

**BEFORE THE NATIONAL GREEN TRIBUNAL
SOUTHERN ZONE, CHENNAI**

**ORIGINAL APPLICATION No. 22 OF 2024 (SZ)
{Earlier OA No. 565/2023 (PB)}**

IN THE MATTER OF:

Tribunal on its own motion SUO MOTU
based on the news item in The New Indian
Express Dt. 08.09.2023 titled "**Snow-like
chemical foam haunts Kukatpally again**"

....

Applicant(s)

Versus

The District Collector,
Medchal – Malkajgiri District,
Telangana and Ors.

....

Respondent(s)

**REPORT OF THE TELANGANA POLLUTION CONTROL BOARD
(RESPONDENT Nos. 2 & 3)**

RUNNING INDEX

| Sl. No. | Particulars | Page Nos. |
|----------------|---|------------------|
| 1. | Report of the Telangana Pollution Control Board dated 27.09.2024 (Respondent Nos. 2 & 3). | 1 – 5 |
| 2. | Annexure–I – Analysis report of samples collected from Pariki Cheruvu, Kukatpally (V), Balanagar (M), Medchal – Malkajgiri District. | 6 |
| 3. | Annexure–II – Hon'ble NGT, Chennai Order dated 05.09.2024. | 7 – 8 |

Place: Hyderabad

Date: 28-09-2024.



COUNSEL FOR RESPONDENT Nos.2 & 3

1

REPORT OF THE ENVIRONMENTAL ENGINEER, TELANGANA POLLUTION CONTROL BOARD (TGPCB), REGIONAL OFFICE, MEDCHAL IN O.A. NO. 22 OF 2024 (SZ) IN HON'BLE NGT, CHENNAI [EARLIER, O.A. NO. 565 OF 2023 (PB)] BASED ON THE NEWS ITEM APPEARED IN EXPRESS NEWS SERVICE DATED 08.09.2023 ENTITLED "SNOW LIKE CHEMICAL FOAM HAUNTS KUKATPALLY".

It is to submit that the Hon'ble National Green Tribunal, Principal Bench, New Delhi has taken up Suo Motu matter and registered OA No. 565/2023 based on the News item appeared in Express News Service dated 08.09.2023 entitled "Snow like Chemical foam haunts". The Hon'ble NGT has issued a notice dated 14.09.2023 to the Board directing to submit the report in the matter. The Respondent Board has submitted report dated 25.09.2023 before the Hon'ble NGT, Principal Bench, New Delhi.

It is submitted that the Hon'ble NGT, Principal Bench, New Delhi has transferred the above Suo Motu matter to Hon'ble NGT, South Zone, Chennai and the Hon'ble NGT, Chennai vide order dated 09.02.2024 has renumbered the case as Original Application No.22 of 2024 (SZ). The Respondent Board has submitted report dated 16.03.2024 before the Hon'ble NGT, SZ, Chennai.

The present status report in the matter is submitted below:

The matter was related to the News item appeared in the Express News Service dated 08.09.2023 regarding the Snow like foam appearing in the residential areas in Kukatpally after heavy rains lashed the city. The root cause of foaming is pollution of Pariki Cheruvu Lake.

In this regard, it is to submit that the officials of TGPCB have inspected the Pariki Cheruvu Lake on 24.09.2024. The details are submitted as follows:-

1. Pariki Cheruvu is located at Dharani Nagar in Kukatpally Village, Medchal-Malkajigiri District and the latitude & longitude are as 17.511119° & 78.414261° respectively.
2. The lake is spread over an area of about 68 Acres and surrounded by thick residential colonies viz., **East:** Tulasi Nagar, Kandri gutta, Lenin Nagar, Srinivasa Nagar, Jagadgir gutta etc., **West:** Guru Govind Nagar,

NTR Nagar, Yellama Banda, etc., **South:** Dharani Nagar, Allwyn Nagar, etc., and **North:** Kailash Hills, Mahadempur Colony, etc.

3. One major drain carrying domestic sewage joining the lake from upstream i.e., Lenin Nagar, Uma Devi Nagar, Chandra Nagar, Babani Nagar, Prakasam Panthulu Nagar etc. Small sewage drains from colonies located towards North and West side are also joining the lake.
4. Dharani Nagar is located in the downstream of Pariki Cheruvu. Outlet from Pariki Cheruvu flows in a drain through Dharani Nagar. During the inspection, the foam formation was observed to be reduced due to the low flow from the outlet weir of the lake. The presence of surfactants and fall from a height are contributing to generation of Foam.
5. During the inspection on 24.09.2024, the Board officials has collected sample of the Pariki Cheruvu Lake water from the outlet and same were submitted to Central Laboratory of the Board for analysis.
6. The Board is monitoring the water body by collecting water samples regularly on monthly basis. The monitoring results of the Pariki Cheruvu water for the last 3 months period are submitted as follows:

May, June & July - 2024

| | |
|--|---|
| Sample Code | : ZLWGL24-05053, 06342 & 07317. |
| Name of the lake | : Pariki Cheruvu, Kukatpally (V), Balanagar (M). MedchalMalkajgiri District. |
| Date of Collection | : 05053: 02.05.2024, 06342: 11.06.2024 & 07317: 09.07.2024 |
| Date of submission | : 05053: 04.05.2024, 06342: 11.06.2024 & 07317: 10.07.2024 |
| Sample Collected & submitted by | : Regional Office, Medchal. |
| Point of Sample | : Pariki Cheruvu |

| Sl. No. | Parameter | Sample No. | | |
|---------|--|------------|-------|-------|
| | | 05053 | 06342 | 07317 |
| | | Values | | |
| 1. | pH | 7.34 | 7.18 | 7.35 |
| 2. | Dissolved Oxygen (DO) | 0.3 | 0.3 | 0.3 |
| 3. | Electrical Conductivity (uS/cm) | 1838 | 1435 | 1463 |
| 4. | Total Solids (TS) | 1172 | 906 | 946 |
| 5. | Total Suspended Solids (TSS) | 32 | 16 | 36 |
| 6. | Total Dissolved Solids (TDS) | 1140 | 890 | 910 |
| 7. | Chlorides as Cl ⁻ | 225 | 180 | 142 |
| 8. | Sulphates as SO ₄ ⁻² | 141 | 84 | 92 |
| 9. | Chemical Oxygen Demand (COD) | 92 | 95 | 83 |
| 10. | Biological Oxygen Demand (BOD) | 8.0 | 6.4 | 8.0 |
| 11. | Total Hardness as CaCO ₃ | 410 | 308 | 350 |
| 12. | Calcium as Ca ⁺² | 88 | 76 | 72 |
| 13. | Magnesium as Mg ⁺² | 46 | 29 | 41 |
| 14. | Total alkalinity as CaCO ₃ | 400 | 300 | 380 |
| 15. | Total Coliform (MPN/100ml) | 350 | 430 | 540 |
| 16. | Fecal Coliform (MPN/100ml) | 21 | 34 | 33 |
| 17. | Nitrates as NO ₃ ⁻ | NA | 5.6 | 23.3 |
| 18. | Phosphates as PO ₄ -3 | 2.99 | 3.25 | 4.20 |
| 19. | Fluoride as F- | 1.13 | 1.24 | 0.83 |
| 20. | Sodium as Na | NA | NA | NA |
| 21. | Potassium as K | NA | NA | NA |
| 22. | % Sodium (%Na) | NA | NA | NA |

| | | | | |
|--|-------------------------------|----|----|----|
| 23. | Sodium Absorption Ratio (SAR) | NA | NA | NA |
| All the values are expressed in mg/L except pH, Electrical Conductivity, Coliform bacteria | | | | |

| 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 | - | - |

CPCB Water Quality Criteria:

A-Drinking Water Source without conventional treatment but after disinfection

B-Outdoor bathing (Organised)

C-Drinking water source after conventional treatment and disinfection

D-Propagation of Wild life and Fisheries

E-Irrigation, Industrial Cooling, Controlled Waste disposal

Below E – Not meeting A, B, C, D, E criteria.

- As seen from the analysis report of the water sample, the Lake water is falling under Class 'E' i.e., Designated best use for Irrigation, Industrial Cooling, Controlled Waste disposal, as per the CPCB water quality criteria. Copy of the analysis report is enclosed as **Annexure-I**.
- It is to submit that no industries are located in the upstream of Pariki Cheruvu and domestic effluents from the surrounding areas are joining the lake. The study conducted by Engineering Staff College of India, Hyderabad has inferred that the cause for the foam formation was filamentous bacteria.

9. The Hyderabad Metro Water Supply and Sewerage Board (HMWS&SB) has proposed to construct a Sewage Treatment Plant of 28 Million Litres per day (MLD) capacity on the upstream of Pariki Cheruvu Lake to treat the Sewage generated from the colonies. The State Government has issued Administrative Sanction under Package-III and the Civil works have been started for construction of STP.
10. However, it was observed that the construction of the STP at Pariki Cheruvu has been stopped. The HMWS&SB has informed that in view of the Hon'ble High Court interim orders in W.P. No. 28313 of 2021, they have stopped the construction works related to the STP due to the litigation on the land allotted.

Submitted.

Place: Hyderabad

Date: 27-09-2024



ENVIRONMENTAL ENGINEER

Environmental Engineer
T.G. Pollution Control Board
Regional Office, Medchal.



6

Annexure - I

| | |
|---|--|
|  | TELANGANA POLLUTION CONTROL BOARD ZONAL LABORATORY: HYDERABAD ZONE H.No.: 1-8-269, Balasamudram, Warangal - 506001 |
| | ISO Certified Laboratory ISO 9001:2015 (Q-205224051107) & ISO 45001:2018 (HS-205224051108) |

ANALYSIS REPORT

| | |
|---------------------------------|--|
| Sample Code | : ZLWGL24-05053, 06342 & 07317. |
| Name of the lake | : Pariki cheruvu, Kukatpally (V), Balanagar (M), Medchal-Malkajgiri (D). |
| Date of Collection | : 05053: 02.05.2024, 06342: 11.06.2024 & 07317: 09.07.2024 |
| Date of submission | : 05053: 04.05.2024, 06342: 11.06.2024 & 07317: 10.07.2024 |
| Sample Collected & submitted by | : Regional Office, Medchal. |
| Point of Sample | : Pariki cheruvu |

| I. No. | Parameter | Sample No. | | | CPCB Water Quality Criteria | | | | |
|----------|---|------------|-------|-------|-----------------------------|---------|---------|---------|----------|
| | | 05053 | 06342 | 07317 | Class-A | Class-B | Class-C | Class-D | Class-E |
| | | Values | | | | | | | |
| 1. | pH | 7.34 | 7.18 | 7.35 | 6.5-8.5 | 6.5-8.5 | 6.0-9.0 | 6.5-8.5 | 6.0-8.5 |
| 2. | Dissolved Oxygen (DO) | 0.3 | 0.3 | 0.3 | ≥6.0 | ≥5.0 | ≥4.0 | ≥4.0 | - |
| 3. | Electrical Conductivity (uS/cm) | 1838 | 1435 | 1463 | - | - | - | - | 2250 Max |
| 4. | Total Solids (TS) | 1172 | 906 | 946 | - | - | - | - | - |
| 5. | Total Suspended Solids (TSS) | 32 | 16 | 36 | - | - | - | - | - |
| 6. | Total Dissolved Solids (TDS) | 1140 | 890 | 910 | - | - | - | - | - |
| 7. | Chlorides as Cl ⁻ | 225 | 180 | 142 | - | - | - | - | - |
| 8. | Sulphates as SO ₄ ⁻² | 141 | 84 | 92 | - | - | - | - | - |
| 9. | Chemical Oxygen Demand (COD) | 92 | 95 | 83 | - | - | - | - | - |
| 10. | Biological Oxygen Demand (BOD) | 8.0 | 6.4 | 8.0 | <2.0 | <3.0 | <3.0 | - | - |
| 11. | Total Hardness as CaCO ₃ | 410 | 308 | 350 | - | - | - | - | - |
| 12. | Calcium as Ca ⁺² | 88 | 76 | 72 | - | - | - | - | - |
| 13. | Magnesium as Mg ⁺² | 46 | 29 | 41 | - | - | - | - | - |
| 14. | Total alkalinity as CaCO ₃ | 400 | 300 | 380 | - | - | - | - | - |
| 15. | Total Coliform (MPN/100ml) | 350 | 430 | 540 | ≤50 | ≤500 | ≤5000 | - | - |
| 16. | Fecal Coliform (MPN/100ml) | 21 | 34 | 33 | - | - | - | - | - |
| 17. | Nitrates as NO ₃ ⁻ | NA | 5.6 | 23.3 | - | - | - | - | - |
| 18. | Phosphates as PO ₄ ⁻³ | 2.99 | 3.25 | 4.20 | - | - | - | - | - |
| 19. | Fluoride as F ⁻ | 1.13 | 1.24 | 0.83 | - | - | - | - | - |
| 20. | Sodium as Na | NA | NA | NA | - | - | - | - | - |
| 21. | Potassium as K | NA | NA | NA | - | - | - | - | - |
| 22. | % Sodium (%Na) | NA | NA | NA | - | - | - | - | - |
| 23. | Sodium Absorption Ratio (SAR) | NA | NA | NA | - | - | - | - | 26 Max |
| Units: | All values are expressed in mg/L except pH, Electrical Conductivity, Coliform bacteria. | | | | | | | | |
| Remarks: | | | | | | | | | |

Class of Water use:

Class-A: Drinking Water Source without conventional treatment but after disinfection.

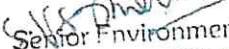
Class-B: Outdoor bathing (Organised).

Class-C: Drinking water source after conventional treatment and disinfection.

Class-D: Propagation of Wild life and Fisheries.

Class-E: Irrigation, Industrial Cooling, Controlled Waste disposal.

Below Class E: Not meeting A, B, C, D and E criteria.


 Senior Environmental Scientist
 Zonal Laboratory Hyderabad Zone
 Warangal-506 001.



(7)

ANNEXURE - II

Item No.13:-

**BEFORE THE NATIONAL GREEN TRIBUNAL
SOUTHERN ZONE, CHENNAI**

(Through Video Conference)

Original Application No.22 of 2024 (SZ)

[Earlier O.A. No. 565/2023 (PB)]

IN THE MATTER OF:

Tribunal on its own motion SUO MOTU
based on the news item in The New Indian
Express Dt. 08.09.2023 titled "*Snow-like
chemical foam haunts Kukatpally again*"

District Collector
Medchal - Malajigiri District,
Telangana and Ors.

With



...Respondent(s)

Date of hearing: 05.09.2024.

CORAM:

HON'BLE Smt. JUSTICE PUSHPA SATHYANARAYANA, JUDICIAL MEMBER

HON'BLE Dr. SATYAGOPAL KORLAPATI, EXPERT MEMBER

For Applicant(s): Suo Motu.

For Respondent(s): Mrs. H. Yasmeen Ali for R1 & R4.
Ms. C.P. Kavitha Renjini represented
Mr. T. Sai Krishnan for R2 & R3.

8

ORDER

1. The further report of the HMWSSB, as directed in our earlier order dated 18.03.2024, is yet to be filed.
2. Post the matter on 01.10.2024.

Sd/-
Smt. Justice Pushpa Sathyanarayana, JM

Sd/-
Dr. Satyagopal Korlapati, EM

O.A. No.22/2024 (SZ),
05th September, 2024. AD.

