

BEFORE THE HON'BLE NATIONAL GREEN TRIBUNAL,
SOUTHERN ZONE AT CHENNAI

Original Application No. 47 of 2023

Suresh,
S/o Panchiyappan,
6/36, Alamelupuram, Paddireddipatti,
Dharmapuri, Tamil Nadu – 636905
Ph: 9566254546
Email: Yogeshwaranadv@gmail.com

...Applicants

Vs

The Tamil Nadu Pollution Control Board,
Rep. by its Chairperson,
76, Anna Salai, Guindy Industrial Estate,
Guindy, Chennai - 600 032 & ors.

...Respondents

INDEX

S.No	Description	Page No.
1.	ADDITIONAL REPORT FILED ON BEHALF OF THE FIRST RESPONDENT - TAMIL NADU POLLUTION CONTROL BOARD.	1 - 12
2	Annexure - I to III	13 - 25



Filed by
Thiru.S. Sai Sathya Jith,
Advocate, Chennai.

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...Applicant

Vs

1. The Tamil Nadu Pollution Control Board,
Rep. by its Chairperson,
76, Anna Salai, Guindy Industrial Estate,
Guindy, Chennai - 600 032.
Phone No.: 04422353134
Email: ssjtnpcb@gmail.com
2. The Executive Engineer,
Water Resource Department,
Public Works Department,
Upper pennaiyar Division,
Dharmapuri –636 705.
Phone No: Not known
Email: Not known
3. The Executive Engineer,
Ground water Division,
Water Resources Department, PWD, Vellore.
Phone No: Not known
Email: Not known.
4. The Assistant Engineer,
Irrigation Department, Vaniyaru Dam,
Public Works Department,
Pappireddipatti, Dharmapuri.
Phone No: Not known
Email: Not known
5. The District Collector,
1st Floor, Main Building,
District Collectorate,
Dharmapuri - 636 705
Phone: 043 4223 0500
E-Mail: collrdpi@nic.in

05/11/24

JOINT CHIEF ENVIRONMENTAL ENGINEER
TAMIL NADU POLLUTION CONTROL BOARD
No.76, MOUNT SALAI, GUINDY,
CHENNAI-600 032.

6. M/s. Varalakshmi Starch Industries (P) Ltd,
Rep. by its Director A. Vinoth Kumar,
"Varalakshmi Tower", No. 127/1,
2nd Floor, Gandhi Road, Salem - 636 007.
Phone No: Not known
Email: office@varalakshmistarch.com.

...Respondents.

ADDITIONAL REPORT FILED ON BEHALF OF THE FIRST RESPONDENT - TAMIL NADU POLLUTION CONTROL BOARD.

I, R.Sarasavani, D/o. Thiru.J.Raghavan, Hindu, aged about 59 years, having my office at 76, Mount Salai, Guindy, Chennai-600032, do hereby solemnly affirm and sincerely state as follows:-

1. I am the Joint Chief Environmental Engineer, Tamil Nadu Pollution Control Board (TNPCB), Chennai -600 032, and filing this status report on behalf of the first Respondent Tamil Nadu Pollution Control Board (TNPCB) and as such I am well acquainted with the facts of the case from the records.

2. It is respectfully submitted that the applicant herein filed this application with the prayer to:

- a. Direct closure of the 6th respondent Industry.
- b. Direct Respondents 2 to 5 to forthwith fill in and close the illegal tank / well-constructed by the 6th respondent and to impose penalty on the 6th respondent for illegal abstraction and utilisation of water for its industrial purposes.
- c. Direct the 1st Respondent to assess the extent of contamination to the ground water and frame a scheme for remediation and for awarding compensation to the affected farmers and impose penalty on the 6th respondent for its violation, apart from initiating prosecution.

3. It is respectfully submitted that the reply affidavit filed by the first respondent on 01.08.2023 before the Hon'ble Tribunal may be considered as part and parcel of this status report.

4. It is respectfully submitted that the Board has issued a direction for closure to the unit and disconnection of power supply under the Section 33A

05/11/24
JOINT CHIEF ENVIRONMENTAL ENGINEER
TAMIL NADU POLLUTION CONTROL BOARD
No.76, MOUNT SALAI, GUINDY,
CHENNAI-600 032.

of Water (Prevention and Control of Pollution) vide Proceedings dated 08.11.2022 for the reason stated therein.

5. It is submitted that during the meeting held on 09.11.2022 before the Hon'ble Legislative Assembly's Petition Committee, a Complaint Petition was received from the appellant, vide Petition No. 6988 against the 6th respondent unit M/s. Varalakshmi Starch industries.

6. It is respectfully submitted that as directed by the Hon'ble Legislative Assembly's Petition Committee, District Level Committee has been formed vide Procs. dated 18.11.2022 under the Chairmanship of the District Revenue Officer with 12 members to inspect the unit and to submit the report to the Petition Committee.

1.	District Revenue Officer, Dharmapuri	Chairman
2.	Joint Director, Agriculture Department, Dharmapuri	Member
3.	Executive Engineer, Public Works Department, WRO Division, Dharmapuri	Member
4.	Executive Engineer, Public Works Department, Ground Water Division, Vellore	Member
5.	Revenue Divisional Officer, Harur	Member
6.	Assistant Director, Survey Department, Dharmapuri	Member
7.	Assistant Director, Fisheries Department, Dharmapuri	Member
8.	Joint Director, Industry Safety and Health, Dharmapuri	Member
9.	Executive Engineer, TWAD Board, Dharmapuri	Member
10.	District Designated Officer, Food safety Department, Dharmapuri	Member
11.	District Environmental Engineer, Tamil Nadu Pollution Control Board, Dharmapuri	Member / Convener
12.	Joint Director, Health Dharmapuri	Member


 JOINT CHIEF ENVIRONMENTAL ENGINEER
 TAMIL NADU POLLUTION CONTROL BOARD
 No.76, MOUNT SALAI, GUINDY,
 CHENNAI-600 032.

7. It is respectfully submitted that the Executive Engineer, Upper Pennaiyar Basin, Water Resources Department, Dharmapuri has submitted the report before the Hon'ble Legislative Assembly's Petition Committee on 12.12.2022 recommending to close down the Rain Water Harvesting pond located inside the unit. Further, it is submitted that, the construction of Rain Water Harvesting (RWH) ponds/extraction of water from the nearby river and extraction of Ground water from open well/bore well comes under the purview of the Water Resource Department and Groundwater Division of Public Works Department respectively.

8. It is respectfully submitted that earlier the unit has submitted NOC obtained from the Public Works Department (PWD), Ground Water Division, Vellore vide Lr. No.AGP/F555/998m/Vlr/dated.03.12.2008 stating that "*there is 'No objection' from our department to give clearance for taking stored harvested rainwater from your collection pond for running the industry throughout the year. However, this NOC is not for tapping of ground water, if any by your industry*". Based, on the above, the Consent order was issued to the unit.

9. It is respectfully submitted that the unit is carrying out manufacturing of starch from tapioca and maize. Tapioca crushing is a seasonal operation. Since it is off-season, the crushing activity was in operation during inspection on 20.08.2024 by the officials of the O/o. DEE, Dharmapuri.

10. It is respectfully submitted that the unit was inspected by officials of the O/o. DEE, Dharmapuri on 26.09.2024 and 08.10.2024 and during inspection the following observations were made

- a. The unit was in operation and it was informed by the unit that they have commenced tapioca crushing operation from 25.08.2024 onwards.
- b. The Effluent treatment plant was in operation.
- c. The present status of compliance of the Board's Direction vide Proc. dated 16.02.2023 is submitted below

Man 05/11/24

JOINT CHIEF ENVIRONMENTAL ENGINEER
TAMIL NADU POLLUTION CONTROL BOARD
No.76, MOUNT SALAI, GUINDY,
CHENNAI-600 032.

S. No	TNPCB directions dated 16.02.2023	Present Status of Compliance as on 08.10.2024	Remarks
1	The unit shall furnish a time bound action plan for completing the ETP revamping works, so as to satisfy the treated trade effluent standards prescribed by the Board within a month's time	<p>It was noticed that the treated effluent discharged in the green belt area is having TDS 2560 ppm (using portable meter), which exceeds the standards prescribed by the Board.</p> <p>The samples collected from the ETP on 26.09.2024 & 08.10.2024 were sent for Analysis and RoA for the same is awaited.</p> <p>The Consolidated RoA of the twelve samples collected at clarifier outlet for the period from Dec 2022 – April 2024 (i.e) after the issue of direction for closure & disconnection of power supply to the unit is enclosed vide Annexure-I.</p> <p>The RoA reveals that the parameters such as TSS in one occasion, TDS & Chloride in two occasions, BOD in three occasion and COD in four occasions exceeded the standards prescribed by the Board.</p> <p>Further, the unit in its reply letter dated 02.03.2023 for the Board's Direction dated 16.02.2023 has stated as follows</p> <p><i>“.... We had already voluntarily commenced installation of a secondary Treatment Plant as an extension to the existing ETP by installing Membrane Bioreactor Plant....”</i></p> <p>Also, the unit in its letter dated 01.01.2024, has stated that</p> <p><i>“.... We have voluntarily, without the insistence of TNPCB also imported and installed a high-tech Membrane Bioreactor (MBR)</i></p>	Not complied


 JOINT CHIEF ENVIRONMENTAL ENGINEER
 TAMIL NADU POLLUTION CONTROL BOARD
 No.76, MOUNT SALAI, GUINDY,
 CHENNAI-600 032.

		<p><i>technology as an extension (tertiary treatment) to the existing ETP....”</i></p> <p>But, the unit in its letter dated 25.04.2024 has changed its stand and stated that</p> <p><i>“The MBR plant is not in the ETP & it is an experimental plant for re-use of wastewater in our industry for which it is not included in the ETP”.</i></p> <p>In this regard, it is submitted that the unit has not clearly stated the purpose of MBR system provided. Further it has not maintained any logbook to ensure the continuous operation of the treatment components.</p> <p>Also, the unit has to ensure the discharge of treated effluent only through the EMFM provided so as to have accountability of the trade effluent generated, treated and disposed.</p>	
2	The unit shall furnish a time bound action plan to replace all the Seemai Karuvelam trees in the premises with the native species as recommended by the Agriculture Department along with the proposal for safe disposal of entire quantity of treated effluent with adequate green belt area within 15 days.	<p>The unit in its letter dated 01.01.2024 has informed that Seemai Karuvelam trees are removed in about 14 Acres in 30 Acres of land and replanted with native species in about 9 Acres land.</p> <p>During inspection on 26.09.2024 & 08.10.2024, the unit is in the process of removing seemaikaruvelam trees and it was observed that the unit has replanted 9 Acres of greenbelt area with native species.</p> <p>Further, in the layout of the Greenbelt area furnished by the unit it has mentioned that the removal of Seemaikaruvelam trees will be</p>	Partially complied

dar 05/11/24

JOINT CHIEF ENVIRONMENTAL ENGINEER
TAMIL NADU POLLUTION CONTROL BOARD
No.76, MOUNT SALAI, GUINDY,
CHENNAI-600 032.

		<p>completed before 2028 in a phased manner.</p> <p>However, the unit has not furnished time bound action plan for the commencement and completion of planting tree saplings to replace all the SeemaiKaruvellam trees with the native species along with the proposal for safe disposal of entire quantity of treated effluent.</p>	
3	The unit shall furnish the layout of the premises marking the greenbelt area that are being maintained for utilization of treated effluent along with the plantation details such as number of plants, name of the plants species, plantation area etc. within 15 days	The unit has furnished the layout of the premises marking the green belt area for utilization of treated effluent. However, it has not furnished the plantation details of fresh tree saplings such as number of plants, name of the plants species, plantation area etc.	Partially complied
4	The unit shall cover the storage area of wet tapioca thippy by providing a shed within a month's time	The unit has provided separate shed to store the wet tapioca thippy.	Complied
5	The unit shall conduct water and wastewater audit through reputed institution like Anna University, Chennai/IFT Madras and furnish report to the Board. The time bound action plan for the same shall be furnished within a month's time, as the unit has made payment to the Anna University, Chennai to carry out ETP Adequacy study only and not for the water and wastewater audit as directed	<p>The unit has submitted the adequacy report of ETP obtained from the Anna University, Chennai.</p> <p>The unit in its letter dated 11.07.2023 has informed that</p> <p><i>"the Project given to Anna university to conduct water audit, waste water audit and ground water quality study they have raised demand that demand also we paid. The project will be completed within in six months"</i></p> <p>Now the unit vide letter dated</p>	Not complied

da 05/11/24

JOINT CHIEF ENVIRONMENTAL ENGINEER
TAMIL NADU POLLUTION CONTROL BOARD
No.76, MOUNT SALAI, GUINDY,
CHENNAI-600 032.

	by the Board vide proceeding dated 17.10.2022	25.04.2024 stated that	
6	The unit shall conduct ground water quality study through reputed institution like Anna university, Chennai/IIT Madras in the green belt areas that are being maintained utilizing the treated effluent and furnish the report to the Board within a month's time.	<p><i>"the Anna University wants access to our entire production plant apart from the ETP and wants to inspect stage wise of our production plant which requires us to allow then access to our production machineries and production technology and knowhow. Since we fear that allowing third party access to our production unit will compromise our technology knowhow, the audit is held up."</i></p> <p>Therefore, the unit has not yet conducted the water and wastewater audit and ground water quality study in the green belt areas as directed.</p>	Not complied
7	The unit shall provide adequate piezometric (monitoring wells) in the green belt area to monitor the ground water quality and furnish the report to the TNPCB regularly in view of repeated complaint received. An action plan shall be submitted within a month's time.	<p>The unit has provided Piezometric (monitoring) wells in the green belt areas to monitor the ground water quality. During inspection on 26.09.2024 & 08.10.2024, it was observed that no water was present in the piezometric wells to monitor the quality of the water.</p> <p>The unit has not provided piezometric wells of adequate depth and not provided piezometric well at north-eastern side of the green belt area, where the allegation of contamination of groundwater was raised by the complainant.</p> <p>However, samples of ground water from the bore wells and open wells located in and around the unit's premises were collected on 16.05.2023 &</p>	Not complied

25/11/24

JOINT CHIEF ENVIRONMENTAL ENGINEER
TAMIL NADU POLLUTION CONTROL BOARD
No.76, MOUNT SALAI, GUINDY,
CHENNAI-600 032.

		<p>29.05.2024 to assess the quality.</p> <p>RoA of the Ground water samples collected (from the open well/bore well) in and around the unit are enclosed vide Annexure II.</p> <p>RoA of the samples collected on 16.05.2023 reveals that the parameters such as TDS & Chloride in the range value between 1024-16610 mg/L & 370-7998 mg/L respectively.</p> <p>RoA of the samples collected on 29.05.2024 reveals that the parameters such as TDS & chloride in the range value between 304-5940 mg/L & 15-3200 mg/L respectively.</p> <p>For continuous monitoring of impact of effluent utilized for growing trees in the green belt area, the unit has to provide adequate depth of Piezometric (monitoring) wells in the green belt area so as to enable to collect samples and furnish the RoA to the TNPCB regularly. However, the unit has not submitted any action plan for the same as per the Board's direction dated 16.02.2023.</p>	
8	<p>The unit shall stop discharging treated / untreated trade effluent through the outfall located near ETP area into the Peeniar canal immediately and shall ensure that there is no access for the treated/untreated trade effluent to nearby water bodies, outside the premises either directly and indirectly. The action taken in this regard shall be reported to the Board within a week's time.</p>	<p>During inspection of the Board's committee on 27.12.2022, an outfall was noticed near ETP area and the sample of water was collected for analysis. The ROA of the water sample revealed that the parameters such as BOD and COD exceeded the inland surface water standards prescribed by the Board.</p> <p>However, during joint inspection of the said outfall on 08.06.2023 by the AE, TNPCB along with the AE, PWD, WRD, the pipe (outfall) was found removed.</p>	Complied


 05/11/24
 JOINT CHIEF ENVIRONMENTAL ENGINEER
 TAMIL NADU POLLUTION CONTROL BOARD
 No.76, MOUNT SALAI, GUINDY,
 CHENNAI-600 032.

		During inspection of the unit on 26.09.2024 & 08.10.2024, the same was ensured and found that there was no outfall observed in the said location.	
9	The unit shall dewater the stagnation of water in the pit provided for the proposed anaerobic reactors immediately and shall maintain the sludge drying beds properly and shall report to the Board within a week's time.	<p>During inspection on 26.09.2024 & 08.10.2024, there was stagnation of water noticed in the huge earthen pit provided for the proposed anaerobic reactors.</p> <p>Also, it was noticed that the stagnated water in the earthen pit is having TDS 1510 ppm (using portable meter). Also, the samples were collected from the pit and sent for Analysis.</p> <p>RoA of the samples collected in the proposed anaerobic pits on 31.08.2023 and 20.02.2024 is enclosed vide Annexure III.</p> <p>The RoA of the samples collected from the above pit on 31.08.2023 and 20.02.2024 reveals that the TDS levels were 2288 mg/lit & 844 mg/lit respectively, which indicates that there is a chance of mixing of effluent in the above pit.</p> <p>Furthermore, the sludge removed from the sludge drying beds were disposed adjacent to the ETP area on open land in a haphazard manner. (photocopy enclosed).</p>	Not complied
10	The unit shall check the stability of the ETP, by engaging reputed institution like Anna University, Chennai/IIT Madras and furnish the report to the TNPCB within a month's time.	The unit has furnished the report on " <i>Assessment of the structural condition and strength of structure of various treatment units</i> " except Anaerobic lagoon carried out by the Department of Civil Engineering, Government College of Engineering, Salem.	Complied

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TAMIL NADU POLLUTION CONTROL BOARD
No.76, MOUNT SALAI, GUINDY,
CHENNAI-600 032.

11	The unit shall install/Maintain Electromagnetic flow meter with computer recording arrangement at the inlet and outlet of the ETP within a month's time and shall furnish monthly report to the Board.	During inspection on 26.09.2024 & 08.10.2024, it was observed that the unit has provided two Electromagnetic flow meter at the UASBR inlet and one at the MBR outlet with computer recording arrangement. The unit has not maintained any logbook so far to ensure the continuous operation of ETP. The unit in its letter dated 01.01.2024 and 25.04.2024, has furnished flow readings for the period from October to December 2023 and January to March 2024 respectively in editable form only.	Not Complied
12	In order to ensure the compliance of all the above said directions 1 to 11, the unit shall furnish a Bank Guarantee for Rs.50 Lakhs valid for one year to the TNPCB within a month's time (Format enclosed)	The unit has not furnished bank guarantee of Rs. 50 Lakhs as directed. Instead, it has <i>requested to waive off the Bank Guarantee for Rs. 50 Lakhs, since the unit has invested 420 lakhs in setting up of secondary treatment plant.</i> However, the unit in its letter dated 25.04.2024 has changed its stand and stated that <i>"The MBR plant is not in the ETP & it is an experimental plant for re-use of wastewater in our industry for which it is not included in the ETP"</i>	Not complied
13	The unit shall ensure the compliance of all the above said conditions and furnish the compliance report to the Board so as to examine the issue of renewal of consent to the unit	<ul style="list-style-type: none"> • Complied with the directions in Serial No-,8,10 • Partially Complied directions in Serial No - 3 • Not Complied Directions in Serial No.- 1,2,5,6,7,9,11,12. 	


 JOINT CHIEF ENVIRONMENTAL ENGINEER
 TAMIL NADU POLLUTION CONTROL BOARD
 No.76, MOUNT SALAI, GUINDY,
 CHENNAI-600 032.

Therefore, it is humbly prayed that this Hon'ble National Green Tribunal may be pleased to pass such further order or other orders as this Hon'ble Tribunal may deem fit and proper in the facts and circumstance of this case and thus render justice.

R.Sar
05/11/24

JOINT CHIEF ENVIRONMENTAL ENGINEER
TAMIL NADU POLLUTION CONTROL BOARD
No.76, MOUNT SALAI, GUINDY,
CHENNAI-600 032.

VERIFICATION

I, R.Sarasavani, D/o. Thiru.J.Ragavan, working as Joint Chief Environmental Engineer, having office at No. 76, Mount Salai, Guindy, Chennai – 32, do hereby submit that the above contents are true to the best of my knowledge and belief through records.

R.Sar
05/11/24

JOINT CHIEF ENVIRONMENTAL ENGINEER
TAMIL NADU POLLUTION CONTROL BOARD
No.76, MOUNT SALAI, GUINDY,
CHENNAI-600 032.

M/s.Varalakshmi Starch Industries Pvt. Ltd-RoA of the samples collected at the Clarifier Outlet

S. No	Parameters	Discharge standards	unit	27.12. 2022	19.01. 2023	23.02. 2023	31.03. 2023	19.09. 2023	13.10. 2023	27.11. 2023	29.12. 2023	31.01. 2024	20.02. 2024	22.03. 2024	26.04. 2024
1	PH	5.5-9	Number	7.6	8.06	8	8.91	7.88	7.86	7.67	7.79	7.58	7.82	8.06	7.70
2	TSS	100	mg/l	564	44	68	12	32	48	28	36	4	12	32	60
3	TDS	2100	mg/l	3016 (FDS)	856	1396	1452	1988	2936	1392	568	884	892	1616	1472
4	Chlorides	1000	mg/l	350	145	300	360	625	1020	508	105	1715	215	580	350
5	Sulphate	1000	mg/l	-	<5	40	<5	87	83	52	25	13	62	<5	143
6	Oil & Grease	10	mg/l	-	8	12	<3	-	-	-	-	-	-	-	-
7	BOD	30	mg/l	352	46	81	18	6	24	16	8	14	24	16	24
8	COD	250	mg/l	824	256	320	368	96	88	128	128	120	120	176	196
9	Ammonical Nitrogen	50	mg/l	-	11.2	3.92	2.8	-	1.68	Not performed	0.56	1.12	0.56	0.56	1.12

10	Cyanide	0.2	mg/l	-	<0.08	<0.08	<0.08	<0.08	<0.008	Not performed	<0.08	<0.008	<0.008	<0.008	<0.008
11	Total Kjeldahl Nitrogen	100	mg/l	350.26	33.6	12.32	8.4	5.04	3.36	Not performed	1.68	3.36	1.68	1.68	4.48
12	Total Hardness as CaCO ₃	-	-	-	-	-	-	620	1150	620	370	290	280	480	360
13	% Sodium	-	-	-	-	-	-	46	-	34	35	32	30	-	-
14	Nitrate Nitrogen as NO ₃	-	-	-	-	-	-	-	0.227	0.778	0.389	9.535	10.368	1.26	8.06
15	SAR	-	-	-	-	-	-	-	-	-	-	2.26	-	-	-
16	Calcium	-	-	-	-	-	-	-	100	-	-	-	32	32	28
17	Magnesium	-	-	-	-	-	-	-	290	-	-	-	49	97	70
18	Alkalinity as CaCo ₃	-	-	-	-	-	-	-	672	-	-	-	292	692	308

Ground Water Sample collected inside and outside the unit on 16.05.2023

S. No	Parameter	Drinking water standards		16.05.2023										
				Open Well-1 (Lat:11.8993 Long:78.3787)	Open Well-2 (Lat:11.8982 Long:78.3786)	Open Well-3 (Lat:11.8990 Long:78.3777)	Bore well-1 (Lat:11.8982 Long:78.3786)	Bore well 2 near open well 1 (Lat:11.8965 Long:78.7486)	Stagnated water near open well 3 (Lat:11.8990 Long:78.3777)	Kannayiram well (Lat: 11.9019 Long: 78.3789)	Mani well (Lat: 11.9018, Long: 78.3766)	Venkatesan well (Lat: 11.9027 Long: 78.3789)	Nagaraj well (Lat: 11.9014 Long: 78.3789)	Nehru well (Lat: 11.9016, Long: 78.3799)
				Acceptable limit	Permissible limit	(within the premises)						(Outside the premises)		
1	pH	6.5-8.5	No relaxation	7.38	8.38	8.44	7.65	7.52	8.68	7.8	8.17	7.8	8.07	8.1
2	TDS	500	2000	9324	8456	4396	1024	7708	2340	9164	3252	4408	7164	16610
3	Chloride	250	1000	4199	4249	1874	370	3299	950	4349	1425	2074	3399	7998
4	Sulphates	200	400	80	54	64	<5	89	-	7	<5	<5	9	45
6	BOD	30 (Discharge standards)		<2	3	<2	<2	2.4	6	<2	<2	2.4	2.7	2.1
7	COD	250 (Discharge standards)		64	64	64	72	144	128	64	48	88	72	72
8	Fluoride	1	1.5	0.505	1.65	0.538	0.316	0.922	-	0.883	0.538	0.2	0.922	0.966
9	Alkalinity	200	600	656	388	628	240	696	-	260	324	364	376	932
10	Total Hardness	200	600	3020	1820	1320	423	2760	640	2960	1140	1240	2140	4520
11	Calcium	75	200	441	136	128	84	417	-	513	152	192	297	625

12	Magnesium	30	100	467	360	243	58	418	122	408	185	185	340	719
13	Sodium			737	940	769	146	831	28%	744	344	374	877	1695
14	Potassium			30	10	14	12	72	-	6	3	8	4	11
15	Iron Total	0.3	No relaxation	<0.2	<0.2	<0.2	<0.2	<0.2	-	<0.2	<0.2	<0.2	<0.2	<0.2
16	Total Kjeldahal Nitrogen	100 (Discharge standards)		3.36	3.92	3.36	3.36	3.92	5.04	3.36	3.36	3.92	3.92	3.92
17	Ph. Alkalinity			4	56	68	20	4	-	20	32	20	28	48
18	Ammonical Nitrogen	0.5	No relaxation	1.12	1.68	1.12	1.12	1.68	1.68	1.12	1.12	1.68	1.68	1.68
19	Cyanide	0.05	No relaxation						<0.08					

Ground water sample collected outside the unit on 28.07.2023

S.No	Parameters	Drinking water standards		Outside the premises				
		Acceptable limit	Permissible limit	Thiru.Pari Open Well 11.894265, 78.372107	Thiru.Jothibabu, Thiru.Gopinath Borewell Well 11.899395, 78.371252	Thiru.Jothibabu, Thiru.Gopinath Open Well 11.898272, 78.372486	Thiru.Kaviarasu, Open Well 11.892635, 78.375317	Thiru.Kanan open Well 11.897552, 78.380113
1	Turbidity	1	5	0.21	0.16	0.16	0.14	0.12
2	pH	6.5-8.5	No relaxation	7.34	7.08	7.28	7.78	7.33
3	TDS	500	2000	1388	2068	1808	1604	1088
4	Total Hardness as CaCO ₃	200	600	580	610	400	450	410
5	Chloride as Cl	250	1000	390	750	500	400	230
6	Sulphates as SO ₄	200	400	94	121	102	90	68
7	Ph.Compounds	0.001	0.002	<0.01	<0.01	<0.01	<0.01	<0.01
8	Nitrate Nitrogen as NO ₃	45	No relaxation	0.108	0.086	0.086	0.078	0.054
9	Magnesium as Mg	30	100	102	97	66	83	63
10	Fluoride as F	1	1.5	0.672	0.005	0.883	0.7	0.75
11	Ammonical Nitrogen as NH ₃ N			1.12	1.12	1.12	1.12	1.12
12	Clacium as Ca	75	200	64	84	52	44	60
13	IronTotal as Fe	0.3	No relaxation	<0.2	<0.2	<0.2	<0.2	<0.2
14	Alkalinity as CaCO ₃	200	600	304	284	318	260	242
15	Manganese	0.1	0.3	<0.1	<0.1	<0.1	<0.1	<0.1
16	copper	0.05	1.5	<0.1	<0.1	<0.1	<0.1	0.1184
17	Zinc	5	15	0.036	<0.03	0.0537	<0.03	0.0935
18	Total Residual Chlorine	-	-	<0.1	<0.1	<0.1	<0.1	<0.1
19	Boron	0.5	1	<0.002	<0.002	<0.002	<0.002	<0.002

Ground water sample collected inside the premises on 20.02.2024

S.No	Parameters	Drinking water standards		Inside the premises
		Acceptable limit	Permissible limit	Bore Well-1 (Lat: 11.8982, Long:78.33786)
1	Colour	5	15	<5
2	Turbidity	1	5	<1
3	pH	6.5-8.5	No relaxation	7.89
4	TSS	-	-	8
5	TDS	500	2000	1060
6	Chloride as Cl	250	1000	445
7	Sulphates as SO ₄	200	400	114
8	Ph.Compounds	0.001	0.002	<0.01
9	Ammonical Nitrogen as NH ₃ N	-	-	0.56
10	Nitrate Nitrogen as NO ₃	45	No relaxation	0.76
11	% Sodium	-	-	35
12	Total Hardness as CaCO ₃			170
13	Clacium as Ca	75	200	32
14	Magnesium as Mg	30	100	22
15	SAR	-	-	1.58
16	Fluoride as F	1	1.5	0.072
17	Alkalinity as CaCO ₃	200	600	132
18	IronTotal as Fe	0.3	No relaxation	<0.05
19	Boron	0.5	1	<0.002
20	Free Residual Chlorine	0.2	1	***
21	copper	0.05	1.5	<0.1
22	Zinc	5	15	<0.03
23	Manganese	0.1	0.3	<0.1
24	Aluminium	0.03	0.2	<0.006
25	Barium	0.7	No relaxation	***

***- Not Performed

Ground Water Sample collected on 29.05.2024													
S.No	Parameters	Drinking water standards		29.05.2024									
				Open Well-1 (Lat:11.8993 Long:78.3787)	Open Well-2 (Lat:11.8982 Long:78.3786)	Open Well-3 (Lat:11.8990, Long:78.3777)	Bore well-1 (Lat:11.8982 Long:78.3786)	Mohan well (Lat:11.901287, Long:78.374927)	Kannayiram well (Lat: 11.9019 Long: 78.3789)	Mani well (Lat: 11.9018, Long: 78.3766)	Venkatesan well (Lat: 11.9027 Long: 78.3789)	Nagaraj well (Lat: 11.9014 Long: 78.3789)	Nehru well (Lat: 11.9016, Long: 78.3799)
		Acceptable limit	Permissible limit	(within the premises)					(Outside the premises)				
1	Colour	5	15	<5.0	<5.0	<5.0	<5.0	5	<5.0	<5.0	10	<5.0	<5.0
2	Turbidity	1	5	<1.0	<1.0	<1.0	<1.0	1.05	1.24	1.24	1.74	1	1.22
3	pH	6.5-8.5	No relaxation	8.4	7.94	7.86	7.61	8.05	7.13	7.61	7.32	7.35	7.05
4	TSS			8	8	8	4	12	16	12	16	12	16
5	TDS	500	2000	3964	2708	3496	304	1164	3860	2780	2056	4736	5940
6	Chloride	250	1000	1100	1650	1850	15	245	1400	890	1160	2300	3200
7	Sulphates	200	400	140	189	116	6	21	77	58	43	106	72
8	Total Phosphate	-	-	0.36	0.458	0.39	0.297	0.363	0.701	0.39	0.458	0.537	0.583
9	Ph. Components	0.001	0.002	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
10	Ammonical Nitrogen	0.5	No relaxation	1.12	1.12	1.12	0.56	0.56	1.12	0.56	1.12	0.56	1.12
11	Total Kjeldahal Nitrogen	100 (Discharge standards)		2.8	2.24	2.24	1.12	1.68	2.24	1.68	2.24	1.68	2.8
12	Total Nitrogen	-	-	2.8	2.681	2.701	1.644	2.117	2.711	2.126	2.658	2.109	3.29
13	Nitrate Nirogen	45	No relaxation	0.497	0.432	0.454	0.518	0.432	0.464	0.443	0.41	0.421	0.486



**ADVANCED ENVIRONMENTAL LABORATORY,
TAMILNADU POLLUTION CONTROL BOARD,
SALEM – 636 004.**

ROA No. 442/TNPCB/AEL – SLM/2022– 23 Dt. 10.10.2023

1.	Name and address of the sender	The District Environmental Engineer, Tamilnadu Pollution Control Board, Dharmapuri.
2.	Date and time of collection	31.08.2023 at 02:20 PM and 02:25 PM
3.	Date and time of receipt at Lab.	01.09.2023 at 11:00 AM
4.	Condition of seal, fastening and Container	Sealed/Unfastened Condition in Polythene carbuoy 2.5 lits X 2 Nos.
5.	Nature and Number of samples	2 Nos. of Trade effluent Samples.
6.	Date of Analysis	01.09.2023 - 13.09.2023

DEE Code No.	Lab Code No.	Point of Collection	Whether Untreated/ Treated
BLA/197/31-08	1601	UASBR Tank Pit-7 (proposed anaerobic reactor unused pit)	-
BLA/198/31-08	1602	UASBR Tank Pit-8 (proposed anaerobic reactor unused pit)	-

TEST REPORT

Sl. No.	Parameters	Unit	Test sample code Nos.		Test Method
			1601/BLA/197/31-08	1602/BLA/198/31-08	
1.	pH at 25°C	Number	7.31	7.70	APHA 23 rd Edn 2017 (4500 H+)
2.	Total Suspended Solids at 103°C – at 105°C	mg/l	8	8	APHA 23 rd Edn 2017 (2540 -D)
3.	Total Dissolved Solids at 180°C	mg/l	2556	2288	APHA 23 rd Edn.2017 (2540 C)
4.	Chloride as Cl	mg/l	956	931	APHA 23 rd Edn.2017 (4500 Cl B)
5.	Sulphates as SO ₄	mg/l	130	107	APHA 23 rd Edn.2017 (4500 SO4-E)
6.	BOD (at 27°C for 3 days)	mg/l	2	1.8	IS 3025 (Part-44)
7.	COD	mg/l	16	16	APHA 23 rd Edn 2017 (5220 B)
8.	Ammonical Nitrogen as NH ₃ -N	mg/l	2.24	1.12	APHA 23 rd Edn. 2017 (4500 - NH ₃ C)
9.	Total Kjeldahl Nitrogen	mg/l	6.16	3.36	APHA 23 rd Edn. 2017 (4500 -N _{org} B)
10.	Total Hardness as CaCO ₃	mg/l	1030	850	APHA 23 rd Edn. 2017 (2340 C)

Received on
MTH
06/10/23

Sl. No.	Parameters	Unit	Test sample code Nos.		Test Method
			1601/BLA/ 197/31-08	1602/BLA/ 198/31-08	
11	Calcium as Ca	mg/l	184	160	APHA 23 rd Edn. 2017 (3500 B)
12	Magnesium as Mg	mg/l	139	109	APHA 23 rd Edn. 2017 (2340 C)
13	% Sodium	%	52	52	TNPCB/AELSLM/SOP/35 Issue No.1, DT: 25 April 2014
14	Cyanide	mg/l	<0.008	<0.008	APHA 23 rd Edn. 2017 (4500 CN E)

Note: < = Indicates Less than Minimum Detectable Limit.

Checked by

M.P. 7/11/10/23
Environmental Scientist

Authorized Signatory

S. Dh...
12/10/2023
Chief Scientific Officer (a/c),
AEL, TNPCB, Salem.

- End of Test Report -

Page No.2 of 2



**ADVANCED ENVIRONMENTAL LABORATORY,
TAMILNADU POLLUTION CONTROL BOARD,
SALEM – 636 004.**

ROA No. 959/TNPCB/AEL – SLM/2023– 24, Dated: 12.03.2024

1.	Name and address of the sender	The District Environmental Engineer, Tamilnadu Pollution Control Board, Dharmapuri.
2.	Date and time of collection	20.02.2024 at 01:30 PM
3.	Date and time of receipt at Lab.	21.02.2024 at 10:45 AM
4.	Condition of seal, fastening and Container	Sealed/Unfastened Condition in Polythene carbuoy 2.5 lits X 2 Nos.
5.	Nature and Number of samples	2 Nos. of Trade effluent Samples.
6.	Date of Analysis	21.02.2024 - 12.03.2024

DEE Code No.	Lab Code No.	Point of Collection	Whether Untreated/ Treated
BLA/45/20-02	3541	UASBR Tank Pit-8 (proposed anaerobic reactor unused pit)	-

TEST REPORT

Sl. No.	Parameters	Unit	Test sample code No.	Test Method
			3541/BLA/45/20-02	
1.	pH at 25°C	Number	7.71	APHA 23 rd Edn 2017 (4500 H+)
2.	Total Suspended Solids at 103°C – at 105°C	mg/l	42	APHA 23 rd Edn 2017 (2540 -D)
3.	Total Dissolved Solids at 180°C	mg/l	844	APHA 23 rd Edn.2017 (2540 C)
4.	Chloride as Cl	mg/l	230	APHA 23 rd Edn.2017 (4500 Cl B)
5.	Sulphates as SO ₄	mg/l	128	APHA 23 rd Edn.2017 (4500 SO4-E)
6.	BOD (at 27°C for 3 days)	mg/l	26	IS 3025 (Part-44)
7.	COD	mg/l	160	APHA 23 rd Edn 2017 (5220 B)
8.	Ammonical Nitrogen as NH ₃ -N	mg/l	0.56	APHA 23 rd Edn. 2017 (4500 -NH ₃ C)
9.	Total Kjeldahl Nitrogen	mg/l	1.68	APHA 23 rd Edn. 2017 (4500 -N _{org} B)
10.	Nitrate Nitrogen as NO ₃	mg/l	1.168	APHA 23 rd Edn. 2017 (4500 NO ₃ -B)

- 2 -

Sl. No.	Parameters	Unit	Test sample code No.	Test Method
			3541/BLA/45/20-02	
11	% Sodium	%	38	TNPCB/AEL-SLM/SOP/35, Issue No:1, Dated 25 April 2014.
12	Total Hardness as CaCO ₃	mg/l	360	APHA 23 rd Edn. 2017 (2340 C)
13	Calcium as Ca	mg/l	60	APHA 23 rd Edn. 2017 (3500 B)
14	Magnesium as Mg	mg/l	51	APHA 23 rd Edn. 2017 (2340 C)
15	Alkalinity as CaCO ₃	mg/l	232	APHA 23 rd Edn. 2017 (2320 B)
16	Cyanide	mg/l	<0.008	APHA 23 rd Edn. 2017 (4500 CN E)

Note: < = Indicates Less than Minimum Detectable Limit.

Checked by

M. D.
12/3/24
Environmental Scientist

Authorized Signatory

S. D. G. H.
12/03/2024
Chief Scientific Officer (a/c),
AEL, TNPCB, Salem.

- End of Test Report -

Page No.2 of 2

BEFORE THE HON'BLE NATIONAL
GREEN TRIBUNAL,
SOUTHERN ZONE AT CHENNAI

Original Application No. 47 of 2023

Suresh,
S/o Panchiyappan,
6/36, Alamelupuram, Paddireddipatti,
Dharmapuri, Tamil Nadu – 636905

...Applicants

Vs

The Tamil Nadu Pollution Control Board,
Rep. by its Chairperson,
76, Anna Salai, Guindy Industrial Estate,
Guindy, Chennai - 600 032 & ors.

...Respondents

**ADDITIONAL REPORT FILED ON
BEHALF OF THE FIRST
RESPONDENT - TAMIL NADU
POLLUTION CONTROL BOARD.**

**Advocate for Respondent: TNPCB
Thiru.S. Sai Sathya Jith,
Advocate, Chennai.**

Date: 05.11.2024

Date of hearing on:06.11.2024