

1027**NGT MATTER****Urgent**

**GOVERNMENT OF ASSAM
ENVIRONMENT AND FOREST DEPARTMENT
DISPUR, GUWAHATI-6**

eCF No.114504/579

Dated Dispur, the 16th Sept, 2024

From : Shri Sachindra Das
Joint Secretary to the Govt. of Assam,
Environment and Forest Department.

To : The Registrar
Hon'ble National Green Tribunal
Principal Bench,
New Delhi

Sub : Regarding submission of Compliance report of Hon'ble NGT's hearing
dated 19.03.2024 in O.A No.606/2018.

Sir,

With reference to the subject cited above, I am directed to submit herewith the Detailed Progress Report in compliance of Hon'ble NGT directions vide order dated 19.03.2024 in O.A No.606/2018.

Encl. as above

Signed Yours' faithfully,

Sachindra Das

Date: 16-09-2024 20:27:01

Joint Secretary to the Govt. of Assam,
Environment and Forest Department.

Memo eCF No.114504/579-A

Dated Dispur, the 16th Sept, 2024

Copy to :-

1. S.O.to the Chief Secretary, Assam, Dispur, Guwahati -6
2. P.S. to the Special Chief Secretary, Environment and Forest Department, Dispur, Guwahati-06
3. P.S to the Secretary, Department of Housing & Urban Affairs department, Dispur, Guwahati.

By order etc.,

E-signed

Joint Secretary to the Govt. of Assam,
Environment and Forests Department.

Compliance Report on Solid and Sewage Management in respect to OA 606/2018 of NGT.

1. Background

In OA 606/2018's last hearing, Chief Secretary of Assam presented the existing status on state's Solid and Liquid (Sewage) management to Hon'ble NGT on 27.01.2023. Hon'ble NGT found gap of 752 TPD in waste processing, 435.5 MLD gap in used water management and 33 Lakh tones of legacy waste in Assam.

In last meeting with Hon'ble NGT on 19.03.2024, NGT had highlighted the following priority items:

- a) Immediate opening of a **Ring-Fenced Account**.
- b) Further, direction to expedite progress of solid and liquid waste management projects and submit detailed report with timelines of completion of all projects within 31.08.2024.

As a response to priority item (a), as per the direction of the Hon'ble NGT, a **Ring Fenced Account, has been created by the Department and an amount of Rs 1014.18 Cr has been credited to the account.**

In last one year, Assam has undertaken following measures to provide sustainable sanitation service to the urban population:

A. Solid Waste Management:

Significant measures has been adopted for processing of solid waste generated, door to door collection, source segregation and backyard composting through community participation and systemic and scientific intervention through professional agencies.

So far, out of the identified **gap of 752 TPD** by Hon'ble NGT in the last hearing on 27/01/2023, the following initiatives have been undertaken to reduce the processing gap in Guwahati and other ULBs in the State of Assam.

Guwahati Municipal Corporation (GMC)

- RDF cum Compost plant with a capacity of **150 TPD funded under State Budget has been operational in Belortol, Guwahati from May, 2024. Consent to Operate (CTO)** has been obtained from Assam Pollution Control Board.
- After receiving revised CTO from Assam PCB the plant has started operating in two shifts expanding its capacity to 300 TPD.
- Additionally, Refuse Transfer Station cum Material Recovery Facility (MRF) capacity of **235 TPD at 3 locations in Guwahati** will be operational by November, 2024.
- **10 TPD MRF** has already been made operational since **March 2024**.
- One Waste to Energy plant is operation at Chatribari, Guwahati of a **capacity of 5 TPD** with an output of 800 units of power and 450 Kgs of manure.

The efforts to reduce the processing gap has been summarised in the table below.

#	Solid Waste Processing Initiatives	Quantity of Waste Processed (in TPD)
1	Processing gap observed in Guwahati	550
2	Processing capacity observed as of 19.03.2024	15
3	RDF cum Compost Plant, operational from May 2024	150
4	Additional capacity in after operating the facility in second shift	150

With these efforts, the gap in solid waste processing in Guwahati will be reduced to **235 TPD which are expected to be managed by 3 additional facilities by November 2024.**

Further, **dedicated land has been allotted for 75 TPD compressed biogas plant**, for which MoU has been signed between **GMC and Numaligarh Refinery Limited (NRL) India.**

Rest of the ULBs in Assam

202 TPD of solid waste processing gap has been observed in the rest 103 urban local bodies in Assam. Initiatives being undertaken at the State level to reduce the processing gap are as follows:

- In the last six months, **2 solid waste processing plants/MRFs have started operating.**
 - **In Nalbari a solid waste composting (10 TPD) and MRF (10TPD) has been made functional.**
 - **In North Lakhimpur a solid waste composting (25 TPD) and MRF (100TPD) has been made functional.**
- Further, **works for 32 other ULBs have started on ground**, which will add solid waste processing capacity of **469.33 TPD**. The projects are at various stages of construction, the details of which are enclosed in **Annexure 1.**
- Process is also underway for the rest 46 ULBs in Assam with population less than 50,000. Detailed Project Reports (DPRs) have been approved by Government of India and Government of Assam. The works for the following projects should start by December 2024, following the due tendering process.
- **Waste to Compressed Bio-gas Plants:**
 - MoU signed between Sivasagar MB & OIL India Ltd for **CBG Plant (50 TPD)**
 - MoU signed between Tinsukia & OIL India Ltd for **CBG Plant (50 TPD)**
 - MoU between Jorhat MB & OIL India Ltd for **CBG Plant** is under development. **(60 TPD)**
 - MoU between Silchar MB & OIL India Ltd for **CBG Plant** is under development. **(60 TPD)**

Key Highlights under Solid Waste Management

- In the last six months, the State had reduced the operational processing capacity gap by **315 TPD.**

- By November 2024, the city of Guwahati itself is expected to add another **235 TPD of operational capacity**.
- Further, the rest of the State is also expected to add **112 TPD** of operational capacity in **13 more ULBs by November, 2024**.
- Therefore, the observed 752 TPD of gap in solid waste processing will be covered. However, the Govt of Assam intends to establish adequate waste management facilities across all ULBs, in rest 82 ULBs

B. Legacy Waste Management:

The summary of the progress made by the State has summarised as follows:

- Out of a total of **33 lakh MT of legacy** waste as identified by hon'ble NGT for remediation, **10.08 lakh MT** have already been remediated in **11 cities**, namely GMC, North Lakhimpur, Jorhat, Tinsukia & Makum, Digboi, Doomdooma, Mariani, Margherita, Narayanpur, Mangaldoi and Dhekiajuli, leading a progress of **30.5%** till date.
- Legacy Waste Remediation project in Guwahati Municipal Corporation is expected to be completed by **July, 2026**.
- Fresh wastes generating in these above mentioned ULBs were managed separately to prevent mixing with legacy waste.
- **72 Bighas** of land have already been reclaimed in these ULBs. Urban Forest will be developed in **16 bighas** of reclaimed land in North Lakhimpur MB under **'Doh Shahar Ek Rupayan'** initiative by the Department of Housing and Urban Affairs.
- Since March 2024, **2.1 lakh MT of legacy waste has been remediated in 4 ULBs**. Narayanpur has completed 100% of legacy waste remediation works in last 6 months.
- Work order has been awarded to remediate 8.3 lakh MT of legacy waste in 39 other ULBs with cost of INR 70.52 crore, under funding from Ministry for Development of North East Region (DONER) under North East Special Infrastructure Development Scheme (NESIDS) Scheme.

The progress of legacy waste remediation efforts in urban areas in Assam has been summarised in the table below.

#	Legacy Waste Processing Initiatives	Quantity of Legacy Waste (in lakh MT)
1	Identified Legacy Waste for Remediation by Hon'ble NGT in Assam	33
1.1	Identified Legacy Waste for Remediation by Hon'ble NGT in Guwahati	15
2	Remediation works completed as of 31.08.2024	10.09
3	Remediation works under the NESIDS	8.3

C. Used Water Management:

In accordance with the Hon'ble NGT's directions, a processing **gap of 435.5 MLD** has been identified for used water management in Assam. To address the same, Sewage Treatment Plants with a **total capacity of 338.50 MLD have been planned and are currently at various stages of development**. In this regard, the progress is as follows:

- Sewage Treatment Plant (STP) with design capacity of 2 MLD, has been made operational in the city of Nagaon, implemented by Assam Urban Water and Supply and Sewerage Board (AUWSSB).
- Further, for cities with population less than 1 lakh under SBM (Urban) 2.0:
 - Work has started in **5 ULBs** (Tinsukia, Jorhat, Bongaigaon, Dhubri, and Mangaldoi) **adding 16.5 MLD capacity**.
 - Work has started in 16 ULBs with population less than 20,000, adopting **nature-based solutions as approved by CPHEEO, MoHUA**, which is also expected to **add capacity of 16.5 MLD**.
 - Tendering is also underway for **6 ULBs** (Nalbari, Mariani, Margherita, Golaghat, Karimganj and Sivsagar), expected to add another **16.1 MLD of treatment capacity in Assam**.
- Under Atal Mission for Rejuvenation and Urban Transformation (AMRUT) 2.0, Sewage Treatment Plants (STPs) are being developed for Silchar (2 MLD) and Dibrugarh (6.5 MLD)
- 1. No of STP of 2 MLD capacity by GMDA at Borsola is under construction expected to be **operational by October,2024**
- Approval has been accorded by Govt of Assam for an amount of Rs,1460.37 Cr for 3 Nos of STPs (189 MLD) to be implemented in Guwahati under JICA assistance is underway. Process of on-boarding of PMC is under process.
- **15 MLD of sewage** is being remediated using bacterial dosing at Silsako Beel before release into Brahmaputra by GMDA. It is pertinent to mention that in the last hearing, the Hon'ble NGT had sought details from the State Government regarding the parameters of the water quality in Silsako Beel, over and above the BOD and COD parameters, specifically with respect to the faecal coliform limit. The reports are attached as **Annexure 2**.
- **7.59 MLD** of wastewater generators by hospitals/hotels etc are now being treated in situ.
- As a part of the strategy followed by the Department in cities with population less than 20,000, dual solutions are being implemented in the form of faecal sludge treatment plants and in-situ treatment of wastewater through nature based solutions.
- Considering the Hon'ble NGT in its Order to explore low cost technologies for used water management, the State has undertaken the following initiatives:
 - **6 FSTPs** constructed in **Goalpara (7 KLD), Titabar (10 KLD), Tinsukia (20 KLD), Mariani (5 KLD), North Lakhimpur (10 KLD)** and **Guwahati (20 KLD)** has been operational since **August, 2024**.
 - **26 more FSTPs** is being constructed on cluster basis with technical assistance from **UNICEF, expected to add additional capacity of 337 KLD**.

As directed by Hon'ble NGT, six monthly compliance reports have been submitted at regular intervals:

1. First report submitted on 27/07/2023
2. Second report submitted on 17/02/2024

2. Directions

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The Tribunal passed following major directions on actions required to be taken for solid and liquid waste management and ring-fencing amount for management of the same:

Solid Waste Management: Directions were given to undertake measures for filling up the gap of 752 TPD in waste processing and emphasis was given Segregation of the Solid Waste at source, adequate composting /vermi composting/bio-methanation and development of Plastic waste and Construction & demolition processing plants

Legacy Waste Management : A total 33 lakh MT of legacy waste were directed to be remediated in accordance with guidelines/SOPs laid down by CPCB and expeditious execution of the remediation works.

Used Water Management : Based on the data presented by the Chief Secretary showing a gap of About 435.5 MLD generation and treatment of sewage, Hon'ble NGT has directed that appropriate treatment of such waste cost-effective methods has to be undertaken ensuring that no faecal contaminants are discharged into water streams/ponds/rivers. Sanctity and significance of natural storm water drains were directed to be maintained. Directions were given for STPs to have Co-treatment facilities of septage rather than having isolated FSTPs.

Making funds available out of Ring fenced amount: A Ring Fenced Account, has been created by the Department and *an amount of Rs 1014.18 Cr has been credited to the account.*

It is to be mentioned that an amount of Rs. **10.74 Cr** has already been made available to the ULBs.

Sl No	Component	State Commitment (Cr.)	Status of Fund
1	Solid Waste Management (waste processing, scientific landfill site development & legacy waste management)	567.78	<ul style="list-style-type: none"> ➤ 1.24 Cr released by state govt. for legacy waste remediation in Jorhat ➤ DoNER has approved 70.52 Cr for Legacy waste Remediation in 39 ULBs.
2	Sewerage & Septage Management	446.4	<ul style="list-style-type: none"> ➤ 2.44 Cr for remediation of water bodies in Guwahati. ➤ 0.60 Cr fund allocated for Borsola STP ➤ 3.99 Cr allocated for FSTP in Guwahati. ➤ 2.47 Cr released to AUWS&SB for STP in Nagaon.
3	Total Commitment	1014.18	10.74 already made available

A detailed compliance report of the above directions has been incorporated in the following paragraphs :

3. City and Town wise Information: *Details at Annexure-3*

4.0 Solid Waste Management:

- (i) **Waste Generation**-1338 TPD (assessed based on per capita).
 - Plastic Waste Generated- 272 TPD
 - C&D Waste Generated- 112.2 TPD.
- (ii) **Waste Collection**- 1231.8 TPD.
- (iii) **Waste Processed**- 791.5 TPD.

About the existing processing facility:

- An MRF of **10 TPD capacity constructed in GMC** under HDFC's CSR is operational from **12th March, 2024**.
- RDF cum Compost plant with a capacity of **150 TPD funded under State Budget has been operational in Guwahati from May, 2024**. **Consent to Operate (CTO)** has been obtained from Assam Pollution Control Board.
- After receiving revised CTO from Assam PCB the plant has started operating in two shifts expanding its capacity to 300 TPD.
- **3.5 TPD of organic waste composter operational** in Bhatnagar and Kamakhya
- **2 solid waste processing plants/MRFs have started operating.**
 - **In Nalbari a solid waste composting (10 TPD) and MRF (10TPD) has been made functional.**
 - **In North Lakhimpur a solid waste composting (25 TPD) and MRF (100TPD) has been made functional.**
- MRF facility with a capacity of **100 TPD** to be operational from November, 2024 in Guwahati. The project works has been delayed due to prolonged monsoon period.
- One Waste to Energy plant is in operation at Chatribari, Guwahati of a capacity of 5 TPD with an output of 800 units of power and 450 Kgs of manure.
- Further, **works for 32 other ULBs have started on ground**, which will add solid waste processing capacity of **469.33 TPD**. Process is also underway for the rest of the ULBs to have MRFs constructed.
- Most of the ULBs of Assam are peri urban in nature, therefore more emphasis is given in in house composting such as backyard/pit composting rather than centralized processing of waste.
- Through SBM(U), Assam's 'Model Ward Initiative' 6800 Nos. of backyard compost pits were created with active participation from 82 NGOs, 398 SHGs and 677 informal waste pickers.

4.1 Measures taken to fill the gap of waste generated and processed:

Hon'ble NGT has observed a Gap of **752 TPD** of waste to be processed. In response to that SBM(U), Assam has planned for processing being future ready and has undertaken following measures to achieve the same :

- i) A RDF cum waste to compost plan with a capacity of **150 TPD has been operational from May , 2024** in Guwahati.
- ii) An MRF of **10 TPD capacity constructed in GMC** under HDFC's CSR Initiative.

- iii) An **MRF of capacity 100 TPD** will be operational by November, 2024 in Jail Road, Guwahati.
- iv) Guwahati has been selected in top 18 ULBs **for CITIIS 2.0 under NIUA**. A dedicated **C&D waste management plant (100 TPD)** will be constructed as a part of this project along with **1(one) 200 TPD Waste to Compost (or similar) plant, 1(one) RTS of 100 TPD and 1(one) MRF of 100 TPD capacity**. Further, a **Guwahati circulatory repository** for innovation and engagement in waste management is planned to be set up
- v) In the last six months, **2 solid waste processing plants/MRFs have started operating.**
 - **In Nalbari a solid waste composting (10 TPD) and MRF (10TPD) has been made functional.**
 - **In North Lakhimpur a solid waste composting (25 TPD) and MRF (100TPD) has been made functional.**
- vi) MoU has been signed with OIL/NRL for development of **Compressed Bio Gas Plant (CBG)** by **GMC (75 TPD), Sivsagar MB (60 TPD) and Tinsukia MB (50 TPD)** and the same is in pipeline for **Jorhat (60TPD) and Silchar (60TPD)**.
- vii) SBM(U), Assam has on-boarded efficient agencies for enhancing Door to door collection and source segregation through policy formation, vehicle route map preparation, IEC activities and capacity building is being done. **A sample city action plan prepared in this regard is attached as Annexure 4.**
- viii) **Model Ward initiative by SBM (U)** initiated in all **103 ULBs of Assam**. In this initiative **6800 backyard compost pits and 124 central compost pits** were created for wet waste processing
- ix) **218 nos.** of Auto Trippers with separated storage chambers distributed to ULBs on **3rd July, 2023** for Door to Door Collection at primary level. **113 e-vehicles** have been distributed to ULBs for primary collection.
- x) Existing primary collection vehicles were mapped and retrofitted as per **Swachh Survekshan Toolkits**.
- xi) Efficient agencies have empanelled by SBM(U), Assam for MRF Operation, Door to Door IEC Activities, promoting source segregation and backyard composting.
- xii) Periodic IEC activities undertaken in major festivals like Swachh Holi, Swachh Biswakarma Puja, Swachh Durga Puja, Swachh Diwali and Swachh Saraswati Puja. ULBs also actively participated in each central and state IEC activities like Indian **Swachhata League 2.0, Swachhata hi Seva, SwachhTeerth Campaign** etc.
- xiii) **'Swachh School Swachh Shehar'** campaign launched with Akshar Foundation in Guwahati to promote source segregation and sense of sanitation among school children.
- xiv) Task Force constituted at ULB level and District level for better Municipal Solid Waste Management.

5. Progress in Legacy Waste Remediation since last hearing

Out of total of **33 Lakh MT** of Legacy Waste as observed in Assam by Hon'ble NGT in last hearing, **10.09 Lakh MT** legacy waste in GMC, Tinsukia MB, Jorhat MB, Narayanpur MB, Dhekiajuli MB North Lakhimpur MB, Doomdooma MB, Margherita MB and Mariani MB has been remediated and **72**

bighas of land reclaimed. A **progress of 30%** is attained since the last hearing of Hon'ble NGT.

Sl No	ULB Name	Remediated Qty	Progress Status	Present Status
1	N Lakhimpur MB	39,000 MT	100% remediated	72 bighas of land reclaimed
2	Mariani MB	10,560 MT	100% remediated	
3	Tinsukia MB & Makum MB	50,000 MT	100% remediated	
4	Doomdooma MB	18,000 MT	100% remediated	
5	Digboi MB	19,200 MT	100% remediated	
6	Margherita MB	25,000 MT	100% remediated	
7	Narayanpur MB	11,333 MT	100% remediated	
8	GMC	7,34,000 MT	48% remediated	Remediation work Ongoing
9	Jorhat MB	93,878 MT	65% remediated	
10	Dhekiajuli MB	7,200 MT	90% remediated	
11	Mangaldoi MB	1200 MT	10% remediated	
Total Processed (A)		10,09,371 MT		

- Project initiated to remediate **8.3 Lakh MT** of legacy waste in **39 ULBs**.
With tendering process concluding on 29 August;

6. Sewage Management-

- i) Sewage Generation – 435.5 MLD
- ii) Existing Sewage Treatment and the gap –
 - a) **Existing treatment capacity: 24.59 MLD**
 - **2 MLD STP** operational in Nagaon, under Assam Urban Water Supply and Sewerage Board (AUWSSB)
 - **15 MLD of sewage** is being bio remediated at Silsako Beel before release into Brahmaputra by GMDA
 - **7.59 MLD** sewage is present which is generated in the Hospitals, Hotels, Apartments in Guwahati city are being treated in-situ.
 - b) **Gap** – 411.11 MLD.

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To mitigate the gap, 340.5 MLD sewage treatment capacity is planned as detailed below.

6.1 Executable and Time bound plan to complete the Gap is attached below:-

Location	Generation (MLD)	Planned STP (MLD)	Remarks
Guwahati	125.88	189	<ul style="list-style-type: none"> Approval has been accorded by Govt of Assam for an amount of Rs,1460.37 Cr for 3 Nos of STPs to be implemented under JICA assistance is underway. Process of onboarding of PMC is under process. 1. No of STP of 2 MLD capacity by GMDA at Borsola is under construction expected to be operational by October,2024
5 ULBs (Bongaigaon, Dhubri, Mangaldoi, Jorhat & Tinsukia)	44.61	16.5	<ul style="list-style-type: none"> Work Order issued for these 5 ULBs, with construction work expected to begin shortly.
16 ULBs	27.59	16.5	Work Order issued to 3 contractors and construction works expected to begin shortly for adopting low cost nature based technologies as approved by CPHEEO, MoHUA as these ULBs are having population less than 20,000.
Dibrugarh MB	16.83	6.5	Tendering process to start shortly subject to the approval of SLTC, AMRUT
Silchar M.B.	22.24	2	Tendering process to start shortly subject to the approval of SLTC, AMRUT
Tezpur	8.28	2	Tendering process

			underway for the same
6 ULBs (Marghera Mariani, Karimga Nalbari, Sibsagar&Golagha)	27.73	16.1	Tender to be floated by SBM 2.0. for 6 ULBs by first week of September 2024
15 ULBs	66.76	33.9	DPRs under preparation.
49 ULBs	83.97	57.75	CSAP has been prepared.

6.2 Faecal Sludge and Septage Management:

- Construction of FSTPs in 32 ULBs of capacity of 337 KLD are taken up with technical assistance from UNICEF. Out of the same –
- 5 FSTPs at **Goalpara (7 KLD), Titabar (10 KLD) and Tinsukia (20 KLD), Mariani (5 KLD) and North Lakhimpur (10 KLD)** are already operational.
- One FSTP with a capacity of **20 KLD has been operational in Guwahati from August, 2024.**
- Construction of another 9 FSTPs with a total capacity of 90 KLD is in advanced stages, with inauguration expected in September 2024.
- Rest of the 17 ULBs are completing their site works and at different stages of completion.

6.3 Remediation of water bodies in Guwahati City:

As per point no.38 of the Hon'ble NGT's directions in its hearing dated 27.01.2023 and to address the adverse effect of such used water and to improve the water quality, several actions has been taken viz: Rejuvenation, Remediation of the Beels and river channels, setting up of STPs, cleaning and distillation works of the river channels.

The five major river channels that carry used water in the city viz Basistha, Bahini, Mora Bhoralu, Bhoralu and Lakhimijan. There are three major water channels/bodies through which most of the used water of Guwahati city drains into Brahmaputra river. These are Deepor Beel, Bhoralu river and Silsakobeel

For remediation of these water bodies following steps has been taken:

- De-silting and rejuvenation projects taken in **Silsako beel after which has improved the water quality significantly as shown below:-**

Parameter	Value as on 2019	Value As on June 2024
pH (Mg/Litre)	7.2	7.18
BOD (Mg/Litre)	46.2	9
COD (Mg/Litre)	170.4	20

- Additionally, microbiological analysis has also been conducted. The summary of the report from April 2024, has been highlighted in the table below.

Parameter	Value As on April 2024	Maximum Desirable Limit
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	Inlet	Outlet	(as per IS 10500:2012)
Faecal Coliform	2800	900	500-2500

- iii. Work started for a STP of 2 MLD capacity at **Borsola Beel, with construction works ongoing currently.**
- iv. Cleaning and de-silting activities done for five major river channels namely **Bahini, Bharalu, Mora Bharalu, Lakhimijaan and Basistha** in Guwahati.
- v. Further, under CITIIS 2.0, a project around boom barriers will be implemented at 5 spots on the five major river channels.

6.4 Making funds available out of Ring fenced amount:

From the committed amount of Rs. 1014.18 Cr. pertaining to Department of Housing and Urban Affairs, an amount of **Rs.10.74 Cr.** has already been made available to the ULBs/Agencies.

Sl No	Component	State Commitment (Cr.)	Status of Fund
1	Solid Waste Management (waste processing, scientific landfill site development & legacy waste management)	567.78	<ul style="list-style-type: none"> ➤ 1.24 Cr released by state govt. for legacy waste remediation in Jorhat ➤ DoNER has approved 70.52 Cr for Legacy waste Remediation in 39 ULBs.
2	Sewerage & Septage Management	446.4	<ul style="list-style-type: none"> ➤ 2.44 Cr for remediation of water bodies in Guwahati. ➤ 0.60 Cr fund allocated for Borsola STP ➤ 3.99 Cr allocated for FSTP in Guwahati. ➤ 2.47 Cr released to AUWS&SB for STP in Nagaon.
3	Total Commitment	1014.18	10.74 already made available

6.5 Following measures has been taken by SBM(U), Assam to fast-track the construction of STPs:

- a. Land for setting up STP and FSTP has been expediently provided by the District Magistrates through personal intervention of Chief Secretary, Assam. Regular meeting being held chaired by Chief Secretary, for reviewing progress with District Magistrates and expediting land availability for the STP projects under SBM (Urban) 2.0.
- b. SBM(U), Assam has issued work orders for 5 ULBs, namely Bongaigaon, Dhubri, Jorhat, Mangaldoi and Tinsukia. Civil works at the respective projects have also been initiated, with images from sites enclosed. This is expected to operationalise 16.5 MLD of design capacity for sewage treatment in the State.
- c. Work Order has been issued for 16 Nature Based Projects in 16 ULBs with population less than 20,000, which is expected to add 16.5 MLD capacity.

- d. SBM(U), Assam in the process of floating tenders for 6 ULBs centrally to avoid lag in STP construction completion timeline i.e. Nalbari, Mariani, Margherita, Golaghat, Karimganj and Sivsagar.
- e. Support obtained from MoHUA for DPR/Tendering documents to prevent retendering/delay.

7.0. Points of Consideration :

(i)	Technical assistance at District level	An online platform for updation of data regarding compliance of Hon'ble NGT guidelines/directions has been developed. Stakeholders/line Departments will be provided with login ID for updation of data corresponding to their respective Department/District
(ii)	SWM measures taken in small ULBs	<ul style="list-style-type: none"> • Assam took Model Ward initiative in all 103 ULBs of Assam. In this initiative 6800 backyard compost pits were created and 82 NGOs, 308 SHGs and 677 Informal Waste-workers participated. • Engaged efficient agencies for Door to Door IEC Activities, Promoting Source Segregation and Promoting Backyard Composting, route mapping and retrofitting of waste collecting vehicles initiated. A sample copy of the action plan prepared is attached along. • MRFs and SLFs being developed in 95 ULBs for sustainable management of Municipal Solid wastes generating from the ULBs. 30 Projects have already started.
(iii)	UWM measures taken in small ULBs.	To explore Nature Based low cost Technologies to minimize the CAPEX and OPEX in ULBs having less than 20,000 populations EoI notification published for empaneling efficient agencies for setting up STPs on EPC mode.
(iv)	Support from MoHUA	Support taken from MoHUA for model DPRs/Bid documents to avoid delay in tendering process.
(v)	Emphasis to maximize use of treated sewage water.	<ul style="list-style-type: none"> • SBM-(U), Assam has given emphasis in reusing the treated water. • Dedicated policy for reutilization of treated water being drafted by UNICEF. • SBM-(U), Assam is also focusing on reusing treated water in ULBs to become Water+.
(vi)	Utilization of Legacy Waste Remediation by-products	➤ MoU signed for sending Refused Derived Fuels generated due to remediation of Legacy Wastes from GMC to cement plant

		<p>for co-processing.</p> <ul style="list-style-type: none"> ➤ MoUs signed in Margherita and Doomdooma ULB with cement factory for co-processing the RDFs. ➤ Inerts generating from Legacy Waste Remediation in N Lakhimpur MB were used for low land filling using Geo-mats.
(vii)	Innovative Ideas/initiatives undertaken	<p>A dedicated cadre of “Assam Urban Administrative Service” officers have been created wherein the 1st batch of 96 Executive Officers have been recruited through APSC and are posted in ULBs. Thus this challenge of having dedicated officers for implementation of works is met with and their unique contribution in last 3 months in the field of waste management are shared herewith as ANNEXURE 5.</p> <p>Most Outstanding District Initiative (MODI) has been introduced by the Govt of Assam to award the best performing district with an amount of R. 100Cr based on assessment of existing sanitation infrastructure and preparedness for providing the same.</p> <p>As per directions of Hon'ble NGT, exposure visit was made by officials from DoHUA to the State of Odisha to study the Nature Based Technologies used in the existing STPs in Odisha and the same was used for floating EOI for empanelling agencies to construct STPs in small ULBs having less than 20,000 populations has been floated.</p> <p>Govt. of Assam has approved a unique initiative of “Doh Sahar Ek Rupayan” to hand hold 10 major ULBs of the State to attain visible cleanliness.</p> <p>A unique Swachhata Challenge has been initiated by SBM-U, Assam amongst all ULBs over 6 parameters to create a competitive spirit and thereby consistency efforts resulting in visible cleanliness and in bringing behavioral change in public.</p> <p>‘Swachh School Swachh Shehar’ campaign launched with Akshar Foundation in Guwahati to promote source segregation and sense of sanitation among school children. Details attached as Annexure 6.</p>
(viii)	Participation in National Campaigns	<ul style="list-style-type: none"> ➤ SBM(U)-Assam, with the help of MoHUA carried out various cleanliness activities in all ULBs of Assam under ‘Safai Apnao Bimari Bhagao’ campaign. ➤ Efforts are being taken by SBM (U) to

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		<p>aware citizen on Source segregation and Door to Door collection of Municipal waste.</p> <ul style="list-style-type: none">➤ SBM(U) is also working on mechanised cleaning of Septic Tanks – Shifting from ‘Manhole to Machinehole’. For this purpose, different machineries like Cesspool cleaner, power rodding apparatus etc are arranged to provide to ULBs.➤ Govt. has also taken other initiatives like providing PPEs to Safaimitras, regular Health Check-up facilities etc
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Annexure 1: Progress Status of construction of Solid Waste Processing Facilities

Sl.No.	ULB Name	Capacity of SWM Plant (TPD)		Status of Project and Expected Date of Completion (in case construction is ongoing)
		Compost Pit	MRF	
		Approved	Approved	
1	Nalbari MB	6	3.5	Operational from August 2024
2	Nagaon MB	36	20	Last week of October, 2024
3	Chapar MB	4.5	2.43	Second week of September 2024
4	Kokrajhar MB	6	4	By last week of of September, 2024
5	Silchar MB	50	15	By November,2024
6	North Lakhimpur MB	12.5	9	Operational as of August 2024
7	Barpeta Road MB	8	5	20 September,2024.
8	Barpathar & Sarupathar MB	4	1	October 2024
9	Silapathar MB	5	3	Operational as of August 2024
10	Tezpur MB	8	6	October 2024
11	Dhekiajuli MB	4.5	2.5	October 2024
12	Golaghat MB	9	5	October 2024
13	Doomdooma MB	4	2.5	November 2024
14	Kharupetia MB	4.5	2	November 2024
15	Mangaldoi MB	5.5	3	November 2024
16	Tinsukia MB	30	20	November 2024

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Sl.No.	ULB Name	Capacity of SWM Plant (TPD)		Status of Project and Expected Date of Completion (in case construction is ongoing)
		Compost Pit Approved	MRF Approved	
17	Digboi MB	4.5	2.5	November 2024
18	North Guwahati MB	4	2	December 2024
19	Hailakandi MB	7	4.5	December 2024
20	Margherita MB	6	3	November 2024
21	Bokakhat MB	3.5	1.5	December 2024
22	Karimganj MB	12	8.2	December 2024
23	Bilasipara MB	8	5	December 2024
24	Mariani MB	4.5	2	December 2024
25	Demow MB	1	1	December 2024
26	Sivsagar MB	9	7	December 2024
27	Bongaigaon MB	10.5	9	December 2024
28	Dhubri MB	14	8.5	December 2024
29	Amguri MB	1.5	0.5	December 2024
30	Hojai MB	8	5.2	December 2024
31	Barpeta MB	9.5	6	December 2024
32	Diphu MB	13	9	December 2024



Pollution Control Board, Assam
Central Laboratory, ¹⁰⁴⁴Bamunimaidam, Guwahati

অসম প্ৰদূষণ নিয়ন্ত্ৰণ পৰিষদ
কেন্দ্ৰীয় পৰীক্ষাগাৰ, বামুনীমৈদাম, গুৱাহাটী



No WB/LB-205/PT-VII/23-24/222

Dated Guwahati the 16th April, 2024

✓ To,

123

M/S. JM INFRA & ENVIRO TECHNOLOGIES Pvt Ltd.
C-22, Lajpat Nagar III, New Delhi-110024
E-mail: admin@jmenviro.com.

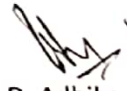
Sub: - Submission of Analysis Reports

Sir,

With reference to the above, please find herewith the Analysis Report of Treated water samples collected from Bahini River Drain inlet, Juripar Drain inlet, Silsako Beel drain outlet and Satgaon outlet, bearing sample ID B.Tech-24/73 to B.Tech-24/76.

Enclo: as stated.

Yours faithfully,


(M. D. Adhikary) SES
Authorized Signatory



অসম প্ৰদূষণ নিয়ন্ত্ৰণ পৰিষদ
(কেন্দ্ৰীয় পৰীক্ষাগাৰ, বামুনীমৈদাম, গুৱাহাটী)

Test Report




REPORT NO.	BTech-24/73	PAGE	1 of 1
DATE OF ISSUE	16/4/2024	SERVICE REQUEST DATE	27/03/2024
SERVICE REQUEST NO	Nil	Sample received on	27/03/2024
NAME & ADDRESS OF CUSTOMER		SAMPLE DETAILS	
M/s -JM INFRA & ENVIRO TECHNOLOGIE S Pvt. Ltd. C-22, Lajpat Nagar III, New Delhi -110024 E-mail: admin@jmenviro.com		Description : Drain sample Sampling done by : Customer Date of sampling : 27/03/2024 Sampling Location : Water sample collected from Vahini river Drain inlet near Hotel Shoolin Grand. Sampling Protocol : PCBA/LAB/W&WW/SOP/02 Packing : Sealed Marking : Labeled Quantity : 2.5 Liter Analysis start Date : 27/03/2024 Analysis end Date : 06/03/2024	


S.N	Parameters	Unit	Results	Test Method
Physico-Chemical Parameter				
	pH @25°C	-	6.65	APHA 24 th Edition, 4500-H ⁺ B: 2023
	BOD (3 days at 27°C)	mg/l	70	IS 3025 (Part 44) :1993 (Reaffirmed 2009)
	COD	mg/l	180	IS 3025 (Part 58) :2006
	Total Suspended Solids	mg/l	192	APHA 24 th Edition, 2540-D: 2023

End of Report

Note:

1. The results given above are related to the tested sample, for various parameters as analyzed. The customer asked for the above tests only.
2. This test will not be generated again, either wholly or in part, without written permission of the laboratory.
3. The samples will be disposed-off after Fifteen days from the date of issue of test report, unless until specified / requested by the customer.
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5. This test report cannot be reproduced except with the permission of the laboratory.


Dr. S. Jahan,
Asstt. Exe. Env. Scientist
Checked By


M. D. ADHIKARY,
Sr. Env. Scientist
Authorized Signatory



অসম প্ৰদূষণ নিয়ন্ত্ৰণ পৰিষদ
(কেন্দ্ৰীয় পৰীক্ষাগাৰ, বামুনীমৈদাম, গুৱাহাটী)

Test Report

REPORT NO.	BTech-24/74	PAGE	1 of 1
DATE OF ISSUE	16/4/2024	SERVICE REQUEST DATE	27/03/2024
SERVICE REQUEST NO.	Nil	Sample received on	27/03/2024
NAME & ADDRESS OF CUSTOMER		SAMPLE DETAILS	
M/s JIM INFRA & ENVIRO TECHNOLOGIE S Pvt. Ltd, C-22, Lajpat Nagar III, New Delhi -110024 E-mail: admin@jimenviro.com		Description : Drain sample Sampling done by : Customer Date of sampling : 27/03/2024 Sampling Location : Water sample collected from Juripar Drain Inlet, Near Ambika Green Apar. Sampling Protocol : PCBA/LAB/W&WW/SOP/02 Packing : Sealed Marking : Labeled Quantity : 2.5 Liter Analysis start Date : 27/03/2024 Analysis end Date : 06-03-2024	



S.N	Parameters	Unit	Results	Test Method
Physico-Chemical Parameter				
	pH @25°C	-	6.4	APHA 24 th Edition, 4500-H: B: 2023
	BOD (3 days at 27°C)	mg/l	60	IS 3025 (Part 44) :1993 (Reaffirmed 2009)
	COD	mg/l	168	IS 3025 (Part 58) :2006
	Total Suspended Solids	mg/l	172	APHA 24 th Edition, 2540-D: 2023

End of Report

Note:

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Dr. S. Jahan,
Asstt. Exe. Env. Scientist
Checked By

M. D. ADHIKARY,
Sr. Env. Scientist
Authorized Signatory



Pollution Control Board Assam
(Central Laboratory, Bamunimaidam, Guwahati)



অসম প্ৰদূষণ নিয়ন্ত্ৰণ পৰিষদ
(কেন্দ্ৰীয় পৰীক্ষাগাৰ, বামুনীমৈদাম, গুৱাহাটী)

Test Report

REPORT NO.	BTech-24/75	PAGE	1 of 1
DATE OF ISSUE	16/4/2024	SERVICE REQUEST DATE	27/03/2024
SERVICE REQUEST NO	Nil	Sample received on	27/03/2024
NAME & ADDRESS OF CUSTOMER		SAMPLE DETAILS	
M/s -JM INFRA & ENVIRO TECHNOLOGIE S Pvt. Ltd. C-22, Lajpat Nagar III, New Delhi -110024 E-mail: admin@jmenviro.com		Description : Drain sample Sampling done by : Customer Date of sampling : 27/03/2024 Sampling Location : Water sample collected from Silsako Beel Drain Outlet, Sai Baba Mandir. Sampling Protocol : PCBA/LAB/W&WW/SOP/02 Packing : Sealed Marking : Labeled Quantity : 2.5 Liter Analysis start Date : 27/03/2024 Analysis end Date : 06-03-2024	





S.N	Parameters	Unit	Results	Test Method
Physico-Chemical Parameter				
	pH @25°C	-	7.86	APHA 24 th Edition, 4500-H ⁺ B: 2023
	BOD (3 days at 27°C)	mg/l	8.5	IS 3025 (Part 44) :1993 (Reaffirmed 2009)
	COD	mg/l	44.0	IS 3025 (Part 58) :2006
	Total Suspended Solids	mg/l	16.0	APHA 24 th Edition, 2540-D: 2023

End of Report

Note:

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Dr. S. Jahan,
Asstt. Exe. Env. Scientist
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Pollution Control Board, Assam
(Central Laboratory, Bamunimaidam, Guwahati)



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Test Report

REPORT NO.	BTech-24/76	PAGE	1 of 1
DATE OF ISSUE	16/4/2024	SERVICE REQUEST DATE	27/03/2024
SERVICE REQUEST NO.	Nil	Sample received on	27/03/2024
NAME & ADDRESS OF CUSTOMER		SAMPLE DETAILS	
M/s - JM INFRA & ENVIRO TECHNOLOGIE S Pvt. Ltd. C-22, Lajpat Nagar III, New Delhi - 110024 E-mail: admin@jmenviro.com		Description : Drain water Sampling done by : Customer Date of sampling : 27/03/2024 Sampling Location : Water sample collected from Satgaon Drain Outlet. Sampling Protocol : PCBA/LAB/W&WW/SOP/02 Packing : Sealed Marking : Labeled Quantity : 2.5 Liter Analysis start Date : 27/03/2024 Analysis end Date : 06/02/2024	





S.N	Parameters	Unit	Results	Test Method
Physico-Chemical Parameter				
	pH @25°C	-	7.6	APHA 24 th Edition, 4500-H+ B: 2023
	BOD (3 days at 27°C)	mg/l	8.8	IS 3025 (Part 44) : 1993 (Reaffirmed 2009)
	COD	mg/l	46.0	IS 3025 (Part 58) : 2006
	Total Suspended Solids	mg/l	16.6	(APHA 24 th Edition, 2540-D: 2023

End of Report

Note:

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Dr. S. Jahan,
Asstt. Exe. Env. Scientist
Checked By


M. D. ADHIKARY,
Sr. Env. Scientist
Authorized Signatory



1049
Pollution Control Board, Assam
(Central Laboratory, Bamunimaidam, Guwahati)



অসম প্ৰদূষণ নিয়ন্ত্ৰণ পৰিষদ
(কেন্দ্ৰীয় পৰীক্ষাগাৰ, বামুনীমৈদাম, গুৱাহাটী)

Test Report

REPORT NO.	BTech-92/24	PAGE	1 of 1
DATE OF ISSUE	28/06/2024	SERVICE REQUEST DATE	24/06/2024
SERVICE REQUEST NO	Nil	SAMPLE RECEIVED ON	24/06/2024
NAME & ADDRESS OF CUSTOMER	SAMPLE DETAILS		
M/S. JM Infra & Enviro Technologies Pvt Ltd. C-22, Lajpat Nagar III, New Delhi-110024	Description: Grab sample Sampling done by: Official of M/S. JM Infra & Enviro Technologies Pvt Ltd. Date of sampling: 24/06/2024 Sampling location: Water from Vahini river drain inlet Sampling protocol: PCBA/LAB/W&WW/SOP/02 Packing: Plastic container Marking: Labeled Quantity: 2.5 Liter Analysis start date: 24/06/2024 Analysis end date: 27/06/2024		

Sl. No.	Parameters	Unit	Results	Test Method
Physico-Chemical Parameter				
1	pH @25°C	-	7.18	APHA, 24 th Edition, 4500-H ⁻ -B: 2023
2	BOD (3 days at 27°C)	mg/L	70.0	IS 3025 (Part 44):1993 (Reaffirmed 2009)
2	COD	mg/L	115.0	IS 3025 (Part 58): 2006
3	Total Suspended Solids	mg/L	88.0	APHA, 24 th Edition, 2540-D: 2023

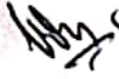
End of Report

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(Dr. S Jahan)

Asstt. Exe. Env. Scientist
Checked By


(M. D. Adhikary)
Sr. Env. Scientist
Authorized Signatory



1050
Pollution Control Board, Assam
(Central Laboratory, Bamunimaidam, Guwahati)

অসম প্ৰদূষণ নিয়ন্ত্ৰণ পৰিষদ
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Test Report

REPORT NO.	BTech-93/24	PAGE	1 of 1
DATE OF ISSUE	28/06/2024	SERVICE REQUEST DATE	24/06/2024
SERVICE REQUEST NO	Nil	SAMPLE RECEIVED ON	24/06/2024
NAME & ADDRESS OF CUSTOMER		SAMPLE DETAILS	
M/S. JM Infra & Enviro Technologies Pvt Ltd. C-22, Lajpat Nagar III, New Delhi-110024		Description: Grab sample Sampling done by: Official of M/S. JM Infra & Enviro Technologies Pvt Ltd. Date of sampling: 24/06/2024 Sampling location: Water from Juripar drain inlet Sampling protocol: PCBA/LAB/W&WW/SOP/02 Packing: Plastic container Marking: Labeled Quantity: 2.5 Liter Analysis start date: 24/06/2024 Analysis end date: 27/06/2024	

Sl. No.	Parameters	Unit	Results	Test Method
Physico-Chemical Parameter				
1	pH @25°C	-	7.04	APHA, 24 th Edition, 4500-H ⁻ B: 2023
2	BOD (3 days at 27°C)	mg/L	80.0	IS 3025 (Part 44):1993 (Reaffirmed 2009)
2	COD	mg/L	127.0	IS 3025 (Part 58): 2006
3	Total Suspended Solids	mg/L	96.0	APHA, 24 th Edition, 2540-D: 2023

End of Report

Note:

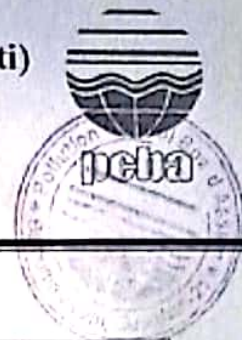
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(Dr. S Jahan)
Asstt. Exe. Env. Scientist
Checked By

(M. D. Adhikary)
Sr. Env. Scientist
Authorized Signatory



1051
Pollution Control Board, Assam
(Central Laboratory, Bamunimaidam, Guwahati)



অসম প্ৰদূষণ নিয়ন্ত্ৰণ পৰিষদ
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Test Report

REPORT NO.	BTech-94/24	PAGE	1 of 1
DATE OF ISSUE	28/06/2024	SERVICE REQUEST DATE	24/06/2024
SERVICE REQUEST NO	Nil	SAMPLE RECEIVED ON	24/06/2024
NAME & ADDRESS OF CUSTOMER	SAMPLE DETAILS		
M/S. JM Infra & Enviro Technologies Pvt Ltd. C-22, Lajpat Nagar III, New Delhi-110024	Description: Grab sample Sampling done by: Official of M/S. JM Infra & Enviro Technologies Pvt Ltd. Date of sampling: 24/06/2024 Sampling location: Water from Silsako Beel drain outlet Sampling protocol: PCBA/LAB/W&WW/SOP/02 Packing: Plastic container Marking: Labeled Quantity: 2.5 Liter Analysis start date: 24/06/2024 Analysis end date: 27/06/2024		

Sl. No.	Parameters	Unit	Results	Test Method
Physico-Chemical Parameter				
1	pH @25°C	-	7.15	APHA, 24 th Edition, 4500-H ⁺ -B: 2023
2	BOD (3 days at 27°C)	mg/L	9.0	IS 3025 (Part 44):1993 (Reaffirmed 2009)
2	COD	mg/L	20.0	IS 3025 (Part 58): 2006
3	Total Suspended Solids	mg/L	24.0	APHA, 24 th Edition, 2540-D: 2023

End of Report

Note:

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(Dr. S Jahan)
Asstt. Exe. Env. Scientist
Checked By

(M. D. Adhikary)
Sr. Env. Scientist
Authorized Signatory



Pollution Control Board, Assam
(Central Laboratory, Bamunimaidam, Guwahati)



অসম প্রদূষণ নিয়ন্ত্রণ পৰিষদ
(কেন্দ্রীয় পৰীক্ষাগাৰ, বামুনীমৈদাম, গুৱাহাটী)

Test Report

REPORT NO.	BTech-95/24	PAGE	1 of 1
DATE OF ISSUE	28/06/2024	SERVICE REQUEST DATE	24/06/2024
SERVICE REQUEST NO	Nil	SAMPLE RECEIVED ON	24/06/2024
NAME & ADDRESS OF CUSTOMER	SAMPLE DETAILS		
M/S. JM Infra & Enviro Technologies Pvt Ltd. C-22, Lajpat Nagar III, New Delhi-110024	Description: Grab sample Sampling done by: Official of M/S. JM Infra & Enviro Technologies Pvt Ltd. Date of sampling: 24/06/2024 Sampling location: Water from Satgaon drain outlet Sampling protocol: PCBA/LAB/W&WW/SOP/02 Packing: Plastic container Marking: Labeled Quantity: 2.5 Liter Analysis start date: 24/06/2024 Analysis end date: 27/06/2024		

Sl. No.	Parameters	Unit	Results	Test Method
Physico-Chemical Parameter				
1	pH @25°C	-	6.83	APHA, 24 th Edition, 4500-H ⁻ B: 2023
2	BOD (3 days at 27°C)	mg/L	8.0	IS 3025 (Part 44):1993 (Reaffirmed 2009)
2	COD	mg/L	28.0	IS 3025 (Part 58): 2006
3	Total Suspended Solids	mg/L	36.0	APHA, 24 th Edition, 2540-D: 2023

End of Report

Note:

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(Dr. S Jahan)
Asstt. Exe. Env. Scientist
Checked By

(M. D. Adhikary)
Sr. Env. Scientist
Authorized Signatory



EREC India Research Laboratory

(NABL Accredited & GoA Recognized Lab)

TEST REPORT (ETP WATER)

Report Date: 26/04/2024

Form No.: EREC/FM/53

Ref. No.: EREC/ETP/2024/035

Client Name	Guwahati Metropolitan Development Authority (GMDA)	Sample ID. No.	ETP/24/035
Address & Ph:	3 rd Floor Staffed Building GMC Hospital Rd, Bhangagarh, Guwahati, PIN-781005		
Sample Drawn By	JM INFRA & ENVIRO TECHNOLOGIES PRIVATE LIMITED		
Location	Juripar Path	Source	Drain Water (Inlet)
Date of Sample Collection	22/04/2024	Sample Received Date	22/04/2024
Customer Reference No.	Nil	Test Completed On	26/04/2024

MICROBIOLOGICAL ANALYSIS:

Sl. No.	Test Parameters	Test Method	Unit	Requirement (Max. Desirable Limit) (As per IS 10500:2012)	Result
1.	Faecal Coliform	IS 15185 : 2002	MPN/100ml	500-2500	2800

END OF THE REPORT

Authorized Signatory

Dr. M. Pathak
CEO cum TM



N.B: 1. Result corresponds to sample submitted only 2. This report is prepared based upon the test results only.

Page 1 of 1

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EREC India Research Laboratory

(NABL Accredited & GoA Recognized Lab)

TEST REPORT (ETP WATER)

Ref. No.: EREC/ETP/2024/034

Report Date: 26/04/2024

Form No.: EREC/FM/53

Client Name	Guwahati Metropolitan Development Authority (GMDA)	Sample ID. No.	ETP/24/034
Address & Ph:	3 rd Floor Statfed Building GMC Hospital Rd, Bhangagarh, Guwahati, PIN-781005		
Sample Drawn By	JM INFRA & ENVIRO TECHNOLOGIES PRIVATE LIMITED		
Location	Sil Sako Beel, Near Sai Mandir	Source	Drain Water (Outlet)
Date of Sample Collection	22/04/2024	Sample Received Date	22/04/2024
Customer Reference No.	Nil	Test Completed On	26/04/2024

MICROBIOLOGICAL ANALYSIS:

Sl. No.	Test Parameters	Test Method	Unit	Requirement (Max. Desirable Limit) (As per IS 10500:2012)	Result
1.	Feacal Coliform	IS 15185 : 2002	MPN/100ml	500-2500	900

END OF THE REPORT

Authorized Signatory



Dr. M. Pathak
CEO cum T.M

N.B: 1. Result corresponds to sample submitted only 2. This report is prepared based upon the test results only.

MIS for the Month of August, 2024

Sl. No	ULB Name	Overall Waste Details		
		Total Waste Generated (TPD)	Total Waste Collected (TPD)	Total Waste Processed (TPD)
1	Abhayapuri MB	3.1	2.2	1.9
2	Amguri MB	5.5	5	3.5
3	B. Chariali M.B.	3.5	3.2	1.5
4	Badarpur MB	0.28	0.27	0.24
5	Barpathar MB	1.5	1.2	0.6
6	Barpeta M.B.	10.344	6.2	5.17
7	Barpeta Rd. M.B.	6	6	4.8
8	Basugaon MB	4.38	4	2
9	Bihpuria MB	3.62	3	1.85
10	Bijni MB	2.01	1.91	1.76
11	Bilasipara MB	4.44	3.77	1.31
12	Bokajan MB	2.9	2.6	1.7
13	Bokakhat MB	1.3	1	0.9
14	Bokolia MB	2	1.7	0.8
15	Bongaigaon M.B.	21	20	11
16	Chabua MB	3.5	3.5	3.5
17	Chapakhowa MB	2	1.6	0.5
18	Chapar MB	4.05	3.1	1.3
19	Demow MB	2.3	2.1	1.2
20	Dergaon M.B.	3.75	3.65	1.68
21	Dhakuakhana MB	4	2.6	1.17
22	Dhekiajuli M.B.	11.7	10.8	2.1
23	Dhemaji MB	4	2.87	1
24	Digboi MB	7	5.6	2.8
25	Dhing MB	1.4	1	0.6
26	Dhubri M.B.	10.00	9.00	2.00
27	Dibrugarh M.B.	95	91	91
28	Diphu MB	4	3.6	3.4

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SI. No	ULB Name	Overall Waste Details		
		Total Waste Generated (TPD)	Total Waste Collected (TPD)	Total Waste Processed (TPD)
29	Doboka MB	2.4	2	1.8
30	Dokmoka MB	0.74	0.53	0.3
31	Donkamakum MB	1.2	1	0.98
32	Doom Dooma MB	6	4.8	1.5
33	G.M.C	550	550	343
34	Gauripur MB	3.9	3	0.65
35	Goalpara M.B.	16.02	12.8	7.22
36	Gohpur MB	2.5	2.2	0.6
37	Golaghat M.B.	13.7	12	8.1
38	Goreswar	0.53	0.32	0.2
39	Gossaigaon MB	2.3	1.7	1.1
40	Haflong MB	13.12	9.5	8.1
41	Hailakandi M.B.	4	3.7	3.2
42	Hamren MB	0.9	0.7	0.6
43	Hojai M.B.	4.5	3.5	1
44	Howly MB	6.5	3.9	3.2
45	Howraghat MB	0.65	0.4	0.25
46	Jorhat M.B.	48	46.6	41
47	Kajalgaon MB	5	5	1.9
48	Karimganj M.B.	9.3	7.3	5.2
49	Kampur MB	2	1.3	1.2
50	Kharupetia MB	9.7	7.2	3.61
51	Kokrajhar M.B.	10.2	9.7	8.2
52	Lakhipur M.B. (C)	3.9	3.2	2.4
53	Lakhipur MB (G)	3.7	3	1.9
54	Lala MB	2.6	1.8	1.2
55	Lanka M.B.	4.5	3.5	1
56	Lumding M.B.	1.6	1.4	1
57	Mahur MB	1.75	1.6	1.05
58	Maibang MB	1.8	1.49	1.09

SI. No	ULB Name	Overall Waste Details		
		Total Waste Generated (TPD)	Total Waste Collected (TPD)	Total Waste Processed (TPD)
59	Makum MB	4.3	2.9	2
60	Mangaldoi M.B.	9.27	6.89	3.46
61	Margherita MB	6	4.3	2.8
62	Moran MB	1	0.9	0.9
63	Moriani MB	7.5	7	5
64	Morigaon M.B.	11	8.5	8
65	N. Lakhimpur M.B.	21	18	13.5
66	N.Guwahati MB	6.6	5	3.6
67	Nagaon M.B.	52.91	43.7	13.56
68	Naharkatia MB	4.5	4	0.6
69	Nalbari M.B.	9		
70	Namrup MB	2.8	1	0.2
71	Narayanpur MB	3.1	2.6	1.6
72	Nazira M.B.	3.1	2.7	1
73	Palasbari M.B.	2.4	2.09	1.9
74	Patacharkuchi MB	1.2	0.5	0.5
75	Pathsala MB	1.1	1	0.5
76	Raha MB	3.1	2.8	0.8
77	Rangapara MB	7	6.65	1.06
78	Rangia M.B.	7	6.5	3
79	Sapatgram MB	1.82	1.54	0.27
80	Sarthebari MB	1.2	0.8	0.3
81	Sarupathar MB	1.5	1.2	0.6
82	Silapathar MB	3.4	2.4	1.6
83	Silchar M.B.	85	80	40
84	Simaluguri MB	2.1	1.7	1
85	Sivasagar M.B.	19.8	18.2	10
86	Sonai MB	4.2	3.6	2.8
87	Sonari M.B.	1.2	1.1	0.4

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Sl. No	ULB Name	Overall Waste Details		
		Total Waste Generated (TPD)	Total Waste Collected (TPD)	Total Waste Processed (TPD)
88	Sorbhog MB	1.8	1.8	0.8
89	Tangla MB	3.5	2.4	1
90	Teok MB	3.5	2.1	1
91	Tihu MB	3	1.8	0.18
92	Tezpur M.B.	28.8	28.2	28.2
93	Tinsukia M.B.	49	45	33
94	Titabar MB	1.8	1.6	0.7
95	Udalguri MB	3.8	2.6	1.1
96	Umrangshu MB	1.6	1.2	0.8
		1338.484	1231.88	791.56

Annexure 4: City Action Plan for Solid Waste Management – illustrative action plan prepared for Dibrugarh

CITY ACTION PLAN FOR DIBRUGARH				
Duration: 3 Months (August to October 2024)				
Key Action 1: Door to Door Waste Collection				
Sl. No.	What to do	Responsibility	Start date	End Date
	Display the route map, SWM dedicated contact number provided by the ULB, name of the agency, name of the designated ward in the door to door waste collection vehicle	Door to Door Waste Collection NGOs	12- Aug	25- Aug
	Ensure install boxes in all SWM vehicles (red box for sanitary waste and yellow box for domestic hazardous with 80ltr capacity each)		13-Aug	30 th Aug
	Prepare and maintain the logbook of each D2D waste collection vehicle (Format of the logbook shared by UMC)		10- Aug	12-Aug
	Prepare the list of properties those are reluctant to hand over the waste to D2D collection vehicle. Report to concerned officers of the ULB		3 rd Sep	7 th – Sept
	Establish dedicated contact number (helpline) for complaint redressel	ULB	10- Aug	20-Aug
	Identification of 5 potential wards with NGOs effectively working in D2D waste collection to achieve 100 % D2D waste collection		10- Aug	12-Aug
	Deployment of vehicles (currently available) for the identified potential wards for 100% daily D2D waste collection		20 – Aug	15 th -Sept
	Ensure issuing a letter for all drivers to maintain the D2D collection logbook/ register and route maps		12 th - Aug	14-Aug
	Ensure that NGOs are developed the route map and maintained the list of total properties and tenants of each ward		13 th -Aug	20 th -Aug

CITY ACTION PLAN FOR DIBRUGARH

Duration: 3 Months (August to October 2024)

Key Action 1: Door to Door Waste Collection

Sl. No.	What to do	Responsibility	Start date	End Date
	EO along with other officials to conduct regular visits to properties those are reluctant to hand over the waste as well as user fees		Weekly	
	Monthly progress review meeting with NGOs and staff engaged in D2D waste collection		Monthly	
	Increase the frequency of cleanliness drives in the selected five wards (specially cleaning of open drains, back lanes)		14 th -Aug	18 th -Aug
	Issue Public notice regarding the penalties and fines for open garbage disposal, HH and commercial unit not handing over garbage to D2D collection agencies,		25-Aug	30 th - Aug
	Print triplicate copy (3 copy) of user fees receipt book		1 st -Sep	5 th -Sept
	Conduct public announcements in all wards on penalties and fines for open garbage disposal in streets, drains and open fields and not handing over garbage to D2D collection agencies		17 th -Aug	20 th -Aug
	Conduct monthly meetings with bulk waste generators (BWG) to for efficient D2D waste collection source segregation and onsite processing. Ensure regular updating of waste collection and processing logbooks/records at BWG site/premises/office		Monthly	
	Establish feedback mechanism (complain / redressal system) for BWG		1 st Sept	5 th - Sept

CITY ACTION PLAN FOR DIBRUGARH

Duration: 3 Months (August to October 2024)

Key Action 1: Door to Door Waste Collection

Sl. No.	What to do	Responsibility	Start date	End Date
	Upload on Swachhtam portal the contract copy between BWG and the third-party agency for dry waste processing if BWG is managing the dry waste by the third party, otherwise upload a self-declaration that it is not managing by the third party.		14 th -August	16 th -August
	Upload on the Swacchtam portal the contract copy between BWG and the third-party agency for wet waste processing if BWG is managing the wet waste by the third party, otherwise upload a self-declaration that it is not managing by the third party.		14 th -August	16 th -August

Key Action 2: Visible Cleanliness

Sl. No.	What to do	Responsibility	Start date	End Date
2	Survey all the back lanes of residential and commercial area from identified five wards	Urban Local Bodies	1 st Sep	5 th Sep
	Maintain the cleanliness in the back lanes from the five identified wards		10 th Sep	20 th -Sep
	Display the anti- littering key messages to maintain the cleanliness in water bodies/ Ghat .		18 th -Aug	30 th -Aug
	Install separate bins every 50- 100 mtr as per the SWM rules 2016 at the water bodies/ Ghat		18 th -Aug	30 th -Aug
	Deploy dedicated vehicles to collect the solid waste after cleaning of the Ghat/ Water bodies		14 th -Aug	17 th -Aug
	Maintain the logbook (attendance register) of the street sweeping (Already shared during the visit)		12- Aug	17 th -Aug

CITY ACTION PLAN FOR DIBRUGARH

Duration: 3 Months (August to October 2024)

Key Action 1: Door to Door Waste Collection

Sl. No.	What to do	Responsibility	Start date	End Date
	Ensure to provide the reflecting jackets to the workers engaged in street sweeping. Also ensure to provide user friendly safety gears like – mask, gloves, shoes and raincoat		10 th –Sep	28 th -Sept
	Ensure that the workers should wear the safety gears while during street sweeping		30 th -Sep	5 th – Oct
	Set up the schedule for collecting waste from the main roads immediately after sweeping		12 th - Aug	17 th –Aug
	ULB should issue a public notification for mandatory use of dust covers for construction and demolition and upload the same on Swachhtam portal		20 th -Aug	25 th – Aug
	Map Garbage vulnerable Points (GVPs) within the city jurisdiction (Primarily transform the GVPs like – Near to Mohamaya Restaurant and Phoolbagan station.		20 th -Aug	23 rd –Aug
	Transform at least 50% GVPs in the city		25 th -Sep	2 nd – Oct
	Coordination with district level Civil defense department to set up a flying squad to enable fortnightly fines who throws the garbage on streets and open area		17 th – Aug	20 th - Aug
	Under the AMRUT Rejuvenation of parks component at least one park can be transformed using 3R principles or Sculpture through waste like old tyres/scrap material/plastic bottles		1 st - Oct	25 th –Oct
	Geotagged picture of Waste to Wonder sculpture to be uploaded on the Swachhatam Portal (IEC module section)		26 th –Oct	30 th –Oct

Key Action 3: Lekai SWM Plant (Dry Waste)

Sl. No.	What to do	Responsibility	Start date	End Date
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CITY ACTION PLAN FOR DIBRUGARH

Duration: 3 Months (August to October 2024)

Key Action 1: Door to Door Waste Collection

Sl. No.	What to do	Responsibility	Start date	End Date
	Develop temporarily facility (MRF) to sort dry waste in different categories	ULB and Mandy Enterprise	1 st - Sep	20- Sept
	Develop partitions within the plant to store the different types of sorted waste		20 th - Sep	25 th – Sept
	Labeling of chambers for different types of sorted recyclable materials		25 th -Sep	28 th –Sep
	Install the signage in the SWM Lekai Plant (signage would be dry waste collection area, weighing bridge and display the various types of dry waste sorted in the MRF centre)		17 th - Aug	25 th –Aug
	Geo coordinate of Lekai SWM plant and landmark and updated on the Swachhatam portal as per prescribed details by MoHUA to qualify Swachh Survakshan marks		12 th Aug	18 th - Aug
	Maintain the record of the electricity bills of the plant		12 th - Aug	14 th –Aug
	Maintain the logbook for dry waste from April 2024 onwards – a) total quantity of dry waste received b) quantity of various dry waste sorted c) quantity of recyclables is sold to recyclers d) quantity of dry waste disposed at land field e) list of the buyers/ recyclers to whom sold the recyclable materials f) maintain the record of revenue generated from the recyclables		14 th - Aug	18 th –Auf
	Ensure to provide user friendly safety gears like – mask, gloves, shoes and reflective jackets / uniform to the engaged staff in the plant		12 th Aug	16 th –Aug
	Ensure that the workers should wear the safety gears while performing their duties		20 th -Aug	2- Aug

Key Action 4: Lekai SWM plant (Wet Waste Processing)

CITY ACTION PLAN FOR DIBRUGARH

Duration: 3 Months (August to October 2024)

Key Action 1: Door to Door Waste Collection

Sl. No.	What to do	Responsibility	Start date	End Date
Sl. No.	What to do	Responsibility	Start date	End Date
	Install the signage in the wet waste processing area (signage would be wet waste collection area, segregation area, composting facility and compost)	ULB	17 th -Aug	25 th -Aug
	Install a banner/ hoarding to show the process of wet waste processing in the Lekai SWM plant		1 st -Sep	10-Sept
	Maintain the logbook for wet waste processing plant from April 2024 onwards – b) quantity of wet waste processed c) quantity of dry waste disposed at land field d) quantity of compost produced from the wet waste in monthly basis e) revenue generated from sale/consumption of compost (Note – Monthly sale/consumption of final compost to be over 75% to claim SS24 marks)		14 th -Aug	18 th -Aug
	Ensure to keep the record of the compost a) sale receipt / self-consumption data b) electricity bill		20 th -Aug	22-Aug
	Upload Legacy waste remediation action plan on the Swachhaam portal		14 th - Aug	16 th -Aug
	Geo coordinates the current dumpsite and update on the Swachtam portal as per the prescribed details (given by MoHUA)		20 th -Aug	25 th -Aug
	Ensure to keep the record of legacy waste: a.) Quantity of waste removed on daily basis (tons) b.) Quantity of RDF sell to the vendor c.) Revenue generated through the RDF		1 st Sep	5 th -Sep

Key Action 5: Benefit to Sanitation workers

CITY ACTION PLAN FOR DIBRUGARH

Duration: 3 Months (August to October 2024)

Key Action 1: Door to Door Waste Collection

Sl. No.	What to do	Responsibility	Start date	End Date
5	Organize health checkup camps for the workers engaged D2D waste collection, MRF plant, wet waste processing plants and street sweeping workers.	Urban Local Bodies	10 th -Sep	15 th -Sep
	Integrate sanitation workers in Govt. Health & Social Benefit schemes (at least three schemes). workers including the workers engaged in D2D collection, MRF plant, wet waste processing plants and street sweeping workers <i>(Note- Govt. schemes such as Ayushman Bharat, Pradhan Mantri Suraksha Bima Yojna, Assam Arogya Nidhi etc.)</i>		2 nd - Oct	5 th -Oct
	Keep the record of the camps along with list of participants, photographs and one page report		2 nd -Oct	5 th -Oct
	Ensure to provide user friendly safety gears like – mask, gloves, shoes and reflective jackets, raincoat and cap to the engaged SWM staff		2 nd -Oct	3 rd -Oct
	Upload the cleaning initiatives on social media platforms(before and after pictures)		5 th -Sep	10 th -Sep

Key Action 6: RRR Centre

Sl. No.	What to do	Responsibility	Start date	End Date
	Identify location to set up a permanent RRR center and delegate the responsibilities to a person		1 st Oct	5 th Oct

CITY ACTION PLAN FOR DIBRUGARH**Duration: 3 Months (August to October 2024)****Key Action 1: Door to Door Waste Collection**

Sl. No.	What to do	Responsibility	Start date	End Date
6	Two registers to be maintained at the RRR center: i) Quantity of Item received in the RRR centre and ii) Quantity of Items handover to the beneficiaries	Urban Local Bodies	10 th - Oct	15 th - Oct
	Install poster and wall painting in prominent locations to create awareness among the citizens to avail the facilities at RRR		10 th - Oct	15 th -Oct
	Display the timing of collection and distribution of RRR centre		10 th -Oct	12 th -Oct

Key Action 7: Cleanliness in School

Sl. No.	What to do		Start date	End Date
7	Identify and select 10 potential schools within the city to implement Swachhata Activities.	Urban Local Bodies	10 th - Sep	15 th Sept
	Generate awareness among the students and teachers on source segregation and collection		15 th Sept	17 th -Sept
	Encourage Schools to develop compost pit for wet waste processing		15 th -Sept	17 th -Sept
	Install the Plastic Bank in school premises		20 th - Sep	2 nd -Oct
	Prepare a Schedule to collect the dry waste from Schools. ULB should send the waste collection vehicle weekly to each school to collect the dry waste		1 st -Oct	5 th Oct

CITY ACTION PLAN FOR DIBRUGARH

Duration: 3 Months (August to October 2024)

Key Action 1: Door to Door Waste Collection

Sl. No.	What to do	Responsibility	Start date	End Date
	Record the quantity of dry waste received from the schools and sold to recyclers		Monthly	
	Conduct Monthly meetings with schools to address the challenges and leverage the opportunities		Monthly	

Key Action 8 : IEC and Dissemination of SWM activities

Sl. No	What to do	Responsibility	Start date	End date
8.	Set up a dedicated team to operate social media accounts and upload SWM activities in a daily basis	ULB	1 st Sept	5 th -Sept
	Reactivate social media account in different platforms such as (Facebook, Instagram and Twitter)		25 th -Aug	27 th -Aug
	Upload Safai Aapnao and Bimari Bhagao details on Swachhtam portal and social media platforms		12 th -Aug	20 th -Aug
	Conduct ward wise meeting (identified five wards) with the support of Ward Commissioner with the HHs, commercial establishments and BWGs on D2D waste collection, source segregation and Swachh Survekshn2024		1 st -Sept	7 th -Sept
	Share the ward wise awareness meeting report with state SBM-U in a monthly basis		Monthly	
	Fixed ward wise target to download the Swachhata App and awareness to register SWM related complains through the app		10 th - Sept	15 th -Sept
	Identify two brand ambassadors to promote SWM activities with in the city		20 th -Aug	22-Aug

CITY ACTION PLAN FOR DIBRUGARH

Duration: 3 Months (August to October 2024)

Key Action 1: Door to Door Waste Collection

Sl. No.	What to do	Responsibility	Start date	End Date
	Upload the details on Swachhtam Portal.		23 rd -Aug	24 th -Aug
	Engage brand ambassadors in SWM activities and to be posted on social media and upload in the portal.		1 st -Sept	3 rd -Sept
	Prepare a report with photographs of over all activities along with evidences		30 th sept	5 th -Oct
	Conduct at least two Zero waste event with in the city a. At least one government program can be conducted as Zero waste event b. At least one awareness campaign regarding Zero waste event SOP is attached for Zero waste event		15 th Aug	
	All the Zero waste events to be well documented with following details: <ul style="list-style-type: none"> ▪ Name of the event, ▪ brief note on event, ▪ number of participants, ▪ photographs related to zero waste (use of alternatives of SUPs used in event, proper segregation and storage of waste, Display of banner on event 		17 th -Aug	20 th -Aug

Annexure 6: Good practices emerging from urban local bodies in Assam

Select good practices emerging from urban local bodies in Assam have been summarised below.

Theme 1: Door to door collection and segregation

#	Name of ULB	Good Practices being implemented
1	Guwahati Municipal Corporation (GMC)	<ul style="list-style-type: none"> Tracking of waste collection vehicles through GPS has been implemented to monitor the solid waste management value chain. GMC has facilitated a series of coordinated campaigns aimed at driving 100% door-to-door collection of segregated waste across the city. Proposed implementation of vehicle tracking system and field staff attendance system to strengthen SWM value chain efficiencies under CITIIS 2.0 initiative
2	Jorhat M.B.	<ul style="list-style-type: none"> Jorhat has achieved 100% door-to-door collection of segregated waste in residential areas, leading to enhanced participation from citizens. Implementation of night-time collection of waste to ensure daily and universal coverage of all households as well as public areas.
3	Nalbari M.B.	<ul style="list-style-type: none"> Door to door twin bin distribution in all commercial areas to drive segregation of waste for non-BWGs in the city. Night cleaning and sweeping initiated in all commercial areas of the city on a daily basis.
4	Silapathar M.B	<ul style="list-style-type: none"> Engagement of NGO for strengthen source segregation practices at household level, with dedicated capacity building workshops for citizens to train them on the right segregation practices for wet and dry waste. Collection of solely segregated waste happening at key market places in the city (with special focus on vegetable, poultry and fish markets), with imposition of fine from ULB on vendors, who are violating segregation SOPs set at ULB level.

Theme 2: Scientific Waste Management and maintenance of Visible Cleanliness (Composting/FSTP and STP/Waste Processing/Removal of GVPs)

#	Name of ULB	Select Good Practices being implemented
1	Rangia M.B.	<ul style="list-style-type: none"> Borolia river bank was picked up for removal of garbage vulnerable point, which has been transformed to Waste to Wonder park.
2	Bijni M.B.	<ul style="list-style-type: none"> Implementation of vermi-composting by

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#	Name of ULB	Select Good Practices being implemented
		SHGs, taking care of implementation as well as operations and maintenance of the vermi-composting pits.
3	Chapar M.B.	<ul style="list-style-type: none">• Polluted water body GVP has been removed and during the removal process and amount of 20 MT (Approx) waste has been collected.• After removal of waste from the polluted water body, barricading and beautiful has been done.
4	Nagaon M.B	<ul style="list-style-type: none">• Dedicated initiative for thermocol waste management, including removal of thermocol-based fish boxing and distribution of drums for proper waste disposal



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Guwahati
Municipal Corporation (GMC)



Swachh Bharat Mission – Urban, Swachh Schools Swachh Shehar Campaign

Overview

Swachh Bharat Mission (Urban) of Assam entered an MoU with Akshar Foundation and Guwahati Municipal Corporation dated 31 July 2023, to launch the Swachh Schools Swachh Shehar Campaign. The campaign commenced in August 2023 with the purpose of helping schools become “Green Schools” by training students to segregate clean and dry plastic from their homes and bring it to school for collection.



12 Schools

Have signed MoUs with GMC



17,000 Students

Learning about and participating in
plastic recycling



14

Collection bins installed in 8
schools



4,183 kg

Segregated plastic waste
collected and recycled till date



Program Implementation

The campaign started with Awareness & Orientation Sessions conducted at each school, to inform students and faculty about the plastic challenge and recruit them into the campaign. Students interact with plastic and tools at various stages of the recycling process, from sorting to shredding to moulds to new products. Students interact with new products made from collected plastic. GMC Commissioner Mr. M N Dahal personally performed school outreach, and Akshar interns from the University of Oxford also participated in the sessions.



Initially, participation was high due to the National "Swachhata Hi Seva" Campaign, but tapered with time. We hope to increase participation again with billboards and competitive rankings between schools, published on a web portal and social media.



Guwahati Municipal Corporation (GMC) provides the funds for campaign operations as well as collection vehicle and industry ties for recycling companies.



Akshar has installed 14 bins for plastic collection in 8 schools so far.



Though most of the plastic is sold to recycling companies, certain types of plastic are recycled by students at Akshar Forum's Precious Plastic Workshop to make new products.



Some of the participating schools have sent field trips for students to see the process firsthand and participate in making new products.

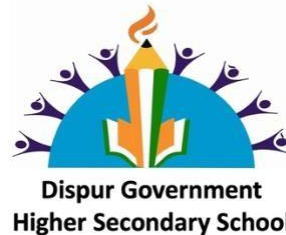
The schools have signed individual MoUs directly with the GMC, signed by the Commissioner, promising to participate in the Swachh Schools Campaign, requiring each student to segregate and submit plastic weekly, and pledging to assign 5 marks to each participating student in a related subject.



**TC Government
Girls School**



DELHI PUBLIC SCHOOL



**Dispur Government
Higher Secondary School**



Next Steps

- Increase school participation with billboards celebrating the Swachh School of the Month.
- Spur competition by publishing school rankings on a web portal and social media, comparing the percentage of participating students. Teachers will be able to sign in to record the weekly submissions of each individual student.
- Host monthly meetings between GMC Commissioner and coordinators from each school to discuss challenges and opportunities.
- Install recycling machines on a truck to create a Mobile Recycling Workshop which can visit schools and enable students to participate in making new products.
- Scale up to 20 schools.