

No. 6836/NGT/SLMC/SCI/2023/636
GOVERNMENT OF PUDUCHERRY
DEPARTMENT OF SCIENCE, TECHNOLOGY AND ENVIRONMENT
PUDUCHERRY POLLUTION CONTROL COMMITTEE
3rd Floor, I-Housing Board Complex, Anna Nagar, Puducherry - 5.
Telephone: (0413) 2201256; Telefax: (0413) 2203494

Puducherry, the 19 JUN 2023

To ✓

Shri.D.P.Mathuria
Executive Director (Tech)
National Mission for Clean Ganga
Ministry of Jai Shakti,
Pth Floor, Major Dhyan Chand National Stadium,
India Gate, New Delhi — 110 002.

Sir,

Sub: DSTE/PPCC-Submission of Progress Report on Restoration of Polluted River Stretches-Reg.

Ref: Your Letter No. Legal/OA No. 673/2018/NMCG/2019 date 08.10.2020.

With reference to the above mentioned subject, Progress Report for the month of May, 2023 is enclosed for kind perusal.

Yours sincerely,

N. Ramesh

(Dr.N.RAMESH)
Member Secretary
PPCC

Enc1: as stated above

Copy to:

1. The Member Secretary,
Central Pollution Control Board,
Parivesh Bhawan, C.B.D. Cum-Office Complex,
East Arjun Nagar, Delhi — 110 032.
2. Standing Guard File

**Format for submission of Monthly Progress Report in the NGT Matter
OA No.673 of 2018 (in compliance to NGT order dated 24.09.2020)**

For the State of Puducherry

I. Overall status of the State (2011)

Total Puducherry Population : 1247953
Puducherry District Population : 950289
Puducherry Urban Population : 657600 (950289x69.20%)
Puducherry Rural Population : 292689 (950289x30.80%)

II. Estimated Sewage Generation (MLD): 71 MLD (URBAN)

III. Details of Sewage Treatment Plant:

1.	Existing no. of STPs and Treatment Capacity (in MLD): at Puducherry Net Treatment capacity of STP's $56 - 5 = 51 \text{ MLD}$	3 Nos. of SBR – 51 MLD 2 Nos. of UASB – 5 MLD (under maintenance) Total - 56 MLD 51 MLD
2.	Capacity Utilization of existing STPs: $14.99+15.37+13.58= 43.94 \text{ MLD}$ $43.94/51= 86.16\%$	43.94 MLD (86.16%)
3.	MLD of sewage being treated through Alternate technology: (71-56=15MLD)	15 MLD (on site sanitation like septic tank and soak pit etc.,)
4.	Gap in Treatment Capacity in MLD: (71-56 =15MLD)	15 MLD Tender was called for setting up of 15MLD at Puducherry. Standing Finance Committee meeting was conducted on 10.05.2023. Expenditure sanction was accorded by the Government. Further action is under process.
5.	No. of Operational STPs:	3 Nos.
6.	No. of Complying STPs with respect to pH, TSS, COD & BOD	3

Details of each existing STP in the State

Sl. No.	Location	Existing STP Capacity	Capacity being Utilized	Operational Status of STP	Compliance Status of STP
1	Puducherry	56 MLD (5 MLD UASB is under maintenance)	86.16 %	3	3
2	Karaikal	-	-	-	-
3	Mahe	-	-	-	-
4	Yanam	-	-	-	-

Details of under construction STPs in the State

Sl. No.	Location	Capacity of the plant in KLD	Physical Progress in%	Status of I & D or House sewer connections	Completion TimeLine
Nil					

Details of proposed STPs in the State

Sl. No.	Location	Capacity of the STP proposed in MLD	Status of Project (at DPR Stage/under Tendering/Work to be Awarded)	Likely Date of Completion
1.	Puducherry	3 MLD	Tender called for the 3 MLD STP at Sankarabarani river in Villianur is under preparation. Technical bid was opened on 02.05.2023 and further scrutiny is in progress. The lowest bidder was requested to furnish reply to the clarification sought.	Can be furnished only after finalizing the tender.
2.	Karaikal	11 MLD	Successful bidder has been identified for establishment of 11 MLD STP in Karaikal.	
3.	Mahe	Tender for setting up of 0.5MLD SBR based decentralized treatment system has been floated on 31.05.2023.		
4.	Yanam	Tender for setting up of 6 MLD STP has been floated on 17.05.2023.		

Idol immersion

- Idol immersion in U.T. of Puducherry is not carried out in fresh water bodies.
- Training program to the Local Administration Department and to the Commissioners, Commune Panchayat, Puducherry and Karaikal for ensuring effective implementation of revised guidelines for idol immersion was conducted by PPCC on 25.08.2021 (copy enclosed).
- Revised CPCB guidelines were also communicated on 13 .08.2021 and 11.08.2022 to the Collector, Puducherry and Karaikal Regions, the Sr. Superintendent of Police (L&O), the Superintendent of Police, Karaikal and to the Secretary, Sri Vinayaga Chaturthi Vizha Peravai, Puducherry and to the Local Administration Department, Puducherry to issue necessary instruction to the concerned to follow the guidelines.
- PPCC officials inspected Vinayaga idols manufacturing units on 19.08.2022 and found the idols were manufactured with waste paper, tapioca powder and water soluble colours. Revised CPCB guidelines were also issued to the manufacturer of idols by PPCC.
- Public Notice regarding environmental friendly idol immersion was published in leading newspapers on 13.08.2022.
- A meeting was conducted by the Collector on 07.09.2022 for the strict implementation of guidelines till the end of festival.

IV. Details of Industrial Pollution:

1.	No. of industries in the State:	3595
2.	No. of Effluent generating industries in the State:	97
3.	Quantity of effluent generated from the industries in MLD:	4.75 MLD
4.	Quantity of Hazardous Sludge generated from the Industries in TPD:	10 TPD
5.	Number of industrial units having ETPs:	97
6.	Number of industrial units connected to CETP:	Nil
7.	Number and total capacity of ETPs (details of existing/ under construction/ proposed)	Existing-97 Capacity-4.75MLD
8.	Compliance status of the ETPs:	95
9.	Number and total capacity of CETPs (details of existing / under construction /proposed)	Nil
10.	Status of compliance and operation of the CETPs	Nil

Town	No.of industries	Industrial discharge	Status of ETPs	Status of CETPs(existing, under construction & proposed)
Puducherry	3271	4746.2KLD	Existing-97	Nil

V. Solid Waste Management:

1.	Total number of Urban Local Bodies and their Population.	Annexure I
2.	Current Municipal Solid Waste Generation.	382.5 TPD
3.	Number, Installed capacity and utilization of existing MSW processing facilities in TPD (bifurcated by type of processing eg., -Waste to Energy (Tonnage and Power Output), Compost Plants (Windrow, Vermi, decentralized pit composting), bio-methanation, MRF etc	Integrated MSWM is being taken up for all types of waste by the ULBs. • 4 TPD Material Recovery Facility is operational in Dubraypet, Pondicherry Municipality • 1 TPD Bio-methanation plant is operational in Oulgaret Municipality - 5 KWH • 1 TPD Bio-methanation plant is operational in Karaikal Municipality – 2 KWH Composting technologies like Windrows method, Black Soldier Fly (BSF) and other aerobic technologies have been adopted by the new concessionaire in Karaikal and Yanam Municipality, and the communes of Puducherry and Karaikal.
4.	Action plan to bridge gap between Installed Capacity and Current Utilization of processing facilities (if Gap > 20%).	Integrated Municipal Solid Waste Management projects including the scope of collection, transportation, processing and disposal are being implemented to handle all the types of waste generated in the ULBs – 610 MTs of waste from entire UT of Puducherry (urban local bodies and commune panchayats together) 1. Selection of concessionaire for IMSWM in Pondicherry and Oulgaret Municipalities is currently in process will address 100% processing. 2. 100% Processing happening in Karaikal Municipality 3. Concessionaire appointed for processing in Yanam Municipality. Identification of alternative land to set up Processing Facility is under progress in Yanam Municipality, 4. Mahe is practising in-situ wet waste management and the current concessionaire is taking care of dry waste separately.
5.	No. and capacity of C&D waste processing Plants in TPD (existing, proposed and under construction).	Tender has been floated for setting up Integrated Municipal Solid Waste Management – the scope is inclusive of Collection, Transportation, Processing and Disposal of C&D waste for

		Pondicherry and Oulgaret Municipalities. The work order has been issued for Karaikal and Yanam municipalities. Puducherry and Karaikal communes also included under C&D waste management.			
6.	Total no. of wards, no. of wards having door to door collection service, no. of wards practicing segregation at source.	ULB PM OM KM YM MM	Number of Wards 42 37 18 14 15	Door to Door collection (DTDC) 100% 100% 100% 100% 100%	Source Segregation 100% 100% 100% 100% 100%
7.	Details of MSW treatment facilities proposed and under construction (no. capacity and technology). PM – Puducherry Municipality OM – Oulgaret Municipality KM – Karaikal Municipality YM – Yanam Municipality MM – Mahe Municipality Pdy CP's – Puducherry Commune Panchayat	ULB PM OM KM YM MM Pdy CP's	MSW treatment facilities proposed Integrated SWM Integrated SWM (Bio-methanation, BSF and Windrows composting) Integrated SWM (Bio-methanation, BSF and Windrows composting) In-house composting is being practiced. There is no requirement of processing plant. Integrated Municipal	Capacity 350 TPD 40 TPD 20 TPD 150 TPD	Status Tender has been floated. Technical bid is proposed on open on 16.05.2023 Work order issued on 22.11.2022 and the work has been commenced. Work order issued on 10.11.2021 and work has been commenced for Collection, segregation and Transportation. Due to certain administrative reason the land is yet to be handed over to Concessionaire to set up the processing plant Work order issued on

	Kkl CP's – Karaikal Commune Panchayat		Solid Waste Processing Project at Puducherry commune panchayat		22.11.2022 and work has been commenced.
		Kkl CP's	Integrated Municipal Solid Waste Processing Project at Puducherry commune panchayat	80 TPD	Work order issued on 22.11.2022 and work has been commenced
8.	No. and area (in acres) of uncontrolled	3Nos. of controlled Landfills			
	Garbage dumpsites and Sanitary Landfills.	Puducherry		:23.0 acre	
		Karaikal		:8.32 acre	
		Yanam		:0.618 acre	
		Total	31.938Acres		
9.	No. and area (in acres) of legacy waste within 1km buffer of both side of the rivers.	Nil			
10	No. of drains falling into rivers and no. of drains having floating racks/screens installed to prevent solid waste from falling into the rivers.	No. of drains: 172 All the drains that reaches the Sankaraparani and Arasalar rivers were identified and in-situ remediation of providing Grill gratings and Bar screen are completed in all the172 drains.			

Status of ULB wise Management of Solid Waste

ULB	Total MSW generation in TPD	Total MSW being processed in TPD	Existing MSW facilities	Utilization Capacity of the existing MSW facilities	Proposed MSW Facilities & Completion Time line
5	382.5	58.02 TPD	3	15.1 %	6 months

Note on Status of Legacy Waste Management:

Out of 6.5 lakhs tons of legacy waste accumulated in the U.T. of Puducherry (Puducherry, Oulgaret, Karaikal and Yanam municipalities):

- 5.533 lakhs tons of legacy waste at Kurumbapet (for Pondicherry and Oulgaret Municipalities) was taken up for bio-mining and bio-remediation by M/S Zigma Global Environ Solution Pvt Ltd. The work has been completed.
- 77,850 MT of legacy waste is accumulated in Paravaipet, Karaikal Municipality. LOA has been issued and erection of plant has been completed. Bio-mining and Bio-remediation commenced from May 2023.
- The tender file has been submitted for approval of the competent authority to clear 25306 MT of legacy waste accumulated in Yanam.
- No legacy waste in Mahe Municipality.

VI. Bio-medical Waste Management:

1	Total Bio-medical generation:	4638kg/day
2	No. of Hospitals and Health Care Facilities:	387
3	Status of Treatment Facility/CBMWTF:	One Common Bio-Medical Waste Treatment Facility functional.

VII. Hazardous Waste Management:

1	Total Hazardous Waste generation:	31101 TPA
2	No.of Industries generating Hazardous waste	139 industries obtained authorization.
3	Treatment Capacity of all TSDFs	-
4	Avg. Quantity of Hazardous waste reaching the TSDF and Treated.	TSDF: Land fillable Waste reached- M/s. Mother Earth Enviro Tech, Bangalore –Nil
5	Detail so for-going or proposed TSDF	The TSDF located in neighboring states is being shared.

VIII. Plastic Waste Management:

1	Total Plastic Waste generation:	25185 TPA
2	Treatment/Measures adopted for reduction or management of plastic waste:	Government of Puducherry has imposed total ban on single use plastics with effect from 02/08/2019. As per the Government of India Notification Addendum has been notified by the Government of Puducherry for imposing additional SUP items like (i) Ear buds with plastic sticks, plastic sticks for balloons, candy sticks and ice cream sticks; (ii) Polystyrene [Thermocol] for decoration; (iii) Plates, cups, glasses, cutlery such as forks, spoons, knives, trays, stirrers, wrapping or packing films around sweet boxes, invitation cards and cigarette packets (iv) Plastics or PVC banners less than 100 micron; (v) Non-woven plastic carry bags less than 60 Gram per Square Meter (GSM). Standard Operating Procedure (SOP) for making SUP free Government office has been prepared and circulated to all the Government Departments and Industries. Surprise inspections are being carried out. As per the direction of MoEF & CC, GOI, “Action Plan on Elimination of Single Use Plastic (SUP)” in the Union Territory of Puducherry has been prepared with the approval of Special Task Force (STF). As per the order of Hon’ble NGT, Bahour Commune Panchayat (BCP) has been declared as Single Use Plastic Free Commune.

	Public notice has been issued on 22.02.2022 in Local dailies for elimination of Single Use Plastics in English and vernacular language. A circular dated 24.02.2022 has been issued to all colleges to declare their campus as SUP free campus as per the direction of CPCB, Delhi. A consultation meeting on “Elimination of single use plastics’ with Local Authorities like District Magistrate, Director, LAD, Supdt. of Police and Commissioners of all Local Bodies was convened on 11.04.2022. Conducted a Technical session on laying of road using waste plastics on 18.04.2022. A pilot scale road was laid on 19.04.2022 for about 200mts at Edayarpalayam, Ariyankuppam Commune Panchayat in co-ordination with Prof. Dr.Vasudevaiah, Thiagarajar College of Engineering, Madurai. Road making using waste plastics at Korkumedu, Ariyankuppam Commune Panchayat. Hon’ble Chief Minister Inaugurated the LED van on 05.06.2022 for creating awareness on PWM. 50 drives were made and 24.6 kg of SUP items have been seized by Local bodies. Rs.4600/- was levied as fine. Implementation of Single Use Plastic (SUP) as per the notification of MoEF&CC, GOI is being strictly implemented by Local bodies and monitored by PPCC.
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		Interaction meeting with the Local bodies of Puducherry, Karaikal, Mahe and Yanam and demo of SUP Portal and Apps of CPCB was held on 13.07.2022. Interaction meeting with the Local bodies of Puducherry, Karaikal, Mahe and Yanam and demo of SUP Portal and APPS of CPCB was held on 13.07.2022. Interaction meeting with the Local bodies of Karaikal, for demo of SUP Portal and Apps of CPCB was held on 10.08.2022. under the Chairmanship of the Collector, Karaikal. For Setting up Material Recovery Facility (MRF) for 20 TPD Recyclable Plastic waste from Pondicherry and Oulgaret Municipality, MoU is under process. 4th meeting of Special Task Force (STF) on elimination of Single use Plastic in the U.T of Puducherry under the Chairmanship of the Chief Secretary was held on 02.11.2022.
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IX	Details of Alternate Treatment Technology being adopted by the State/UT	Nil
X	Identification of polluting sources including drains contributing to river pollution and action as per NGT order on in-situ treatment:	All the drains that reaches the Sankaraparani and Arasalar rivers were identified and in-situ remediation of providing grill grating, sandbar screen are completed in all the 172 drains.
XI	Details of Nodal Officer appointed by Chief Secretary in the State/UT:	The Development Commissioner-cum-Senior Nodal Officer, Government of Puducherry
XII	Details of meetings carried under the Chairmanship of Chief Secretary in the State/UT:	Review meetings on compliance status of the Hon'ble NGT Order dated 24.11.2022, in the matter of O.A No.606/2018 was held on 23.01.2023 and 11.05.2023 under the Chairmanship of the Chief Secretary,

		Government of Puducherry.
XIII	Latest water quality of polluted river, distributaries, drains with flow details and ground water quality in the catchment of polluted river;	Common STP Water Quality Data and River water quality data of Chunnambar and Arasalar are given in Annexure-II .
XIV	Ground water regulation:	Pondicherry Ground Water Authority had closed 6 Nos. of tube wells in Puducherry region and 2Nos.of tube wells in Karaikal Region during the past 5years due to illegal extraction of ground water.
XV	Good irrigation practices being adopted by the State:	Annexure- III
XVI	Rain Water Harvesting:	The planning authorities while issuing occupancy certificate ascertain that the conditions stipulated in the building permits regarding rain water harvesting measures have been complied with. The Puducherry Ground Water Authority does not issues fresh permits/renews permits to any industries/ institutions unless Rain Water Harvesting System is installed in their respective buildings. 882 Rain Water Harvesting structure are constructed in the U.T of Puducherry by Department of Agriculture. No. of Rain Water Harvesting structure by PWD - 262.
XVII	Demarcation of Flood plain and removal of Illegal encroachments:	Demarcation of flood plain and removal of illegal encroachments in Karaikal region is to be prepared under FMBAP. The expert team from Central Water Commission, New Delhi has inspected the sites on 02.02.2023 for conducting field survey for sustainable water management in Karaikal Region. After getting necessary expert advice/recommendation from the expert team CWC, New Delhi necessary DPR will

		be prepared.
XVIII	Maintaining minimum –flow of river:	Special Task Team has been constituted under the chairmanship of Deputy Collector in each District for curtailing illegal sand mining and its transportation. 44 Cases have been booked against illegal sand miners and Rs. 9.1.lakhs were collected as fine during 2021-2022. 144 has been imposed on illegal sand mining prone area.
XIX	Plantation activities along the rivers:	For the development of green belt along Chunnambar, Forest Department has planted 4000 trees.
XX	Development of bio-diversity park:	The mangrove area to an extent of 11-09-30 Hectares belongs to the Government and the rest of the area to an extent of 10-39-00 Hectares belongs to private owners. Hence, proposal of providing chain link fencing around three sides in Mangroves plantation at Northern side of beach road in Karaikal has been dropped. It is proposed to construct wooden walkway with watch tower in the mangrove area considering ecological balance. Biodiversity Assessment in the Mangrove Forest of Karaikal was carried out for the period July 2021 to June, 2022.
XXI	Reuse of Treated Water:	Annexure-IV
XXII	Model River being adopted by the State& Action Proposed for achieving the bathing quality standards:	Chunnambar River -Sankarabarani
XXIII	Status of Preparation of Action Plan by the13 Coastal States:	Action plan submitted to CPCB dt.24.02.2020.
XXIV	Regulation of Mining Activities in the State/UT:	Special Task Team has been constituted under the Chairmanship of Deputy Collector in each district for curtailing illegal sand mining and its transportation. 44 cases have been booked against illegal sand miners and Rs.9.1 lakhs were collected as fine. 144 has been imposed in illegal sand mining prone area.
XXV	Action against identified polluters, law violators and officers responsible for failure for vigorous monitoring.	-

Details of Solid Waste Generation in Urban Local Bodies (Municipalities)

Sl. No	Name of the Municipality	Total Population as per census2011	Total Quantity of waste generation in TPD
1.	Puducherry	2,44,700	155
2.	Oulgaret	3,00,104	155
3.	Karaikal	86,838	40
4.	Mahe	41,816	12.5
5.	Yanam	55,628	12
Total			382.5

**GOVERNMENT OF PUDUCHERRY
WATER TESTING LABORATORY
P.H.D., P.W.D., PUDUCHERRY**



Report No. : TR/WTL/PHD/PWD/PDY/2023/W-0388
ULR-TC758022000000364F

Date: 18.05.2023

TEST REPORT

Customer Name & Address : The Assistant Engineer,
Drainage Sub Division, PHD, PWD, Puducherry.
Customer Reference : Test request dt:11.05.2023

Page 1 of 1

SAMPLE DETAILS

Sample Code	: 2023/W-0388	Sampled by	: Customer
Sample Name	: Waste Water	Sampled on	: 11.05.2023
Sample Description	: Waste Water(Outlet)		
Temperature at the time of Receipt	: 31.4°C	Sampling Location	: Dubrayapet Outlet
Identification by Customer	: Sample - 2	Sampling Procedure	: -
Sample Condition	: Fit for analysis	Sample Received on	: 11.05.2023
Test Started on	: 11.05.2023	Test Completed on	: 18.05.2023

TEST RESULTS

Sl.No.	Test Parameter	Test Method	Units	Results
1	pH @ 25°C	APHA, 23rd Edition, 2017, 4500-H+B	--	7.21
2	Total Suspended Solids @ 103 - 105°C	APHA, 23rd Edition, 2017, 2540 D	mg/L	<10
3	Chemical Oxygen Demand	APHA, 23rd Edition, 2017, 5220 B	mg/L	27.6
4	Biochemical Oxygen Demand (3 days at 27°C)	IS 3025 Part44; (1994); RA2014	mg/L	9.7
5	Total Phosphate as PO ₄	APHA, 23rd Edn, 2017, 4500-P B,C	mg/L	3.24

.....End of Report.....

Authorized Signatory

V. Venkatachalam

Vimala Venkatachalam

BIOCHEMIST

WATER TESTING LABORATORY

PUBLIC HEALTH DIVISION

Copy submitted to:

The Executive Engineer,
PHD., PWD., Puducherry.

1. The test result relevant only to the item tested.
2. The tested report shall not be reproduced in full or part without written approval of WTL-PHDPWD.
3. The laboratory is not responsible for the authenticity of photocopied test report.
4. The test item will not be retained for more than 15 days from the date of issue of test report except in case as required by applicable regulations.
5. The laboratory is not responsible for any legal dispute that may arise in future if the sample was not drawn by the laboratory personnel.

GOVERNMENT OF PUDUCHERRY
WATER TESTING LABORATORY
P.H.D., P.W.D., PUDUCHERRY

Report No. : TR/WTL/PHD/PWD/PDY/2023/W-0388(Annexe)

Date: 18.05.2023

TEST REPORT

Customer Name & Address : The Assistant Engineer,
Drainage Sub Division, PHD, PWD, Puducherry.
Customer Reference : Test request dt:11.05.2023

Page 1 of 1

SAMPLE DETAILS

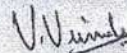
Sample Code	: 2023/W-0388	Sampled by	: Customer
Sample Name	: Waste Water	Sampled on	: 11.05.2023
Sample Description	: Waste Water(Outlet)	Sampling Location	: Dubrayapet Outlet
Temperature at the time of Receipt	: 31.4°C	Sampling Procedure	: --
Identification by Customer	: Sample - 2	Sample Received on	: 11.05.2023
Sample Condition	: Fit for analysis	Test Completed on	: 18.05.2023
Test Started on	: 11.05.2023		

TEST RESULTS

Sl.No.	Test Parameter	Test Method	Units	Results
1	Nitrate as NO ₃	APHA, 23rd Edn, 2017, 4500-NO ₃ B	mg/L	<5
2	Phosphorus as P	APHA, 23rd Edn, 2017, 4500-P B, C	mg/L	1.0
3	Faecal Coliforms	WHO Guideliness for drinking water Quality - Vol3	MPN/100 ml	<200 MPN/100ml

.....End of Report.....

Authorized Signatory



Vimala Venkatachalam

BIOCHEMIST

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GOVERNMENT OF PUDUCHERRY
WATER TESTING LABORATORY
P.H.D., P.W.D., PUDUCHERRY



Report No. : TR/WTL/PHD/PWD/PDY/2023/W-0390
ULR-TC758022000000366F

Date: 18.05.2023

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Customer Name & Address : The Assistant Engineer,
Drainage Sub Division, PHD, PWD, Puducherry.
Customer Reference : Test request dt:11.05.2023

Page 1 of 1

SAMPLE DETAILS

Sample Code	: 2023/W-0390	Sampled by	: Customer
Sample Name	: Waste Water	Sampled on	: 11.05.2023
Sample Description	: Waste Water (Outlet)		
Temperature at the time of Receipt	: 32.3°C	Sampling Location	: Kanaganeri Outlet
Identification by Customer	: Sample - 4	Sampling Procedure	: --
Sample Condition	: Fit for analysis	Sample Received on	: 11.05.2023
Test Started on	: 11.05.2023	Test Completed on	: 18.05.2023

TEST RESULTS

Sl.No.	Test Parameter	Test Method	Units	Results
1	pH @ 25°C	APHA, 23rd Edition, 2017, 4500-H+B	--	6.73
2	Total Suspended Solids @ 103 - 105°C	APHA, 23rd Edition, 2017, 2540 D	mg/L	<10
3	Chemical Oxygen Demand	APHA, 23rd Edition, 2017, 5220 B	mg/L	18.7
4	Biochemical Oxygen Demand (3 days at 27°C)	IS 3025 Part44; (1994); RA2014	mg/L	7.7
5	Total Phosphate as PO ₄	APHA, 23rd Edn, 2017, 4500-P B,C	mg/L	2.62

.....End of Report.....

Authorized Signatory

Vimala Venkatachalam

BIOCHEMIST

WATER TESTING LABORATORY

PUBLIC HEALTH DIVISION

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WATER TESTING LABORATORY
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Date: 18.05.2023

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Drainage Sub Division, PHD, PWD, Puducherry.

Page 1 of 1

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SAMPLE DETAILS

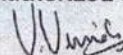
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1	Nitrate as NO ₃	APHA, 23rd Edn, 2017, 4500-NO ₃ B	mg/L	<5
2	Phosphorus as P	APHA, 23rd Edn, 2017, 4500-P B, C	mg/L	0.9
3	Faecal Coliforms	WHO Guideliness for drinking water Quality - Vol3	MPN/100 ml	<200 MPN/100ml

.....End of Report.....

Authorized Signatory



Vimala Venkatachalam

BIOCHEMIST

WATER TESTING LABORATORY
PUBLIC HEALTH DIVISION

Copy submitted to:

The Executive Engineer,
PHD., PWD., Puducherry.

1. The test result relevant only to the item tested.
2. The tested report shall not be reproduced in full or part without written approval of WTL-PHDPWD.
3. The laboratory is not responsible for the authenticity of photocopied test report.
4. The test item will not be retained for more than 15 days from the date of issue of test report except in case as required by applicable regulations.
5. The laboratory is not responsible for any legal dispute that may arise in future if the sample was not drawn by the laboratory personnel.

GOVERNMENT OF PUDUCHERRY
WATER TESTING LABORATORY
P.H.D., P.W.D., PUDUCHERRY



Report No. : TR/WTL/PHD/PWD/PDY/2023/W-0392
ULR-TC758022000000368F

Date: 18.05.2023

TEST REPORT

Customer Name & Address : The Assistant Engineer,
Drainage Sub Division, PHD, PWD, Puducherry.
Customer Reference : Test request dt:11.05.2023

Page 1 of 1

SAMPLE DETAILS

Sample Code	: 2023/W-0392	Sampled by	: Customer
Sample Name	: Waste Water	Sampled on	: 11.05.2023
Sample Description	: Waste Water (Outlet)		
Temperature at the time of Receipt	: 31.8°C	Sampling Location	: Lawspet Outlet
Identification by Customer	: Sample - 6	Sampling Procedure	: --
Sample Condition	: Fit for analysis	Sample Received on	: 11.05.2023
Test Started on	: 11.05.2023	Test Completed on	: 18.05.2023

TEST RESULTS

Sl.No.	Test Parameter	Test Method	Units	Results
1	pH @ 25°C	APHA, 23rd Edition, 2017, 4500-H+B	--	7.01
2	Total Suspended Solids @ 103 - 105°C	APHA, 23rd Edition, 2017, 2540 D	mg/L	<10
3	Chemical Oxygen Demand	APHA, 23rd Edition, 2017, 5220 B	mg/L	17.7
4	Biochemical Oxygen Demand (3 days at 27°C)	IS 3025 Part44; (1994); RA2014	mg/L	7.7
5	Total Phosphate as PO ₄	APHA, 23rd Edn, 2017, 4500-P B,C	mg/L	3.86

.....End of Report.....

Authorized Signatory

V. Venkatachalam

Vimala Venkatachalam

BIOCHEMIST

WATER TESTING LABORATORY
PUBLIC HEALTH DIVISION

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GOVERNMENT OF PUDUCHERRY
WATER TESTING LABORATORY
P.H.D., P.W.D., PUDUCHERRY

Report No. : TR/WTL/PHD/PWD/PDY/2023/W-0392(Annexe)

Date: 18.05.2023

TEST REPORT

Customer Name & Address : The Assistant Engineer,
Drainage Sub Division, PHD, PWD, Puducherry.
Customer Reference : Test request dt:11.05.2023

Page 1 of 1

SAMPLE DETAILS

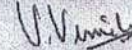
Sample Code	: 2023/W-0392	Sampled by	: Customer
Sample Name	: Waste Water	Sampled on	: 11.05.2023
Sample Description	: Waste Water (Outlet)		
Temperature at the time of Receipt	: 31.8°C	Sampling Location	: Lawspet Outlet
Identification by Customer	: Sample - 6	Sampling Procedure	: --
Sample Condition	: Fit for analysis	Sample Received on	: 11.05.2023
Test Started on	: 11.05.2023	Test Completed on	: 18.05.2023

TEST RESULTS

Sl.No.	Test Parameter	Test Method	Units	Results
1	Nitrate as NO ₃	APHA, 23rd Edn, 2017, 4500-NO ₃ B	mg/L	<5
2	Phosphorus as P	APHA, 23rd Edn, 2017, 4500-P B, C	mg/L	1.2
3	Faecal Coliforms	WHO Guidelines for drinking water Quality - Vol3	MPN/100 ml	<200 MPN/100ml

.....End of Report.....

Authorized Signatory



Vimala Venkatachalam
BIOCHEMIST
WATER TESTING LABORATORY
PUBLIC HEALTH DIVISION

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Chunnambar River Water Quality Data - 2023			
S.No	Parameters	May-23	Standard limit as per the Primary Water Quality Criteria for bathing water - Class of Water B
1	Date of sampling	11.05.2023	
2	Time	4.25 P.M	
3	Temp°C	30.0	
4	pH	9.09	6.5-8.5
5	DO (mg/l)	12.5	5 or more
6	BOD (mg/l)	7.5	3 or less
7	Faecal Coliform MPN/100ml	1600	500 (Desirable) and 2500 (Max. Permissible)
8	Faecal Streptococci MPN/100ml	140	100 (Desirable) and 500 (Max. Permissible)
Arasalar River Water Quality Data			
S.No	Parameters	May-23	Standard limit as per the Primary Water Quality Criteria for bathing water - Class of Water B
1	Date of sampling	22.05.2023	
2	Time	6.20 A.M	
3	Temp°C	30.0	
4	pH	8.03	6.5-8.5
5	DO (mg/l)	5.1	5 or more
6	BOD (mg/l)	2.8	3 or less
7	Faecal Coliform MPN/100ml	900	500 (Desirable) and 2500 (Max. Permissible)
8	Faecal Streptococci MPN/100ml	110	100 (Desirable) and 500 (Max. Permissible)

MPN- Most Probable Number

ADOPTION OF GOOD IRRIGATION PRACTICE

1. It is proposed to cover more area under precision farming.
2. System of Rice Intensification (SRI) is popularized among the farming community as a water saving measure.
3. Sustainable Sugarcane Initiative (SSI) for reducing water consumption in sugarcane crops is also being popularized.
4. Attractive subsidy assistance is being extended to farmers for installation of Drip/Sprinkler irrigation devices.
5. Attractive subsidy assistance is being extended to farmers for laying underground pipelines for conveyance of irrigation water.

Reuse of Treated Water

Station	Purpose	Quantity
Lawspet STP	Industrial usage	0.8 MLD
	Fodder Grass raising	6.0 MLD
	Coconut Plantation	
	Silk cotton trees	
	Natural recharging through impounding reservoir	9 MLD
Dubrayapet STP	To Pondy Marina Hotel	0.3 MLD
	Total	16.10 MLD

An Ultrafiltration Plant of 0.50 MLD capacity for treating the STEW from Dubrayapet STP has already been installed at Dubrayapet and pumping mains for conveying the treated water at Botanical Garden and Bharathi Park has been laid at a total cost of `2.06 Crores under AMRUT scheme has been implemented as Pilot project and is to be commissioned immediately by which 0.50 MLD of Tertiary Treated Water will be reused in public parks. The system is ready and awaited for drawl of treated used water by Puducherry Municipality and Agriculture Department.