production process and spent wash management system are mentioned below:

Sr. No.	Sample Location	pH	COD (mg/l)	BOD (mg/l)	TSS (mg/l)	TDS (mg/l)	TS (mg/l)	Color (Hazen)	SO ₄ ²⁻ (mg/l)
1.	Spent Lees	4.65	427	313	18	408	-	33	-
2.	Raw Spent Wash	4.84	1,09,881	42,600	-	-	1,33,392	10,404	-
3.	IMEE Concentrate	4.80	2,78,261	-	-	-	3,77,540	-	-
4.	CPU (RO) Inlet	5.83	304	188	BDL	436	-	12	-

5.	Combined permeate of RO-I & II	5.31	134	98	BDL	16	-	12	-
6.	Reject (final RO)	5.59	704	391	13	1,016	-	15	-
7.	Condensate (Holding Tank)	6.74	292	153	BDL	280	-	12	-
8.	Spent wash from bio-compost spray	4.01	1,10,672	-	-	-	1,31,372	-	-
9.	Feed to lagoon	4.74	1,42,293	-	-	-	1,79,448	-	-
10.	Stored spent wash in lagoon	4.14	2,13,439	-	-	-	3,61,036	-	-
11.	Tanker	4.02	1,50,198	54,500	6,977	-	1,33,304	8832	7610

4. Analysis results of samples collected from the tanker showed **pH-4.02, BOD-54,500 mg/l, COD-1,50,198 mg/l, Colour-8,832 hazen, TS-1,33,304 mg/l, Sulphate-7,610 mg/l and TSS-6,977 mg/l** which indicates illegal disposal of spent wash through tanker.
5. Analysis result of samples collected from various points in the production process and spent wash management system comprising of IMEE, RO, CPU and lagoon at bio-composting sites indicate that spent wash being utilised for bio-composting contain pH-4.01, Total solids-1,31,372 mg/l and COD-1,10,672 mg/l, as against concentrated spent wash at IMEE outlet containing pH-4.80, Total solids-3,77,540 mg/l and COD-2,78,261 mg/l.
6. It appears that the unit is utilising its raw spent wash with Total solids-13 % as against desired 30% solid concentration (as per CPCB directions dated 07/12/2015) for bio-composting, which clearly indicates bypassing of IMEE for concentration of spent wash.
7. The unit has only stored the concentrated spent wash having solid content beyond 30 % (here 37.7 %) in the lagoon however, raw spent wash is used either for bio-composting or disposing outside of the premises through tankers. The characteristics of spent wash being transferred through tankers for illegal disposal and spent wash used at bio-compost yard spray are of same quality with total solids of about 13 %.
8. The unit is either bypassing IMEE or utilizing raw spent wash in bio-composting, for which compost area of about 29 acres (covered) is required as against 19 acres available with the unit to use all the raw spent wash in bio-composting. In the absence of adequate bio-compost area, the unit has chosen illegal route to dispose excess raw spent wash through tanker outside of the premises.
9. Security guard located at gate informed that record of such tanker movement, which is illegal, is not maintained in the unit's entry/exit logbook/register by the unit.
10. The unit has Consent to Operate under the Water (Prevention and Control of Pollution) Act, 1974 and the Air (Prevention and Control of Pollution) Act, 1981, which are valid up to 31.12.2020.

11. The unit has valid authorization (for Spent oil) under Hazardous and Other Waste (Management and Transboundary Movement) Rules, 2016, which is valid up to 02.02.2025.
12. The unit has common 03 nos. of bore wells for distillery and sugar unit to meet the water requirement of production and domestic purpose. As informed during inspection, the unit is using about 370-400 KLD of fresh water in distillery division from tube well no. 3.
13. The unit has 03 stage falling film type Integrated Multi Effect Evaporator (IMEE) having design capacity of 650 m³/day followed by Condensate Polishing Unit of 30 m³/hr capacity for treatment of condensate from IMEE.
14. In CPU, the unit is having Holding tank, Pressure Sand Filter, Activated Carbon Filter, RO (1st stage), RO (2nd stage) and Treated Water Holding tank. Treated water (Permeate of RO-1 & 2) is being utilized in cooling tower and cooling tower blow down is collected and treated in CPU. Reject of RO-2 is sent to IMEE.
15. The unit has installed Condensate Polishing Unit of 30 m³/hr capacity having RO based technology for treatment of condensate from IMEE. Cooling tower blow down is also treated in CPU along with condensate from IMEE.
16. The unit has total 19 acres of active area for bio-composting. Among total 19-acre area, 07-acre area is covered and remaining 12-acre area is uncovered.
17. Spent wash generation rate is 4.5 KL/KL of alcohol production (as informed by the unit, average SW generation from B heavy type molasses).
18. The unit has not complied with the consent conditions of installation of Online Continuous Emission Monitoring System (OCEMS) and providing its connectivity to CPCB/UPPCB servers for uninterrupted data transmission.
19. The unit has one lagoon of 19,250 m³ capacity for storage of concentrated spent wash. As per CPCB direction dated 07.12.2015, maximum allowed storage capacity in the lagoon is equivalent of 30 days storage of concentrated spent wash i.e. 4,300 m³ (considering spent wash generation rate is 4.5 KL/KL of ethanol production).
20. As on 19.02.2020 approx. 6,470 m³ quantity of concentrated spent wash was found stored in lagoon, against the allowed 4,300 m³, which indicates the unit is not properly utilizing the spent wash in bio-composting.
21. As per the consent condition, the unit is allowed to operate its plant for 365 days. The unit is having total 19 acres of bio-compost area, out of which only 07 acres is covered. Considering the consent condition, the unit is not having adequate covered compost yard to operate its plant throughout the year.
22. Rain water collection system provided at bio-compost yard was not proper, as the collected rain water would ultimately mix with the bio-compost windrows.
23. No proper logbook is maintained for spent wash generation, spent wash storage in lagoon and spent wash utilization in bio-composting. In absence of proper record, possibility of illegal disposal of spent wash outside of the unit's premises through tanker could not be ruled out.
24. The unit has installed web cameras at entry/exit gate of the unit, but footage of the same was not provided by the unit representative and it was informed that they are not keeping any back up/record of the footages at the time of inspection.

WHEREAS, Hon'ble NGT vide its orders dated 03.08.2018 and 19.02.2019 in Original Application No. 593/2017 (W.P. (Civil) No. 375/2012), Paryavaran Suraksha Samiti & Anr. Vs. Union of India & Ors. directed that "*The CPCB may take penal action for failure, if any, against those accountable for setting up and maintaining STPs, CETPs and ETPs. CPCB may also assess and recover compensation for damage to the environment and said fund may be kept in a separate account and utilized in terms of an action plan for protection of the environment*"; and

WHEREAS, in compliance of above orders of the Hon'ble NGT, cases to be considered for levying penalty are discharges in violation of consent conditions/ non-compliance with the directions, such as direction for closure due to non-installation of OCEMS/ non-adherence to the action plans submitted/ intentional avoidance of data submission or data manipulation by tampering OCEMS; and

WHEREAS, as per Environmental Compensation (EC) policy framed in compliance of NGT order dated 31.08.2018 in O.A no. 593/2017, the unit is levied to deposit environmental compensation (EC) for illegal disposal of spent wash into ambient environment-land and water resulting into acute injury and damage to the environment;

AND WHEREAS, as per policy for levying Environmental Compensation for industries dated 04.09.2019, Environmental Compensation to be levied on the unit has been calculated as Rs.3,16,50,000/- for illegal disposal of spent wash for the period from initial observation of such disposal dated 31.07.2019 to 04.03.2020; and

WHEREAS, CPCB issued closure direction dated 11.05.2020 under Section 5 of Environment (Protection) Act, 1986, to the Unit to close down all its manufacturing operations with immediate effect till compliance with following directions and also to show cause why environmental compensation of Rs. 3,16,50,000 /- should not be levied:

1. The unit shall stop all its manufacturing operations with immediate effect and report to CPCB immediately.
2. The unit shall immediately stop illegal disposal of effluent/spent wash outside of the industrial premises.
3. The unit shall submit record of spent wash generation, spent wash storage in lagoon, spent wash utilization in bio-composting, availability of press mud, composting process, sell of bio-compost and quality of bio-compost from the date of commissioning of the unit.
4. The unit shall install OCEMS (flow meters and web cameras as per the guidelines uploaded on CPCB website dated 7th November, 2014), mass flow meter with totalizer (at inlet & outlet of IMEE), web cameras (at bio-compost yard, lagoon & at entry/exit gate) and shall provide its connectivity to CPCB/UPPCB server.
5. The unit shall restrict its lagoon capacity equivalent to 30 days of concentrated spent wash generation by dismantling/levelling /filling the excess capacity of the lagoon and shall submit time bound action plan for the same within 15 days.
6. The unit shall submit Adequacy Assessment report of the installed spent wash management system duly validated by a technical institution like VSI, Pune, NSI, Kanpur or IITs etc.
 - a. Assessment of the manufacturing technology for generation of spent wash and adequacy assessment of ZLD system comprising of Biomethanation, RO, MEE, composting/incineration system and steam availability, etc.
 - b. Water audit and mass balance reports to establish spent wash generation rate,

- c. Action Plans to achieve Zero Liquid Discharge (ZLD), and
 - d. Assessments of availability of press mud, compost yard, composting process, sell of compost and compost quality.
7. The unit shall consume all the spent wash stored in lagoon through bio-composting along with maintaining the record of compost prepared and spent wash consumed before resumption of operation.
 8. The unit shall seek permission from CPCB before restart of manufacturing operations after compliance of the above directions.

AND WHEREAS, the Unit's replies vide e-mail dated 30.06.2020, 14.07.2020 & 16.07.2020 were examined and following observations were made;

1. The unit stopped its manufacturing operation with effect from 04.06.2020 and requested for revocation of closure direction.
2. The unit has an Integrated Multi Effect Evaporator (IMEE) and only concentrated spent wash is used for bio-composting.
3. The unit has 19 acres of bio-compost yard, out of which 12 acres area is covered and 07 acres area is un-covered.
4. The unit has submitted the record of spent wash (SW) generation, SW utilization, Bio-compost production, bio-compost sell and press mud usage from May-2019 to March-2020.
5. The unit has installed OCEMS as per the CPCB guidelines and has provided its connectivity to CPCB server. The same has been verified by IT division, CPCB on 24.07.2020.
6. The unit has submitted adequacy assessment report prepared by Vasantdada Institute (VSI), Pune on the basis of online inspection with video recording and data provided by the unit through e-mail dated 14.07.2020.
7. The unit has informed that, they have IMEE which is reducing raw spent wash up to 40% with 30% solid concentration. Only concentrated spent wash with solid concentration of 30% is being stored in lagoon which is further utilized in bio-composting. Condensate from IMEE is treated through CPU and used in process for molasses dilution.
8. The unit has informed that lagoon is filled with spent wash, so dismantling the lagoon is not possible at present, however the unit has confirmed that spent wash storage in the lagoon is below red mark level indicating storage of less than 30 days.
9. The unit has also informed that, as per the Environmental Clearance issued by the Ministry of Environment, Forest and Climate Change, they are allowed spent wash factor of 8, i.e., 8 KL of spent wash/KL of alcohol produced. They have also informed that, the unit mostly run on 'C' molasses in which spent wash generation is 8 KL/KL of alcohol production and even if concentrated spent wash figure is considered then, 30 days' quantity would be 7,680 m³.

AND WHEREAS, CPCB issued letter dated 10.08.2020 to the unit, to restrict its lagoon capacity equivalent to 30 days of concentrated spent wash generation by dismantling/levelling/filling the excess capacity of the lagoon and directed to submit time bound action plan to restrict the lagoon capacity up to 7,700 m³ within 15 days; and

WHEREAS, the unit vide email dated 11.08.2020 submitted their time bound action plan to restrict the lagoon capacity up to 7700 m³, by bifurcating the lagoon and will use the same for running the plant. The unit has committed to complete the lagoon restriction work within six months; and

WHEREAS, considering unit's request vide letter dated 30.06.2020 for personal hearing of the unit w.r.t EC levied on the unit, personal hearing of the unit was held on 28.09.2020 where non-compliance of norms by the unit was established. However, decision will be taken and directions would be issued to the unit for levying EC separately; and

WHEREAS, CPCB constituted Four-Member committee vide office order dated 24.02.2020 having representative from CPCB, MoEF & CC and NMCG to examine the representations for revocation of the closure direction issued by CPCB. The Committee in its meeting held on 28.09.2019 examined the matter and recommended for revocation of the closure direction with conditions; and

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 Rana Sugars Ltd., (Distillery Division), Belwara, Moradabad, Uttar Pradesh is directed to comply with the following:

1. The unit may resume it's manufacturing operation and shall inform to CPCB after resumption.
2. The unit shall ensure uninterrupted connectivity of Online Continuous Effluent & Emission Monitoring System (OCEMS) (Web cameras, mass flow meters with totalizer and stack monitoring facility for Particulate matter on stack) data transfer to CPCB server.
3. The unit shall submit the re-validated adequacy assessment report of the installed Zero Liquid Discharge (ZLD) system prepared by the same technical institute which has carried out adequacy of the unit i.e., VSI, Pune after resumption of operation of the distillery at 100 % capacity utilization within 60 days.
4. The unit shall maintain ZLD as per CPCB direction dated 07.12.2015 issued under Section 18(1) (b) of Water (Prevention & Control of Pollution) Act, 1974.
5. The unit shall continue to submit monthly data on production, spent wash generation, mass flow meter readings of mass flow meter at MEE inlet and outlet, bio-composting data etc. as per prescribed format. In addition, analysis report of samples collected from upstream and downstream locations of identified recipient drain shall also be submitted by 10th of every month.
6. The unit shall submit photographic evidences after completion of the restriction of its lagoon capacity to 7,700 m³ i.e., equivalent to 30 days of concentrated spent wash generation by dismantling/levelling /filling the excess capacity of the lagoon before 31st March, 2021.

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 without any further notice.


(SHIV DAS MEENA)
CHAIRMAN

Copy to:

1. **Member Secretary**
Uttar Pradesh Pollution Control Board,
Building No. TC-12 V, Vibhuti Khand
Gomti Nagar, Lucknow-226010 : With request to ensure compliance to
the direction
2. **District Magistrate**
District: Moradabad : For kind information, please
Uttar Pradesh-244001
3. **Joint Secretary (CP Division)**
Ministry of Environment, Forest & C.C
Prithvi Block, Indira Paryavaran Bhawan,
Jorbagh Road, New Delhi – 110 003 : For kind information, please
4. **The Regional Director**
Regional Directorate :For follow up and ensuring
Central Pollution Control Board compliance
PICUP Bhawan, Ground Floor,
Vibhuti Khand, Gomti Nagar,
Lucknow – 226 010.
5. **Superintending Engineer,**
Urja Bhawan, Pashchimanchal Vidyut : With request to re-connect the power
Vitran Nigam Ltd., Victoria Park, supply for industrial operations.
Meerut 250001
Circle-Electricity Urban Distribution Circle,
Moradabad, Division- Electricity Urban
Distribution Division, Moradabad
- ✓ 6. **The In-charge, IT Division, CPCB** : For follow up, please
7. **Master file/Guard file, WQM II, CPCB,
Delhi**

(PRASHANT GARGAVA)
MEMBER SECRETARY