

BEFORE THE NATIONAL GREEN TRIBUNAL
SOUTHERN ZONE, CHENNAI

ORIGINAL APPLICATION No. 97 OF 2021 (SZ)

IN THE MATTER OF:

Ravula Lingaswamy, Yadadri
Bhuvanagiri District and Ors.

....

Applicant(s)

Versus

Union of India,
rep by its Secretary, MoEF
New Delhi & Ors.

....

Respondent(s)

REPORT OF THE TELANGANA STATE POLLUTION CONTROL BOARD (R3)

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Place: Hyderabad.
Date: 23-08-2023.

T. Jankar

Counsel for Respondent No. 3

**REPORT DATED 22-08-2023 OF TELANGANA STATE POLLUTION CONTROL BOARD IN
OA No.97 OF 2021 FILED BY SRI RAVULA LINGA SWAMY, S/o.YADAIHAH & OTHERS
OF ANTHAMMAGUDEM VILLAGE, POCHAMPALLY MANDAL, YADADRI BHUVANAGIRI
DISTRICT.**

It is to submit that Sri. Ravula Lingaswamy, R/o.Yadadri Bhuvanagiri District & others has filed an OA No. 97 of 2021 before the Hon'ble NGT, Chennai on pollution due to M/s. Hazelo Labs (P) Ltd., Anthammagudem (V), Yadadri District.

The Hon'ble NGT, Chennai vide Order dated 17.01.2023 directed the TSPCB to furnish Compliance report on water and soil analysis.

In this regard, following is submitted:

1. The TSPCB has entrusted study on ground water and soil quality in Dothigudem (Anthammagudem) Industrial Cluster to M/s. Environment Protection Training & Research Institute (EPTRI), Gachibowli, Hyderabad.
2. M/s EPTRI has submitted the report dated 24.04.2023 (**Annexure-I**). The details are as follows: -
 - The total number of borewell/openwell samples collected from the surrounding areas of industrial cluster at Dothigudem Village, Choutuppal Mandal, Yadadri-Bhuvanagiri District are 19. During the inspection, it was observed that the bore water was being used for agricultural purpose with predominant paddy crop.
 - Out of the above 19 bore well/open well samples, 10 samples are meeting the standards of irrigation.
 - 4 bore well samples having moderately high TDS & EC which may be due to Geological conditions in the area. The water from these bore wells can be used directly for irrigation.
 - Remaining 5 bore well samples are contaminated due to presence of organic material (COD). The contaminated sources may be agricultural activities or industries. To ascertain the source of contamination, further 10 ground water samples and effluent samples from 8 industries collected to carryout finger print analysis by GC-MS/MS instrument.
 - The finger print analysis of ground water and the industry raw material and products were matched. It is observed that the product and derivatives of all the 8 industries are matched with the contaminated ground water for the following ground water samples:

| S. No | Sample Code | Latitude | Longitude | Name of the location | Drug and derivatives matched with the industries |
|-------|-------------|----------------|-----------------|---|---|
| 1 | GW-6 | N 17° 17'32.5" | E 78° 50'49.4" | Kandi Reddy, No:254 Mohan Survey | <ul style="list-style-type: none"> •Optimus Drugs Pvt Ltd., •SVR Laboratories (P) Ltd., •VJ Sai Chem •Brundavan Laboratories (P) Ltd., •Ravoos Laboratories Ltd., •Hazelo Lab Pvt Ltd., •Archimedis Laboratories Pvt Ltd., |
| 2 | GW-7 | N 17° 17'35.3" | E 78° 51'10.4" | K. Linga Reddy, S/o: Muthyam Reddy | <ul style="list-style-type: none"> •SVR Laboratories (P) Ltd., •VJ Sai Chem •Hazelo Lab Pvt Ltd., |
| 3 | GW-8 | N 17° 17'32.9" | E 78° 50'52.2" | Kandi Reddy, well, No:254 Mohan Open Survey | <ul style="list-style-type: none"> •SVR Laboratories (P) Ltd., •Ravoos Laboratories Ltd., |
| 4 | GW-9 | N 17° 17'40.2" | E 78° 51'07.2" | Ch. Pedda Narasimha, S/o: Chennaiah, Survey No:209 | <ul style="list-style-type: none"> •SVR Laboratories (P) Ltd., •VJ Sai Chem •Ravoos Laboratories Ltd., •Hazelo Lab Pvt Ltd., •Archimedis Laboratories Pvt Ltd., •Optimus Drugs Pvt Ltd., •Chemic Life Sciences Pvt Ltd., |
| 5 | GW-10 | N 17° 17'19.2" | E 78° 51'08.70" | Borra Sudhakar Reddy, S/o Venkatreddy, Survey No: 232 | <ul style="list-style-type: none"> •Optimus Drugs Pvt Ltd., •SVR Laboratories (P) Ltd., •VJ Sai Chem •Ravoos Laboratories Ltd., |

➤ The contaminated above ground water samples (5 Nos.) which are having high COD values are located in and around industry cluster. Samples were collected again suspecting contamination from the industry cluster. These samples were analyzed by GCMS and found that the following major drugs and its derivatives were observed and compared with the products and raw materials of the industries:

- i. Omeprazole and pantoprazole and all Antacid family
- ii. Flucanazole/itraconazole like antifungal medicines
- iii. Domepridone - antiemetic family
- iv. Cinnerazine like Piperazine family

- v. Quinoline derivatives from Montelukast anti Allergics
- vi. Pyridine derivatives of Rosuvastatin Anti Cholesterol Medicines

- Further, it was also observed that compounds from the effluent samples of the industries were also present in the ground water samples.
 - The total number of 30 soil samples collected from the surrounding areas of industrial cluster at Dothigudem Village, Choutuppal Mandal, Yadadri-Bhuvanagiri District. It was observed that the predominant crop is paddy and bore water was being used for the same.
 - The available phosphorus is below the prescribed limits and the potassium levels are very high in some of the soil samples. This may be due to Geological condition in the area and the same may require regular use of fertilizers.
3. The respondent Board vide letter dated 20.05.2023 addressed to the District Collector, Yadadri Bhuvanagiri District requesting to constitute a team to assess the crop compensation and the compensation may awarded to the affected farmers. **(Annexure – II).**
 4. The respondent Board on 22.05.2023 issued Show Cause notices to all the 8 Nos industries in the area with a view to give an opportunity to the industries to explain as to why the Environmental Compensation should not be levied.
 5. The respondent board gave an opportunity of hearing for industries before the board's Task Force Committee meeting held on 13.06.2003. Based on the recommendations of the Committee, the respondent board issued additional directions dt.21.06.2023 (final directions) to the following industries levying Environmental Compensation (EC). The details are submitted below:

| S.No. | Name and address of the industry | Environmental Compensation (EC) levied. (Rs) |
|-------|---|--|
| 1. | M/s. Hazelo Lab Private Limited, (Formerly M/s. Venlar Labs (P) Ltd), Dhotigudem (V), Pochampally (M), Yadadri Bhuvanagiri District (Annexure – III) | 77,70,000/- |
| 2. | M/s. Ravoos Laboratories Limited (Formerly M/s. Silicon Drugs & Intermediates (P) Ltd.), Sy. No. 210, Dothigudem (V), Pochampally (M), Yadadri Bhuvanagiri District (Annexure – IV) | 50,40,000/- |
| 3. | M/s. VJ Sai Chem., Sy.No.240/B, Dothigudem (V), Pochampally (M), Yadadri Bhuvanagiri District (Annexure – V) | 22,40,000/- |
| 4. | M/s. SVR Laboratories (P) Ltd., Sy.No. 238 (part), 239/A, 239/E, Dothigudem (V), Pochampally (M), Yadadri Bhuvanagiri District | 44,80,000/- |

| | | |
|----|--|-------------|
| | (Annexure – VI) | |
| 5. | M/s. Chemic Life Sciences (P) Ltd., Sy No. 238 & 239, Dhotigudem (V), Pochampally (M), Yadadri Bhuvanagiri District (Annexure – VII) | 44,80,000/- |
| 6. | M/s. Archimedis Laboratories (P) Ltd., Sy.No. 238, Dothigudem (V), Pochampally (M), Yadadri Bhuvanagiri District (Annexure – VIII) | 51,80,000/- |
| 7. | M/s. Optimus Drugs (P) Ltd. Sy.No. 238, 239, 240 & 248, Dhothigudem (V), Pochampally (M), Yadadri Bhuvanagiri District (Annexure – IX) | 77,70,000/- |
| 8. | M/s. Brundavan Laboratories (P) Ltd., Yellagiri (V), Choutuppal (M); Yadadri Bhavangiri District (Annexure – X) | 45,00,000/- |

6. The above 8 industries have filed a Writ Petitions before Hon'ble High Court of Telangana praying the Hon'ble High Court to declare the orders dated:20.06.2023 issued by the Respondent Board directing the petitioner industry to deposit an amount towards Environmental Compensation without giving any notice as arbitrary and irregular, contrary to law, without power and jurisdiction and set aside the same. The details of WP Nos are as given below:

| S.No. | Name and address of the industry | WP. No |
|-------|--|---------------|
| 1. | M/s. Hazelo Lab Private Limited, (Formerly M/s. Venlar Labs (P) Ltd), Dhotigudem (V), Pochampally (M), Yadadri Bhuvanagiri District. | 20623 of 2023 |
| 2. | M/s. Ravoos Laboratories Limited (Formerly M/s. Silicon Drugs & Intermediates (P) Ltd.), Sy. No. 210, Dothigudem (V), Pochampally (M), Yadadri Bhuvanagiri District. | 18057 of 2023 |
| 3. | M/s. VJ Sai Chem., Sy.No.240/B, Dothigudem (V), Pochampally (M), Yadadri Bhuvanagiri District. | 18088 of 2023 |
| 4. | M/s. SVR Laboratories (P) Ltd., Sy.No. 238 (part), 239/A, 239/E, Dothigudem (V), Pochampally (M), Yadadri Bhuvanagiri District. | 18108 of 2023 |

| | | |
|----|--|---------------|
| 5. | M/s. Chemic Life Sciences (P) Ltd., Sy No. 238 & 239, Dhotigudem (V), Pochampally (M), Yadadri Bhuvanagiri District. | 19239 of 2023 |
| 6. | M/s. Archimedis Laboratories (P) Ltd., Sy.No. 238, Dhotigudem (V), Pochampally (M), Yadadri Bhuvanagiri District. | 18213 of 2023 |
| 7. | M/s. Optimus Drugs (P) Ltd. Sy.No. 238, 239, 240 & 248, Dhotigudem (V), Pochampally (M), Yadadri Bhuvanagiri District. | 17179 of 2023 |
| 8. | M/s. Brundavan Laboratories (P) Ltd., Yellagiri (V), Choutuppal (M), Yadadri Bhuvanagiri District. | 19039 of 2023 |

7. The Hon'ble High Court vide orders dt.08.08.2023 quashed and set aside the orders issued by the Board levying Environmental Compensation and matter is remitted to the Respondent Board with a direction to afford an opportunity of hearing to the industry **(orders issued to 7 industries only excluding M/s Hazelo labs (Respondent industry)). (Annexure – XI)**
8. The Hon'ble High Court vide orders dt.08.08.2023 disposed the WP No.20623 of 2023 **filed by M/s Hazelo labs** with following directions **(Annexure – XII)**

"Therefore, we are not inclined to entertain this writ petition. However, the petitioner is granted the liberty to take recourse to the remedy of statutory appeal available to him. Needless to state that in case the petitioner files an appeal within a period of two weeks, the National Green Tribunal shall entertain the appeal preferred by the petitioner. Writ petition is accordingly disposed of".

In view of the above and as per orders of Hon'ble High Court, the Respondent Board will give an opportunity of hearing to the industries and take further necessary action to collect the levied Environmental Compensation.

Place: Nalgonda

Date: 22.08.2023


ENVIRONMENTAL ENGINEER

ENVIRONMENTAL ENGINEER
T.S. Pollution Control Board,
Regional Office, Nalgonda.

1841. A. ...
...
...

**STUDY REPORT ON GROUND WATER AND
SOIL QUALITY IN DOTHIGUDEM
INDUSTRIAL CLUSTER**

BY



EPTRI

**M/S.ENVIRONMENT PROTECTION
TRAINING & RESEARCH INSTITUTE,
91/4, GACHIBOWLI, HYDERABAD - 500 032,
TELANGANA.**

24.04.2023

**STUDY REPORT ON GROUND WATER AND SOIL QUALITY IN
DOTHIGUDEM INDUSTRIAL CLUSTER CARRIED BY M/S.EPTRI, HYDERABAD**

The Telangana State Pollution Control Board has entrusted the study of ground water and soil quality in and around Dothigudem industrial cluster, Choutuppal Mandal, Yadadri-Bhuvanagiri District to the Environment Protection Training and Research Institute (EPTRI), Gachibowli, Hyderabad in connection with complaint filed vide O.A.No.97 of 2021 before Hon'ble NGT, Chennai.

Accordingly a joint inspection team of EPTRI and TSPCB officials have taken up detailed investigation of Water and Soil quality in Dothigudem Industrial Cluster comprising of 8 bulk drug and bulk drug intermediates. The details are as follows:

1.0 WATER QUALITY

1.1 Selection of Sampling Locations

The ground water samples locations were selected considering their proximity to the Dothigudem Industrial Cluster. Ground water samples and industrial samples were collected and analyzed for various physico-chemical and bacteriological parameters in the month of February and March 2023.

The groundwater quality results are compared with Quality of Irrigation Water Guidelines vide IS-11624:2019 as the ground water is used for irrigation purpose.

The details of the groundwater sampling and Effluent locations are given in Tables 1.1 and 1.2 respectively. Quality of Irrigation Water Guidelines vide IS-11624:2019 is presented in Table 1.3. The analytical results for groundwater and Effluent samples are presented in Tables 1.4 & 1.5 respectively.

Table 1.1 Ground Water Sampling Locations

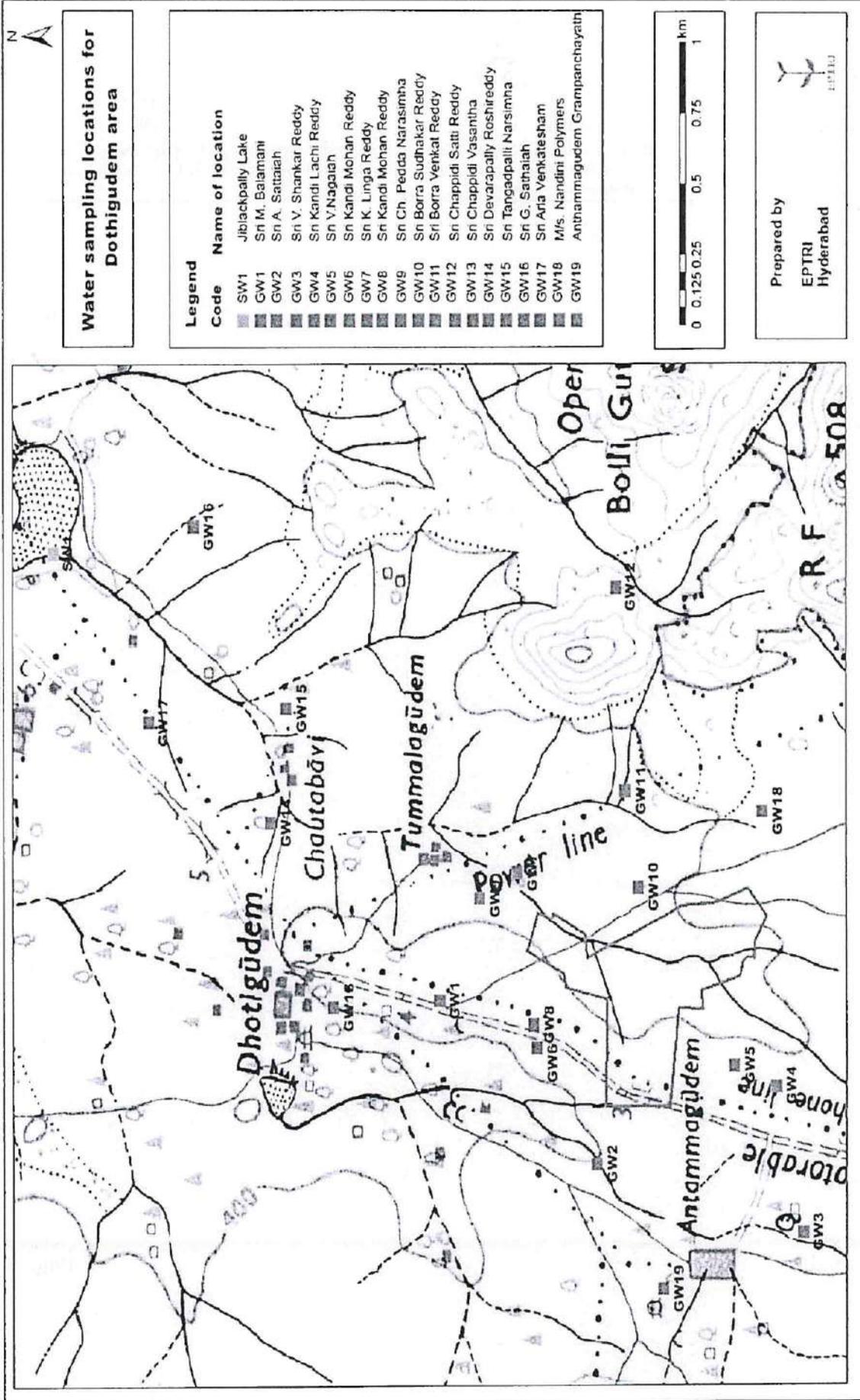
| Sl. No. | Sampling code | Date of sampling | Sampling Location | Latitude | Longitude |
|---------|---------------|------------------|--|-----------------|-----------------|
| 1. | GW-1 | 13.02.2023 | M. Balamani W/o Bal Reddy Survey No: 199 | N 17° 25' 51.6" | E 78° 52' 33.0" |
| 2. | GW-2 | 13.02.2023 | A.Sattaiah S/o : Yadagiri, Survey No:244/245 | N 17° 17' 24.3" | E 78° 50' 35.5" |
| 3. | GW-3 | 13.02.2023 | V. Shankar Reddy S/o: Satti Reddy Survey No:255/54 | N 17° 16' 56.9" | E 78° 50' 27.5" |
| 4. | GW-4 | 13.02.2023 | Kandi Lachi Reddy S/o: Rami Reddy Survey No:62/61 | N 17° 17' 00.7" | E 78° 50' 45.1" |

| | | | | | |
|-----|-------|------------|--|-----------------|------------------|
| 5. | GW-5 | 13.02.2023 | v. ivagallu S/o: Yellaiah (8) | N 17° 17' 06.3" | E 78° 50' 47.5" |
| 6. | GW-6 | 13.02.2023 | Kandi Mohan Reddy Survey No:254 | N 17° 17' 32.5" | E 78° 50' 49.4" |
| 7. | GW-7 | 13.02.2023 | K. Linga Reddy S/o: Muthyam Reddy | N 17° 17' 35.3" | E 78° 51' 10.4" |
| 8. | GW-8 | 13.02.2023 | Kandi Mohan Reddy, Open used borewell Survey No:254 | N 17° 17' 32.9" | E 78° 50' 52.2" |
| 9. | GW-9 | 13.02.2023 | Ch. Pedda Narasimha S/o: Chennaiah Survey No:209 | N 17° 17' 40.2" | E 78° 51' 07.2" |
| 10. | GW-10 | 14.02.2023 | Borra Sudhakar Reddy S/o Venkatreddy. Survey No: 232 | N 17° 17' 19.2" | E 78° 51' 08.70" |
| 11. | GW-11 | 14.02.2023 | Borra Venkat Reddy S/o Sathireddy Survey No: 230 | N 17° 17' 21.0" | E 78° 51' 20.3" |
| 12. | GW-12 | 14.02.2023 | Chappidi Sathi Reddy S/o Gopi Reddy Survey No: 170 | N 17° 17' 22.5" | E 78° 51' 44.8" |
| 13. | GW-13 | 14.02.2023 | Chappidi Vasantha W/o Sudhakar Reddy | N 17° 17' 59.5" | E 78° 50' 51.1" |
| 14. | GW-14 | 14.02.2023 | DevarapallyRoshireddy S/o Mallareddy Survey No: 151 | N 17° 18' 08.0" | E 78° 51' 16.1" |
| 15. | GW-15 | 14.02.2023 | Tangadpalli Narsimha S/o Mallaiah Survey No: 146 | N 17° 18' 06.1" | E 78° 51' 29.9" |
| 16. | GW-16 | 14.02.2023 | G. Sathaiah S/o Lachaiah Survey No: 142 | N 17° 18' 18.5" | E 78° 51' 51.6" |
| 17. | GW-17 | 14.02.2023 | Arla Venkatesham S/o Sathaiah Survey No 138 | N 17° 18' 24.3" | E 78° 51' 28.1" |
| 18. | GW-18 | 14.02.2023 | Nandini Polymers Survey No: 120 | N 17° 17' 02.9" | E 78° 51' 18.0" |
| 19. | GW-19 | 14.02.2023 | Anthammagudem | N 17° 17' 15.3" | E 78° 50' 20.5" |

(9)

Table 1.2 Effluent Sampling Locations

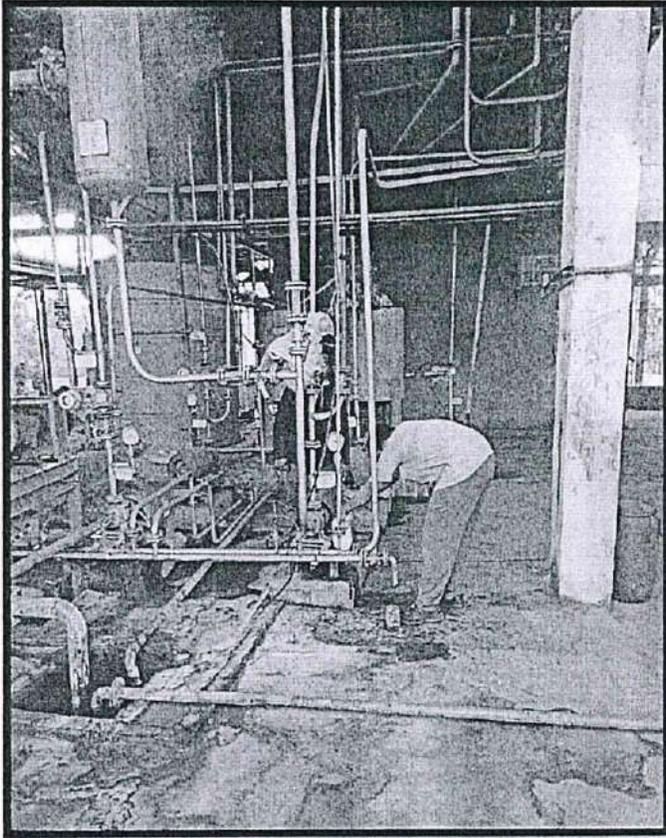
| Station Code | Name of the Stations | Date of sampling |
|--------------|--|------------------|
| EW-1 | HTDS Sample collected at Hazelo Lab Pvt Ltd Survey No 247 & 248 | 14.02.2023 |
| EW-2 | LTDS Sample collected at Hazelo Lab Pvt Ltd Survey No 247 & 248 | 14.02.2023 |
| EW-3 | RO Permeate Sample collected at Hazelo Lab Pvt Ltd Survey No 247 & 248 | 14.02.2023 |
| EW-4 | HTDS Sample Ravoos Lab Ltd Unit- II Survey No 210 | 14.02.2023 |
| EW-5 | LTDS Sample Ravoos Lab Ltd Unit- II Survey No 210 | 14.02.2023 |
| EW-6 | RO Permeate Sample Collected at Hazelo Lab Pvt Ltd Survey No 210 | 14.02.2023 |
| EW-7 | HTDS Sample Archimedis Lab Pvt Ltd Survey No 238 | 14.02.2023 |
| EW-8 | LTDS Sample Archimedis Lab Pvt Ltd Survey No 238 | 14.02.2023 |
| EW-9 | RO Permeate Sample Archimedis Lab Pvt Ltd Survey No 238 | 14.02.2023 |
| EW-10 | HTDS Sample VJ Sai Chemicals Survey No 240/B | 14.02.2023 |
| EW-11 | LTDS Sample VJ Sai Chemicals Survey No 240/B | 14.02.2023 |
| EW-12 | RO Permeate Sample VJ Sai Chemicals Survey No 240/B | 14.02.2023 |



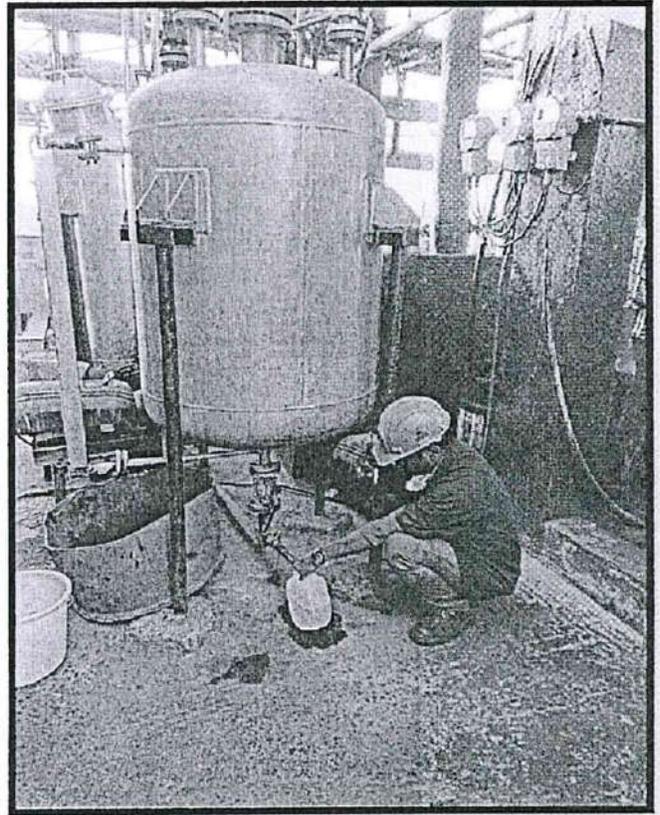
MAP SHOWING SURFACE WATER & GROUND WATER LOCATIONS

Table 1.3 Quality of Irrigation Water Guidelines vide IS-11624:2019

| Sl No. | Water Quality | ECiw (dS/m) | SARiw (millimole/litre) ^{1/2} | RSC (me/l) |
|--------|----------------------|---|--|------------|
| (1) | (2) | (3) | (4) | (5) |
| i) | Good | < 0.7 | < 10 | < 2.5 |
| ii) | Saline: | | | |
| | a) Marginally saline | 0.7 to 3.0 | < 10 | < 2.5 |
| | b) Saline | > 3 | < 10 | < 2.5 |
| | c) High-SAR saline | > 3 | > 10 | < 2.5 |
| iii) | Alkali water: | | | |
| | a) Marginally alkali | < 4 | < 10 | 2.5 – 4.0 |
| | b) Alkali | < 4 | < 10 | > 4.0 |
| | c) High-SAR alkali | Variable | > 10 | > 4.0 |
| iv) | Toxic water | The toxic water has variable salinity, SAR and RSC but has excess of specific ions such as chloride, sodium, nitrate, boron, fluoride, or heavy metals such as selenium, cadmium, lead and arsenic, etc | | |



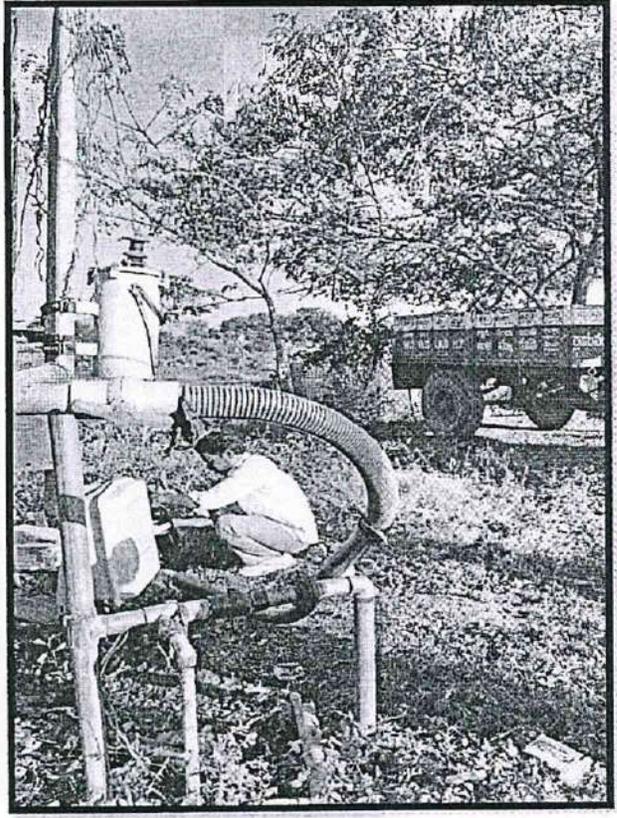
Archimedis Lab Pvt Ltd



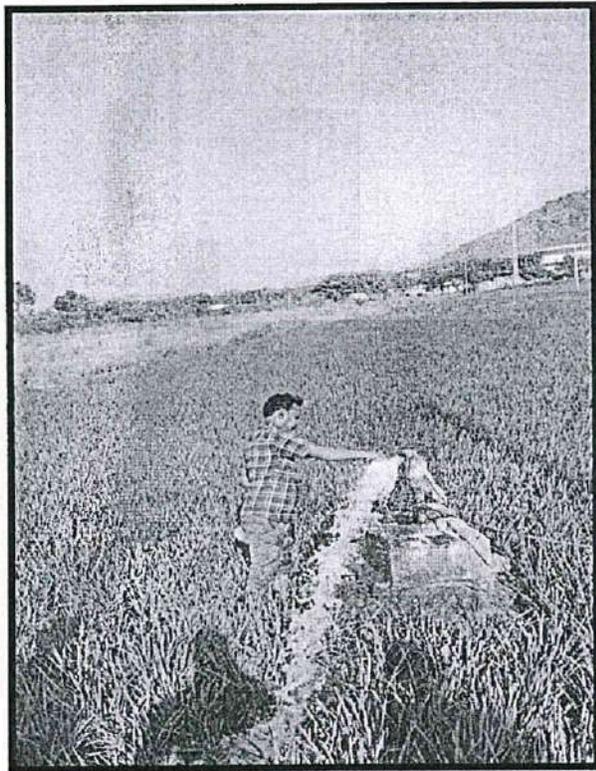
VJ Sai Chemicals



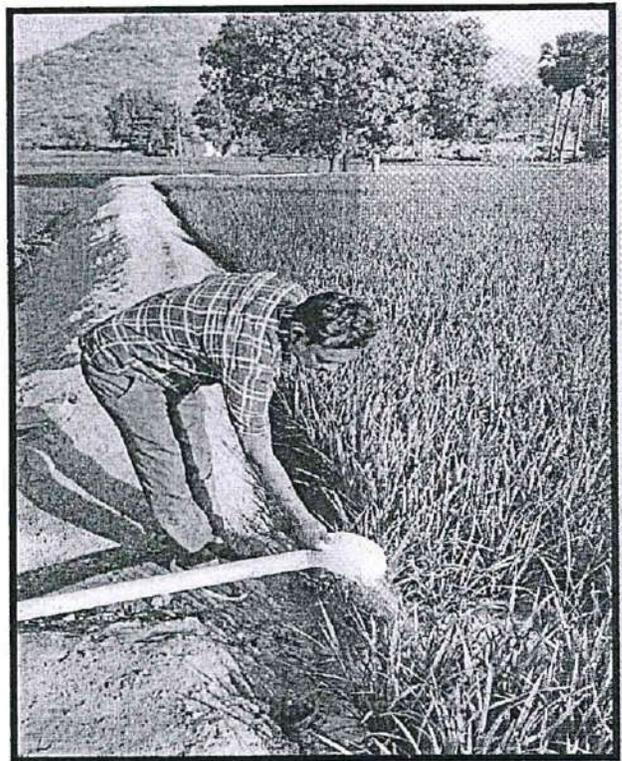
Roshireddy S/o Mallareddy Borewell (GW-14)
(GW-19)



Anthammagudem Gram panchayat



Kandi Mohan Reddy (GW-6)
(GW-9)



Ch. Pedda Narasimha

14



Lachireddy borewell GW-4)



Borra Venkat Reddy (GW-11)

10)



Borra Sudhakar Reddy (GW-

Table 1.4 Physico-Chemical, Bacteriological Characteristics of Groundwater Collected within the Study Area

| Sl. No. | Parameters | Unit | Test Method | RESULT | | | | | | |
|---------|--|----------|---------------------------------------|--------|-------|-------|-------|-------|-------|--------|
| | | | | GW-1 | GW-2 | GW-3 | GW-4 | GW-5 | GW-6 | GW-7 |
| 1. | Colour | Hazen | 2120. B | <5 | <5 | <5 | <5 | <5 | <5 | <5 |
| 2. | Odour | TON | 2150. B | Agree. | Agree | Agree | Agree | Agree | Agree | Agree. |
| 3. | Taste | FTN | 2160. B | Agree. | Agree | Agree | Agree | Agree | Agree | Agree. |
| 4. | pH | - | 4500-H+B | 6.5 | 6.8 | 6.8 | 7.1 | 6.7 | 6.7 | 6.6 |
| 5. | Temperature | °C | 2550. B | 25.0 | 25.6 | 25.3 | 25.2 | 25.3 | 25.5 | 25.1 |
| 6. | Turbidity | NTU | 2130. B | 0.81 | 0.50 | 0.66 | 0.93 | 0.84 | 0.58 | 0.73 |
| 7. | Total Dissolved Solids at 180° C | mg/L | 2540.C | 2006 | 1159 | 779 | 2383 | 2168 | 2325 | 1942 |
| 8. | Electrical Conductivity | µmhos/cm | 2510-B | 3120 | 1990 | 1680 | 3990 | 3730 | 4000 | 3340 |
| 9. | Total Alkalinity as CaCO ₃ | mg/L | 2320. B | 438 | 391 | 341 | 418 | 319 | 479 | 374 |
| 10. | Total Hardness as CaCO ₃ | mg/L | 2340. C | 970 | 761 | 627 | 1109 | 1080 | 1162 | 898 |
| 11. | Chemical Oxygen Demand | mg/L | 5220. D | 11 | 11 | 3.7 | 11 | 4 | 89 | 126 |
| 12. | Calcium as Ca | mg/L | 3500-Ca.B | 156 | 81 | 81 | 227 | 187 | 81 | 61 |
| 13. | Magnesium as Mg | mg/L | 3500-Mg.B | 142 | 136 | 99 | 132 | 149 | 229 | 181 |
| 14. | Sodium as Na | mg/L | 3500-Na.B | 105 | 58 | 43 | 108 | 121 | 115 | 118 |
| 15. | Potassium as K | mg/L | 3500-K.B | 2.6 | 1.13 | 0.76 | 2.43 | 1.4 | 3.5 | 7.1 |
| 16. | Chlorides as Cl ⁻ | mg/L | 4500-Cl-B | 665 | 284 | 256 | 936 | 835 | 869 | 689 |
| 17. | Sulphates as SO ₄ ²⁻ | mg/L | 4500-SO ₄ ²⁻ .E | 119 | 112 | 70 | 64 | 62 | 104 | 75 |
| 18. | Fluoride as F ⁻ | mg/L | 4500-F-C | 1.35 | 1.18 | 0.73 | 1.38 | 1.15 | 1.31 | 1.18 |
| 19. | Nitrates as NO ₃ | mg/L | 4500-NO ₃ -B | 30 | 51 | 18 | 45 | 46 | 24 | 61 |

(15)

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| Sl. No. | Parameters | Unit | Test Method | RESULT | | | | | | |
|---------|--|------------|----------------|--------|-------|-------|--------|--------|--------|--------|
| | | | | GW-1 | GW-2 | GW-3 | GW-4 | GW-5 | GW-6 | GW-7 |
| 20. | SAR | % | By calculation | 1.58 | 0.91 | 0.75 | 1.58 | 1.60 | 1.50 | 1.71 |
| 21. | % Sodium | % | By calculation | 21.36 | 14.19 | 12.97 | 20.85 | 19.58 | 18.20 | 22.00 |
| 22. | RSC | % | By calculation | -9.57 | -8.82 | -6.95 | -10.93 | -16.36 | -14.53 | -11.89 |
| 23. | Sulphide as H ₂ S | mg/L | 4500-S2-F&D | BDL | BDL | BDL | BDL | BDL | BDL | BDL |
| 24. | Phenolic compounds as C ₆ H ₅ OH | mg/L | 5530-D | BDL | BDL | BDL | BDL | BDL | BDL | BDL |
| 25. | Cyanide as CN- | mg/L | 4500-CN-F | BDL | BDL | BDL | BDL | BDL | BDL | BDL |
| 26. | Aluminium as Al | mg/L | 3120-B | 0.12 | 0.07 | 0.06 | 0.07 | 0.08 | 0.09 | 0.10 |
| 27. | Barium as Ba | mg/L | 3120. B | 0.5 | 0.07 | 0.05 | 0.17 | 0.10 | 0.10 | 0.11 |
| 28. | Boron as B | mg/L | 3120-B | BDL | BDL | 0.12 | 0.17 | 0.09 | 0.14 | BDL |
| 29. | Iron as Fe | mg/L | 3120-B | 0.15 | 0.43 | 0.22 | 0.09 | 0.15 | 0.13 | 0.47 |
| 30. | Zinc as Zn | mg/L | 3120-B | 0.05 | 0.04 | 0.04 | 0.05 | 0.04 | 0.04 | 0.06 |
| 31. | Arsenic as As | mg/L | 3120-B | BDL | BDL | BDL | BDL | BDL | BDL | BDL |
| 32. | Lead as Pb | mg/L | 3120-B | 0.05 | 0.05 | 0.04 | 0.05 | 0.05 | 0.05 | 0.05 |
| 33. | Cadmium as Cd | mg/L | 3120-B | BDL | BDL | BDL | BDL | BDL | BDL | BDL |
| 34. | Chromium as Cr | mg/L | 3120-B | 0.04 | 0.04 | BDL | 0.04 | 0.04 | 0.04 | 0.06 |
| 35. | Hexavalent Chromium as Cr+6 | mg/L | 3120-B | BDL | BDL | BDL | BDL | BDL | BDL | BDL |
| 36. | Nickel as Ni | mg/L | 3120-B | 0.04 | BDL | 0.04 | BDL | BDL | BDL | BDL |
| 37. | Copper as Cu | mg/L | 3120-B | 0.04 | BDL | BDL | BDL | BDL | BDL | BDL |
| 38. | Selenium as Se | mg/L | 3120-B | BDL | BDL | BDL | BDL | BDL | BDL | BDL |
| 39. | Silver as Ag | mg/L | 3120. B | BDL | BDL | BDL | BDL | BDL | BDL | BDL |
| 40. | Manganese as Mn | mg/L | 3120-B | 0.11 | 0.12 | 0.12 | 0.122 | 0.10 | 0.20 | 0.12 |
| 41. | Molybdenum as Mo | mg/L | 3120. B | BDL | BDL | BDL | BDL | BDL | BDL | BDL |
| 42. | Mercury as Hg | µg/L | 3500-Hg.B | BDL | BDL | BDL | BDL | BDL | BDL | BDL |
| 43. | Total Coliforms | MPN/100 mL | 9221 B | <1.8 | <1.8 | <1.8 | <1.8 | <1.8 | 70 | 94 |
| 44. | Fecal Coliforms | MPN/100 mL | 9221 E | <1.8 | <1.8 | <1.8 | <1.8 | <1.8 | <1.8 | <1.8 |
| 45. | <i>E. coli</i> | MPN/100 mL | 9221 F | <1.8 | <1.8 | <1.8 | <1.8 | <1.8 | <1.8 | <1.8 |

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| Sl. No. | Parameters | Unit | Test Method | RESULT | | | | | | | | |
|---------|---------------------------------------|----------|----------------|--------|--------|--------|--------|--------|--------|--------|--|--|
| | | | | GW-8 | GW-9 | GW-10 | GW-11 | GW-12 | GW-13 | | | |
| 1. | Colour | Hazen | 2120. B | <5 | <5 | <5 | <5 | <5 | <5 | <5 | | |
| 2. | Odour | TON | 2150. B | Agree. | | |
| 3. | Taste | FTN | 2160. B | Agree. | | |
| 4. | pH | - | 4500-H+B | 6.3 | 6.7 | 6.6 | 6.9 | 7.1 | 7.1 | 6.8 | | |
| 5. | Temperature | °C | 2550. B | 25.6 | 25.1 | 25.6 | 25.3 | 25.0 | 25.0 | 25.4 | | |
| 6. | Turbidity | NTU | 2130. B | 0.69 | 0.43 | 1.1 | 0.9 | 0.7 | 0.7 | 1.0 | | |
| 7. | Total Dissolved Solids at 180°C | mg/L | 2540.C | 4338 | 2139 | 2681 | 1098 | 576 | 576 | 1517 | | |
| 8. | Electrical Conductivity | µmhos/cm | 2510-B | 7480 | 3680 | 4610 | 1890 | 990 | 990 | 2610 | | |
| 9. | Total Alkalinity as CaCO ₃ | mg/L | 2320. B | 622 | 418 | 539 | 396 | 457 | 457 | 380 | | |
| 10. | Total Hardness as CaCO ₃ | mg/L | 2340. C | 2670 | 980 | 1230 | 596 | 356 | 356 | 820 | | |
| 11. | Chemical Oxygen Demand | mg/L | 5220. D | 171 | 41 | 89 | 11 | 4 | 4 | 11 | | |
| 12. | Calcium as Ca | mg/L | 3500-Ca.B | 104 | 23 | 58 | 86 | 27 | 27 | 103 | | |
| 13. | Magnesium as Mg | mg/L | 3500-Mg.B | 585 | 224 | 264 | 92 | 68 | 68 | 137 | | |
| 14. | Sodium as Na | mg/L | 3500-Na.B | 110 | 160 | 80 | 71 | 97 | 97 | 99 | | |
| 15. | Potassium as K | mg/L | 3500-K.B | 80 | 1.2 | 3.9 | 2.7 | 3.0 | 3.0 | 2.9 | | |
| 16. | Chlorides as Cl- | mg/L | 4500-Cl-.B | 1892 | 787 | 1017 | 251 | 31 | 31 | 502 | | |
| 17. | Sulphates as SO ₄ 2- | mg/L | 4500-SO42-.E | 126 | 126 | 67 | 52 | 35 | 35 | 102 | | |
| 18. | Fluoride as F- | mg/L | 4500-F-.C | 1.41 | 0.89 | 1.44 | 1.0 | 0.73 | 0.73 | 1.2 | | |
| 19. | Nitrates as NO ₃ | mg/L | 4500-NO3-.B | 56 | 37 | 182 | 84 | 0.13 | 0.13 | 70 | | |
| 20. | SAR | % | By calculation | 0.93 | 2.22 | 0.99 | 1.27 | 2.24 | 2.24 | 1.51 | | |
| 21. | % Sodium | % | By calculation | 7.96 | 26.18 | 12.37 | 20.49 | 37.04 | 37.04 | 20.75 | | |
| 22. | RSC | % | By calculation | -43.11 | -12.74 | -15.71 | -5.42 | 0.39 | 0.39 | -10.14 | | |
| 23. | Sulphide as H ₂ S | mg/L | 4500-S2-F&D | BDL | | |

| Sl. No. | Parameters | Unit | Test Method | RESULT | | | | | |
|---------|--|------------|-------------|--------|------|-------|-------|-------|-------|
| | | | | GW-8 | GW-9 | GW-10 | GW-11 | GW-12 | GW-13 |
| 24. | Phenolic compounds as C ₆ H ₅ OH | mg/L | 5530-D | BDL | BDL | BDL | BDL | BDL | BDL |
| 25. | Cyanide as CN- | mg/L | 4500-CN.F | BDL | BDL | BDL | BDL | BDL | BDL |
| 26. | Aluminium as Al | mg/L | 3120-B | 0.09 | 0.2 | 0.08 | 0.09 | 0.14 | 0.09 |
| 27. | Barium as Ba | mg/L | 3120-B | 0.12 | 0.07 | 0.4 | 0.07 | 0.12 | 0.09 |
| 28. | Boron as B | mg/L | 3120-B | 0.08 | BDL | BDL | BDL | 0.06 | BDL |
| 29. | Iron as Fe | mg/L | 3120-B | 0.23 | 0.12 | 0.13 | 0.17 | 0.63 | 0.18 |
| 30. | Zinc as Zn | mg/L | 3120-B | 0.05 | 0.05 | 0.05 | 0.06 | 0.09 | 0.04 |
| 31. | Arsenic as As | mg/L | 3120-B | BDL | BDL | BDL | 0.04 | BDL | 0.04 |
| 32. | Lead as Pb | mg/L | 3120-B | 0.05 | BDL | 0.05 | 0.04 | 0.06 | 0.05 |
| 33. | Cadmium as Cd | mg/L | 3120-B | 0.06 | 0.06 | 0.05 | 0.05 | 0.06 | 0.04 |
| 34. | Chromium as Cr | mg/L | 3120-B | 0.05 | 0.06 | 0.05 | 0.04 | 0.09 | 0.04 |
| 35. | Hexavalent Chromium as Cr+6 | mg/L | 3120-B | BDL | BDL | BDL | BDL | BDL | BDL |
| 36. | Nickel as Ni | mg/L | 3120-B | 0.04 | 0.04 | 0.04 | BDL | 0.04 | 0.04 |
| 37. | Copper as Cu | mg/L | 3120-B | 0.04 | BDL | BDL | BDL | 0.04 | BDL |
| 38. | Selenium as Se | mg/L | 3120-B | BDL | BDL | BDL | BDL | BDL | BDL |
| 39. | Silver as Ag | mg/L | 3120-B | BDL | BDL | BDL | BDL | BDL | BDL |
| 40. | Manganese as Mn | mg/L | 3120-B | 1.58 | 0.12 | 0.23 | 0.11 | 0.12 | 0.12 |
| 41. | Molybdenum as Mo | mg/L | 3120-B | BDL | BDL | BDL | BDL | BDL | BDL |
| 42. | Mercury as Hg | µg/L | 3500-Hg.B | BDL | BDL | BDL | BDL | BDL | BDL |
| 43. | Total Coliforms | MPN/100 mL | 9221 B | 140 | 49 | 70 | <1.8 | <1.8 | <1.8 |
| 44. | Fecal Coliforms | MPN/100 mL | 9221 E | <1.8 | <1.8 | <1.8 | <1.8 | <1.8 | <1.8 |
| 45. | <i>E. coli</i> | MPN/100 mL | 9221 F | <1.8 | <1.8 | <1.8 | <1.8 | <1.8 | <1.8 |

| Sl. No. | Parameters | Unit | Test Method | RESULT | | | | | |
|---------|---------------------------------------|----------|---------------------------|--------|--------|--------|--------|--------|--------|
| | | | | GW-14 | GW-15 | GW-16 | GW-17 | GW-18 | GW-19 |
| 1. | Colour | Hazen | 2120. B | <5 | <5 | <5 | <5 | <5 | <5 |
| 2. | Odour | TON | 2150. B | Agree. | Agree. | Agree. | Agree. | Agree. | Agree. |
| 3. | Taste | FTN | 2160. B | Agree. | Agree. | Agree. | Agree. | Agree. | Agree. |
| 4. | pH | - | 4500-H+B | 6.9 | 6.9 | 6.7 | 6.9 | 6.9 | 7.0 |
| 5. | Temperature | °C | 2550. B | 25.3 | 25.5 | 25.5 | 25.1 | 25.4 | 25.1 |
| 6. | Turbidity | NTU | 2130. B | 0.73 | 0.42 | 0.68 | 0.51 | 0.74 | 0.58 |
| 7. | Total Dissolved Solids at 180°C | mg/L | 2540.C | 1571 | 662 | 1805 | 1397 | 1320 | 957 |
| 8. | Electrical Conductivity | µmhos/cm | 2510-B | 2700 | 1130 | 3100 | 2400 | 2260 | 1640 |
| 9. | Total Alkalinity as CaCO ₃ | mg/L | 2320. B | 451 | 418 | 374 | 385 | 506 | 457 |
| 10. | Total Hardness as CaCO ₃ | mg/L | 2340. C | 868 | 449 | 860 | 750 | 614 | 610 |
| 11. | Chemical Oxygen Demand | mg/L | 5220. D | 11 | 11 | 22 | 11 | 7.7 | 7.7 |
| 12. | Calcium as Ca | mg/L | 3500-Ca.B | 54 | 43 | 94 | 63 | 54 | 41 |
| 13. | Magnesium as Mg | mg/L | 3500-Mg.B | 178 | 83 | 152 | 144 | 116 | 123 |
| 14. | Sodium as Na | mg/L | 3500-Na.B | 136 | 44 | 112 | 94 | 202 | 78 |
| 15. | Potassium as K | mg/L | 3500-K.B | 2.0 | 1.23 | 2.5 | 2.3 | 1.06 | 2.09 |
| 16. | Chlorides as Cl- | mg/L | 4500-Cl-.B | 469 | 81 | 617 | 428 | 285 | 153 |
| 17. | Sulphates as SO ₄ 2- | mg/L | 4500-SO ₄ 2-.E | 103 | 39 | 126 | 58 | 157 | 88 |
| 18. | Fluoride as F- | mg/L | 4500-F-.C | 1.2 | 0.74 | 0.97 | 0.85 | 1.35 | 0.83 |
| 19. | Nitrates as NO ₃ | mg/L | 4500-NO ₃ -.B | 54 | 23 | 44 | 45 | 151 | 120 |
| 20. | SAR | % | By calculation | 2.01 | 0.90 | 1.66 | 1.49 | 3.55 | 1.37 |
| 21. | % Sodium | % | By calculation | 25.36 | 17.55 | 21.98 | 21.38 | 41.65 | 21.71 |
| 22. | RSC | % | By calculation | -9.97 | -2.11 | -11.09 | -8.68 | -3.99 | -4.69 |
| 23. | Sulphide as H ₂ S | mg/L | 4500-S ₂ -F&D | BDL | BDL | BDL | BDL | BDL | BDL |
| 24. | Phenolic compounds | mg/L | 5530-D | BDL | BDL | BDL | BDL | BDL | BDL |

| Sl. No. | Parameters | Unit | Test Method | RESULT | | | | | | |
|---------|-----------------------------|------------|-------------|--------|-------|-------|-------|-------|-------|------|
| | | | | GW-14 | GW-15 | GW-16 | GW-17 | GW-18 | GW-19 | |
| | as C6H5OH | | | | | | | | | |
| 25. | Cyanide as CN- | mg/L | 4500-CN.F | BDL | BDL | BDL | BDL | BDL | BDL | BDL |
| 26. | Aluminium as Al | mg/L | 3120-B | 0.30 | 0.26 | 0.25 | 0.19 | 0.23 | 0.18 | 0.18 |
| 27. | Barium as Ba | mg/L | 3120-B | 0.14 | 0.13 | 0.22 | 0.18 | 0.12 | 0.13 | 0.13 |
| 28. | Boron as B | mg/L | 3120-B | 0.09 | 0.10 | 0.04 | BDL | 0.18 | 0.09 | 0.09 |
| 29. | Iron as Fe | mg/L | 3120-B | 0.53 | 0.92 | 0.74 | 0.35 | 0.45 | 0.53 | 0.53 |
| 30. | Zinc as Zn | mg/L | 3120-B | 0.06 | 0.14 | 0.09 | 0.08 | 0.08 | 0.09 | 0.09 |
| 31. | Arsenic as As | mg/L | 3120-B | 0.04 | 0.05 | BDL | BDL | BDL | BDL | BDL |
| 32. | Lead as Pb | mg/L | 3120-B | 0.06 | 0.07 | 0.06 | 0.06 | 0.07 | 0.07 | 0.07 |
| 33. | Cadmium as Cd | mg/L | 3120-B | 0.05 | 0.04 | BDL | BDL | 0.04 | BDL | BDL |
| 34. | Chromium as Cr | mg/L | 3120-B | 0.08 | 0.05 | 0.09 | 0.06 | 0.06 | 0.06 | 0.05 |
| 35. | Hexavalent Chromium as Cr+6 | mg/L | 3120-B | BDL | BDL | BDL | BDL | BDL | BDL | BDL |
| 36. | Nickel as Ni | mg/L | 3120-B | 0.04 | 0.04 | BDL | 0.04 | BDL | 0.04 | 0.04 |
| 37. | Copper as Cu | mg/L | 3120-B | 0.04 | 0.04 | 0.05 | 0.04 | 0.05 | BDL | BDL |
| 38. | Selenium as Se | mg/L | 3120-B | BDL | BDL | BDL | BDL | BDL | BDL | BDL |
| 39. | Silver as Ag | mg/L | 3120-B | BDL | BDL | BDL | BDL | BDL | BDL | BDL |
| 40. | Manganese as Mn | mg/L | 3120-B | 0.12 | 0.12 | 0.12 | 0.11 | 0.12 | 0.15 | 0.15 |
| 41. | Molybdenum as Mo | mg/L | 3120-B | BDL | BDL | BDL | BDL | BDL | BDL | BDL |
| 42. | Mercury as Hg | µg/L | 3500-Hg.B | BDL | BDL | BDL | BDL | BDL | BDL | BDL |
| 43. | Total Coliforms | MPN/100 mL | 9221 B | <1.8 | <1.8 | <1.8 | <1.8 | <1.8 | <1.8 | <1.8 |
| 44. | Fecal Coliforms | MPN/100 mL | 9221 E | <1.8 | <1.8 | <1.8 | <1.8 | <1.8 | <1.8 | <1.8 |
| 45. | <i>E. coli</i> | MPN/100 mL | 9221 F | <1.8 | <1.8 | <1.8 | <1.8 | <1.8 | <1.8 | <1.8 |

Table 1.5 Physico-Chemical and Biological characteristics of Effluent samples collected at study area

| S. No | Test Parameter(s) | Unit | Test Method | Result | | |
|-------|--|------|---------------|--------------------|------------------|-------------------------|
| | | | | Hazelo Lab Pvt Ltd | | |
| | | | | EW-1 HTDS Sample | EW-2 LTDS Sample | EW-3 RO Permeate Sample |
| 1. | pH | -- | 4500-H+B | 4.3 | 9.4 | 7.9 |
| 2. | Temperature | °C | 2550. B | 25.3 | 25.2 | 25.4 |
| 3. | Total Suspended Solids | mg/L | 2540. D | 130 | 80 | 83 |
| 4. | Total Dissolved Solids at 180°C | mg/L | 2540.C | 72 | 4505 | 631 |
| 5. | Chemical Oxygen Demand | mg/L | 5220. D | 28224 | 2457 | 149 |
| 6. | Biochemical Oxygen Demand (3 days at 27°C) | mg/L | IS:3025 | 7240 | 820 | 51 |
| 7. | Chlorides as Cl- | mg/L | 4500-Cl-.B | 34457 | 1507 | 210 |
| 8. | Sulphates as SO42- | mg/L | 4500-SO42- .E | 273 | 243 | 93 |

| S. No | Test Parameter(s) | Unit | Test Method | Result | | |
|-------|--|------|---------------|--------------------|------------------|-------------------------|
| | | | | Ravoos Lab Pvt Ltd | | |
| | | | | EW-1 HTDS Sample | EW-2 LTDS Sample | EW-3 RO Permeate Sample |
| 1. | pH | -- | 4500-H+B | 11.2 | 8.0 | 7.9 |
| 2. | Temperature | °C | 2550. B | 25.3 | 25.5 | 25.2 |
| 3. | Total Suspended Solids | mg/L | 2540. D | 100 | 68 | 18 |
| 4. | Total Dissolved Solids at 180°C | mg/L | 2540.C | 904 | 1663 | 904 |
| 5. | Chemical Oxygen Demand | mg/L | 5220. D | 13670 | 384 | 38 |
| 6. | Biochemical Oxygen Demand (3 days at 27°C) | mg/L | IS:3025 | 3200 | 85 | 12 |
| 7. | Chlorides as Cl- | mg/L | 4500-Cl-.B | 244 | 555 | 306 |
| 8. | Sulphates as SO42- | mg/L | 4500-SO42- .E | 323 | 411 | 44 |

| S. No | Test Parameter(s) | Unit | Test Method | Result | | |
|-------|---------------------------------|------|-------------|------------------|------------------|-------------------------|
| | | | | VJ Sai Chemicals | | |
| | | | | EW-1 HTDS Sample | EW-2 LTDS Sample | EW-3 RO Permeate Sample |
| 1. | pH | -- | 4500-H+B | 8.6 | 5.0 | 5.9 |
| 2. | Temperature | °C | 2550. B | 25.4 | 25.1 | 25.3 |
| 3. | Total Suspended Solids | mg/L | 2540. D | 185 | 51 | 10 |
| 4. | Total Dissolved Solids at 180°C | mg/L | 2540.C | 26965 | 5323 | 344 |

| | | | | | | |
|----|--|------|---------------|-------|-------|-----|
| 5. | Chemical Oxygen Demand | mg/L | 5220. D | 42240 | 15052 | 11 |
| 6. | Biochemical Oxygen Demand (3 days at 27°C) | mg/L | IS:3025 | 8640 | 3060 | 1.6 |
| 7. | Chlorides as Cl- | mg/L | 4500-Cl-.B | 7705 | 120 | 90 |
| 8. | Sulphates as SO42- | mg/L | 4500-SO42- .E | 473 | 48 | 20 |

| S. No | Test Parameter(s) | Unit | Test Method | Result | | |
|-------|--|------|---------------|------------------------|------------------|-------------------------|
| | | | | Archimedis Lab Pvt Ltd | | |
| | | | | EW-1 HTDS Sample | EW-2 LTDS Sample | EW-3 RO Permeate Sample |
| 1. | pH | -- | 4500-H*B | 9.7 | 10.3 | 10.3 |
| 2. | Temperature | °C | 2550. B | 25.3 | 25.1 | 25.5 |
| 3. | Total Suspended Solids | mg/L | 2540. D | 135 | 95 | 25 |
| 4. | Total Dissolved Solids at 180°C | mg/L | 2540.C | 20073 | 5410 | 1472 |
| 5. | Chemical Oxygen Demand | mg/L | 5220. D | 16842 | 8720 | 3560 |
| 6. | Biochemical Oxygen Demand (3 days at 27°C) | mg/L | IS:3025 | 6520 | 4480 | 750 |
| 7. | Chlorides as Cl- | mg/L | 4500-Cl-.B | 9691 | 1732 | 191 |
| 8. | Sulphates as SO42- | mg/L | 4500-SO42- .E | 273 | 123 | 219 |

Observations:

The above High TDS and RO permeate samples of the 4 industries were analyzed and these effluents are disposed through zero liquid discharge systems. No discharges were observed within the industries and outside the premises.

However, it was observed that certain industries are showing High TDS in the RO permeate and the same needs to be verified and necessary rectification of the RO system to be taken up.

1.2. Summary of Groundwater Quality

The analytical reports show pH values are in the range 6.3 & 7.1 in GW-1 to 19 samples collected within the study area.

1. **Electrical Conductivity** concentrations were in the range of 576 - 4338 mg/L. The values in locations GW-1, 4, 5, 6, 8, 9, 10 (3120, 3990, 3730, 4000, 7480, 3680, 4610 mg/L). As per the limits EC < 700 $\mu\text{s}/\text{cm}$ are good and 700 to 3000 $\mu\text{s}/\text{cm}$ are marginally saline, more than 4000 is toxic.
2. **COD** values are indicators of pollution. Generally more than 30 mg/L, COD is indicative of pollution. The GW-6 (89), GW-7 (126), GW-8 (171), GW-9 (41), GW-10 (89) are highly polluted may be due to industrial contamination and needs evaluation of contamination based on the vicinity of industries.
3. SAR < 10, % Sodium (60 %) & RSC < 2.5 and these are within the limits.

2.0 SOIL QUALITY

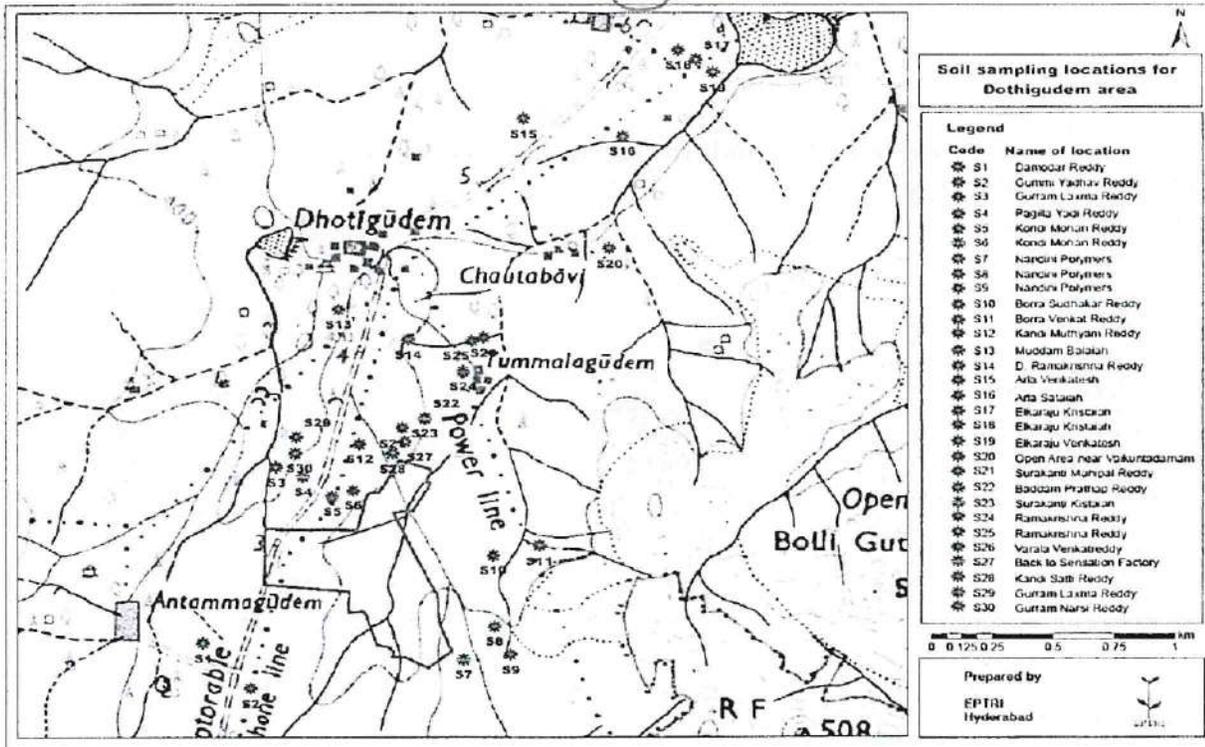
2.1 Baseline Status of Soil with respect to Conventional Parameters

30 soil samples were collected in the study area. The soil samples collected from the locations where land is being used for agricultural purpose. Location of these places is presented in Table 2.1. Representative soil samples from depth (30 cm) were collected from these locations to estimate the physico-chemical characteristics of soil. Standard methods have been followed to analyze the soil samples are shown in Table 2.2 and standard soil classification is shown in Table 2.3.

Table 2.1 Soil Sampling Locations

| Station Code | Name of the Stations | Latitude | Longitude | Date of Sampling |
|--------------|--|----------------|----------------|------------------|
| S-1 | Damodar Reddy S/o Ram Reddy Survey No:251 | N 17°17' 05.6" | E 78°50' 34.1" | 25.02.2023 |
| S-2 | Gummi Yudham Reddy S/o Peddi Reddy Survey No:254 | N 17°16' 58.8" | E 78°50' 40.8" | 25.02.2023 |
| S-3 | Gurram Laxma Reddy S/o swamy Reddy Survey No:119 | N 17°16' 32.6" | E 78°50' 44.0" | 25.02.2023 |
| S-4 | Pagilla Yadi Reddy S/o Rami Reddy Survey No | N 17°17' 31.2" | E 78°50' 47.7" | 25.02.2023 |
| S-5 | Kondi Mohan Reddy Survey No:254 | N 17°17' 28.2" | E 78°50' 51.8" | 25.02.2023 |
| S-6 | Kondi Mohan Reddy (Adjusant to Hazllo Pharma Industry) Survey No:254 | N 17°17' 29.2" | E 78°50' 54.7" | 25.02.2023 |
| S-7 | Nandini Polymers Beside Road Survey No:120 | N 17°17' 03.5" | E 78°51' 10.4" | 25.02.2023 |
| S-8 | Nandini Polymers (Near Kunta Down side) Survey No: 120 | N 17°17' 08.6" | E 78°51' 14.7" | 25.02.2023 |
| S-9 | Nandini Polymers Near bore Survey No:120 | N 17°17' 04.3" | E 78°51' 17.0" | 25.02.2023 |
| S-10 | Borra Sudhakar Reddy S/o Venkat Reddy | N 17°17' 19.5" | E 78°51' 14.4" | 25.02.2023 |
| S-11 | Borra Vekat Reddy S/o Sati Reddy Survey No:230 | N 17°17' 21.0" | E 78°51' 20.8" | 25.02.2023 |
| S-12 | Kandi Muthyam Reddy | N 17°17' 36.2" | E 78°50' 55.5" | 25.02.2023 |
| S-13 | Muddam Balaiah S/o Papaaih | N 17°17' 56.7" | E 78°50' 52.3" | 25.02.2023 |
| S-14 | D.Ramakrishna Reddy S/o Saati Reddy Survey No:206 | N 17°17' 52.2" | E 78°51' 02.1" | 25.02.2023 |
| S-15 | Arla Venkatesh S/o Sataiah Survey No:141 | N 17°18' 26.1" | E 78°51' 17.9" | 25.02.2023 |
| S-16 | Arla Sataiah | N 17°18' 23.5" | E 78°51' 31.6" | 25.02.2023 |

| Station Code | Name of the Stations | Latitude | Longitude | Date of Sampling |
|--------------|--|----------------|----------------|------------------|
| | S/o Lachaiiah Survey No:137 | | | |
| S-17 | Elkaraju Kristaiah S/o Ramulu (near Lake) Jiblack Pally | N 17°18' 35.3" | E 78°51' 41.8" | 25.02.2023 |
| S-18 | Elkaraju Kristaiah S/o Ramulu | N 17°18' 36.1" | E 78°51' 40.1" | 25.02.2023 |
| S-19 | Elkaraju Venkataiah S/o Ramulu chacment area of Lake/Flowing | N 17°18' 33.7" | E 78°51' 43.5" | 25.02.2023 |
| S-20 | Open area Near Vaikunta damam | N 17°18' 06.4" | E 78°51' 29.9" | 25.02.2023 |
| S-21 | Surakanti Mahipal Reddy | N 17°17' 38.7" | E 78°51' 01.4" | 25.02.2023 |
| S-22 | Baddam Prathap Reddy Vagu/canal type flow area | N 17°17' 40.2" | E 78°51' 04.6" | 25.02.2023 |
| S-23 | Srakanti Kistaiah | N 17°17' 40.2" | E 78°51' 04.5" | 25.02.2023 |
| S-24 | Ramakrishna Reddy S/o Sati Reddy | N 17°17' 47.4" | E 78°51' 09.8" | 25.02.2023 |
| S-25 | Ramakrishna Reddy S/o Sati Reddy | N 17°17' 52.1" | E 78°51' 11.0" | 25.02.2023 |
| S-26 | Varala Venkat Reddy S/o Buchi reddy | N 17°17' 52.4" | E 78°51' 11.8" | 25.02.2023 |
| S-27 | Back to Sensation Factory Drain Dried | N 17°17' 37.7" | E 78°51' 01.6" | 25.02.2023 |
| S-28 | Kandi satti Reddy S/o Yadi Reddy | N 17°17' 34.8" | E 78°51' 08.1" | 25.02.2023 |
| S-29 | Gurram Laxma Reddy S/o Swamy Reddy | N 17°17' 37.2" | E 78°50' 46.7" | 25.02.2023 |
| S-30 | Gurram Narsi Reddy S/o Sati Reddy (Near Gas pipe line) | N 17°17' 34.7" | E 78°50' 46.6" | 25.02.2023 |



MAP SHOWING SOIL SAMPLING LOCATIONS

Table 2.2 Methods for Analysis of Soil Samples

| S.No | Parameter (s) | Unit | Test Method |
|------------------------------------|---------------------------------|---------------------|---------------------------------|
| Physical Parameters | | | |
| 1. | Soil Texture | -- | Bouyoucos Hydrometer Method |
| 2. | Particle size distribution Sand | % | Bouyoucos Hydrometer Method |
| | Silt | % | |
| | Clay | % | |
| 3. | Water Holding Capacity | % | Keen Roetzowski Box Method |
| 4. | Porosity | % | Keen Roetzowski Box Method |
| 5. | Bulk Density | gm/cm ³ | Keen Roetzowski Box Method |
| Physico Chemical Parameters | | | |
| 6. | pH | -- | IS: 2720 |
| 7. | Electrical Conductivity | mmhos/cm | IS: 14767: 2000 |
| 8. | Cation Exchange Capacity | Meq | IS: 2720 |
| 9. | SAR | -- | By-calculation |
| 10. | Organic Carbon | % | Walkley & Black |
| Exchangeable cations: | | | |
| 11. | Exchangeable Calcium | meq/100 gm | M.L. Jackson |
| 12. | Exchangeable Magnesium | meq/100 gm | M.L. Jackson |
| 13. | Exchangeable Sodium | meq/100 gm | M.L. Jackson |
| 14. | Exchangeable Potassium | meq/100 gm | M.L. Jackson |
| Macro Elements: | | | |
| 15. | Nitrogen | kg ha ⁻¹ | Subbaiah and Asija 1956 |
| 16. | Phosphorous | kg ha ⁻¹ | Olsen's S. R. Method |
| 17. | Potassium | kg ha ⁻¹ | Ammonium Acetate Extract Method |

Table 2.3 Standard Soil Classification

| S. No. | Soil Test | Classification |
|--------|---|---|
| 1 | pH | 6.1 - 6.50 slightly acidic 6.6 - 7.30 Neutral 7.4 - 7.80 slightly alkaline 7.9 - 8.4 moderately alkaline |
| 2 | Organic Carbon | <0.5 percent - Low 0.5 - 0.75 percent - Medium >0.75 percent - High |
| 3 | Available Nitrogen (kg ha ⁻¹) | < 280 - Low 280-560 - Medium >560 - High |
| 4 | Available Phosphorus (kg ha ⁻¹) | < 11 - Low 11-25.6 - Medium >25.6 - High |
| 5 | Available Potassium (kg ha ⁻¹) | < 120 - Low 120-280 - Medium >280 - High |
| 6 | Salinity Electrical Conductivity (mmhos/cm) (1ppm = 640 mmho/cm) | Up to 1.00 Average 1.01 -2.00 harmful to germination 2.01 - 3.00 harmful to crops (sensitive to salts) |

*Indian Council of Agricultural Research (ICAR)

Table 2.4 Chemical Characteristics of Soil Extract

| Sampling Stations | pH | EC (mmhos/cm) (1ppm = 640 mmho/cm) | CEC (meq%) | Organic Carbon (%) | Chlorides (mg/L) | Soluble Sulphates | Ex. Na (meq/100gr) | Ex. K (meq/100gr) | Available Phosphorous Kg/ha | Available Potassium Kg/ha |
|-------------------|------------|---------------------------------------|------------|--------------------|------------------|-------------------|--------------------|-------------------|-----------------------------|---------------------------|
| Limits | 6.1 to 8.4 | | - | 0.5 - 0.75 | | | | | 11-25.6 | 120-280 |
| S-1 | 6.4 | 0.222 | 29 | 0.69 | 70 | 22 | 4.8 | 0.87 | 5.64 | 383 |
| S-2 | 6.7 | 0.192 | 33 | 0.1 | 65 | 37 | 4.76 | 0.50 | 5.85 | 222 |
| S-3 | 6.8 | 0.197 | 22 | 0.6 | 60 | 42 | 5.58 | 1.38 | 5.29 | 605 |
| S-4 | 6.9 | 0.130 | 18 | 0.67 | 87 | 39 | 4.6 | 1.19 | 4.64 | 525 |
| S-5 | 6.5 | 0.235 | 28 | 0.3 | 89 | 43 | 6.63 | 0.42 | 3.45 | 187 |
| S-6 | 6.8 | 0.160 | 23 | 0.26 | 43 | 39 | 0.68 | 0.66 | 5.49 | 585 |
| S-7 | 6.9 | 0.134 | 23 | 0.26 | 96 | 35 | 0.33 | 0.68 | 5.54 | 299 |
| S-8 | 8.9 | 0.601 | 38 | 1.5 | 130 | 68 | 5.1 | 3.03 | 5.07 | 1328 |
| S-9 | 7.5 | 0.125 | 31 | 0.32 | 82 | 30 | 0.37 | 0.77 | 3.83 | 298 |
| S-10 | 7.3 | 0.154 | 18 | 1.09 | 82 | 40 | 0.50 | 1.8 | 5.33 | 7865 |
| S-11 | 7.5 | 0.148 | 37 | 0.52 | 82 | 33 | 6.3 | 0.93 | 3.35 | 411 |
| S-12 | 7.3 | 0.229 | 29 | 1.05 | 118 | 25 | 5.9 | 0.51 | 3.49 | 225 |
| S-13 | 5.7 | 0.204 | 28 | 0.92 | 111 | 56 | 5.17 | 0.99 | 4.41 | 434 |
| S-14 | 6.4 | 0.125 | 32 | 0.44 | 125 | 38 | 5.02 | 0.2 | 4.35 | 88 |
| S-15 | 6.6 | 0.167 | 19 | 0.49 | 96 | 34 | 5.02 | 0.31 | 4.42 | 138 |
| S-16 | 6.6 | 0.529 | 46 | 0.93 | 120 | 73 | 6.73 | 0.76 | 4.10 | 335 |
| S-17 | 7.0 | 0.395 | 44 | 0.99 | 82 | 94 | 6.9 | 0.64 | 3.67 | 183 |
| S-18 | 7.4 | 0.294 | 41 | 1.15 | 92 | 74 | 6.7 | 0.62 | 3.93 | 275 |

| Sampling Stations | pH | EC (mmhos/cm) | CEC (meq%) | Organic Carbon (%) | Chlorides (mg/L) | Soluble Sulphates | Ex. Na (meq/100gr) | Ex. K (meq/100gr) | Available Phosphorous Kg/ha | Available Potassium Kg/ha |
|-------------------|-----|---------------|------------|--------------------|------------------|-------------------|--------------------|-------------------|-----------------------------|---------------------------|
| S-19 | 7.3 | 0.543 | 47 | 1.78 | 176 | 149 | 10.1 | 0.85 | 3.39 | 375 |
| S-20 | 7.8 | 0.307 | 41 | 0.79 | 79 | 44 | 6.9 | 0.53 | 3.37 | 234 |
| S-21 | 6.1 | 2.800 | 56 | 1.2 | 508 | 464 | 9.7 | 0.50 | 3.78 | 222 |
| S-22 | 6.5 | 2.260 | 52 | 1.07 | 407 | 380 | 12.9 | 1.09 | 5.74 | 480 |
| S-23 | 7.1 | 0.431 | 42 | 0.84 | 224 | 56 | 8.29 | 0.57 | 3.78 | 250 |
| S-24 | 7.1 | 0.927 | 39 | 0.89 | 89 | 72 | 7.7 | 1.09 | 4.77 | 481 |
| S-25 | 7.2 | 0.944 | 43 | 1.37 | 205 | 109 | 11.3 | 1.36 | 4.01 | 596 |
| S-26 | 7.2 | 0.838 | 35 | 1.16 | 205 | 79 | 10.7 | 0.90 | 3.65 | 394 |
| S-27 | 6.9 | 4.650 | 73 | 1.52 | 692 | 1044 | 18.3 | 0.79 | 5.11 | 349 |
| S-28 | 7.2 | 6.730 | 90 | 1.48 | 824 | 1454 | 47.7 | 3.98 | 5.43 | 1788 |
| S-29 | 7.9 | 0.179 | 24 | 0.82 | 26 | 51.8 | 5.03 | 1.51 | 3.76 | 662 |
| S-30 | 7.8 | 0.139 | 23 | 0.69 | 72 | 42.5 | 4.85 | 0.84 | 3.11 | 370 |

Table 2.5 Trace Metals Content in Soil

| Sampling Stations | Cr | Cd | As | Hg | Ni | Sb | Cu | B | Co |
|-------------------|-------|-----|-----|-----|----|----|----|----|----|
| | mg/kg | | | | | | | | |
| S-1 | 19 | 7 | BDL | BDL | 13 | 9 | 10 | 22 | 8 |
| S-2 | 19 | 5 | BDL | BDL | 16 | 9 | 10 | 12 | 9 |
| S-3 | 22 | BDL | BDL | BDL | 13 | 7 | 9 | 8 | 9 |
| S-4 | 28 | 4 | BDL | BDL | 17 | 8 | 12 | 14 | 10 |
| S-5 | 40 | 6 | BDL | BDL | 23 | 11 | 16 | 11 | 14 |
| S-6 | 45 | BDL | BDL | BDL | 22 | 11 | 12 | 20 | 24 |
| S-7 | 12 | BDL | BDL | BDL | 12 | 7 | 10 | 15 | 9 |
| S-8 | 25 | 5 | BDL | BDL | 18 | 9 | 18 | 12 | 10 |
| S-9 | 17 | 5 | BDL | BDL | 16 | 14 | 13 | 8 | 9 |
| S-10 | 18 | 4 | BDL | BDL | 12 | 9 | 11 | 13 | 9 |
| S-11 | 16 | 3 | BDL | BDL | 15 | 12 | 14 | 16 | 10 |
| S-12 | 24 | 2 | BDL | BDL | 12 | 7 | 12 | 11 | 9 |
| S-13 | 28 | 5 | BDL | BDL | 15 | 8 | 11 | 31 | 9 |
| S-14 | 26 | 3 | BDL | BDL | 27 | 11 | 11 | 25 | 13 |
| S-15 | 30 | 4 | BDL | BDL | 23 | 8 | 12 | 18 | 11 |
| S-16 | 19 | BDL | BDL | BDL | 16 | 9 | 11 | 15 | 9 |
| S-17 | 26 | BDL | BDL | BDL | 17 | 10 | 14 | 19 | 10 |
| S-18 | 30 | BDL | BDL | BDL | 20 | 11 | 18 | 25 | 12 |
| S-19 | 28 | 4 | BDL | BDL | 17 | 9 | 11 | 16 | 10 |
| S-20 | 31 | 5 | BDL | BDL | 20 | 10 | 18 | 23 | 11 |
| S-21 | 17 | BDL | BDL | BDL | 15 | 11 | 8 | 18 | 9 |
| S-22 | 22 | BDL | BDL | BDL | 17 | 11 | 10 | 26 | 9 |
| S-23 | 23 | 4 | BDL | BDL | 17 | 6 | 12 | 17 | 10 |
| S-24 | 20 | 3 | BDL | BDL | 15 | 8 | 11 | 23 | 8 |
| S-25 | 19 | 6 | BDL | BDL | 13 | 9 | 11 | 36 | 7 |
| S-26 | 19 | 5 | BDL | BDL | 13 | 9 | 10 | 27 | 8 |
| S-27 | 21 | 4 | BDL | BDL | 48 | 11 | 13 | 18 | 13 |
| S-28 | 23 | 5 | BDL | BDL | 32 | 10 | 13 | 15 | 12 |
| S-29 | 20 | 5 | BDL | BDL | 12 | 9 | 8 | 16 | 7 |
| S-30 | 24 | 4 | BDL | BDL | 15 | 6 | 9 | 21 | 8 |

2.1 Chemical Properties of Soil

The collected soil samples were analyzed for various chemical properties. The parameters selected were pH, Electrical Conductivity, Cation Exchange Capacity (CEC), Sodium Adsorption Ratio (SAR), Organic carbon, Ex. Na, and Ex. K. The results are presented in Tables 2.4.

pH is an important parameter which indicates the alkaline or acidic nature of soil. Soils collected from the study area are acidic to alkaline in nature having pH in the range of 5.7 to 8.9.

The EC for the soil samples are in the range 0.125 - 6.73 mmhos/cm i.e., average to harmful to crops. Cation exchange capacity is found to be in the range 18-90 meq%. Organic carbon was found to be in the range 0.1 to 1.78 % i.e., low to high.

Nutrient Status

The macro nutrients like Nitrogen (N) Phosphorus (P) Potassium (K) were analyzed in the study area and compared with standard soil classification, published by ICAR, presented in Table 2.4.

The Phosphorus values ranged from 3.11 to 5.85 kg ha⁻¹ indicating that the values were in low category. The maximum value was found at S-2 and the minimum value was found at S-30. The Potassium values ranged from 88 - 7865 kg ha⁻¹ indicating that values are observed to be low-high category. The maximum value was found at S-10 and the minimum value was observed at S-14.

Trace Metals

The trace metals present in the soil are presented in Table 2.5. The trace metals Cr, Cd, As, Hg, Ni, Sb, Cu, B, Co were analyzed. As & Hg levels were below the detection limit of the ICPOES instrument sensitivity levels. The other metals were well within the soil permissible limits.

3.0 Finger print analysis by Gas Chromatography-Mass Spectrometry (GCMS):

The contaminated ground water samples (5 Nos.) which are having high COD values were collected again suspecting contamination from the industry cluster. These samples were analyzed by GCMS and found that the following major drugs and its derivatives were observed and compared with the products and raw materials of the industries:

1. Omeprazole and pantoprazole and all Antacid family
2. Flucanazole/itraconazole like antifungal medicines
3. Domepridone - antiemetic family
4. Cinnerazine like Piperazine family
5. Quinoline derivatives from Montelukast anti Allergics
6. Pyridine derivatives of Rosuvastatin Anti Cholesterol Medicines

The details of the above 5 bore wells are as follows:

| S.No | Sample Code | Name of the location |
|------|-------------|---|
| 1 | GW-6 | Kandi Mohan Reddy, Survey No:254 |
| 2 | GW-7 | K. Linga Reddy, S/o: Muthyam Reddy |
| 3 | GW-8 | Kandi Mohan Reddy, Open well, Survey No:254 |
| 4 | GW-9 | Ch. Pedda Narasimha, S/o: Chennaiah, Survey No:209 |
| 5 | GW-10 | Borra Sudhakar Reddy, S/o Venkatreddy, Survey No: 232 |

1. Results of GW6 Sample collected from bore well of Kandi Mohan Reddy at Survey No:254 compared with the industries effluent samples:

| S. No. | Quantitative Result Table | Major Drug residues found | Products/Raw materials | Name of the industry matched with ground water sample |
|--------|--------------------------------|---|-------------------------|---|
| ID# | Sample Code GW6 (COD-171) | Name 2 | | |
| 1 | Sample Name : 23/WCS-136-03 | N-Formylmorpholine | Aprepetiant | M/s. Optimus Drugs (P) Ltd., Sy.No. 239 & 240, Dhothigdem (V), Pochampally (M), Yadadri Bhuvanagiri District. |
| 2 | Sample Name : 23/WCS-136-03 | 4-(4-Methyl-piperazin-1-yl)-1,5-dihydro-imid | | |
| 3 | Sample Name : 23/WCS-136-03 | Piperazine, 2,5-dimethyl-3-(2-methylpropyl)- | Piperazine intermediate | M/s. SVR Laboratories (P) Ltd., Sy.No. 239/A, 239/E, Dothigudem (V), Pochampally (M), Yadadri Bhuvanagiri District. |
| 4 | Sample Name : 23/WCS-136-03 | 1H-Benzotriazole, 1-methyl- | Piperazine intermediate | M/s. SVR Laboratories (P) Ltd., Sy.No. 239/A, 239/E, Dothigudem (V), Pochampally (M), Yadadri Bhuvanagiri District. |
| 5 | Sample Name : 23/WCS-136-03 | Thiazolidin-4-one, 5-(4-chlorobenzylidene)-2- | | |
| 6 | Sample Name : 23/WCS-136-03 | benzenamine, N,N-bis(2-fluoroethyl)- | | |
| 7 | Sample Name : 23/WCS-136-03 | Pyrazole-1-carboxamide, 3,5-dimethyl-N-phen | | |
| 9 | Sample Name : 23/WCS-136-03 | Benzophenone | | |
| 10 | Sample Name : 23/WCS-136-03 | 5-Methyl-1-phenylpyridin-2(1H)-one | | |

| | | | | |
|----|--------------------------------|---|-----------------------|---|
| 11 | Sample Name : 23/WCS-136-03 | 1H-1,2,4-Triazole-1-ethanol, alpha-butyl-alp | | |
| 12 | Sample Name : 23/WCS-136-03 | Pyrrolidin-2-one, 1-[1-(4-carbomethoxyphenyl | | |
| 13 | Sample Name : 23/WCS-136-03 | Octahydro-2H-pyrido(1,2-a)pyrimidin-2-one | Rousuvastatin | M/s. Optimus Drugs (P) Ltd., Sy.No. 239 & 240, Dhothigdem (V), Pochampally (M), Yadadri Bhuvanagiri District. |
| 14 | Sample Name : 23/WCS-136-03 | Etaconazole .beta. | | M/s. VJ Sai Chem, Sy.No.240/B, Dothigudem (V), Pochampally (M), Yadadri Bhuvanagiri District. |
| 15 | Sample Name : 23/WCS-136-03 | N-Formylmorpholine | | M/s. Optimus Drugs (P) Ltd., Sy.No. 239 & 240, Dhothigdem (V), Pochampally (M), Yadadri Bhuvanagiri District. |
| 16 | Sample Name : 23/WCS-136-03 | Morpholine, 4-acetyl- | Aprepitant | M/s. Optimus Drugs (P) Ltd., Sy.No. 239 & 240, Dhothigdem (V), Pochampally (M), Yadadri Bhuvanagiri District. |
| 17 | Sample Name : 23/WCS-136-03 | 4-(4-Methylpiperazin-1-yl)-1,5-dihydro-imid | | M/s. SVR Laboratories (P) Ltd., Sy.No. 239/A, 239/E, Dothigudem (V), Pochampally (M), Yadadri Bhuvanagiri District. |
| 18 | Sample Name : 23/WCS-136-03 | Piperazine, 2,5-dimethyl-3-(2-methylpropyl)- | | M/s. SVR Laboratories (P) Ltd., Sy.No. 239/A, 239/E, Dothigudem (V), Pochampally (M), Yadadri Bhuvanagiri District. |
| 19 | Sample Name : 23/WCS-136-03 | Thiazolidin-4-one, 5-(4-chlorobenzylidene)-2- | | |
| 20 | Sample Name : 23/WCS-136-03 | 2,5-Pyridinedicarboxylic acid, 2-methyl ester | Omeprazole derivative | 1. M/s. Brundavan Laboratories (P) Ltd., Yellagiri (V), Choutuppal (M), Yadadri Bhuvanagiri District. 2. M/s. Ravoos Laboratories Limited, Sy.No.210, Dothigudem (V), Pochampally (M), |

| | | | | |
|----|--------------------------------|--|-------------------------|--|
| | | | | <p>Yadadri Bhuvanagiri District.</p> <p>3. M/s. VJ Sai Chem, Sy.No.240/B, Dothigudem (V), Pochampally (M), Yadadri Bhuvanagiri District.</p> <p>4. M/s. Hazelo Lab Pvt. Ltd., (Formerly M/s Venlar Labs (P) Ltd.,) Dothigudem (V), Pochampally (M), Yadadri Bhuvanagiri District.</p> <p>5. M/s. Archimedis Laboratories (Pvt) Ltd., Dothigudem (V), Pochampally (M), Yadadri-Buvanagiri District.</p> |
| 21 | Sample Name : 23/WCS-136-03 | Pyrazole-1-carboxamide, 3,5-dimethyl-N-phen | | |
| 23 | Sample Name : 23/WCS-136-03 | 1H-Pyrimidine-2,4-dione, 5-(2-hydroxy-1,1-di | | |
| 24 | Sample Name : 23/WCS-136-03 | 1H-1,2,4-Triazole-1-ethanol, .alpha.-butyl-alp | Piperazine intermediate | M/s. SVR Laboratories (P) Ltd., Sy.No. 239/A, 239/E, Dothigudem (V), Pochampally (M), Yadadri Bhuvanagiri District. |
| 25 | Sample Name : 23/WCS-136-03 | Lacosamide | | |
| 26 | Sample Name : 23/WCS-136-03 | Oxazolidin-2-one, 4-hydroxy-4,5,5-trimethyl-3 | | |
| 27 | Sample Name : 23/WCS-136-03 | Pyrrolidin-2-one, 1-[1-(4-carbomethoxyphen | | |
| 28 | Sample Name : 23/WCS-136-03 | 2H-pyrido[1,2-a]pyrimidine-2,4(3H)-dione, 9- | | |

| | | | |
|----|--------------------------------|--------------------|---|
| 29 | Sample Name : 23/WCS-136-03 | Etacozazole .beta. | <ol style="list-style-type: none"> 1. M/s. Ravoos Laboratories Limited Sy.No.210, Dothigudem (V), Pochampally (M), Yadadri Bhuvanagiri District. 2. M/s. Archimedis Laboratories (Pvt) Ltd., Dothigudem (V), Pochampally (M), Yadadri-Buvanagiri District. 3. M/s. VJ Sai Chem, Sy.No.240/B, Dothigudem (V), Pochampally (M), Yadadri Bhuvangiri District. |
|----|--------------------------------|--------------------|---|

2. Results of GW7 Sample collected from bore well of K.Linga Reddy S/o.Muthyam Reddy

| S. No. | Quantitative Result Table | Major Drug residues found | Products/Raw materials | Name of the industry matched with ground water sample |
|--------|--------------------------------|---------------------------------------|-------------------------|--|
| ID# | Sample Code GW7 (COD-126) | Name 2 | | |
| 1 | Sample Name : 23/WCS-136-04 | Benzonitrile, 2,6-dichloro- | | |
| 2 | Sample Name : 23/WCS-136-04 | 1H-Benzotriazole, 1-methyl- | Piperazine intermediate | M/s. SVR Laboratories (P) Ltd., Sy.No. 239/ A, 239/E, Dothigudem (V), Pochampally (M), Yadadri Bhuvanagiri District. |
| 3 | Sample Name : 23/WCS-136-04 | 4-Isobutyl-2-pyrrolidinone | | |
| 4 | Sample Name : 23/WCS-136-04 | N,N-Dimethylvaleramid e | | |
| 5 | Sample Name : 23/WCS-136-04 | 2-Pyrazoline, 1-isobutyl-3-methyl- | | |
| 6 | Sample Name : 23/WCS-136-04 | Piperidine, 1-(1-methylpentyl)- | Domperidone | M/s. VJ Sai Chem, Sy.No.240/B, Dothigudem (V), Pochampally (M), Yadadri Bhuvangiri District. |
| 7 | Sample Name : 23/WCS-136-04 | (1H)Imidazol-4-amine, 2,5-diisobutyl- | | M/s. SVR Laboratories (P) Ltd., Sy.No. 239/ A, 239/E, Dothigudem (V), Pochampally (M), Yadadri Bhuvanagiri District. |
| 8 | Sample Name : 23/WCS-136-04 | Phthalan | | |

| | | | | |
|----|--------------------------------|---|--------------|--|
| 9 | Sample Name : 23/WCS-136-04 | 2H-Benzimidazol-2-one, 1,3-dihydro-1-methy | Esomeprazole | M/s. VJ Sai Chem, Sy.No.240/B, Dothigudem (V), Pochampally (M), Yadadri Bhuvangiri District. |
| 10 | Sample Name : 23/WCS-136-04 | 2-Ethyl-3,5,6,7-tetramethyl-pyrazolo[1,5-a]py | Glimepiride | M/s. Hazelo Lab Pvt. Ltd., (Formerly M/s Venlar Labs (P) Ltd.,) Dhutigudem (V), Pochampally (M), Yadadri Bhuvanagiri District. |

3. Results of GW8 Sample collected from open well of Kandi Mohan Reddy at Survey No:254

| S. No | Quantitative Result Table | Major Drug residues found | Products/Raw materials | Name of the industry matched with ground water sample |
|-------|-----------------------------------|--|----------------------------|--|
| ID # | Sample Code 1 (GW8) COD- 89 | Name 2 | | |
| 1 | Sample Name : 23/WCS-136-02 | 3-Piperidino-2-pentene | Domperidone/ Piperazine | 1. M/s. Ravoos Laboratories Limited, Sy.No.210, Dothigudem (V), Pochampally (M), Yadadri Bhuvanagiri District. 2. M/s. SVR Laboratories (P) Ltd., Sy.No. 239/A, 239/E, Dothigudem (V), Pochampally (M), Yadadri Bhuvanagiri District. |
| 2 | Sample Name : 23/WCS-136-02 | 1-Benzoylamino-5-piperidinyl-1-(4-ethylpheny | Domperidone/ Piperazine | 1. M/s. Ravoos Laboratories Limited, Sy.No.210, Dothigudem (V), Pochampally (M), Yadadri Bhuvanagiri District. 2. M/s. SVR Laboratories (P) Ltd., Sy.No. 239/A, 239/E, Dothigudem (V), Pochampally (M), Yadadri Bhuvanagiri District. |
| 3 | Sample Name : 23/WCS-136-02 | Cyclohexanone, 2,3,3-trimethyl-2-(3-methylbu | | |
| 4 | Sample Name : | Acethydrazide, 2-(4- | | |

| | | | | |
|---|--------------------------------|--|--|--|
| | 23/WCS-136-02 | ethoxyphenylamino) -N2-(| | |
| 5 | Sample Name : 23/WCS-136-02 | 3-Ethyl-5- methyldolizidine | | |
| 6 | Sample Name : 23/WCS-136-02 | Thiazole, 5-ethyl-4- methyl-2-propyl- | | |
| 7 | Sample Name : 23/WCS-136-02 | Thiazole, 2,4- dipropyl- | | |
| 8 | Sample Name : 23/WCS-136-02 | Acetamide, N,N- dipropyl- | | |

4. Results of GW9 Sample collected from bore well of Ch.Pedda Narsimha, S/o.Chennaiah, Sy.No.209

| S. No. | Quantitative Result Table | Major Drug residues found | Products/Raw materials | Name of the industry matched with ground water sample |
|--------|--------------------------------|--|----------------------------|---|
| ID# | Sample Code GW9 (COD-40) | Name 2 | | |
| 1 | Sample Name : 23/WCS-136-06 | 1H-Benzotriazole, 1- methyl- | Piperazine intermediate | M/s. SVR Laboratories (P) Ltd., Sy.No. 239/ A, 239/E, Dothigudem (V), Pochampally (M), Yadadri Bhuvanagiri District. |
| 2 | Sample Name : 23/WCS-136-06 | Piperidine, 1-butyl- | Domperideine product | |
| 3 | Sample Name : 23/WCS-136-06 | 2H-Benzimidazol-2- one, 1,3-dihydro-1- methy | | 1. M/s. Hazelo Lab Pvt. Ltd., (Formerly M/s Venlar Labs (P) Ltd.,) Dhotigudem (V), Pochampally (M), Yadadri Bhuvanagiri District. 2. M/s. Ravoos Laboratories Limited (Sy.No.210, Dothigudem (V), Pochampally (M), Yadadri Bhuvanagiri District. 3. M/s. Archimedis Laboratories (Pvt) Ltd., Dothigudem (V), Pochampally (M), Yadadri-Buvanagiri District. 4. M/s. VJ Sai Chem, |

| | | | |
|---|--------------------------------|--|--|
| | | | Sy.No.240/B, Dothigudem (V), Pochampally (M), Yadadri Bhuvangiri District. |
| 4 | Sample Name : 23/WCS-136-06 | Imidazolidin-4-one, 5-(2,6- dichlorobenzyliden | <ol style="list-style-type: none"> 1. M/s. Hazelo Lab Pvt. Ltd., (Formerly M/s Venlar Labs (P) Ltd.,) Dhotigudem (V), Pochampally (M), Yadadri Bhuvanagiri District. 2. M/s. Ravoos Laboratories Limited Sy.No.210, Dothigudem (V), Pochampally (M), Yadadri Bhuvanagiri District. 3. M/s. Archimedis Laboratories (Pvt) Ltd., Dothigudem (V), Pochampally (M), Yadadri-Buvanagiri District. 4. M/s. VJ Sai Chem, Sy.No.240/B, Dothigudem (V), Pochampally (M), Yadadri Bhuvangiri District. 5. M/s. Optimus Drugs (P) Ltd., Sy.No. 239 & 240, Dhothigdem (V), Pochampally (M), Yadadri Bhuvanagiri District. |
| 5 | Sample Name : 23/WCS-136-06 | 5-Methyl-1- phenylpyridin- 2(1H)-one | M/s. Chemic Life Sciences Pvt. Ltd., Sy.No.238 & 239, Dhotigudem (V), Pochampally (M), Yadadri Bhuvanagiri District. |

5. Results of GW10 Sample collected from bore well of Borra Sudhakar Reddy S/o Venkatreddy Survey No: 232

| S. No. | Quantitative Result Table | Major Drug residues found | Products/Raw materials | Name of the industry matched with ground water sample |
|--------|---------------------------------|---------------------------------------|-------------------------|--|
| ID# | Sample Code 1 GW 10 (COD-89) | Name 2 | | |
| 1 | Sample Name : 23/WCS-136-05 | Formamide, N,N-dibutyl- | | |
| 2 | Sample Name : 23/WCS-136-05 | 1H-Benzotriazole, 1-methyl- | Piperazine intermediate | M/s. SVR Laboratories (P) Ltd., Sy.No. 239/A, 239/E, Dothigudem (V), Pochampally (M), Yadadri Bhuvanagiri District. |
| 3 | Sample Name : 23/WCS-136-05 | 4-Isobutyl-2-pyrrolidinone | | |
| 4 | Sample Name : 23/WCS-136-05 | 1H-Benzotriazole-1-carboxaldehyde | Piperazine intermediate | M/s. SVR Laboratories (P) Ltd., Sy.No. 239/A, 239/E, Dothigudem (V), Pochampally (M), Yadadri Bhuvanagiri District. |
| 5 | Sample Name : 23/WCS-136-05 | 1-Acetamido-1,2-dihydro-2-oxopyridine | | |
| 6 | Sample Name : 23/WCS-136-05 | 4-Chlorohistidine | | |
| 7 | Sample Name : 23/WCS-136-05 | 5-Methyl-1-phenylpyridin-2(1H)-one | | |
| 8 | Sample Name : 23/WCS-136-05 | Quinoline, decahydro-4-chloro- | | 1. M/s. VJ Sai Chem, Sy.No.240/B, Dothigudem (V), Pochampally (M), Yadadri Bhuvanagiri District. 2. M/s. Optimus Drugs (P) Ltd., Sy.No. 239 & 240, Dhothigdem (V), Pochampally (M), Yadadri Bhuvanagiri District. |
| 9 | Sample Name : 23/WCS-136-05 | Piperidine, 1-(1-methylpentyl)- | Domperidone /Piperazine | 1. M/s. SVR Laboratories (P) Ltd., Sy.No. 239/A, 239/E, Dothigudem (V), Pochampally (M), Yadadri Bhuvanagiri District. 2. M/s. Ravoos |

| | | | | |
|----|--------------------------------|---|--|---|
| | | | | Laboratories Limited Sy.No.210, Dothigudem (V), Pochampally (M), Yadadri Bhuvanagiri District. |
| 10 | Sample Name : 23/WCS-136-05 | 9H-Fluorene, 1- methyl- | | |
| 11 | Sample Name : 23/WCS-136-05 | Pyrrolidine, 1,1'- [1,2-bis(4- chlorophenyl)-1,2- | | |
| 12 | Sample Name : 23/WCS-136-05 | 5-Methoxy-N- isopropyltryptami ne | | |
| 13 | Sample Name : 23/WCS-136-05 | Pyrrolidin-2-one, 1-[1-(4- carbomethoxyphe ny | | |
| 14 | Sample Name : 23/WCS-136-05 | Fenfluramine | | |
| 15 | Sample Name : 23/WCS-136-05 | Pyrrol-2-ol, 4,5- dihydro-3,4- diphenyl- | | |
| 16 | Sample Name : 23/WCS-136-05 | 5,6-Dihydro-6- oxodibenzo(b,f)- 1,4-thiazepine | | |

GCMS Analysis results of the High TDS / effluent samples of 8 industries are enclosed as Annexure.

SUMMARY OF THE REPORT AND RECOMMENDATIONS

The above study was carried out by EPTRI and details were provided in the above report. The conclusions are as follows.

Ground Water Quality:

The total number of borewell/openwell samples collected from the surrounding areas of industrial cluster at Dothigudem Village, Choutuppal Mandal, Yadadri-Bhuvanagiri District are 19. During the inspection it was observed that the bore water was being used for agricultural purpose with predominant paddy crop:

- Out of the above 19 bore well/open well samples, 10 samples are meeting the standards of irrigation.
- 4 bore well samples having moderately high TDS & EC which may be due to Geological conditions in the area. These bore wells water can be used directly for irrigation.
- Remaining 5 bore well samples are contaminated due to presence of organic material (COD). The contaminated sources may be agricultural activities or industries. To ascertain the source of contamination, further 10 ground water samples and effluent samples from 8 industries collected to carryout finger print analysis by GC-MS/MS instrument.

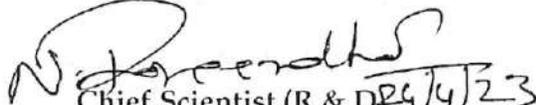
The finger print analysis of ground water and the industry raw material and products were matched. It is observed that the product and derivatives of all the 8 industries are matched with the contaminated ground water.

Further, it was also observed that compounds from the industries effluent samples were also present in the ground water samples.

SOIL QUALITY:

The total number of 30 soil samples collected from the surrounding areas of industrial cluster at Dothigudem Village, Choutuppal Mandal, Yadadri-Bhuvanagiri District. It was observed that the predominant crop is paddy and bore water was being used for the same:

- The available phosphorus is below the prescribed limits and the potassium levels are very high in some of the soil samples. This may be due to Geological condition in the area and the same may require regular use of fertilizers.


Chief Scientist (R & D) 23
EPTRI, Hyderabad



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ANNEXURE - II

TELANGANA STATE POLLUTION CONTROL BOARD

Paryavarana Bhavan, A-III, Industrial Estate, Sanathnagar, Hyderabad-500 018
Phones : 040-23887500 Fax: 040 - 23887519

Lr.No.RCP-10/TSPCB/TF/BO/2023- 326

Dt:20.05.2023

To
**The Collector & District Magistrate,
Yadadri Bhuvanagiri District.**

Madam

Sub: TSPCB -O.A. No.97 of 2021 before the Hon'ble National Green Tribunal (NGT), Southern Zone, Chennai- Crop Compensation to the affected farmers Constitution of Committee to assess the crop compensation - Reg.

- Ref:**
1. Hon'ble NGT (SZ), Chennai Orders dt. 31.10.2022 in O.A. No. 97 of 2021.
 2. Hon'ble NGT (SZ), Chennai Orders dt. 17.01.2023 in O.A. No.97 of 2021.
 3. TSPCB filed a report before Hon'ble NGT vide report dated: 20.02.2023.
 4. Work Order/ TSPCB/TF/UH-IV/HO/2023-1768 dated 08.02.2023.
 5. M/s. Environment Protection Training & Research Institute (EPTRI) Gachibowli, Hyderabad study report dt: 24.04.2023.
 6. Task Force Committee meeting held on 11.05.2023.

Attention is invited to the subject and references cited above, Sri Ravula Linga Swamy, S/o.Yadaiah and Others of Anthammagudem Village, Pochampally Mandal, Yadadri Bhuvanagiri District filed O.A. No.97 of 2021 in the Hon'ble National Green Tribunal (NGT), Southern Zone, Chennai against the pollution problems caused by M/s. Hazelo Lab Pvt Ltd., Sy.Nos. 240, 242, 247, 248 & 249, Dhotigudem (V), Pochampally (M), Yadadri Bhuvanagiri District.

Based on the directions of the Hon'ble NGT, the TSPCB has entrusted M/s. EPTRI, Hyderabad to carryout study on water & soil in and around Industrial cluster of Dhotigudem (Anthammagudem) Village, Choutuppal (M), Yadadri-Bhuvanagiri District.

Subsequently, M/s. EPTRI has submitted the study report stating certain bore wells in the area are contaminated with chemicals and these contaminated chemicals are matched with the products & derivatives of the following 8 industries located in the Anthammagudem:

1. M/s. Brundavan Laboratories (P) Ltd., Yellagiri (V), Choutuppal (M), Yadadri Bhuvanagiri District.
2. M/s. VJ Sai Chem, Sy.No.240/B, Dhotigudem (V), Pochampally (M), Yadadri Bhuvanagiri District.
3. M/s. Chemic Life Sciences Pvt. Ltd., Sy.No.238 & 239, Dhotigudem (V), Pochampally (M), Yadadri Bhuvanagiri District.
4. M/s. SVR Laboratories (P) Ltd., Sy.No. 239/A, 239/E, Dhotigudem (V), Pochampally (M), Yadadri Bhuvanagiri District.
5. M/s. Ravoos Laboratories Limited (Formerly M/s. Silicon Drugs & Intermediates (P) Ltd., M/s. Anvija Pharmaceuticals (P) Ltd.), Sy.No.210, Dhotigudem (V), Pochampally (M), Yadadri Bhuvanagiri District.
6. M/s. Archimedis Laboratories (Pvt) Ltd., Dhotigudem (V), Pochampally (M), Yadadri-Bhuvanagiri District.
7. M/s. Optimus Drugs (P) Ltd., Sy.No. 239 & 240, Dhotigudem (V), Pochampally (M), Yadadri Bhuvanagiri District.
8. M/s. Hazelo Lab Pvt. Ltd., (Formerly M/s Venlar Labs (P) Ltd.) Dhotigudem (V), Pochampally (M), Yadadri Bhuvanagiri District.

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The Task Force Committee of the Board has reviewed the above 8 industries during the meeting held on 11.05.2023. The Committee, duly considering the EPTRI study report and the contamination of ground water by the 8 industries located in the Anthammagudem Village, Choutuppal Mandal, Yadadri Bhuvanagiri District has recommended the following:

1. The TSPCB may impose Environmental Compensation on all the 8 industries located at Anthammagudem Village, Yadadri Bhuvanagiri District as per CPCB guidelines.
2. The District Collector may be addressed to constitute a Committee including officials from Revenue & Agricultural Departments to assess the crop compensation to be provided to the affected farmers.

In view of the above, the District Collector is requested to constitute a team to assess the crop compensation and the compensation may be awarded to the affected farmers .

**Sd/-
MEMBER SECRETARY**

Copy to:

1. The JCEE, ZO, RC Puram for information and necessary action. The JCEE also directed to coordinate with EE-RO, Nalgonda & District Administration for constitution of committee and to carry out assessment of the crop damage and to submit a report.
2. The EE, RO, Nalgonda for information and necessary action. The EE also directed to coordinate with District Administration for constitution of committee and to carry out assessment of the crop compensation and to submit a report.
3. Concerned file.

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

Prasanna
Senior Environmental Engineer
(Task Force - UH-IV)



BY REGD. POST WITH ACK. DUE

ANNEXURE - III

Order No. NLG-44/TSPCB/TF/HO/2023- 438

Date: 21.06.2023

Sub : TSPCB - M/s. Hazelo Lab Private Limited, (Formerly M/s. Venlar Labs (P) Ltd), Dhotigudem (V), Pochampally (M), Yadadri Bhuvangiri District - Causing of damage to the Environment due to operation of the industry - **LEVYING OF ENVIRONMENTAL COMPENSATION** and Water (Prevention and Control of Pollution) Amendment Act, 1988 - Air (Prevention and control of Pollution) Amendment Act, 1987 - **ADDITIONAL DIRECTIONS - ORDERS ISSUED** - Reg.

- Ref :**
1. CFO Order dated; 01.09.2022, which is valid upto 31.03.2027.
 2. Closure Order No. NLG-44/TSPCB/U-II/TF/2016 -789, dt. 01.07.2019.
 3. Revocation of Closure Order No. NLG-44/TSPCB/TF/HO/2016 -490, dt. 09.07.2021.
 4. Directions Order No. NLG-44/TSPCB/TF/HO/2022-, dt: 02.03.2022.
 5. Directions Order No. NLG-44/TSPCB/TF/HO/2022-, dt: 31.10.2022.
 6. CPCB Letter No. F.No. B-29016/04/06/IPC-I/438, Dt. 19.09.2022, received on 13.10.2022 /28.10.2022.
 7. Hon'ble NGT, (SZ), Chennai Orders dated 31.10.2022 in O.A.No.97 of 2021.
 8. Additional Directions issued on 06.12.2022.
 9. Directions issued on 30.05.2023.
 10. The Hon'ble NGT, Chennai has issued directions vide Order dated: 17.01.2023.
 11. EPTRI, Hyderabad Study report dt. 24.04.2023.
 12. Directions Order dated: 30.05.2023.
 13. Show Cause Notice issued on 22.05.2023.
 14. Hearing held on 13.06.2023.

* * * * *

1. **WHEREAS**, you are operating the manufacturing of Bulk Drugs Intermediates unit at Dhotigudem (V), Pochampally (M), Yadadri Bhuvangiri District.
2. **WHEREAS**, vide reference 1st cited, the Board issued CFO&HWA to your industry on 01.09.2022, which is valid upto 31.03.2027.
3. **WHEREAS**, vide reference 2nd cited, the Board issued closure orders to the industry on 01.07.2019 for operating the industry against stop production orders issued to the industry by the Board.
4. **WHEREAS**, vide reference 3rd cited, the Board issued Revocation of Closure Order to the industry on 09.07.2021 with certain directions to comply with.
5. **WHEREAS**, vide reference 4th & 5th cited, the Board issued certain directions to the industry on 02.03.2022, 31.10.2022. in connection with complaints.
6. **WHEREAS**, vide reference 6th cited, CPCB issued certain directions to the Board in connection with O.A No. 97 of 2021 filed by Sri Ravula Linga Swamy, S/o. Yadaiah and Others, Anthammagudem Village, Pochampally Mandal, Yadadri Bhuvanagiri District before Hon'ble NGT (SZ) Chennai.
7. **WHEREAS**, vide reference 7th cited, the Hon'ble NGT vide Order dated 31.10.2022 issued directions to the Board to implement the directions given by the CPCB to the Board and also assess the compensation for the alleged deliberate violations found in the CPCB report.
8. **WHEREAS**, vide reference 8th & 9th cited, the Board issued certain directions to the industry on 06.12.2022 & 30.05.2023 based on the observations made in the CPCB report.

9. **WHEREAS**, vide reference 10th cited, the Hon'ble NGT, Chennai vide Order dated: 17.01.2023 directed the TSPCB to furnish the compliance report on water & soil analysis.
10. **WHEREAS**, vide reference 11th cited, EPTRI, Hyderabad has submitted study report dt.24.04.2023 on water & soil monitoring in Dothigudem industrial cluster. As per the study report, certain bore wells are contaminated with the chemicals and the same were matched with the products and derivatives of all the 8 industries located in the area.
11. **WHEREAS**, The TSPCB filed a report dt.25.04.2023 before Hon'ble NGT submitting that the TSPCB will take necessary action, based on the finding of the study report dated 24.04.2023 of M/s Environment Protection Training & Research Institute (EPTRI), Gachibowli, Hyderabad.
12. **WHEREAS**, vide reference 12th & 13th cited, the Board issued further direction and issued show cause notice to the industry on levy of Environmental Compensation (EC).
13. **WHEREAS**, the Board calculated the Environmental Compensation (EC). The details are as mentioned below:

- The Environmental Compensation (EC) is estimated base on the pollution index method developed by Central Pollution Control Board in the guidelines "Policy for levying Environmental Compensation (EC) for Industries" Vide Order No:B-400 (S)/IPC-III/2019-20/1162, Dt.4.09.2019 and action plan to utilize the fund. The Hon'ble NGT has accepted the method and mentioned in the order dt.19.02.2019 in the matter of Original Application No.593/2017, (W.P) (Civil) No. 375/2012, Paryavaran Suraksha Samiti & Anr. Versus Union of India & Ors.

- The following equation is used for estimating Environmental Compensation (EC):

$$\text{Environmental Compensation (EC)} = P_1 \times N \times R \times S \times L_f$$

Where

P_1 - Pollution index of industrial sector

N - No of days of violation took place

R - A factor in Rupees for EC

S - Factor for scale of operation

L_f - Location factor

- Pollution index of industrial sector (PI): The Telangana State Pollution Control Board categorized these industries into 'Red' category and accordingly the combined CFO & HWA order has been granted. For 'Red' category of industries, average pollution index is 80. **Thus P_1 is considered as 80 in the EC estimation for this industry.**
- Factor in Rupees @ (Rs): As per the environmental compensation estimation guidelines, factor of rupees may be minimum of Rs. 100/- and maximum of Rs. 500/-. In the guidelines it is suggested to consider R as Rs.250/-, as environmental compensation in case of violation. Hence, **Factor in Rupees (R) for EC estimation is considered as 250.**
- Scale of operation (S):

| S.No | Name of the industry | Small / Medium / Large | Scale of operation (S). |
|--|--|------------------------|-------------------------|
| i. | M/s. Hazelo Lab Private Limited, (Gross Block/Fixed assests:52.97 Crores) | Large | 1.5 |
| <p>➤ As per website of Ministry of Micro, Small & Medium Enterprises, the small scale unit criteria is upto Rs. 10 Crore of investment and Rs 50 Crore of turnover and medium scale unit criteria is upto Rs. 50 Crore of investment and Rs. 250 Crore of turnover.</p> <p>➤ Accordingly, the large scale unit criteria has considered as above Rs 50 Crores</p> | | | |

of investment.
> Turnover of the industry is not considered for above calculation.

- 6. **Location Factor (LF):** The industries are located in Dhotigudem village of Pochampally Mandal and Yellagiri (V), Choutuppal (M), of Yadadri Bhuvangiri District and no other eco sensitive regions are located in the region. The total population in the region is less than one million. **Thus location factor (LF) is considered as 1 for EC estimation.**
- 7. **No of days of violation took place (N):** The details of the violations and dates considered for calculation of period of violation for estimating EC is given as below:

| S.No. | Date of violation observed | Action taken for violation | Date of compliance observed | Number of days of violation | Remarks, if any. Summarise the violations. |
|---|-----------------------------------|--|-----------------------------|-------------------------------------|---|
| M/s. Hazelo Lab Private Limited: | | | | | |
| 1. | 23.03.2022 (CPCB team inspection) | Issued directions vide order dt. 06.12.2022. | -- | 259 (From 23.03.2022 to 06.12.2022) | <u>CPCB observations:</u> The above industry and other adjacent pharmaceutical industries have discharged their untreated/partially treated effluent on land as well as contributing to VOC emission in Ambient Air. |
| Number of days of violation | | | | 259 | |

Based on the above factors, the Environmental Compensation (EC) is estimated as given below:

| S.No | Name of the industry | Environmental Compensation (EC) $= P_I \times N \times R \times S \times L_f$ | Environmental Compensation (EC) is estimated. (Rs) |
|------|----------------------------------|--|---|
| 1. | M/s. Hazelo Lab Private Limited, | 80 x 259 x 250 x 1.5 x 1 | 77,70,000/- |

- 14. **WHEREAS**, vide reference 14th cited, you were given an opportunity of hearing before the Task Force Committee during the meeting held on 13.06.2023. The industry representative attended the meeting. After detailed discussion, duly considering the directions of the Hon'ble NGT Order, ~~The~~ Committee recommended to Levy Environmental Compensation and also issue additional directions to the industry.
- 15. **WHEREAS**, after careful consideration of the material facts of the case, **the Board hereby issues the following additional directions to the industry:**
 - 1. The industry shall maintain sufficient free board to avoid overflows in effluent collection tanks and shall dispose the same as per CFO&HWA conditions.
 - 2. The industry shall not stock the effluents in the collection tanks and shall treat the effluents in ZLD system / send to the CETP to avoid any over flow in view of the rainy season.

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16. **WHEREAS**, the Task Force Committee has recommended to levy the Environmental Compensation (EC) of Rs.77,70,000/- as per the Joint Committee recommendations, you are hereby directed to deposit an amount of Rs.77,70,000/- (Rupees Seventy Seven Lakhs Seventy Thousand Only) towards Environmental Compensation within 15 days. The amount shall be deposited by way of D.D drawn in favour of "Member Secretary, T.S Pollution Control Board" payable at Hyderabad.
17. 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.
18. The above mentioned directives shall comply by the industry, failing which legal action will be initiated against your industry under Section 33(A) of Water (Prevention and Control of Pollution) Amendment Act, 1988 and under Section 31(A) of Air (Prevention and Control of Pollution) Amendment Act, 1987 which also includes closure to the industry in the interest of Public Health and Environment, without further notice.

Sd/-
MEMBER SECRETARY

To
M/s. Hazelo Lab Private Limited,
(Formerly M/s. Venlar Labs (P) Ltd),
Dhotigudem (V), Pochampally (M),
Yadadri Bhuvangiri District

//T.C.F.B.O//
S. Sasanna
Senior Environmental Engineer
(TF, UH-IV)



M. Rahul kr
(M. Rahul Kumar)
23/06/2023



BY REGD. POST WITH ACK. DUE

ANNEXURE - IV

Order No. NLG-14/TSPCB/TF/HO/2023- 1309

Date: 21.06.2023

Sub : TSPCB - M/s. Ravoos Laboratories Limited (Formerly M/s. Silicon Drugs & Intermediates (P) Ltd., M/s. Anvija Pharmaceuticals (P) Ltd.), Sy.No.210, Dothigudem (V), Pochampally (M), Yadadri Bhuvanagiri District - Causing of damage to the Environment due to operation of the industry - **LEVYING OF ENVIRONMENTAL COMPENSATION** and Water (Prevention and Control of Pollution) Amendment Act, 1988 - Air (Prevention and control of Pollution) Amendment Act, 1987 - **ADDITIONAL DIRECTIONS - ORDERS ISSUED** - Reg.

- Ref :**
1. CFO&HWA order dt.28.05.2022 valid up to 31.03.2026.
 2. Closure Order No. NLG-14/TSPCB/TF/HO/2016-2150, dt.02.03.2022.
 3. Temporary Revocation of Closure Order No.NLG-14/TSPCB/TF/HO/2016, Dt: 30.03.2022.
 4. Extension of Temporary Revocation of Closure Order No.NLG-14/TSPCB/TF/HO/2016, Dt: 09.11.2022.
 5. CPCB Letter No.F.No.B-29016/04/06/IPC-I/438, Dt.19.09.2022, received on 13.10.2022 /28.10.2022.
 6. Hon'ble NGT, (SZ), Chennai Orders dated 31.10.2022 in O.A.No.97 of 2021.
 7. Additional Directions Orders issued on 06.12.2023.
 8. The Hon'ble NGT, Chennai has issued directions vide Order dated: 17.01.2023.
 9. EPTRI, Hyderabad Study report dt.24.04.2023.
 10. Show Cause Notice issued on 22.05.2023.
 11. Hearing held on 13.06.2023.

* * * * *

1. **WHEREAS**, you are operating the Drug Intermediates manufacturing unit at Sy.No.210, Dothigudem (V), Pochampally (M), Yadadri Bhuvanagiri District.
2. **WHEREAS**, vide reference 1st cited, the industry has CFO & HWA of the Board vide order dated 28.05.2022 with a validity up to 31.03.2026.
3. **WHEREAS**, vide reference 2nd cited, the Board issued Closure order to the industry for non compliance of the Board directions / Consent conditions.
4. **WHEREAS**, vide reference 3rd cited, the Board issued Temporary revocation of closure order to the industry on 30.03.2022 for a period of three months.
5. **WHEREAS**, vide reference 4th cited, the Board issued Extension of Temporary revocation of closure order to the industry on 09.11.2022 for a period of six months.
6. **WHEREAS**, vide reference 5th cited, the CPCB has issued certain directions to the Board in connection with O.A No. 97 of 2021 filed by Sri Ravula Linga Swamy, S/o. Yadaiah and Others, Anthammagudem Village, Pochampally Mandal, Yadadri Bhuvanagiri District before Hon'ble NGT (SZ) Chennai.
7. **WHEREAS**, vide reference 6th cited, the Hon'ble NGT vide Order dated 31.10.2022 issued directions to the Board to implement the directions given by the CPCB to the Board and also assess the compensation for the alleged deliberate violations found in the CPCB report
8. **WHEREAS**, vide reference 7th cited, the Board issued Additional Directions to the industry on 06.12.2022 based on the observations made in the CPCB report.
9. **WHEREAS**, vide reference 8th cited, the Hon'ble NGT, Chennai vide Order dated: 17.01.2023 directed the TSPCB to furnish the compliance report on water & soil analysis.

10. **WHEREAS**, vide reference 9th cited, EPTRI, Hyderabad has submitted study report dt.24.04.2023 on water & soil monitoring in Dothigudem industrial cluster. As per the study report, certain bore wells are contaminated with the chemicals and the same were matched with the products and derivatives of all the 8 industries located in the area.
11. **WHEREAS**, The TSPCB filed a report dt.25.04.2023 before Hon'ble NGT submitting that the TSPCB will take necessary action, based on the finding of the study report dated 24.04.2023 of M/s Environment Protection Training & Research Institute (EPTRI), Gachibowli, Hyderabad.
12. **WHEREAS**, vide reference 10th cited, the Board issued show cause notice to the industry on levy of Environmental Compensation (EC).
13. **WHEREAS**, the Board calculated the Environmental Compensation (EC). The details are as mentioned below:

1. The Environmental Compensation (EC) is estimated base on the pollution index method developed by Central Pollution Control Board in the guidelines "Policy for levying Environmental Compensation (EC) for Industries" Vide Order No:B-400 (S)/IPC-III/2019-20/1162, Dt.4.09.2019 and action plan to utilize the fund. The Hon'ble NGT has accepted the method and mentioned in the order dt.19.02.2019 in the matter of Original Application No.593/2017, (W.P) (Civil) No. 375/2012, Paryavaran Suraksha Samiti & Anr. Versus Union of India & Ors.

2. The following equation is used for estimating Environmental Compensation (EC):

$$\text{Environmental Compensation (EC)} = P_1 \times N \times R \times S \times L_f$$

Where

P_1 - Pollution index of industrial sector

N - No of days of violation took place

R - A factor in Rupees for EC

S - Factor for scale of operation

L_f - Location factor

3. Pollution index of industrial sector (PI): The Telangana State Pollution Control Board categorized these industries into 'Red' category and accordingly the combined CFO & HWA order has been granted. For 'Red' category of industries, average pollution index is 80. **Thus P_1 is considered as 80 in the EC estimation for this industry.**
4. Factor in Rupees @ (Rs): As per the environmental compensation estimation guidelines, factor of rupees may be minimum of Rs. 100/- and maximum of Rs. 500/-. In the guidelines it is suggested to consider R as Rs.250/-, as environmental compensation in case of violation. Hence, **Factor in Rupees (R) for EC estimation is considered as 250.**
5. Scale of operation (S):

| S.No | Name of the industry | Small / Medium / Large | Scale of operation (S). |
|---|---|------------------------|-------------------------|
| i. | M/s. Ravoos Laboratories Limited, (Gross Block/Fixed assests:10.93 Crores) | Medium | 1 |
| <p>➤ As per website of Ministry of Micro, Small & Medium Enterprises, the small scale unit criteria is upto Rs. 10 Crore of investment and Rs 50 Crore of turnover and medium scale unit criteria is upto Rs. 50 Crore of investment and Rs. 250 Crore of turnover.</p> <p>➤ Accordingly, the medium scale unit criteria has considered upto Rs 50 Crores of investment.</p> <p>➤ Turnover of the industry is not considered for above calculation.</p> | | | |

6. Location Factor (LF): The industries ⁽⁵¹⁾ are located in Dhotigudem village of Pochampally Mandal and Yellagiri (V), Choutuppal (M), of Yadadri Bhuvangiri District and no other eco sensitive regions are located in the region. The total population in the region is less than one million. **Thus location factor (LF) is considered as 1 for EC estimation.**
7. No of days of violation took place (N): The details of the violations and dates considered for calculation of period of violation for estimating EC is given as below:

| S.No. | Date of violation observed | Action taken for violation | Date of compliance observed | Number of days of violation | Remarks, if any. Summarise the violations. |
|--|--------------------------------------|--|-----------------------------|--|---|
| M/s. Ravoos Laboratories Limited, | | | | | |
| 1. | 23.03.2022 (CPCB team inspection) | Issued directions vide order dt. 06.12.2022. | -- | 259 (From 23.03.2022 to 06.12.2022) | <u>CPCB observations:</u> The above industry and other adjacent pharmaceutical industries have discharged their untreated/partially treated effluent on land as well as contributing to VOC emission in Ambient Air. |
| Number of days of violation | | | | 259 | |

Based on the above factors, the Environmental Compensation (EC) is estimated as given below:

| S.No | Name of the industry | Environmental Compensation (EC) $= P_I \times N \times R \times S \times L_f$ | Environmental Compensation (EC) is estimated. (Rs) |
|------|-----------------------------------|--|---|
| 1. | M/s. Ravoos Laboratories Limited, | 80 x 252 x 250 x 1 x 1 | 50,40,000/- |

14. **WHEREAS**, vide reference 11th cited, you were given an opportunity of hearing before the Task Force Committee during the meeting held on 13.06.2023. The industry representative attended the meeting. After detailed discussion, duly considering the directions of the Hon'ble NGT Order, the Committee recommended to Levy Environmental Compensation and also issue additional directions to the industry.
15. **WHEREAS**, after careful consideration of the material facts of the case, **the Board hereby issues the following additional directions to the industry:**
1. The industry shall maintain sufficient free board to avoid over flows in effluent collection tanks and shall dispose the same as per CFO&HWA conditions.
 2. The industry shall not stock the effluents in the collection tanks and shall send the excess effluents to CETP/ to treat in ZLD system in view of the rainy season.
16. **WHEREAS**, the Task Force Committee has recommended to levy the Environmental Compensation (EC) of Rs.50,40,000/- as per the Joint Committee recommendations, you are hereby directed to **deposit an amount of Rs.50,40,000/- (Rupees Fifty Lakhs Forty Thousand Only) towards Environmental Compensation within 15 days. The amount shall be deposited by way of D.D drawn in favour of "Member Secretary, T.S Pollution Control Board" payable at Hyderabad.**

17. 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.
18. The above mentioned directives shall comply by the industry, failing which legal action will be initiated against your industry under Section 33(A) of Water (Prevention and Control of Pollution) Amendment Act, 1988 and under Section 31(A) of Air (Prevention and Control of Pollution) Amendment Act, 1987 which also includes closure of the industry in the interest of Public Health and Environment, without further notice.

Sd/-
MEMBER SECRETARY

To
M/s. Ravoos Laboratories Limited
(Formerly M/s. Silicon Drugs & Intermediates (P) Ltd., M/s.Anvija
Pharmaceuticals (P) Ltd.),
Sy.No.210, Dothigudem (V), Pochampally (M),
Yadadri Bhuvanagiri District

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

Prasanna

Senior Environmental Engineer
(TF, UH-IV)



23/04/2023



BY REGD. POST WITH ACK. DUE

ANNEXURE - V

Order No. NLG-50/TSPCB/TF/HO/2023- 1137

Date: 21.06.2023.

Sub : TSPCB - M/s. V.J.Sai Chem, Sy.No.240/B, Dhothigudem (V), Pochampally (M), Yadadri Bhuvanagiri District - Causing of damage to the Environment due to operation of the industry - **LEVYING OF ENVIRONMENTAL COMPENSATION** and Water (Prevention and Control of Pollution) Amendment Act, 1988 - Air (Prevention and control of Pollution) Amendment Act, 1987 - **ADDITIONAL DIRECTIONS - ORDERS ISSUED** - Reg.

Ref :

1. CFO&HWA Order dt: 14.10.2021 with a validity upto 30.04.2026.
2. Closure Order No.NLG-50/TSPCB/TF/HO/2017-, dt.02.03.2022.
3. Temporary Revocation of Closure Order No.NLG-50/TSPCB/TF/HO/2017, Dt: 27.04.2022.
4. CPCB Letter No.F.No.B-29016/04/06/IPC-I/438, Dt.19.09.2022, received on 13.10.2022 /28.10.2022.
5. Hon'ble NGT, (SZ), Chennai Orders dated 31.10.2022 in O.A.No.97 of 2021.
6. Extension of Temporary Revocation of Closure Oder No.50/TSPCB/TF/HO/2023-, Dt: 06.12.2023.
7. The Hon'ble NGT, Chennai has issued directions vide Order dated: 17.01.2023.
8. EPTRI, Hyderabad Study report dt.24.04.2023.
9. Show Cause Notice issued on 22.05.2023.
10. Hearing held on 13.06.2023.

* * * * *

1. **WHEREAS**, you are operating the Bulk drugs & Intermediates manufacturing unit at Sy.No.240/B, Dhothigudem (V), Pochampally (M), Yadadri Bhuvanagiri District.
2. **WHEREAS**, vide reference 1st cited, the Board issued CFO&HWA to the industry on 14.10.2021 with a validity up to 30.04.2026.
3. **WHEREAS**, vide reference 2nd cited, the Board issued Closure order to the industry for non compliance of the Board directions / Consent conditions and causing pollution in the surrounding area.
4. **WERHEAS**, vide reference 3rd cited, the Board issued Temporary Revocation of Closure Order to industry on 27.04.2022 for a period of Three months with certain directions to comply.
5. **WHEREAS**, vide reference 4th cited, CPCB has issued certain directions to the Board in connection with O.A No. 97 of 2021 filed by Sri Ravula Linga Swamy, S/o. Yadaiah and Others, Anthammagudem Village, Pochampally Mandal, Yadadri Bhuvanagiri District before Hon'ble NGT (SZ) Chennai.
6. **WHEREAS**, vide reference 5th cited, the Hon'ble NGT vide Order dated 31.10.2022 issued directions to the Board to implement the directions given by the CPCB to the Board and also assess the compensation for the alleged deliberate violations found in the CPCB report.
7. **WERHEAS**, vide reference 6th cited, the Board issued Extension of Temporary Revocation of Closure Order to industry on 06.12.2022 for a period of Six months with certain directions to comply based on the observations made in the CPCB report.
8. **WHEREAS**, vide reference 7th cited, the Hon'ble NGT, Chennai vide Order dated: 17.01.2023 directed the TSPCB to furnish the compliance report on water & soil analysis.
9. **WHEREAS**, vide reference 8th cited, EPTRI, Hyderabad has submitted study report dt.24.04.2023 on water & soil monitoring in Dhothigudem industrial cluster. As per the study report, certain bore wells are contaminated with the chemicals and the same were matched with the products and derivatives of all the 8 industries located in the area.

Received
on 23/06/2023

10. **WHEREAS**, The TSPCB filed a report dt.25.04.2023 before Hon'ble NGT submitting that the TSPCB will take necessary action, based on the finding of the study report dated 24.04.2023 of M/s Environment Protection Training & Research Institute (EPTRI), Gachibowli, Hyderabad.
11. **WHEREAS**, vide reference 9th cited, the Board issued show cause notice to the industry on levy of Environmental Compensation (EC) to all eight industries located in Dhotigudem industrial cluster.
12. **WHEREAS**, the Board calculated the Environmental Compensation (EC). The details are as mentioned below:

1. The Environmental Compensation (EC) is estimated base on the pollution index method developed by Central Pollution Control Board in the guidelines "Policy for levying Environmental Compensation (EC) for Industries" Vide Order No:B-400 (S)/IPC-III/2019-20/1162, Dt.4.09.2019 and action plan to utilize the fund. The Hon'ble NGT has accepted the method and mentioned in the order dt.19.02.2019 in the matter of Original Application No.593/2017, (W.P) (Civil) No. 375/2012, Paryavaran Suraksha Samiti & Anr. Versus Union of India & Ors.
2. The following equation is used for estimating Environmental Compensation (EC):

$$\text{Environmental Compensation (EC)} = P_I \times N \times R \times S \times L_F$$

Where

P_I - Pollution index of industrial sector

N - No of days of violation took place

R - A factor in Rupees for EC

S - Factor for scale of operation

L_F - Location factor

3. Pollution index of industrial sector (PI): The Telangana State Pollution Control Board categorized these industries into 'Red' category and accordingly the combined CFO & HWA order has been granted. For 'Red' category of industries, average pollution index is 80. **Thus P_I is considered as 80 in the EC estimation for this industry.**
4. Factor in Rupees @ (Rs): As per the environmental compensation estimation guidelines, factor of rupees may be minimum of Rs. 100/- and maximum of Rs. 500/-. In the guidelines it is suggested to consider R as Rs.250/-, as environmental compensation in case of violation. Hence, **Factor in Rupees (R) for EC estimation is considered as 250.**
5. Scale of operation (S):

| S.No | Name of the industry | Small / Medium / Large | Scale of operation (S). |
|---|--|------------------------|-------------------------|
| i. | M/s. VJ Sai Chem., (Gross Block/Fixed assests:8.2 Crores) | Small | 0.5 |
| <p>➤ As per website of Ministry of Micro, Small & Medium Enterprises, the small scale unit criteria is upto Rs. 10 Crore of investment and Rs 50 Crore of turnover and small scale unit criteria is upto Rs. 10 Crore of investment and Rs. 250 Crore of turnover.</p> <p>➤ Accordingly, the small scale unit criteria has considered upto Rs 10 Crores of investment.</p> <p>➤ Turnover of the industry is not considered for above calculation.</p> | | | |

6. Location Factor (LF): The industries are located in Dhotigudem village of Pochampally Mandal and Yellagiri (V), Choutuppal (M), of Yadadri Bhuvangiri District and no other eco sensitive regions are located in the region. The total population in the region is less than one million. **Thus location factor (LF) is considered as 1 for EC estimation.**

7. No of days of violation took place ⁽⁵⁵⁾ (N): The details of the violations and dates considered for calculation of period of violation for estimating EC is given as below:

| S.No. | Date of violation observed | Action taken for violation | Date of compliance observed | Number of days of violation | Remarks, if any. Summarise the violations. |
|------------------------------------|--------------------------------------|--|-----------------------------|--|---|
| M/s. VJ Sai Chem: | | | | | |
| 1. | 23.03.2022 (CPCB team inspection) | Issued directions vide order dt. 06.12.2022 (Earlier, Board Closure order issued on 02.03.2022 and Temporary Revocation of Closure order issued on 27.04.2022.) | -- | 224 (From 27.04.2022 to 06.12.2022) | <u>CPCB observations:</u> The above industry and other adjacent pharmaceutical industries have discharged their untreated/partially treated effluent on land as well as contributing to VOC emission in Ambient Air. |
| Number of days of violation | | | | 224 | |

Based on the above factors, the Environmental Compensation (EC) is estimated as given below:

| S.No | Name of the industry | Environmental Compensation (EC) $= P_1 \times N \times R \times S \times L_f$ | Environmental Compensation (EC) is estimated. (Rs) |
|------|----------------------|--|---|
| 1. | M/s. VJ Sai Chem., | 80 x 224 x 250 x 0.5 x 1 | 22,40,000/- |

13. **WHEREAS**, vide reference 11th cited, you were given an opportunity of hearing before the Task Force Committee during the meeting held on 13.06.2023. The industry representative attended the meeting. After detailed discussion, duly considering the directions of the Hon'ble NGT Order, the Committee recommended to Levy Environmental Compensation and also issue additional directions to the industry.
14. **WHEREAS**, after careful consideration of the material facts of the case, **the Board is hereby issues the following additional directions to the industry:**
1. The industry shall maintain sufficient free board to avoid over flows in effluent collection tanks and shall dispose the same as per CFO&HWA conditions.
 2. The industry shall not stock the effluents in the collection tanks and shall send the excess effluents to CETP/ to treat in ZLD system in view of the rainy season.
15. **WHEREAS**, the Task Force Committee has recommended to levy the Environmental Compensation (EC) of Rs.22,40,000/- as per the Joint Committee recommendations, you are hereby directed to deposit an amount of Rs.22,40,000/- (Rupees Twenty Two Lakhs Forty Thousand Only) towards Environmental Compensation within 15 days. The amount shall be deposited by way of D.D drawn in favour of "Member Secretary, T.S Pollution Control Board" payable at Hyderabad.
16. 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.

(56)

17. The above mentioned directives shall comply by the industry, failing which legal action will be initiated against your industry under Section 33(A) of Water (Prevention and Control of Pollution) Amendment Act, 1988 and under Section 31(A) of Air (Prevention and Control of Pollution) Amendment Act, 1987 which also includes closure of the industry in the interest of Public Health and Environment, without further notice.

Sd/-
MEMBER SECRETARY

To
M/s. V.J.Sai Chem,
Sy.No.240/B, Dhothigudem (V),
Pochampally (M), Yadadri Bhuvanagiri District.

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

Prasanna
Senior Environmental Engineer
(TF, UH-IV)





BY REGD. POST WITH ACK. DUE

ANNEXURE - VI

Order No. NLG-96/TSPCB/TF/HO/2023- 434

Date: 21.06.2023

Sub : TSPCB - M/s. SVR Laboratories (P) Ltd., Sy.No. 239/A, 239/E, Dothigudem (V), Pochampally (M), Yadadri Bhuvanagiri District - Causing of damage to the Environment due to operation of the industry - **LEVYING OF ENVIRONMENTAL COMPENSATION** and Water (Prevention and Control of Pollution) Amendment Act, 1988 - Air (Prevention and control of Pollution) Amendment Act, 1987 - **ADDITIONAL DIRECTIONS - ORDERS ISSUED** - Reg.

- Ref :**
1. CFO Order dt. 09.11.2021 and valid up to 31.10.2025.
 2. Closure Order No.NLG-96/TSPCB/TF/HO/2016-, dt.02.03.2022.
 3. Temporary Revocation of Closure Order No.NLG-96/TSPCB/TF/HO/2016, Dt: 27.04.2022.
 4. CPCB Letter No.F.No.B-29016/04/06/IPC-I/438, Dt.19.09.2022, received on 13.10.2022 /28.10.2022.
 5. Hon'ble NGT, (SZ), Chennai Orders dated 31.10.2022 in O.A.No.97 of 2021.
 6. Extension of Temporary Revocation of Closure Order No.NLG-96/TSPCB/TF/HO/2023, Dt: 06.12.2022.
 7. The Hon'ble NGT, Chennai has issued directions vide Order dated: 17.01.2023.
 8. EPTRI, Hyderabad Study report dt.24.04.2023.
 9. Show Cause Notice issued on 22.05.2023.
 10. Hearing held on 13.06.2023.

* * * * *

1. **WHEREAS**, you are operating the manufacturing of Bulk Drugs & Intermediates unit at Sy.No. 239/A, 239/E, Dothigudem (V), Pochampally (M), Yadadri Bhuvanagiri District.
2. **WHEREAS**, vide reference 1st cited, the industry has obtained CFO&HWA from the Board vide orders dt.09.11.2021 and valid up to 31.10.2025.
3. **WHEREAS**, vide reference 2nd cited, the Board issued Closure order to the industry on 02.03.2022 for non compliance of the Board directions / Consent conditions and causing pollution in the surrounding area.
4. **WERHEAS**, vide reference 3rd cited, the Board issued Temporary Revocation of Closure Order to industry on 27.04.2022 for a period of Three months with certain directions to comply.
5. **WHEREAS**, vide reference 4th cited, CPCB has issued certain directions to the Board in connection with O.A No. 97 of 2021 filed by Sri Ravula Linga Swamy, S/o. Yadaiah and Others, Anthammagudem Village, Pochampally Mandal, Yadadri Bhuvanagiri District before Hon'ble NGT (SZ) Chennai.
6. **WHEREAS**, vide reference 5th cited, the Hon'ble NGT vide Order dated 31.10.2022 issued directions to the Board to implement the directions given by the CPCB to the Board and also assess the compensation for the alleged deliberate violations found in the CPCB report
7. **WERHEAS**, vide reference 6th cited, the Board issued Extension of Temporary Revocation of Closure Order to industry on 06.12.2022 for a period of Six Months with directions based on the observations made in the CPCB report.
8. **WHEREAS**, vide reference 7th cited, the Hon'ble NGT, Chennai vide Order dated: 17.01.2023 directed the TSPCB to furnish the compliance report on water & soil analysis.
9. **WHEREAS**, vide reference 8th cited, EPTRI, Hyderabad has submitted study report dt.24.04.2023 on water & soil monitoring in Dothigudem industrial cluster. As per the study report, certain bore wells are contaminated with the chemicals and the same

were matched with the products and derivatives of all the 8 industries located in the area.

- 10. **WHEREAS**, The TSPCB filed a report dt.25.04.2023 before Hon'ble NGT submitting that the TSPCB will take necessary action, based on the finding of the study report dated 24.04.2023 of M/s Environment Protection Training & Research Institute (EPTRI), Gachibowli, Hyderabad.
- 11. **WHEREAS**, vide reference 9th cited, the Board issued show cause notice to the industry on levy of Environmental Compensation (EC) to all eight industries located in Dothigudem industrial cluster.
- 12. **WHEREAS**, the Board calculated the Environmental Compensation (EC). The details are as mentioned below:

1. The Environmental Compensation (EC) is estimated base on the pollution index method developed by Central Pollution Control Board in the guidelines "Policy for levying Environmental Compensation (EC) for Industries" Vide Order No:B-400 (S)/IPC-III/2019-20/1162, Dt.4.09.2019 and action plan to utilize the fund. The Hon'ble NGT has accepted the method and mentioned in the order dt.19.02.2019 in the matter of Original Application No.593/2017, (W.P) (Civil) No. 375/2012, Paryavaran Suraksha Samiti & Anr. Versus Union of India & Ors.

2. The following equation is used for estimating Environmental Compensation (EC):

$$\text{Environmental Compensation (EC)} = P_1 \times N \times R \times S \times L_f$$

Where

P_1 - Pollution index of industrial sector

N - No of days of violation took place

R - A factor in Rupees for EC

S - Factor for scale of operation

L_f - Location factor

3. Pollution index of industrial sector (PI): The Telangana State Pollution Control Board categorized these industries into '**Red**' category and accordingly the combined CFO & HWA order has been granted. For '**Red**' category of industries, average pollution index is 80. **Thus P_1 is considered as 80 in the EC estimation for this industry.**

4. Factor in Rupees @ (Rs): As per the environmental compensation estimation guidelines, factor of rupees may be minimum of Rs. 100/- and maximum of Rs. 500/-. In the guidelines it is suggested to consider R as Rs.250/-, as environmental compensation in case of violation. Hence, **Factor in Rupees (R) for EC estimation is considered as 250.**

5. Scale of operation (S):

| S.No | Name of the industry | Small / Medium / Large | Scale of operation (S). |
|--|---|------------------------|-------------------------|
| i. | M/s. SVR Laboratories (P) Ltd., (Gross Block/Fixed assests:15.15 Crores) | Medium | 1 |
| <p>> As per website of Ministry of Micro, Small & Medium Enterprises, the small scale unit criteria is upto Rs. 10 Crore of investment and Rs 50 Crore of turnover and medium scale unit criteria is upto Rs. 50 Crore of investment and Rs. 250 Crore of turnover.</p> <p>> Accordingly, the medium scale unit criteria has considered upto Rs 50 Crores of investment.</p> <p>> Turnover of the industry is not considered for above calculation.</p> | | | |

6. Location Factor (LF): The industries are located in Dhotigudem village of Pochampally Mandal and Yellagiri (V), Choutuppal (M), of Yadadri Bhuvangiri District and no other eco sensitive regions are located in the region. The total population in the region is less than one million. **Thus location factor (LF) is considered as 1 for EC estimation.**

7. No of days of violation took place (N): The details of the violations and dates considered for calculation of period of violation for estimating EC is given as below:

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| S.N o. | Date of violation observed | Action taken for violation | Date of compliance observed | Number of days of violation | Remarks, if any. Summarise the violations. |
|---|--------------------------------------|--|-----------------------------|--|---|
| M/s. SVR Laboratories (P) Ltd.,: | | | | | |
| 1. | 23.03.2022 (CPCB team inspection) | Issued directions vide order dt. 06.12.2022. (Earlier, Board Closure orders issued on 02.03.2022 and Temporary Revocation of Closure order issued on 27.04.2022.) | -- | 224 (From 27.04.2022 to 06.12.2022) | <u>CPCB observations:</u> The above industry and other adjacent pharmaceutical industries have discharged their untreated/partially treated effluent on land as well as contributing to VOC emission in Ambient Air. |
| Number of days of violation | | | | 224 | |

Based on the above factors, the Environmental Compensation (EC) is estimated as given below:

| S.No | Name of the industry | Environmental Compensation (EC) $= P_1 \times N \times R \times S \times L_f$ | Environmental Compensation (EC) is estimated. (Rs) |
|------|---------------------------------|--|---|
| 1. | M/s. SVR Laboratories (P) Ltd., | $80 \times 224 \times 250 \times 1 \times 1$ | 44,80,000/- |

13. **WHEREAS**, vide reference 10th cited, you were given an opportunity of hearing before the Task Force Committee during the meeting held on 13.06.2023. The industry representative attended the meeting. After detailed discussion, duly considering the directions of the Hon'ble NGT Order, the Committee recommended to Levy Environmental Compensation and also issue additional directions to the industry.
14. **WHEREAS**, after careful consideration of the material facts of the case, **the Board is hereby issues the following additional directions to the industry:**
1. The industry shall maintain sufficient free board to avoid over flows in effluent collection tanks and shall dispose the same as per CFO&HWA conditions.
 2. The industry shall not stock the effluents in the collection tanks and shall send the excess effluents to CETP/ to treat in ZLD system in view of the rainy season.
15. **WHEREAS**, the Task Force Committee has recommended to levy the Environmental Compensation (EC) of Rs.44,80,000/- as per the Joint Committee recommendations, you are hereby directed to **deposit an amount of Rs.44,80,000/- (Rupees Forty Four Lakhs Eighty Thousand Only) towards Environmental Compensation within 15 days. The amount shall be deposited by way of D.D drawn in favour of "Member Secretary, T.S Pollution Control Board" payable at Hyderabad.**
16. 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.

17. The above mentioned directives shall comply by the industry, failing which legal action will be initiated against your industry under Section 33(A) of Water (Prevention and Control of Pollution) Amendment Act, 1988 and under Section 31(A) of Air (Prevention and Control of Pollution) Amendment Act, 1987 which also includes closure of the industry in the interest of Public Health and Environment, without further notice.

Sd/-
MEMBER SECRETARY

To
M/s. SVR Laboratories (P) Ltd.,
Sy.No. 239/A, 239/E, Dothigudem (V),
Pochampally (M), Yadadri Bhuvanagiri District.

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

Prasanna

Senior Environmental Engineer
& (TF, UH-IV)

Received by
m to 23/06/23
8096205431





BY REGD. POST WITH ACK. DUE

ANNEXURE - VI

Order No. NLG-50/TSPCB/TF/HO/2023- 435

Date: 21.06.2023.

Sub : TSPCB - M/s. Chemic Life Sciences Pvt. Ltd., Sy.No.238 & 239, Dhotigudem (V), Pochampally (M), Yadadri Bhuvanagiri District - Causing of damage to the environment due to operation of the industry - LEVYING OF ENVIRONMENTAL COMPENSATION and Water (Prevention and Control of Pollution) Amendment Act, 1988 - Air (Prevention and control of Pollution) Amendment Act, 1987 - ADDITIONAL DIRECTIONS - ORDERS ISSUED - Reg.

Ref :

1. CFO & HWA Order dt.02.05.2023, valid up to 30.04.2028.
2. Closure Order No.NLG-50/TSPCB/TF/HO/2017-, dt.02.03.2022.
3. Temporary Revocation of Closure Order No.NLG-47/TSPCB/TF/HO/2016, Dt: 27.04.2022.
4. CPCB Letter No.F.No.B-29016/04/06/IPC-I/438, Dt.19.09.2022, received on 13.10.2022 /28.10.2022.
5. Hon'ble NGT, (SZ), Chennai Orders dated 31.10.2022 in O.A.No.97 of 2021.
6. Extension of Temporary Revocation of Closure Order issued on 06.12.2022.
7. The Hon'ble NGT, Chennai has issued directions vide Order dated: 17.01.2023.
8. EPTRI, Hyderabad Study report dt.24.04.2023.
9. Show Cause Notice issued on 22.05.2023.
10. Hearing held on 13.06.2023.

* * * * *

1. **WHEREAS**, you are operating the manufacturing Drug intermediates unit at Sy.No.238 & 239, Dhotigudem (V), Pochampally (M), Yadadri Bhuvanagiri District is
2. **WHEREAS**, vide reference 1st cited, the Board issued CFO&HWA vide order dt:02.05.2023, which is valid up to 30.04.2028.
3. **WHEREAS**, vide reference 2nd cited, the Board issued Closure order to the industry on 02.03.2022 for non compliance of the Board directions / Consent conditions and causing pollution in the surrounding area.
4. **WERHEAS**, vide reference 3rd cited, the Board issued Temporary Revocation of Closure Order to industry on 27.04.2022 for a period of Three months with certain directions to comply.
5. **WHEREAS**, vide reference 4th cited, CPCB issued certain directions to the Board in connection with O.A No. 97 of 2021 filed by Sri Ravula Linga Swamy, S/o. Yadaiah and Others, Anthammagudem Village, Pochampally Mandal, Yadadri Bhuvanagiri District before Hon'ble NGT (SZ) Chennai.
6. **WHEREAS**, vide reference 5th cited, the Hon'ble NGT vide Order dated 31.10.2022 issued directions to the Board to implement the directions given by the CPCB to the Board and also assess the compensation for the alleged deliberate violations found in the CPCB report
7. **WERHEAS**, vide reference 6th cited, the Board issued Extension of Temporary Revocation of Closure Order to industry on 06.12.2022 for a period of Six Months with certain directions to comply based on the observation made in the CPCB report .
8. **WHEREAS**, vide reference 7th cited, the Hon'ble NGT, Chennai vide Order dated: 17.01.2023 directed the TSPCB to furnish the compliance report on water & soil analysis.

9. **WHEREAS**, vide reference 8th cited, EPTRI, Hyderabad has submitted study report dt.24.04.2023 on water & soil monitoring in Dothigudem industrial cluster. As per the study report, certain bore wells are contaminated with the chemicals and the same were matched with the products and derivatives of all the 8 industries located in the area.
10. **WHEREAS**, The TSPCB filed a report dt.25.04.2023 before Hon'ble NGT submitting that the TSPCB will take necessary action, based on the finding of the study report dated 24.04.2023 of M/s Environment Protection Training & Research Institute (EPTRI), Gachibowli, Hyderabad.
11. **WHEREAS**, vide reference 9th cited, the Board issued show cause notice to the industry on levy of Environmental Compensation (EC) to all eight industries located in Dothigudem industrial cluster.
12. **WHEREAS**, the Board calculated the Environmental ompensation (EC). The details are as mentioned below:

- The Environmental Compensation (EC) is estimated base on the pollution index method developed by Central Pollution Control Board in the guidelines "Policy for levying Environmental Compensation (EC) for Industries" Vide Order No:B-400 (S)/IPC-III/2019-20/1162, Dt.4.09.2019 and action plan to utilize the fund. The Hon'ble NGT has accepted the method and mentioned in the order dt.19.02.2019 in the matter of Original Application No.593/2017, (W.P) (Civil) No. 375/2012, Paryavaran Suraksha Samiti & Anr. Versus Union of India & Ors.

- The following equation is used for estimating Environmental Compensation (EC):

$$\text{Environmental Compensation (EC)} = P_1 \times N \times R \times S \times L_f$$

Where

P_1 - Pollution index of industrial sector

N - No of days of violation took place

R - A factor in Rupees for EC

S - Factor for scale of operation

L_f - Location factor

- Pollution index of industrial sector (PI): The Telangana State Pollution Control Board categorized these industries into 'Red' category and accordingly the combined CFO & HWA order has been granted. For 'Red' category of industries, average pollution index is 80. **Thus P_1 is considered as 80 in the EC estimation for this industry.**
- Factor in Rupees @ (Rs): As per the environmental compensation estimation guidelines, factor of rupees may be minimum of Rs. 100/- and maximum of Rs. 500/-. In the guidelines it is suggested to consider R as Rs.250/-, as environmental compensation in case of violation. Hence, **Factor in Rupees (R) for EC estimation is considered as 250.**
- Scale of operation (S):

| S.No | Name of the industry | Small / Medium / Large | Scale of operation (S). |
|---|--|------------------------------|----------------------------|
| i. | M/s. Chemic Life Sciences (P) Ltd., (Gross Block/Fixed assests:28.94 Crores) | Medium | 1 |
| <p>➤ As per website of Ministry of Micro, Small & Medium Enterprises, the small scale unit criteria is upto Rs. 10 Crore of investment and Rs 50 Crore of turnover and medium scale unit criteria is upto Rs. 50 Crore of investment and Rs. 250 Crore of turnover.</p> <p>➤ Accordingly, the medium scale unit criteria has considered upto Rs 50 Crores of investment.</p> <p>➤ Turnover of the industry is not considered for above calculation.</p> | | | |

6. **Location Factor (LF):** The industries are located in Dhotigudem village of Pochampally Mandal and Yellagiri (V), Choutuppal (M), of Yadadri Bhuvangiri District and no other eco sensitive regions are located in the region. The total population in the region is less than one million. **Thus location factor (LF) is considered as 1 for EC estimation.**
7. **No of days of violation took place (N):** The details of the violations and dates considered for calculation of period of violation for estimating EC is given as below:

| S.No. | Date of violation observed | Action taken for violation | Date of compliance observed | Number of days of violation | Remarks, if any. Summarise the violations. |
|--|--------------------------------------|---|-----------------------------|--|---|
| M/s. Chemic Life Sciences (P) Ltd., | | | | | |
| 1. | 23.03.2022 (CPCB team inspection) | Issued directions vide order dt. 06.12.2022. (Earlier, Board Closure order issued on 02.03.2022 and Temporary Revocation of Closure order issued on 27.04.2022.) | -- | 224 (From 27.04.2022 to 06.12.2022) | <u>CPCB observations:</u> The above industry and other adjacent pharmaceutical industries have discharged their untreated/partially treated effluent on land as well as contributing to VOC emission in Ambient Air. |
| Number of days of violation | | | | 224 | |

Based on the above factors, the Environmental Compensation (EC) is estimated as given below:

| S.No | Name of the industry | Environmental Compensation (EC) $= P_I \times N \times R \times S \times L_F$ | Environmental Compensation (EC) is estimated. (Rs) |
|------|-------------------------------------|--|---|
| 1. | M/s. Chemic Life Sciences (P) Ltd., | $80 \times 224 \times 250 \times 1 \times 1$ | 44,80,000/- |

13. **WHEREAS**, vide reference 10th cited, you were given an opportunity of hearing before the Task Force Committee during the meeting held on 13.06.2023. The industry representative attended the meeting. After detailed discussion, duly considering the directions of the Hon'ble NGT Order, the Committee recommended to Levy Environmental Compensation and also issue additional directions to the industry.
14. **WHEREAS**, after careful consideration of the material facts of the case, **the Board hereby issues the following additional directions to the industry:**
1. The industry shall maintain sufficient free board to avoid over flows in effluent collection tanks and shall dispose the same as per CFO&HWA conditions.
 2. The industry shall not stock the effluents in the collection tanks and shall send the excess effluents to CETP/ to treat in ZLD system in view of the rainy season.
15. **WHEREAS**, the Task Force Committee has recommended to levy the Environmental Compensation (EC) of Rs.44,80,000/- as per Hon'ble NGT Orders, you are hereby directed to deposit an amount of **Rs.44,80,000/- (Rupees Forty Four Lakhs Eighty Thousand Only)** towards Environmental Compensation within 15 days. The amount shall be deposited by way of D.D drawn in favour of "Member Secretary, T.S Pollution Control Board" payable at Hyderabad.

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16. 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.
17. The above mentioned directives shall comply by the industry, failing which legal action will be initiated against your industry under Section 33(A) of Water (Prevention and Control of Pollution) Amendment Act, 1988 and under Section 31(A) of Air (Prevention and Control of Pollution) Amendment Act, 1987 which also includes closure of the industry in the interest of Public Health and Environment, without further notice.

Sd/-
MEMBER SECRETARY

To
M/s. Chemic Life Sciences Pvt. Ltd.,
Sy.No.238 & 239, Dhotigudem (V),
Pochampally (M), Yadadri Bhuvanagiri District.



M. Anand Mohan Reddy

//T.C.F.B.O//
Rasanna
Senior Environmental Engineer
(TF, UH-IV)



BY REGD. POST WITH ACK. DUE

ANNEXURE - VIII

Order No. NLG-40/TSPCB/TF/HO/2023- 436

Dated: 21.06.2023.

Sub : TSPCB - M/s. Archimedis Laboratories (P) Ltd., Sy.No.238, Dhotigudem (V), Pochampally (M), Yadadri Bhuvanagiri District - Causing of damage to the Environment due to operation of the industry - LEVYING OF ENVIRONMENTAL COMPENSATION and Water (Prevention and Control of Pollution) Amendment Act, 1988 - Air (Prevention and control of Pollution) Amendment Act, 1987 - ADDITIONAL DIRECTIONS - ORDERS ISSUED - Reg.

Ref : 1. CFO&HWA order dt.15.01.2021 valid up to 30.11.2025.
2. Directions Order dated: 02.03.2022 & 14.07.2022.
3. CPCB Letter No.F.No.B-29016/04/06/IPC-I/438, Dt.19.09.2022, received on 13.10.2022 /28.10.2022.
4. Hon'ble NGT, (SZ), Chennai Orders dated 31.10.2022 in O.A.No.97 of 2021.
5. Additional Directions Order dated: 06.12.2022.
6. The Hon'ble NGT, Chennai has issued directions vide Order dated: 17.01.2023.
7. EPTRI, Hyderabad Study report dt.24.04.2023.
8. Directions Order dated: 30.05.2023.
9. Show Cause Notice issued on 22.05.2023.
10. Hearing held on 13.06.2023.

* * * * *

1. **WHEREAS**, you are operating Bulk Drugs manufacturing unit located at Sy.No.238, Dhotigudem (V), Pochampally (M), Yadadri Bhuvanagiri District.
2. **WHEREAS**, vide reference 1st cited, the Board issued CFO&HWA (renewal) to the industry on 15.01.2021 with a validity up to 30.11.2025.
3. **WHEREAS**, vide reference 2nd cited, the Board issued certain directions to the industry on 02.03.2022, 14.07.2022 in connection with complaints.
4. **WHEREAS**, vide reference 3rd cited, CPCB issued certain directions to the Board in connection with O.A No. 97 of 2021 filed by Sri Ravula Linga Swamy, S/o. Yadaiah and Others, Anthammagudem Village, Pochampally Mandal, Yadadri Bhuvanagiri District before Hon'ble NGT(SZ), Chennai.
5. **WHEREAS**, vide reference 4th cited, the Hon'ble NGT vide Order dated 31.10.2022 issued directions to the Board to implement the directions given by the CPCB to the Board and also to assess the compensation for the alleged deliberate violations by the industries.
6. **WHEREAS**, vide reference 5th cited, the Board issued further directions to the industry on 06.12.2022 based on the observation made in the CPCB report.
7. **WHEREAS**, vide reference 6th cited, the Hon'ble NGT, Chennai vide Order dated: 17.01.2023 in O.A No.97 of 2021, directed the TSPCB to furnish the compliance report on water & soil analysis.
8. **WHEREAS**, vide reference 7th cited, EPTRI, Hyderabad has submitted study report dt.24.04.2023 on water & soil monitoring in Dhotigudem industrial cluster. As per the study report, certain bore wells are contaminated with the chemicals and the same were matched with the products and derivatives of all the 8 industries located in the area.
9. **WHEREAS**, the TSPCB filed a report dt.25.04.2023 before Hon'ble NGT submitting that the TSPCB will take necessary action, based on the finding of the study report dated 24.04.2023 of M/s Environment Protection Training & Research Institute (EPTRI), Gachibowli, Hyderabad.

10. **WHEREAS**, vide reference 8th & 9th cited, the Board issued directions and show cause notice to the industry on levy of Environmental Compensation (EC).

11. **WHEREAS**, the Board calculated the Environmental Compensation (EC). The details are as mentioned below:

1. The Environmental Compensation (EC) is estimated base on the pollution index method developed by Central Pollution Control Board in the guidelines "Policy for levying Environmental Compensation (EC) for Industries" Vide Order No:B-400 (S)/IPC-III/2019-20/1162, Dt.4.09.2019 and action plan to utilize the fund. The Hon'ble NGT has accepted the method and mentioned in the order dt.19.02.2019 in the matter of Original Application No.593/2017, (W.P) (Civil) No. 375/2012, Paryavaran Suraksha Samiti & Anr. Versus Union of India & Ors.

2. The following equation is used for estimating Environmental Compensation (EC):

$$\text{Environmental Compensation (EC)} = P_I \times N \times R \times S \times L_F$$

Where

P_I - Pollution index of industrial sector

N - No of days of violation took place

R - A factor in Rupees for EC

S - Factor for scale of operation

L_F - Location factor

3. Pollution index of industrial sector (PI): The Telangana State Pollution Control Board categorized these industries into 'Red' category and accordingly the combined CFO & HWA order has been granted. For 'Red' category of industries, average pollution index is 80. **Thus P_I is considered as 80 in the EC estimation for this industry.**

4. Factor in Rupees @ (Rs): As per the environmental compensation estimation guidelines, factor of rupees may be minimum of Rs. 100/- and maximum of Rs. 500/-. In the guidelines it is suggested to consider R as Rs.250/-, as environmental compensation in case of violation. Hence, **Factor in Rupees (R) for EC estimation is considered as 250.**

5. Scale of operation (S):

| S.No | Name of the industry | Small / Medium / Large | Scale of operation (S). |
|---|--|------------------------|-------------------------|
| i. | M/s. Archimedis Laboratories (P) Ltd., (Gross Block/Fixed assests:25.04 Crores) | Medium | 1 |
| <p>➤ As per website of Ministry of Micro, Small & Medium Enterprises, the small scale unit criteria is upto Rs. 10 Crore of investment and Rs 50 Crore of turnover and medium scale unit criteria is upto Rs. 50 Crore of investment and Rs. 250 Crore of turnover.</p> <p>➤ Accordingly, the medium scale unit criteria has considered upto Rs 50 Crores of investment.</p> <p>➤ Turnover of the industry is not considered for above calculation.</p> | | | |

6. Location Factor (LF): The industries are located in Dhotigudem village of Pochampally Mandal and Yellagiri (V), Choutuppal (M), of Yadadri Bhuvangiri District and no other eco sensitive regions are located in the region. The total population in the region is less than one million. **Thus location factor (LF) is considered as 1 for EC estimation.**

7. No of days of violation took place (N): The details of the violations and dates considered for calculation of period of violation for estimating EC is given as below:

| S.No. | Date of violation observed | Action taken for violation | Date of compliance observed | Number of days of violation | Remarks, if any. Summarise the violations. |
|--|--------------------------------------|--|-----------------------------|--|---|
| M/s. Archimedis Laboratories (P) Ltd: | | | | | |
| 1. | 23.03.2022 (CPCB team inspection) | Issued directions vide order dt. 06.12.2022. | -- | 259 (From 23.03.2022 to 06.12.2022) | <u>CPCB observations:</u> The above industry and other adjacent pharmaceutical industries have discharged their untreated/partially treated effluent on land as well as contributing to VOC emission in Ambient Air. |
| Number of days of violation | | | | 259 | |

Based on the above factors, the Environmental Compensation (EC) is estimated as given below:

| S.No | Name of the industry | Environmental Compensation (EC) $= P_1 \times N \times R \times S \times L_f$ | Environmental Compensation (EC) is estimated. (Rs) |
|------|--|--|---|
| 1. | M/s. Archimedis Laboratories (P) Ltd., | 80 x 259 x 250 x 1 x 1 | 51,80,000/- |

12. **WHEREAS**, vide reference 10th cited, you were given an opportunity of hearing before the Task Force Committee during the meeting held on 13.06.2023. The industry representative attended the meeting. After detailed discussion, duly considering the directions of the Hon'ble NGT Order, the Committee recommended to Levy Environmental Compensation and also issue additional directions to the industry.
13. **WHEREAS**, after careful consideration of the material facts of the case, **the Board hereby issues the following Additional directions to the industry:**
1. The industry shall maintain sufficient free board to avoid overflows in effluent collection tanks and shall dispose the same as per CFO & HWA conditions.
 2. The industry shall not stock the effluents in the collection tanks and shall treat the effluents in ZLD system / send to the CETP to avoid any over flow in view of the rainy season.
14. **WHEREAS**, the Task Force Committee has recommended to levy the Environmental Compensation (EC) of Rs.51,80,000/- as per the NGT orders, you are hereby directed to **deposit an amount of Rs.51,80,000/- (Rupees Fifty One Lakhs Eighty Thousand Only) towards Environmental Compensation within 15 days. The amount shall be deposited by way of D.D drawn in favour of "Member Secretary, T.S Pollution Control Board" payable at Hyderabad.**
15. 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.

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16. The above mentioned directives shall be complied by the industry, failing which legal action will be initiated against your industry under Section 33(A) of Water (Prevention and Control of Pollution) Amendment Act, 1988 and under Section 31(A) of Air (Prevention and Control of Pollution) Amendment Act, 1987 which also includes closure of the industry in the interest of Public Health and Environment, without further notice.

Sd/-
MEMBER SECRETARY

To
M/s. Archimedis Laboratories (P) Ltd.,
Sy.No.238, Dhotigudem (V), Pochampally (M),
Yadadri Bhuvanagiri District.

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

Prasanna

Senior Environmental Engineer
(TF, UH-IV)

ARCHIMEDIS LABORATORIES PVT. LTD.
Sy. No. 238, Dhotigudem-508 284
Mandal: Bhoodan Pochampally,
Dist. Yadadri-Bhuvanagiri-508 284 T.S.

Received
[Signature]



BY REGD. POST WITH ACK. DUE

ANNEXURE-IX

Order No. NLG-48/TSPCB/TF/HO/2023- 111

Date: 21.06.2023

Sub : TSPCB - M/s. Optimus Drugs (P) Ltd., Dhothigudem (V), Pochampally (M), Yadadri Bhuvanagiri District - Causing of damage to the Environment due to operation of the industry - **LEVYING OF ENVIRONMENTAL COMPENSATION** and Water (Prevention and Control of Pollution) Amendment Act, 1988 - Air (Prevention and control of Pollution) Amendment Act, 1987 - **ADDITIONAL DIRECTIONS - ORDERS ISSUED** - Reg.

- Ref :**
1. CFO Expansion (phase-I) order No. 200522362965, dt.16.03.2020 with a validity period up to 31.10.2023.
 2. Directions Order No.NLG-48/TSPCB/TF/HO/2016-2164, dt.02.03.2022.
 3. Directions Order No.NLG-48/TSPCB/TF/HO/2016, 14.07.2022.
 4. CPCB Letter No.F.No.B-29016/04/06/IPC-I/438, Dt.19.09.2022, received on 13.10.2022 /28.10.2022.
 5. Hon'ble NGT, (SZ), Chennai Orders dated 31.10.2022 in O.A.No.97 of 2021.
 6. Directions Orders issued on 06.12.2022.
 7. The Hon'ble NGT, Chennai has issued directions vide Order dated: 17.01.2023.
 8. EPTRI, Hyderabad Study report dt.24.04.2023.
 9. Directions Order dated: 30.05.2023.
 10. Show Cause Notice issued on 22.05.2023.
 11. Hearing held on 13.06.2023.

* * * * *

1. **WHEREAS**, you are operating the manufacturing of Bulk Drugs & Intermediates unit at Dhothigudem (V), Pochampally (M), Yadadri Bhuvanagiri District.
2. **WHEREAS**, vide reference 1st cited, the Board issued CFO & HWA (expansion Phase-I) to the industry vide order dated 16.03.2020 with a validity period up to 31.10.2023.
3. **WHEREAS**, vide reference 2nd & 3rd cited, the Board issued directions to the industry on 02.03.2022, 14.07.2022 in connection with complaints.
4. **WHEREAS**, vide reference 4th cited, CPCB issued certain directions to the Board in connection with O.A No. 97 of 2021 filed by Sri Ravula Linga Swamy, S/o. Yadaiah and Others, Anthammagudem Village, Pochampally Mandal, Yadadri Bhuvanagiri District before Hon'ble NGT(SZ) Chennai.
5. **WHEREAS**, vide reference 5th cited, the Hon'ble NGT vide Order dated 31.10.2022 issued directions to the Board to implement the directions given by the CPCB to the Board and also assess the compensation for the alleged deliberate violations found in the CPCB report.
6. **WHEREAS**, vide reference 6th cited, the Board issued further directions to the industry on 06.12.2022 based on the observations made in the CPCB report.
7. **WHEREAS**, vide reference 7th cited, the Hon'ble NGT, Chennai vide Order dated: 17.01.2023 directed the TSPCB to furnish the compliance report on water & soil analysis.
8. **WHEREAS**, vide reference 8th cited, EPTRI, Hyderabad has submitted study report dt.24.04.2023 on water & soil monitoring in Dhothigudem industrial cluster. As per the study report, certain bore wells are contaminated with the chemicals and the same were matched with the products and derivatives of all the 8 industries located in the area.

9. **WHEREAS**, The TSPCB filed a report dt.25.04.2023 before Hon'ble NGT submitting that the TSPCB will take necessary action, based on the finding of the study report dated 24.04.2023 of M/s Environment Protection Training & Research Institute (EPTRI), Gachibowli, Hyderabad.
10. **WHEREAS**, vide reference 8th & 9th cited, the Board issued directions and issued show cause notice to the industry on levy of Environmental Compensation (EC).
11. **WHEREAS**, the Board calculated the Environmental Compensation (EC). The details are as mentioned below:

1. The Environmental Compensation (EC) is estimated base on the pollution index method developed by Central Pollution Control Board in the guidelines "Policy for levying Environmental Compensation (EC) for Industries" Vide Order No:B-400 (S)/IPC-III/2019-20/1162, Dt.4.09.2019 and action plan to utilize the fund. The Hon'ble NGT has accepted the method and mentioned in the order dt.19.02.2019 in the matter of Original Application No.593/2017, (W.P) (Civil) No. 375/2012, Paryavaran Suraksha Samiti & Anr. Versus Union of India & Ors.
2. The following equation is used for estimating Environmental Compensation (EC):

$$\text{Environmental Compensation (EC)} = P_I \times N \times R \times S \times L_F$$

Where

P_I – Pollution index of industrial sector

N - No of days of violation took place

R – A factor in Rupees for EC

S – Factor for scale of operation

L_F – Location factor

3. Pollution index of industrial sector (PI): The Telangana State Pollution Control Board categorized these industries into 'Red' category and accordingly the combined CFO & HWA order has been granted. For 'Red' category of industries, average pollution index is 80. **Thus P_I is considered as 80 in the EC estimation for this industry.**
4. Factor in Rupees ® (Rs): As per the environmental compensation estimation guidelines, factor of rupees may be minimum of Rs. 100/- and maximum of Rs. 500/-. In the guidelines it is suggested to consider R as Rs.250/-, as environmental compensation in case of violation. Hence, **Factor in Rupees (R) for EC estimation is considered as 250.**
5. Scale of operation (S):

| S.No | Name of the industry | Small / Medium / Large | Scale of operation (S). |
|--|---|------------------------|-------------------------|
| i. | M/s. Optimus Drugs (P) Ltd. (Gross Block/Fixed assests:165.275 Crores) | Large | 1.5 |
| <p>➤ As per website of Ministry of Micro, Small & Medium Enterprises, the small scale unit criteria is upto Rs. 10 Crore of investment and Rs 50 Crore of turnover and medium scale unit criteria is upto Rs. 50 Crore of investment and Rs. 250 Crore of turnover.</p> <p>➤ Accordingly, the large scale unit criteria has considered as above Rs 50 Crores of investment.</p> <p>➤ Turnover of the industry is not considered for above calculation.</p> | | | |

6. Location Factor (LF): The industries are located in Dhotigudem village of Pochampally Mandal and Yellagiri (V), Choutuppal (M), of Yadadri Bhuvangiri District and no other eco sensitive regions are located in the region. The total population in the region is less than one million. **Thus location factor (LF) is considered as 1 for EC estimation.**

7. No of days of violation took place (N): The details of the violations and dates considered for calculation of period of violation for estimating EC is given as below:

| S.No. | Date of violation observed | Action taken for violation | Date of compliance observed | Number of days of violation | Remarks, if any. Summarise the violations. |
|------------------------------------|--------------------------------------|--|-----------------------------|--|---|
| M/s. Optimus Drugs (P) Ltd: | | | | | |
| 1. | 23.03.2022 (CPCB team inspection) | Issued directions vide order dt. 06.12.2022. | -- | 259 (From 23.03.2022 to 06.12.2022) | <u>CPCB observations:</u> The above industry and other adjacent pharmaceutical industries have discharged their untreated/partially treated effluent on land as well as contributing to VOC emission in Ambient Air. |
| Number of days of violation | | | | 259 | |

Based on the above factors, the Environmental Compensation (EC) is estimated as given below:

| S.No | Name of the industry | Environmental Compensation (EC) $= P_1 \times N \times R \times S \times L_f$ | Environmental Compensation (EC) is estimated. (Rs) |
|------|-----------------------------|--|---|
| 1. | M/s. Optimus Drugs (P) Ltd. | $80 \times 259 \times 250 \times 1.5 \times 1$ | 77,70,000/- |

12. **WHEREAS**, vide reference 12th cited, you were given an opportunity of hearing before the Task Force Committee during the meeting held on 13.06.2023. The industry representative attended the meeting. After detailed discussion, duly considering the directions of the Hon'ble NGT Order, the Committee recommended to Levy Environmental Compensation and also issue additional directions to the industry.
13. **WHEREAS**, after careful consideration of the material facts of the case, the Board hereby issues the following additional directions to the industry:
1. The industry shall maintain sufficient free board to avoid overflows in effluent collection tanks and shall dispose the same as per CFO & HWA conditions.
 2. The industry shall not stock the effluents in the collection tanks and shall treat the effluents in ZLD system / send to the CETP to avoid any over flow in view of the rainy season.
14. **WHEREAS**, the Task Force Committee has recommended to levy the Environmental Compensation (EC) of Rs.77,70,000/- as per the NZG Orders, you are hereby directed to deposit an amount of Rs.77,70,000/- (**Rupees Seventy Seven Lakhs Seventy Thousand Only**) towards Environmental Compensation within 15 days. The amount shall be deposited by way of D.D drawn in favour of "Member Secretary, T.S Pollution Control Board" payable at Hyderabad.
15. 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.

16. The above mentioned directives shall comply by the industry, failing which legal action will be initiated against your industry under Section 33(A) of Water (Prevention and Control of Pollution) Amendment Act, 1988 and under Section 31(A) of Air (Prevention and Control of Pollution) Amendment Act, 1987 which also includes closure of the industry in the interest of Public Health and Environment, without further notice.

Sd/-
MEMBER SECRETARY

To
M/s. Optimus Drugs (P) Ltd.,
Dhothigudem (V), Pochampally (M),
Yadadri Bhuvanagiri District.

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

Prasanna
Senior Environmental Engineer
(TF, UH-IV)



S. Sreedhar
S. Sreedhar



BY REGD. POST WITH ACK. DUE

ANNEXURE - X

Order No. NLG-50/TSPCB/TF/HO/2023- 440

Dated: 20.06.2023

Sub : TSPCB - M/s. Brundavan Laboratories (P) Ltd., Yellagiri (V), Choutuppal (M), Yadadri Bhauangiri District - Causing of damage to the Environment due to operation of the industry - LEVYING OF ENVIRONMENTAL COMPENSATION and Water (Prevention and Control of Pollution) Amendment Act, 1988 - Air (Prevention and control of Pollution) Amendment Act, 1987 - ADDITIONAL DIRECTIONS - ORDERS ISSUED - Reg.

- Ref :**
1. CFO&HWA Order dt.13.01.2023 with a validity upto 31.12.2027.
 2. Closure Order No.NLG-54/TSPCB/TF/HO/2017-2131 & 2132, dt.02.03.2022.
 3. Temporary Revocation of Closure Order No.NLG-54/TSPCB/TF/HO/2017-161, Dt: 26.04.2022.
 4. CPCB Letter No.F.No.B-29016/04/06/IPC-I/438, Dt.19.09.2022, received on 13.10.2022 /28.10.2022.
 5. Hon'ble NGT, (SZ), Chennai Orders dated 31.10.2022 in O.A.No.97 of 2021.
 6. Extension of Temporary Revocation of Closure Order No.NLG-54/TSPCB/TF/HO/2022-, Dt:06.12.2022.
 7. The Hon'ble NGT, Chennai has issued directions vide Order dated: 17.01.2023.
 8. M/s. EPTRI, Hyderabad study report dated:24.04.2023.
 9. Show Cause Notice dated:22.05.2023.
 10. Hearing held on 11.05.2023.

* * * * *

1. **WHEREAS**, you are operating the Bulk drugs & Intermediates manufacturing unit at Yellagiri (V), Choutuppal (M), Yadadri Bhauangiri District.
2. **WHEREAS**, vide reference 1st cited, the Board issued CFO&HWA to the industry on 13.01.2023 with a validity up to 31.12.2027.
3. **WHEREAS**, vide reference 2nd cited, the Board issued Closure order to the industry for non compliance of the Board directions / Consent conditions and causing pollution in the surrounding area.
4. **WERHEAS**, vide reference 3rd cited, the Board issued Temporary Revocation of Closure Order to industry on 26.04.2022 for a period of Three months with certain directions to comply.
5. **WHEREAS**, vide reference 4th cited, CPCB issued certain directions to the Board in connection with O.A No. 97 of 2021 filed by Sri Ravula Linga Swamy, S/o. Yadaiah and Others, Anthammagudem Village, Pochampally Mandal, Yadadri Bhuvanagiri District before Hon'ble NGT (SZ) Chennai.
6. **WHEREAS**, vide reference 5th cited, the Hon'ble NGT vide Order dated 31.10.2022 issued directions to the Board to implement the directions given by the CPCB to the Board and also assess the compensation for the alleged deliberate violations found in the CPCB report.
7. **WERHEAS**, vide reference 6th cited, the Board issued Extension of Temporary Revocation of Closure Order to industry on 06.12.2022 for a period of Six months with certain directions to comply based on the observation made in the CPCB report.
8. **WHEREAS**, vide reference 7th cited, the Hon'ble NGT, Chennai vide Order dated: 17.01.2023 directed the TSPCB to furnish the compliance report on water & soil analysis.

9. **WHEREAS**, vide reference 8th cited, EPTRI, Hyderabad has submitted study report dt.24.04.2023 on water & soil monitoring in Dothigudem industrial cluster. As per the study report, certain bore wells are contaminated with the chemicals and the same were matched with the products and derivatives of all the 8 industries located in the area.
10. **WHEREAS**, The TSPCB filed a report dt.25.04.2023 before Hon'ble NGT submitting that the TSPCB will take necessary action, based on the finding of the study report dated 24.04.2023 of M/s Environment Protection Training & Research Institute (EPTRI), Gachibowli, Hyderabad.
11. **WHEREAS**, vide reference 9th cited, the Board issued show cause notice to the industry on levy of Environmental Compensation (EC) to all eight industries located in Dothigudem industrial cluster.
12. **WHEREAS**, the Board calculated the Environmental Compensation (EC). The details are as mentioned below:

- The Environmental Compensation (EC) is estimated base on the pollution index method developed by Central Pollution Control Board in the guidelines "Policy for levying Environmental Compensation (EC) for Industries" Vide Order No:B-400 (S)/IPC-III/2019-20/1162, Dt.4.09.2019 and action plan to utilize the fund. The Hon'ble NGT has accepted the method and mentioned in the order dt.19.02.2019 in the matter of Original Application No.593/2017, (W.P) (Civil) No. 375/2012, Paryavaran Suraksha Samiti & Anr. Versus Union of India & Ors.

- The following equation is used for estimating Environmental Compensation (EC):

$$\text{Environmental Compensation (EC)} = P_I \times N \times R \times S \times L_F$$

Where

P_I - Pollution index of industrial sector

N - No of days of violation took place

R - A factor in Rupees for EC

S - Factor for scale of operation

L_F - Location factor

- Pollution index of industrial sector (PI): The Telangana State Pollution Control Board categorized these industries into 'Red' category and accordingly the combined CFO & HWA order has been granted. For 'Red' category of industries, average pollution index is 80. **Thus P_I is considered as 80 in the EC estimation for this industry.**
- Factor in Rupees @ (Rs): As per the environmental compensation estimation guidelines, factor of rupees may be minimum of Rs. 100/- and maximum of Rs. 500/-. In the guidelines it is suggested to consider R as Rs.250/-, as environmental compensation in case of violation. Hence, **Factor in Rupees (R) for EC estimation is considered as 250.**
- Scale of operation (S):

| S.No | Name of the industry | Small / Medium / Large | Scale of operation (S). |
|---|---|------------------------|-------------------------|
| i. | M/s. Brundavan Laboratories (P) Ltd., (Gross Block/Fixed assests:63.72 Crores) | Medium | 1 |
| <p>➤ As per website of Ministry of Micro, Small & Medium Enterprises, the small scale unit criteria is upto Rs. 10 Crore of investment and Rs 50 Crore of turnover and medium scale unit criteria is upto Rs. 50 Crore of investment and Rs. 250 Crore of turnover.</p> <p>➤ Accordingly, the medium scale unit criteria has considered upto Rs 50 Crores of investment.</p> <p>➤ Turnover of the industry is not considered for above calculation.</p> | | | |

6. Location Factor (LF): The industries are located in Dhotigudem village of Pochampally Mandal and Yellagiri (V), Choutuppal (M), of Yadadri Bhuvangiri District and no other eco sensitive regions are located in the region. The total population in the region is less than one million. **Thus location factor (LF) is considered as 1 for EC estimation.**
7. No of days of violation took place (N): The details of the violations and dates considered for calculation of period of violation for estimating EC is given as below:

| S.No. | Date of violation observed | Action taken for violation | Date of compliance observed | Number of days of violation | Remarks, if any. Summarise the violations. |
|---|--------------------------------------|--|-----------------------------|--|---|
| M/s. Brundavan Laboratories (P) Ltd: | | | | | |
| 1. | 23.03.2022 (CPCB team inspection) | Issued directions vide order dt. 06.12.2022. (Earlier, Board Closure orders issued on 02.03.2022 and Temporary Revocation of Closure order issued on 26.04.2022.) | -- | 225 (From 26.04.2022 to 06.12.2022) | <u>CPCB observations:</u> The above industry and other adjacent pharmaceutical industries have discharged their untreated/partially treated effluent on land as well as contributing to VOC emission in Ambient Air. |
| Number of days of violation | | | | 225 | |

Based on the above factors, the Environmental Compensation (EC) is estimated as given below:

| S.No | Name of the industry | Environmental Compensation (EC) $= P_1 \times N \times R \times S \times L_f$ | Environmental Compensation (EC) is estimated. (Rs) |
|------|-------------------------------------|--|---|
| 1. | M/s. Brundavan Laboratories (P) Ltd | 80 x 225 x 250 x 1 x 1.5 | 67,50,000/- |

WHEREAS, vide reference 10th cited, you were given an opportunity of hearing before the Task Force Committee during the meeting held on 13.06.2023. The industry representative attended the meeting and stated that, the unit was small scale unit with the investment of only Rs.17.60 Crores till 23.03.2023, whereas the investment after expansion i.e. Rs.63.72 Crores was considered by the Board for the calculation of compensation. After detailed discussion, the committee examined the request of the industry and recommended to revise Environmental Compensation based on the investment of the industry during the period of violation and levy the same. Further the committee also recommended to issue additional directions to the industry. Subsequently, based on the recommendation of the Task Force Committee, the revised Environmental Compensation duly considering the investment of the industry during the period of violation is Rs. 45,000,00/-.

13. **WHEREAS**, after careful consideration of the material facts of the case, **the Board is hereby issues the following Additional Directions to your industry to comply:**
1. The industry shall maintain sufficient free board to avoid over flows in effluent collection tanks and shall dispose the same as per CFO&HWA conditions.

2. The industry shall not stock the effluents in the collection tanks and shall send the excess effluents to CETP/ to treat in ZLD system in view of the rainy season.
14. **WHEREAS**, the Task Force Committee has recommended to levy the Environmental Compensation (EC) of Rs.45,00,000/- as per the Joint Committee recommendations, you are hereby directed to **deposit an amount of Rs.45,00,000/- (Rupees Forty Five Lakhs Only) towards Environmental Compensation within 15 days. The amount shall be deposited by way of D.D drawn in favour of "Member Secretary, T.S Pollution Control Board" payable at Hyderabad.**
15. 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.
16. The above mentioned directives shall comply by the industry, failing which legal action will be initiated against your industry under Section 33(A) of Water (Prevention and Control of Pollution) Amendment Act, 1988 and under Section 31(A) of Air (Prevention and Control of Pollution) Amendment Act, 1987 which also includes closure of the industry in the interest of Public Health and Environment, without further notice.

Sd/-
MEMBER SECRETARY

To
M/s. Brundavan Laboratories (P) Ltd.,
Yellagiri (V), Choutuppal (M),
Yadadri Bhauangiri District.

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

Prasanna
Senior Environmental Engineer
(TF, UH-IV)

Recd on 23/06/2023
At 15:30pm.

Mark
23/06/23.



THE HON'BLE THE CHIEF JUSTICE ALOK ARADHE

AND

THE HON'BLE SRI JUSTICE T.VINOD KUMAR

WRIT PETITION No.18057 of 2023

ORDER: *(Per the Hon'ble the Chief Justice Alok Aradhe)*

Mr. P.Subash, learned counsel for the petitioner.

Mr. Kondaparthi Srinivas, learned Government Pleader for Industries and Commerce Department for respondent No.1.

Mr. Pranav Munigela, learned Additional Standing Counsel for respondent Nos.2 and 3.

2. The petitioner which is a bulk drug and intermediate drug manufacturing company in this petition has assailed the validity of the composite order dated 21.06.2023 *vide* No.NLG-14/TSPCB/TF/HO/2023-439 passed by the Telangana State Pollution Control Board (briefly referred to hereinafter as 'the Board') in exercise of powers under Section 33A of the Water (Prevention and Control of Pollution) Act, 1974 (briefly referred to hereinafter as 'the Water Act') and Section

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31A of the Air (Prevention and Control of Pollution) Act, 1981 (briefly referred to hereinafter as 'the Air Act').

3. For the reasons assigned by us by a separate order dated 08.08.2023 passed in W.P.No.17179 of 2023, the composite order dated 21.06.2023 *vide* No.NLG-48-TSPCB/TF/HO/2023-441 passed by the Board is quashed and set aside and the operative portion of the order reads as under:

"12. For the afore-mentioned reasons, order dated 21.06.2023 passed by the Board cannot be sustained in the eye of law. Accordingly, it is quashed and set aside. The matter is remitted to the Board to consider the grounds taken by the petitioner in the explanation dated 02.06.2023. Needless to state that the Board shall also consider the fact that consent for operation was granted to the petitioner on 08.02.2023 as well as the fact that the petitioner was not a party to the order dated 17.01.2023 passed by National Green Tribunal in O.A.No.97 of 2021. The Board shall afford an opportunity of hearing to the petitioner and shall by a speaking order conclude the proceeding initiated in pursuance to show cause notice dated 22.05.2023. It is made clear that this Court has not expressed any opinion on merits of the matter."

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4. Accordingly, the Writ Petition is disposed of. There shall be no order as to costs.

As a sequel, miscellaneous applications pending, if any, in this Writ Petition, shall stand closed.

ALOK ARADHE, CJ

T. VINOD KUMAR, J

Date: 08.08.2023
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THE HON'BLE THE CHIEF JUSTICE ALOK ARADHE

AND

THE HON'BLE SRI JUSTICE T.VINOD KUMAR

WRIT PETITION No.18088 of 2023

ORDER: *(Per the Hon'ble the Chief Justice Alok Aradhe)*

Mr. P.Subash, learned counsel for the petitioner.

Mr. Kondaparthi Srinivas, learned Government Pleader for Industries and Commerce Department for respondent No.1.

Mr. Pranav Munigela, learned Additional Standing Counsel for respondent Nos.2 and 3.

2. The petitioner which is a bulk drug and intermediate drug manufacturing company in this petition has assailed the validity of the composite order dated 21.06.2023 *vide* No.NLG-50/TSPCB/TF/HO/2023-1137 passed by the Telangana State Pollution Control Board (briefly referred to hereinafter as 'the Board') in exercise of powers under Section 33A of the Water (Prevention and Control of Pollution) Act, 1974 (briefly referred to hereinafter as 'the Water Act') and Section

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31A of the Air (Prevention and Control of Pollution) Act, 1981 (briefly referred to hereinafter as 'the Air Act').

3. For the reasons assigned by us by a separate order dated 08.08.2023 passed in W.P.No.17179 of 2023, the composite order dated 21.06.2023 *vide* No.NLG-48-TSPCB/TF/HO/2023-441 passed by the Board is quashed and set aside and the operative portion of the order reads as under:

"12. For the afore-mentioned reasons, order dated 21.06.2023 passed by the Board cannot be sustained in the eye of law. Accordingly, it is quashed and set aside. The matter is remitted to the Board to consider the grounds taken by the petitioner in the explanation dated 02.06.2023. Needless to state that the Board shall also consider the fact that consent for operation was granted to the petitioner on 08.02.2023 as well as the fact that the petitioner was not a party to the order dated 17.01.2023 passed by National Green Tribunal in O.A.No.97 of 2021. The Board shall afford an opportunity of hearing to the petitioner and shall by a speaking order conclude the proceeding initiated in pursuance to show cause notice dated 22.05.2023. It is made clear that this Court has not expressed any opinion on merits of the matter."

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4. Accordingly, the Writ Petition is disposed of. There shall be no order as to costs.

As a sequel, miscellaneous applications pending, if any, in this Writ Petition, shall stand closed.

ALOK ARADHE, CJ

T. VINOD KUMAR, J

Date: 08.08.2023
KL

THE HON'BLE THE CHIEF JUSTICE ALOK ARADHE

AND

THE HON'BLE SRI JUSTICE T.VINOD KUMAR

WRIT PETITION No.18108 of 2023

ORDER: *(Per the Hon'ble the Chief Justice Alok Aradhe)*

Mr. P.Subash, learned counsel for the petitioner.

Mr. Kondaparthi Srinivas, learned Government Pleader for Industries and Commerce Department for respondent No.1.

Mr. Pranav Munigela, learned Additional Standing Counsel for respondent Nos.2 and 3.

2. The petitioner which is a bulk drug and intermediate drug manufacturing company in this petition has assailed the validity of the composite order dated 21.06.2023 *vide* No.NLG-96/TSPCB/TF/HO/2023-1134 passed by the Telangana State Pollution Control Board (briefly referred to hereinafter as 'the Board') in exercise of powers under Section 33A of the Water (Prevention and Control of Pollution) Act, 1974 (briefly referred to hereinafter as 'the Water Act') and Section

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31A of the Air (Prevention and Control of Pollution) Act, 1981 (briefly referred to hereinafter as 'the Air Act').

3. For the reasons assigned by us by a separate order dated 08.08.2023 passed in W.P.No.17179 of 2023, the composite order dated 21.06.2023 *vide* No.NLG-48-TSPCB/TF/HO/2023-441 passed by the Board is quashed and set aside and the operative portion of the order reads as under:

"12. For the afore-mentioned reasons, order dated 21.06.2023 passed by the Board cannot be sustained in the eye of law. Accordingly, it is quashed and set aside. The matter is remitted to the Board to consider the grounds taken by the petitioner in the explanation dated 02.06.2023. Needless to state that the Board shall also consider the fact that consent for operation was granted to the petitioner on 08.02.2023 as well as the fact that the petitioner was not a party to the order dated 17.01.2023 passed by National Green Tribunal in O.A.No.97 of 2021. The Board shall afford an opportunity of hearing to the petitioner and shall by a speaking order conclude the proceeding initiated in pursuance to show cause notice dated 22.05.2023. It is made clear that this Court has not expressed any opinion on merits of the matter."

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4. Accordingly, the Writ Petition is disposed of. There shall be no order as to costs.

As a sequel, miscellaneous applications pending, if any, in this Writ Petition, shall stand closed.

ALOK ARADHE, CJ

T. VINOD KUMAR, J

Date: 08.08.2023
KL

THE HON'BLE THE CHIEF JUSTICE ALOK ARADHE

AND

THE HON'BLE SRI JUSTICE T.VINOD KUMAR

WRIT PETITION No.19239 of 2023

ORDER: *(Per the Hon'ble the Chief Justice Alok Aradhe)*

Mr. P.Subash, learned counsel for the petitioner.

Mr. Kondaparthi Srinivas, learned Government Pleader for Industries and Commerce Department for respondent No.1.

Mr. Pranav Munigela, learned Additional Standing Counsel for respondent Nos.2 and 3.

2. The petitioner which is a bulk drug and intermediate drug manufacturing company in this petition has assailed the validity of the composite order dated 21.06.2023 *vide* No.NLG-50/TSPCB/TF/HO/2023-435 passed by the Telangana State Pollution Control Board (briefly referred to hereinafter as 'the Board') in exercise of powers under Section 33A of the Water (Prevention and Control of Pollution) Act, 1974 (briefly referred to hereinafter as 'the Water Act') and Section

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31A of the Air (Prevention and Control of Pollution) Act, 1981 (briefly referred to hereinafter as 'the Air Act').

3. For the reasons assigned by us by a separate order dated 08.08.2023 passed in W.P.No.17179 of 2023, the composite order dated 21.06.2023 *vide* No.NLG-48-TSPCB/TF/HO/2023-441 passed by the Board is quashed and set aside and the operative portion of the order reads as under:

"12. For the afore-mentioned reasons, order dated 21.06.2023 passed by the Board cannot be sustained in the eye of law. Accordingly, it is quashed and set aside. The matter is remitted to the Board to consider the grounds taken by the petitioner in the explanation dated 02.06.2023. Needless to state that the Board shall also consider the fact that consent for operation was granted to the petitioner on 08.02.2023 as well as the fact that the petitioner was not a party to the order dated 17.01.2023 passed by National Green Tribunal in O.A.No.97 of 2021. The Board shall afford an opportunity of hearing to the petitioner and shall by a speaking order conclude the proceeding initiated in pursuance to show cause notice dated 22.05.2023. It is made clear that this Court has not expressed any opinion on merits of the matter."

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4. Accordingly, the Writ Petition is disposed of. There shall be no order as to costs.

As a sequel, miscellaneous applications pending, if any, in this Writ Petition, shall stand closed.

ALOK ARADHE, CJ

T. VINOD KUMAR, J

Date: 08.08.2023
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THE HON'BLE THE CHIEF JUSTICE ALOK ARADHE

AND

THE HON'BLE SRI JUSTICE T.VINOD KUMAR

WRIT PETITION No.18213 of 2023

ORDER: *(Per the Hon'ble the Chief Justice Alok Aradhe)*

Mr. P.Subash, learned counsel for the petitioner.

Mr. Kondaparthi Srinivas, learned Government Pleader for Industries and Commerce Department for respondent No.1.

Mr. Pranav Munigela, learned Additional Standing Counsel for respondent Nos.2 and 3.

2. The petitioner which is a bulk drug and intermediate drug manufacturing company in this petition has assailed the validity of the composite order dated 21.06.2023 *vide* No.NLG-40/TSPCB/TF/HO/2023-1136 passed by the Telangana State Pollution Control Board (briefly referred to hereinafter as 'the Board') in exercise of powers under Section 33A of the Water (Prevention and Control of Pollution) Act, 1974 (briefly referred to hereinafter as 'the Water Act') and Section

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31A of the Air (Prevention and Control of Pollution) Act, 1981 (briefly referred to hereinafter as 'the Air Act').

3. For the reasons assigned by us by a separate order dated 08.08.2023 passed in W.P.No.17179 of 2023, the composite order dated 21.06.2023 *vide* No.NLG-48-TSPCB/TF/HO/2023-441 passed by the Board is quashed and set aside and the operative portion of the order reads as under:

"12. For the afore-mentioned reasons, order dated 21.06.2023 passed by the Board cannot be sustained in the eye of law. Accordingly, it is quashed and set aside. The matter is remitted to the Board to consider the grounds taken by the petitioner in the explanation dated 02.06.2023. Needless to state that the Board shall also consider the fact that consent for operation was granted to the petitioner on 08.02.2023 as well as the fact that the petitioner was not a party to the order dated 17.01.2023 passed by National Green Tribunal in O.A.No.97 of 2021. The Board shall afford an opportunity of hearing to the petitioner and shall by a speaking order conclude the proceeding initiated in pursuance to show cause notice dated 22.05.2023. It is made clear that this Court has not expressed any opinion on merits of the matter."

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4. Accordingly, the Writ Petition is disposed of. There shall be no order as to costs.

As a sequel, miscellaneous applications pending, if any, in this Writ Petition, shall stand closed.

ALOK ARADHE, CJ

T. VINOD KUMAR, J

Date: 08.08.2023

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THE HON'BLE THE CHIEF JUSTICE ALOK ARADHE

AND

THE HON'BLE SRI JUSTICE T.VINOD KUMAR

WRIT PETITION No.17179 of 2023

ORDER: *(Per the Hon'ble the Chief Justice Alok Aradhe)*

Mr. Ch.Samson Babu, learned counsel for the petitioner.

Mr. Gadi Praveen Kumar, learned Deputy Solicitor General of India for respondent No.1.

Ms. Akula Sunitha, learned Assistant Government Pleader attached to the office of learned Additional Advocate General for respondent No.2.

Mr. Pranav Munigela, learned Additional Standing Counsel for respondent Nos.3 and 4.

2. The petitioner which is a bulk drug and intermediate drug manufacturing company in this petition has assailed the validity of the composite order dated 21.06.2023 *vide* No.NLG-48-TSPCB/TF/HO/2023-441 passed by the Telangana State Pollution Control Board (briefly referred to hereinafter as 'the Board') in exercise of powers under Section

33A of the Water (Prevention and Control of Pollution) Act, 1974 (briefly referred to hereinafter as 'the Water Act') and Section 31A of the Air (Prevention and Control of Pollution) Act, 1981 (briefly referred to hereinafter as 'the Air Act').

3. Facts leading to filing of this petition briefly stated are that the petitioner as stated supra is a bulk drug and intermediate drug manufacturing company established in the year 2004. The company has its manufacturing unit at Dothigudem Village of Pochampally Mandal in Yadadri-Bhuvanagiri District, which was set up after obtaining environmental clearance from Union of India as well as consent orders for setting up and running the unit from other statutory bodies. The Board granted consent for operation to the petitioner on the ground that the petitioner complies with the provisions of the Water Act and the Air Act.

4. The petitioner was thereafter served with a show cause notice dated 22.05.2023 on the basis of an order dated 17.01.2023 passed by the National Green Tribunal, South Zone, Chennai in O.A.No.97 of 2021. The petitioner submitted an explanation on 02.06.2023 to the aforesaid show cause

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notice and stated that the petitioner is not a party to the proceeding in O.A.No.97 of 2021. In the explanation, the petitioner also disclosed that it is complying with the provisions of the Water Act and the Air Act. However, the Board by an order dated 21.06.2023 *vide* No.NLG-48-TSPCB/TF/HO/2023-441 passed a composite order under Section 33A of the Water Act and Section 31A of the Air Act, by which the petitioner was asked to pay compensation to the tune of Rs.77,70,000.00. In the aforesaid factual background, this petition has been filed.

5. Learned Senior Counsel for the petitioner has submitted that the writ petition filed against the composite order dated 21.06.2023 *vide* No.NLG-48-TSPCB/TF/HO/2023-441 passed by the Board in exercise of powers under Section 33A of the Water Act and Section 31A of the Air Act is maintainable. It is further submitted that the Board while passing the impugned order dated 21.06.2023 has neither considered the fact that it had granted consent for operation of the industry to the petitioner on 08.02.2023 nor the explanation furnished by the petitioner on 02.06.2023 has been considered. It is also urged that the Board ought to have appreciated that petitioner was not a party in the proceeding

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before the National Green Tribunal, on the basis of which show cause notice has been issued to the petitioner. It is therefore contended that impugned order be set aside and the matter be remitted afresh for consideration before the Board for decision afresh.

6. On the other hand, learned Additional Standing Counsel for respondent Nos.3 and 4-Board has supported the order passed by the Board.

7. We have considered the rival submissions made by learned counsel for the parties.

8. The issue with regard to availability of an alternative remedy under the provisions of the Water Act and the Air Act against a composite order passed by the Board in exercise of powers under Section 33A of the Water Act and Section 31A of the Air Act is no longer *res integra* and has been answered by Hon'ble Supreme Court in **Tamil Nadu Pollution Control Board v. Sterlite Industries (India) Limited and others**¹. Hon'ble Supreme Court in paras 36, 45 and 46 has held as under:

¹ (2019) 19 Supreme Court Cases 479

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"36. We have referred to the orders dated 12-4-2018, 23-5-2018, and 28-5-2018 passed by the TNPCB under Sections 33-A and 31-A of the Water Act and the Air Act respectively. At this juncture, it is important to state that Section 33-B of the Water Act and Section 31-B of the Air Act were both enacted on 18-10-2010, which is the very date on which the NGT Act came into force. What is important to note is that whereas Section 33-B(c) of the Water Act read with Section 16(c) of the NGT Act make it clear that directions issued under Section 33-A of the Water Act are appealable to the NGT, directions issued under Section 31-A of the Air Act are not so appealable. In fact, the statutory scheme is that directions given under Section 31-A of the Air Act are not appealable. This being the case, all the aforesaid orders, being composite orders issued under both the Water Act and the Air Act, it will not be possible to split the aforesaid orders and say that so far as they affect water pollution, they are appealable to the NGT, but so far as they affect air pollution, a suit or a writ petition would lie against such orders. Shri Sundaram's argument that these orders being substantially relatable to the Water Act would, therefore, not hold, as such orders are composite orders made *both* under the Water Act and the Air Act. Equally disingenuous is the reference to Section 14 of the NGT Act which only refers to the original jurisdiction of the NGT and not to its appellate jurisdiction. Also, to state generally

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that the subject-matter of environment lies with the NGT, is an argument of despair that must be dismissed for the reason that as held by us hereinabove, an appeal being a creature of statute, a statute either confers a right of appeal or it does not. In the present case, we have seen that so far as directions issued under Section 31-A of the Air Act are concerned, there is no right of appeal conferred by the Air Act read with the NGT Act. The ingenious argument made by Shri Sundaram that, in any case, a "direction" under Section 31-A of the Air Act is nothing but an "order", and would, therefore, be appealable as such under Section 31-B of the Air Act read with Section 16(f) of the NGT Act would drive a coach-and-four through the statutory scheme that has just been adverted to. We have seen how all the appellate proceedings to the NGT, whether under the Air Act, the Water Act, or the NGT Act have been brought into force on the same date. Whereas the identical power to give directions by the Board under the Water Act is appealable to the NGT, the same power to give directions by the Board under the Air Act is not so appealable. The absence of any mention of Section 31-A in Section 31-B of the Air Act, given the statutory scheme as aforesaid, makes it clear that even this argument must be rejected. Also, "directions" that are issued under Section 31-A of the Air Act are of a different quality from "orders" referred to in Section 31 of the same Act. Directions are issued in the exercise of powers and performance of functions

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under the Act and are not quasi-judicial in nature, whereas orders that are appealed against under Section 31 are quasi-judicial orders made, inter alia, under Section 21 of the Air Act. For this reason also, we cannot accept the aforesaid argument of Shri Sundaram. However, Shri Sundaram argued, with particular reference to the Explanation to Section 31-A of the Air Act that "directions" partake of the nature of "orders" when closure of any particular industry or stoppage of supply of electricity qua any single industry is made, and therefore, such directions are appealable as orders under Section 31 of the Air Act. This argument is also of no avail as Section 33-A of the Water Act contains an identical explanation to that contained in Section 31-A of the Air Act. Despite this, the legislative scheme, as stated hereinabove, is that so far as directions under the Water Act are concerned, they are appealable, but so far as directions under the Air Act are concerned, they are not appealable. Hence, reference made to *P. Ramanatha Aiyar's Law Lexicon* and *Black's Law Dictionary*, which state that in certain circumstances, orders are also directions and vice versa, would not apply to the present case, given the express statutory scheme. In this connection, Shri Sundaram cited *Kanhiya Lal Omar v. R.K. Trivedi* [*Kanhiya Lal Omar v. R.K. Trivedi*, (1985) 4 SCC 628], and relied upon para 17, where this Court held, referring to Article 324(1) of the Constitution of India, that a "direction" may be equated with a

specific or a general order. The context of Article 324 being wholly different, it is obvious that this authority also has no application, given the statutory scheme in the present case.

45. Equally, so far as the order dated 8-8-2013 [*Sterlite Industries (India) Ltd. v. T.N. Pollution Control Board*, 2013 SCC OnLine NGT 68] is concerned, we have seen how the NGT stated that the doctrine of necessity would take over if an appellate authority under the Act is not properly constituted so that no appeal can then be effectively preferred. This, again, is an argument that cannot be countenanced. If an appellate authority is either not yet constituted, or not properly constituted, a leapfrog appeal to the NGT cannot be countenanced. As has been held by us supra, the NGT is only conferred appellate jurisdiction from an order passed in exercise of first appeal. Where there is no such order, the NGT has no jurisdiction.

46. In conclusion, we are cognizant of the fact that the respondent's plant has been shut down since 9-4-2018. Since we have set aside the impugned judgments of the NGT on the ground of maintainability, the order dated 22-1-2019 passed by the TNPCB, being a consequential order, is also set aside. The respondents are relegated to the position that the six orders impugned before the NGT, dealt with by the impugned judgment dated 15-12-2018 [*Vedanta Ltd. v. State of T.N.*, 2018 SCC OnLine NGT 1239] and the order dated 29-3-2013, dealt with

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by the final judgment dated 8-8-2013 [*Sterlite Industries (India) Ltd. v. T.N. Pollution Control Board*, 2013 SCC OnLine NGT 68] , are alive and operative. Given the fact that we are setting aside the NGT judgments involved in these appeals on the ground of maintainability, we state that it will be open for the respondents to file a writ petition in the High Court against all the aforesaid orders. If such writ petition is filed, it will be open for the respondent to apply for interim reliefs considering that their plant has been shut down since 9-4-2018. Also, since their plant has been so shut down for a long period, and they are exporting a product which is an important import substitute, the respondent may apply to the Chief Justice of the High Court for expeditious hearing of the writ petition, which will be disposed of on merits notwithstanding the availability of an alternative remedy in the case of challenge to the 9-4-2018 order of the TNPCB. The appeals are disposed of accordingly.”

9. In view of aforesaid enunciation of law by Hon'ble Supreme Court, writ petition challenging the composite order dated 21.06.2023 *vide* No.NLG-48-TSPCB/TF/HO/2023-441 passed by the Board in exercise of powers under Section 33A of the Water Act and Section 31A of the Air Act is held to be maintainable.

10. We may now advert to the merits of the case.

11. Admittedly, the consent for operation of the manufacturing unit was granted to the petitioner by the Board by an order dated 08.02.2023. However, the show cause notice dated 22.05.2023 was issued to the petitioner on the basis of an order dated 17.01.2023 passed by National Green Tribunal in O.A.No.97 of 2021. Admittedly, the petitioner is not a party to the aforesaid proceeding. The petitioner submitted a detailed explanation on 02.06.2023. However, from close scrutiny of order dated 21.06.2023, it is evident that the explanation put forth by the petitioner has not been considered. The Board has neither adverted to the fact that it had granted consent for operation of the manufacturing unit to the petitioner on 08.02.2023 nor has adverted to the fact that the petitioner was not a party in the proceeding before National Green Tribunal, which lead to order dated 17.01.2023 passed in O.A.No.97 of 2021 by National Green Tribunal.

12. For the afore-mentioned reasons, order dated 21.06.2023 passed by the Board cannot be sustained in the eye of law. Accordingly, it is quashed and set aside. The matter is

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remitted to the Board to consider the grounds taken by the petitioner in the explanation dated 02.06.2023. Needless to state that the Board shall also consider the fact that consent for operation was granted to the petitioner on 08.02.2023 as well as the fact that the petitioner was not a party to the order dated 17.01.2023 passed by National Green Tribunal in O.A.No.97 of 2021. The Board shall afford an opportunity of hearing to the petitioner and shall by a speaking order conclude the proceeding initiated in pursuance to show cause notice dated 22.05.2023. It is made clear that this Court has not expressed any opinion on merits of the matter.

13. Accordingly, the Writ Petition is disposed of. There shall be no order as to costs.

As a sequel, miscellaneous applications pending, if any, in this Writ Petition, shall stand closed.

ALOK ARADHE, CJ

T. VINOD KUMAR, J

Date: 08.08.2023
KL

THE HON'BLE THE CHIEF JUSTICE ALOK ARADHE

AND

THE HON'BLE SRI JUSTICE T.VINOD KUMAR

WRIT PETITION No.19039 of 2023

ORDER: *(Per the Hon'ble the Chief Justice Alok Aradhe)*

Mr. P.Subash, learned counsel for the petitioner.

Mr. Kondaparthi Srinivas, learned Government Pleader for Industries and Commerce Department for respondent No.1.

Mr. Pranav Munigela, learned Additional Standing Counsel for respondent Nos.2 and 3.

2. The petitioner which is a bulk drug and intermediate drug manufacturing company in this petition has assailed the validity of the composite order dated 20.06.2023 *vide* No.NLG-50/TSPCB/TF/HO/2023-440 passed by the Telangana State Pollution Control Board (briefly referred to hereinafter as 'the Board') in exercise of powers under Section 33A of the Water (Prevention and Control of Pollution) Act, 1974 (briefly referred to hereinafter as 'the Water Act') and Section

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31A of the Air (Prevention and Control of Pollution) Act, 1981 (briefly referred to hereinafter as 'the Air Act').

3. For the reasons assigned by us by a separate order dated 08.08.2023 passed in W.P.No.17179 of 2023, the composite order dated 21.06.2023 *vide* No.NLG-48-TSPCB/TF/HO/2023-441 passed by the Board is quashed and set aside and the operative portion of the order reads as under:

"12. For the afore-mentioned reasons, order dated 21.06.2023 passed by the Board cannot be sustained in the eye of law. Accordingly, it is quashed and set aside. The matter is remitted to the Board to consider the grounds taken by the petitioner in the explanation dated 02.06.2023. Needless to state that the Board shall also consider the fact that consent for operation was granted to the petitioner on 08.02.2023 as well as the fact that the petitioner was not a party to the order dated 17.01.2023 passed by National Green Tribunal in O.A.No.97 of 2021. The Board shall afford an opportunity of hearing to the petitioner and shall by a speaking order conclude the proceeding initiated in pursuance to show cause notice dated 22.05.2023. It is made clear that this Court has not expressed any opinion on merits of the matter."

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4. Accordingly, the Writ Petition is disposed of. There shall be no order as to costs.

As a sequel, miscellaneous applications pending, if any, in this Writ Petition, shall stand closed.

ALOK ARADHE, CJ

T. VINOD KUMAR, J

Date: 08.08.2023

KL

THE HON'BLE THE CHIEF JUSTICE ALOK ARADHE

AND

THE HON'BLE SRI JUSTICE T.VINOD KUMAR

WRIT PETITION No.20623 of 2023

ORDER: *(Per the Hon'ble the Chief Justice Alok Aradhe)*

Mr. P.Nagendra Reddy, learned counsel for the petitioner.

2. In this writ petition, petitioner *inter alia* has assailed the validity of the order dated 21.06.2023 by which the Telangana State Pollution Control Board has issued directions under Section 33A of the Water (Prevention and Control of Pollution) Amendment Act, 1988, and under Section 31A of the Air (Prevention and Control of Pollution) Amendment Act, 1987.

3. Section 33B of the Water (Prevention and Control of Pollution) Act, 1974, deals with appeal to the National Green Tribunal, which is extracted below for the facilitation of reference:

33B. Appeal to National Green Tribunal - Any person aggrieved by,—

(a) an order or decision of the appellate authority under section 28, made on or after the commencement of the National Green Tribunal Act, 2010; or

(b) an order passed by the State Government under section 29, on or after the commencement of the National Green Tribunal Act, 2010; or

(c) directions issued under section 33A by a Board, on or after the commencement of the National Green Tribunal Act, 2010, may file an appeal to the National Green Tribunal established under section 3 of the National Green Tribunal Act, 2010, in accordance with the provisions of that Act.

4. Similarly, Section 31B of the Air (Prevention and Control of Pollution) Act, 1981, is extracted below, which provides for an appeal to the National Green Tribunal:

31B. Appeal to National Green Tribunal - Any person aggrieved by an order or decision of the Appellate Authority under section 31, made on or after the commencement of the National Green Tribunal Act, 2010, may file an appeal to the National Green Tribunal established under section 3 of the National Green Tribunal Act, 2010, in accordance with the provisions of that Act.

5. Thus, it is evident that an appeal under Section 33B of the Water (Prevention and Control of Pollution) Act, 1974, and Section 31B of the Air (Prevention and Control of Pollution) Act, 1981, lies before the National Green Tribunal.

6. It is well settled in law that where the statute creates the right and provides for a forum of redressal of grievances of the parties, the parties should resort to that forum and the extraordinary jurisdiction of this Court under Article 226 of the Constitution of India cannot be permitted to be invoked (See **Hameed Kunju v. Nazim¹** and **Authorized Officer, State Bank of Travancore v. Mathew K.C²**). It is neither the case of the petitioner that the alternative remedy provided by the statute is not efficacious, nor is it the case of the petitioner that its case falls in any of the exceptions as carved out by the Hon'ble Supreme Court in **Whirlpool Corporation v. Registrar of Trade Marks³**.

¹ (2017) 8 SCC 611

² (2018) 3 SCC 85

³ (1998) 8 SCC 1

7. Therefore, we are not inclined to entertain this writ petition. However, the petitioner is granted the liberty to take recourse to the remedy of statutory appeal available to him. Needless to state that in case the petitioner files an appeal within a period of two weeks, the National Green Tribunal shall entertain the appeal preferred by the petitioner.

8. Writ petition is accordingly disposed of.

Miscellaneous applications pending, if any, shall stand closed. However, there shall be no order as to costs.

ALOK ARADHE, CJ

T.VINOD KUMAR, J

07.08.2023
vs