



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

By Speed Post

CP-14/1/2023-TECH-RD-CHANDIGARH-RD(Chandigarh) May.17., 2023

To,

The Chairman,
Punjab Pollution Control Board,
Head Office, Vatavaran Bhawan,
Nabha Road, Patiala-147 001,
Punjab

Direction under section 18(1) (b) of the Water (Prevention & Control of Pollution) Act, 1974 to Punjab Pollution Control Board (PPCB) in the matter of complaint regarding pollution caused by M/s Kuantum Paper Ltd. Village-Saila Khurd, Hoshiarpur, Punjab.

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, Central Pollution Control Board (CPCB) received a letter dated 02.01.2023 of Shri Manish Tewari, Hon'ble Member of Parliament (Lok Sabha) addressed to Hon'ble Union Minister for Environment, Forest & Climate Change Sh. Bhupender Yadav regarding pollution being caused by M/s Kuantum Paper Ltd., village Saila Khurd, District-Hoshiarpur, Punjab. The Hon'ble MP Sh. Manish Tewari in its said letter has raised various issues & requested to kindly send a team of CPCB to carry out a thorough investigation into the alleged pollution being caused by the said Unit and ensure that this problem is mitigated & that the problem is either brought within permissible limits permitted by the law or other penal action may be taken in order to save the life & health of people who live in the adjoining villages; and

WHEREAS, in pursuant to the above said letter dated 02.01.2023, M/s Kuantam Paper Ltd., Village Saila Khurd, District-Hoshiarpur (Punjab)(*hereinafter referred as 'the Unit'*) and its adjoining area was visited by a team of officials of CPCB on 23.01.2023. The inspection report is annexed at **Annexure-I**. The inspection team made the following observations:

1. M/s Kuantum Paper Ltd. (the unit) is engaged in manufacturing of writing & printing paper with installed capacity of 450MT/Day using Agro & Wood based raw material like wheat straw, Bagasse/grass, wood chips, imported softwood/Hardwood etc. The Unit is operating @ 427MT/Day.
2. On the day of inspection, the Unit & its ETP were found operational.
3. The Unit have valid consent under the Water Act, 1974 & Air Act, 1981 with validity up to 31.03.2023. The Unit has valid Authorization under Hazardous & Other Waste Rules 2016, with validity up to 30.05.2023.
4. The Unit has installed continuous cooking type digester for cooking of the Agro based raw material. However, the Unit also have batch type digester for cooking the wood waste.
5. The Unit has installed a Chemical Recovery Plant(CRP) having 06 stage MEE with recovery boilers 21TPH & 65 TPH for black liquor management.

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6. The Unit is meeting its domestic and industrial water requirement through 08 tube wells [total-10 out of which 02 are defunct (not yielding water)].
7. The Unit has installed electromagnetic flow-meters on all the borewells. The Unit is maintaining the record of water consumption from each well. As per logbook record, the water consumption in the month of Dec, 2022 was about 19470m³/day.
8. The Unit has obtained previous NOC valid up to 13/07/2011 from CGWA for abstraction of the ground water. The Unit has applied online application for permission to extract ground water to Punjab Water Regulation & Development Authority (PWRDA).
9. The water consumption of the Unit was assessed from environmental audit report & log book record indicate that fresh water consumption of the Unit is about 49.8m³/ton of paper which is within CPCB prescribed limit of Agro based Units. The data indicates that the Unit is generating wastewater @39m³/ton of paper and further also reported about 4.6m³/ton of effluent is recycled by the Unit.
10. On the day of visit, the team observed that the Unit is segregating high COD & low COD effluent stream for effective treatment of the effluent. For High COD stream treatment process (effluent from pulp washing & wet washing) comprised of Bio-Clarifier, UASB reactor, Tube Settlers, SediCell, Pre-Aeration tank, Aeration tank-3 (AT-3), Secondary Clarifier-2, Geo Tubes. For low COD stream the treatment process (effluent from process area i.e. paper machines section) consist of Equalization tank, Primary Clarifier, Parallel two Activated Sludge Tank (AT-1& 02), Secondary Clarifier-1.
11. As per consent conditions, treated effluent to be used onto land for plantation/irrigation (approx. 110 acres within premises for plantation and 250 acres in nearby village for irrigation) and domestic effluent to be discharged onto land through septic tank followed by ETP for plantation/irrigation.
12. The inspection team collected samples from ETP to assess the efficiency of the treatment system and lab analysis result of the samples collected from the outlet of the ETP showed pH-7.6 (*against norms of 7.0-8.5*), TSS-62 mg/l (*against norms of 50 mg/l*); COD-127 mg/l (*against norms of 350 mg/l*); BOD-24 mg/l (*against norms of 30 mg/l*); TDS-1904 and SAR-5.54 (*against norms of 26*). It is evident from the above lab result that the Unit is meeting with effluent discharge standard except TSS (62 mg/l against 50 mg/l) parameter. Moreover, the MLSS in aeration tank found to be in excess to the optimum range which indicates that ASP based ETP is not being operated properly.
13. The Unit has installed OCEMS at mixing tank and connected to CPCB/PPCB server.
14. The dewatered sludge is sent to in-house board manufacturing section.
15. The Unit has installed 02 power boilers of 60TPH and 130TPH capacities using rice husk and coal as fuel and equipped with individual ESP as air pollution control device (APCD). The Unit has a captive power plant of 38 MW capacity for generation of electricity and installed ESP as APCD.

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16. The Unit has installed online emission monitoring system at power boiler & recovery boilers & connected to CPCB/PPCB portal. OCEMS data on the day of inspection data was meeting with CPCB prescribed norms.
17. Process generated odour is controlled by adding odour control enzyme based chemical at source as reported by the Unit. The Unit has carried out monitoring of H₂S at different locations inside the premise. As reported about 0.3 - 0.5 ppm H₂S value found nearby foul condensate collection pit however other locations H₂S values were not observed.
18. Overall housekeeping of the Unit was found satisfactory.
19. During visit, team had collected 06 Ground water samples from 03 Piezometers (02 inside the Unit premises & 01 outside the premises) and 03 tube wells maintained by farmers in surrounding area up to a distance of about 250m to 3 km of the Unit. The analysis results of ground samples indicated the following:
 - i. The high concentration of TDS (2780mg/l against BIS permissible limit 2000 mg/l) in 01 piezometers well located inside the Unit premises indicate leaching of industrial effluent/waste which may lead to increase in TDS values. However, other collected ground water sample TDS values were found within permissible limit.
 - ii. The value of High COD (COD-22 mg/l) found in the groundwater sample collected from the piezometer well installed within the Unit premise at upstream & piezometer well at downstream (COD-49mg/l) indicates ground water contamination. Further, also other groundwater parameters (like EC, TDS, chloride, Turbidity, Sodium and Ammonia) in these two piezometer well (located within premises) showed increasing trends.
 - iii. Heavy metal analysis results of the collected ground samples showed higher value of iron (Fe) in piezometer well located near yard area & near canteen within the Unit premise. Higher value of lead (Pb) was found at piezometer well (located inside the Unit & outside the Unit) which may be due to iron fitting in the pipeline laid for abstraction of the ground water.

NOW, THEREFORE, in view of above observations and in exercise of the powers conferred under section 18 (1) (b) of the Water (Prevention and Control of Pollution) Act, 1974, the following directions are issued to Punjab Pollution Control Board (PPCB) for its compliance:

1. Punjab Pollution Control Board (PPCB) shall issue appropriate direction to the Unit for taking necessary measures w.r.t violations observed in the inspection report (Annexure-I).
2. To ensure that the Unit enhance its ground water monitoring network in command area where treated wastewater is used for irrigation to assess the ground water quality. Also ensure to install at least 02 monitoring wells at downstream gradient away from the Unit premises for regular monitoring of groundwater quality.
3. To ensure that the Unit undertake detailed environmental site assessment, as per the CPCB guidelines, by engaging a professional agency/institute having expertise in assessment and remediation of contaminated groundwater and soil and submit the report within 60 days. If required as per detailed site assessment, the Unit

shall submit a DPR for remediation of groundwater contaminated area in around the premises, and execute the work in the supervision of SPCB in a time bound manner.

4. To ensure that the Unit shall prepare a comprehensive irrigation management plan (IMP) as per CPCB guideline by engaging Agriculture Scientist or Agriculture University/Institute and submit report to PPCB and CPCB within 60 days. The PPCB shall verify the same while issuing the consent and the same shall be incorporated with Consent condition before issuance of Consent to Operate to the Unit for compliance.
5. To ensure that the Unit take all the appropriate remedial measures for the prevention of groundwater contamination in their premises piezometer wells.
6. To ensure that the Unit shall obtain NOC from PWRDA for abstraction of the ground water.
7. To ensure that the Unit shall comply with the CPCB guidelines for Utilization of Treated Effluent in Irrigation.
8. To ensure that the Unit shall make necessary arrangement to hold back the effluent in case of failure of re-circulation system /effluent treatment plant.
9. To ensure that no water pollution problem is created in the area due to discharge of effluent from the Unit premises and also ensure that no stagnation occurs inside & outside the Unit premises during rainy season and no demand period.
10. To ensure that the Unit should install suitable odour control system as per CREP recommendation, 2003.
11. To ensure that the Unit shall ensure regular maintenance & operation and calibration of the on-line system so as to obtain continuous reliable accurate results.

The action taken report shall be sent to the CPCB within 45 days from the date of receipt of this direction. Punjab Pollution Control Board (PPCB) shall also acknowledge the receipt of this direction to CPCB within 15 days from the date of the receipt.


(PRASHANT GARGAVA)
MEMBER SECRETARY

Enc: As above

Copy to:

1. **The Member Secretary**
Punjab Pollution Control Board,
Head Office, Vatavaran Bhawan,
Nabha Road, Patiala, Punjab

With a request to ensure compliance of the said direction issued u/s 18(1)(b) of the Water Act, 1974, please.

OK

2. **The Regional Director,**
REGIONAL DIRECTORATE – Chandigarh
Central Pollution Control Board,
BSNL Telephone Exchange, 2nd Floor, Sector -49
C, Chandigarh – 160047
For information and necessary follow up
action please.
3. **The Director (CP Division)**
Ministry of Environment, Forest & Climate Change,
Indra Paryavaran Bhavan, JorBagh Road,
New Delhi-110003
For information, please.
4. The Division Head, IT Division, CPCB, Delhi : To upload the direction at CPCB website

(PRASHANT GARGAVA)
MEMBER SECRETARY