

No. 6836/NGT/SLMC/SCI/2023/ 561
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

22 DEC 2023

To

Shri.D.P.Mathuria
Executive Director (Tech)
National Mission for Clean Ganga
Ministry of Jai Shakti,
P' 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: Letter received from MoJS, GOI vide 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 November, 2023 is enclosed for kind perusal.

Yours sincerely,


(YASAM LAKSHMI NARAYANA REDDY)
DIRECTOR
(DSTE)

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 Plants: Puducherry District

1.	Existing no. of STPs and Treatment Capacity (in MLD) Net Treatment capacity of STP's	3 Nos. of SBR – 51 MLD 2 Nos. of UASB – 5 MLD (under maintenance) Total – 56 MLD 56 – 5 = 51 MLD
2.	Capacity Utilization of existing STPs: (14.61+16.29+15.72)=46.62 MLD 46.62/51=91.41%	46.62 MLD (91.41%)
3.	MLD of sewage being treated through Alternate technology: (71-56=15 MLD)	15 MLD (on site sanitation like septic tank and soak pit etc.)
4.	Gap in Treatment Capacity in MLD: (71-56 =15MLD)	15 MLD Work order has been issued on 22.06.2023 to M/s. ECO Protection Engineers Pvt. Ltd., Chennai for an amount of Rs. 43,08,68,289/-. Basic Engineering Plan was approved by NIT, Karaikal. Soil stabilisation test completed. Further work is in progress.
5.	No. of Operational STPs:	3 Nos.
6.	No. of Complying STPs with respect to pH, TSS, COD & BOD	2 Nos.

Details of existing STPs 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)	91.41%	3	2
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 for 3 MLD STP called for on 02.05.2023. Only one contractor quoted and the cost is very high. Hence, Works Board not accepted and instructed PWD to go for fresh tender. And also there is a proposal for FSTP (Fecal Sludge Treatment Plant) at the same site funded by SBM (Gramin). Therefore Works Board directed to go for comprehensive tender with 3 MLD STP and FSTP. The comprehensive DPR has been prepared and submitted to competent authority for approval.	Can be furnished only after finalizing the tender.
2.	Karaikal	11 MLD	Installation of 11 MLD STP in Karaikal has been commenced and will be completed as per the timeline of LOA.	
3.	Mahe	Tender has been floated on 15.11.2023 for construction of 0.5MLD		
4.	Yanam	Financial bid was opened on 06.10.2023. Evaluation of financial bid is under progress.		

Idol immersion

Letter dt. 14.08.2023 along with revised CPCB guidelines were sent to the Collector, Puducherry and Karaikal Region, to the Sr. Superintendent of Police (L&O), Senior Superintendent of Police, Karaikal, Secretary, Sri Vinayaga Chathurthi Vizha Peravai, Puducherry and to the Local Administration Department, Puducherry to issue necessary instruction to the concerned to follow the guidelines in to-to.

PPCC officials inspected Vinayaga idols manufacturing units on 12.09.2023 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.

Press note was released through Directorate of information and Publicity vide letter dt. 04.09.2023.

A meeting was conducted by the Collector on 08.09.2023 for the strict implementation of guidelines till the end of festive.

A meeting was conducted with the Secretary, Sri Vinayagar Chathurthi Peravai by the Member Secretary, PPCC on 13.09.2023 for strict compliance of the guidelines of the idol immersion.

Sea water quality monitoring was carried out at pre immersion, during immersion and post immersion in Puducherry region for ascertaining water quality, Physico-chemical parameters such as pH, DO, colour, BOD, COD, Conductivity, Turbidity, TDS, Chloride, TSS, Hardness, Total Alkalinity and metals such as Chromium, Lead, Zinc, Copper, Cadmium, Mercury, Antimony, Barium, Cobalt, Manganese, Strontium were analysed. Apart from the water samples, sediment samples also were collected during pre-immersion, during-immersion and post immersion. The assessment report reveals that there is no significant variation in the concentration of the parameters when compared between the pre, during and post immersion stages in sea water and sediment samples.

Action taken report along with test report send to CPCB, Delhi dated 16.10.2023.

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:	96
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.	5 ULB's (7,28,761, Census 2011)								
2.	Current Municipal Solid Waste Generation.	Total solid waste generation - 382.5 TPD								
		Sl. No.	ULB	Total waste generated (TPD)						
		1	PM	155						
		2	OM	155						
		3	KM	40						
		4	MM	12.5						
		5	YM	20						
			Total	382.5						
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.								
		As on 30.09.2023								
		S.No	ULB	Processing	Bio methanation	MRF	MRF through formal sectors	MRF through informal sectors	Total	Percentage of processing
		1	PM	-	-	4	-	3.05	7.05	4.54%
		2	OM	-	1	-	0.5	2.47	3.97	2.38%
		3	KM	40 (Bio composting, vermi, MRF)	-	-		-	40	100%
		4	MM	8.5 (Inhouse pipe composting)	-	2	2	-	12.5	100%
		5	YM	-	-	-	-	1	1	5%
			Total	48.5	1	6	2.5	6.52	64.52	16.86%
		Composting technologies like Windrows method and other aerobic technologies have been adopted by the new concessionaire in 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. Letter of Award has been issued on 29.09.2023 for IMSWM in Pondicherry and Oulgaret Municipalities. 2. 100% Processing happening in Karaikal Municipality 3. Concessionaire appointed for processing in Yanam Municipality. Identification of alternative land with Dept of Veterinary and Animal husbandries and Dept. of Fisheries to set up Processing Facility is under progress in Yanam Municipality, 4. Mahe is practicing in-house pipe composting wet waste management and the current concessionaire is taking care of Door to door, segregation and dry waste to MRF separately.						
5.	No. and capacity of C&D waste processing Plants in TPD (existing, proposed and under construction).	Municipalities and commune panchayats in Puducherry and Karaikal includes C&D waste management in their scope of the work.								
6.	Total no. of wards, no. of wards having door to door collection service, no. of wards practicing segregation at source.	ULB	Number of Wards	Door to Door collection (DTDC)		Ground Status on Source Segregation				
		PM	42	100%		43 % (15 wards by Recity)				
		OM	37	100%		5.4 % (20 wards by OM)				
		KM	18	100%		50%				
		YM	14	100%		0%				
		MM	15	100%		Weekly basis in commercial area and monthly basis in residential area				
		(100% segregation is reported in all 5 ULB's Swaththam SBM portal)								
7.	Details of MSW treatment facilities proposed and under construction (no. capacity and technology). PM – Puducherry Municipality OM – Oulgaret Municipality	ULB	MSW treatment facilities proposed		Capacity proposed	Status				
		PM	Integrated SWM		350 TPD	Work order issued on 29.09.2023. On clearance of site, setting up of the processing plant will be				
		OM								

	KM – Karaikal Municipality				commenced from 01.01.2024.
		KM	Integrated SWM (Bio-methanation, BSF and Windrows composting)	40 TPD	Work order issued on 22.11.2022 and the work has been commenced. 100% processing in progress.
	YM – Yanam Municipality	YM	Integrated SWM (Bio-methanation, BSF and Windrows composting)	20 TPD	Work order was issued on 10.11.2021. Due to certain administrative reason the handing over of the land got delayed from Dept. of Electricity and recently the G.O has been issued for clearance of land. On handing over the land to the local body the setting up of the processing plant will be commenced by Jan, 2024.
	MM – Mahe Municipality	MM	The agency engaged M/s Labour Co. Op society ltd commenced the work for door to door collection in Mahe from 21.09.2023 onwards for 1 year contract for the cost of Rs.3.83 Cr. Work order issued and commenced. The dry waste has been sent to MRF near Pallor. In-house pipe composting is being practiced by individual households.		
	Pdy CP's – Puducherry Commune Panchayat	Pdy CP's	Integrated Municipal Solid Waste Processing Project at Puducherry commune panchayat	150 TPD	Work order was issued on 22.11.2022 and work has been commenced. Construction of processing unit is ongoing.
	Kkl CP's – Karaikal Commune Panchayat	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. Processing commenced for Karaikal municipality and Karaikal commune Panchayats from 25.09.2023.
8.	No. and area (in acres) of uncontrolled Garbage dumpsites and Sanitary Landfills.	3Nos. of controlled Landfills			
		Puducherry		:23.0 acre	
		Karaikal		:8.32 acre	
		Yanam		:0.618 acre	
		Total		31.938 acres	
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 the 172 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	64.52 TPD	3	16.86 %	Work order issued on 29.09.2023 for ISWM for PM and OM only. Other local bodies have already commenced processing solid waste.

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):

Pondicherry & Oulgaret Municipality:

- 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 by 30.04.2023.

Karaikal Municipality:

- 77,850 MT of legacy waste is accumulated in Paravaipet, Karaikal Municipality. M/s. Srinivas Waste Management Services (P) Ltd. has started Bio-remediation and Bio-Mining works at Resource Recovery Park (RRP), Paravaipet, Karaikal on 02.06.2023 and processed 39920 M.T.

Yanam Municipality:

- Work order issued on 31.08.2023 to clear 25306 MT of legacy waste accumulated in Yanam. Dumping yard handed over to the concessionaire on 3.11.2023. Setting up of transformer is under progress to commence the bio-mining.

Mahe Municipality:

- No legacy waste in Mahe Municipality is reported.

VI. Bio-medical Waste Management:

1	Total Bio-medical generation:	4706.4kg/day
2	No. of Hospitals and Health Care Facilities:	390
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 – 72.41 MT to M/s. Kalyana Karnataka Waste Management Project Private Limited, Karnataka
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:	31087 TPA
2	Treatment/Measures adopted for reduction or management of plastic waste:	<p>Government of Puducherry has imposed total ban on single use plastics with effect from 02/08/2019.</p> <p>As per the Government of India Notification Addendum has been notified by the Government of Puducherry for imposing additional SUP items like</p> <p>(i) Ear buds with plastic sticks, plastic sticks for balloons, candy sticks and ice cream sticks;</p> <p>(ii) Polystyrene [Thermocol] for decoration;</p> <p>(iii) Plates, cups, glasses, cutlery such as forks, spoons, knives, trays, stirrers, wrapping or packing films around sweet boxes, invitation cards and cigarette packets</p> <p>(iv) Plastics or PVC banners less than 100 micron;</p> <p>(v) Non-woven plastic carry bags less than 60 Gram per Square Meter (GSM).</p> <p>Standard Operating Procedure (SOP) for making SUP free Government office has been prepared and circulated to all the Government Departments and Industries.</p> <p>Surprise inspections are being carried out.</p> <p>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).</p> <p>As per the order of Hon’ble NGT, Bahour Commune Panchayat (BCP) has been declared as Single Use Plastic Free Commune.</p>

		<p>Public notice has been issued on 22.02.2022 in Local dailies for elimination of Single Use Plastics in English and vernacular language.</p> <p>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.</p> <p>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.</p> <p>Conducted a Technical session on laying of road using waste plastics on 18.04.2022.</p> <p>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.</p> <p>Road making using waste plastics at Korkumedu, Ariyankuppam Commune Panchayat.</p> <p>Hon’ble Chief Minister Inaugurated the LED van on 05.06.2022 for creating awareness on PWM.</p> <p>111 drives were conducted and 1834.2 kg of SUP items have been seized by Local bodies. Rs.29,500/- was levied as fine.</p> <p>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.</p>
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		<p>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.</p> <p>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.</p> <p>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.</p> <p>For Setting up Material Recovery Facility (MRF) for 20 TPD Recyclable Plastic waste from Pondicherry and Oulgaret Municipality, MoU is under process.</p> <p>5 th 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 10.11.2023. Minutes of the meeting communicated to the concerned line Department.</p>
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 172drains.
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	Development Commissioner cum Senior Nodal Officer reviewed the status of the

	State/UT:	Compliance of the order of the Hon'ble NGT in the matter of O.A.No.606 of 2018 dated 27.09.2023.
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 Chunnambar and Arasalar River water quality data are given in Annexure-I .
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- II
XVI	Rain Water Harvesting:	<p>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.</p> <p>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.</p> <p>882 Rain Water Harvesting structure are constructed in the U.T of Puducherry by Department of Agriculture.</p> <p>No. of Rain Water Harvesting structure by PWD - 262.</p>
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:	Illegal sand mining affect e-flow in the rivers. Hence, orders u/s 144 of CrPc were issued on 1 st April, 2019 prohibiting lorries, vans, two wheelers, bullock carts and any similar sand carrying vehicles. Check dams were constructed to regulate the flow.
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 by PWD, Karaikal 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-III
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 the 13 Coastal States:	Action plan submitted to CPCB dt.24.02.2020.
XXIV	Regulation of Mining Activities in the State/UT:	Illegal sand mining affect e-flow in the rivers. Hence, orders u/s 144 of CrPc were issued on 1 st April, 2019 prohibiting lorries, vans, two wheelers, bullock carts and any similar sand carrying vehicles. Check dams were constructed to regulate the flow.
XXV	Action against identified polluters, law violators and officers responsible for failure for vigorous monitoring.	-

Chunnambar River Water Quality Data - 2023			
S.No	Parameters	Nov-23	Standard limit as per the Primary Water Quality Criteria for bathing water - Class of Water B (Water Used for Organised Outdoor Bathing) as per Environment (Protection) Rules, 1986
1	Date of sampling	17.11.2023	
2	Time	12.25 P.M	
3	Temp°C	29.0	
4	pH	8.68	6.5-8.5
5	DO (mg/l)	7.8	5 or more
6	BOD (mg/l)	5.0	3 or less
7	Total Coliform MPN/100 ml	500	
8	Faecal Coliform MPN/100ml	500	500 (Desirable) and 2500 (Max. Permissible)
9	Faecal Streptococci MPN/100ml	140	100 (Desirable) and 500 (Max. Permissible)
Arasalar River Water Quality Data - 2023			
S.No	Parameters	Nov-23	Standard limit as per the Primary Water Quality Criteria for bathing water - Class of Water B (Water Used for Organised Outdoor Bathing) as per Environment (Protection) Rules, 1986
1	Date of sampling	13.11.2023	
2	Time	6.10 A.M	
3	Temp°C	27.5	
4	pH	7.35	6.5-8.5
5	DO (mg/l)	7.0	5 or more
6	BOD (mg/l)	BDL (DL:1.0)	3 or less
7	Total Coliform MPN/100 ml	220	
8	Faecal Coliform MPN/100ml	79	500 (Desirable) and 2500 (Max. Permissible)
9	Faecal Streptococci MPN/100ml	170	100 (Desirable) and 500 (Max. Permissible)

BDL - Below Detectable Limit; DL - Detection Limit

MPN- Most Probable Number

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

Report No. : TR/WTL/PHD/PWD/PDY/2023/W-1715(Annexe)

Date: 15.11.2023

TEST REPORT

Customer Name & Address : The Assistant Engineer,
Drainage Sub Division, PHD, PWD, Puducherry.

Customer Reference : Letter dated.08.11.2023

Page 1 of 1

SAMPLE DETAILS

Sample Code	: 2023/W-1715	Information provided by the Customer	
Product Category	: Pollution & Environment	Sampled by	: Customer
Sample Name	: Waste Water	Sampling Procedure	: --
Temperature at the time of Receipt	: 30.2°C	Sample Description	: Waste Water (Outlet)
Sample Condition	: Fit for analysis	Sampling Location	: Dubrayapet Outlet
Sample Received on	: 08.11.2023	Date of Sampling	: 08.11.2023
Test Started on	: 08.11.2023	Identification by Customer	: Sample 8
Test Completed on	: 15.11.2023		

TEST RESULTS

Sl.No.	Test Parameter	Test Method	Units	Results
1	Phosphorus as P	APHA, 23rd Edition, 2017, 4500-P B, C	mg/L	1.04
2	Faecal Coliforms	WHO Guidelines for drinking water Quality - Vol3	MPN/100 ml	<200 MPN/100ml

.....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.

Terms and Conditions:

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-1715
ULR-TC758022000001365F

Date: 15.11.2023

TEST REPORT

Customer Name & Address : The Assistant Engineer,
Drainage Sub Division, PHD, PWD, Puducherry.
Customer Reference : Letter dated:08.11.2023

Page 1 of 1

SAMPLE DETAILS

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Sample Received on	: 08.11.2023	Date of Sampling	:	08.11.2023	
Test Started on	: 08.11.2023	Identification by Customer	:	Sample 8	
Test Completed on	: 15.11.2023				

TEST RESULTS

Sl.No.	Test Parameter	Test Method	Units	Results	NGT Standards for treated Sewage for discharge into surface water
1	pH @ 25°C	APHA, 23rd Edition, 2017, 4500-H+B	--	7.46	5.5 to 9
2	Total Suspended Solids @ 103 - 105°C	APHA, 23rd Edition, 2017, 2540 D	mg/L	<10	Less than 10
3	Chemical Oxygen Demand	APHA, 23rd Edition, 2017, 5220 B	mg/L	18.1	Not more than 50
4	Biochemical Oxygen Demand (3 days at 27°C)	IS 3025 Part44; (1994), RA2014	mg/L	9.0	Less than 10
5	Total Phosphate as PO ₄	APHA, 23rd Edn, 2017, 4500-P B,C	mg/L	3.12	--

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

Authorized Signatory

V.V. Vimala

Vimala Venkatachalam

BIOCHEMIST

WATER TESTING LABORATORY
PUBLIC HEALTH DIVISION

Copy submitted to:

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

Terms and Conditions

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.
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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-1713
ULR-TC758022000001363F

Date: 15.11.2023

TEST REPORT

Customer Name & Address : The Assistant Engineer,
Drainage Sub Division, PHD, PWD, Puducherry.
Customer Reference : Letter dated:08.11.2023

Page 1 of 1

SAMPLE DETAILS

Sample Code	: 2023/W-1713	Information provided by the Customer
Product Category	: Pollution & Environment	Sampled by : Customer
Sample Name	: Waste Water	Sampling Procedure : --
Temperature at the time of Receipt	: 30.1°C	Sample Description : Waste Water (Outlet)
Sample Condition	: Fit for analysis	Sampling Location : Kanaganeri Outlet
Sample Received on	: 08.11.2023	Date of Sampling : 08.11.2023
Test Started on	: 08.11.2023	Identification by Customer : Sample 6
Test Completed on	: 15.11.2023	

TEST RESULTS

Sl.No.	Test Parameter	Test Method	Units	Results	NGT Standards for treated Sewage for discharge into surface water
1	pH @ 25°C	APHA, 23rd Edition, 2017, 4500-H+B	--	7.24	5.5 to 9
2	Total Suspended Solids @ 103 - 105°C	APHA, 23rd Edition, 2017, 2540 D	mg/L	17	Less than 10
3	Chemical Oxygen Demand	APHA, 23rd Edition, 2017, 5220 B	mg/L	45.8	Not more than 50
4	Biochemical Oxygen Demand (3 days at 27°C)	IS 3025 Part44; (1994); RA2014	mg/L	30.0	Less than 10
5	Total Phosphate as PO ₄	APHA, 23rd Edn, 2017, 4500-P B,C	mg/L	12.4	--

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

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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-1713(Annexe)

Date: 15.11.2023

TEST REPORT

Customer Name & Address : The Assistant Engineer,
Drainage Sub Division, PHD, PWD, Puducherry.
Customer Reference : Letter dated:08.11.2023

Page 1 of 1

SAMPLE DETAILS

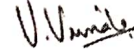
Sample Code	: 2023/W-1713	Information provided by the Customer	
Product Category	: Pollution & Environment	Sampled by	: Customer
Sample Name	: Waste Water	Sampling Procedure	: --
Temperature at the time of Receipt	: 30.1°C	Sample Description	: Waste Water (Outlet)
Sample Condition	: Fit for analysis	Sampling Location	: Kanaganeri Outlet
Sample Received on	: 08.11.2023	Date of Sampling	: 08.11.2023
Test Started on	: 08.11.2023	Identification by Customer	: Sample 6
Test Completed on	: 15.11.2023		

TEST RESULTS

Sl.No.	Test Parameter	Test Method	Units	Results
1	Phosphorus as P	APHA,23rd Edition,2017,4500-P B, C	mg/L	4.10
2	Faecal Coliforms	WHO Guideliness for drinking water Quality - Vol3	MPN/100 ml	<200 MPN/100ml

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

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BIOCHEMIST
WATER TESTING LABORATORY
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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-1708
ULR-TC758022000001358F

Date: 15.11.2023

TEST REPORT

Customer Name & Address : The Assistant Engineer,
Drainage Sub Division, PHD, PWD, Puducherry.
Customer Reference : Letter dated:08.11.2023

Page 1 of 1

SAMPLE DETAILS

Sample Code	: 2023/W-1708	Information provided by the Customer
Product Category	: Pollution & Environment	Sampled by : Customer
Sample Name	: Waste Water	Sampling Procedure : --
Temperature at the time of Receipt	: 30.1°C	Sample Description : Waste Water (Outlet)
Sample Condition	: Fit for analysis	Sampling Location : Lawspet STP Outlet
Sample Received on	: 08.11.2023	Date of Sampling : 08.11.2023
Test Started on	: 08.11.2023	Identification by Customer : Sample 1
Test Completed on	: 15.11.2023	

TEST RESULTS

Test Parameter	Test Method	Units	Results	NGT Standards for treated Sewage for discharge into surface water
pH @ 25°C	APHA, 23rd Edition, 2017, 4500-H+B	--	6.92	5.5 to 9
2 Total Suspended Solids @ 103 - 105°C	APHA, 23rd Edition, 2017, 2540 D	mg/L	<10	Less than 10
3 Chemical Oxygen Demand	APHA, 23rd Edition, 2017, 5220 B	mg/L	12.4	Not more than 50
4 Biochemical Oxygen Demand (3 days at 27°C)	IS 3025 Part 44, (1994); RA2014	mg/L	4.0	Less than 10
5 Total Phosphate as PO ₄	APHA, 23rd Edn, 2017, 4500-P B, C	mg/L	2.12	--

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

Authorized Signatory

V. Venkatasachalam

Vimala Venk tachalam

BIOCHE MIST
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-1708(Annexe)

Date: 15.11.2023

TEST REPORT

Customer Name & Address : The Assistant Engineer,
Drainage Sub Division, PHD, PWD, Puducherry.
Customer Reference : Letter dated 08.11.2023

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SAMPLE DETAILS

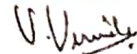
Sample Code	: 2023/W-1708	Information provided by the Customer	
Product Category	: Pollution & Environment	Sampled by	: Customer
Sample Name	: Waste Water	Sampling Procedure	: --
Temperature at the time of Receipt	: 30.1°C	Sample Description	: Waste Water (Outlet)
Sample Condition	: Fit for analysis	Sampling Location	: Lawspet STP Outlet
Sample Received on	: 08.11.2023	Date of Sampling	: 08.11.2023
Test Started on	: 08.11.2023	Identification by Customer	: Sample 1
Test Completed on	: 15.11.2023		

TEST RESULTS

Sl.No.	Test Parameter	Test Method	Units	Results
1	Phosphorus as P	APHA 23rd Edition, 2017, 4500-P B, C	mg/L	0.7
2	Faecal Coliforms	WHO Guidelines for drinking water Quality - Vol3	MPN/100 ml	<200 MPN/100ml

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

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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.