



सत्यमेव जयते

280

INDIA NON JUDICIAL

THE ADMINISTRATION OF UNION TERRITORY OF LADAKH

Rs. 10

e-Stamp

**Certificate No.** : IN-LA09699501508502X  
**Certificate Issued Date** : 23-Aug-2025 02:41 PM  
**Account Reference** : NONACC (SV)/ la12102704/ LEH/ LA-LEH  
**Unique Doc. Reference** : SUBIN-LALA1210270418579252531182X  
**Purchased by** : Pawan Kotwal  
**Description of Document** : Article 4 Affidavit  
**Property Description** : affidavit  
**Consideration Price (Rs.)** : 0  
 (Zero)  
**First Party** : National Green Tribunal Pr Bench New Delhi  
**Second Party** : Pawan Kotwal  
**Stamp Duty Paid By** : Pawan Kotwal  
**Stamp Duty Amount(Rs.)** : 10  
 (Ten only)

Ghulam Mohd  
 Stamp Vendor  
 District and Session Court  
 Leh (L No LA12102704)

सत्यमेव जयते



Please write or type below this line

Statutory Alert:

1. The authenticity of this Stamp certificate should be verified at 'www.shcilestamp.com' or using e-Stamp Mobile App of Stock Holding. Any discrepancy in the details on this Certificate and as available on the website / Mobile App renders it invalid.
2. The onus of checking the legitimacy is on the users of the certificate.
3. In case of any discrepancy please inform the Competent Authority.

**BEFORE THE NATIONAL GREEN TRIBUNAL  
PRINCIPAL BENCH, NEW DELHI**

Original Application No. 606/2018

**(In respect of Union Territory of Ladakh)**

**IN THE MATTER OF: -**

**Compliance of the Hon'ble National Green Tribunal order  
dated: 28/11/2024 regarding the Municipal Solid Waste  
Management Rules, 2016 And Other Environmental Issues**

(Union Territory of Ladakh)

**INDEX**

<b>S. No.</b>	<b>PARTICULARS</b>	<b>PAGES</b>
<b>1</b>	<b>COMPLIANCE REPORT BY ADMINISTRATION OF UNION TERRITORY OF LADAKH IN COMPLIANCE TO THE ORDER DATED: 28/11/2024</b>	<b>1-8</b>
<b>2</b>	<b>ANNEXURE-I</b>	<b>9-10</b>
<b>3</b>	<b>ANNEXURE-II</b>	<b>11-12</b>

**Filed By: -**

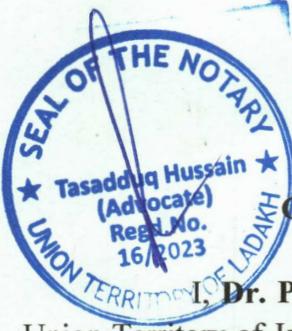
**BEFORE THE NATIONAL GREEN TRIBUNAL  
PRINCIPAL BENCH, NEW DELHI**

Original Application No. 606/2018  
(In respect of Union Territory of Ladakh)

In the matter of: -

**Compliance of Municipal Solid Waste Management Rules, 2016  
And Other Environmental Issues**  
(Union Territory of Ladakh)

**AFFIDAVIT ON BEHALF OF UNION TERRITORY OF LADAKH  
BY ADMINISTRATION OF UNION TERRITORY OF LADAKH IN  
COMPLIANCE TO THE HON'BLE NGT ORDER DATED: 28/11/2024**



I, **Dr. Pawan Kotwal**, aged 59 years, S/o **Chander Prakash Kotwal**, R/o **Gandhi Nagar**, Union Territory of Jammu and Kashmir, presently working as **Chief Secretary**, UT of Ladakh, do hereby solemnly affirm and declare as hereunder: -

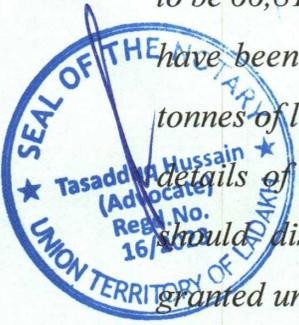
1. The afore titled matter related to Municipal Solid Waste and allied issues was listed before the Hon'ble National Green Tribunal (hereinafter "Hon'ble NGT") on 28/11/2024 wherein the Advisor to the Lt. Governor, Union Territory of Ladakh, the Member Secretary-Ladakh Pollution Control Committee and the Director Urban Local Bodies-Ladakh, appeared before the Hon'ble Principal Bench NGT, with the submission of 6<sup>th</sup> monthly progress report dt: 22/11/2024 on behalf of UT of Ladakh w.r.t compliance status of the Solid Waste Management Rules-2016 and other environmental issues.
2. Pursuant to the hearing on **28/11/2024**, the Hon'ble Tribunal passed the order dated **28/11/2024** in respect of Union Territory of Ladakh wherein several deficiencies and gaps w.r.t. solid waste Management and Sewage Management have been pointed out, with the direction to file compliance report before the next date of hearing i.e., **01/09/2025**, keeping in view the observations made by the Hon'ble Tribunal.
3. **The observations/directions issued by the Hon'ble Tribunal as per order dt: 28/11/2024 are as follows: -**

(A) *Solid waste management: -*

- i) *It has been disclosed that waste generation of 23.93 TPD is based on actual weight when compared with figures reported earlier. We find that for processing of 14.59 TPD waste generation from the Leh region, a processing capacity of 30 TPD has been created, but no quantification of Biodegradable and Non- biodegradable waste has been disclosed.*
- ii) *We further find that MoU entered with Recycling Agency is more focussed on rates for each recyclable fraction and has no mention of how each bailable and non-bailable waste will be routed to end users and Authorisation to be granted under the applicable Rules, Further, 3.24 TPD of compost is produced but how much biodegradable per day is generated, has not been disclosed. We find it concerning that, 850 Tonnes of compost remains unutilised, which needs mobilisation.*

iii) In Kargil region, 25 TPD of waste processing capacities have been created for processing 9.34 TPD generation of waste. But, quantities of generation of biodegradable and non-biodegradable has been disclosed. Since no waste processing facilities are in existence, the entire waste generated per day, which is unprocessed and is forming legacy waste. The processing plant, which now has been established and running on trial, should ensure that both biodegradable and non -biodegradable are processed as disposed.

iv) We find that legacy waste at Kargil has not been remediated which at present is estimated to be 66,819 tonnes and no timelines for its remediation are disclosed. Further, no details have been disclosed about different fractions arising out of the remediation of 61,637 tonnes of legacy waste at Leh and disposal of the processed waste. We further do not find details of the incineration process mentioned for RDF management. The next report should disclose capacity, operational parameters, performance and authorisation granted under MSW rules.



(B) Sewage management: -

- i) There is almost no progress in bridging the gap in sewage generation and treatment. The report does not disclose the present status of disposal of sewage, flowing into soak pits or getting discharged in rivers and streams or on land.
- ii) There is a gap of 5.69 and 6.64 MLD in sewage treatment in Leh and Kargil regions. Further, functional and operational 2 performance 3 MLD in terms of capacity utilisation and compliance with the standards to be provided.
- iii) We find it difficult to accept the proposition of setting of STPs by December 2026. Setting up of STP of 0.30 to 2.0 MLD should not take such a long time. Therefore, the Tribunal earlier directed to work out modular package STPs for smaller quantities of sewage, which would take less time, have effective performance and be fitted with a disinfection system. Therefore, we direct to speed up the process of setting up of sewage treatment facilities and overcome the land issue.

**COMPLIANCE REPORT TO ORDER DATED: 28/11/2024**  
**Submitted by the Administration of Union Territory of Ladakh**

In compliance to the Hon'ble NGT order dated: 28/11/2024, compliance report is hereby submitted as follows: -

**A. SOLID WASTE MANAGEMENT: -**

**1. Clarification on quantification of Biodegradable and Non-Biodegradable Waste generated in Municipal Committee area of Leh: -**

Municipal Committee	6 <sup>th</sup> Monthly Compliance Report dated	Biodegradable Waste in TPD	Non-Biodegradable Waste in TPD	Total Waste in TPD
Leh	11/03/2024	5.84	8.75	14.59
	04/10/2024	8.84	13.26	22.1
	07/04/2024	6.24	9.36	15.6
<b>Solid Waste Management Plant Capacity</b>				
	Dry Waste	Wet Waste	Total Capacity	Remarks
	20 TPD	10 TPD	30 TPD	Functional since August-2020

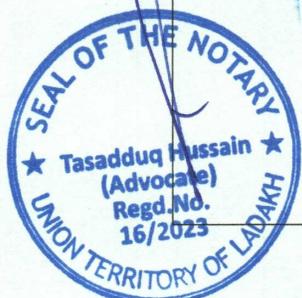
- This facility plays a key role in managing the waste generated in the town by processing both dry and wet fractions in a segregated and sustainable manner.

**2. Clarification regarding the MoU with Recycling Agency on Bailable and Non-bailable waste and generation of 3.24 TPD of Compost: -**

- All recyclable waste fractions are segregated at the **Material Recovery Facility (MRF)**. The segregation process is carried out with the help of a **trommel machine**, which ensures efficient and systematic sorting of recyclable materials. The segregated recyclables are subsequently sold to **M/s Ladakh Recycling Solutions** for further processing and recycling. The remaining inert waste, which is non-recyclable, is disposed safely at the designated **scientific landfill**. As on date 268.95 tonnes of recyclable material has been sold to **M/s Ladakh Recycling Solutions** and *Rs 17,29,142* earned.
- In Leh town, the generation of biodegradable waste is estimated to be **approximately 5.84 metric tons per day (TPD)**. This waste primarily consists of organic materials such as food scraps, garden trimmings, and other compostable matter.
- The compost generated at the **Solid Waste Management (SWM) Plant** is presently properly stacked within the facility and is distributed from time to time to the various departments like Forest Department, departmental farms, and municipal/forest parks to popularise the use of city compost for agricultural, horticultural and social forestry purposes free of cost as per the direction received from Ladakh Autonomous Hill Development Constitution (LAHDC) Leh. The Minutes of Meeting is annexed herewith as **Annexure-I**.

3. Clarification regarding legacy waste and quantification of Biodegradable and Non-Biodegradable Waste generated in Municipal Committee area of Kargil: -

Municipal Committee	6 <sup>th</sup> Monthly Compliance Report dated	Biodegradable Waste in TPD	Non-Biodegradable Waste in TPD	Total Waste in TPD
Kargil	11/03/2024	3.73	5.61	9.34
	04/10/2024	6.56	10.72	17.28
	07/04/2024	3.01	5.87	8.88
	<b>Solid Waste Management Plant Capacity</b>			
	Dry Waste	Wet Waste	Total Capacity	Remarks
	15 TPD	10 TPD	25 TPD	The construction of the plant is fully completed and has started functioning.



4. Clarification regarding remediation and disposal of processed wastes in Leh and Kargil: -

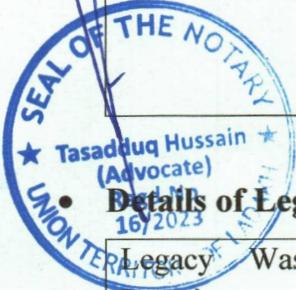
• Details of Legacy Waste Leh: -

Legacy Waste Location	<b>Leh</b>
Quantity of legacy waste remediated	<b>61,637 tons</b>
Different fractions of Legacy waste.	<p>A total of 61,637 tons of legacy waste has been successfully remediated through the biomining process at the Bombgarh site in Leh. This effort forms a critical part of the region's long-term solid waste management strategy and has significantly reduced the environmental burden of unprocessed waste. The physical composition analysis of the remediated legacy waste reveals the following key insights: -</p> <p style="text-align: center;"><b>Paper: 24.74%,</b> <b>Plastic: 16.47%,</b> <b>Cloth/Textile: 10.94%.</b></p> <p>Together, these materials make up approximately 52% of the total waste stream, highlighting the potential for resource recovery through recycling. The fines or soil-like fraction accounts for 41.58%, representing the largest single component. Whereas, biodegradable content has decomposed over time, leaving behind an inert, soil-like material. Inert materials such as glass,</p>

stones, and metals are present in relatively low proportions, consistent with expected trends in aged landfill sites.

Importantly, no detectable fraction of food waste was found in the analyzed samples, suggesting that the organic content has fully degraded over time through natural processes, resulting in stabilization and conversion into humus-like material.

Keeping the fragile environment and ecology of Ladakh in mind it has been proposed not to undertake incineration of the recovered non-recyclable fraction from biomining at Bombgarh site. The same is proposed to be trommeled, baled and transported for co-processing in cement plants for which an appropriate tender document is being worked upon.



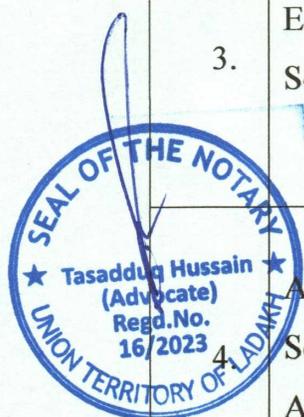
**Details of Legacy Waste Kargil: -**

Legacy Waste, Location	<b><i>Kurbathang, Kargil</i></b>
Quantity of legacy waste	<b><i>66,819 tons (as per the DPR)</i></b>
Current Status	The installation of machinery is currently in progress. The Weigh Bridge and DG Set have already been installed, while the installation of the Trommel Unit is presently underway. The plant is planned to commence Operations on 15th September, 2025.
Work Completion Period	450 Days w.e.f. issue of letter of Intent (26.04.2025)
Technology	<b>Mechanical Bioremediation.</b>

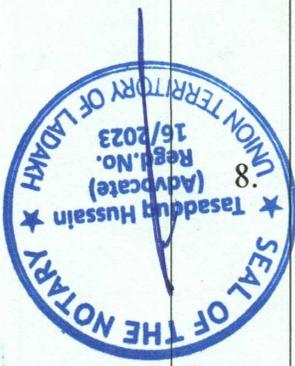
## B. SEWAGE MANAGEMENT: -

## 1. Clarification regarding bridging the gap in sewage generation and treatment: -

S. No	Action	Status
1.	Additional STP of 12.5 MLD for left out areas of Leh town	DPR prepared has been vetted by IIT Roorkee. Suggestions/recommendations received from IIT Roorkee are being incorporated. Once completed, Accord of Administrative Approval (AAA) will be sought.
2.	Faecal Sludge Treatment Plant (FSTP) with a capacity of 12KLD at Bombgarh Leh	Fully Operationalised and has been successfully running as on date.
3.	Enhanced suction capacity for Septic tanks at Leh	Acquisition of 11 no. of suction trucks with capacity of 80,000 ltrs/day/shift, and operating in two shifts has been started. From 1st May 2025 till date, 1.248 ML of sludge has been treated at the FSTP, Leh.
4.	Additional storage tank at existing Sewerage Treatment Plant (STP) at Agling, Leh	Additional storage tank of 0.38 MLD capacity has been constructed and commissioned at the existing STP at Agling, Leh, thereby enhancing the holding capacity of the plant considerably.
5.	Ladakh Pollution Control Committee (LPCC) decision to make compulsory Sewerage Treatment Plant (STP) installation for hotels/Guesthouses above 19 rooms	25 no.'s of decentralised STP have been installed at hotels/guesthouses till date and more such STPs are in the pipeline.
6.	Ladakh STP Incentive Scheme	To encourage tourism stakeholders having hotels/guesthouses below 19 rooms, Ladakh STP Incentive Scheme has been notified with the following incentives proposed to be provided: Provides <b>75% reimbursement</b> of STP equipment and installation cost (up to ₹5 lakh for 10-19 rooms with STP Capacity of 10 KLD, ₹3 lakh for 1-9 rooms with STP capacity of 5 KLD).



		Additional <b>10% incentive</b> for women-owned establishments, encouraging women entrepreneurship.
7.	Mechanized cleaning of manholes to prevent overflowing of sewerage through manholes and also to prevent manual scavenging	1 large capacity and 3 small capacity specialised Bandicoot Machines have been procured and operationalized since October 2022. This has solved the problem of sewerage overflowing through manholes and eliminating sewer line blockages.
8.	Wilboar machine	One specialized remote controlled and AI enabled Wilboar machine has been procured and deployed for effective cleaning and desilting operations at the Sewage Treatment Plant (STP) at Agling Leh since July 2025. This has made operations at the STP continuous without having to seek shut down for desilting operations.
9.	A Faecal Sludge Treatment Plant (FSTP) in Kargil	A treatment capacity of 10 KLD has been established at Kurbathang, Kargil, and is now fully operational.
10.	Enhanced suction capacity for Septic tanks at Kargil	Acquisition of 6 no. of suction trucks with capacity of 23,000 ltrs/day/shift, and operating in two shifts has been completed.



**2. Compliance and capacity utilization for the existing 3 MLD STP in Leh and gap of 5.69 and 6.64 MLD in sewage treatment in Leh and Kargil regions respectively: -**

Details are mentioned above regarding gap in sewage treatment in Leh and Kargil regions.

***The functional and operational performance of 3 MLD STP at Agling Leh is as follows:***

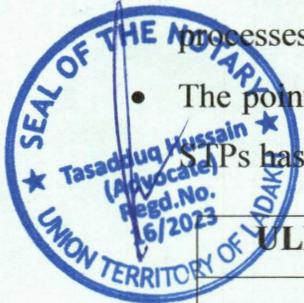
- The 3 MLD SBR plant in Leh treats wastewater in sequential phases—fill, aeration, settle, decant, and idle—within a single reactor, enabling efficient biological treatment in limited space. Capacity utilization ranges from 70% to 100%, with seasonal variations due to tourism and population changes. The plant achieves high treatment efficiencies, reducing BOD and COD by 85–90% and TSS by over 90%, meeting or exceeding local discharge standards.
- Raw sewage inlet typically has a flow of 3 MLD, BOD of 200–300 mg/L, COD of 400–600 mg/L, TSS of 250–350 mg/L, total nitrogen of 40–60 mg/L, and pH between 6.5 and 8.0.

- Treated effluent usually shows BOD <20 mg/L, COD <50 mg/L, TSS <30 mg/L, total nitrogen 10–20 mg/L, and pH between 6.5 and 8.5, all within CPCB standards.
- Detailed Water Analysis report is attached herewith as **Annexure-II**.

**3. Clarifications regarding the Hon’ble NGT directions to speed up the process of setting up of sewage treatment facilities and overcome the land issue: -**

- Due to the harsh winter climatic conditions in Ladakh, the working season is limited from 1<sup>st</sup> April to 1<sup>st</sup> November each year. This significantly reduces project completion timelines compared to other states. During the winter months, construction activities come to a complete halt, making it impossible to carry out standard construction processes.

- The point 3 has been well noted and accepted. Implementation of small decentralized STPs has started in Kargil as per the table below:



ULB	PROJECT	CAPACITY	STATUS
KARGIL	ZONE-1	1.0 MLD	Land allotment is pending due to an ongoing court matter which is in progress and is being followed up actively.
	ZONE-2 & 5	1.2+0.8 MLD	Submission for Administrative approval is in progress
	ZONE-3	2.0 MLD	Work order awarded and Work in progress
	ZONE-4	2.0 MLD	Work awarded and Work in progress
	ZONE-6	0.3 MLD	Submission for Administrative approval is in progress

Hence submitted for the kind consideration of the Compliance report on behalf of UT Administration.

**4. The answering respondent is duty bound to obey the directions and orders of this Hon’ble Tribunal.**

*[Signature]*  
**DEPONENT**

**VERIFICATION**

Verified at Leh, UT of Ladakh on this 23<sup>rd</sup> day of August-2025, that the contents of my above affidavit are true and correct to the official records of this case and nothing materials have been concealed there from.

Certified that Smt/Sh Chander Rajesh Kumar  
 S/o, D/o, W/o Sanjay Kumar  
 R/o Sanjay Kumar  
 and witnessed by Anwar Khan  
 on 13/08/2025  
 I administered Oath to him who  
 swore/solemnly affirmed that the contents  
 of this affidavit & hence attested

*[Signature]*  
**DEPONENT**

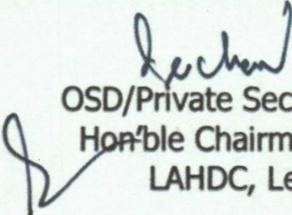
Tasadduq Hussain (Advocate)  
 Notary Public  
 Union Territory of Ladakh



**Decisions & Directives:** Following detailed discussions, the **Hon'ble Chairperson, Advocate Sh. Tashi Gyalson**, and the **Hon'ble EC, Sh. Stanzin Chosphe**, expressed their support for the proposal. Recognizing the benefits of locally produced compost, they decided that:

1. The compost should be **distributed to relevant government departments** for use in **horticulture, agriculture, and related projects** during the upcoming working season.
2. Given the **urgency of the sowing season**, the **supply of compost must be expedited**.
3. The concerned authorities must ensure **distribution within one week**, enabling timely utilization during the critical **sowing period**.

This prompt action will support **agricultural and horticultural activities**, contributing to **sustainability and improved productivity** in the region.

  
OSD/Private Secretary to,  
Hon'ble Chairman/CEC,  
LAHDC, Leh

LAHDC/CEC/66 125/2909-16

Dated:-26<sup>th</sup> March , 2025

**Copy for information and necessary action to the:-**

1. **Sh. Stanzin Chosphe**, Hon'ble Executive Councillor (Agriculture/Cooperative/Culture), LAHDC, Leh.
2. **Sh. Moses Kunzang**, Director, Urban Local Bodies (ULB), Ladakh.
3. **Mr.Thinles Dawa**, Chief Agriculture Officer, Leh
4. **Dr. TundupNamgail** District Sheep Husbandry Officer, Leh.
5. **Sh. Mohd Ali**, Divisional Forest Officer, Leh.
6. **Dr. Stanzin Rabgais**, Chief Animal Husbandry Officer, Leh.
7. **Sh. Stanzin Rabgais**, Executive Officer, Municipal Committee, Leh.
8. **Ms. Kunzang Wangmo**, Chief Horticulture Officer, Leh.

# Annexure-II

## Government of Ladakh UT

Project Under (PHE) Igo Phey Irrigation Division Leh

### WATER ANALYSIS LABORATORY

3MLD Sewage Treatment Plant, Agling, Leh, Ladakh UT-194101

Date: 30-06-2025

## WATER ANALYSIS REPORT

Sampling Description:  
3MLD STP Agling, Leh

No. of Samples: 02

Date of Sample Collection: 16-06-2025

Date of Stating Analysis:

16-06-2025

Date of Completion:

21-06-2025

### Sampling Site

1. Influent of STP

2. Effluent of STP

Sample Quantity: 2 liter

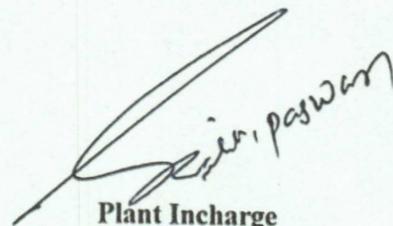
Sample Packing Container: Plastic Can

### Methods of Analysis Used for Determination

Parameter	Method Used
Biochemical Oxygen Demand (5 Days, 20°C) BOD5	5210 B: 5-Day BOD Test: Bottle Incubation For 5- Days At 20°C
Chemical Oxygen Demand (COD)	5220 B: Open Reflux Method
Dissolved Oxygen (DO)	4500-O-C: Azide Modification (Modified Winkler's Method)
Total Dissolved Solids (TDS)	2540-C: Total Dissolved solids Dried at 180 °C
Total Suspended Solids (TSS)	2540-D: Total Dissolved solids Dried at 103- 105 °C
pH	4500-H: pH value with digital pH meter Method
Phosphate	W5560: Water Testing Kit
Ammonical Nitrogen	W5560: Water Testing Kit
Chloride	4500 CL:B Argentometric Method



Laboratory Incharge

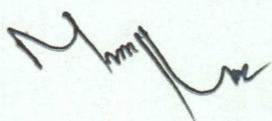


Plant Incharge

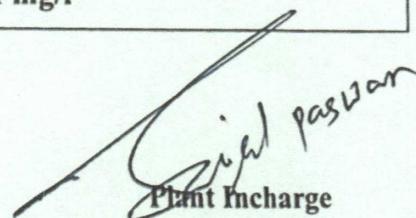
**Government of Ladakh UT**  
**Project Under (PHE) Igo Phey Irrigation Division Leh**  
**WATER ANALYSIS LABORATORY**  
**3MLD Sewage Treatment Plant, Agling, Leh, Ladakh UT-194101**

## WATER ANALYSIS REPORT

Parameters	Units	Influent	Effluent	Permissible Limits as per CPCB Norms
Temperature	°C	19.6	20.7	
Ph	Value	7.1	7.6	6.5-9.0
Conductivity	µS/cm	894	638	
Biochemical Oxygen Demand (5 Days, 20°C) BOD5	mg/l	360	12.8	Less than or equal to 10 mg/l
Chemical Oxygen Demand (COD)	mg/l	680	50	Less than or equal to 50 mg/l
Dissolved Oxygen (DO)	mg/l	0.0	4.2	Greater or equal to 4mg/l
TKN	mg/l	82.2	9.8	Less than or equal to 10 mg/l
Total Dissolved Solids (TDS)	mg/l	440	384	
Total Suspended Solids (TSS)	mg/l	360	28	Less than or equal to 30 mg/l
Faecal Coliform	MPN/100ml	4.6×10 <sup>5</sup>	190	Less than 230 mg/l
Nitrate Nitrogen	mg/l	10.0	4.8	Less than 5 mg/l
Total Phosphorous	mg/l	0.0	0.5	Less than 2 mg/l
Ammonical Nitrogen	mg/l	5.0	3.0	Less than 5mg/l
Residual Chloride	mg/l	0.0	0.7	0.5-1 mg/l



Laboratory Incharge



Plant Incharge