

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

In

**Original Application No. 231 of 2020
(SZ)**

Report of the Joint Committee

BEFORE THE HONOURABLE NATIONAL GREEN TRIBUNAL
SOUTHERN ZONE, CHENNAI

In

Original Application No. 231 of 2020 (SZ)

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BEFORE THE HONOURABLE NATIONAL GREEN TRIBUNAL
SOUTHERN ZONE, CHENNAI

In

Original Application No. 231 of 2020 (SZ)

IN THE MATTER OF:

Tribunal on its own motion
Suo Motu based on the News Item in
The New Indian Express Newspaper,
Chennai Edition dated 12.10.2020, "Another
Cooum in the making? Illegal landfills take life out
of the Muttukadu Backwaters" ...Applicant(s)

Versus

The Chief Secretary to Govt. of Tamil Nadu,
Chennai and Ors. ...Respondent(s)

REPORT OF THE JOINT COMMITTEE

BEFORE THE HONOURABLE NATIONAL GREEN TRIBUNAL
SOUTHERN ZONE, CHENNAI

In

Original Application No. 231 of 2020 (SZ)

Introduction:

Vide Order dated 20.10.2020 in the matter of O.A No.231 of 2020 (SZ), the Hon'ble NGT (SZ) has constituted a Joint Committee to inspect the area in question and to submit a factual as well action taken report including imposition of environmental compensation.

As Nodal Agency, the Competent Authority in the Ministry of Environment, Forest and Climate Change, Regional Office Chennai has nominated Dr.C.Kaliyaperumal, Director as the Nodal Officer to the Joint Committee and accordingly MoEFCC vide letter dated 30.12.2020 has requested all other concerned officers to nominate their representatives to the committee.

Accordingly the Regional Director, CPCB, Chennai has nominated Shri R. Rajkumar, Scientist 'D' as their representative to the Committee, Tamil Nadu State Coastal Zone Management Authority has nominated Dr.V.Selvam, Expert Member, TNCZMA as their representative to the committee. The PWD has nominated Thiru. A.Jayakumari, the Executive Engineer, PWD (WRD) Araniyar Basin as their representative, TNPCB has nominated Thiru. Vasudevan as their representative and the District Administration nominated RDO, Chengalpattu as their representatives to the committee.

Vide Letter No. 180/MA-3(2)/2021-1.dated 13.01.2021 of Municipal Administration and Water Supply (MA-3(2)) Department informed that they have transferred the case to Rural Development and Panchayat Raj Department for

taking necessary action due to jurisdiction problem. Accordingly MoEFCC has requested the Rural Development and Panchayat Raj Department to nominate a suitable officer from to the Joint Committee.

(Copy of the letter No. 180/MA-3(2)/2021-1 dated 13.01.2021 is at Annexure I)

The Joint Committee has visited five site on 23.6.2021 namely Navaloor, Padur, Kazhipattur, Egattur & Muttukadu Boat House and water samples were also collected by TNPCB for analysis.

Photos taken during the site inspection is at Annexure-II and photographs showing collection of water sample taken during inspection to ascertain the quality of water is at Annexure-III.

Back ground of the Panchayat:

The Block Development Officer and representative Rural Development and Panchayat Raj, furnishes the following data of Thiruporur Panchayat Union (Muttukadu, Navalur, Padur Village Panchayat)

S. No.	Name of the Panchayat	Total No of Population	No of Households	No of Apartments	No of Hotels, vegetable markets and Provisional stores
1	2	3	4	5	6
1	Muttukadu	18905	1801	10	283
2	Padur	24200	4840	10	78
3	Navallur	11980	2995	15	60
Grand Total		55088	9640	40	427

It is also informed that from Muttukadu, Padur and Navallur Panchayats that about 10 to 15 tons of garbage is being collected every day and the same is being stored at a temporary yard near to the Buckingham canal. Once in every 15 days the collected Municipal Solid Waste is

transferring to the garbage depot at Kolathur panchayat for further treatment.

Directions given by the Hon'ble NGT (SZ) to the Joint Committee

Vide Order dated 20.10.2020 in the matter of O.A No.231 of 2020 (SZ) eight directions were given to the Joint Committee and the observation of the joint committee against each direction is as follows:

a. *"The committee is directed to ascertain the nature of waste deposited, the person responsible for the same and how far it has affected the water body and its water quality and the remedial measures to be taken for removing the waste that is already dumped illegally and whether the Solid Waste Management Rules, 2016 and the directions given by the Principal Bench of National Green Tribunal, New Delhi in Original Application No.606 of 2018 are being strictly implemented in these local bodies within whose jurisdiction the alleged illegal activity has been done."*

At Navaloor, the Village Panchayat/Block authorities have identified an area adjacent to the water body for collection and segregation of the Municipal waste before transporting them to the disposal yard. The natures of waste deposited were Municipal Solid waste. During the visit no waste was observed in the temporary collecting area and the authorities informed that they have removed the dumped waste from the temporary yard to the garbage depot at Kolathur panchayat for further treatment.

The Report of analysis of the water samples collected from the said water bodies Muttukadu Boat house, Backside of M/s. "Hiranandani Upscale" By Hiranandani Realtors Pvt Ltd.&Navalur reveals that BOD doesn't not meet any Primary Water Quality Criteria and presence of coliform indicated that pollution of water

bodies is due to discharge of untreated sewage from nearby areas. The analysis report is at Annexure-IV and is as follows:

Analysis Results of the Samples Collected at Various Locations

1. Physico Chemical Parameters

Sl.No.	Parameters	Units	Point of Collection			
			Muttukadu Boat House	Backside of M/s. "Hiranandani Upscale" By Hiranandani Realtors Pvt Ltd.	Navalur	Mr. Sathya House, Door No. 128, Navalur (Well Water Sample)
1	pH @ 25°C	--	7.90	7.81	7.89	7.88
2	BOD @ 27°C	mg/L	11	17	17	9
3	COD	mg/L	168	184	192	96
4	Copper as Cu	mg/L	<0.033	<0.033	<0.033	<0.033
5	Zinc as Zn	mg/L	<0.05	<0.05	<0.05	<0.05
6	Cadimium as Cd	mg/L	<0.013	<0.013	<0.013	<0.013
7	Lead as Pb	mg/L	<0.07	<0.07	<0.07	<0.07
8	Nickel as Ni	mg/L	<0.05	<0.05	<0.05	<0.05
9	Total Chromium as Cr ⁺³	mg/L	<0.01	<0.01	<0.01	<0.01
10	Hexavalent Chromium Cr ⁺⁶	mg/L	<0.01	<0.01	<0.01	<0.01

2. Bacteriological parameter

Parameters	Units	Point of Collection			Primary Water Quality Criteria for Bathing Waters prescribed by Central Pollution Control Board
		Buckingham Canal at Muttukadu Boat House	Backside of M/s. Hiranandani Apartment	Navalur	
Faecal Coliform	MPN/ 100 ml	130	790	92	500 (desirable) 2500 (Maximum Permissible)

It is also noticed that the Solid Waste Management Rules, 2016 and the directions given by the Principal Bench of National Green Tribunal, New Delhi in Original Application No.606 of 2018 were not implemented by the local authorities.

b. *"The committee is directed to ascertain as to whether there is any violation of Coastal Regulation Zone Notification, 2011 or 2019 and if so, what is the action taken by the regulating authority in this regard and if there is any encroachment, then the committee is directed to identify the encroachers and take steps to remove the encroachment to save the water body against the encroachment."*

With regard to the encroachment in the CRZ area, the Muttukadu Backwaters in the Navalur Village is classified as Buckingham Canal poramboke land bearing S.No.242 and having a total area of 18.475 hectares does not notice any encroachment.

The Muttukadu Backwaters in the Egattur Village is classified in the Revenue Records as Buckingham Canal poramboke land bearing S.No.141 is having a total area of 12.47 hectares. This piece of land was partitioned as S.No.141/1 with an area of 8.425 hectares belonging to Buckingham Canal poramboke land and remaining land was partitioned as S.No.141/2 with an area of 4.045 hectares was alienated to Tamil Nadu Fisheries Department vide District Revenue Officer Lr.No.1295/0183/F7 dated 9.10.1990 & Tahsildar, Chengalpet Lr.No. F13 TK 8A264/400 dated 20.11.1990. In the Survey No.141/(Part), a Construction Firm M/s. Hiranandini Realtors Private Limited has encroached this piece of PWD land by laying a bituminous road with a width of around 9metres and being equipped with street lights. The total extent of this encroachment is around 0.30 ares.

The Muttukadu Backwaters in the Kazhipattur Village is classified in the Revenue Records as Buckingham Canal poramboke land bearing S.No.264/part is having a total area of 12.24 hectares, out of which a private company named Chettinad Morimura Semi-Conductor Material Private Limited has encroached around 0.45 ares of Buckingham Canal poramboke land in the form of deposition of stones.

The Muttukadu Backwaters in the Padur Village is classified in the Revenue Records as Kazhuveli poramboke landbearing S.No.481 is having a total area of 15.13 hectares, out of which a private entity has encroached around 0.80 ares of Kazhuveli poramboke land in the form of Prawn Hatchery. At present, this prawn hatchery is non-functional.

Steps were taken by the PWD and Revenue officials to initiate action against the violators.

c. *"The committee is also directed to assess the environmental damage caused and assess the environmental compensation for restoring the damage caused to the environment and the persons responsible for the same from whom this will have to be recovered."*

Environmental compensation is calculated by the committee due to non-compliance of Solid Waste Management Rules, 2016.

The Block Panchayat authorities informed that they have installed CCTV Cameras and security personals were also deployed to prevent any encroachment and dumping of sewage/Municipal waste in to the CRZ area/water bodies and they also seized some vehicles deployed in the dumping of sewage.

d. *"The committee is also directed to ascertain as to whether on account of such illegal activities of dumping waste and burning waste, any contamination has been caused to the backwaters and if so, what is the remedial measures to be taken to rectify the same."*

The Report of analysis of the water samples collected from the said water body reveals that BOD ranges from 11 - 17 mg/l and presence of fecal coliform indicates the pollution of backwater is mainly due to discharge of untreated sewage from nearby areas.

Remedial measures are incorporated in the Recommendation part

e. "The committee is also directed to ascertain as to whether there was any scheme launched either by the

State Government or by the district administration to protect the water bodies in their area and what is the stage of the implementation of the scheme."

The Joint Committee requested the members from District Administration and PWD, WRD to collect the details of scheme launched either by the State Government or by the district administration to protect the water bodies in their area if any like Chennai River Restoration programme. However the PWD, WRD informed that presently no such schemes are in place for the Muttukad back water.

f. *"The committee is also directed to conduct a water quality test of the water body showing the value of COD, BOD, TC, FC, pH and presence of heavy metals both in backwaters as well as in the residential area nearby and if there is any deterioration or contamination caused, what is the remedial measure to be taken to rectify the same."*

Water samples were collected from four locations for testing water quality parameters. The Report of analysis of the water samples collected from the said water body reveals that BOD ranges from 11 - 17 mg/l and presence of coliform indicates the pollution of backwater is due to discharge of untreated sewage from nearby area.

Remedial measures are incorporated in the Recommendation part.

g. *"The committee is also directed to ascertain as to whether there is any regulating mechanism for monitoring the persons to whom the collection and disposal of the waste is being entrusted by the local bodies."*

To prevent any encroachment and dumping of sewage/Municipal waste in to the CRZ area/water bodies, the Block Panchayat has done the following:

They installed camera and gate with height barrier at Kazhipattur along with security personals.

At Padur & Muttukadu they installed gate and deployed security personals to prevent any encroachment and dumping of sewage/Municipal waste in to the CRZ area/water bodies.

The Block Panchayat authorities informed that they have also seized some vehicles deployed in the dumping of sewage.

h. "The committee is also directed to submit an action plan with longer as well as shorter time lines to avoid such things including creation of biodiversity park or tree plantation around this area to avoid encroachment in future and also fixation of CCTV Cameras in that area to locate the persons who are responsible for such illegal activities so as to trace them out and bring them before law. They can also mention the feasibility of providing GPS enabled trucks to monitor their movement which are entrusted with the task of collection and disposal of waste as per Rules."

The Joint Committee has discussed about an Action Plan to avoid the dumping of solid waste along the water body and thereby to enhance the environmental quality. The Joint committee is also noticed that the Block Panchayat authorities have installed CCTV Cameras and security personals were also deployed to prevent any encroachment and dumping of sewage/Municipal waste in to the CRZ area/water bodies and they also seized some vehicles deployed in the dumping of sewage. It is also noticed that trees were planted at some patches around the water body and this should be extended along the bank.

Based on the above observation, the joint committee has calculated an Environmental Compensation as follows

Environmental Compensation:

As the Village Panchayats (Muttukadu, Navalur, Padur Village Panchayat) has not complied the directions of the Hon'ble Supreme Court and Hon'ble National Green Tribunal (PB) to comply with the Solid Waste Management Rules,

2016 before 31.03.2020, the interim compensation of Rs.1 lakh per month to be paid by the local bodies having population less than 5 lakhs from 01.04.2020 till compliance as detailed below.

Population of the village Panchayats (Muttukadu, Navalur, Padur Village Panchayat) as on date is less than 5 lakhs. Hence, the village panchayats shall remit the interim compensation amount of Rs.16 lakhs x 3 panchayats till August 2021 for noncompliance of Solid Waste Management Rules, 2016.

Based on the above observation, the joint committee submits the following recommendation before the Hon'ble National Green Tribunal (Southern Zone)

Recommendations

01. The Village Panchayats shall ensure 100% collection of solid waste being generated within its jurisdiction with proper segregation, door to door collection, processing and disposal by complying with the provisions of the Solid Waste Management Rules 2016 within six months time.
02. The Village Panchayats shall avoid the dumping of solid waste along the water body and thereby to enhance the environmental quality.
03. The Village Panchayats shall establish Micro composting center within six months within the village panchayat area to compost the segregated Biodegradable wastes and to take steps to dispose the non-degradable waste including plastic waste to the recycling facility complying with the provisions of the Solid Waste Management Rules, 2016.
04. The village panchayat (Muttukadu, Navalur, Padur Village Panchayat) shall remit interim Environmental Compensation (EC) of Rs.16 Lakhs x 3 panchayats for not complying with the provisions of the Solid Waste Management Rules, 2016, as directed by the Hon'ble

National Green Tribunal (Principal Bench) in its order dated.28.02.2020.

05. The Village Panchayat shall identify and provide decentralized community soak pit arrangement at vulnerable locations within three months time to prevent the entry of sewage/sullage to the backwaters.

06. The Village Panchayat shall provide a treatment system to intercept sewage entering the lake and to treat the same within a year.

06. Until providing proper treatment system, the Village Panchayat shall provide a temporary measure such as phytoremediation, in situ treatment etc for treating the sewage entering the lake within three months.

07. The Village Panchayat shall levy fine on the violators found dumping solid waste and disposing sewage into the water body under Local Body Acts.

08. The Village Panchayat shall create awareness among the public with the help of associations in the local body area for proper segregation of solid waste.

09. The PWD with the help of Revenue Authorities shall evict the encroachments within six months.

10. More trees should be planted along the bank of water body and more cameras should be installed to strengthen the monitoring mechanism.

11. Government should consider for implementing a scheme to restore the Muttukad back waters after a detailed study.



Dr.C.Kaliyaperumal
Director, MoEFCC

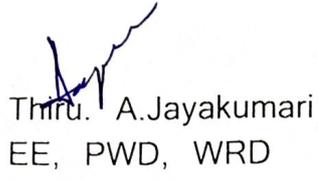
Dr.V.Selvam
Expert Member
TNCZMA

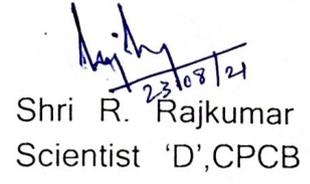


RDO
23/8/2020
Chengalpattu


23/08/21

Thiru. Vasudevan
DEE, TNPCB


Thiru. A. Jayakumari
EE, PWD, WRD


23/08/21
Shri R. Rajkumar
Scientist 'D', CPCB


BDO 23/08/21

Thiruporur

Annexure - 1



Municipal Administration & Water Supply [MA-3(2)] Department, Secretariat, Chennai - 600 009.

Letter No.180/MA-3(2)/2021- 1, Dated: 13.01.2021

From
Thiru Harmander Singh, I.A.S.,
Additional Chief Secretary to Government.

ROCF (S) - envelope
DIGF (S)
ROCF

To
The Research Officer,
Ministry of Environment, Forests and Climate Change /
Regional Officer (South Eastern Zone),
1&2nd Floor, HEPC Building, No.34, Cathedral Garden Road,
Nungambakkam, Chennai - 34.

Sir,

Sub: Joint Committee Constituted by the Hon'ble National Green Tribunal (SZ) in the matter of O.A No. 231 of 2020 (SZ) regarding "illegal landfills take life out of the Muttukadu Backwaters" - Regarding.

Ref: Your Letter No. F.No.EP/12.7/NGT(SZ)/076/ 2020/ TN/279, dated 30.12.2020.

I am directed to invite attention to your reference cited and to state that the National Green Tribunal O.A.No. 231 of 2020 (SZ) has been transferred to Rural Development and Panchayat Raj Department, Government of Tamil Nadu, due to jurisdiction and also for necessary action.

2. I therefore request you to kindly communicate to Rural Development and Panchayat Raj Department, Government of Tamil Nadu, for further action in the matter.

Yours faithfully,

for Additional Chief Secretary to Government.

Handwritten initials/signature

Site-1(Navaloor)



Site-2 (Egattur)



Site-III (Kazhipattur)



Site-IV (Padur)



Site-V (Muttukadu)





Backwaters @ Muttukadu Boat House



Backwaters @ Backside of M/s. "Hiranandani Upscale" By Hiranandani Realtors Pvt Ltd.



Backwaters @ Navalur



In the residential area nearby @ Mr. Sathya House, Door No. 128, Navalur (Well Water Sample)



TAMIL NADU POLLUTION CONTROL BOARD

From
Er. D Vasudevan, M.Tech ,
District Environmental Engineer,
Tamil Nadu Pollution Control Board,
Maraimalai Nagar,
Chengalpattu District- 603209.

To
1. Dr.K.G.Prijilal
RO, MoEFCC, Gol,
#34, HEPC Campus
Cathedral Garden Road,
Nungambakkam,
Chennai-600 034.

2.Mr. R. Rajkumar,
Scientist D
Central Pollution Control Board,
77-A, South Avenue Road,
Ambattur Industrial Estate,
Ambattur Taluk,Thiruvallur District,
Chennai - 600 058

Letter No. DEE/TNPCB/MMN/OA 231 of 2020 /2021 Dt. 30.07.2021

Sir,

Sub: Hon'ble NGT (SZ) - Joint Committee Constituted by the Hon'ble NGT (SZ) in the matter of O.A No.231 of 2020 (SZ) regarding "illegal landfills take life out of the Muttukadu Backwaters" – Water sample analysis report – furnished - Reg.

Ref: 1. Joint Committee inspection on 23/06/2021
2. Your e mail received on 06/07/2021

I submit to state that the Joint Committee Constituted by the Hon'ble NGT (SZ) in the matter of O.A No.231 of 2020 (SZ) regarding "illegal landfills take life out of the Muttukadu Backwaters" has made inspection to the said site on 23.06.2021.

In due compliance, water samples were collected on 23.06.2021 at the following places

1. Muttukadu Boat House
2. Backside of M/s. "Hiranandani Upscale" By Hiranandani Realtors Pvt Ltd. in Buckingham canal
3. Navalur in Buckingham canal
4. Mr. Sathya House, Door No. 128, Mayana Salai, Navalur (Well Water Sample)

and the Report of Analysis of the water samples collected is enclosed and also tabulated below

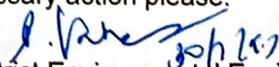
Statement showing the report of analysis for the Mutukadu Lake Water sample collected on 23.06.2021 (Physico Chemical parameters analysed).

Sl.No.	Parameters	Units	Point of Collection			
			Muttukadu Boat House	Backside of M/s. "Hiranandani Upscale" By Hiranandani Realtors Pvt Ltd.	Navalur	Door No. 128, House owned by Mr. Sathya, Navalur (Well Water Sample)
1	pH @ 25°C	No.	7.90	7.81	7.89	7.88
2	BOD @ 27°C	mg/L	11	17	17	9
3	COD	mg/L	168	184	192	96
4	Copper as Cu	mg/L	<0.033	<0.033	<0.033	<0.033
5	Zinc as Zn	mg/L	<0.05	<0.05	<0.05	<0.05
6	Cadimium as Cd	mg/L	<0.013	<0.013	<0.013	<0.013
7	Lead as Pb	mg/L	<0.07	<0.07	<0.07	<0.07
8	Nickel as Ni	mg/L	<0.05	<0.05	<0.05	<0.05
9	Total Chromium as Cr ⁺³	mg/L	<0.01	<0.01	<0.01	<0.01
10	Hexavalent Chromium Cr ⁺⁶	mg/L	<0.01	<0.01	<0.01	<0.01

Statement showing the value of the Bacteriological parameters analysed

Sl.No.	Parameters	Units	Point of Collection			
			Buckingham Canal at Muttukadu House	Boat	Backside of M/s. Hiranandani Apartment	Navalur
1.	Total Coliform	MPN/100 ml	20		170	<1.8
2.	Faecal Coliform	MPN/100 ml	130		790	92

This is submitted for favour of kind information and necessary action please.


 District Environmental Engineer,
 Tamilnadu Pollution Control Board,
 MaraimalaiNagar.

Encl: Water sample analysis report.



TAMIL NADU POLLUTION CONTROL BOARD
ADVANCED ENVIRONMENTAL LABORATORY
No. 76, MOUNT SALAI, GUINDY,
CHENNAI - 32.
TEST REPORT



ROA No. June-368 - June-370/2021 - 2022/ Dated: 30.06.2021

Name and Address of the sender	: The District Environmental Laboratory, Tamil Nadu Pollution Control Board, Maraimalai Nagar		
Nature and number of samples	: 3 Numbers of NGT Microbiology Sample	Sample quantity 300ml	Sealed in 300ml glass Bottle
Date and time of sample collection	: 23.06.2021 01.35 PM to 03.35 PM	Date & time of sample receipt at the lab	24.06.2021 at 5.50 PM
Point of Collection	1	Buckingham Canal at Muttukadu Boat House	
	2	Backside of M/s. "Hiranandani Apartment"	
	3	Navalur	
Analysis Starting date	: 25.06.2021	30.06.2021	

Sl. No.	DEE Code No.	Unit	DEE-74	DEE-75	DEE-76	Test Method
	Lab Code No.		June-368	June-369	June-370	
	Parameters					
1	Fecal Coliform	MPN/ 100ml	20	170	<1.8	APHA 23rd Edn 2017,-9221 B,E
2	Total Coliform	MPN/ 100ml	130	790	92	APHA 23rd Edn 2017- 9221 B,C

Note: < BDL indicates Less than minimum detectable limit.


Authorized Signatory
[AD (L), Dy. CSO]
[Sankara Subramanian, B. Helen Mary]


17/12/21



TAMIL NADU POLLUTION CONTROL BOARD
DISTRICT ENVIRONMENTAL LABORATORY M.M.Nagar

Report of Analysis

ROA No. 122/2021-22 dated 09.07.2021.

Name and address of the sender	District Environmental Engineer Tamil Nadu Pollution Control Board, M.M.Nagar		
Nature and number of samples	One number of trade effluent /sewage samples/Lake water	Sample quantity	2.5L
Date and Time of Sample Collection	23.06.2021 01.35 pm	Date and Time of Sample receipt at lab	24.06.2021 03.30 pm
Point of collection	1	Muttukadu Boat House (Water Sample)	

Sl.No	DEE Code no		DEE - 74	
	Lab code No		207	Tested as per APHA 22 nd Edition 2012
	Parameters	Unit		
1	pH @ 25°C	No.	7.90	Electrometric method
2	BOD @ 27° C	mg/L	11	DO meter method
3	COD	mg/L	168	Open reflux method
4	Copper as Cu	mg/L	<0.033	AAS method
5	Zinc as Zn	mg/L	<0.05	AAS method
6	Cadmium as Cd	mg/L	<0.013	AAS method
7	Lead as Pb	mg/L	<0.07	AAS method
8	Nickel as Ni	mg/L	<0.05	AAS method
9	Total Chromium as Cr ⁺³	mg/L	<0.01	Colorimetric method
10	Hexavalent Chromium Cr ⁺⁶	mg/L	<0.01	Colorimetric method

Chief Scientific Officer (Lab)
TNPCC, DEL M.M.Nagar.



TAMIL NADU POLLUTION CONTROL BOARD
DISTRICT ENVIRONMENTAL LABORATORY M.M.Nagar

Report of Analysis

ROA No. 123/2021-22 dated 09.07.2021.

Name and address of the sender	District Environmental Engineer Tamil Nadu Pollution Control Board, M.M.Nagar		
Nature and number of samples	One number of trade effluent /sewage samples/Lake water	Sample quantity	2.5L
Date and Time of Sample Collection	23.06.2021 03.00 pm	Date and Time of Sample receipt at lab	24.06.2021 03.30 pm
Point of collection	1	Backside of M/s. "Hiranandani Upscale" By Hiranandani Realtors Pvt. Ltd. (Water Sample)	

Sl.No	DEE Code no		DEE - 75	
	Lab code No		208	Tested as per APHA 22 nd Edition 2012
	Parameters	Unit		
1	pH @ 25°C	No.	7.81	Electrometric method
2	BOD @ 27° C	mg/L	17	DO meter method
3	COD	mg/L	184	Open reflux method
4	Copper as Cu	mg/L	<0.033	AAS method
5	Zinc as Zn	mg/L	<0.05	AAS method
6	Cadmium as Cd	mg/L	<0.013	AAS method
7	Lead as Pb	mg/L	<0.07	AAS method
8	Nickel as Ni	mg/L	<0.05	AAS method
9	Total Chromium as Cr ⁺³	mg/L	<0.01	Colorimetric method
10	Hexavalent Chromium Cr ⁺⁶	mg/L	<0.01	Colorimetric method

Chief Scientific Officer (Lab)
TNPCCB, DEL M.M.Nagar.



TAMIL NADU POLLUTION CONTROL BOARD
DISTRICT ENVIRONMENTAL LABORATORY M.M.Nagar

Report of Analysis

ROA No. 124/2021-22 dated 09.07.2021.

Name and address of the sender	District Environmental Engineer Tamil Nadu Pollution Control Board, M.M.Nagar		
Nature and number of samples	One number of trade effluent /sewage samples/Lake water	Sample quantity	2.5L
Date and Time of Sample Collection	23.06.2021 03.35 pm	Date and Time of Sample receipt at lab	24.06.2021 03.30 pm
Point of collection	1	Navalur (Water Sample)	

Sl.No	DEE Code no		DEE - 76	
	Lab code No		209	Tested as per APHA 22 nd Edition 2012
	Parameters	Unit		
1	pH @ 25°C	No.	7.89	Electrometric method
2	BOD @ 27° C	mg/L	17	DO meter method
3	COD	mg/L	192	Open reflux method
4	Copper as Cu	mg/L	<0.033	AAS method
5	Zinc as Zn	mg/L	<0.05	AAS method
6	Cadmium as Cd	mg/L	<0.013	AAS method
7	Lead as Pb	mg/L	<0.07	AAS method
8	Nickel as Ni	mg/L	<0.05	AAS method
9	Total Chromium as Cr ⁺³	mg/L	<0.01	Colorimetric method
10	Hexavalent Chromium Cr ⁺⁶	mg/L	<0.01	Colorimetric method

Chief Scientific Officer (Lab)
TNPCC, DEL M.M.Nagar. 5/



TAMIL NADU POLLUTION CONTROL BOARD
DISTRICT ENVIRONMENTAL LABORATORY M.M.Nagar

Report of Analysis

ROA No. 125/2021-22 dated 09.07.2021.

Name and address of the sender	District Environmental Engineer Tamil Nadu Pollution Control Board, M.M.Nagar		
Nature and number of samples	One number of trade effluent /sewage samples/Lake water	Sample quantity	2:5L
Date and Time of Sample Collection	23.06.2021 03.39 pm	Date and Time of Sample receipt at lab	24.06.2021 03.30 pm
Point of collection	1	Door No. 126, House owned by Mr. Sathya, Navalur (Well Water Sample)	

Sl.No	DEE Code no		DEE - 77	
	Lab code No		210	Tested as per APHA 22 nd Edition 2012
	Parameters	Unit		
1	pH @ 25°C	No.	7.88	Electrometric method
2	BOD @ 27° C	mg/L	9	DO meter method
3	COD	mg/L	96	Open reflux method
4	Copper as Cu	mg/L	<0.033	AAS method
5	Zinc as Zn	mg/L	<0.05	AAS method
6	Cadmium as Cd	mg/L	<0.013	AAS method
7	Lead as Pb	mg/L	<0.07	AAS method
8	Nickel as Ni	mg/L	<0.05	AAS method
9	Total Chromium as Cr ⁺³	mg/L	<0.01	Colorimetric method
10	Hexavalent Chromium Cr ⁺⁶	mg/L	<0.01	Colorimetric method

Chief Scientific Officer (Lab)
TNPCCB, DEL M.M.Nagar.