

Speed Post

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To,

M/S NANGLAMAL SUGAR COMPLEX
NANGLAMAL, MEERUT,
UTTAR PRADESH-250001

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 Nanglamal Sugar Complex, Nanglamal, Meerut, U.P. (hereinafter referred as 'the Unit') is involved in the process of sugar manufacturing from crushing of cane; and

WHEREAS, CPCB issued direction dated 04.07.2017 under section 5 of Environment Protection Act, 1986 to the Unit to remain closed till compliance of the following directions : i) Submission of ETP adequacy assessment report ii) Time bound action plan of ETP augmentation iii) Water audit and mass balance report iv) Action plan to achieve notified effluent discharge quality and generation standards v) Irrigation management plan vi) restriction of storage of treated effluent in lined lagoon only for 15 days and other general direction pertaining to proper running of effluent treatment system, with all the reports and action plans validated by reputed institutions like National Sugar Institute (NSI), Kanpur/Vasandada Sugar Institute (VSI), Pune /IITs submitted to CPCB within 60 days; and

WHEREAS, CPCB received adequacy assessment report vide letter dt. 20.09.2017 from the Unit prepared by NSI, Kanpur; and

WHEREAS, CPCB issued direction dated 02.11.2017 under Section 5 of the Environment (Protection) Act, 1986 to the Unit to comply with the following;

1. The Unit shall start its operation only after obtaining valid consent from the concerned State Pollution Control Board.
2. The Unit shall submit action plan within 15 days to implement recommendations (including general observation) of adequacy report within 45 days.
3. The Unit shall install & Commission ETP system upto tertiary treatment level including adequate treatment system for spray pond overflow effluent in case of double sulphitation process (Brine recovery system to be installed in case of sugar refinery having Ion Exchange Process for sugar melt de-colorization).

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4. The Unit having high pressure boiler (>45 Kg/cm²) shall install & Commission Condensate Polishing Unit (CPU) within 45 days for treatment of condensate water to ensure its reuse & recycle within the process.
5. The Unit shall restrict the effluent storage capacity to 15 days.
6. The Unit shall utilise treated effluent meeting the prescribed norms for irrigation as per the irrigation management plan validated by expert institutions namely, NSI, Kanpur/ VSI, Pune/ Agricultural Institutions.
7. The Unit shall implement the observation and recommendation of the adequacy report within 45 days.
8. The Unit shall get the verification of implement status of the recommendation of adequacy report including ETP performance assessment & effluent generation assessment done by the same institute which carried out adequacy assessment and submit the report to CPCB within 45 days from date of resumption of manufacturing operations.
9. The analysis result of the treated effluent shall also be submitted within 45 days through EPA recognised laboratories.

AND WHEREAS, the Unit has submitted implementation status of recommendations of the adequacy report vide letter dated 16.12.2017; and

WHEREAS, the Unit has submitted the validation report of adequacy assessment report from NSI, Kanpur vide their letter dated 27.03.2018 which was examined and following points were observed;

1. Necessary flowmeters are installed at only few unit operations, for other places no flowmeters are installed which shall require validation in future.
2. Flowmeters have been installed at various freshwater consumption points and recording in log book is maintained but consumption for sugar plant, co-generation and domestic purpose has not been recorded separately.
3. The capacity of the plant shall be adequate to handle the generated effluent from the plant at the rated capacity of 6,000TCD. Capacity of sludge drying bed has been increased and provision of aeration in equalization tank has been done, possibility of diffused aeration system instead of surface aeration.
4. Factory has enhanced the capacity of existing lagoon 1000 M³ to 5000 M³ by constructing a new lagoon of 4000 M³ for storage of treated effluent.
5. Total effluent generation is 146.5 litres/ton of cane as per flow meter reading, which is within the norms.
6. The observed treated effluent quality was in conformity with the discharge standards.
7. The working of the plant shall require verification after compliance of all the recommendations.

AND WHEREAS, the Unit was inspected on 23.03.2018 by officials from CPCB, Delhi and following observations were made;

1. The Unit and its ETP were operational.
2. The Unit has valid consent under the Water (Prevention and Control of Pollution) Act, 1974 & Air (Prevention and Control of Pollution) Act, 1981 upto 31.12.2019.
3. Effluent Treatment Plant (ETP) comprised of Oil & Greases skimmer, Equalisation Tank, Primary Clarifier, Aeration Tank, Secondary Clarifier & Tertiary treatment (Filtration units).
4. Analysis of treated effluent sample shows pH-7.15 as against norms of 5.5-9.0, BOD- 19 mg/l against norms of 30 mg/l, COD- 116 mg/l against norms of 250 mg/l, TSS- 43 mg/l against norms of 30 mg/l which indicates non-compliance w.r.t. TSS against surface water discharge norms prescribed under Environment (Protection) Rules,1986.

5. MLSS in aeration tank was **1271 mg/l** which indicates un-stabilised Activated Sludge Process system due to poor operation and maintenance of ETP system and possibility of dilution of ETP system.
6. The Unit has installed brine recovery plant for refinery sugar unit.
7. Treated effluent is discharged into lagoon and utilised for irrigation purpose. However, lagoon was empty at the time of inspection.
8. The Unit has not installed Condensate Polishing Unit (CPU) for high pressure having capacity of 120 TPH.
9. The Unit has installed 'V' notch at spray pond overflow.
10. Flow meters were installed at manufacture processes.
11. The Unit has submitted irrigation management plan.

AND WHEREAS, a show cause notice dated 18.05.2018 under Section 5 of the Environment (Protection) Act, 1986, was issued to the Unit; and

WHEREAS, Unit reply vide letter dated 13.06.2018 is examined and the following points were observed;

1. The Unit has submitted that the ETP of the Unit is operating as per guidelines and treated effluent is being analysed on monthly basis by EPA approved laboratory.
2. The Unit has claimed that the MLSS analysis of samples from aeration tank of ETP is being carried out in their laboratory and found the MLSS maintained around 3000 mg/l.
3. The Unit is utilizing the treated water of ETP in irrigation of own green belt and farmers land after temporary storage in lined lagoon.
4. The Unit is under process of finding the appropriate technology/party for installation of Condensate Polishing Unit, currently the condensate is being reused in process.
5. The Unit has informed that it has submitted their irrigation plan for utilization of treated effluent duly validated by CSA University of Agriculture & Technology, Kanpur.

AND WHEREAS, CPCB through an Expert Committee comprising of experts from National Sugar Institute (NSI), Kanpur, Vasantdada Sugar Institute (VSI), IITs and representatives from sugar mills prepared a Charter for Water Recycling and Pollution Prevention (thereafter referred to as the Charter; and

WHEREAS, a meeting of sugar mills operating in Uttar Pradesh, representatives of UPPCB and CPCB was held on 06.07.2018 under Chairmanship of Principal Secretary, Sugar Industries and Sugarcane Development, Government of Uttar Pradesh and the following decisions are made:

1. Sugar Mills shall submit an action plan to CPCB by 20.07.2018 regarding the steps taken by them pertaining to the notices issued to them. Also they shall submit action plan to implement recommendations of their adequacy assessment report.
2. All sugar mills shall ensure implementation of Charter and shall submit action plan to CPCB by 20.08.2018.
3. All sugar mills shall ensure the upgradation of their ETP within August, 2018 so as to ensure no interruption in functioning of the ETP in the following seasons.
4. All sugar mills shall maintain a logbook on ETP operations on a daily basis.
5. ETP shall be operational at all times and all bypass arrangements should be dismantled with immediate effect.
6. MLSS in aeration tanks should be maintained at 2000-2500 mg/l.
7. All sugar units shall set up environmental laboratories for regular analysis of raw and treated effluent thereby ensuring proper functioning of the ETP.

8. All sugar mills shall employ dedicated technicians for operating and regular maintenance of ETP and shall also ensure that the technicians are given proper training on ETP maintenance and lab analysis on regular basis.
9. To ensure proper training of the environmental technicians all sugar mills shall facilitate training of 5 employees.
10. All sugar mills may establish an Environment Management Cell at their level consisting of concerned officials in order to ensure compliance with environmental standards at industry level itself.

AND WHEREAS, the Unit has submitted action plan on Charter for Water Recycling & Pollution Prevention in Sugar factories and action plan on Bare Minimum Technology to be adopted by Sugar Industry vide their letters dated 26.07.2018, 17.09.2018 and 25.09.2018 with the following points:

1. Installation of flowmeters at various unit operations for fresh water and hot water usage will be implemented by 15.10.2018.
2. Installation of flowmeters at points to determine generation from major sources as outlet of cooling tower/spray pond overflow, at outlet of R.O./DM water reject/washings, for assessing brine reject quantity and at the inlet of ETP will be implemented by 15.10.2018.
3. Hydro-jet cleaning of heat exchangers will be implemented in coming session.
4. Unit has constructed an UGR of 50M³ capacity for collection of washing/chemicals used in chemical cleaning.
5. Unit has adopted the rainwater harvesting system.
6. Unit has enhanced the capacity of existing sludge drying beds from existing 168 M² to 300 M² by constructing new sludge drying beds.
7. The capacity of existing lagoon has been enhanced from existing 1000 M³ to 5000 M³ by constructing a new lagoon of 4000 M³.
8. Unit has informed that DM/RO reject cooling tower blow down water is being treated in existing ETP and surplus condensate is being used as makeup water in cooling tower.

AND NOW, THEREFORE, in view of the above observation, and exercising powers delegated to the Chairman, Central Pollution Control Board under section 5 of the Environment (Protection) Act, 1986, the unit (M/s Nanglamal Sugar Complex, Nanglamal, Meerut, U.P.) is directed to comply with the following directions before commencement of crushing season 2018-19;

1. The Unit shall operate the effluent treatment plant properly as to achieve the notified treated effluent discharge standards as per Standard G.S.R. 35 (E), MoEF & CC, January 14, 2016.
2. The unit shall implement the observation & recommendation of the revalidated adequacy assessment of ETP.
3. The unit shall install sealed flow meter along with running hours meter on bore wells so as to ascertain usage of fresh water for various uses.
4. The unit shall install flow meters at major areas of cold and hot water consumption.
5. The unit shall install flow meters for measuring generation of effluent from various prominent areas.
6. The unit shall maintain logbook for individual process unit for recording daily water consumption and effluent generation also.
7. The unit shall carry out colour coding of pipelines carrying recycled process water and fresh process water.
8. The Unit shall commission mechanical sludge handling system of adequate capacity.
9. The Unit will carry out analysis of parameters of treated effluent notified under Environment (Protection) Rules, 1986 on daily basis and maintain its logbook.

10. The unit shall submit the implementation status of the Charter in the form of Affidavit and the documentary proof of the completion of the work as committed in the action plan.
11. The unit shall submit implementation status of the Charter and performance adequacy audit of ETP including actual assessment of water consumption and effluent generation duly validated by reputed expert Government institute namely NSI Kanpur, VSI Pune, IITs during crushing season & submit the report to CPCB within 60 days of resumption of operation.

In case of default in compliance with the above directions, CPCB will be constrained to initiate action against the Unit (**M/s Nanglamal Sugar Complex, Nanglamal, Meerut, U.P.**) without giving any further notice in accordance with the provisions of the Environment (Protection) Act, 1986.


(S.P. SINGH PARIHAR)
CHAIRMAN

Copy to:

1. **Principal Secretary (Sugar)**
Sugar Industry and Cane Development Department,
"G" Block , 2/3, Mantri Wing
4th Floor, Babu Bhawan
Vidhan Sabha Marg
Lucknow - 226 001
: For kind information, please.
2. **Member Secretary**
Uttar Pradesh Pollution Control Board,
Building No. TC-12V, Vibhuthi Khand,
Gomti Nagar,
Lucknow – 226 010
: With request to ensure compliance of the directions.
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. **District Magistrate**
Meerut, U.P.
: For kind information, please.
5. **Regional Director**
Regional Directorate
Central Pollution Control Board, PICUP Bhawan,
Ground Floor, Vibhuthi Khand,
Gomti Nagar,
Lucknow – 226 010
: For follow up and ensuring compliance
6. In-charge, IT Division, CPCB
: For uploading on CPCB website
7. Master file/Guard file, WQM II, CPCB Delhi
: For record


(PRASHANT GARGAVA)
MEMBER SECRETARY