



TELANGANA STATE POLLUTION CONTROL BOARD

Paryavarana Bhavan, A-III, Industrial Estate, Sanathnagar, Hyderabad-500 018
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Order No. NLG-211/TSPCB/UH-V/TF/2016- 120

Dt.10.04.2020

Sub : TSPCB – M/s. Tripura Bio Tech Ltd., Sy.No.29-A, Thallasingaram (V), Choutuppal (M), Yadadri Bhuvanagiri District – Water (Prevention and Control of Pollution) Amendment Act, 1988 and Air (Prevention and Control of Pollution) Amendment Act, 1987 – **Directions** – Issued – Reg.

Ref : 1. CFO&HWA order No.TSPCB/ZO/RCP/NLG/220/W&A/2016-194, dt.23.01.2016, which is valid upto 31.10.2020.
2. CFO&HWA Order No. TSPCB/ZO/RCP/NLG/220/CFO/2019-525, dt.28.05.2019 which is valid upto 31.05.2029.
3. Telephonic complaint dt.22.11.2019 received from S. Venkat Reddy of Lingareddy gudem (V), Choutuppal (M), Yadadri Bhuvanagiri District.
4. Inspection of the industry by Board Officials on 22.11.2019.
5. Hearing held on 04.03.2020.

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1. **WHEREAS**, you are operating the industry located at Sy.No.29-A, Thallasingaram (V), Choutuppal (M), Yadadri Bhuvanagiri District and engaged in manufacturing of organic/Bio fertilizer.
2. **WHEREAS**, vide reference 1st cited, the Board issued CFO & HWA order vide dt.23.01.2016, for a period upto 31.10.2020 and the Board issued CFO & HWA order vide dt.28.05.2019 for a period upto 31.05.2029 vide reference 2nd cited.
3. **WHEREAS**, vide reference 3rd cited, the Board received a telephonic complaint received from S. Venkat Reddy of Lingareddygudem (V), Choutuppal (M), Yadadri Bhuvanagiri District dt.22.11.2019 regarding death of goats in Pillaipalli Canal due to pollution caused by surrounding industries water pollution.
4. The Board Officials inspected the two industries i.e., M/s. Vision Drugs (P) Ltd., and M/s. Tripura Bio Tech Ltd., on 22.11.2019 near to Pillaipalli canal and the following observations were made:
5. **WHEREAS**, vide reference 4th cited, the Board Officials inspected the two industries i.e., M/s. Vision Drugs (P) Ltd., and M/s. Tripura Bio Tech Ltd., on 22.11.2019 near to Pillaipalli canal and the following observations were made:
 - i. M/s. Tripura Bio Tech Ltd., is engaged in manufacturing of organic/Bio fertilizer.
 - ii. The Zonal Office RC Puram issued CFO & HWA to the industry vide order dated 23.01.2016 with a validity period upto 31.10.2020 for existing 5 products.
 - iii. The Zonal Office RC Puram issued CFE expansion to the industry on 11.09.2018. Subsequently, issued CFO expansion for 19 products on 28.05.2019.
 - iv. Pillaipalli canal is about 140 mtrs away from the M/s. Tripura Bio Tech in North direction.
 - v. The industry has constructed ETP to treat the effluents in collection tank, neutralization tank, Primary clarifier, Feed tank, Anaerobic reactor, treated effluent collection tank and sludge drying beds. The effluents generated from this unit are biodegradable effluents.
 - vi. The industry representative informed that, they are directly reusing the effluent generated from the process without treating in ETP.
 - vii. As per CFE Order, the industry is having 2 Nos. of husk / coal fired boilers of 4 TPH capacity each. The industry provided mechanical dust collector as APCE to 1x4 TPH boiler and another 4 TPH boiler has not installed.
 - viii. The industry generates solid waste such as ETP sludge, Process waste (Mycelium bio mass) and spent carbon. The ETP sludge is used as manure for agriculture, spent carbon disposed to authorized Re-processors / Recyclers or TSDF, Dundigal

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DESPATCHED
ON 24/4/2020

and Process waste (Mycelium bio mass) is used for internal consumption in the process.

- The compliance of the industry on CFO schedule - B conditions for CFO order dt.28.05.2019:

S.No	Condition	Compliance																					
1.	<p>The industry shall take steps to reduce water consumption to the extent possible and consumption shall NOT exceed the quantities mentioned below:</p> <table border="1"> <thead> <tr> <th>S.No.</th> <th>Water Consumption</th> <th>Quantity</th> </tr> </thead> <tbody> <tr> <td>1.</td> <td>Process</td> <td>135.0 KLD</td> </tr> <tr> <td>2.</td> <td>Boiler feed</td> <td>25.0 KLD</td> </tr> <tr> <td>3.</td> <td>Cooling tower make up</td> <td>1.0 KLD</td> </tr> <tr> <td>4.</td> <td>Softener regeneration & Others</td> <td>5.0 KLD</td> </tr> <tr> <td>5.</td> <td>Domestic & Gardening</td> <td>10.0 KLD</td> </tr> <tr> <td colspan="2">Total:</td> <td>176 KLD</td> </tr> </tbody> </table>	S.No.	Water Consumption	Quantity	1.	Process	135.0 KLD	2.	Boiler feed	25.0 KLD	3.	Cooling tower make up	1.0 KLD	4.	Softener regeneration & Others	5.0 KLD	5.	Domestic & Gardening	10.0 KLD	Total:		176 KLD	As per the records availability furnished by the industry from June 2019 to November 2019. The water consumption is 100 KLD as against the consented water consumption is 176 KLD.
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1.	Process	135.0 KLD																					
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2.	A sampling port with removable dummy of not less than 15cm diameter shall be provided to the stack at a distance of 8 times the diameter of the stack from the nearest constraint such as bends etc. A platform with suitable ladder shall be provided below 1 meter of sampling port to accommodate three persons with instruments. A 15 AMP 250 V plug point shall be provided on the platform.	Complied.																					
3.	<p>The emissions shall not contain constituents in excess of the prescribed limits mentioned below.</p> <table border="1"> <thead> <tr> <th>Chimney No.</th> <th>Parameter</th> <th>Emission standards (mg/NM³)</th> </tr> </thead> <tbody> <tr> <td>1 to 5</td> <td>SPM</td> <td>115</td> </tr> </tbody> </table>	Chimney No.	Parameter	Emission standards (mg/NM ³)	1 to 5	SPM	115	---															
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4.	<p>The industry shall comply with ambient air quality standards of PM₁₀ (particulate Matter size less than 10µm) - 100 µg/m³; PM_{2.5} (Particulate Matter size less than 2.5µm) - 60 µg/m³; SO₂ - 80 µg/m³; NO_x - 80 µg/m³, outside the factory premises at the periphery of the industry.</p> <p>Standards for other parameters as mentioned in the National Ambient Air Quality Standards of CPCB Notification No.B29016/20/90/PCI-I, dated 18.11.2009 shall be complied.</p> <p>The following noise level standards shall be complied:</p> <p>Noise Levels: Day time (6 AM to 10 PM) - 75 dB (A) Night time (10 PM to 6 AM) - 70 dB (A)</p>	---																					
5.	The industry shall not manufacture new products / excess capacity beyond the permitted capacity mentioned in this order without obtaining CFE /CFO of the Board.	As per the records furnished by the industry from June 2019 to November 2019 Micro nutrients (Granules) - 18000 TPA as against the consented is 20000 TPA & Micro nutrients (Liquid) - 3000 TPA as against the consented is 10000 TPA.																					
6.	The industry shall provide above ground level	During the inspection,																					

	RCC tanks for collection / storage of trade effluents and arrest ground water pollution due to leaks/crack of pipes, tanks and spillages etc.	no discharges were observed.
7.	The industry shall not cause any spillages / discharges of chemicals/ effluents on ground. The drums containing chemicals & wastes shall be stored on elevated platform provided with leachate/spillages collection pit. In no case the drums shall be stored on naked ground.	
8.	The industry shall carryout only fermentation process during manufacturing and shall not carry any synthesis process of products.	Complied.
9.	The industry shall not use any solvents in the process under any circumstance	Complied.
10.	The industry shall treat the trade effluents in ETP. After treatment in the ETP, the treated effluents of about 8.375 KLD shall be used for granulation production for coating and remaining treated effluents used for onland for irrigation within the industry's premises duly meeting the irrigation standards stipulated, and shall not discharge any waste water outside the premises.	Industry representative informed that, they are directly reusing the effluent generated from the process without treating in ETP.
11.	The industry shall store the treated effluents in above ground level tanks before utilizing them for granulation production.	The industry is storing the effluents in 2 KL sump present in the industry.
12.	The industry shall store the raw materials, husk, boiler ash etc in a closed shed only.	Complied.
13.	The industry shall use de-odourizing liquids near raw material storage and process areas.	Not Complied.
14.	The industry shall regularly operate the Air Pollution Control Equipment i.e., Mechanical dust collector to the coal / husk fired boiler of capacity 4 TPH to control the flue gas emissions	Complied.
15.	The industry shall not cause any air pollution / dust emissions / odour nuisance in the nearby environment.	During the inspection, no air pollution was observed.
16.	The industry shall not discharge any waste water outside the plant premises under any circumstances.	During the inspection, no discharges were observed.
17.	The industry shall pay the balance water cess dues, if any.	---
18.	The industry shall develop a minimum of 5mtrs width green belt all around the boundary of the unit and in vacant places with tall growing trees with wide leaf area. The area allocated for greenbelt shall not be less than 33 % of total area of industry.	Complied.
19.	The industry shall install digital flow meters with totalizer to measure the actual water consumption, waste water generated, treated & disposed and maintain a log register as per the meter readings.	Complied.
20.	The industry shall provide separate energy meter to the air pollution control system and maintain a log register to record the readings.	Complied.
21.	The industry shall maintain the following records and the same shall be made available to the Board Officials during the inspection a. Daily production details as per the GST sales. b. Log Books for pollution control systems.	---
22.	Qualified technical man power shall be employed to operate the ETP.	Complied.
23.	The industry shall take all precautionary and safety measures during process operations.	Complied.

24.	The industry shall maintain good housekeeping within the plant premises.	Satisfactory.
25.	The industry shall comply with all the directions issued by the Board from time to time.	---
26.	The industry shall not sell the used empty drums/ barrels / liners / bags / Bottle etc. to outside parties & vendors for reuse, instead they shall discard the same to avoid reuse, which is resorting in illegal dumping of Hazardous Waste and shall dispose the same directly to authorized recyclers only.	---
27.	The industry shall ensure for proper labelling of Hazardous Waste / other waste containers with particulars of industry & type of Waste along with characteristics, while storage & transporting the waste to Recyclers / TSDF / Cement Industries	Directed to comply.

- Following samples collected and the analysis reports indicate:

Sample code	Sample details / collection point
11312	ETP (Stagnated water)
11313	Filter Press washing water.

Parameters	Unit	Results	
		11312	11313
pH at 25°C	-	7.44	2.25
Total Suspended Solids	mg/L	< 5	76
Total Dissolved Solids (TDS)	mg/L	217	3,247
Chemical Oxygen Demand	mg/L	4	459
Oil and Grease	mg/L	BDL	0.2

- Following samples collected from Pillaipalli Canal and the analysis reports indicate:

Sample code	Sample details / collection point
11309	Pillaipalli Canal which is 100 metres distance to choutuppall-Valigonda Road. (Near Tripura Biotech).
11310	Pillaipalli Canal which is 500 metres distance to Choutuppall-Valigonda Road. (where the cattle died).
11311	Pillaipalli Canal where the canal water diverted to use agricultural purpose.

Parameters	Method (*) No.	Unit	Results		
			11309	11310	11311
pH at 25°C	4500-B	-	7.68	7.75	7.90
Electrical conductivity	µS/cm	-	1,411	1,413	1,420
Total Suspended Solids	2540-B	mg/L	14	16	15
Total Dissolved Solids (TDS)	2540-C	mg/L	950	938	948
Chemical Oxygen Demand	5220-B	mg/L	56	72	56
BOD 3 at 27°C	IS 3025, 1993	mg/L	5	7	5
Oil and Grease	5520 - B	mg/L	BDL	BDL	BDL
Chlorides as Cl ⁻	4500 -C1 -B	mg/L	180	189	189
Sulphates as SO ₄ ⁻²	4500 - SO ₄ ⁻²	mg/L	111	107	94
Sodium as Na	3500 - Na B	mg/L	116	115	116
Potassium as K	3500 -K B	mg/L	13	12	16
Boron	4500 - B B	mg/L	BDL	BDL	BDL
Free Ammonia	-	mg/L	0.12	0.13	0.23
SAR	-	-	2.2	2.6	2.3

CPCB Water Quality Criteria					
Parameters	A	B	C	D	E
pH	6.5 – 8.5	6.5 – 8.5	6.0 – 9.0	6.5 – 8.5	6.0 – 8.5
Electrical conductivity	-	-	-	-	Max 2250
Dissolved oxygen	6 or >6	5 or >5	4 or >4	4 or >4	-
BOD 3 at 27°C	2 or < 2	3 or < 3	3 or < 3	-	-
Free Ammonia	-	-	-	1.2 or <1.2	-
SAR	-	-	-	-	Max 26
Boron	-	-	-	-	Max 2
Total coliform	50 or < 50	500 or < 500	5000 or < 5000	-	-

Remarks: As per CPCB Water Quality criteria the water bodies falls in the 'E' class.

- Finger Printing analysis of the sample:

Sample code	Sample details / collection point
11309	Pillaipalli Canal which is 100 metres distance to choutuppall-Valigonda Road. (Near Tripura Biotech).
11310	Pillaipalli Canal which is 500 metres distance to Choutuppall-Valigonda Road. (where the cattles died).
11311	Pillaipalli Canal where the canal water diverted to use agricultural purpose.

S. No	Compounds Identified
	Sample Code: 11309
1	No compound detected
	Sample Code: 11310
1	No compound detected
	Sample Code: 11311
1	No compound detected

Remarks:

As per the finger printing analysis of the samples collected from Pillaipalli Canal, no compounds were detected inferring that the industries abutting the canal may not be indulging in illegal discharge of effluents. However, all the industries within the vicinity of the canal may be directed to install TILT ZOOM IP cameras and the same may be connected to TSPCB server to have a continuous vigil.

6. **WHEREAS**, vide reference 8th cited, you were given an opportunity for hearing before the Task Force Committee of the Board during the meeting held on 04.03.2020.

The complainant has not attended the meeting and the industry representative attended the meeting.

The Committee noted that the industry is involved in manufacturing of organic / bio-fertilizers. The industry is re-using the effluents generated from the process directly without treating in the ETP.

The Committee also noted that a complaint was received regarding discharge of effluents into Pillaipalli canal leading to death of goats. The Committee observed that as per the finger print analysis, no compounds were detected in the samples collected from Pillaipalli canal.

The industry representative informed that they are storing waste water in the sump and that water is being re-used for granulation process. He also informed that in the fermentation process, lactobacillus bacteria is generated which is acidic and the same is neutralized using lime or calcium.

After detailed discussion, the Committee recommended to issue certain directions to comply with.

7. **WHEREAS**, after careful consideration of the material facts of the case, the Board hereby issue **following Directions to your industry to comply with:**
1. The industry shall not operate without valid Consent of the Board.
 2. The industry shall comply with CFO&HWA conditions and Board directions issued by the Board scrupulously.
 3. The industry shall use de-odourizing liquids near raw material storage and process areas to control odour if any.
 4. The industry shall use tank in tank with proper collection system for storage of effluents.
 5. The industry shall provide IP camera with PAN, TILT Zoom, 5x or above focal length, with night vision capability at the main entrance and the same shall be connected to TSPCB Server.
 6. **The industry shall submit the Bank Guarantee of Rs.1.0 lakh in favour of Member Secretary, TSPCB, Hyderabad** towards compliance of the Board directions and consent conditions within a week and submit at concerned Regional office and shall extend the validity of the Bank Guarantee from time to time prior to its expiry till further orders of the Board.
8. These directions are issued under Sec.33 (A) of Water (Prevention and Control of Pollution) Amendment Act, 1988 and under Sec. 31 (A) of Air (Prevention and Control of Pollution) Amendment Act, 1987.
9. The above mentioned directives shall be implemented by the industry, failing which legal action will be initiated against your industry under Sec.33 (A) of Water (Prevention and Control of Pollution) Amendment Act, 1988 and under Sec. 31 (A) of Air (Prevention and Control of Pollution) Amendment Act, 1987 directing closure of the industry in the interest of Public Health and Environment, without further notice.


Sd/-
MEMBER SECRETARY

To
M/s. Tripura Bio Tech Ltd.,
Sy.No.29-A, Thallasingaram (V),
Choutuppal (M),
Yadadri Bhuvanagiri District

Copy to:

1. The District Magistrate & Collector, Yadadri Bhuvanagiri for kind information.
2. The JCEE, Z.O, R.C.Puram for information and necessary action.
3. The Environmental Engineer, Regional Office, Nalgonda for information and necessary action. He is directed to monitor the industry for compliance of the directions issued and shall submit status report.
4. Concerned file.

// T.C.F.B.O //


Senior Environmental Engineer (FAC)
(UH-V)