

**BEFORE THE NATIONAL GREEN TRIBUNAL  
SOUTHERN ZONE, CHENNAI  
Original Application No.24 of 2024  
(Earlier O.A. No. 608/2023)**

Tribunal on its own motion SUO MOTU  
based on the News Item in South First  
Dt. 19.09.2023 titled “Wages of mining  
Neyveli turns ashtray, leaving farmers  
with broken promises and uncertain future”

And

Central Pollution Control Board,  
Through its Member Secretary,  
New Delhi and Others.

...Respondents

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**Advocate  
Thiru.S. Sai Sathya Jith,  
Advocate, Chennai.**

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Central Pollution Control Board,  
Through its Member Secretary New Delhi and Ors.

...Respondents.

**REPORT FILED ON BEHALF OF THE SECOND RESPONDENT-  
TAMIL NADU POLLUTION CONTROL BOARD**

I, M.Vijayalakshmi, D/o. K.R.Muthaiah, aged about 59 years, having office at No.76, Mount Salai, Guindy, Chennai-600 032, do hereby solemnly affirm and sincerely stated as follows:-

I submit that I am working as the Additional Chief Environmental Engineer, Tamil Nadu Pollution Control Board, Chennai and I am authorized to file this report on behalf of the second respondent and as such I am well acquainted with the facts of the case from the records available at office.

2. It is respectfully submitted that the OA No: 608 of 2023 was taken as a Suo Motu by the Hon'ble NGT(PB), New Delhi based on the news appearing in South First dated 19.09.2023 titled " Wages of mining: Neyveli turns ' ashtray', leaving farmers with broken promises and uncertain future". The news item discloses that the Neyveli Power Station-1 (expansion) project is around two km from Adithyan's field and was set up in 1956. The NLC operates three opencast lignite mines and four thermal power stations in Neyveli. The allegation is that untreated hot water from the power station and fly ash contaminate water. The news item further discloses that farmers, scientists and even government bodies

*M. Vijayalakshmi 5/8/2024*  
ADDITIONAL CHIEF ENVIRONMENTAL ENGINEER  
TAMIL NADU POLLUTION CONTROL BOARD  
No.76, MOUNT SALAI, GUINDY,  
CHENNAI-600 032.

have blamed fly ash for the degradation of land and reduced yields. As per the news report on account of the said discharge, soil has become unfit to cultivate any crop and ground water has been depleted and fly ash is polluting the water sources. There is allegation of blatant violation of environmental laws. On 9.10.2023, the Hon'ble NGT (PB), New Delhi has transferred the above mentioned OA No.608 of 2023(PB) to Southern Zone Bench, Chennai as the issue relates to Southern Zone Bench of the Tribunal.

3. It is respectfully submit that on 9.2.2024, the Hon'ble NGT(SZ), Chennai has re-numbered the above mentioned OA No.608 of 2023 (PB) as O.A No.24 of 2024(SZ) and the Hon'ble Tribunal has issued notices to the respondent and directed to file their reports.
4. It is respectfully submit that as per the direction of the Hon'ble Tribunal the report is submitted.
5. It is respectfully submit that on 10.8.2023, the Hon'ble Tribunal has taken a Suo Motu in O.A. No. 107 of 2023 based on a news report "Huge Pollution Risk in 8 Km around NLC referring the study titles 'POWERing Pollution: The Environmental and Pollution Impacts of Thermal Power Stations and Mining Operation in Neyveli". and directed the TNPCB to inspect the area, study the water quality of the water bodies near NLC and furnish report. Based on the directions of Hon'ble NGT, the TNPCB has formed an internal committee comprising of the following officers to inspect the area and collect water and soil samples in the area referred in the study report and submitted a detailed report. The Committee has inspected the NLC and the surrounding areas on 11.08.2023, 16.08.2023 & 28.09.2023 and collected 37 samples (Surface water-22, Ground Water-9, Soil-5 and fly Ash-1 No). It is submitted that TNPCB has filed a detailed report before the Hon'ble NGT (SZ) on 20.05.2024, Chennai on the basis of study of ground water, surface water and soil samples collected in and around the NLC Thermal Power Stations and Mines.
6. It is respectfully submit that on 15.03.2024, the Hon'ble NGT (SZ), Chennai, in O.A No. 107/2023 (SZ) has directed the "***TNPCB to collect samples again and sent them to the same lab who had furnished the***

*M. Vijayalakshmi* 5/8/2024  
 ADDITIONAL CHIEF ENVIRONMENTAL ENGINEER  
 TAMIL NADU POLLUTION CONTROL BOARD  
 No.76, MOUNT SALAI, GUINDY,  
 CHENNAI-600 032.

*report to the NGO, based on which, the news item was published. The same sample can be tested by the TNPCB in a normal mode available to them and collect both reports and furnish it before the next hearing".* In compliance of the above orders of the Hon'ble NGT (SZ), Chennai, the team of TNPCB officials have collected 34 Water and soil samples on 03.04.2024 in the same locations (Surface water-19 and Surface water-no flow-3, Ground water samples -9 and Soil -5 and Fly ash -1) and were sent to the following laboratories for analysis.

1. Chennai Mettlex Lab Private Limited, Chennai.
  2. Tamil Nadu Test House, Chennai.
  3. Advanced Environmental Lab, TNPCB, Chennai/Cuddalore.
  4. IIT Madras, Cube, Taramani Chennai.
7. It is respectfully submitted that the water samples were tested in the same laboratory (Chennai Mettlex Lab Private Limited, Chennai., Tamil Nadu Test House, Chennai) in which the earlier drinking water samples were tested by the NGO, based on which this suo moto was taken up.
8. It is respectfully submit that O.A. No.107/2023 (SZ) is pending before the Hon'ble NGT (SZ), Chennai for further orders.
9. It is respectfully submit that the present O.A. No. 24/2024 is similar in nature as O.A. No. 107/2023(SZ) which is pending before the Hon'ble NGT (SZ), Chennai. On 3.4.2024, the samples were collected in the places in and around NLC Thermal Power Stations and Mines area, where the samples were collected previously and analysed in the Labs to assess the status of water/soil contamination if any in the area. In compliance of the above orders of the Hon'ble NGT (SZ), Chennai, the team of TNPCB officials have collected 34 Water and soil samples on 03.04.2024 in the same locations (Surface water-19 and Surface water-no flow-3, Ground water samples -9 and Soil -5 and Fly ash -1) and were sent to the following laboratories for analysis.
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  4. IIT Madras, Cube, Taramani Chennai.

*m. Upayalokhini 5/8/2024*  
 ADDITIONAL CHIEF ENVIRONMENTAL ENGINEER  
 TAMIL NADU POLLUTION CONTROL BOARD  
 No.76, MOUNT SALAI, GUINDY,  
 CHENNAI-600 032.

**Conclusion:**

A. As per the reports of private Labs analysed by NGO

- a. The parameters Mercury and selenium were below the limit of quantification (BLQ) in the 19 number of surface water samples collected.
- b. The parameters Mercury and selenium were below the limit of quantification (BLQ) in the 9 number of ground water samples collected.
- c. The parameters Mercury and selenium were below the limit of quantification (BLQ) in the 6 number of soil samples collected. However, *the heavy metals such as zinc, Arsenic, Nickel and Total Chromium were present in 4 places out of 6 numbers of soil samples collected.*

B. As per the TNPCB lab reports

- a. The parameter Mercury was present in the range of 0.01 mg/l to 0.027 mg/l in the 6 places out of 19 numbers of surface water collected. However, the other heavy metals are within the limit as per standards IS 2296:1982 standard.
- b. The Parameter Mercury was present in excess in the range of 0.005-0.007 mg/l (IS 10500:2012 standard value -0.001 mg/l) in the 2 places out of 9 numbers of ground water collected. Selenium was below the limit of quantification (BLQ) in the 9 number of ground water samples collected as per IS 10500:2012 standard.
- c. The parameters Selenium, Zinc and Nickel were present in excess in 2 places out of 6 numbers of soil samples collected as per Canadian Soil Quality Guidelines for the Protection of Environmental and Human Health and Dutch "T"

*M. Udayalakshmi* 5/8/2024  
 ADDITIONAL CHIEF ENVIRONMENTAL ENGINEER  
 TAMIL NADU POLLUTION CONTROL BOARD  
 No.76, MOUNT SALAI, GUINDY,  
 CHENNAI-600 032.

Value and Dutch "I" value. The other heavy metals are within the limit in 4 places out of 6 places as per the above Canadian Standard.

1. The comparison of analytical reports of Water/Soil samples collected on 11.08.2023, 16.08.2023 and 28.09.2023 are enclosed as Annexure –I.
2. The comparison of analytical reports of Water/Soil samples collected on 03.04.2024 are enclosed as Annexure –II.

Therefore, it is humbly prayed that this Hon'ble National Green Tribunal (SZ), 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.

*M. Vijayalakshmi* 5/8/2024  
 ADDITIONAL CHIEF ENVIRONMENTAL ENGINEER  
 TAMIL NADU POLLUTION CONTROL BOARD  
 No.76, MOUNT SALAI, GUINDY,  
 CHENNAI-600 032.

### VERIFICATION

I, M.Vijayalakshmi, D/o. K.R.Muthaiah, aged about 59 years, having office at No.76, Mount Salai, Guindy, Chennai 600 032, do hereby verify that the contents of above report are true to the best of my knowledge through records.

*M. Vijayalakshmi* 5/8/2024  
 ADDITIONAL CHIEF ENVIRONMENTAL ENGINEER  
 TAMIL NADU POLLUTION CONTROL BOARD  
 No.76, MOUNT SALAI, GUINDY,  
 CHENNAI-600 032.

**COMPARISON OF TNPCB LAB AND PRIVATE LAB- REPORTS WITH THE SURFACE WATER STANDARDS WITH REGARDS TO HEAVY METALS CONCENTRATION IN THE SAMPLES COLLECTED ON 11.08.2023, 16.08.2023 & 28.09.2023**

<b>Name of the location : Neyveli PCS store Discharge</b>				
S.NO	Parameters	Surface water Standard ( IS 2296 Class E)	TNPCB Report	NGO report (M/s. Chennai Mettex Lab Private Limited)
1.	Zinc as Zn	-	0.014	BDL
2.	Cadmium as Cd	-	BLQ	BDL
3.	Nickel as Ni	-	0.005	0.035
4.	Lead as Pb	-	0.006	BDL
5.	Arsenic as As	-	BLQ	BDL
6.	Total Chromium as Cr	-	BLQ	BDL
7.	Mercury as Hg	-	BLQ	BDL
8.	Selenium as Se	-	BLQ	BDL
9.	Calcium as Ca	-	8	112.2
10.	Magnesium as Mg	-	2.67	34
11.	Manganese as Mn	--	0.012	0.399
12.	Iron as Fe	-	3.27	1.45
<b>Name of the location : Discharge from NNTPS (Polluted Surface water)</b>				
S.NO	Parameters	Surface water Standard (IS 2296 Class E)	TNPCB Report	NGO report (M/s. Chennai Mettex Lab Private Limited)
1.	Zinc as Zn	-	0.0124	0.05
2.	Cadmium as Cd	-	BLQ	BDL
3.	Nickel as Ni	-	0.117	0.011
4.	Lead as Pb	-	0.006	BDL
5.	Arsenic as As	-	BLQ	BDL
6.	Total Chromium as Cr	-	BLQ	BDL
7.	Mercury as Hg	-	BLQ	BDL
8.	Selenium as Se	-	BLQ	BDL
9.	Calcium as Ca	-	169	102.2
10.	Magnesium as Mg	-	63	36.4
11.	Manganese as Mn	--	6.68	0.064
12.	Iron as Fe	-	5.3	1.91
<b>Name of the location : Discharge from NNTPS (unpolluted stream surface water)</b>				
S.NO	Parameters	Surface water Standard (IS 2296 Class E)	TNPCB Report	NGO report (M/s. Chennai Mettex Lab Private Limited)
1.	Zinc as Zn	-	0.0124	BDL
2.	Cadmium as Cd	-	BLQ	BDL
3.	Nickel as Ni	-	0.117	0.029
4.	Lead as Pb	-	0.006	BDL
5.	Arsenic as As	-	BLQ	BDL
6.	Total Chromium as Cr	-	BLQ	BDL
7.	Mercury as Hg	-	BLQ	0.004
8.	Selenium as Se	-	BLQ	BDL

<b>Name of the location : Neyveli PCS store Discharge</b>				
S.NO	Parameters	Surface water Standard ( IS 2296 Class E)	TNPCB Report	NGO report (M/s. Chennai Mettex Lab Private Limited)
9.	Calcium as Ca	-	169	200
10.	Magnesium as Mg	-	63	38.8
11.	Manganese as Mn	--	6.68	0.165
12.	Iron as Fe	-	5.3	2.59
<b>Name of the location : Direct Discharge from Neyveli TPS I</b>				
S.NO	Parameters	Surface water Standard ( IS 2296 Class E)	TNPCB Report	NGO report (M/s. Chennai Mettex Lab Private Limited)
1.	Zinc as Zn	-	0.065	BDL
2.	Cadmium as Cd	-	BLQ	BDL
3.	Nickel as Ni	-	0.075	0.10
4.	Lead as Pb	-	BLQ	BDL
5.	Arsenic as As	-	BLQ	BDL
6.	Total Chromium as Cr	-	BLQ	BDL
7.	Mercury as Hg	-	BLQ	BDL
8.	Selenium as Se	-	BLQ	BDL
9.	Calcium as Ca	-	52	36.8
10.	Magnesium as Mg	-	15	11.6
11.	Manganese as Mn	--	0.016	0.324
12.	Iron as Fe	-	0.21	1.51
<b>Name of the location : Discharge from Neyveli TPS II</b>				
S.NO	Parameters	Surface water Standard ( IS 2296 Class E)	TNPCB Report	NGO report (M/s. Chennai Mettex Lab Private Limited)
1.	Zinc as Zn	-	0.057	BDL
2.	Cadmium as Cd	-	BLQ	BDL
3.	Nickel as Ni	-	0.184	0.10
4.	Lead as Pb	-	BLQ	BDL
5.	Arsenic as As	-	BLQ	BDL
6.	Total Chromium as Cr	-	0.006	BDL
7.	Mercury as Hg	-	BLQ	BDL
8.	Selenium as Se	-	BLQ	BDL
9.	Calcium as Ca	-	184	132
10.	Magnesium as Mg	-	46	35
11.	Manganese as Mn	--	5.6	0.027
12.	Iron as Fe	-	1.38	0.77
<b>Name of the location : Opposite to Main Gate of Mine 2 Kootu Kunideer Thittam near Valiyamadevi</b>				
S.NO	Parameters	Surface water Standard ( IS 2296 Class E)	TNPCB Report	NGO report (M/s. Chennai Mettex Lab Private Limited)
1.	Zinc as Zn	-	0.013	BDL
2.	Cadmium as Cd	-	BLQ	BDL
3.	Nickel as Ni	-	0.053	0.032
4.	Lead as Pb	-	BLQ	0.007
5.	Arsenic as As	-	BLQ	BDL
6.	Total Chromium as Cr	-	BLQ	0.085

<b>Name of the location : Neyveli PCS store Discharge</b>				
S.NO	Parameters	Surface water Standard ( IS 2296 Class E)	TNPCB Report	NGO report (M/s. Chennai Mettex Lab Private Limited)
7.	Mercury as Hg	-	BLQ	0.003
8.	Selenium as Se	-	BLQ	BDL
9.	Calcium as Ca	-	74	112.2
10.	Magnesium as Mg	-	29	36
11.	Manganese as Mn	--	1.22	0.393
12.	Iron as Fe	-	9.8	20.7
<b>Name of the location : Coal Mine discharged from Mine I</b>				
S.NO	Parameters	Surface water Standard ( IS 2296 Class E)	TNPCB Report	NGO report (M/s. Chennai Mettex Lab Private Limited)
1.	Zinc as Zn	-	0.029	BDL
2.	Cadmium as Cd	-	BLQ	BDL
3.	Nickel as Ni	-	0.044	BDL
4.	Lead as Pb	-	BLQ	BDL
5.	Arsenic as As	-	BLQ	BDL
6.	Total Chromium as Cr	-	BLQ	BDL
7.	Mercury as Hg	-	BLQ	BDL
8.	Selenium as Se	-	BLQ	BDL
9.	Calcium as Ca	-	136	56
10.	Magnesium as Mg	-	31	14.5
11.	Manganese as Mn	--	0.059	0.035
12.	Iron as Fe	-	0.31	1.54
<b>Name of the location : Parawnar River carrying NLC Mine 2 Discharge</b>				
S.NO	Parameters	Surface water Standard ( IS 2296 Class E)	TNPCB Report	NGO report (M/s. Chennai Mettex Lab Private Limited)
1.	Zinc as Zn	-	0.034	BDL
2.	Cadmium as Cd	-	BLQ	BDL
3.	Nickel as Ni	-	0.081	0.020
4.	Lead as Pb	-	BLQ	BDL
5.	Arsenic as As	-	BLQ	BDL
6.	Total Chromium as Cr	-	BLQ	BDL
7.	Mercury as Hg	-	BLQ	BDL
8.	Selenium as Se	-	BLQ	BDL
9.	Calcium as Ca	-	77	100
10.	Magnesium as Mg	-	25.3	36.4
11.	Manganese as Mn	--	0.375	0.061
12.	Iron as Fe	-	5.02	1.31
<b>Name of the location : Walaja Lake</b>				
S.NO	Parameters	Surface water Standard ( IS 2296 Class E)	TNPCB Report	NGO report (M/s. Chennai Mettex Lab Private Limited)
1.	Zinc as Zn	-	0.014	0.097
2.	Cadmium as Cd	-	BLQ	BDL
3.	Nickel as Ni	-	0.059	0.093
4.	Lead as Pb	-	BLQ	BDL
5.	Arsenic as As	-	BLQ	BDL

<b>Name of the location : Neyveli PCS store Discharge</b>				
S.NO	Parameters	Surface water Standard ( IS 2296 Class E)	TNPCB Report	NGO report (M/s. Chennai Mettex Lab Private Limited)
6.	Total Chromium as Cr	-	BLQ	BDL
7.	Mercury as Hg	-	BLQ	BDL
8.	Selenium as Se	-	BLQ	BDL
9.	Calcium as Ca	-	159	104
10.	Magnesium as Mg	-	81	40
11.	Manganese as Mn	--	0.618	0.121
12.	Iron as Fe	-	1.20	1.12
<b>Name of the location : Pond near Ash Pond water discharge to the pond some times ( Aadhandarkollai)</b>				
S.NO	Parameters	Surface water Standard ( IS 2296 Class E)	TNPCB Report	NGO report (M/s. Chennai Mettex Lab Private Limited)
1.	Zinc as Zn	-	0.026	BDL
2.	Cadmium as Cd	-	BLQ	BDL
3.	Nickel as Ni	-	0.071	0.034
4.	Lead as Pb	-	0.011	BDL
5.	Arsenic as As	-	BLQ	BDL
6.	Total Chromium as Cr	-	BLQ	BDL
7.	Mercury as Hg	-	BLQ	BDL
8.	Selenium as Se	-	BLQ	BDL
9.	Calcium as Ca	-	82	104
10.	Magnesium as Mg	-	22	17
11.	Manganese as Mn	--	1.87	0.731
12.	Iron as Fe	-	BLQ	0.34
<b>Name of the location : Kanjamadanpettai Point ( control Point)</b>				
S.NO	Parameters	Surface water Standard ( IS 2296 Class E)	TNPCB Report	NGO report (M/s. Chennai Mettex Lab Private Limited)
1.	Zinc as Zn	-	0.052	BDL
2.	Cadmium as Cd	-	BLQ	BDL
3.	Nickel as Ni	-	0.014	BDL
4.	Lead as Pb	-	0.035	BDL
5.	Arsenic as As	-	BLQ	BDL
6.	Total Chromium as Cr	-	BLQ	BDL
7.	Mercury as Hg	-	BLQ	BDL
8.	Selenium as Se	-	BLQ	BDL
9.	Calcium as Ca	-	12.1	4.4
10.	Magnesium as Mg	-	4.86	4.6
11.	Manganese as Mn	--	0.324	0.042
12.	Iron as Fe	-	28.3	0.89
<b>Name of the location: Iyyan Lake</b>				
S.NO	Parameters	Surface water Standard ( IS 2296 Class E)	TNPCB Report	NGO report (M/s. Chennai Mettex Lab Private Limited)
1.	Zinc as Zn	-	0.102	BDL
2.	Cadmium as Cd	-	BLQ	BDL
3.	Nickel as Ni	-	0.103	0.031

<b>Name of the location : Neyveli PCS store Discharge</b>				
S.NO	Parameters	Surface water Standard ( IS 2296 Class E)	TNPCB Report	NGO report (M/s. Chennai Mettex Lab Private Limited)
4.	Lead as Pb	-	0.035	BDL
5.	Arsenic as As	-	BLQ	BDL
6.	Total Chromium as Cr	-	BLQ	BDL
7.	Mercury as Hg	-	BLQ	BDL
8.	Selenium as Se	-	BLQ	BDL
9.	Calcium as Ca	-	49	36.8
10.	Magnesium as Mg	-	19	11.6
11.	Manganese as Mn	--	0.95	BDL
12.	Iron as Fe	-	0.14	0.06
<b>Name of the location : Karrikuppam Village Fish Pond</b>				
S.NO	Parameters	Surface water Standard ( IS 2296 Class E)	TNPCB Report	NGO report (M/s. Chennai Mettex Lab Private Limited)
1.	Zinc as Zn	-	0.05	BDL
2.	Cadmium as Cd	-	BLQ	BDL
3.	Nickel as Ni	-	0.026	BDL
4.	Lead as Pb	-	BLQ	BDL
5.	Arsenic as As	-	BLQ	BDL
6.	Total Chromium as Cr	-	BLQ	BDL
7.	Mercury as Hg	-	BLQ	BDL
8.	Selenium as Se	-	BLQ	BDL
9.	Calcium as Ca	-	55	80
10.	Magnesium as Mg	-	28.2	49.8
11.	Manganese as Mn	--	0.042	BDL
12.	Iron as Fe	-	0.27	0.89
<b>Name of the location : Canal near the Thermal power Plant ( water discharge from the plant time to time)</b>				
S.NO	Parameters	Surface water Standard ( IS 2296 Class E)	TNPCB Report	NGO report (M/s. Chennai Mettex Lab Private Limited)
1.	Zinc as Zn	-	0.037	BDL
2.	Cadmium as Cd	-	BLQ	BDL
3.	Nickel as Ni	-	0.017	BDL
4.	Lead as Pb	-	0.035	BDL
5.	Arsenic as As	-	BLQ	BDL
6.	Total Chromium as Cr	-	BLQ	BDL
7.	Mercury as Hg	-	BLQ	BDL
8.	Selenium as Se	-	BLQ	BDL
9.	Calcium as Ca	-	81	50
10.	Magnesium as Mg	-	43	54.6
11.	Manganese as Mn	--	5.28	BDL
12.	Iron as Fe	-	1.07	0.93
<b>Name of the location : Mine 1 outlet Vennageni</b>				
S.NO	Parameters	Surface water Standard ( IS 2296 Class E)	TNPCB Report	NGO not furnished the report

<b>Name of the location : Neyveli PCS store Discharge</b>				
S.NO	Parameters	Surface water Standard ( IS 2296 Class E)	TNPCB Report	NGO report (M/s. Chennai Mettex Lab Private Limited)
1.	Zinc as Zn	-	0.550	
2.	Cadmium as Cd	-	BLQ	
3.	Nickel as Ni	-	0.355	
4.	Lead as Pb	-	0.006	
5.	Arsenic as As	-	BLQ	
6.	Total Chromium as Cr	-	BLQ	
7.	Mercury as Hg	-	BLQ	
8.	Selenium as Se	-	BLQ	
9.	Calcium as Ca	-	61	
10.	Magnesium as Mg	-	15	
11.	Manganese as Mn	--	0.915	
12.	Iron as Fe	-	5.3	
<b>Name of the location : Ramapuri, Mantharakuppam Vadakkuvellur</b>				
S.NO	Parameters	Surface water Standard ( IS 2296 Class E)	TNPCB Report	NGO report (M/s.Tamilnadu Test House Private Limited)
1.	Zinc as Zn	-	0.014	BQL
2.	Cadmium as Cd	-	BLQ	BQL
3.	Nickel as Ni	-	0.014	BQL
4.	Lead as Pb	-	0.006	BQL
5.	Arsenic as As	-	BLQ	BQL
6.	Total Chromium as Cr	-	BLQ	BQL
7.	Mercury as Hg	-	BLQ	0.02
8.	Selenium as Se	-	BLQ	0.024
9.	Calcium as Ca	-	115	196.39
10.	Magnesium as Mg	-	24	38.89
11.	Manganese as Mn	--	0.029	BQL
12.	Iron as Fe	-	2.62	0.21
<b>Name of the location : Vadakku vellur Ammeri</b>				
S.NO	Parameters	Surface water Standard ( IS 2296 Class E)	TNPCB Report	NGO report (M/s.Tamilnadu Test House Private Limited)
1.	Zinc as Zn	-	0.008	BQL
2.	Cadmium as Cd	-	BLQ	BQL
3.	Nickel as Ni	-	0.011	BQL
4.	Lead as Pb	-	0.006	BQL
5.	Arsenic as As	-	BLQ	BQL
6.	Total Chromium as Cr	-	BLQ	BQL
7.	Mercury as Hg	-	BLQ	BQL
8.	Selenium as Se	-	BLQ	0.014
9.	Calcium as Ca	-	113	68.14
10.	Magnesium as Mg	-	27	14.58
11.	Manganese as Mn	--	0.012	BQL
12.	Iron as Fe	-	BLQ	0.23
<b>Name of the location : NNTPS outlet near Thropathi Amman Temple.</b>				
S.NO	Parameters	Surface water Standard	TNPCB Report	NGO report (M/s.Tamilnadu

<b>Name of the location : Neyveli PCS store Discharge</b>				
S.NO	Parameters	Surface water Standard ( IS 2296 Class E)	TNPCB Report	NGO report (M/s. Chennai Mettex Lab Private Limited)
		( IS 2296 Class E)		Test House Private Limited)
1.	Zinc as Zn	-	0.0124	BQL
2.	Cadmium as Cd	-	BLQ	BQL
3.	Nickel as Ni	-	0.117	BQL
4.	Lead as Pb	-	0.006	BQL
5.	Arsenic as As	-	BLQ	BQL
6.	Total Chromium as Cr	-	BLQ	BQL
7.	Mercury as Hg	-	BLQ	0.01
8.	Selenium as Se	-	BLQ	0.024
9.	Calcium as Ca	-	169	84.17
10.	Magnesium as Mg	-	63	34.08
11.	Manganese as Mn	--	6.68	BQL
12.	Iron as Fe	-	5.3	0.24
<b>Name of the location: Central store</b>				
S.NO	Parameters	Surface water Standard ( IS 2296 Class E)	TNPCB Report	NGO report (M/s.Tamilnadu Test House Private Limited)
1.	Zinc as Zn	-	0.014	BQL
2.	Cadmium as Cd	-	BLQ	BQL
3.	Nickel as Ni	-	0.005	BQL
4.	Lead as Pb	-	0.006	BQL
5.	Arsenic as As	-	BLQ	BQL
6.	Total Chromium as Cr	-	BLQ	BQL
7.	Mercury as Hg	-	BLQ	0.03
8.	Selenium as Se	-	BLQ	0.024
9.	Calcium as Ca	-	8	140.28
10.	Magnesium as Mg	-	2.67	34.03
11.	Manganese as Mn	--	0.012	BQL
12.	Iron as Fe	-	3.27	0.21
<b>Name of the location: TPS outlet Karuvetti</b>				
S.NO	Parameters	Surface water Standard ( IS 2296 Class E)	TNPCB Report	NGO report (M/s.Tamilnadu Test House Private Limited)
1.	Zinc as Zn	-	0.1	BQL
2.	Cadmium as Cd	-	BLQ	BQL
3.	Nickel as Ni	-	0.117	BQL
4.	Lead as Pb	-	BLQ	BQL
5.	Arsenic as As	-	BLQ	BQL
6.	Total Chromium as Cr	-	BLQ	BQL
7.	Mercury as Hg	-	BLQ	BQL
8.	Selenium as Se	-	BLQ	0.124
9.	Calcium as Ca	-	142	104.21
10.	Magnesium as Mg	-	25	31.60
11.	Manganese as Mn	--	5	BQL
12.	Iron as Fe	-	2.24	0.21
<b>Name of the location: Muppaneri</b>				

<b>Name of the location : Neyveli PCS store Discharge</b>				
S.NO	Parameters	Surface water Standard ( IS 2296 Class E)	TNPCB Report	NGO report (M/s. Chennai Mettex Lab Private Limited)
S.NO	Parameters	Surface water Standard ( IS 2296 Class E)	TNPCB Report	NGO report (M/s.Tamilnadu Test House Private Limited)
1.	Zinc as Zn	-	0.006	BQL
2.	Cadmium as Cd	-	BLQ	BQL
3.	Nickel as Ni	-	BLQ	BQL
4.	Lead as Pb	-	BLQ	BQL
5.	Arsenic as As	-	BLQ	BQL
6.	Total Chromium as Cr	-	BLQ	BQL
7.	Mercury as Hg	-	BLQ	BQL
8.	Selenium as Se	-	BLQ	0.047
9.	Calcium as Ca	-	66	68.06
10.	Magnesium as Mg	-	20.4	12.16
11.	Manganese as Mn	--	0.043	BQL
12.	Iron as Fe	-	0.76	0.24
<b>Name of the location: TPS 2 outlet</b>				
S.NO	Parameters	Surface water Standard ( IS 2296 Class E)	TNPCB Report	NGO report (M/s.Tamilnadu Test House Private Limited)
1.	Zinc as Zn	-	0.057	BQL
2.	Cadmium as Cd	-	BLQ	BQL
3.	Nickel as Ni	-	0.184	BQL
4.	Lead as Pb	-	BLQ	BQL
5.	Arsenic as As	-	BLQ	BQL
6.	Total Chromium as Cr	-	0.006	BQL
7.	Mercury as Hg	-	BLQ	0.14
8.	Selenium as Se	-	BLQ	0.021
9.	Calcium as Ca	-	184	124.25
10.	Magnesium as Mg	-	46	41.32
11.	Manganese as Mn	--	5.6	BQL
12.	Iron as Fe	-	1.38	0.27

**COMPARISON OF TNPCB LAB AND PRIVATE LAB - REPORTS WITH THE GROUND WATER STANDARDS WITH REGARDS TO HEAVY METALS CONCENTRATION IN THE SAMPLES COLLECTED ON 11.08.2023,16.08.2023 AND 28.09.2023.**

<b>Name of the location : Aadhandarkollai Borewell near Thiravupathi Amman Temple 300m away from ash pond</b>				
S.NO	Parameters	Drinking water Standard ( IS 10500 2012)	TNPCB Report	NGO report (M/s. Chennai Mettex Lab Private Limited)
1.	pH at 25°C	6.5-8.5	6.78	6.58
2.	Electrical Conductivity	-	172	1.729
3.	Total Dissolved Solids at 180 °C	500	102	<b>1002</b>

4.	Turbidity	1	BLQ	<b>56</b>
5.	Total Suspended Solids at 105 °C	--		28
6.	Oil & Grease	--	--	--
7.	Fluoride as F	1	NA	<b>1.11</b>
8.	Chloride as Cl	250	18.9	126
9.	Sulphates as SO4	200	7.0	93
10.	Zinc as Zn	5	0.007	BDL
11.	Cadmium as Cd	0.003	BLQ	BDL
12.	Nickel as Ni	0.02	<b>0.020</b>	0.013
13.	Lead as Pb	0.01	0.011	BDL
14.	Arsenic as As	0.01	BLQ	BDL
15.	Chromium as Cr	0.05	BLQ	BDL
16.	Mercury as Hg	0.001	BLQ	BDL
17.	Selenium as Se	0.01	BLQ	BDL
18.	Boron as B	0.5	BLQ	0.251
19.	Total Hardness as CaCO3	200	41	<b>725</b>
20.	Calcium as Ca	75	12.5	<b>252</b>
21.	Magnesium as Mg	30	2.4	23
22.	Manganese as Mn	0.1	BLQ	<b>0.426</b>
23.	Sulphide as S	0.05	BLQ	BDL
24.	Aluminium as Al	0.03	BLQ	0.015
25.	Total Alkalinity as CaCO3	200	49.5	10.2
26.	Iron as Fe	0.3	BLQ	<b>0.79</b>
27.	Sodium as Na	-	9.2	
28.	Potassium as K	-	BLQ	6.22
29.	Biochemical Oxygen Demand (BOD) for 3 days at 27°C	-	BLQ	--
30.	Chemical Oxygen Demand (COD)	-	BLQ	--

**Name of the location : Vanadhirayapuram Village 100 meters from the Mine**

S.NO	Parameters	Drinking water Standard ( IS 10500 2012)	TNPCB Report	NGO report (M/s. Chennai Mettex Lab Private Limited)
1.	pH at 25°C	6.5-8.5	7.84	6.83
2.	Electrical Conductivity	-	252	8.21
3.	Total Dissolved Solids at 180 °C	500	134	459
4.	Turbidity	1	7	<0.5NTU
5.	Total Suspended Solids at 105 °C	--		BDL
6.	Oil & Grease	--	--	--
7.	Fluoride as F	1	BLQ	0.71
8.	Chloride as Cl	250	14.1	119
9.	Sulphates as SO4	200	24.4	39.6
10.	Zinc as Zn	5	0.053	BDL
11.	Cadmium as Cd	0.003	BLQ	BDL
12.	Nickel as Ni	0.02	0.026	BDL
13.	Lead as Pb	0.01	0.02	BDL

14.	Arsenic as As	0.01	BLQ	BDL
15.	Chromium as Cr	0.05	BLQ	BDL
16.	Mercury as Hg	0.001	BLQ	BDL
17.	Selenium as Se	0.01	BLQ	BDL
18.	Boron as B	0.5	BLQ	<b>0.056</b>
19.	Total Hardness as CaCO <sub>3</sub>	200	119	190
20.	Calcium as Ca	75	28	60.9
21.	Magnesium as Mg	30	12	9.2
22.	Manganese as Mn	0.1	0.019	BDL
23.	Sulphide as S	0.05	BLQ	BDL
24.	Aluminium as Al	0.03	0.023	BDL
25.	Total Alkalinity as CaCO <sub>3</sub>	200	9.9	73.4
26.	Iron as Fe	0.3	BLQ	0.06
27.	Sodium as Na	-	38.4	--
28.	Potassium as K	-	2.4	6.22
29.	Biochemical Oxygen Demand(BOD) for 3 days at 27°C	-	BLQ	--
30.	Chemical Oxygen Demand (COD)	-	BLQ	--

**Name of the location : Ayikuppam – Kullanchavadi Bore well (Control Point)**

S.NO	Parameters	Drinking water Standard ( IS 10500 2012)	TNPCB Report	NGO report (M/s. Chennai Mettlex Lab Private Limited)
1.	pH at 25°C	6.5-8.5	8.06	6.89
2.	Electrical Conductivity	-	426	450
3.	Total Dissolved Solids at 180 °C	500	263	247
4.	Turbidity	1	1.0	<0.5NTU
5.	Total Suspended Solids at 105 °C	--		BDL
6.	Oil & Grease	--	--	--
7.	Fluoride as F	1	NA	0.59
8.	Chloride as Cl	250	66	64
9.	Sulphates as SO <sub>4</sub>	200	34.8	21.3
10.	Zinc as Zn	5	0.202	BDL
11.	Cadmium as Cd	0.003	BLQ	BDL
12.	Nickel as Ni	0.02	<b>0.024</b>	BDL
13.	Lead as Pb	0.01	<b>0.02</b>	BDL
14.	Arsenic as As	0.01	BLQ	BDL
15.	Chromium as Cr	0.05	BLQ	BDL
16.	Mercury as Hg	0.001	BLQ	BDL
17.	Selenium as Se	0.01	BLQ	BDL
18.	Boron as B	0.5	0.315	0.102
19.	Total Hardness as CaCO <sub>3</sub>	<b>200</b>	80.6	135
20.	Calcium as Ca	<b>75</b>	22.6	31.2
21.	Magnesium as Mg	30	5.8	13.2
22.	Manganese as Mn	0.1	0.023	BDL
23.	Sulphide as S	0.05	BLQ	BDL
24.	Aluminium as Al	0.03	0.024	0.013
25.	Total Alkalinity as CaCO <sub>3</sub>	200	79.2	73.4

26.	Iron as Fe	0.3	BLQ	0.02
27.	Sodium as Na	-	34	--
28.	Potassium as K	-	1.8	2.39
29.	Biochemical Oxygen Demand(BOD) for 3 days at 27°C	-	BLQ	--
30.	Chemical Oxygen Demand (COD)	-	BLQ	--

**Name of the location: NLC Pipe Water ( Drinking Water Supplied by NLC Management )**

S.NO	Parameters	Drinking water Standard ( IS 10500 2012)	TNPCB Report	NGO report (M/s. Chennai Mettex Lab Private Limited)
1.	pH at 25°C	6.5-8.5	7.13	5.64
2.	Electrical Conductivity	-	1092	368
3.	Total Dissolved Solids at 180 °C	500	<b>678</b>	202
4.	Turbidity	1	BLQ	<0.5NTU
5.	Total Suspended Solids at 105 °C	--		BDL
6.	Oil & Grease	--	--	--
7.	Fluoride as F	1	0.43	0.48
8.	Chloride as Cl	250	137	39.3
9.	Sulphates as SO4	200	<b>209</b>	15.8
10.	Zinc as Zn	5	0.113	BDL
11.	Cadmium as Cd	0.003	BLQ	BDL
12.	Nickel as Ni	0.02	0.108	BDL
13.	Lead as Pb	0.01	BLQ	BDL
14.	Arsenic as As	0.01	BLQ	BDL
15.	Chromium as Cr	0.05	BLQ	BDL
16.	Mercury as Hg	0.001	BLQ	BDL
17.	Selenium as Se	0.01	BLQ	BDL
18.	Boron as B	0.5	0.490	0.121
19.	Total Hardness as CaCO3	200	<b>298</b>	115
20.	Calcium as Ca	75	<b>79</b>	30.4
21.	Magnesium as Mg	30	24	9.4
22.	Manganese as Mn	0.1	0.030	BDL
23.	Sulphide as S	0.05	BLQ	BDL
24.	Aluminium as Al	0.03	0.025	<b>0.031</b>
25.	Total Alkalinity as CaCO3	200	29.7	91.8
26.	Iron as Fe	0.3	BLQ	0.02
27.	Sodium as Na	-	134	--
28.	Potassium as K	-	6.2	1.388
29.	Biochemical Oxygen Demand(BOD) for 3 days at 27°C	-	BLQ	--
30.	Chemical Oxygen Demand (COD)	-	BLQ	--

**Name of the location: Vellankulam**

S.NO	Parameters	Drinking water Standard	TNPCB Report	NGO report (M/s. Chennai Mettex Lab
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		( IS 10500 2012)		Private Limited)
1.	pH at 25°C	6.5-8.5	7.81	6.63
2.	Electrical Conductivity	-	186	198
3.	Total Dissolved Solids at 180 °C	500	115	109
4.	Turbidity	1	--	<0.5NTU
5.	Total Suspended Solids at 105 °C	--	--	BDL
6.	Oil & Grease	--	--	--
7.	Fluoride as F	1	NA	BDL
8.	Chloride as Cl	250	14.1	16.9
9.	Sulphates as SO4	200	14	4.5
10.	Zinc as Zn	5	0.044	<b>5.903</b>
11.	Cadmium as Cd	0.003	BLQ	BDL
12.	Nickel as Ni	0.02	0.024	BDL
13.	Lead as Pb	0.01	BLQ	BDL
14.	Arsenic as As	0.01	BLQ	BDL
15.	Chromium as Cr	0.05	BLQ	BDL
16.	Mercury as Hg	0.001	BLQ	BDL
17.	Selenium as Se	0.01	BLQ	BDL
18.	Boron as B	0.5	BLQ	0.057
19.	Total Hardness as CaCO3	200	68.5	68
20.	Calcium as Ca	75	16.5	17.6
21.	Magnesium as Mg	30	6.5	5.1
22.	Manganese as Mn	0.1	BLQ	BDL
23.	Sulphide as S	0.05	BLQ	BDL
24.	Aluminium as Al	0.03	<b>0.130</b>	BDL
25.	Total Alkalinity as CaCO3	200	29.7	53.0
26.	Iron as Fe	0.3	BLQ	0.02
27.	Sodium as Na	-	11.4	--
28.	Potassium as K	-	1.8	2.15
29.	Biochemical Oxygen Demand (BOD) for 3 days at 27°C	-	BLQ	--
30.	Chemical Oxygen Demand (COD)	-	BLQ	--

**Name of the location : Pudukuppam village**

S.No	Parameters	Drinking water Standard ( IS 10500 2012)	TNPCB Report	NGO report (M/s. Chennai Mettex Lab Private Limited)
1.	pH at 25°C	6.5-8.5	8.12	7.92
2.	Electrical Conductivity	-	825	908
3.	Total Dissolved Solids at 180 °C	500	<b>510</b>	<b>508</b>
4.	Turbidity	1	BLQ	<0.5NTU
5.	Total Suspended Solids at 105 °C	--	--	BDL
6.	Oil & Grease	--	--	--
7.	Fluoride as F	1	0.27	BDL
8.	Chloride as Cl	250	141	87.7

9.	Sulphates as SO <sub>4</sub>	200	97	52
10.	Zinc as Zn	5	0.013	BDL
11.	Cadmium as Cd	0.003	BLQ	BDL
12.	Nickel as Ni	0.02	0.01	BDL
13.	Lead as Pb	0.01	BLQ	BDL
14.	Arsenic as As	0.01	BLQ	BDL
15.	Chromium as Cr	0.05	BLQ	BDL
16.	Mercury as Hg	0.001	BLQ	BDL
17.	Selenium as Se	0.01	BLQ	BDL
18.	Boron as B	0.5	0.349	0.062
19.	Total Hardness as CaCO <sub>3</sub>	200	<b>226</b>	<b>282</b>
20.	Calcium as Ca	75	52	65.7
21.	Magnesium as Mg	30	23	28.6
22.	Manganese as Mn	0.1	0.232	0.068
23.	Sulphide as S	0.05	BLQ	BDL
24.	Aluminium as Al	0.03	0.016	0.010
25.	Total Alkalinity as CaCO <sub>3</sub>	200	153	<b>249.2</b>
26.	Iron as Fe	0.3	BLQ	0.23
27.	Sodium as Na	-	86	--
28.	Potassium as K	-	3.3	14.16
29.	Biochemical Oxygen Demand (BOD) for 3 days at 27°C	-	3.2	--
30.	Chemical Oxygen Demand (COD)	-	8	--

**Name of the location : Pudukuppam village Pipe Water**

S.No	Parameters	Drinking water Standard ( IS 10500 2012)	TNPCB Report	NGO report (M/s. Chennai Mettex Lab Private Limited)
1.	pH at 25°C	6.5-8.5	8.26	7.83
2.	Electrical Conductivity	-	786	888
3.	Total Dissolved Solids at 180 °C	500	488	497
4.	Turbidity	1	BLQ	<0.5NTU
5.	Total Suspended Solids at 105 °C	--	--	BDL
6.	Oil & Grease	--	--	--
7.	Fluoride as F	1	NA	0.59
8.	Chloride as Cl	250	108	90.6
9.	Sulphates as SO <sub>4</sub>	200	72	68.6
10.	Zinc as Zn	5	0.013	BDL
11.	Cadmium as Cd	0.003	BLQ	BDL
12.	Nickel as Ni	0.02	0.01	BDL
13.	Lead as Pb	0.01	BLQ	BDL
14.	Arsenic as As	0.01	BLQ	BDL
15.	Chromium as Cr	0.05	BLQ	BDL
16.	Mercury as Hg	0.001	BLQ	BDL
17.	Selenium as Se	0.01	BLQ	BDL
18.	Boron as B	0.5	0.342	0.070
19.	Total Hardness as CaCO <sub>3</sub>	200	<b>302</b>	<b>318</b>

20.	Calcium as Ca	75	82	<b>81</b>
21.	Magnesium as Mg	30	23.3	28
22.	Manganese as Mn	0.1	0.024	0.076
23.	Sulphide as S	0.05	BLQ	BDL
24.	Aluminium as Al	0.03	BLQ	BDL
25.	Total Alkalinity as CaCO <sub>3</sub>	200	193	<b>208</b>
26.	Iron as Fe	0.3	BLQ	0.18
27.	Sodium as Na	-	63	--
28.	Potassium as K	-	5.3	8.03
29.	Biochemical Oxygen Demand (BOD) for 3 days at 27°C	-	BLQ	--
30.	Chemical Oxygen Demand (COD)	-	BLQ	--

**Name of the location : Karrikuppam Village**

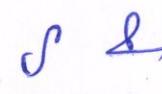
S.No	Parameters	Drinking water Standard ( IS 10500 2012)	TNPCB Report	NGO report (M/s. Chennai Mettex Lab Private Limited)
1.	pH at 25°C	6.5-8.5	6.94	7.27
2.	Electrical Conductivity	-	509	1555
3.	Total Dissolved Solids at 180 °C	500	312	902
4.	Turbidity	1	NA	18 NTU
5.	Total Suspended Solids at 105 °C	--	--	BDL
6.	Oil & Grease	--	--	--
7.	Fluoride as F	1	NA	1.15
8.	Chloride as Cl	250	37.7	192
9.	Sulphates as SO <sub>4</sub>	200	50.4	128.7
10.	Zinc as Zn	5	BLQ	BDL
11.	Cadmium as Cd	0.003	BLQ	BDL
12.	Nickel as Ni	0.02	0.005	BDL
13.	Lead as Pb	0.01	BLQ	BDL
14.	Arsenic as As	0.01	BLQ	BDL
15.	Chromium as Cr	0.05	BLQ	BDL
16.	Mercury as Hg	0.001	BLQ	BDL
17.	Selenium as Se	0.01	BLQ	BDL
18.	Boron as B	0.5	0.301	0.144
19.	Total Hardness as CaCO <sub>3</sub>	<b>200</b>	143	<b>415</b>
20.	Calcium as Ca	<b>75</b>	32	<b>92</b>
21.	Magnesium as Mg	30	15	<b>44.9</b>
22.	Manganese as Mn	0.1	0.187	<b>0.101</b>
23.	Sulphide as S	0.05	BLQ	BDL
24.	Aluminium as Al	0.03	0.015	BDL
25.	Total Alkalinity as CaCO <sub>3</sub>	200	104	<b>267.8</b>
26.	Iron as Fe	0.3	BLQ	<b>0.39</b>
27.	Sodium as Na	-	42	--
28.	Potassium as K	-	2.4	47
29.	Biochemical Oxygen Demand (BOD) for 3 days at 27°C	-	BLQ	--

30.	Chemical Oxygen Demand (COD)	-	8	--
<b>Name of the location: Tholkappiar Nagar</b>				
S.No	Parameters	Drinking water Standard ( IS 10500 2012)	TNPCB Report	NGO report (M/s.Tamilnadu Test House Private Limited)
1.	pH at 25°C	6.5-8.5	7.53	7.691
2.	Electrical Conductivity	-	221	423.63
3.	Total Dissolved Solids at 180 °C	500	128	237.23
4.	Turbidity	1	1.7	<b>7.00</b>
5.	Total Suspended Solids at 105 °C	--	--	9.00
6.	Oil & Grease	--	--	--
7.	Fluoride as F	1	BLQ	BQL
8.	Chloride as Cl	250	18.8	47.86
9.	Sulphates as SO4	200	6.4	38.64
10.	Zinc as Zn	5	BLQ	BQL
11.	Cadmium as Cd	0.003	BLQ	BQL
12.	Nickel as Ni	0.02	0.024	BQL
13.	Lead as Pb	0.01	BLQ	BQL
14.	Arsenic as As	0.01	BLQ	BQL
15.	Chromium as Cr	0.05	BLQ	BQL
16.	Mercury as Hg	0.001	BLQ	<b>0.25</b>
17.	Selenium as Se	0.01	BLQ	<b>0.014</b>
18.	Boron as B	0.5	<0.1	BQL
19.	Total Hardness as CaCO3	200	61	100.00
20.	Calcium as Ca	75	17.4	24.05
21.	Magnesium as Mg	30	4.4	9.72
22.	Manganese as Mn	0.1	0.012	BQL
23.	Sulphide as S	0.05	BLQ	NA
24.	Aluminium as Al	0.03	BLQ	BDL
25.	Total Alkalinity as CaCO3	200	54	102.00
26.	Iron as Fe	0.3	0.19	0.19
27.	Sodium as Na	-	16.7	--
28.	Potassium as K	-	2.4	14.80
29.	Biochemical Oxygen Demand (BOD) for 3 days at 27°C	-	BLQ	--
30.	Chemical Oxygen Demand (COD)	-	4	31.08

**COMPARISON OF TNPCB LAN AND PRIVATE LAB - REPORTS WITH SOIL STANDARDS WITH REGRDS TO HEAVY METALS CONCENTRATION IN THE SAMPLES COLLECTED ON 11.08.2023,16.08.2023 AND 28.09.2023**

<b>Name of the Location : Karumbu Thottam Vadakuvellur</b>				
Sl.No.	Parameters	Soil standards	TNPCB committee Results	NGO report ( Tamil nadu Test Home Private Limited )
1	Zinc as Zn	250	<b>492.7</b>	78.79
2	Nickel as Ni	45	<b>99.62</b>	19.17

3	Cadmium as Cd	1.4	1.25	0.30
4	Lead as Pb	70	8.80	3.02
5	Arsenic as As	12	BLQ	BQL
6	Total Chromium as Cr	64	15.50	BQL
7	Mercury as Hg	6.6	BLQ	0.23
8	Selenium as Se	1.0	BLQ	<b>24.12</b>
<b>Name of the Location: Vadakku Vellore By pass</b>				
Sl.No.	Parameters	Soil standards	TNPCB Results	NGO not furnished the report
1.	Zinc as Zn	250	12.37	
2.	Nickel as Ni	45	13.94	
3.	Cadmium as Cd	1.4	BLQ	
4.	Lead as Pb	70	20.32	
5.	Arsenic as As	12	3.60	
6.	Total Chromium as Cr	64	7.62	
7.	Mercury as Hg	6.6	<0.04	
8.	Selenium as Se	1.0	<0.5	
<b>Name of the Location: Agriculture Land near Iyyan Lake</b>				
Sl.No.	Parameters	Soil standards	TNPCB Results	NGO report (Chennai Mettlex Lab Pvt Limited )
1.	Zinc as Zn	250	1.53	152
2.	Nickel as Ni	45	3.63	20.5
3.	Cadmium as Cd	1.4	1.12	BDL
4.	Lead as Pb	70	1.83	BDL
5.	Arsenic as As	12	BLQ	BDL
6.	Total Chromium as Cr	64	3.9	78.6
7.	Mercury as Hg	6.6	BLQ	BDL
8.	Selenium as Se	1.0	BLQ	BDL
<b>Name of the Location: Paddy Filed within one Kilometer from the stack of NNTPS</b>				
Sl.No.	Parameters	Soil standards	TNPCB Results	NGO report (Chennai Mettlex Lab Pvt Limited )
1.	Zinc as Zn	250	9.35	205
2.	Nickel as Ni	45	2.20	<b>87.4</b>
3.	Cadmium as Cd	1.4	BLQ	BDL
4.	Lead as Pb	70	9.58	BDL
5.	Arsenic as As	12	BLQ	BDL
6.	Total Chromium as Cr	64	BLQ	21.6
7.	Mercury as Hg	6.6	BLQ	BDL
8.	Selenium as Se	1.0	BLQ	BDL
<b>Name of the Location: Karikuppam Village agricultural land near Thermal Power Plant</b>				
Sl.No.	Parameters	Soil standards	TNPCB Results	NGO report (Chennai Mettlex Lab Pvt Limited )
1.	Zinc as Zn	250	16.01	20.8
2.	Nickel as Ni	45	6.20	4.68
3.	Cadmium as Cd	1.4	1.23	BDL
4.	Lead as Pb	70	10.54	BDL
5.	Arsenic as As	12	BLQ	BDL
6.	Total Chromium as Cr	64	6.72	BDL
7.	Mercury as Hg	6.6	BLQ	BDL
8.	Selenium as Se	1.0	BLQ	BDL

  
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**COMPARISON OF TNPCB LAB AND PRIVATE LAB REPORTS WITH THE SURFACE WATER STANDARDS WITH REGARDS TO HEAVY METALS CONCENTRATION IN THE SAMPLES COLLECTED ON 03.04.2024**

<b>Name of the location : Neyveli PCS store Discharge</b>					
S.N O	Parameters	Surface water Standard ( IS 2296 Class E)	TNPCB Report	M/s. Chennai Mettex Lab Private Limited	M/s.Tamilnadu Test House Private Limited
1.	Zinc as Zn	-	No flow during the collection of sample. Hence sample could not be collected		
2.	Cadmium as Cd	-			
3.	Nickel as Ni	-			
4.	Lead as Pb	-			
5.	Arsenic as As	-			
6.	Total Chromium as Cr	-			
7.	Mercury as Hg	-			
8.	Selenium as Se	-			
9.	Calcium as Ca	-			
10	Magnesium as Mg	-			
11	Manganese as Mn	--			
12	Iron as Fe	-			
<b>Name of the location : Discharge from NNTPS (polluted Surface water)</b>					
S.N O	Parameters	Surface water Standard ( IS 2296 Class E)	TNPCB Report	M/s. Chennai Mettex Lab Private Limited	M/s.Tamilnadu Test House Private Limited
1.	Zinc as Zn	-	0.053	BDL	BQL
2.	Cadmium as Cd	-	0.032	BDL	BQL
3.	Nickel as Ni	-	0.105	BDL	BQL
4.	Lead as Pb	-	0.072	BDL	BQL
5.	Arsenic as As	-	0.001	BDL	BQL
6.	Total Chromium as Cr	-	<0.06	BDL	BQL
7.	Mercury as Hg	-	BLQ	BDL	BQL
8.	Selenium as Se	-	BLQ	BDL	BQL
9.	Calcium as Ca	-	132.26	208	117.95
10	Magnesium as Mg	-	26.73	112	55.65
11	Manganese as Mn	--	0.120	0.283	BQL
12	Iron as Fe	-	1.03	0.07	1.41
<b>Name of the location : Discharge from NNTPS</b>					
S.N O	Parameters	Surface water Standard ( IS 2296 Class E)	TNPCB Report	M/s. Chennai Mettex Lab Private Limited	M/s.Tamilnadu Test House Private Limited
1.	Zinc as Zn	-	0.053	BDL	BQL
2.	Cadmium as Cd	-	0.032	BDL	BQL
3.	Nickel as Ni	-	0.105	BDL	BQL
4.	Lead as Pb	-	0.072	BDL	BQL
5.	Arsenic as As	-	0.001	BDL	BQL

<b>Name of the location : Neyveli PCS store Discharge</b>					
S.N O	Parameters	Surface water Standard ( IS 2296 Class E)	TNPCB Report	M/s. Chennai Mettex Lab Private Limited	M/s.Tamilnadu Test House Private Limited
6.	Total Chromium as Cr	-	<0.06	BDL	BQL
7.	Mercury as Hg	-	BLQ	BDL	BQL
8.	Selenium as Se	-	BLQ	BDL	BQL
9.	Calcium as Ca	-	132.26	208	117.95
10	Magnesium as Mg	-	26.73	112	55.65
11	Manganese as Mn	--	0.120	0.283	BQL
12	Iron as Fe	-	1.03	0.07	1.41
<b>Name of the location : Direct Discharge from Neyveli TPS I</b>					
S.N O	Parameters	Surface water Standard ( IS 2296 Class E)	TNPCB Report	M/s. Chennai Mettex Lab Private Limited	M/s.Tamilnadu Test House Private Limited
1.	Zinc as Zn	-	0.094	BDL	BQL
2.	Cadmium as Cd	-	0.030	BDL	BQL
3.	Nickel as Ni	-	0.042	BDL	BQL
4.	Lead as Pb	-	0.05	BDL	BQL
5.	Arsenic as As	-	0.002	BDL	BQL
6.	Total Chromium as Cr	-	<0.06	BDL	BQL
7.	Mercury as Hg	-	BLQ	BDL	BQL
8.	Selenium as Se	-	BLQ	BDL	BQL
9.	Calcium as Ca	-	20.04	25	13.11
10	Magnesium as Mg	-	12.15	11	10.6
11	Manganese as Mn	--	<.01	BDL	BQL
12	Iron as Fe	-	0.279	0.19	0.97
<b>Name of the location : Discharge from Neyveli TPS II</b>					
S.N O	Parameters	Surface water Standard ( IS 2296 Class E)	TNPCB Report	M/s. Chennai Mettex Lab Private Limited	M/s.Tamilnadu Test House Private Limited
1.	Zinc as Zn	-	0.411	BDL	BQL
2.	Cadmium as Cd	-	0.036	BDL	BQL
3.	Nickel as Ni	-	0.112	BDL	BQL
4.	Lead as Pb	-	0.139	BDL	BQL
5.	Arsenic as As	-	0.003	BDL	BQL
6.	Total Chromium as Cr	-	<0.06	BDL	BQL
7.	Mercury as Hg	-	0.027	BDL	BQL
8.	Selenium as Se	-	BLQ	BDL	BQL
9.	Calcium as Ca	-	32.06	357	174.75
10	Magnesium as Mg	-	14.88	122	74.19
11	Manganese as Mn	--	0.173	0.122	BQL

<b>Name of the location : Neyveli PCS store Discharge</b>					
S.N O	Parameters	Surface water Standard ( IS 2296 Class E)	TNPCB Report	M/s. Chennai Mettex Lab Private Limited	M/s.Tamilnadu Test House Private Limited
12	Iron as Fe	-	6.120	6.14	2.24
<b>Name of the location : Opposite to Main Gate of Mine 2 Kootu Kunideer Thittam near Valiyamadevi</b>					
S.N O	Parameters	Surface water Standard ( IS 2296 Class E)	TNPCB Report	M/s. Chennai Mettex Lab Private Limited	M/s.Tamilnadu Test House Private Limited
1.	Zinc as Zn	-	0.111	BDL	BQL
2.	Cadmium as Cd	-	0.031	BDL	BQL
3.	Nickel as Ni	-	0.066	BDL	BQL
4.	Lead as Pb	-	0.106	BDL	BQL
5.	Arsenic as As	-	0.0006	BDL	BQL
6.	Total Chromium as Cr	-	<0.06	BDL	BQL
7.	Mercury as Hg	-	0.014	BDL	BQL
8.	Selenium as Se	-	BLQ	BDL	BQL
9.	Calcium as Ca	-	96.20	176	113.5
10	Magnesium as Mg	-	9.72	54	34.45
11	Manganese as Mn	--	0.083	0.060	BQL
12	Iron as Fe	-	0.725	0.53	0.81
<b>Name of the location : Coal Mine discharged from Mine I</b>					
S.N O	Parameters	Surface water Standard ( IS 2296 Class E)	TNPCB Report	M/s. Chennai Mettex Lab Private Limited	M/s.Tamilnadu Test House Private Limited
1.	Zinc as Zn	-	0.105	BDL	BQL
2.	Cadmium as Cd	-	0.031	BDL	BQL
3.	Nickel as Ni	-	0.038	BDL	BQL
4.	Lead as Pb	-	0.086	BDL	BQL
5.	Arsenic as As	-	0.0003	BDL	BQL
6.	Total Chromium as Cr	-	<0.06	BDL	BQL
7.	Mercury as Hg	-	BLQ	BDL	BQL
8.	Selenium as Se	-	BLQ	BDL	BQL
9.	Calcium as Ca	-	40.08	47	39.32
10	Magnesium as Mg	-	19.44	10.4	13.25
11	Manganese as Mn	--	0.026	BDL	BQL
12	Iron as Fe	-	0.638	0.58	1.9
<b>Name of the location : Parawnar River carrying NLC Mine 2 Discharge</b>					
S.N O	Parameters	Surface water Standard ( IS 2296 Class E)	TNPCB Report	M/s. Chennai Mettex Lab Private Limited	M/s.Tamilnadu Test House Private Limited
1.	Zinc as Zn	-	0.096	BDL	BQL

<b>Name of the location : Neyveli PCS store Discharge</b>					
S.N O	Parameters	Surface water Standard ( IS 2296 Class E)	TNPCB Report	M/s. Chennai Mettex Lab Private Limited	M/s.Tamilnadu Test House Private Limited
2.	Cadmium as Cd	-	0.035	BDL	BQL
3.	Nickel as Ni	-	0.091	BDL	BQL
4.	Lead as Pb	-	0.110	BDL	BQL
5.	Arsenic as As	-	0.0009	BDL	BQL
6.	Total Chromium as Cr	-	<0.06	BDL	BQL
7.	Mercury as Hg	-	BLQ	BDL	BQL
8.	Selenium as Se	-	BLQ	BDL	BQL
9.	Calcium as Ca	-	152.30	173	135.43
10	Magnesium as Mg	-	46.17	50	47.7
11	Manganese as Mn	--	0.312	0.129	BQL
12	Iron as Fe	-	2.524	1.02	1.13
<b>Name of the location : Walaja Lake</b>					
S.N O	Parameters	Surface water Standard ( IS 2296 Class E)	TNPCB Report	M/s. Chennai Mettex Lab Private Limited	M/s.Tamilnadu Test House Private Limited
1.	Zinc as Zn	-	0.053	BDL	BQL
2.	Cadmium as Cd	-	0.033	BDL	BQL
3.	Nickel as Ni	-	0.061	BDL	BQL
4.	Lead as Pb	-	0.092	BDL	BQL
5.	Arsenic as As	-	0.0009	BDL	BQL
6.	Total Chromium as Cr	-	<0.06	BDL	BQL
7.	Mercury as Hg	-	0.018	BDL	BQL
8.	Selenium as Se	-	BLQ	BDL	BQL
9.	Calcium as Ca	-	104.20	180	91.74
10	Magnesium as Mg	-	43.74	54	45.05
11	Manganese as Mn	--	0.163	0.109	BQL
12	Iron as Fe	-	0.644	0.51	0.65
<b>Name of the location : Pond near Ash Pond water discharge to the pond some times ( Aadhandarkollai)</b>					
S.N O	Parameters	Surface water Standard ( IS 2296 Class E)	TNPCB Report	M/s. Chennai Mettex Lab Private Limited	M/s.Tamilnadu Test House Private Limited
1.	Zinc as Zn	-	0.122	BDL	BQL
2.	Cadmium as Cd	-	0.036	BDL	BQL
3.	Nickel as Ni	-	0.113	BDL	BQL
4.	Lead as Pb	-	0.101	BDL	BQL
5.	Arsenic as As	-	0.0006	BDL	BQL
6.	Total Chromium as Cr	-	<0.06	BDL	BQL
7.	Mercury as Hg	-	BLQ	BDL	BQL
8.	Selenium as Se	-	BLQ	BDL	BQL

<b>Name of the location : Neyveli PCS store Discharge</b>					
S.N O	Parameters	Surface water Standard ( IS 2296 Class E)	TNPCB Report	M/s. Chennai Mettex Lab Private Limited	M/s.Tamilnadu Test House Private Limited
9.	Calcium as Ca	-	152.30	156	166.01
10	Magnesium as Mg	-	17.01	44	13.25
11	Manganese as Mn	--	0.096	0.125	BQL
12	Iron as Fe	-	0.251	0.30	0.45
<b>Name of the location : Kanjamadanpettai Point ( control Point)</b>					
S.N O	Parameters	Surface water Standard ( IS 2296 Class E)	TNPCB Report	M/s. Chennai Mettex Lab Private Limited	M/s.Tamilnadu Test House Private Limited
1.	Zinc as Zn	-	0.079	BDL	BQL
2.	Cadmium as Cd	-	0.04	BDL	BQL
3.	Nickel as Ni	-	0.048	BDL	BQL
4.	Lead as Pb	-	0.103	BDL	BQL
5.	Arsenic as As	-	0.001	BDL	BQL
6.	Total Chromium as Cr	-	<0.06	BDL	BQL
7.	Mercury as Hg	-	BLQ	BDL	BQL
8.	Selenium as Se	-	BLQ	BDL	BQL
9.	Calcium as Ca	-	12.02	14	4.36
10	Magnesium as Mg	-	2.43	2	5.3
11	Manganese as Mn	--	0.072	BDL	BQL
12	Iron as Fe	-	1.176	0.66	BQL
<b>Name of the location: Iyyan Lake</b>					
S.N O	Parameters	Surface water Standard ( IS 2296 Class E)	TNPCB Report	M/s. Chennai Mettex Lab Private Limited	M/s.Tamilnadu Test House Private Limited
1.	Zinc as Zn	-	0.135	BDL	BQL
2.	Cadmium as Cd	-	0.040	BDL	BQL
3.	Nickel as Ni	-	0.07	BDL	BQL
4.	Lead as Pb	-	0.095	BDL	BQL
5.	Arsenic as As	-	0.001	BDL	BQL
6.	Total Chromium as Cr	-	<0.06	BDL	BQL
7.	Mercury as Hg	-	0.01	BDL	BQL
8.	Selenium as Se	-	BLQ	BDL	BQL
9.	Calcium as Ca	-	84.16	126	56.79
10	Magnesium as Mg	-	7.29	22	21.2
11	Manganese as Mn	--	0.082	BDL	BQL
12	Iron as Fe	-	1.05	1.04	BQL
<b>Name of the location : Karrikuppam Village Fish Pond</b>					
S.N O	Parameters	Surface water Standard (	TNPCB Report	M/s. Chennai Mettex Lab Private Limited	M/s.Tamilnadu Test House Private Limited

<b>Name of the location : Neyveli PCS store Discharge</b>					
S.N O	Parameters	Surface water Standard ( IS 2296 Class E)	TNPCB Report	M/s. Chennai Mettex Lab Private Limited	M/s.Tamilnadu Test House Private Limited
		IS 2296 Class E)			
1.	Zinc as Zn	-	0.208	BDL	BQL
2.	Cadmium as Cd	-	0.041	BDL	BQL
3.	Nickel as Ni	-	0.102	BDL	BQL
4.	Lead as Pb	-	0.196	BDL	BQL
5.	Arsenic as As	-	0.006	BDL	BQL
6.	Total Chromium as Cr	-	<0.06	BDL	BQL
7.	Mercury as Hg	-	BLQ	BDL	BQL
8.	Selenium as Se	-	BLQ	BDL	BQL
9.	Calcium as Ca	-	40.08	66	43.69
10	Magnesium as Mg	-	19.44	19	26.5
11	Manganese as Mn	--	0.045	BDL	BQL
12	Iron as Fe	-	0.601	0.45	BQL
<b>Name of the location : Canal near the Thermal power Plant ( water discharge from the plant time to time)</b>					
S.N O	Parameters	Surface water Standard ( IS 2296 Class E)	TNPCB Report	M/s. Chennai Mettex Lab Private Limited	M/s.Tamilnadu Test House Private Limited
1.	Zinc as Zn	-	0.125	BDL	BQL
2.	Cadmium as Cd	-	0.045	BDL	BQL
3.	Nickel as Ni	-	0.087	BDL	BQL
4.	Lead as Pb	-	0.103	BDL	BQL
5.	Arsenic as As	-	0.015	BDL	BQL
6.	Total Chromium as Cr	-	<0.06	BDL	BQL
7.	Mercury as Hg	-	BLQ	BDL	BQL
8.	Selenium as Se	-	BLQ	BDL	BQL
9.	Calcium as Ca	-	44.08	54	43.68
10	Magnesium as Mg	-	17.01	19	3.35
11	Manganese as Mn	--	0.779	BDL	BQL
12	Iron as Fe	-	0.764	0.96	0.86
<b>Name of the location : Mine 1 outlet Vennageni</b>					
S.N O	Parameters	Surface water Standard ( IS 2296 Class E)	TNPCB Report	M/s. Chennai Mettex Lab Private Limited	M/s.Tamilnadu Test House Private Limited
1.	Zinc as Zn	-	0.196	BDL	BQL
2.	Cadmium as Cd	-	0.045	BDL	BQL
3.	Nickel as Ni	-	0.098	BDL	BQL
4.	Lead as Pb	-	0.114	BDL	BQL
5.	Arsenic as As	-	0.0003	BDL	BQL
6.	Total Chromium as Cr	-	<0.06	BDL	BQL

<b>Name of the location : Neyveli PCS store Discharge</b>					
S.N O	Parameters	Surface water Standard ( IS 2296 Class E)	TNPCB Report	M/s. Chennai Mettex Lab Private Limited	M/s.Tamilnadu Test House Private Limited
7.	Mercury as Hg	-	BLQ	BDL	BQL
8.	Selenium as Se	-	BLQ	BDL	BQL
9.	Calcium as Ca	-	60.12	65	48.05
10	Magnesium as Mg	-	9.72	15	29.15
11	Manganese as Mn	--	0.090	0.233	BQL
12	Iron as Fe	-	0.476	0.38	0.21
<b>Name of the location : Ramapuri, Mantharakuppam Vadakkuvellur</b>					
S.N O	Parameters	Surface water Standard ( IS 2296 Class E)	TNPCB Report	M/s. Chennai Mettex Lab Private Limited	M/s.Tamilnadu Test House Private Limited
1.	Zinc as Zn	-	0.175	BDL	BQL
2.	Cadmium as Cd	-	0.047	BDL	BQL
3.	Nickel as Ni	-	0.104	BDL	BQL
4.	Lead as Pb	-	0.138	BDL	BQL
5.	Arsenic as As	-	0.0003	BDL	BQL
6.	Total Chromium as Cr	-	<0.06	BDL	BQL
7.	Mercury as Hg	-	BLQ	BDL	BQL
8.	Selenium as Se	-	BLQ	BDL	BQL
9.	Calcium as Ca	-	148.29	168	144.17
10	Magnesium as Mg	-	19.44	63	52.99
11	Manganese as Mn	--	0.170	0.060	BQL
12	Iron as Fe	-	1.585	1.13	1.08
<b>Name of the location : Vadakku vellur Ammeri</b>					
S.N O	Parameters	Surface water Standard ( IS 2296 Class E)	TNPCB Report	M/s. Chennai Mettex Lab Private Limited	M/s.Tamilnadu Test House Private Limited
1.	Zinc as Zn	-	0.095	BDL	BQL
2.	Cadmium as Cd	-	0.047	BDL	BQL
3.	Nickel as Ni	-	0.102	BDL	BQL
4.	Lead as Pb	-	0.130	BDL	BQL
5.	Arsenic as As	-	0.029	BDL	BQL
6.	Total Chromium as Cr	-	<0.06	BDL	BQL
7.	Mercury as Hg	-	0.019	BDL	BQL
8.	Selenium as Se	-	BLQ	BDL	BQL
9.	Calcium as Ca	-	152.30	204	192.22
10	Magnesium as Mg	-	43.74	56	50.35
11	Manganese as Mn	--	0.044	BDL	BQL
12	Iron as Fe	-	0.240	0.17	1
<b>Name of the location : NNTPS outlet near Thropathi Amman Temple.</b>					

Name of the location : Neyveli PCS store Discharge					
S.N O	Parameters	Surface water Standard ( IS 2296 Class E)	TNPCB Report	M/s. Chennai Mettex Lab Private Limited	M/s.Tamilnadu Test House Private Limited
S.N O	Parameters	Surface water Standard ( IS 2296 Class E)	TNPCB Report	M/s. Chennai Mettex Lab Private Limited	M/s.Tamilnadu Test House Private Limited
1.	Zinc as Zn	-	0.053	BDL	BQL
2.	Cadmium as Cd	-	0.032	BDL	BQL
3.	Nickel as Ni	-	0.105	BDL	BQL
4.	Lead as Pb	-	0.072	BDL	BQL
5.	Arsenic as As	-	0.001	BDL	BQL
6.	Total Chromium as Cr	-	<0.06	BDL	BQL
7.	Mercury as Hg	-	BLQ	BDL	BQL
8.	Selenium as Se	-	BLQ	BDL	BQL
9.	Calcium as Ca	-	132.26	208	117.95
10	Magnesium as Mg	-	26.73	112	55.65
11	Manganese as Mn	--	0.120	0.283	BQL
12	Iron as Fe	-	1.03	0.07	1.41
Name of the location: Central store					
S.N O	Parameters	Surface water Standard ( IS 2296 Class E)	TNPCB Report	M/s. Chennai Mettex Lab Private Limited	M/s.Tamilnadu Test House Private Limited
1.	Zinc as Zn	-	No flow during the collection of sample. . Hence sample could not be collected		
2.	Cadmium as Cd	-			
3.	Nickel as Ni	-			
4.	Lead as Pb	-			
5.	Arsenic as As	-			
6.	Total Chromium as Cr	-			
7.	Mercury as Hg	-			
8.	Selenium as Se	-			
9.	Calcium as Ca	-			
10	Magnesium as Mg	-			
11	Manganese as Mn	--			
12	Iron as Fe	-			
Name of the location: TPS outlet Karuvetti					
S.N O	Parameters	Surface water Standard ( IS 2296 Class E)	TNPCB Report	M/s. Chennai Mettex Lab Private Limited	M/s.Tamilnadu Test House Private Limited
1.	Zinc as Zn	-	No flow during the collection of sample. . Hence sample could not be collected		
2.	Cadmium as Cd	-			
3.	Nickel as Ni	-			
4.	Lead as Pb	-			
5.	Arsenic as As	-			

Name of the location : Neyveli PCS store Discharge					
S.N O	Parameters	Surface water Standard ( IS 2296 Class E)	TNPCB Report	M/s. Chennai Mettex Lab Private Limited	M/s.Tamilnadu Test House Private Limited
6.	Total Chromium as Cr	-			
7.	Mercury as Hg	-			
8.	Selenium as Se	-			
9.	Calcium as Ca	-			
10	Magnesium as Mg	-			
11	Manganese as Mn	--			
12	Iron as Fe	-			
Name of the location: Muppaneri					
S.N O	Parameters	Surface water Standard ( IS 2296 Class E)	TNPCB Report	M/s. Chennai Mettex Lab Private Limited	M/s.Tamilnadu Test House Private Limited
1.	Zinc as Zn	-	0.067	BDL	BQL
2.	Cadmium as Cd	-	0.047	BDL	BQL
3.	Nickel as Ni	-	0.120	BDL	BQL
4.	Lead as Pb	-	0.116	BDL	BQL
5.	Arsenic as As	-	0.001	BDL	BQL
6.	Total Chromium as Cr	-	<0.06	BDL	BQL
7.	Mercury as Hg	-	BLQ	BDL	BQL
8.	Selenium as Se	-	BLQ	BDL	BQL
9.	Calcium as Ca	-	136.27	164	135.43
10	Magnesium as Mg	-	41.31	41	58.3
11	Manganese as Mn	--	0.124	0.046	0.15
12	Iron as Fe	-	1.232	1.16	4.42
Name of the location: TPS 2 outlet					
S.N O	Parameters	Surface water Standard ( IS 2296 Class E)	TNPCB Report	M/s. Chennai Mettex Lab Private Limited	M/s.Tamilnadu Test House Private Limited
1.	Zinc as Zn	-	0.411	BDL	BQL
2.	Cadmium as Cd	-	0.036	BDL	BQL
3.	Nickel as Ni	-	0.112	BDL	BQL
4.	Lead as Pb	-	0.139	BDL	BQL
5.	Arsenic as As	-	0.003	BDL	BQL
6.	Total Chromium as Cr	-	<0.06	BDL	BQL
7.	Mercury as Hg	-	0.027	BDL	BQL
8.	Selenium as Se	-	BLQ	BDL	BQL
9.	Calcium as Ca	-	32.06	357	174.75
10	Magnesium as Mg	-	14.88	122	74.19
11	Manganese as Mn	--	0.173	0.122	BQL

Name of the location : Neyveli PCS store Discharge					
S.N	Parameters	Surface water Standard ( IS 2296 Class E)	TNPCB Report	M/s. Chennai Mettex Lab Private Limited	M/s.Tamilnadu Test House Private Limited
12	Iron as Fe	-	6.120	6.14	2.24

**COMPARISON OF TNPCB LAN AND PRIVATE LAB REPORTS WITH THE GROUND WATER STANDARDS WITH REGARDS HEAVY METALS CONCENTRATION IN THE SAMPLES COLLECTED ON 03.04.2024**

Name of the location : Aadhandarkollai Borewell near Thiravupathi Amman Temple 300m away from ash pond					
S.N	Parameters	Drinking	TNPCB	M/s. Chennai	M/s.Tamilnadu

O		water Standard ( IS 10500 2012)	Report	Mettex Lab Private Limited	Test House Private Limited
1.	pH at 25°C	6.5-8.5	8.09	6.25	6.55
2.	Electrical Conductivity	-	158	185	196.5
3.	Total Dissolved Solids at 180 °C	500	108	128	110
4.	Turbidity	1	<1	<0.05	<1
5.	Total Suspended Solids at 105 °C	--	8	BDL	3
6.	Oil & Grease	--	<2	BDL	BQL
7.	Fluoride as F	1	0.403	0.12	0.568
8.	Chloride as Cl	250	14	23	29.21
9.	Sulphates as SO4	200	27	9	BQL
10	Zinc as Zn	5	0.139	BDL	BQL
11	Cadmium as Cd	0.003	0.035	BDL	BQL
12	Nickel as Ni	0.02	0.050	BDL	BQL
13	Lead as Pb	0.01	0.069	BDL	BQL
14	Arsenic as As	0.01	0.0002	BDL	BQL
15	Chromium as Cr	0.05	<0.06	BDL	BQL
16	Mercury as Hg	0.001	BLQ	BDL	BQL
17	Selenium as Se	0.01	BLQ	BDL	BQL
18	Boron as B	0.5	0.18	0.129	BQL
19	Total Hardness as CaCO3	200	40	78	65.4
20	Calcium as Ca	75	8.817	20	13.11
21	Magnesium as Mg	30	4.37	7	7.94
22	Manganese as Mn	0.1	0.014	BDL	BQL
23	Sulphide as S	0.05	<1	BDL	BQL
24	Aluminium as Al	0.03	0.480	0.008	BQL
25	Total Alkalinity as CaCO3	200	60	53	80.4
26	Iron as Fe	0.3	0.272	0.16	0.35
27	Sodium as Na	-	7.2	10	36.1
28	Potassium as K	-	6.2	3.4	20.1
29	Biochemical Oxygen Demand (BOD) for 3 days at 27°C	-	2.2	BDL	4
30	Chemical Oxygen Demand (COD)	-	24	BDL	16.8
Inference		In			
<b>Name of the location : Vanadhirayapuram Village 100 meters from the Mine</b>					
S.N	Parameters	Drinking water Standard ( IS 10500 2012)	TNPCB Report	M/s. Chennai Mettex Lab Private Limited	M/s.Tamilnadu Test House Private Limited
1.	pH at 25°C	6.5-8.5	8.01	6.75	6.67
2.	Electrical Conductivity	-	861	528	575.9
3.	Total Dissolved Solids at 180 °C	500	596	362	323
4.	Turbidity	1	2.48	<0.05	<1

5.	Total Suspended Solids at 105 °C	--	12	BDL	11
6.	Oil & Grease	--	<2	BDL	9
7.	Fluoride as F	1	0.387	0.36	1.462
8.	Chloride as Cl	250	126	68	54.77
9.	Sulphates as SO4	200	69	31	65.57
10	Zinc as Zn	5	0.148	BDL	BQL
11	Cadmium as Cd	0.003	0.040	BDL	BQL
12	Nickel as Ni	0.02	0.087	BDL	BQL
13	Lead as Pb	0.01	0.110	BDL	BQL
14	Arsenic as As	0.01	0.206	BDL	BQL
15	Chromium as Cr	0.05	<0.06	BDL	BQL
16	Mercury as Hg	0.001	BLQ	BDL	BQL
17	Selenium as Se	0.01	BLQ	BDL	BQL
18	Boron as B	0.5	0.12	0.195	BQL
19	Total Hardness as CaCO3	200	200	147	141.7
20	Calcium as Ca	75	64.12	40	30.58
21	Magnesium as Mg	30	9.72	12	15.9
22	Manganese as Mn	0.1	0.038	BDL	BQL
23	Sulphide as S	0.05	<1	BDL	BQL
24	Aluminium as Al	0.03	0.187	0.040	BQL
25	Total Alkalinity as CaCO3	200	140	97	120.6
26	Iron as Fe	0.3	0.329	0.34	1.64
27	Sodium as Na	-	48.7	40	33.1
28	Potassium as K	-	49.3	14	17.1
29	Biochemical Oxygen Demand(BOD) for 3 days at 27°C	-	2.6	3	1
30	Chemical Oxygen Demand (COD)	-	40	8	8.4

**Name of the location : Ayikuppam – Kullanchavadi Bore well (Control Point)**

S.N	Parameters	Drinking water Standard ( IS 10500 2012)	TNPCB Report	M/s. Chennai Mettex Lab Private Limited	M/s.Tamilnadu Test House Private Limited
1.	pH at 25°C	6.5-8.5	7.54	7.02	6.88
2.	Electrical Conductivity	-	482	537	773.1
3.	Total Dissolved Solids at 180 °C	500	312	411	433
4.	Turbidity	1	2.83	<0.05	<1
5.	Total Suspended Solids at 105 °C	--	12	BDL	4
6.	Oil & Grease	--	<2	BDL	25.2
7.	Fluoride as F	1	0.499	0.28	8.444
8.	Chloride as Cl	250	70	69	65.72
9.	Sulphates as SO4	200	29	27	29.77
10	Zinc as Zn	5	0.150	BDL	BQL
11	Cadmium as Cd	0.003	0.040	BDL	BQL
12	Nickel as Ni	0.02	0.068	BDL	BQL

13	Lead as Pb	0.01	<b>0.114</b>	BDL	BQL
14	Arsenic as As	0.01	0.00002	BDL	BQL
15	Chromium as Cr	0.05	<0.06	BDL	BQL
16	Mercury as Hg	0.001	<b>BLQ</b>	<b>BDL</b>	<b>BQL</b>
17	Selenium as Se	0.01	<b>BLQ</b>	<b>BDL</b>	<b>BQL</b>
18	Boron as B	0.5	0.13	0.180	BQL
19	Total Hardness as CaCO <sub>3</sub>	200	140	161	141.7
20	Calcium as Ca	<b>75</b>	48.09	45	30.58
21	Magnesium as Mg	30	4.86	12	15.89
22	Manganese as Mn	0.1	0.018	BDL	BQL
23	Sulphide as S	0.05	<1	BDL	BQL
24	Aluminium as Al	0.03	BDL	BDL	BQL
25	Total Alkalinity as CaCO <sub>3</sub>	200	80	78	110.55
26	Iron as Fe	0.3	0.264	0.12	BQL
27	Sodium as Na	-	10.9	33	31.6
28	Potassium as K	-	6.3	2.41	7.8
29	Biochemical Oxygen Demand (BOD) for 3 days at 27°C	-	3	3	9
30	Chemical Oxygen Demand (COD)	-	40	9	25.2

**Name of the location: NLC Pipe Water ( Drinking Water Supplied by NLC Management )**

S.N	Parameters	Drinking water Standard ( IS 10500 2012)	TNPCB Report	M/s. Chennai Mettex Lab Private Limited	M/s.Tamilnadu Test House Private Limited
1.	pH at 25°C	6.5-8.5	7.52	6.62	6.87
2.	Electrical Conductivity	-	271	290	382.9
3.	Total Dissolved Solids at 180 °C	500	<b>182</b>	152	214.4
4.	Turbidity	1	<1	<b>&lt;0.05</b>	<1
5.	Total Suspended Solids at 105 °C	--	12	BDL	12
6.	Oil & Grease	--	<2	BDL	BQL
7.	Fluoride as F	1	0.656	BDL	7.579
8.	Chloride as Cl	250	24	24	25.56
9.	Sulphates as SO <sub>4</sub>	200	<b>35</b>	10	56.59
10	Zinc as Zn	5	0.059	BDL	BQL
11	Cadmium as Cd	0.003	<b>0.038</b>	BDL	BQL
12	Nickel as Ni	0.02	<b>0.055</b>	BDL	BQL
13	Lead as Pb	0.01	<b>0.081</b>	BDL	BQL
14	Arsenic as As	0.01	0.0001	BDL	BQL
15	Chromium as Cr	0.05	<0.06	BDL	BQL
16	Mercury as Hg	0.001	<b>BLQ</b>	<b>BDL</b>	<b>BQL</b>
17	Selenium as Se	0.01	<b>BLQ</b>	<b>BDL</b>	<b>BQL</b>
18	Boron as B	0.5	0.37	0.099	BQL
19	Total Hardness as CaCO <sub>3</sub>	200	90	102	109
20	Calcium as Ca	75	28.05	26	30.58
21	Magnesium as Mg	30	4.86	9	7.95

22	Manganese as Mn	0.1	0.012	BDL	BQL
23	Sulphide as S	0.05	<1	BDL	BQL
24	Aluminium as Al	0.03	0.164	BDL	BQL
25	Total Alkalinity as CaCO <sub>3</sub>	200	50	46	70.35
26	Iron as Fe	0.3	0.292	0.73	BQL
27	Sodium as Na	-	8	17	38.20
28	Potassium as K	-	6.4	3	10.40
29	Biochemical Oxygen Demand (BOD) for 3 days at 27°C	-	2	4	55
30	Chemical Oxygen Demand (COD)	-	24	12	226.8

**Name of the location: Vellankulam**

S.N O	Parameters	Drinking water Standard (IS 10500 2012)	TNPCB Report	M/s. Chennai Mettlex Lab Private Limited	M/s. Tamilnadu Test House Private Limited
1.	pH at 25°C	6.5-8.5	6.58	6.21	6.57
2.	Electrical Conductivity	-	126	142	193.6
3.	Total Dissolved Solids at 180 °C	500	86	102	108.4
4.	Turbidity	1	<1	<b>&lt;0.05</b>	<1
5.	Total Suspended Solids at 105 °C	--	8	BDL	8
6.	Oil & Grease	--	<2	BDL	4
7.	Fluoride as F	1	0.421	BDL	8.067
8.	Chloride as Cl	250	13	17	14.61
9.	Sulphates as SO <sub>4</sub>	200	30	7	11.39
10	Zinc as Zn	5	0.128	BDL	BQL
11	Cadmium as Cd	0.003	0.044	BDL	BQL
12	Nickel as Ni	0.02	0.055	BDL	BQL
13	Lead as Pb	0.01	0.082	BDL	BQL
14	Arsenic as As	0.01	0.0001	BDL	BQL
15	Chromium as Cr	0.05	<0.06	BDL	BQL
16	Mercury as Hg	0.001	0.005	BDL	BQL
17	Selenium as Se	0.01	BLQ	BDL	BQL
18	Boron as B	0.5	5	0.077	BQL
19	Total Hardness as CaCO <sub>3</sub>	200	40	57	87.2
20	Calcium as Ca	75	12.02	17	8.75
21	Magnesium as Mg	30	2.43	3.6	15.9
22	Manganese as Mn	0.1	0.016	BDL	BQL
23	Sulphide as S	0.05	<1	BDL	BQL
24	Aluminium as Al	0.03	0.211	BDL	BQL
25	Total Alkalinity as CaCO <sub>3</sub>	200	30	2.7	40.2
26	Iron as Fe	0.3	0.240	0.22	BQL
27	Sodium as Na	-	7.1	11	28.1
28	Potassium as K	-	5.9	2	9.8
29	Biochemical Oxygen Demand (BOD) for 3 days at 27°C	-	<2	3	80

30	Chemical Oxygen Demand (COD)	-	8	9.5	226.8
<b>Name of the location : Pudukuppam village</b>					
S.No	Parameters	Drinking water Standard (IS 10500 2012)	TNPCB Report	M/s. Chennai Mettex Lab Private Limited	M/s.Tamilnadu Test House Private Limited
1.	pH at 25°C	6.5-8.5	8.04	7.47	7.57
2.	Electrical Conductivity	-	840	1190	1041
3.	Total Dissolved Solids at 180 °C	500	<b>580</b>	<b>713</b>	<b>582.9</b>
4.	Turbidity	1	1.92	<b>&lt;0.05</b>	<1
5.	Total Suspended Solids at 105 °C	--	12	BDL	10
6.	Oil & Grease	--	<2	BDL	149
7.	Fluoride as F	1	0.399	0.32	9.235
8.	Chloride as Cl	250	128	146	29.21
9.	Sulphates as SO4	200	59	56	68.3
10	Zinc as Zn	5	0.141	BDL	BQL
11	Cadmium as Cd	0.003	<b>0.041</b>	BDL	BQL
12	Nickel as Ni	0.02	<b>0.055</b>	BDL	BQL
13	Lead as Pb	0.01	<b>0.090</b>	BDL	BQL
14	Arsenic as As	0.01	<b>0.002</b>	BDL	BQL
15	Chromium as Cr	0.05	<0.06	BDL	BQL
16	Mercury as Hg	<b>0.001</b>	<b>0.007</b>	<b>BDL</b>	<b>BQL</b>
17	Selenium as Se	0.01	<b>BLQ</b>	<b>BDL</b>	<b>BQL</b>
18	Boron as B	0.5	0.29	0.176	BQL
19	Total Hardness as CaCO3	<b>200</b>	<b>230</b>	<b>270</b>	<b>272.5</b>
20	Calcium as Ca	75	6.012	78	39.32
21	Magnesium as Mg	30	19.44	18	<b>42.4</b>
22	Manganese as Mn	0.1	0.237	0.192	BQL
23	Sulphide as S	0.05	<1	BDL	BQL
24	Aluminium as Al	<b>0.03</b>	<b>0.149</b>	BDL	BQL
25	Total Alkalinity as CaCO3	200	180	<b>201</b>	<b>201</b>
26	Iron as Fe	0.3	0.169	0.11	BQL
27	Sodium as Na	-	21	102	39.8
28	Potassium as K	-	9.5	13	4.8
29	Biochemical Oxygen Demand (BOD) for 3 days at 27°C	-	3.8	7	92
30	Chemical Oxygen Demand (COD)	-	48	35	272.2
<b>Name of the location : Pudukuppam village Pipe Water</b>					
S.No	Parameters	Drinking water Standard (IS 10500 2012)	TNPCB Report	M/s. Chennai Mettex Lab Private Limited	M/s.Tamilnadu Test House Private Limited
1.	pH at 25°C	6.5-8.5	7.56	7.92	8.08
2.	Electrical Conductivity	-	797	1032	924.4
3.	Total Dissolved Solids at	500	552	724	517.6

	180 °C				
4.	Turbidity	1	1.49	<b>&lt;0.05</b>	<10
5.	Total Suspended Solids at 105 °C	--	14	BDL	56
6.	Oil & Grease	--	<2	BDL	103
7.	Fluoride as F	1	0.072	0.37	11.56
8.	Chloride as Cl	250	104	112	87.63
9.	Sulphates as SO4	200	61	37	78.12
10	Zinc as Zn	5	0.176	BDL	BQL
11	Cadmium as Cd	0.003	0.042	BDL	BQL
12	Nickel as Ni	0.02	0.082	BDL	BQL
13	Lead as Pb	0.01	0.143	BDL	BQL
14	Arsenic as As	0.01	0.003	BDL	BQL
15	Chromium as Cr	0.05	<0.06	BDL	BQL
16	Mercury as Hg	0.001	BLQ	BDL	BQL
17	Selenium as Se	0.01	BLQ	BDL	BQL
18	Boron as B	0.5	0.23	0.082	BQL
19	Total Hardness as CaCO3	200	300	290	359.7
20	Calcium as Ca	75	84.16	82	87.37
21	Magnesium as Mg	30	21.87	21	34.45
22	Manganese as Mn	0.1	0.029	BDL	BQL
23	Sulphide as S	0.05	<1	BDL	BQL
24	Aluminium as Al	0.03	0.065	BDL	BQL
25	Total Alkalinity as CaCO3	200	200	196	190.95
26	Iron as Fe	0.3	0.236	0.22	BQL
27	Sodium as Na	-	16.5	47	25.2
28	Potassium as K	-	9.1	8	8.1
29	Biochemical Oxygen Demand (BOD) for 3 days at 27°C	-	3	4	19
30	Chemical Oxygen Demand (COD)	-	40	17	42
<b>Name of the location : Karrikuppam Village</b>					
S.No	Parameters	Drinking water Standard ( IS 10500 2012)	TNPCB Report	M/s. Chennai Mettex Lab Private Limited	M/s.Tamilnadu Test House Private Limited
1.	pH at 25°C	6.5-8.5	8.09	7.89	8.18
2.	Electrical Conductivity	-	451	592	528.7
3.	Total Dissolved Solids at 180 °C	500	342	406	296.07
4.	Turbidity	1	1.26	<0.05	<1
5.	Total Suspended Solids at 105 °C	--	12	BDL	8
6.	Oil & Grease	--	<2	BDL	BQL
7.	Fluoride as F	1	0.318	0.21	7.59
8.	Chloride as Cl	250	64	70	62.07
9.	Sulphates as SO4	200	123	22	50.91
10	Zinc as Zn	5	0.113	BDL	BQL
11	Cadmium as Cd	0.003	0.044	BDL	BQL

12	Nickel as Ni	0.02	0.063	BDL	BQL
13	Lead as Pb	0.01	0.094	BDL	BQL
14	Arsenic as As	0.01	0.002	BDL	BQL
15	Chromium as Cr	0.05	<0.06	BDL	BQL
16	Mercury as Hg	0.001	BQL	BDL	BQL
17	Selenium as Se	0.01	BQL	BDL	BQL
18	Boron as B	0.5	0.52	BDL	BQL
19	Total Hardness as CaCO <sub>3</sub>	200	190	196	239.8
20	Calcium as Ca	75	52.10	41	48.06
21	Magnesium as Mg	30	14.58	23	29.15
22	Manganese as Mn	0.1	0.138	0.098	BQL
23	Sulphide as S	0.05	<1	BDL	BQL
24	Aluminium as Al	0.03	0.238	BDL	BQL
25	Total Alkalinity as CaCO <sub>3</sub>	200	100	105	150.75
26	Iron as Fe	0.3	0.102	0.30	1.1
27	Sodium as Na	-	10	16	37.80
28	Potassium as K	-	4.9	2	13.60
29	Biochemical Oxygen Demand (BOD) for 3 days at 27°C	-	2.3	3	8
30	Chemical Oxygen Demand (COD)	-	24	7	25.2

**Name of the location: Tholkappiar Nagar**

S.No	Parameters	Drinking water Standard (IS 10500 2012)	TNPCB Report	M/s. Chennai Mettex Lab Private Limited	M/s. Tamilnadu Test House Private Limited
1.	pH at 25°C	6.5-8.5	6.5	6.46	7.26
2.	Electrical Conductivity	-	330	412	387.6
3.	Total Dissolved Solids at 180 °C	500	226	272	217.05
4.	Turbidity	1	4.45	0.8	<1
5.	Total Suspended Solids at 105 °C	--	16	4	BQL
6.	Oil & Grease	--	<2	BDL	2
7.	Fluoride as F	1	0.594	0.13	8.02
8.	Chloride as Cl	250	23	35	36.51
9.	Sulphates as SO <sub>4</sub>	200	28	15	75.28
10	Zinc as Zn	5	0.082	BDL	BQL
11	Cadmium as Cd	0.003	0.053	BDL	BQL
12	Nickel as Ni	0.02	0.05	BDL	BQL
13	Lead as Pb	0.01	0.116	BDL	BQL
14	Arsenic as As	0.01	0.0004	BDL	BQL
15	Chromium as Cr	0.05	<0.06	BDL	BQL
16	Mercury as Hg	0.001	BLQ	BDL	BQL
17	Selenium as Se	0.01	BLQ	BDL	BQL
18	Boron as B	0.5	0.11	0.118	BQL
19	Total Hardness as CaCO <sub>3</sub>	200	130	132	152.6
20	Calcium as Ca	75	36.07	33	39.32

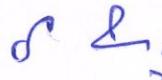
21	Magnesium as Mg	30	9.72	12	13.25
22	Manganese as Mn	0.1	0.029	BDL	BQL
23	Sulphide as S	0.05	<1	BDL	BQL
24	Aluminium as Al	0.03	0.139	0.021	BQL
25	Total Alkalinity as CaCO <sub>3</sub>	200	80	66	70.35
26	Iron as Fe	0.3	0.293	0.52	0.4
27	Sodium as Na	-	10.2	22	28.10
28	Potassium as K	-	8.4	2.2	7.3
29	Biochemical Oxygen Demand (BOD) for 3 days at 27°C	-	2.5	2.8	61
30	Chemical Oxygen Demand (COD)	-	24	6	109.2

**COMPARISON OF TNPCB LAB AND PRIVATE LAB REPORTS WITH THE SOIL STANDARDS WITH REGARDS TO HEAVY METALS CONCENTRATION IN THE SAMPLES COLLECTED ON 03.04.2024.**

<b>Name of the Location : Karumbu Thottam Vadakuvellur</b>					
Sl.No	Parameters	Soil standards mg/kg	TNPCB committee Results	M/s. Chennai Mettex Lab	M/s.Tamilnadu Test House Private Limited
.					

				Private Limited	
1	Zinc as Zn	250	133.79	190	29.4
2	Nickel as Ni	45	20.65	BDL	BQL
3	Cadmium as Cd	1.4	<0.02	BDL	BQL
4	Lead as Pb	70	4.76	BDL	BQL
5	Arsenic as As	12	0.004	BDL	16.7
6	Total Chromium as Cr	64	<0.06	38.9	55.5
7	Mercury as Hg	6.6	BLQ	BDL	BQL
8	Selenium as Se	1.0	2.31	BDL	BQL
<b>Name of the Location: Vadakku Vellore By pass</b>					
Sl.No.	Parameters	Soil standards mg/kg	TNPCB Results	M/s. Chennai Mettex Lab Private Limited	M/s.Tamilnadu Test House Private Limited
1.	Zinc as Zn	250	459	600	20.19
2.	Nickel as Ni	45	51.54	BDL	BQL
3.	Cadmium as Cd	1.4	<0.02	BDL	BQL
4.	Lead as Pb	70	1.12	BDL	BQL
5.	Arsenic as As	12	0.002	BDL	21.18
6.	Total Chromium as Cr	64	<0.06	47.5	34.09
7.	Mercury as Hg	6.6	0.59	BDL	BQL
8.	Selenium as Se	1.0	6.77	BDL	BQL
<b>Name of the Location: Agriculture Land near Iyyan Lake</b>					
Sl.No.	Parameters	Soil standards mg/kg	TNPCB Results	M/s. Chennai Mettex Lab Private Limited	M/s.Tamilnadu Test House Private Limited
1.	Zinc as Zn	250	22.10	57.9	31.06
2.	Nickel as Ni	45	5.34	BDL	BQL
3.	Cadmium as Cd	1.4	<0.02	BDL	BQL
4.	Lead as Pb	70	3.20	BDL	BQL
5.	Arsenic as As	12	0.003	BDL	15.4
6.	Total Chromium as Cr	64	<0.06	56.5	28.19
7.	Mercury as Hg	6.6	BLQ	BDL	BQL
8.	Selenium as Se	1.0	BLQ	BDL	BQL
<b>Name of the Location: Paddy Filed within one Kilometer from the stack of NNTPS</b>					
Sl.No.	Parameters	Soil standards mg/kg	TNPCB Results	M/s. Chennai Mettex Lab Private Limited	M/s.Tamilnadu Test House Private Limited
1.	Zinc as Zn	250	20	32.6	22.4
2.	Nickel as Ni	45	5.89	BDL	BQL
3.	Cadmium as Cd	1.4	<0.02	BDL	BQL
4.	Lead as Pb	70	8.08	BDL	BQL
5.	Arsenic as As	12	0.001	BDL	BQL
6.	Total Chromium as Cr	64	<0.06	44.5	67.7
7.	Mercury as Hg	6.6	0.62	BDL	BQL

8.	Selenium as Se	1.0	BLQ	BDL	BQL
<b>Name of the Location: Karikuppam Village agricultural land near Thermal Power Plant</b>					
Sl.No.	Parameters	Soil standards mg/kg	TNPCB Results	M/s. Chennai Mettlex Lab Private Limited	M/s. Tamilnadu Test House Private Limited
1.	Zinc as Zn	250	7.63	24.1	18.09
2.	Nickel as Ni	45	2.02	BDL	BQL
3.	Cadmium as Cd	1.4	<0.02	BDL	BQL
4.	Lead as Pb	70	1.52	BDL	BQL
5.	Arsenic as As	12	0.004	BDL	BQL
6.	Total Chromium as Cr	64	<0.06	26.2	30.09
7.	Mercury as Hg	6.6	BLQ	BDL	BQL
8.	Selenium as Se	1.0	BLQ	BDL	BQL
<b>Name of the Location: Pallitheru Vadakku Vellore</b>					
Sl.No.	Parameters	Soil standards mg/kg	TNPCB Results	M/s. Chennai Mettlex Lab Private Limited	M/s. Tamilnadu Test House Private Limited
1.	Zinc as Zn	250	22.05	53.2	33.89
2.	Nickel as Ni	45	17.16	BDL	BQL
3.	Cadmium as Cd	1.4	<0.02	BDL	BQL
4.	Lead as Pb	70	1.14	BDL	BQL
5.	Arsenic as As	12	0.004	BDL	10.98
6.	Total Chromium as Cr	64	<0.06	56.2	42.9
7.	Mercury as Hg	6.6	BLQ	BDL	BQL
8.	Selenium as Se	1.0	BLQ	BDL	BQL

  
 30/7/24  
 JCEEC(M) (A/C)  
 TNPC BOARD  
 CUDDALORE.

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

**Original Application No.24 of 2024**

**(Earlier O.A. No. 608/2023)**

Tribunal on its own motion SUO MOTU  
based on the News Item in South First  
Dt. 19.09.2023 titled “Wages of mining  
Neyveli turns ashtray, leaving farmers  
with broken promises and uncertain future”

**Vs**

Central Pollution Control Board,  
Through its Member Secretary,  
New Delhi and Others.

...Respondents

**REPORT FILED ON BEHALF OF  
THE SECOND RESPONDENT –  
TAMIL NADU POLLUTION  
CONTROL BOARD**

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

**Date: 05.08.2024.**

**Date of hearing on: 05.08.2024**