

**BEFORE THE NATIONAL GREEN TRIBUNAL
WESTERN ZONE BENCH, PUNE**

[Through Physical Hearing (with Hybrid Option)]

**ORIGINAL APPLICATION NO.182 OF 2023 (WZ)
WITH
I.A.NO.237/2024 IN O.A. NO.182/2023 (WZ)**

Prasad Haribhau Jadhav

.... **Applicant**

Versus

M/s Godavari Biorefineries Ltd. & Ors.

....**Respondents**

Date of Hearing : 13.09.2024

**CORAM : HON'BLE MR. JUSTICE DINESH KUMAR SINGH, JUDICIAL MEMBER
HON'BLE DR. VIJAY KULKARNI, EXPERT MEMBER**

Applicant : Mr. Abhiraj S. Kulkarni, Advocate

Respondents : Mr. Aniruddha Kulkarni, Advocate for R-2 and R-3

ORDER

1. We have perused the Joint Committee report dated 26.08.2024 submitted by respondent No.2 – MPCB, relevant portion of which is quoted hereunder:

“6.0 Conclusions

i. As directed by the Hon'ble NGT vide para 7 of the order dated 15/04/2024, the joint committee during its inspection heard the representation (oral submissions) as submitted by the applicant(s) & applicant(s) counsel about the present issues, allegations made in the original application, area under reference and other submissions made by the applicant(s) & applicant(s) counsel. Accordingly, the joint committee taken cognizance of submissions made by the applicant(s) & applicant(s) counsel including the submissions made in the original application. The joint committee also heard the representation (oral submissions) as submitted by the representative of the industry about

various initiatives taken in the field of pollution control and various developmental activities implemented under CSR scheme at surrounding villages.

ii. The industry has installed ETP of reported design capacity of 600 m³/day consisting of primary, secondary & tertiary treatment system as per CTO, dated 27/02/2023 to achieve the ZLD conditions. At present, the average effluent generation from the process, R&D activities, and utility streams is about 350 – 390 m³/day.

[Please refer S. no. 3.1, as above]

iii. Analysis results of the treated effluent sample from the final outlet of ETP (RO permeate & MEE condensate), meant for reuse for the process, cooling, scrubbing within the industry premises as per CTO, dated 27/02/2023 reveals that the concentration of all the monitored parameters are within the General standards (inland surface standards) for discharge of environmental pollutants Part A: Effluents, as per the Environment (Protection) Rules, 1986.

[Please refer S. no. 4.1, as above]

As per the data analysed in respect of generation & utilization of treated effluent from ETP (i.e. RO permeate & MEE condensate) w.e.f. April, 2023 till date of joint committee inspection (22/05/2024), the industry is generating avg. 365 m³/day of effluent and after treatment at ETP, the industry is reusing the entire treated effluent from ETP (i.e. RO permeate & MEE condensate) for cooling tower make-up (process cooling towers, 12 nos. and MEE cooling tower, 02 nos.) within the industry premises @ avg. 359 m³/day. The industry has installed inline CEMS sensors (effluent) for measurement of various parameters viz. pH, TSS, BOD, COD & flow at the outlet of ETP i.e. RO permeate. Thus complying with ZLD conditions as per CTO, dated 27/02/2023. The same is in compliance to the conditions stipulated in S. no. 1 of Schedule-I i.e. Terms & conditions for compliance of Water Pollution Control of the CTO, dated 27/02/2023.

As per the water balance, at full production capacity, the industry requires at about 2,691 m³/day of fresh water for the process, utilities and domestic purpose. For process cooling towers (12 nos. and MEE cooling towers of 02 nos.) alone the industry requires 2,222.5 m³/day of

fresh water. Wherein, the industry requires entire treated effluent generated @ avg. 590 m³/day (obtained from treatment of maximum effluent generation of about 596 m³/day, after considering evaporation losses from all the cooling towers) for reuse in the cooling towers and the remaining quantity is met through addition/top-up with fresh water.

Hence, in view of the above, the industry is in deficit to completely meet/replace the actual fresh water requirement to the said cooling towers through reuse of treated effluent from ETP and such deficit quantity is met through addition/top-up with fresh water.

iv. Analysis results of the treated sewage from the final outlet of STP, meant for

reuse for gardening within the industry premises as per CTO, dated 27/02/2023 reveals that the concentration of all the monitored parameters are within the MPCB prescribed standards, as per CTO, dated 27/02/2023.

[Please refer S. no. 4.1, as above]

As per the data analysed in respect of generation & utilization of treated sewage from STP w.e.f. October, 2023 till date of joint committee inspection (22/05/2024), the industry is reusing the treated sewage for gardening within the industry premises @ 138.5 – 149.63 m³/day. The same is in compliance to the conditions stipulated in S. no. 2 of Schedule-I i.e. Terms & conditions for compliance of Water Pollution Control of the CTO, dated 27/02/2023.

As per the records, the industry is reusing the said quantity of treated sewage for gardening at four different Gat nos. within the industry premises having total area of about 70 acres (i.e. Gat no. 158 – 20 acres; Gat no. 167 – 12.5 acres; Gat no. 168 – 20 acres and Gat no. 169 – 17.5 acres). The industry has adopted sprinkler & drip irrigation system (2 no. of pumps having 7.5 HP capacity & delivery pipe of 3.5 inches) for utilization of treated sewage for gardening near officer's bungalow and ETP area. In rest of the areas, the treated sewage is being conveyed through tankers for watering of green belt.

v. Analysis results of the water sample i.e. stagnant water accumulated at depression/pit at western side pit of Godavari River (within the Godavari River bed – Please refer Photograph-5) reveals that the concentration of criteria pollutant parameters viz. BOD: 330 mg/l and COD: 960 mg/l is on higher side along with other physicochemical parameters viz. TDS: 45,820 mg/l; EC: 55,870 µS/cm; Chloride: 19,244.03 mg/l; Total hardness: 22,400 mg/l; Sulphate: 1,627.5 mg/l and Sodium: 199.84 mg/l respectively.

[Please refer S. no. 4.2, as above]

During joint committee inspection, the Godavari River is observed to be completely in dried condition (Please refer Photograph-12), except at few locations, stagnant water is accumulated at depressions/pits within the Godavari River bed and not observed any sort of discharge of effluent/sewage from the industry. Further, as the aforesaid water sample is a stagnant water, the quality of the same may not be compared with that of the drinking water quality standards – IS 10500: 2012 or with the Designated Best Use Water Quality Criteria.

The aerial distance (based on the Google earth) from the nearest boundary i.e. North-West corner of the industry, where the erstwhile alleged discharge through Balantin nalah to the stagnant water accumulated at depression/pit at western side pit of Godavari River (within the Godavari River bed) is about 390 m. Similarly, the aerial distance (based on the Google earth) from the nearest boundary i.e. South-West corner of the industry, where the erstwhile alleged discharge through Pimpal nalah to the stagnant water accumulated at depression/pit at western side pit of Godavari River (within the Godavari River bed) is about 1,087 m.

[Please refer Google image at S. no. 4.0, as above]

Whereas, during the past MPCB monitoring carried-out on 06/06/2023 it is reported that the stagnant water sample collected at depression/pit at eastern side pit-1 & 2 of Godavari River (within the Godavari River bed) had concentration of BOD: 32 mg/l & 66 mg/l and COD: 147.2 mg/l & 230 mg/l respectively. Similarly, the stagnant water sample collected at depression/pit at centre side pit and western side pit of

Godavari River (within the Godavari River bed) had concentration of BOD: 36 mg/l & 65 mg/l and COD: 152.4 mg/l & 204.8 mg/l respectively. It was reported by MPCB that there were no industrial discharges outside the premises and the treated effluent sample collected from the final outlet of ETP on 06/06/2023 reveals that the concentration of BOD: 3.2 mg/l and COD: 20.4 mg/l. The same is found well within the General standards (inland surface standards) for discharge of environmental pollutants Part A: Effluents, as per the Environment (Protection) Rules, 1986.

Further, during the past MPCB monitoring carried-out on 29/11/2023 it is reported that the water sample collected at Balantin nalah had concentration of BOD: 40 mg/l and COD: 98.8 mg/l. Similarly, the water sample collected at Pimpal nalah had concentration of BOD: 28 mg/l and COD: 92 mg/l. It was reported by MPCB that there were no industrial discharges into the said nalahs and the said quality might due to surface run-off from the agricultural fields located upstream of the said nalahs which are passing through/passing adjacent to the industry premises, as it was reported about the incidence of heavy rainfall occurred on 27/11/2023. Whereas, the treated effluent sample collected from the final outlet of ETP on 17/11/2023 reveals that the concentration of BOD: 5.4 mg/l and COD: 28 mg/l and the treated effluent sample collected from the final outlet of ETP on 29/11/2023 also reveals that the concentration of BOD: 5.4 mg/l and COD: 19.2 mg/l. The same is found well within the General standards (inland surface standards) for discharge of environmental pollutants Part A: Effluents, as per the Environment (Protection) Rules, 1986.

Similarly, during the recent MPCB monitoring carried-out on 13/02/2024, it was reported by MPCB that there were no industrial discharges outside the premises and the treated effluent sample collected from the final outlet of ETP on 13/02/2024 reveals that the concentration of BOD: 34 mg/l and COD: 88 mg/l. The same is found within the General standards (inland surface standards) for discharge of environmental pollutants Part A: Effluents, as per the Environment (Protection) Rules, 1986, except for BOD. However, the treated effluent is

being reused within the industrial premises for the process, cooling, scrubbing as per CTO, dated 27/02/2023.

vi. Analysis result of the source emission sample collected from the operational stack attached to 30 TPH AFBC boiler reveals that the concentration of monitored parameter i.e. PM and SO₂ is found to be within the MPCB prescribed standards. The industry has installed requisite air pollution control device i.e. Electrostatic Precipitator (ESP) for both the operational 30 TPH AFBC boiler & 18 TPH ISGEC boiler as per CTO, dated 27/02/2023 and the same is in compliance to the conditions stipulated in S. no. 1 of Schedule-II i.e. Terms & conditions for compliance of Air Pollution Control of the CTO, dated 27/02/2023. During source emission monitoring (i.e. on 22/05/2024 w.e.f. 14.00 hr to 16.00 hr) of the operational stack attached to 30 TPH AFBC boiler, the said boiler is operated @ 24.93 TPH with fuel consumption of about 4.414 TPH (coal: 3.142 TPH & biomass briquette: 1.272 TPH) and is found operated @ 83.1% load.

[Please refer S. no. 4.3, as above]

vii. Analysis results of ambient air quality monitoring carried-out at all the three locations reveals that the concentration of PM₁₀ is found to be exceeding the National Ambient Air Quality Standards vide Notification dated 18/11/2009. Rest of the parameters viz. PM_{2.5}, SO₂, NO₂, Ozone, Lead, Carbon monoxide, Ammonia, Benzene, Benzo (a) pyrene, Arsenic, and Nickle are well within the National Ambient Air Quality Standards vide Notification dated 18/11/2009 at all the three monitored locations. The increase in PM₁₀ concentration within the industry premises may be attributed due to dispersion of stack emission and re-suspension of road dust near the monitored locations, where it is observed that the approach roads are unpaved. Similarly, slight increase in PM₁₀ concentration Near Tukaram Maharaj mandir, Gat no. 463, outside the industry premises, Vill. Vari may be attributed due to movement of vehicles on the public road. The aerial distance (based on the Google earth) from the operational stack to the said monitoring location is about 335 m.

[Please refer S. no. 4.4, as above]

7.0 Recommendations

- i. As per the conditions stipulated in S.no.1 of Schedule-II i.e. Terms & Conditions for compliance of Air Pollution Control of the CTO, dated 27/02/2023, the industry has obtained consent for operation of 02 no. of boilers. Whereas, it is observed that the industry has additional 02 no of old boilers. Hence, the industry may be directed either to amend the existing CTO dated 27/02/2023 for the provision of 04 no. of boilers or to dismantle the 02 no of old boilers. Further, the industry may be directed to amend the existing CTO dated 27/02/2023 for provision of process vent attached to the acetaldehyde plant.*
- ii. As there are instances of episodal deterioration of quality of run-off water at the alleged Balantin nalah, adjacent to wetland no.1 of bioremediation area of the industry and Pimpal nalah, passing through the industry premises, Gat no.138, Vill. Kanegaon i.e. near ETP of the industry; the industry may be directed to construct a trench of adequate size along the periphery of the bio-remediation area to contain the run-off water, outfalls into Godavari River. Later, the accumulated water from trench may be conveyed for treatment at the industry.”*

2. From the perusal of the said report, it is apparent that the Joint Committee has found that water accumulated at the depression/pit at western wide pit of Godavari river (within the Godavari river bed) reveals that the concentration of criteria pollutant parameters viz. BOD:330 mg/l and COD : 960 mg/l is on higher side. But we find that the source of this pollution has not been given as to who is the person due to whose activity pollution is happening . We also find that PM₁₀ is found to be exceeding the National Ambient Air Quality Standards as stated at page 546 of the paper-book. There are also few recommendations made. But looking to the fact that some violations of terms & conditions of CTO granted in respect of air pollution control are found, we deem it appropriate to admit this Original Application and direct the Registry to issue notices to the respondents,

returnable within four weeks. We also direct the Registry that it shall serve copy of the Joint Committee report to the respondents so that if any objection is to be filed by them, the same may be filed within that period by submitting their respective replies.

3. The applicant is directed to provide copies of the Original Application and the annexures thereto to the respondents, within a week from the date of uploading of this order.

4. The applicant is also directed to take necessary steps for service upon the respondents by both ways and also through available e-mail.

5. From the side of respondent No.2-MPCB and respondent No.3-CPCB, learned counsel Mr. Aniruddha Kulkarni has appeared and waives service of notice on behalf of these two respondents.

6. Put up this matter for next consideration on 22.11.2024.

Dinesh Kumar Singh, JM

Dr. Vijay Kulkarni, EM

September 13, 2024
O.A. No.182/2023(WZ)
npj