# No. 6836/NGT/SLMC/SCI/2023/ 5 4 8 GOVERNMENT OF PUDUCIHERRY DEPARTMENT OF SCIENCE, TECHNOLOGY AND ENVIRONMENT PUDUCHERRY POLLUTION CONTROL COMMITTEE

3<sup>rd</sup> Floor, I-Housing Board Complex, Anna Nagar, Puducherry - 5. Telephone: (0413) 2201256; Telefax: (0413) 2203494

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Puducherry, the 2 9 MAY 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: 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 April, 2023 is enclosed for kind perusal.

Yours sincerely,

(Dr.N.RAMESH) Member Secretary PPCC

Enc1: as stated above

Copy to:

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

2. Standing Guard Fil

## 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 $56 - 5 = 51$ MLD	3 Nos. of SBR - 51 MLD  2 Nos. of UASB - 5 MLD (under maintenance) Total - 56 MLD
2.	Capacity Utilization of existing STPs:	
	13.03+8.14+13.26= 34.43 MLD	34.43 MLD (67.51%)
	39.86/51= 67.51%	
	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:	15 MLD
	(71-56 =15MLD)	Tender was called for setting up of 15MLD at Puducherry. Standing Finance Committee meeting was conducted on 10.05.2023. Based on the minutes of the meeting, expenditure sanction will be obtained under AMRUT for providing infrastructure and State Fund for O&M.
5.	No. of Operational STPs:	3 Nos.
6.	No. of Complying STPs with respect to pH, TSS, COD & BOD	Nil.

## **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)	67.51 %	3	Nil
2	Karaikal	-	-	-	-
3	Mahe	-	-	-	-
4	Yanam	-	-	-	-

## **Details of under construction STPs in the State**

Sl. No.	Location	Capacity of the plant in KLD	i ii y bicai	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.	Can be furnished
2.	Karaikal	11 MLD	opened. Standing Finance Committee meeting was conducted on 11.05.2023. Based on the minutes of the meeting, expenditure sanction will be obtained under AMRUT for providing infrastructure and State Fund for O&M.	only after finalizing the tender.
3.	Mahe	DPR for 500 KLD has Department under SBN		

		The site of 0.82.00Ha for construction of 6 MLD STP is	
4.	Yanam	identified and handed over to PWD. DPR has been submitted to	
7.		Local Administration Department under SBM.	

#### **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. <u>Details of Industrial Pollution:</u>

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:	97
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
		4 TPD Material Recovery Facility is operational in Dubraypet,     Pondicherry Municipality
	Vermi, decentralized pit composting),biomethanation, MRF etc	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.	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

OM Ouls and Manising live			Pondicherry and Oulgaret Municipalities.				
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.    PM   42   100%   100			The w	ork order	has	been iss	ued for Karaikal and Yanam
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.    PM   42   100%   100			munici	palities. P	uduc	cherry a	nd Karaikal communes also
6. Total no. of wards, no. of wards having door to door collection service, no. of wards practicing segregation at source.    PM   42   100%				_		_	
having door to door collection service, no. of wards practicing segregation at source.    PM   42   100%	6	Total no. of wards no. of wards					0
service, no. of wards practicing segregation at source.    PM   42   100%   100%	0.	,					
segregation at source.    PM   42   100%   100%     OM   37   100%   100%     KM   18   100%   100%     YM   14   100%   100%     YM   15   100%   100%     MM   15   100%   100%     MSW   treatment facilities proposed and under construction (no. capacity and technology).    PM   Puducherry Municipality   PM   Integrated   350   Tender has been floated open on 16.05.2023     Capaci ty   Status     Capaci ty   S				Wards	col	lection	
7. Details of MSW treatment facilities proposed and under construction (no. capacity and technology).  PM					(DT	DC)	
7. Details of MSW treatment facilities proposed and under construction (no. capacity and technology).  PM — Puducherry Municipality OM — Oulgaret Municipality		segregation at source.	PM	42	100	)%	100%
7. Details of MSW treatment facilities proposed and under construction (no. capacity and technology).  PM — Puducherry Municipality OM — Oulgaret Municipality			OM	37	100	)%	100%
7. Details of MSW treatment facilities proposed and under construction (no. capacity and technology).  PM – Puducherry Municipality OM – Oulgaret Municipality  OM – Oulgaret Municipality  OM – Oulgaret Municipality  OM SWM TPD Technical bid is proposed open on 16.05.2023							
7. Details of MSW treatment facilities proposed and under construction (no. capacity and technology).  PM – Puducherry Municipality OM – Oulgaret Municipality							
7. proposed and under construction (no. capacity and technology).  PM – Puducherry Municipality OM – Oulgaret Municipality OM – Oulgaret Municipality OM SWM  TPD  Technical bid is proposed open on 16.05.2023			MM		100	)%	100%
(no. capacity and technology).  PM – Puducherry Municipality OM – Oulgaret Municipality OM – SWM  TPD  Technical bid is proposed open on 16.05.2023	7.				nt	Canaci	
PM – Puducherry Municipality OM – Oulgaret Municipality OM SWM  TPD  Technical bid is proposed open on 16.05.2023			ULB			-	Status
OM – Oulgaret Municipality  OM SWM  TPD Technical bid is proposed open on 16.05.2023		(no. capacity and technology).		propose	ed	J	
open on 16.05.2023		PM – Puducherry Municipality	PM	Integrated		350	Tender has been floated.
		OM – Oulgaret Municipality	OM	SWM		TPD	Technical bid is proposed on
KM – Karaiakal Municipality KM Integrated 40 Work order issued on							open on 16.05.2023
		KM – Karaiakal Municipality	KM	Integrated		40	Work order issued on
SWM (Bio- TPD 22.11.2022 and the work h				SWM (Bio	0-	TPD	22.11.2022 and the work has
methanation, been commenced.				methanati	on,		been commenced.
BSF and				BSF and			
Windrows				Windrows	S		
composting)				compostin	ng)		
YM – Yanam Municipality YM Integrated 20 Work order issued on		YM – Yanam Municipality	YM	Integrated		20	
SWM (Bio- TPD 10.11.2021 and work has been commenced for				SWM (Bio	0-	TPD	
1 1 1 1				methanation	on,		Collection, segregation and
BSF and Transportation. Due to				BSF and			Transportation. Due to
Windrows				Windrows	3		certain administrative reason
composting)				compostin	ıg)		the land is yet to be handed
							over to Concessionaire to set
up the processing plant							
MM – Mahe Municipality  MM   In-house composting is being practiced. There is n		MM – Mahe Municipality	ММ	In house	com	nostina i	
requirement of processing plant.			101101				
Pdy CP's – Puducherry Commune Pdy Integrated 150 Work order issued on			Pdy				
Panchayat CP's Municipal TPD 22.11.2022 and work has	1	Panchayat	CP's	Municipal		TPD	22 11 2022 and work has
Solid Waste				Wamerpar		112	22.11.2022 and work has

			Processing			been com	nmenced.
			Project at				
			Puducherry				
			commune				
			panchayat				
	Kkl CP's – Karaiakal Commune	Kkl	Integrated	80	0	Work ord	ler issued on
	Panchayat	CP's	Municipal	TP	PD	22.11.202	22 and work has
			Solid Waste			been com	nmenced
			Processing				
			Project at				
			Puducherry				
			commune				
			panchayat				
8.	No. and area (in acres) of uncontrolled	3Nos. o	of controlled La	andfi	lls		
	Garbage dumpsites and Sanitary	Puduch	nerry		:23	.0 acre	
	Landfills.	Karaikal				32 acre	
		Yanam				518 acre	
	No. and area (in acres) of legacy	Total	31.938	Acre	es		
9.	waste within 1km buffer of both side of the rivers.		Nil				
10	No. of drains falling into rivers and no. of drains having floating	No. of	drains: 172				
	racks/screens installed to prevent solid waste from falling into the rivers.	All the drains that reaches the Sankar rivers were identified and in-situ rem Grill gratings and Bar screen are con drains.			situ reme	diation of providing	

#### 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 is scheduled to be commenced by end of May 2023 and proposed to be completed by October 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	GovernmentofPuducherryhasimposedtotalb			
	management of plastic waste:	anonsingleuseplasticswitheffectfrom02/08/			
		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 coordination 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.

73 drives were made and 21.4 kg of SUP items have been seized by Local bodies. Rs.6400/- 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.

	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			
F	acility (MRF) for 20 TPD Recyclable			
P	lastic waste from Pondicherry and Oulgaret			
N	Municipality, MoU is under process.			
4'	th meeting of Special Task Force (STF) on			
e!	limination of Single use Plastic in the U.T			

of Puducherry under the Chairmanship of the

Chief Secretary was held on 02.11.2022.

IX	Details of Alternate Treatment Technology being adopted by the State/UT	Nil		
X	Identification of polluting sources including	All the drains that reaches the		
	drains contributing to river pollution and	Sankaraparani and Arasalar rivers were		
	action as per NGT order on in-situ treatment:	identified and in-situ remediation of		
		providing grill grating, sandbar screen are		
		completed in all the 172drains.		
XI	Details of Nodal Officer appointed by	The Development Commissioner-cum-		
	Chief Secretary in the State/UT:	Senior Nodal Officer, Government of Puducherry		
XII	Details of meetings carried under the	Ist Review meeting on compliance status		
	Chairmanship of Chief Secretary in the	of the Hon'ble NGT Directions in the		
	State/UT:	matter of OA No.606/2018 was held on		
		27.10.2022 under the Chairmanship of		
		Development Commissioner-cum-Senior		

		Nodal Officer and 2 <sup>nd</sup> Review meeting was held on 12.01.2023.
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 River water quality data of Chunnambar and Arasalar are given in <b>Annexure–II.</b>
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
XVII	Demarcation of Flood plain and removal of Illegal encroachments:	PWD - 262.  Demarcation of flood plain and removal of
	megar encroaciments.	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		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 the 13 Coastal States:	Action plan submitted to CPCB dt.24.02.2020.
XXIV	Regulation of Mining Activities in the	Special Task Team has been constituted
	State/UT:	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
	Tota	382.5	

	Chunnambar River Water Quality Data - 2023				
S.No	Parameters	Apr-23	Standard limit as per the Primary Water Quality Criteria for bathing water - Class of Water B		
1	Date of sampling	26.04.2023			
2	Time	1.30 P.M			
3	Temp°C	35.0			
4	рН	8.80	6.5-8.5		
5	DO (mg/l)	9.9	5 or more		
6	BOD (mg/l)	4.5	3 or less		
7	Faecal Coliform MPN/100ml	1600	500 (Desirable) and 2500 (Max. Permissible)		
8	Faecal Streptococci MPN/100ml	94	100 (Desirable) and 500 (Max. Permissible)		
	Arasalar R	iver Water Qu	ality Data		
S.No	Parameters	Apr-23	Standard limit as per the Primary Water Quality Criteria for bathing water - Class of Water B		
1	Date of sampling	25.04.2023			
2	Time	6.20 A.M			
3	Temp°C	32.0			
4	рН	7.84	6.5-8.5		
5	DO (mg/l)	5.0	5 or more		
6	BOD (mg/l)	2.9	3 or less		
7	Faecal Coliform MPN/100ml	<2	500 (Desirable) and 2500 (Max. Permissible)		
8	Faecal Streptococci MPN/100ml	84	100 (Desirable) and 500 (Max. Permissible)		

BDL - Below Detectable Limit; DL - Detection Limit
MPN- Most Probable Number

Report No.: TR/WTL/PHD/PWD/PDY/2023/W-0307(Annexe)

Date: 20.04.2023

#### **TEST REPORT**

**Customer Name & Address** 

: The Assistant Engineer,

Drainage Sub Division, PHD, PWD, Puducherry.

**Customer Reference** 

: Test request dt:11.04.2023

Page 1 of 1

#### SAMPLE DETAILS

Sample Code	: 2023/W-0307	Sampled by	: Customer
Sample Name	: Waste Water	Sampled on	: 11.04.2023
Sample Description	Waste Water (Outlet)		
Temperature at the time of receipt	: 32.4°C	Sampling Location	: Lawspet Outlet
Identification by Customer	: Sample 2	Sampling Procedure	
Sample Condition	: Fit for analysis	Sample Received on	: 11.04.2023
Test Started on	: 11.04.2023	Test Completed on	: 20.04.2023
		TEST RESULTS	

	ILOT RESOLTS						
SI.NO	Test Parameter	Test Method	Units	Results			
1	Nitrate as NO <sub>3</sub>	APHA, 23rd Edn, 2017, 4500-NO3B	mg/L	<5			
2	Phosphorus as P	APHA, 23rd Edn, 2017, 4500-P B, C	mg/L	1.5			
3	Faecal Coliforms	WHO Guideliness for drinking water Quality - Vol3	MPN/ 100ml	200 MPN/100ml			

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

Authorized Signatory

Vimala Venkatachalam BIOCHEMIST WATER TESTING LABORATORY PUBLIC HEALTH DIVISION

Copy Submitted to: The Executive Engineer, P.H.D..P.W.D.. 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-PHD PWD.
- 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.



Report No.: TR/WTL/PHD/PWD/PDY/2023/W-0307

ULR-TC758021000000274F

Date: 20.04.2023

#### TEST REPORT

Customer Name & Address : The Assistant Engineer,

Drainage Sub Division, PHD, PWD, Puducherry.

**Customer Reference** 

: Test request dt:11.04.2023

Page 1 of 1

#### SAMPLE DETAILS

		TEST RESULTS		
Test Started on	: 11.04.2023	Test Completed on	: 20.04.2023	
Sample Condition	: Fit for analysis	Sample Received on	: 11.04.2023	
Identification by Customer	: Sample 2	Sampling Procedure		
Temperature at the time of receipt	: 32.4°C	Camping Location	: Lawspet Outlet	
Sample Description	: (Outlet)	Sampling Location		
Sample Name	: Waste Water	Sampled on	: 11.04.2023	
Sample Code	: 2023/W-0307	Sampled by	: Customer	

SI.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	_	7.12	5.5 to 9
2	Total Suspended Solids @ 103 - 105°C	APHA, 23rd Edition, 2017, 2540 D	mg/L	<10	Less than 10
	Chemical Oxygen Demand	APHA, 23rd Edition, 2017, 5220 B	mg/L	27.8	Not more than 50
	Biochemical Oxygen Demand (3 days at 27°C)	IS 3025 Part44; (1994); RA2014	mg/L	10.5	Less than 10
5	Total Phosphate as PO4	APHA, 23rd Edn,2017,4500-P B,C	mg/L	4.75	P. C. L. Statemen

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

Authorized Signatory

Vimala Venkatachalam BIOCHEMIST WATER TESTING LABORATORY PUBLIC HEALTH DIVISION

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Report No.: TR/WTL/PHD/PWD/PDY/2023/W-0311 ULR-TC758021000000278F Date: 20.04.2023

#### **TEST REPORT**

Customer Name & Address : The Assistant Engineer,

Drainage Sub Division, PHD, PWD, Puducherry.

**Customer Reference** 

: Test request dt:11.04.2023

Page 1 of 1

#### SAMPLE DETAILS

Sample Code : 2023/W-0311 Sampled by : Customer Sample Name : Waste Water Sampled on : 11.04.2023 Waste Water Sample Description (Outlet) Sampling Location : Kanaganeri Outlet Temperature at the time of : 32.5°C receipt Identification by Customer : Sample 6 Sampling Procedure Sample Condition : Fit for analysis Sample Received on : 11.04.2023 Test Started on : 11.04.2023 :20.04.2023 Test Completed on

TEST RESULTS

SI.NO	Test Parameter	Test Method	Units	Results	NGT Standards for treated Sewage for discharge into surface water
1	рН @ 25°C	APHA, 23rd Edition,2017,4500-H+B	-	7.17	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	24.9	Not more than 50
4	Biochemical Oxygen Demand (3 days at 27°C)	IS 3025 Part44; (1994); RA2014	mg/L	8.6	Less than 10
5	Total Phosphate as PO4	APHA, 23rd Edn,2017,4500-P B,C	mg/L	4.81	

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

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Report No.: TR/WTL/PHD/PWD/PDY/2023/W-0311(Annexe)

Date: 20.04.2023

#### **TEST REPORT**

**Customer Name & Address** 

: The Assistant Engineer,

Drainage Sub Division, PHD, PWD, Puducherry.

**Customer Reference** 

: Test request dt:11.04.2023

Page 1 of 1

#### SAMPLE DETAILS

Sami	ple Code	: 2023/W-0311	Sampled by	: Custon	or
Sample Name : Waste Water		Sampled on	: 11.04.2023		
Sample Description : (Outlet) Temperature at the time of receipt Identification by Customer : Sample 6		: (Outlet)	Sampling Location	: Kanaganeri Outlet : : 11.04.2023 : 20.04.2023	
		: Sample 6	Sampling Procedure		
		: Fit for analysis			
		: 11.04.2023	Test Completed on		
			TEST RESULTS		
SI.NO	Test Parameter	10000		Units	Results
1	Nitrate as NO₃		APHA, 23rd Edn, 2017, 4500-NO <sub>3</sub> B	mg/L	<5
2	Phosphorus as P		APHA, 23rd Edn, 2017, 4500-P B, C	mg/L	1.6
3 Faecal Coliforms		WHO Guideliness for drinking water Quality - Vol3	MPN/	200 MPN/100ml	

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

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Report No.: TR/WTL/PHD/PWD/PDY/2023/W-0309

ULR-TC758021000000276F

Date: 20.04.2023

#### **TEST REPORT**

Customer Name & Address : The Assistant Engineer,

Drainage Sub Division, PHD, PWD, Puducherry.

Customer Reference : Test request dt:11.04.2023

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#### SAMPLE DETAILS

Sample Code : 2023/W-0309 Sampled by : Customer Sample Name : Waste Water Sampled on : 11.04.2023 Waste Water Sample Description (Outlet) Sampling Location : Dubrayapet Outlet Temperature at the time of : 32.4°C receipt Identification by Customer : Sample 4 Sampling Procedure Sample Condition : Fit for analysis Sample Received on : 11.04.2023 Test Started on : 11.04.2023 Test Completed on : 20.04.2023

TEST RESULTS

SI.NO	Test Parameter	Test Method	Units	Results	NGT Standards for treated Sewage for discharge into surface water
1	рН @ 25°C	APHA, 23rd Edition,2017,4500-H+B	-	7.77	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	30.8	Not more than 50
4	Biochemical Oxygen Demand (3 days at 27°C)	IS 3025 Part44; (1994); RA2014	mg/L	10.6	Less than 10
5	Total Phosphate as PO4	APHA, 23rd Edn,2017,4500-P B,C	mg/L	6.12	

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Report No.: TR/WTL/PHD/PWD/PDY/2023/W-0309(Annexe)

Date: 20.04.2023

#### **TEST REPORT**

**Customer Name & Address** 

: The Assistant Engineer,

Drainage Sub Division, PHD, PWD, Puducherry.

**Customer Reference** 

: Test request dt:11.04.2023

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#### SAMPLE DETAILS

Sample Code	: 2023/W-0309	Sampled by	: Customer
Sample Name	: Waste Water	Sampled on	: 11.04.2023
Sample Description	Waste Water (Outlet)	ALEKS ALDER A	
Temperature at the time of receipt	: 32.4°C	Sampling Location	: Dubrayapet Outlet
Identification by Customer	: Sample 4	Sampling Procedure	
Sample Condition	: Fit for analysis	Sample Received on	: 11.04.2023
Test Started on	: 11.04.2023	Test Completed on	: 20.04.2023
		TEST RESULTS	

SI.NO	Test Parameter	Test Method	Units	Results
1	Nitrate as NO <sub>3</sub>	APHA, 23rd Edn, 2017, 4500-NO3B	mg/L	<5
2	Phosphorus as P	APHA, 23rd Edn, 2017, 4500-P B, C	mg/L	2
3	Faecal Coliforms	WHO Guideliness for drinking water Quality - Vol3	MPN/ 100ml	200 MPN/100ml

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

**Authorized Signatory** Villemida

Vimala Venkatachalam BIOCHEMIST WATER TESTING LABORATORY PUBLIC HEALTH DIVISION

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#### **ADOPTION OF GOODIRRIGATIONPRACTICE**

- 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.

#### **ANNEXURE-IV**

#### **Reuse of Treated Water**

Station	Purpose	Quantity
Lawspet STP	Industrial usage	0.8 MLD
	Fodder Grass raising	
	Coconut Plantation	6.0 MLD
	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.