

**BEFORE THE NATIONAL GREEN TRIBUNAL**

**SOUTHERN ZONE, CHENNAI**

**Original Application No. 107 of 2023 (SZ)**

**In the matter of:**

Tribunal on its own motion Suo motu

Based on the news item published in

The New Indian Express, dt. 09.08.2023,

under the caption "Huge pollution risk in

8km around NLC" and in The Times

of India, Chennai Edition dt. 09.08.2023 under

the caption "Water near NLC full of Mercury".

...Applicant(s)

And

The Managing Director,

NLC India Limited,

Chennai and Ors.

...Respondent(s)

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**(Note:** The page numbers are at the top centre of every page)



Through

Dr. D. Shanmuganathan

Standing Counsel of Tamil Nadu

National Green Tribunal

Southern Zone

DATE:03.12.2024

1  
BEFORE THE NATIONAL GREEN TRIBUNAL  
SOUTHERN ZONE, CHENNAI  
O.A. No.107 of 2023

In the Matter of:  
Suo Motu

...Applicant(s)

Versus

- ...Respondent(s)
- 1) Managing director NLC India Ltd
  - 2) Central pollution control board
  - 3) Chairman, TNPCB
  - 4) Chennai Metropolitan water Supply & Sewerage Board
  - 5) Directorate of public health
  - 6) District Collector, Cuddalore District
  - 7) Union of India rep. By its Secretary Ministry of Environment Forest and Climate Change
  - 8) Department of Environment Climate Change and Forests
  - 9) Department of Municipal Administration and Water Supply
  - 10) Tamil Nadu Water Supply and Drainage Board (TWAD)

**STATUS REPORT SUBMITTED BY THE EXECUTIVE ENGINEER,  
WRD., COLEROON BASIN DIVISION, CHIDAMBARAM**

I, Dr.K.Kantharuban, S/o. Kumarasamy, aged 52, presently discharging my duties as Executive Engineer, WRD., Cuddalore District, file the report as follows.

1. The Suo Motu application by the Hon'ble National Green Tribunal (SZ) on 09-08-2023 and seeking particulars by the order dated 01-07-2024 regarding a news item published on 31.05.2024 in Tamil Daily viz., Dinamalar alleging that the water in the Veeranam Tank has turned green which raises a doubt among farmers and public as to whether the dyeing units from Karur area had letting the dyeing effluents into the Veeranam Tank.

2. It is respectfully submitted that, as the Executive Engineer, WRD., Coleroon Basin Division, Chidambaram, I am submitting the report on 30.07.2024 as follows:
3. Government of Tamil Nadu have issued an order to release water from Mettur Dam to Veeranam Tank, to meet the water requirement of Chennai (Metro City). The water released from Mettur reached the Veeranam Tank on 25.05.2024. From 29.05.2024 onwards, water from Veeranam Tank is being supplied to Chennai Metro City according to the their demand.

This being the case, a news has been published in Tamil daily Dinamalar on 31.05.2024, that the Veeranam Tank water seems to be green in colour and in turn it has caused panic among the public and farmers as to whether the dyeing units from Karur area had let the dyeing effluents into the Veeranam Tank.


4. It is respectfully submitted that the Water Resources Department has collected water samples from Veeranam Tank and sent the water samples to Annamalai University and VATECH WABAG Ltd. company (Quality Assurance authorities of Chennai Metro Water supply and Sewage Board) for analysis on 01.06.2024. The reports of Annamalai University and VATECH WABAG Ltd. Company were received on 01.06.2024 and 06.06.2024. According to the above reports, it was ascertained that there is no toxicity in the Veeranam Tank water and the water is fit for drinking purposes.

In continuation, a detailed report regarding this, from the Water Resources Department was sent to the District Collector, Cuddalore District on 04.04.2024.

5. It is respectfully submitted that, the same news was again published on 13.07.2024 in Tamil daily viz., Dinamalar, that the Veeranam Tank water was green in colour. This time also water sample was collected from Veeranam Tank and sent again to Annamalai University and VATECH WABAG Ltd., Company for analysis. The water quality report from Annamalai University was received on 22.07.2024 and the report of VATECH WABAG Ltd., Company for the period 11.07.2024 to 21.07.2024 also received for verification.

6. It is respectfully submitted that, according to the reports from both Annamalai University and the VATECH WABAG Ltd., Company, it is concluded that the Veeranam Tank water does not contain any dangerous toxins and is suitable for drinking water use by the public and livestock.
7. It is respectfully further submitted that, since 29.05.2024, around 73 cusecs of water is being continuously supplied to Chennai from Veeranam tank for drinking water, after being checked by the VATECH WABAG Ltd., company then and their.

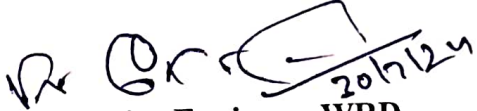
It is therefore prayed that this Hon'ble Tribunal may be pleased to accept this Status and Action Taken Report on file and pass such further other orders which it deems fit to the case and thus render justice.

  
30/7/24  
**Executive Engineer, WRD.,**  
Coleroon Basin Division,  
Chidambaram

**VERIFICATION**

I, Dr.K.Kantharuban, S/o. Kumarasamy, aged 52, presently discharging my duties as Executive Engineer, WRD., Coleroon Basin Division, Chidambaram, Solemnly affirm that the contents of this Report are true to the best of my knowledge based on the records and I have not suppressed any facts.

Date: 30.07.2024

  
**Executive Engineer, WRD.,**  
Coleroon Basin Division,  
Chidambaram

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DEPARTMENT OF CIVIL ENGINEERING  
(B.E. Degree Programme – NBA Accredited)

**Dr. S.POONGOTHAI M.E., Ph.D., FIE**  
Professor & Head

+919443088462  
[hod.civilengg.au@gmail.com](mailto:hod.civilengg.au@gmail.com)

Annamalainagar  
Date: 06.06.2024

To,

**Er. V.Vijayakumar, M.E,**  
Assistant Executive Engineer, P.W.D/W.R.O  
Coleroon / River Basin, Sub Division,  
Chidambaram.

Sir,

**Sub:** Test on water sample- Report on Water quality parameters-  
Regarding.

**Ref:** Your letter dated: 03-06-2024 / Bill No: 8499 & 8500 dated: 03.06.2024.


\*\*\*\*\*

With regards to the reference cited, the test results of the water sample received from you on 03.06.2024 is enclosed for your reference and record. The results revealed that the water quality parameters tested are within the permissible limit prescribed by BIS 10500-2004. Hence the water is fit for drinking purpose.

Thanking you,

Encl: Test Report

Yours faithfully

  
Professor and Head  
Department of Civil Engineering  
Annamalai University,  
Annamalai Nagar - 608 002

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**DEPARTMENT OF CIVIL ENGINEERING**  
**(B.E. Degree Programme – NBA Accredited)**

**TEST REPORT**

REPORT NO: AU/CL/07

Date 06.06.2024

Method of collecting the sample : **Given Sample**  
 Test conducted for : **Er. V.Vijayakumar, M.E.**  
 Address : Assistant Executive Engineer, P.W.D/W.R.O  
 Coleroon Basin, Sub Division,  
 Chidambaram.  
 Sample Description : Surface water  
 Sample Qty : 2 Lts –Two Nos  
 Sample Location : 1. Thiruchinnapuram, 2. Kanthakumaran in  
 Veeranam Lake, Chidambaram, Cuddalore Dist.  
 Sampling Date : 03.06.2024  
 Sampling Received : 03.06.2024  
 Test Start & End Date : 03.06.2024 to 06.06.2024

TEST	PROTOCOL	Concentration In Sample		Stipulation Of BIS:10500-004	
		Sample No 1	Sample No 2	Desirable Limit	Maximum permissible
pH @ 25°C	APHA21 <sup>st</sup> Edn2005	7.6	7.7	6.5 to 8.5	No relaxation
Chlorides as Cl (mg/l)	APHA21 <sup>st</sup> Edn2005	170	168	250	1000
Sulphates as SO <sub>4</sub> (mg/l)	APHA21 <sup>st</sup> Edn2005	40	65	200	400
Hardness (mg/l)	APHA21 <sup>st</sup> Edn2005	200	210	300	600
Total Dissolved Solids (mg/l)	APHA21 <sup>st</sup> Edn2005	490	500	500	2000
Turbidity (NTU)	APHA21 <sup>st</sup> Edn2005	4.0	4.3	5	10
Dissolved Oxygen (mg/l)	APHA21 <sup>st</sup> Edn2005	7.5	7.2	Above 6.0	-

6/6/24

*S. Poojitha* 6/6/2024  
 Professor and Head  
 Department of Civil Engineering  
 Annamalai University,  
 Annamalai Nagar - 608 002

# 7 VATECH WABAG LTD



## OPERATION AND MAINTENANCE OF 180 MLD WTP AT VADAKUTHU

PROJECT NO:10M185

CLIENT : CMWSSB

### WATER QUALITY ANALYSIS REPORT

Date : 01.06.2024

Format No:Lab/01

S.No.	Parameters	Units	Raw water	Treated Water	As per contract requirement	Remarks
1	Taste	-		Agreeable	Agreeable	
2	Odour	-		Un-objectionable	un-objectionable	
3	Colour	Hazen units	25.0	4.0	Not exceeding 5	
4	Temperature	°C	31.0	31.6	-	
5	TSS	mg/l	1.0	NIL	-	
6	pH	-	7.90	7.74	7.5-8.5	
7	Turbidity	NTU	46.0	4.7	Not exceeding 5	
8	Conductivity	µs/Cm	670	680	<1000	
9	TDS	mg/l	435	442	<500	
10	Total Hardness	mg/l	178	170	200	
11	Total Alkalinity	mg/l	185	178	200	
12	Chloride	mg/l	132	137	250	
13	Iron as Fe	mg/l	0.32	0.09	0.10	
14	Manganese as Mn	mg/l	-	-	Not exceeding 0.05	
15	Soluble Aluminium as Al	mg/l	0.08	0.07	Not exceeding 0.2	
16	Copper as Cu	mg/l	0.06	0.04	Not exceeding 0.1	
17	Dissolved oxygen	mg/l	7.2	7.7	> 4.0	
18	Free residual chlorine	mg/l	-	0.6	0.5	
19	Coliform organism	MPN / 100 ml			Nil	

SHIFT	LAB ANALYST / INCHARGE	SHIFT INCHARGE	For VATECH WABAG LIMITED	 R. Sankar AEIV 01/06/2024 CMWSSB
I				
II				
III				

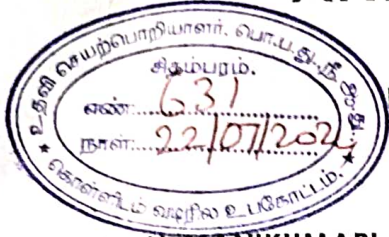
01/06/2024  
 -JEE/V

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கொள்வனியில் வழங்கிய உட்கொள்வனியில், சிதம்பரம்.	
உ.நெ.பெ.உ.	22/7/24
க.கா	22/7/24



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**Dr. N. MANIKUMARI M.E., Ph.D.**  
 Professor & Head

+ 918807230113  
[hod.civilengg.au@gmail.com](mailto:hod.civilengg.au@gmail.com)

Annamalainagar  
 Date: 22.07.2024

To,

**Er. V.Vijayakumar, M.E.**  
 Assistant Executive Engineer, P.W.D/W.R.O  
 Coleroon / River Basin, Sub Division,  
 Chidambaram.

Sir,

**Sub:** Test on water sample- Report on Water quality parameters-  
 Regarding.

**Ref:** Your letter dated: 15-07-2024 / Bill No: 11906, dated: 15.07.2024.

\*\*\*\*\*

With regards to the reference cited, the test results of the water sample received from you on 15.07.2024 is enclosed for your reference and record. The results revealed that the water quality parameters tested are within the permissible limit prescribed by BIS 10500-2004. Hence the water is fit for drinking purpose.

Thanking you,

Yours faithfully

Encl: Test Report

*Manikumari N.*  
 22/07/2024.  
 Professor and Head  
 Department of Civil Engineering  
 Annamalai University,  
 Annamalai Nagar - 608 002.

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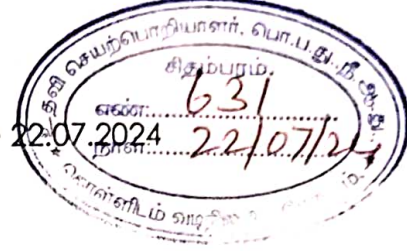
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TEST REPORT

REPORT NO: AU/CL/03

Date 22/07/2024

Method of collecting the sample : **Given Sample**  
 Test conducted for : **Er. V.Vijayakumar, M.E.**  
 Address : Assistant Executive Engineer, P.W.D/W.R.O  
 Coleroon Basin, Sub Division,  
 Chidambaram.  
 Sample Description : Surface water  
 Sample Qty : 5 Lts  
 Sample Location : Veeranam Lake, Chidambaram, Cuddalore Dist.  
 Sampling Date : 15.07.2024  
 Sampling Received : 15.07.2024  
 Test Start & End Date : 15.07.2024 to 22.07.2024



TEST PARAMETER	PROTOCOL	Concentration In Sample	Stipulation Of BIS:10500-004	
			Desirable Limit	Maximum permissible
pH @ 25°C	APHA21 <sup>st</sup> Edn2005	7.11	6.5 to 8.5	No relaxation
Chlorides as Cl (mg/l)	APHA21 <sup>st</sup> Edn2005	176	250	1000
Sulphates as SO <sub>4</sub> (mg/l)	APHA21 <sup>st</sup> Edn2005	35	200	400
Hardness (mg/l)	APHA21 <sup>st</sup> Edn2005	220	300	600
Total Dissolved Solids (mg/l)	APHA21 <sup>st</sup> Edn2005	495	500	2000
Turbidity (NTU)	APHA21 <sup>st</sup> Edn2005	4.10	5	10
Dissolved Oxygen (mg/l)	APHA21 <sup>st</sup> Edn2005	5.0	Above 6.0	-
Chemical Oxygen Demand (COD in mg/l)		32	25	50
Biochemical Oxygen Demand At 20°C for 5 days (BOD in mg/l)		3.10	-	5 (mg/l)

22/7/24

Manikumar. N.  
 22/07/2024.  
 Professor and Head  
 Department of Civil Engineering  
 Annamalai University.  
 Annamalai Nagar - 608 002.

# VATECH WABAG LTD



## OPERATION AND MAINTENANCE OF 100 MLD WTP AT VADAKUTHU

PROJECT NO: 10M185

CLIENT : CMWSSB

### WATER QUALITY ANALYSIS REPORT

Format No: Lab/01

Date: 11.07.24

S.No.	Parameters	Units	Raw water	Treated Water	As per contract requirement	Remarks
1	Taste	-		Agreeable	Agreeable	
2	Odour	-		Un-objectionable	Un-objectionable	
3	Colour	Hazen units	25.0	5.0	Not exceeding 5	
4	Temperature	°C	29.1	29.5	-	EB power
5	TSS	mg/l	1.0	NIL	-	Shut down
6	pH	-	7.72	7.63	7.5-8.5	
7	Turbidity	NTU	22.1	4.7	Not exceeding 5	
8	Conductivity	µs/cm	580	595	<1000	
9	TDS	mg/l	377	387	<500	
10	Total Hardness	mg/l	170	164	200	
11	Total Alkalinity	mg/l	167	160	200	
12	Chloride	mg/l	136	142	250	
13	Iron as Fe	mg/l	0.32	0.10	0.10	
14	Manganese as Mn	mg/l	-	-	Not exceeding 0.05	
15	Soluble Aluminium as Al	mg/l	0.08	0.07	Not exceeding 0.2	
16	Copper as Cu	mg/l	0.07	0.04	Not exceeding 0.1	
17	Dissolved oxygen	mg/l	6.9	7.3	> 4.0	
18	Free residual chlorine	mg/l	-	1.0	0.5	
19	Coliform organism	MPN / 100 ml	20	nil	Nil	

SHIFT	LAD ANALYST / INCHARGE	SHIFT INCHARGE
I	<i>[Signature]</i>	<i>[Signature]</i>
II	<i>[Signature]</i>	<i>[Signature]</i>
III	<i>[Signature]</i>	<i>[Signature]</i>

VATECH WABAG LIMITED

*[Signature]*  
11/7/24  
ALN  
CMWSSB

*[Signature]*  
11/7/24  
20012

# VATECH WABAG LTD



## OPERATION AND MAINTENANCE OF 180 MLD WTP AT VADAKUTHU

PROJECT NO: 10M185

CLIENT : CMWSSB

### WATER QUALITY ANALYSIS REPORT

Format No: Lab/Q1

Date: 12-07-2024

S.No.	Parameters	Units	Raw water	Treated Water	As per contract requirement	Remarks
1	Taste	-		Agreeable	Agreeable	
2	Odour	-		un-objectionable	un-objectionable	
3	Colour	Hazen units	25.0	5.0	Not exceeding 5	
4	Temperature	°C	29.3	29.8	-	
5	TSS	mg/l	1.0	NIL	-	
6	pH	-	7.91	7.70	7.5-8.5	
7	Turbidity	NTU	14.2	4.2	Not exceeding 5	
8	Conductivity	µs/cm	605	615	<1000	
9	TDS	mg/l	393	400	<500	
10	Total Hardness	mg/l	172	167	200	
11	Total Alkalinity	mg/l	166	161	200	
12	Chloride	mg/l	134	139	250	
13	Iron as Fe	mg/l	0.28	0.09	0.10	
14	Manganese as Mn	mg/l	-	-	Not exceeding 0.05	
15	Soluble Aluminium as Al	mg/l	0.08	0.07	Not exceeding 0.2	
16	Copper as Cu	mg/l	0.06	0.05	Not exceeding 0.1	
17	Dissolved oxygen	mg/l	7.1	7.5	> 4.0	
18	Free residual chlorine	mg/l	-	1.0	0.5	
19	Coliform organism	MPN / 100 ml	25	NIL	Nil	

SHIFT	LAB ANALYST / INCHARGE	SHIFT INCHARGE		
I	<i>[Signature]</i>	<i>[Signature]</i>	For: <i>[Signature]</i>	<i>[Signature]</i> 12/07/2024
II	<i>[Signature]</i>	<i>[Signature]</i>		
III		<i>[Signature]</i>		
			VATECH WABAG LIMITED	CMWSSB



# VATECH WABAG LTD



## OPERATION AND MAINTENANCE OF 180 MLD WTP AT VADAKUTHU

PROJECT NO:10M185

CLIENT : CMWSSB

### WATER QUALITY ANALYSIS REPORT

Format No:Lab/01

Date : 13.07.2024

S.No.	Parameters	Units	Raw water	Treated Water	As per contract requirement	Remarks
1	Taste	-		Agreeable	Agreeable	
2	Odour	-		un-objectionable	un-objectionable	
3	Colour	Hazen units	25.0	5.0	Not exceeding 5	
4	Temperature	°C	28.4	28.9	-	
5	TSS	mg/l	1.0	NIL	-	
6	pH	-	7.84	7.66	7.5-8.5	
7	Turbidity	NTU	16.7	4.5	Not exceeding 5	
8	Conductivity	µs/Cm	580	590	<1000	
9	TDS	mg/l	377	384	<500	
10	Total Hardness	mg/l	160	155	200	
11	Total Alkalinity	mg/l	156	150	200	
12	Chloride	mg/l	138	143	250	
13	Iron as Fe	mg/l	0.32	0.10	0.10	
14	Manganese as Mn	mg/l	-	-	Not exceeding 0.05	
15	Soluble Aluminium as Al	mg/l	0.06	0.05	Not exceeding 0.2	
16	Copper as Cu	mg/l	0.05	0.03	Not exceeding 0.1	
17	Dissolved oxygen	mg/l	6.9	7.5	> 4.0	
18	Free residual chlorine	mg/l	-	1.0	0.5	
19	Coliform organism	MPN / 100 ml	20	NIL	Nil	

SHIFT	LAB ANALYST / INCHARGE	SHIFT INCHARGE	VATECH WABAG LIMITED	CMWSSB
I	<i>M. Suresh</i>	<i>[Signature]</i>		
II	<i>[Signature]</i>	<i>[Signature]</i>		
III	<i>[Signature]</i>	<i>[Signature]</i>		

*B. Kumar*  
13/07/24

*R. Lakshmi*  
13/07/2024

*[Signature]*  
13/07/2024  
AEEV

**VATECH WABAG LTD****OPERATION AND MAINTENANCE OF 180 MLD WTP AT VADAKUTHU**

CLIENT : CMW88B

PROJECT NO: 10M185

**WATER QUALITY ANALYSIS REPORT**

Date: 14-07-2024

Format No: Lab/01

S.No.	Parameters	Units	Raw water	Treated Water	As per contract requirement	Remarks
1	Taste	-		Agreeable	Agreeable	
2	Odour	-		un-objectionable	un-objectionable	
3	Colour	Hazen units	25.0	5.0	Not exceeding 5	
4	Temperature	°C	28.7	29.2	-	
5	TSS	mg/l	1.0	Nil	-	
6	pH	-	7.90	7.69	7.5-8.5	
7	Turbidity	NTU	16.1	4.7	Not exceeding 5	
8	Conductivity	µs/Cm	605	615	<1000	
9	TDS	mg/l	393	400	<500	
10	Total Hardness	mg/l	161	157	200	
11	Total Alkalinity	mg/l	156	152	200	
12	Chloride	mg/l	136	141	250	
13	Iron as Fe	mg/l	0.30	0.09	0.10	
14	Manganese as Mn	mg/l	-	-	Not exceeding 0.05	
15	Soluble Aluminium as Al	mg/l	0.08	0.07	Not exceeding 0.2	
16	Copper as Cu	mg/l	0.06	0.05	Not exceeding 0.1	
17	Dissolved oxygen	mg/l	7.1	7.6	> 4.0	
18	Free residual chlorine	mg/l	-	1.0	0.5	
19	Coliform organism	MPN / 100 ml	18	Nil	Nil	

SHIFT	LAB ANALYST / INCHARGE	SHIFT INCHARGE		
I	<i>[Signature]</i>	<i>[Signature]</i>	<i>[Signature]</i> 14/07/2024 VATECH WABAG LIMITED	<i>[Signature]</i> 14/07/2024 CMWSSB
II	<i>[Signature]</i>	<i>[Signature]</i>		
III	<i>[Signature]</i>	<i>[Signature]</i>		

*[Signature]*  
14/07/2024  
*[Signature]*

# VATECH WABAG LTD



## OPERATION AND MAINTENANCE OF 180 MLD WTP AT VADAKUTHU

PROJECT NO:10M185

CLIENT : CMWSSB

### WATER QUALITY ANALYSIS REPORT

Format No: Lab/01

Date: 15-07-2024

S.No.	Parameters	Units	Raw water	Treated Water	As per contract requirement	Remarks
1	Taste	-		Agreeable	Agreeable	
2	Odour	-		un-objectionable	un-objectionable	
3	Colour	Hazen units	25.0	5.0	Not exceeding 5	
4	Temperature	°C	28.5	29.0	-	
5	TSS	mg/l	1.0	NL	-	
6	pH	-	7.91	7.67	7.5-8.5	
7	Turbidity	NTU	16.0	4.4	Not exceeding 5	
8	Conductivity	µs/Cm	610	620	<1000	
9	TDS	mg/l	397	403	<500	
10	Total Hardness	mg/l	159	155	200	
11	Total Alkalinity	mg/l	154	139	200	
12	Chloride	mg/l	137	141	250	
13	Iron as Fe	mg/l	0.28	0.09	0.10	
14	Manganese as Mn	mg/l	-	-	Not exceeding 0.05	
15	Soluble Aluminium as Al	mg/l	0.07	0.06	Not exceeding 0.2	
16	Copper as Cu	mg/l	0.06	0.05	Not exceeding 0.1	
17	Dissolved oxygen	mg/l	6.9	7.3	> 4.0	
18	Free residual chlorine	mg/l	-	1.0	0.5	
19	Coliform organism	MPN / 100 ml	25	N/L	Nil	

SHIFT	LAB ANALYST / INCHARGE	SHIFT INCHARGE	FOR	
I	<i>[Signature]</i>	<i>[Signature]</i>	FOR <i>[Signature]</i>	R. Lakshmi 15/07/2024 AE/V
II	<i>[Signature]</i>	<i>[Signature]</i>		
III	<i>[Signature]</i>	<i>[Signature]</i>		
			VATECH WABAG LIMITED	CMWSSB

*[Signature]*  
15/07/2024  
AE/V

**VATECH WABAG LTD****OPERATION AND MAINTENANCE OF 180 MLD WTP AT VADAKUTHU**

PROJECT NO: 10M185

CLIENT : CMWSSB

**WATER QUALITY ANALYSIS REPORT**

Format No: Lab/01

Date: 16-07-2024

S.No.	Parameters	Units	Raw water	Treated Water	As per contract requirement	Remarks
1	Taste	-		Agreeable	Agreeable	
2	Odour	-		un-objectionable	un-objectionable	
3	Colour	Hazen units	30	5	Not exceeding 5	
4	Temperature	°C	27.0	27.7	-	
5	TSS	mg/l	1.0	NIL	-	
6	pH	-	7.93	7.71	7.5-8.5	
7	Turbidity	NTU	14.2	1.6	Not exceeding 5	
8	Conductivity	µs/cm	610	620	<1000	
9	TDS	mg/l	397	403	<500	
10	Total Hardness	mg/l	160	155	200	
11	Total Alkalinity	mg/l	157	153	200	
12	Chloride	mg/l	140	146	250	
13	Iron as Fe	mg/l	0.30	0.09	0.10	
14	Manganese as Mn	mg/l	-	-	Not exceeding 0.05	
15	Soluble Aluminium as Al	mg/l	0.08	0.07	Not exceeding 0.2	
16	Copper as Cu	mg/l	0.07	0.06	Not exceeding 0.1	
17	Dissolved oxygen	mg/l	7.2	7.6	> 4.0	
18	Free residual chlorine	mg/l	-	0.9	0.5	
19	Coliform organism	MPN / 100 ml	30	NIL	NIL	

SHIFT	LAB ANALYST / INCHARGE	SHIFT INCHARGE		
I	<i>[Signature]</i>	<i>[Signature]</i>	<i>B. Kumar</i> 16/07/24 VATECH WABAG LIMITED	<i>R. Lakshmi</i> 16/07/2024 CMWSSB
II	<i>[Signature]</i>	<i>[Signature]</i>		
III	<i>[Signature]</i>	<i>[Signature]</i>		

*[Signature]*  
16/7/2024  
ABG/V

# VATECH WABAG LTD



## OPERATION AND MAINTENANCE OF 180 MLD WTP AT VADAKUTHU

CLIENT : CMWSSB

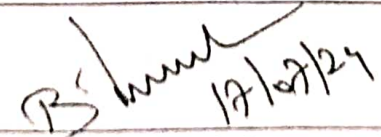
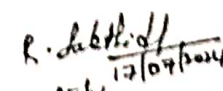
PROJECT NO:10M185

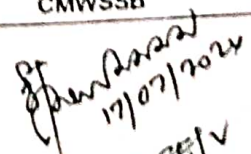
### WATER QUALITY ANALYSIS REPORT

Date : 17-07-24

Format No:Lab/01

S.No.	Parameters	Units	Raw water	Treated Water	As per contract requirement	Remarks
1	Taste	-		Agreeable	Agreeable	
2	Odour	-		undetectable	un-objectionable	
3	Colour	Hazen units	30	5	Not exceeding 5	
4	Temperature	°C	26.4	27.1	-	
5	TSS	mg/l	1.0	NIL	-	
6	pH	-	7.91	7.71	7.5-8.5	
7	Turbidity	NTU	15.2	4.6	Not exceeding 5	
8	Conductivity	µs/Cm	615	625	<1000	
9	TDS	mg/l	400	406	<500	
10	Total Hardness	mg/l	154	150	200	
11	Total Alkalinity	mg/l	150	146	200	
12	Chloride	mg/l	137	143	250	
13	Iron as Fe	mg/l	0.30	0.10	0.10	
14	Manganese as Mn	mg/l	-	-	Not exceeding 0.05	
15	Soluble Aluminium as Al	mg/l	0.09	0.07	Not exceeding 0.2	
16	Copper as Cu	mg/l	0.07	0.05	Not exceeding 0.1	
17	Dissolved oxygen	mg/l	7.4	7.8	> 4.0	
18	Free residual chlorine	mg/l	-	0.9	0.5	
19	Coliform organism	MPN / 100 ml	25	NIL	NIL	

SHIFT	L-E ANALYST / INCHARGE	SHIFT INCHARGE		
I	Sini	A. S. D.	 17/07/24 VATECH WABAG LIMITED	 17/07/2024 CMWSSB
II				
III	L. Anil			

  
 17/07/2024  
 AEE/V

# VATECH WABAG LTD



## OPERATION AND MAINTENANCE OF 180 MLD WTP AT VADAKUTHU

CLIENT : CMWSSB

PROJECT NO:10M185

### WATER QUALITY ANALYSIS REPORT

Date : 18.07.2024

Format No: Lab/01

S.No.	Parameters	Units	Raw water	Treated Water	As per contract requirement	Remarks
1	Taste	-		Agreeable	Agreeable	
2	Odour	-		Un-objectionable	un-objectionable	
3	Colour	Hazen units	25.0	5.0	Not exceeding 5	
4	Temperature	°C	29.0	29.6	-	
5	TSS	mg/l	1.0	NIL	-	
6	pH	-	7.94	7.76	7.5-8.5	
7	Turbidity	NTU	12.8	4.8	Not exceeding 5	
8	Conductivity	µs/Cm	630	640	<1000	
9	TDS	mg/l	410	416	<500	
10	Total Hardness	mg/l	165	160	200	
11	Total Alkalinity	mg/l	158	153	200	
12	Chloride	mg/l	142	147	250	
13	Iron as Fe	mg/l	0.28	0.09	0.10	
14	Manganese as Mn	mg/l	-	-	Not exceeding 0.05	
15	Soluble Aluminium as Al	mg/l	0.07	0.05	Not exceeding 0.2	
16	Copper as Cu	mg/l	0.05	0.03	Not exceeding 0.1	
17	Dissolved oxygen	mg/l	7.5	7.8	> 4.0	
18	Free residual chlorine	mg/l	-	1.0	0.5	
19	Coliform organism	MPN / 100 ml	20	NIL	NIL	

SHIFT	LAB ANALYST / INCHARGE	SHIFT INCHARGE		
I	<i>[Signature]</i>	<i>[Signature]</i>	VATECH WABAG LIMITED <i>[Signature]</i> 18/07/24	R. Lakshmi AE/V 18/07/2024
II	<i>[Signature]</i>	<i>[Signature]</i>		
III	<i>[Signature]</i>	<i>[Signature]</i>		

*[Signature]*  
18/07/2024  
AE/V

# VATECH WABAG LTD



## OPERATION AND MAINTENANCE OF 180 MLD WTP AT VADAKUTHU

CLIENT : CMWSSB

PROJECT NO:10M185

### WATER QUALITY ANALYSIS REPORT

Date : 19-07-24

Format No: Lab/01

S.No.	Parameters	Units	Raw water	Treated Water	As per contract requirement	Remarks
1	Taste	-		Aggreable	Aggreable	
2	Odour	-		Un-objectionable	un-objectionable	
3	Colour	Hazen units	25.0	5.0	Not exceeding 5	
4	Temperature	°C	29.3	29.7	-	
5	TSS	mg/l	1.0	NIL	-	
6	pH	-	7.89	7.72	7.5-8.5	
7	Turbidity	NTU	15.8	4.9	Not exceeding 5	
8	Conductivity	µs/Cm	650	660	<1000	
9	TDS	mg/l	423	429	<500	
10	Total Hardness	mg/l	168	163	200	
11	Total Alkalinity	mg/l	160	155	200	
12	Chloride	mg/l	139	146	250	
13	Iron as Fe	mg/l	0.90	0.09	0.10	
14	Manganese as Mn	mg/l	-	-	Not exceeding 0.05	
15	Soluble Aluminium as Al	mg/l	0.08	0.06	Not exceeding 0.2	
16	Copper as Cu	mg/l	0.06	0.04	Not exceeding 0.1	
17	Dissolved oxygen	mg/l	7.2	7.7	> 4.0	
18	Free residual chlorine	mg/l	-	1.0	0.5	
19	Coliform organism	MPN / 100 ml	25.0	NIL	NIL	

SHIFT	LAB ANALYST / INCHARGE	SHIFT INCHARGE
I	M. Anand	R. Anand
II	S. Anand	R. Anand
III	R. Anand	A. Anand

B. Anand  
19/07/24  
VATECH WABAG LIMITED

R. Anand  
19/07/2024  
CMWSSB

R. Anand  
19/07/2024  
CMWSSB

# VATECH WABAG LTD



## OPERATION AND MAINTENANCE OF 180 MLD WTP AT VADAKUTHU

CLIENT : CMWSSB

PROJECT NO: 10M185

### WATER QUALITY ANALYSIS REPORT

Date : 20.07.2024

Format No: Lab/01

S.No.	Parameters	Units	Raw water	Treated Water	As per contract requirement	Remarks
1	Taste	-		Aggreable	Aggreable	
2	Odour	-		Un-objectionable	un-objectionable	
3	Colour	Hazen units	25.0	5.0	Not exceeding 5	
4	Temperature	°C	29.5	29.9	-	
5	TSS	mg/l	1.0	NIL	-	
6	pH	-	7.99	7.76	7.5-8.5	
7	Turbidity	NTU	16.4	4.6	Not exceeding 5	
8	Conductivity	µs/Cm	620	630	<1000	
9	TDS	mg/l	403	410	<500	
10	Total Hardness	mg/l	171	165	200	
11	Total Alkalinity	mg/l	164	158	200	
12	Chloride	mg/l	135	140	250	
13	Iron as Fe	mg/l	0.26	0.08	0.10	
14	Manganese as Mn	mg/l	-	-	Not exceeding 0.05	
15	Soluble Aluminium as Al	mg/l	0.06	0.05	Not exceeding 0.2	
16	Copper as Cu	mg/l	0.05	0.04	Not exceeding 0.1	
17	Dissolved oxygen	mg/l	7.4	7.7	> 4.0	
18	Free residual chlorine	mg/l	-	0.9	0.5	
19	Coliform organism	MPN / 100 ml			Nil	

SHIFT	ANALYST / INCHARGE	SHIFT INCHARGE	FOR	DATE
I	<i>M. S. S. S.</i>	<i>S. S. S.</i>	<i>S. S. S.</i>	<i>20/07/2024</i>
II				
III			VATECH WABAG LIMITED	CMWSSB

*S. S. S.*  
20/07/2024  
AE/V

**VATECH WABAG LTD****OPERATION AND MAINTENANCE OF 180 MLD WTP AT VADAKUTHU**

PROJECT NO:10M185

CLIENT : CMWSSB

**WATER QUALITY ANALYSIS REPORT**

Format No: Lab/01

Date : 21-07-2024

S.No.	Parameters	Units	Raw water	Treated Water	As per contract requirement	Remarks
1	Taste	-		Agreeable	Agreeable	
2	Odour	-		un-objectionable	un-objectionable	
3	Colour	Hazen units	25.0	5.0	Not exceeding 5	
4	Temperature	°C	29.4	30.1	-	
5	TSS	mg/l	1.0	Nil	-	
6	pH	-	7.96	7.73	7.5-8.5	
7	Turbidity	NTU	17.3	4.9	Not exceeding 5	
8	Conductivity	µs/Cm	630	640	<1000	
9	TDS	mg/l	409	415	<500	
10	Total Hardness	mg/l	169	164	200	
11	Total Alkalinity	mg/l	165	160	200	
12	Chloride	mg/l	136	140	250	
13	Iron as Fe	mg/l	0.30	0.09	0.10	
14	Manganese as Mn	mg/l	-	-	Not exceeding 0.05	
15	Soluble Aluminium as Al	mg/l	0.08	0.07	Not exceeding 0.2	
16	Copper as Cu	mg/l	0.06	0.05	Not exceeding 0.1	
17	Dissolved oxygen	mg/l	7.1	7.6	> 4.0	
18	Free residual chlorine	mg/l	-	1.0	0.5	
19	Coliform organism	MPN / 100 ml			Nil	

SHIFT	LAB ANALYST / INCHARGE	SHIFT INCHARGE			R. Lakshmi 21/07/2024 AE/V CMWSSB
I	<i>[Signature]</i>	<i>[Signature]</i>	Per	<i>[Signature]</i>	
II					
III			VATECH WABAG LIMITED		

*[Signature]*  
21/07/2024  
AE/V