No. 6836/NGT/SLMC/SCI/2023/1009 GOVERNMENT OF PUDUCIHERRY

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 1 8 OCT 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 September, 2023 is enclosed for kind perusal.

Yours sincerely,

N. lembe

(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 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. <u>Details of Sewage Treatment Plants</u>: Puducherry District

1.	Existing no. of STPs and Treatment Capacity (in MLD)	3 Nos. of SBR - 51 MLD 2 Nos. of UASB - 5 MLD (under maintenance) Total - 56 MLD
	Net Treatment capacity of STP's	56 - 5 = 51 MLD
2.	Capacity Utilization of existing STPs: (15.75+16.42+13.05)=45.22 MLD 45.22/51=88.67%	45.22 MLD (88.67%)
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:	15 MLD
	(71-56 =15MLD)	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/ The contractor had submitted BEP (Basic Engineering Plan) for approval. Design approval from NIT/IIT is awaited.
5.	No. of Operational STPs:	3 Nos.
6.	No. of Complying STPs with respect to pH, TSS, COD & BOD	3

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)	88.67%	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		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	Financial Bid was opened on 15.05.2023. Due to higher cost quoted by successful bidder, tender has been deferred and Re-tendering process has been initiated.		
2.	Karaikal	11 MLD	di di Groa	Can be furnished only after finalizing the tender.	
3.	Mahe	Transferred of land for Animal Husbandry at process. PWD to appreciate is located in CRZ			
4.	Yanam	The technical evaluat	The technical evaluation of the 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.

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:	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

^{*}Two units did not meet the discharge standards. Directions were issued, compliance repot is awaited.

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:

	Total number of Urban Local			·							
1.	Bodies and their Population.	5 ULB's (7,28,761, Census 2011)									
2.			Total solid waste generation - 382.5 TPD								
		S.No)	ULI	3			waste gen	erated (TP	PD)	
		1		PM			155				
	Current Municipal Solid Waste	2		OM			155				
	Generation.	3		KM			40				
		4		MM			12.5				
		5		YM			20				
2	AY 1 Y 11 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	T .	13.46	Tota			382.5		. 1 .1	THE	
	Number, Installed capacity and utilization of existing MSW processing facilities in		ated MS	SWM 1s b	eing	taken up	for al	I types of	waste by th		As on 30.09.2023
	TPD (bifurcated by type of processing eg., -Waste to Energy (Tonnage and	S.No	ULB	Processin	ıg	Bio methanation	MRF	MRF through formal sectors	MRF through informal sectors	Total	Percentage of processing
	Power Output), Compost Plants	1	PM	-		-	4	-	3.05	7.05	4.54%
	(Windrow, Vermi, decentralized pit	3	OM KM	40 (Bio compo		1	-	0.5	2.47	3.97 40	2.38%
	composting), bio-methanation, MRF etc			vermi, MR 8.5 ((Inhouse		-	-		-		
		5	MM	compostin		-	2	2	-	12.5	100%
		3	YM Total	48.5		1	6	2.5	6.52	64.52	5% 16.86%
4.	Composting technologies like Windrows method and other aeroby technologies have been adopted by the new concessionaire in communes Puducherry and Karaikal. 4. Action plan to bridge gap between Integrated Municipal Solid Waste Management projects including the scope Installed Capacity and Current collection, transportation, processing and disposal are being implemented Utilization of processing facilities (if Gap> 20%). Each of the new concessionaire in communes Puducherry and Karaikal. 4. Action plan to bridge gap between Integrated Municipal Solid Waste Management projects including the scope collection, transportation, processing and disposal are being implemented handle all the types of waste generated in the ULBs – 610 MTs of waste from the following together) 1. Selection of concessionaire for IMSWM in Pondicherry and Oulgary together)					scope of nented to aste from anchayats					
		2.3.	proces 100% Concounted Identify husb unde Mahe mana	essing. 6 Process: cessionair cification andries a r progress e is pr agement a	ing he ap of all	appening pointed ternative Dept. of I anam Ming in-I	in Ka for p land Fisher unicip house	araikal Mu processing with Dept ries to set pality, pipe	in Yanai of Veterin up Proces	m Mur nary an ssing F g wet	nicipality. d Animal Facility is waste
5		Puducherry and Karaikal communes included C&D waste management in their scope of the work.									
6.	Total no. of wards, no. of wards having	ULI		ımber		Oor to D			nd Status	on Sou	rce
	door to door collection service, no. of	D: 1	of '	Wards	coll	ection (D	OTDC		gation	1 1 5	• • •
	wards practicing segregation at source.	PM		42		100%			% (15 ward		
		OM	-	37		100%			(2 wards b	y OM)	
		KM YM	+	18		100%		0%			
		MM	+	14 15		100%			ly basis in	commo	rcial
		101101		13		100%		area, a	ny basis in and monthl ntial area		
		(100	0/0 50000	gation is:	renor	ted in all	5 1 11		ntiai area htham SBN	1 norte	1)
		(100	/u acgic	ganon is	герог	wu iii ali	3 OL	wau פיש	minam 5DN	п рона	1)

7.	Details of MSW treatment facilities proposed and under construction (no.	ULB	MSW treatment facilities proposed	Capacity proposed	Statu	s	
	capacity and technology).	PM	Integrated	350 TPD	Tende	er has been	
	capacity and teemistogy).	OM	SWM	330 11 B		sed. Work order	
	PM – Puducherry Municipality	01,1			I	be issued by Oct	
	OM – Oulgaret Municipality				2023.		
		KM	Integrated	40 TPD	Work	order issued on	
			SWM (Bio-		22.11	.2022 and the	
	KM – Karaiakal Municipality		methanation, BSF			has been	
			and Windrows		comn	nenced.	
			composting)				
		YM	Integrated	20 TPD		order was issued	
			SWM (Bio- methanation, BSF		I	.11.2021 and work een commenced.	
			and Windrows			o certain	
	YM – Yanam Municipality		composting)			nistrative reason	
			composting)		I	nd is yet to be	
						ed over to the	
					Conce	essionaire to set up	
					the pr	ocessing plant	
		MM	The agency engaged co				
			collection in Mahe is la				
			21.09.2023 onwards for				
			Cr. Work order will be				
	MM – Mahe Municipality		been sent to MRF near			composting is	
	Wilvi – Wane Wumerpanty	Dd-	being practiced by indi				
	Pdy CP's – Puducherry Commune	Pdy CP's	Integrated Municipal Solid Waste	150 TPD	I	order was issued .11.2022 and work	
	Panchayat	CP S	Processing Project at		I	een commenced.	
			Puducherry commune			cruction of	
			panchayat		I	ssing unit is	
			F			ng; Processing	
						e started at the	
					earlie	st.	
		Kkl	Integrated Municipal	80 TPD		order issued on	
		CP's	Solid Waste			.2022 and work	
	Kkl CP's – Karaiakal Commune		Processing Project at		I	een commenced.	
	Panchayat		Puducherry commune			ssing commenced	
	Tunenayar		panchayat			araikal cipality.	
						essing will be	
						nenced for	
						kal communes at	
					the ea	ırliest.	
8.	No. and area (in acres) of uncontrolled	3Nos. of	controlled Landfills				
	Garbage dumpsites and Sanitary	Puduche	errv	:23.0 acr	e –		
	Landfills.	Karaika		:8.32 acı			
			•	:0.618 ac			
		Yanam Total		31.938			
9.	No. and area (in acres) of legacy waste within 1km buffer of both side of the rivers.	Nil S1.938 acres					
10.		no.				-	
10.	_	No of drains: 177					
	9	All the	drains that reaches the	Sankarapara	ni and	Arasalar rivers we	ere
	falling into the rivers.	identifie	d and in-situ remediation	of providing			
9.	within 1km buffer of both side of the rivers. No. of drains falling into rivers and no. of drains having floating racks/screens installed to prevent solid waste from						

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 %	2 months for PM and OM only. Other local bodies have commenced.

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):

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.

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 32449 M.T as on 09.10.2023 of legacy wastes and transported 9448 M.T. of materials disposed from site. The work of the firm is being monitored on daily basis by the District Collector, Karaikal. To expedite the processing to complete in timeline given to the Hon'ble NGT, 3 set of Processing unit has been installed and details given below. Additional lands for installations of two more lines was given to the firm on the eastern side outside compound wall of RRP, Paravaipet, which belongs to Parvatheeswarar Temple.
 - o First Unit 400 MT appox (considering 3 shift Operation)
 - o Second Unit 150 MT approx. (considering 3 shift Operation)
 - Third unit 400 MT (Installing Completed, Wiring Work and EB work is pending). The unit will become operational in two working days.

Yanam Municipality:

• Work order issued on 31.08.2023 to clear 25306 MT of legacy waste accumulated in Yanam.

Mahe Municipality:

No legacy waste in Mahe Municipality.

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 - 533.510 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	Government of Puducherry has imposed
	management of plastic waste:	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 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.

157 drives were conducted and 342 kg of SUP items have been seized by Local bodies. Rs.69, 050/- 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.
		Meeting with implementing authorities on
		Ban on SUP was held on 14.08.2023 and
		Guage meters were distributed to the
		Implementing Authorities. It was also
		decided to send the data in Google forms
		hereafter by the Implementing Authorities
		For Setting up Material Recovery Facility
		(MRF) for 20 TPD Recyclable Plastic
		waste from Pondicherry and Oulgaret
		Municipality, MoU is under process.
	Details of Alternate Treatment Technology	
137	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	Development Commissioner cum Senior
	Chairmanship of Chief Secretary in the State/UT:	Nodal Officer reviewed the status of the Compliance of the order of the Hon'ble
	State/O1.	compliance of the order of the from the

		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–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:	Illegal sand miming 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		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-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	Action plan submitted to CPCB
	the13 Coastal States:	dt.24.02.2020.
XXIV	Regulation of Mining Activities in the	Illegal sand miming affect e-flow in the
VVV	State/UT:	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.	-

ANNEXURE-I

<u>Details of Solid Waste Generation in Urban Local Bodies (Municipalities)</u>

Sl. No	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	al	382.5

	Chunnambar River Water Quality Data - 2023						
S.No	Parameters	Parameters Sep-23					
1	Date of sampling	29.09.2023					
2	Time	12.00 P.M					
3	Temp°C	32.0					
4	рН	8.88	6.5-8.5				
5	DO (mg/l)	6.3	5 or more				
6	BOD (mg/l)	8.0	3 or less				
7	Total Coliform MPN/100 ml	1600					
8	Faecal Coliform MPN/100ml	1600	500 (Desirable) and 2500 (Max. Permissible)				
9	Faecal Streptococci MPN/100ml	280	100 (Desirable) and 500 (Max. Permissible)				
	Arasalar R	iver Water Qu	ality Data				
S.No	Parameters	Sep-23	Standard limit as per the Primary Water Quality Criteria for bathing water - Class of Water B				
1	Date of sampling	19.09.2023					
2	Time	7.30 A.M					
3	Temp°C	30.0					
4	рН	8.06	6.5-8.5				
5	DO (mg/l)	6.0	5 or more				
6	BOD (mg/l)	2.8	3 or less				
7	Total Coliform MPN/100 ml	1600					
8	Faecal Coliform MPN/100ml	1600	500 (Desirable) and 2500 (Max. Permissible)				
9	Faecal Streptococci MPN/100ml	140	100 (Desirable) and 500 (Max. Permissible)				

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

TC-758U

Report No.: TR/WTL/PHD/PWD/PDY/2023/W-1195

ULR-TC758022000000871F

Date: 21.09.2023

TEST REPORT

Customer Name & Address: The Assistant Engineer,

Drainage Sub Division, PHD, PWD, Puducherry.

Customer Reference : Letter dated:12.09.2023

Page 1 of 1

SAMPLE DETAILS

Sample Code	: 2023/W-1195	Information provided by the	e Customer			
Product Category	Pollution & Environment	Sampled by : Customer				
Sample Name	: Waste Water	Sampling Procedure				
Temperature at the time of	of					
Receipt	: 30,4°C	Sample Description	: Waste water Outlet			
Sample Condition	: Fit for analysis	Mary Comments of the Comments				
Sample Received on	: 12.09.2023	Sampling Location	: Lawspet STP Outlet			
Test Started on	: 12.09.2023	Sample Received on	: 12.09.2023			
Test Completed on	: 21.09,2023	Identification by Customer	: Sample 2			
781		TEST RESULTS	The same of the sa			

	TEST RESULTS								
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	-	8.69	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	Not more than 50				
	Biochemical Oxygen Demand (3 days at 27°C)	IS 3025 Part44; (1994); RA2014	mg/L	11.0	Less than 10				
5	Total Phosphate as PO4	APHA, 23rd Edn,2017,4500-P B,C	mg/L	3.34					

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

Authorized Signatory

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.
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- 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-1195(Annexe)

Date: 21.09.2023

TEST REPORT

Customer Name & Address: The Assistant Engineer,

Drainage Sub Division, PHD, PWD, Puducherry.

Page 1 of 1

Customer Reference

: Letter dated:12.09.2023

SAMPLE DETAILS

Sample Code	: 2023/W-1195	Information provided by the Customer				
Product Category	Pollution & Environment	Sampled by	: Customer			
Sample Name	: Waste Water	Sampling Procedure	그는 그들은 그래 한 그를 다 가게 하셨다.			
Temperature at the time of Receipt	: 30.4°C	Sample Description	: Waste water Outlet			
Sample Condition Sample Received on	: Fit for analysis : 12.09.2023	Sampling Location	: Lawspet STP Outlet			
Test Started on	: 12.09.2023	Sample Received on	: 12,09.2023			
Test Completed on	: 21.09.2023	Identification by Customer	: Sample 2			

TEST RESULTS

		12011120210		
SI.No.	Test Parameter	Test Method	Units	Results
1	Phosphorus as P	APHA, 23rd Edn,2017, 4500-P B, C	mg/L	1.1
2	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

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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-1193

ULR-TC758022000000869F

Date: 21.09.2023

TEST REPORT

Customer Name & Address : The Assistant Engineer,

Drainage Sub Division, PHD, PWD, Puducherry.

: Letter dated:12.09.2023

Page 1 of 1

Customer Reference

SAMPLE DETAILS

		SAMPLE DETAILS	
Sample Code	: 2023/W-1193	Information provided by the	e 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

Sample Received on : 12.09.2023

Test Started on : 12.09.2023 Test Completed on : 21.09.2023 Sampling Location : Dubrayapet STP Outlet

: 12.09.2023 : Sample 2

Identification by Customer

T	E	S	T	R	E	S	U	L	Ī	S
-			-			_	_		-	

Sample Received on

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		8.81	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	11.9	Not more than 50			
1	Biochemical Oxygen Demand (3 days at 27°C)	IS 3025 Part44; (1994); RA2014	mg/L	5.0	Less than 10			
5	Total Phosphate as PO4	APHA, 23rd Edn,2017,4500-P B,C	mg/L	8.90	**			

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

Authorized Signatory

V. Vumile Vimala Venkatachalam

BIOCHEMIST WATER TESTING LABORATORY PUBLIC HEALTH DIVISION

Copy submitted to:

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

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Report No.: TR/WTL/PHD/PWD/PDY/2023/W-1193(Annexe)

Date: 21.09.2023

TEST REPORT

Customer Name & Address: The Assistant Engineer,

Drainage Sub Division, PHD, PWD, Puducherry.

Page 1 of 1

Customer Reference

: Letter dated:12.09.2023

SAMPLE DETAILS

Sample Code	: 2023/W-1193	Information provided by the Customer	
Product Category	: Pollution & : Environment	Sampled by	: Cuslomer
Sample Name	: Waste Water	Sampling Procedure	: -
Temperature at the time of Receipt	: 30.1°C	Sample Description	; Waste water Outlet
Sample Condition Sample Received on	: Fit for analysis : 12.09.2023	Sampling Location	: Dubrayapet STP Outlet
Test Started on	: 12.09.2023	Sample Received on	: 12.09.2023
Test Completed on	: 21.09.2023	Identification by Customer	; Sample 2

TEST RESULTS

	12011120210				
SI.No.	Test Parameter	Test Method	Units	Results	
1	Phosphorus as P	APHA, 23rd Edn,2017, 4500-P B, C	mg/L	2.9	
2	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.

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Report No.: TR/WTL/PHD/PWD/PDY/2023/W-1205

ULR-TC758022000000879F

Date: 25.09.2023

TEST REPORT

Customer Name & Address: The Assistant Engineer,

Drainage Sub Division, PHD, PWD, Puducherry.

Customer Reference : Letter dated:15.09.2023 Page 1 of 1

SAMPLE DETAILS

Sample Code : 2023/W-1205 Information provided by the Customer **Product Category** Pollution & Sampled by Environment : Customer

: Waste Water Sampling Procedure

Temperature at the time of : 30.1°C

Receipt Sample Description : Waste water Outlet Sample Condition

: Fit for analysis Sample Received on Sampling Location : Kanaganeri STP Outlet : 15.09.2023

Test Started on : 15.09.2023 Sample Received on : 15.09.2023 Test Completed on : 25.09.2023 Identification by Customer · Sample 2

	. 20.00.2020	Identification by Customer	: Sample	e 2	
TEST RESULTS					
SI.No.	Test Parameter	Test Method	Units		NGT Standards for treated Sewage for discharge into surface water
1	pH @ 25°C	APHA, 23rd Edition,2017,4500-H+B		7.06	5.5 to 9
2	Total Suspended Solids @ 103 - 105°C	APHA, 23rd Edition, 2017, 2540 D	mg/L	<10	Less than 10
1	Chemical Oxygen Demand	APHA, 23rd Edition, 2017, 5220 B	mg/Ľ	35.5	Not more than 50
Zi 1	Biochemical Oxygen Demand (3 days at 27°C)	IS 3025 Part44; (1994); RA2014	mg/L	15.8	Less than 10

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

APHA, 23rd Edn, 2017, 4500-P B, C

Authorized Signatory

4.39

mg/L

Vimala Venkatachalam

BIOCHEMIST WATER TESTING LABORATORY PUBLIC HEALTH DIVISION

Copy submitted to:

Sample Name

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

Terms and Conditions:

1. The test result relevant only to the item tested.

Total Phosphate as PO4

2. The tested report shall not be reproduced in full or part without written approval of WTL-PHDPWD

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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-1205(Annexe)

Date: 25.09.2023

TEST REPORT

Customer Name & Address: The Assistant Engineer,

Drainage Sub Division, PHD, PWD, Puducherry.

Page 1 of 1

Customer Reference

: Letter dated:15,09,2023

SAMPLE DETAILS

Sample Code	: 2023/W-1205	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 STP Outlet
Sample Received on	: 15.09.2023	Sampling Location	. Nanaganen om Odilet
Test Started on	: 15.09.2023	Sample Received on	: 15.09.2023
Test Completed on	: 25.09.2023	Identification by Customer	: Sample 2

TEST RESULTS

SI.No.	Test Parameter	Test Method	Units	Results
1	Phosphorus as P	APHA, 23rd Edn,2017, 4500-P B, C	mg/L	1.4
2	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

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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	
	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.